

INSTITUTO UNIVERSITÁRIO DE LISBOA

<b>Comparative Management:</b>	Europe	VS.	Africa

Maria de Assis Pereira de Mello Gomes

Masters in Business Administration

Advisors:

Professor Associado com Agregação Leandro Pereira, Auxiliar Professor ISCTE-IUL

August, 2023



Comparative Management: Europe VS. Africa

Maria de Assis Pereira de Mello Gomes

**SCHOOL** 

Masters in Business Administration

Advisors:

Professor Associado com Agregação Leandro Pereira, Auxiliar Professor ISCTE-IUL

August, 2023

## Resumo

A lacuna em artigos comparativos sobre as realidades socioeconómicas dos continentes africano e europeu foi o catalisador para a realização desta dissertação, com o intuito de compreender as razões e quais as diferenças e semelhanças. Devido à complexidade e dimensão desta tarefa, houve necessidade de reduzir a sua escala, e por isso, foram escolhidos os países com maior PIB nominal, nomeadamente, a Alemanha, na Europa, e a Nigéria, em África. Esta redução, não pode, contudo, levar a uma generalização mas sim, servir como base para um estudo mais alargado. Para isso, utilizando a análise PEST, foram abordados temas dentro do domínio político, económico, social e tecnológico de forma a que esta pesquisa fosse mais objetiva. Para analisar os conteúdos foi utilizada uma análise quantitativa e qualitativa baseando em autores que estudaram este tema individualmente criando uma correlação entre eles. Após o estudo realizado, conclui-se, que todas as áreas têm, grandes diferenças nestes países, podendo a Nigéria utilizar a Alemanha como exemplo. Na Nigéria o elevadíssimo grau de corrupção e iliteracia leva a que haja problemas fundamentais, com infraestruturas insuficientes e mesmo as existentes altamente deficitárias, a agravar com facto de ter uma população com um elevado grau de iliteracia e mesmo os literados, na sua maioria, não passa dos anos básicos o que leva a que a população não tenha competências académicas e técnicas para não só alavancar a economia como exigir maior transparência e eficiência do governo. Quando falamos da realidade alemã os problemas são diferentes assim como os desafios que se apresentam. Os baixos níveis de natalidade têm como consequência o envelhecimento da população e consequentemente um número reduzido de população ativa o que provoca a necessidade de mão de obra recorrendo à imigração, esta, muitas vezes, pouco qualificada.

## **Abstract**

The lack of comparative articles on the socio-economic realities of the African and European continents was the catalyst to do this dissertation, in order to understand the reasons and what the differences and similarities are. Due to the complexity and size of this task, it was necessary to reduce its scale, which is why the countries with the highest nominal GDP were chosen, namely Germany in Europe and Nigeria in Africa. This reduction, however, cannot lead to a generalisation it can, nevertheless, serve as the basis for a broader study. To this end, using PEST analysis, themes within the political, economic, social and technological realms were applied in order to make this research more objective. A quantitative and qualitative analysis was used to analyse the content, based on authors who have studied this topic individually, creating a correlation between them. After the conduction of this study, it can be concluded that all areas have major differences in these countries, and Nigeria can use Germany as an example. In Nigeria, the extremely high level of corruption and illiteracy leads to fundamental problems, with insufficient infrastructure and even the existing infrastructure being highly deficient, combined by the fact that the population has a high level of illiteracy and even the literate, for the most part, do not go beyond the basic years, which means that the population does not have the academic and technical skills to not only leverage the economy but also demand greater transparency and efficiency from the government. When it comes to Germany, the problems are different, as are the challenges. Low birth rates result in an ageing population and, consequently, a reduced number of working people, which leads to the need for labour through immigration, that is often poorly qualified.

# Index

1. Introduction	4
2. Methodology	6
3. Comparative Analysis	8
3.1. Fundamental Points of the Research	8
3.2. Methodologically orientated reflection on the policy domai	<b>n</b> 10
3.2.1. Government policy / Foreign Trade Policy	10
3.2.2. Political stability	14
3.2.3. Corruption	17
3.3. Methodologically orientated reflection on the economic field	l <b>d</b> 21
3.3.1. Economic Growth	21
3.3.2. Unemployment Rate	26
3.4. Methodologically orientated reflection on the social domain	n31
3.4.1. Population growth and age distribution	31
3.4.2. Education	34
3.5. Methodologically orientated reflection on the technological	l <b>domain</b> 38
4. Discussion and Findings	49
5. Final considerations	53
Bibliography	55
A tto obmonts	CO

## 1. Introduction

This research proposes a comparative management analysis between the European continent and the African continent, starting from a concrete case study, namely the comparison between Germany, as the European country with the highest nominal GDP, and Nigeria, as the African country with the highest nominal GDP (World Data, s.d).

With this objective in mind, the methodology adopted will be the PEST analysis, as a study enabling comparative understanding between the two countries, precisely as a first way to reflect comparatively the European continent and the African continent. (1). PEST as an analysis that enshrines four concrete domains of comparison: the political domain, the economic domain, the social domain and the technological domain (Mariadoss, 2018).

This is why the research was divided into six parts.

In the first part, proposes and reflects on the basic points of the research. These are: (1) the importance of a comparative management analysis between the two continents; (3) the importance of a comparative management analysis between the two countries as a first path; (4) and the importance of a PEST analysis.

In the second part, the methodology is an oriented reflection on the political domain, where it will be dealt, in the first order, with the government policies of the two countries, where it will be related, in the second order, globalization, the economy and political stability, and where it will be reflected, in the third order, the problem of corruption.

In the third part, the methodology is an oriented reflection on the economic field. Here, it will be looked more specifically at the economic growth, analysing the economic performance of the two countries over time. To this end, it will be considered points as relevant as investment, the unemployment rate and economic policies.

In the fourth part, the methodology is an oriented reflection on the social domain. Here, population growth and age distribution - insofar as they have a decisive influence on the social sphere – it will be the benchmarks for comparing the two countries.

<sup>1</sup> Methodology as a rationally based path to achieve an objective. The objective as the comparative analysis between the European continent and the African continent. Certainly. However, we are dealing here, as we have said, with the first path. What we mean by this expression is that it would be impossible to contain in the space of

said, with the first path. What we mean by this expression is that it would be impossible to contain in the space of a master's dissertation a reasoned comparative analysis between two continents. We simply recognize the importance of contemplating, even if only residually, the dialectic that is established between the micro and macro frameworks. This is simply the first step in an investigation that we would like to develop in the future.

In the fifth part, the methodology is an oriented reflection on the technological domain. At this stage, it will be considered the relationship between technological development and the development of countries at different levels, inter alia, at the economic level; at the infrastructure level; at the investment level.

In the sixth part, it will be made the final considerations, explaining the relevance of our research and the main reflections that were possible to achieve, since there is a gap in this area with a view to comparing a developed continent and a developing one, taking two countries from these same continents, shrinking them through their GDP indices in 2021 and what measures developing countries can adopt, in the areas addressed, in order to achieve their development.

## 2. Methodology

The aim of the dissertation is to identify, within several areas, the differences and contrasts in the different socio-economic and governmental pillars, of Germany and Nigeria, establishing as a comparative basis a PEST analysis [(Statista a), 2022), (Statista b), 2022)]. (2)

The countries chosen for the comparison between Europe and Africa were Nigeria and Germany. This choice was made because they are the two countries with the highest GDP in each continent and, as can be seen below, they present many differences and evolutions in the points analysed.

To better screen the comparative analysis, some aspects were chosen within each topic included in the PEST analysis, and the fact that only two countries were chosen makes it a micro analysis that establishes correlations with the different countries taking into account that some aspects of their realities are common.

The method used in this thesis was mostly quantitative because, since it is not feasible to carry out an on-site analysis, the form of study and information search was through an analysis of studies and theses already carried out in the different areas proposed, namely, in the fields of political stability, corruption, economic growth, unemployment rate, population growth and age distribution, education, technology. To complement the information gathered in the articles and theses, a qualitative method was also used, through statistical analysis in relation to the different themes (Dierckx de Casterlé et al., 2012).

Taking into account the comparative objectives of the research, it was necessary to establish a relationship and comparison between the two countries in certain sectors, in order to better understand whether the assumptions of the differences between the two were really real, in case the differences do exist, investigate what some of the reasons may be, what are the proximity factors between the two and what measures could be thought or taken in order to have an approximation within certain standards between the two countries. In order to better clarify why the aspects of comparison were chosen, below is a brief explanation of their importance and the metrics used (Sanford, 1997).

(1) The first aspect is related to government policy and trade policy because trade is one of the most important aspects of a country's economic well-being and its relations with other

<sup>&</sup>lt;sup>2</sup> PEST analysis is a strategic framework used by businesses and organizations to understand and analyze the external macro-environmental factors that can impact their operations and decision-making. It stands for Political, Economic, Social and Technological factors. By examining these factors, businesses can gain insights into potential opportunities and threats that might influence their strategies, plans, and overall success.

countries with which it interacts. It is necessary to understand the trade openness of both countries as well as to understand the strategy, measures and agreements adopted by each country with its trading partners (Afonso, 2011).

- (2) The second aspect refers to political stability and aims to understand whether there is any problem in terms of instability in these countries and what causes it, as it directly influences economic growth, investments and development (Aisen & Veiga, 2010).
- (3) The third aspect is corruption in terms of understanding the levels of corruption in these countries and the sectors where it is the strongest, as well as its reasons. The spread of corruption is one of the main deteriorants in the functioning of a country as can be confirmed in the studies presented (Ghazanchyan et al., 2018).
- (4) The fourth aspect presents economic growth and the association between the provision of more products and services with economic development, the increase in the quality of life of its inhabitants and the reduction of poverty, among other factors. Various metrics were analysed to quantify and analyse this growth in the two countries [(Poliduts & Kapkaev, 2015), (Son & Kakwani, 2004)].
- (5) The fifth aspect is related to the unemployment rate and how the fight against it leads to greater economic power of the population. By analysing statistics, it becames clear which areas had the greatest deficit and what measures the countries adopted to combat unemployment (Bondarenko, s.d).
- (6) The sixth aspect is about population growth and age distribution and how this metric is important to realise the negative or positive impact on the respective countries, as well as the measures that are being implemented in order to ensure new opportunities for the population ("Why Population Growth Matters for Sustainable Development," 2022).
- (7) The seventh aspect focuses on education and how an increase in education can bring an increase in skilled jobs as well as a boost and increase in productivity in the different economic sectors. It was necessary to understand and analyse the degree of literacy of the two countries, the areas of greatest difficulty within education that both present as well as the measures and future investments in order to improve education (Grant, 2017).
- (8) Finally, related to technology, it was important to understand how it is one of the great economic drivers and its development generates global benefits for its populations. Investment and the ability to attract entrepreneurial companies that have the capacity for innovation was one of the measures used in this study, as well as the gaps that still exist in the respective countries and how they propose to solve them (Nikoloski, 2016).

## 3. Comparative Analysis

#### 3.1. Fundamental Points of the Research

In this research it will be attempted to carry out a comparative management analysis between the European continent and the African continent, starting from a specific case study, namely the comparison between Germany, as the European country with the highest nominal GDP, and Nigeria, as the African country with the highest nominal GDP. However, it will not be considered this task possible without first reflecting on certain fundamental points. These are: (1) the importance of a comparative management analysis between the two continents; (3) the importance of a comparative management analysis between the two countries as a first path; (4) and the importance of a PEST analysis.

(1) The importance of a comparative management analysis. It is known that the management is the planning, organisation, coordination, control and use of limited resources in order to achieve a goal. It is, also, known that comparative management is precisely the committed analysis between two systems of planning, organising, coordinating, controlling and using limited resources in order to achieve a goal. Consequently, it is known that the method used in a comparative management analysis must be exactly that of comparison, i.e. the possible relationship between the differences and similarities of two factors of comparison; as well as the importance of this specific type of analysis in any field. Ultimately, benchmarking allows to strategically understand the improvements that can be implemented in planning, organising, coordinating, controlling and using limited resources in order to achieve the desired goal.

(2) The importance of a comparative management analysis between the two continents. Aware of the different and deepening ties fostered by globalisation, but especially by what may be called international regionalisation - it refers specifically to the impact of Regional Organisations on the two continents, as well as to the growing demand for the systematisation of common values and the implementation of common action (3) —, the importance of a

<sup>&</sup>lt;sup>3</sup> Globalization is the continuous process of connectivity, integration and interdependence between different countries and their economies, societies, cultures and governments on a global scale - check articles Erixon, F. (n.d), Segal, U.A. (2019, July) & Rajaguru, G., Srivastava, S., Sem, R. & Mukhopadhaya, P. (2023, May); The European Union's main motivation is to promote peace and stability on the European continent as well as political and economic integration in order to prevent conflicts by making the European economy cohesive and able to compete with international markets - check the articles Woolock, S. (2019, April), Eissel, D. (2020, March) & Freeman, D., Meijerink, G. & Teulings, R. (2022, January); The African Union was created to promote unity and solidarity among its members as well as cooperation to achieve peace, security, stability and the development of the economy - see articles Zamfir, I. (2022, November), Silas, D. (n.d) & Ababa, A. (n.d)

comparative management analysis between the two continents becomes evident. For considering, albeit not linearly, the possibility of the existence of two systems that can be identified with the two continents - very specifically, with the African continent and with the European continent - we may well consider the committed analysis between them, with regard to planning, organising, coordinating, controlling and using limited resources in order to achieve a goal, or, if you prefer, in order to achieve the realisation of common values. And so, we may well realise the importance of knowing potential improvements to be implemented in any of the systems. However, despite the evidence mentioned above, this analysis does not become any less complex. Clearly because, as it was already mentioned, this research is only a first step of an investigation that would be interesting to develop in the future. It also allows, albeit only residually, to contemplate the dialectic that is established between the micro and macro frameworks. In this case, clearly through a comparative management analysis between countries belonging to the continents in question: the African continent and the European continent.

- (3) The importance of a comparative management analysis between the two countries as a first point. The importance of a comparative management analysis between Nigeria and Germany is grounded in the fact that these two countries have the largest nominal GDP in their respective continents, and thus that these two countries have the two largest economies in their respective continents.
- (4) The importance of a PEST analysis. PEST is an acronym for Political, Economic, Social and Technological. PEST analysis is an important methodological tool for identifying strategic risk and external factors that analyse a company's competitive position in relation to its environment. In other words, because of the vulnerability of the company to external factors, the PEST analysis makes it possible to define strategies that mitigate the impact of these factors on the company. Moreover, this analysis will be used in a different perspective, i.e. comparing the context of a country instead of a company. The reason this method was chosen was because it allows to use it as a comparative tool between the two realities under analysis [(Sammut-Bonnici & Galea, 2015), (Cima, s.d)].

Having reflected on these fundamental points of the research, lets begin the proposed analysis - PEST - and thus the reflection on the political, economic, social and technological domains.

## 3.2. Methodologically orientated reflection on the policy domain

## 3.2.1. Government policy / Foreign Trade Policy

Among the matters covered by government policy, it will be focused on the support and measures adopted in relation to new investments. The reason for this is the research tenor, which understands management as intertwined with policies adopted for the growth and development of countries.

For example, the topic of international trade is one of the most sensitive in terms of both domestic and international policy. International trade is important for the economic health of countries, and thus for increasing the quality of life - it goes without saying that when a consumer, a national of country A, buys items from country B, the wealth of country B increases. In this simple case, the citizen-consumer of country A finds in the foreign supply - and therefore not in the domestic supply - a product that better meets his individual and private needs [(Okenna, 2020), (McDonald, s.d.)].

While open trade between countries is important for their economic growth, it can also have negative effects. For example, domestic companies may not be able to compete with the prices charged by foreign companies, which can lead to bankruptcy, higher unemployment and greater inequality. Conversely, successful companies can bring wealth to their country and increase the standard of living of their employees. Considering these circumstances, trade agreements between different countries are necessary, not only to ensure that domestically manufactured products are exported, but also to ensure that products that are not domestically manufactured are imported, using their own mechanisms, such as tariffs or barriers to trade imposed in some areas of the economy so that there is no unfair external competition - there is, therefore, a domestic monopoly in these sectors [(Pavcnik, s.d.), (McDonald, s.d.)].

In order to promote international trade and to facilitate liberalisation in various areas of trade, the World Trade Organization (1995) was created, which allowed trade policies to become more stable, transparent and open to new members. In fact, this is one of the reasons why there is not so much protectionism on the part of the various states (World Trade Organization, 1995).

#### Nigeria

In the context of this country, there are some barriers to international trade made through a combination of tariffs and taxes in order to tax the profits made by these transactions and protect local industries and companies from highly competitive external markets. In addition to these tariffs and taxes, some products have been banned, specifically in the agricultural sector. There

is, thus, a protectionist policy - protectionism as the control of products by a nation state, usually undertaken to control imports on one hand, and to promote exports on the other. These measures are often implemented through tariffs on imported products, which make them more expensive than local products. As a result, imports are affected and there is an increase in local production [(International Trade Administration b), 2021), (Kimberly, 2022)]. (<sup>4</sup>)

Due to the inability of the Nigerian government to carry out necessary inspections and tests on imported products, most of these products are held up at the customs for an indefinite period, the losers in these situations are the companies that export the products to Nigeria, as they are left with their goods held up, and there may be monetary losses for the company. In order to mitigate the impact of these measures on its economy, the Nigerian government has created some guidelines so that there is no gap in these products: (1) products whose importation is prohibited must be produced in the country (2) there must be a preference for domestic products by domestic companies and service providers (Oyejide et al., s.d).

Given these problems - but also the fact that Nigerian ports are, inter alia, characterised by barriers to entry; lack of protocol; non-compliance with the little protocol that exists; high costs of docking and unloading vessels; and corruption - vessels can wait weeks or even months to be unloaded, which does not attract companies exporting products to trade with Nigeria. In addition, the access infrastructure to these ports is poor, making operations in these ports among the most expensive in the world. It should, however, be noted that the Nigerian Ports Authority, through public-private partnerships, has reached an agreement to upgrade the two main ports (Port of Lagos and Port Harcourt), as well as to build another port in the city of Lagos, the latter being a deep-see port, with the aim of receiving larger vessels (Chilaka, 2022).

Nigeria has several international trade agreements, including a bilateral agreement with the United States, making it the second largest importer of goods from the United States. It is clear that in order to guarantee these exchanges Nigeria is part of several organisations such as the World Trade Organization, the United Nations, the International Monetary Fund and the World Bank, and also belongs to the African Growth and Opportunity Act, a programme created by the United States in order to increase trade between sub-Saharan countries. Thus, they have to try to fulfil certain requirements. Finally, Nigeria has signed the African Continental Free Trade Area Agreement, which, when fully implemented, will require its members to remove 90% of tariffs on their goods and services when trading with African countries [(Central Bank of Nigeria, s.d.), (International Trade Administration b), 2021), (Karimo et al., 2016)].

11

<sup>(4)</sup> Verify the website Federal Government of Nigeria <a href="https://customs.gov.ng/?page\_id=3075">https://customs.gov.ng/?page\_id=3075</a>.

#### Germany

Germany is one of the pioneering countries when it comes to international trade and services. Accounting for 7.2% of all global trade, its various industry sectors invariably rely on exports. However, the existence of trade requires open markets and multilateral laws to ensure longevity and transparency. As a result, what jeopardises trade and the competitiveness of European countries, and Germany in particular, are dumping strategies. (5) — very specifically, it jeopardises the export of certain products (Federal Ministry for Economic Affairs and Climate Action a), s.d.).

In order to combat these practices it is necessary to initiate an investigation in order to determine whether injury material exists, whether this dumping is done by producers and whether the implementation of measures does not go against European interests. These measures include either a fixed tariff for these products or in more extreme cases the creation of a minimum import price. It is the responsibility of the European Commission to create these measures as well as to monitor their implementation (Europian Comission a), s.d).

Germany is a part of the World Trade Organisation and the European Union, which allows for business visitor targets, recognition of professional qualifications, product certification, intellectual property rights, as well as duty-free trade [(International Trade Administration c), 2022), (World Trade Organization, 1995)].

The European Commission adopted the raw material initiative which is based on three pillars "(1) fair and sustainable supply of raw materials from global markets, (2) sustainable supply of raw materials within the EU and (3) resource efficiency and supply of "secondary raw materials" through recycling". This strategy covers all natural resources used by European industry except natural resources needed for agricultural production and fuels. These measures are crucial for the competitiveness and growth of the economy in the European Union (Europian Comission b), 2023).

## Comparison

Based on the data presented in the 2 countries, Nigeria and Germany, and also comparing the profits they make through international trade (imports and exports) we notice that in Nigeria these make up about 22.58% of GDP, and their ranking in Trade Openness (<sup>6</sup>) is 165 out of 174.

<sup>&</sup>lt;sup>5</sup> Dumping happens when a good or service is systematically sold on international markets at a price lower than the prevailing one.

<sup>&</sup>lt;sup>6</sup> Trade Openess is a measure of the extent to which a country is involved in the Gobal Trading System, the sum of imports and exports in relation to GDP. (*Degree of Openess* =  $\frac{\text{Imports+Exports}}{\text{GDP}} * 100$ )

The largest export is crude oil totalling about 77.5% and the largest import is refined petroleum, totalling about 18.3%. In terms of Global Trade, it accounts for about 0.36% of all world trade, and its biggest ally in terms of exports is India, which accounts for about 15.7% of its total exports, and in terms of imports, China, which accounts for about 35.5% of its imports [(The Observatory of Economic Complexity, s.d.), (The World Data Bank a), 2021), (United States Trade Representative, 2021), (Karimo et al., 2016)].

In Germany, about 89.4% of GDP comes from imports and exports and is considered the most open to trade country in the G7 (ranking 74 out of 174 in Trade Openness), and ranks 3rd most importing and exporting country in the world, behind the United States and China. Regarding Global Trade, they account for about 6.8% of all exchanges worldwide, and their biggest export ally is the United States with 8.9% and import China with 11.8%. From an employability perspective, 27% of jobs are directly related to exports. Its largest export sector is automobiles with about 15.3% and imports are technology (data processing devices, electronic and optical devices), with 10.7% [(The Observatory of Economic Complexity, s.d.), The World Data Bank a), 2021)].

Regarding trade between these two countries, Germany exported to Nigeria in monetary values 1.31 billion, with its most exported product being wheat. On the other hand, Nigeria exported 1.34 billion to Germany, and its most exported product was crude oil [(The Observatory of Economic Complexity, s.d.), (Karimo, et al., 2016)].

To enhance trade, there are some points of improvement such as improving the regulatory institutions present in the country, as well as reducing inherent corruption are factors that contribute to reducing the risk of a given country to successfully trade (these factors also contribute to the emergence of new investors which boost the economy making the country more attractive), economic diversification is another factor that can promote new agreements and increase trade, because a more complex and diversified economy offers a greater number of products that can be exported, for this it is important to develop the industry in order to make raw material, which is usually quite abundant in countries with emerging economies for more specialised and differentiated products and finally removal of barriers and tariffs on the entry and exit of new products, reduction of protectionist laws as well as trade agreements with several countries are all measures that increase trade, creating a more conductive environment for the emergence of agreements and ideal (United Nations, 2007).

#### 3.2.2. Political stability

Political stability is a variable of great importance for a country's economic and social evolution and development, and is associated with lasting economic growth. Conversely, political instability causes negative economic impacts as it destabilises financial markets and can cause problems for national employment and various stakeholders - which can jeopardise chains of command, causing a constraint on production, which affects long-term growth and development in the sector, and consequently in the country.

In this context, political tension can be generated, and thus adverse conditions for domestic investors, since political tension acts as a deterrent for these investors, to the exact extent that the necessary conditions for the proper functioning of the economy are not defined (Aisen & Veiga, 2010).

#### **Nigeria**

Political instability is a latent problem in Nigeria. Indeed, despite being a country with a large population and natural resources, Nigeria is in a vicious circle of poverty and autocracy. As it will be seen later, with its levels of corruption, elections are rigged, and there is a lack of trust among the population in the governments that win power. Otherwise, the country's representatives take advantage of this unstable situation for personal gain, and do not govern in favour of the country's development. Naturally, these structural behaviours undermine economic growth, as all companies, when they are created, have to meet the demands of the political regime in place. What is more. These factors cause the population to become alienated from the government, doubting its ability to ensure their security and economic prosperity [(Nomor & Iorember, 2017), (Aderemi & Ikeola, 2016)].

As a result, armed groups (Boko Haram in the North) and other violent conflicts have emerged across Nigeria's agricultural provinces. These conflicts increase the levels of insecurity within the country with a rise in violent crime and an inability on the part of the government to control these situations. The fact that governments are imposed, through vote rigging and intimidation through military militia groups, makes these situations increasingly recurrent and further increases insecurity and instability in the country as each group seeks to impose its will through violence [(Odozi & Uwaifo Oyelere, 2019), (Beautmont, 2021)].

The effects of the lack of security have led to multiple international companies withdrawing from the region and the retreat of potential foreign investors. Armed conflicts have caused population migration to areas of less conflict, which in turn has led to overcrowding in these areas, increasing problems such as unemployment and poverty (Beautmont, 2021).

There is an ongoing conflict in the Niger Delta region, a region with the highest concentration of strategic minerals (oil and gas), which accounts for 80% of government revenue. This conflict has three main participants, the state, the multinationals/oil corporations and the communities of inhabitants of this region, as there is an inequality in the distribution of wealth, which causes local communities to revolt and, as has happened in the past, the population to create armed conflicts. This conflict situation, and the wealth accumulated in the area where it occurs, causes economic instability for the rest of the country [(Beautmont, 2021), (Newson, 2011)].

#### Germany

Germany is a democratic country with a broad political and civil culture, where both political and civil rights are ensured through the rule of law. The current political stability in Germany is mainly attributed to the country's established democratic institutions, strong economy and cohesive society. One of the main factors contributing to the stability of the German political system is its federal structure. Germany is made up of 16 states, each with its own government, which allows for a decentralised system of power sharing and decision-making. This has helped to create a cohesive society with a shared sense of identity and a commitment to democratic values. It is considered one of the most politically stable and prosperous countries in Europe, however, in recent years, new challenges to its stability have emerged, including a significant influx of refugees, rising economic inequality and the growing popularity of right-wing populist movements. Despite these challenges, the German political system has remained remarkably stable, with a strong commitment to democracy, the rule of law and social cohesion [(The Federal Government a), s.d), (Federal Ministry of Finance, 2022), (Folkerts-Landau & Schneider, 2016)].

Germany's political stability is almost unique among developed countries, and as the European leader on economic issues, this stability is based on the focus of the German people and their companies on looking at the long-term perspective rather than the immediate success perspective. When it comes to governance and administrative quality, Germany is in one of the top places in the ranking (7). Social and welfare systems are robust and rely on interaction between the administration, trade unions and labour associations to encourage harmony and make decision making easier. This builds trust in government systems among the German

<sup>&</sup>lt;sup>7</sup> According to data from The Global Economy, they are in 26th place https://www.theglobaleconomy.com/rankings/wb\_government\_effectiveness/

people by making them look to the global and the common good, rather than the momentary and for their own benefit [(The Federal Government a), s.d), (Federal Ministry of Finance, 2022), (Folkerts-Landau & Schneider, 2016)].

The country's economy also contributes significantly to political stability. Germany has the largest and most robust economy in Europe and its fiscal policies are based on a prudent, long-term approach to financial sustainability. The government has managed to maintain low unemployment rates, high economic growth and a strong social security system, which has helped to reduce the risk of political instability. In addition, Germany has a well-established political culture that values consensus, compromise and reflection. This allows for constructive dialogue between political parties and civil society, which helps to create a sense of trust and legitimacy in government institutions [(The Federal Government a), s.d), (Federal Ministry of Finance, 2022), (Folkerts-Landau & Schneider, 2016)].

The stability of the German political system is based on its federal structure, a strong economy and a cohesive society. However, current challenges such as the rise of populism and the increasing polarisation of society require the government to remain vigilant and committed to democratic principles [(The Federal Government a), s.d), (Federal Ministry of Finance, 2022), (Folkerts-Landau & Schneider, 2016)].

#### Comparison

Using the Political Stability Index, an index that aims to measure the perception of government replacement through violent or unconstitutional acts (including politically motivated violence and acts of terrorism), with values ranging from -2.5 (very likely to happen) to 2.5 (unlikely to happen), it is possible to calculate that Nigeria is ranked 182 out of 194 countries with a rating of -1.78 and Germany is ranked 52 out of 194 with a rating of 0.76 [(The Global Economy a), 2021), (The Global Economy b), 2021)].

According to the Government Effectiveness Index (8) Nigeria ranks 165th with a score of -1 and Germany ranks 26th with a score of 1.33 (The Global Economy e), 2021).

Germany has a stable democracy based on a constitution that restricts absolute power to its rulers and protects its citizens. This stability has also been achieved due to the coalition of the two largest German parties during the years 2005-2009 and 2013-2021, this coalition has brought not only stability but long-term prosperity to the German people. Political stability is

\_

<sup>&</sup>lt;sup>8</sup> Index that captures the perceived quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies.

also based on the absence of violence and terrorism as a political pretext (Trading Economics d), 2022).

Due to the independence of its 16 states, which hold responsibilities at different levels - security, school system, administrative and local government - there is less pressure on the central government and each state solves its problems more efficiently. In effect, power is not centralised as much within the country, which serves to contribute to political stability within the country [(Facts about Germany a), s.d), (Perfil da Alemanha, s.d)].

Nigeria is considered a newly democratic country as its last democratic period started in 1999. Despite being considered a democratic country it is still not seen as a true democracy, this is due to the fact that there are high numbers of electoral corruption present in the country as well as the lack of civil rights and liberalities guaranteed to all its citizens (Ashindorbe & Danjibo, 2022).

Nigeria, despite being a country with democratic elections, is highly susceptible not only due to the high levels of electoral corruption present in the country that often results in the exchange of votes for monetary means, but also due to the lack of means to conduct elections efficiently, with often shortages of material for the registration of votes, lack of places to vote in all regions, as well as a lack of workers in polling stations [(Green & Carson, 2023), (Nigeria, 2022)].

This political instability in the country extends to the lack of security currently being experienced in several regions with the emergence of several armed groups, militias and acts of terrorism often motivated by political or independent issues of some regions within Nigeria. This problem is intensified by the fact that Nigeria has a collection of over 250 groups and 500 languages, this creates conflicts in terms of different mindsets as well as the fact that many of these regions before the colonisation of Nigeria were independent (University of Birmingham, s.d).

#### 3.2.3. Corruption

Corruption is the misuse of power for personal gain at both public and private levels. All forms of corruption accounted for are used to acquire advantages dishonestly. The corruption that will be focused on, is in the public sector as it directly interferes with the smooth running of both the government and businesses, which consequently influence the economic success of the country and private sector investment in the country and the creation of new businesses (Ghazanchyan et al., 2018).

From a macro perspective, in many countries corruption is one of the main deteriorating factors for the proper functioning of institutions and, consequently, of the country. As it is illegal, the way to measure it is complicated, not only because of its intangibility, but also because it depends on its measurement by external organisations - such as *Transparency International*, the basis used in this thesis as a benchmark [(Akça, H. et al., 2012), (Transparency International a), s.d.)].

Main impacts of corruption: (1) public finances, (2) financial and monetary stability and (3) growth [(Ghazanchyan et al., 2018), (Tanzi, 1999)].

- (1) Public finances due to the difficulty of obtaining state profits through the payment of taxes because corruption is interlinked with tax evasion in the countries with the highest rate of corruption; in addition, public investment projects also suffer an inflation in their costs and a deviation of the means to execute them because in the middle of the processes capital is diverted to bribes/corruption.
- (2) Financial and monetary stability the distribution and efficient use of existing resources in the country is directly affected due to active corruption. This process causes negative effects on the economy which potentiates the emergence of inflation and inequality in income distribution. Inflation causes an economic deterioration which conditions the monetary policies of the Central Bank, which ultimately weakens the financial markets, which can negatively affect the financial development and stability of the system (Akça et al., 2012).
- (3) Growth the impact of corruption on growth may not be easily detected, as growth is affected by the difficulty for new organisations to enter existing markets and causes existing organisations in the market to have increased costs linked to corruption, which may cause them to fail due to these costs, and makes markets not very attractive to new investment, constraining not only growth but also the creation of new jobs.

#### **Nigeria**

Among the management problems in the country one of the most serious and that influences all its citizens is bribery, most of which is carried out by public officials (60%), this creates public distrust in the government and its ability to eradicate the problem. This implies the creation of laws and a more severe anti-corruption agenda by the government, not only focused

on the macro perspective and business corruption but also on a micro scale and active corruption that affects all its citizens. (9)

This corruption is embedded within various public sectors, from the armed forces, police, doctors, prosecutors and citizen aid departments, creating instability and uncertainty in these public sectors (Lim, 2017).

Corruption is done notably to speed up judicial and registration processes and to finalise administrative procedures. These bribes are also paid to inspectors so that not as many taxes or income declarations are paid, which causes economic impediments, creating delays in the development and creation of new companies that have to take into account this type of corruption in terms of their monetary capital and the delay of all the processes that incorporate their creation. In addition to these factors, the need for government connections creates barriers to the development and growth of the economy as well as the entry of foreign investment (United Nations Office on Drugs and Crime, 2019).

Nepotism is prevalent when looking at recruitment in the public sector, with individuals being hired more easily on the basis of inside contacts than on their personal and/or professional skills or merits; this causes constraints in the public sector as people without the necessary qualifications are left in positions of high responsibility. In order to mitigate these practices, more transparent practices could be implemented in the recruitment process. Corruption problems in Nigeria are overwhelmed by the poor quality of institutions and governments [(Chiamogu & Chiamogu, 2019), (Sanni, 2020), (Itodo & O'Regan, 2018)].

#### Germany

According to data from the World Data Bank, Germany is one of the least corrupt countries in the world, ranking 10th out of 192 countries. This is largely due to its anti-corruption policies and laws in place. These laws are based on 9 principles "(I) increasing transparency, accountability and integrity in order to achieve better governance, (II) prosecution and prevention of corruption, (III) assisting international partners with these anti-corruption reforms, (IV) including the public, private and civil sector, (V) given the risk that corruption brings to the various economic systems a proactive perspective is needed in order to mitigate it, (VI) government awareness programmes in risky government areas, (VII) anti-corruption activities have to take into account the context of each country when applied to economic

\_

<sup>&</sup>lt;sup>9</sup> Nigeria loses about 70 to 75% of its state budget annually due to corruption <a href="https://dailytrust.com/75-of-nigerias-budget-lost-to-corruption-forensic-experts/">https://dailytrust.com/75-of-nigerias-budget-lost-to-corruption-forensic-experts/</a>. It also loses about 18 billion due to financial crimes. <a href="https://www.icirnigeria.org/18-billion-lost-to-illicit-financial-crimes-yearly-in-nigeria-group/">https://dailytrust.com/75-of-nigerias-budget-lost-to-corruption-forensic-experts/</a>. It also loses about 18 billion due to financial crimes.

partners, (VIII) when it comes to cooperation between countries it is necessary to strengthen the elements that provide a reduction in active corruption and develop leadership capable of reducing this problem and (IX) coherence is needed at the level of policy measures in order to cover the complexity of the problem and involve all stakeholders for this cooperation, because of this the German government needs to keep these policies coherent and direct." (Federeal Ministry for Economic Cooperation and Development, 2012).

Despite its progress in reducing corruption, there are still efforts to be made regarding tax evasion by managers of public and private companies as well as white-collar crime. This can be explained by the lack of qualified staff to enforce these laws and also by the lack of government funding in this area. As a result, these measures are not enforced or are enforced late, which jeopardises the sectors where this active corruption is sustained. (Glucroft, 2022).

## Comparison

Given that corruption is one of the greatest risks to development, because resources are wasted or mismanaged, it creates barriers to the country's economic growth, limiting the emergence of new investors which increases the difficulty for a nation to reach its potential. It also jeopardises the legal and democratic processes of government, leading to uncertainty both internally and from international partners.

Corruption is one of the major detractors to poverty reduction and the disadvantages experienced by some sectors of the population that are regularly affected in developing countries. Given that corruption causes a deprivation of resources and stewardship can be defined as the use of resources for development, a lack of resources can jeopardise a country's growth and development (Chêne, 2014).

One of the bases used for the comparison of the corruption ranking of Germany and Nigeria was Transparency International, which is based on the CPI ("Corruption Perceptions Index") which is based on 13 different external sources informed by expert opinions or surveys of entrepreneurs from private venture and consulting firms, think tanks and data taken from the World Bank and the World Economic Forum. As these sources use their own scale, before direct comparison, the data are all transformed to the same scale so that they are all standardised. The average of these results is then calculated, which is the CPI value. To ensure that these values are reliable, only countries that are in at least 3 of the sources are included in the CPI, which include any type of illegal act carried out by the public sector - bribery, access to legal protections and information from whistle-blowers, investigators and journalists and the diversion of public funds and the effective prosecution of corruption cases within appropriate

legal frameworks, data such as money laundering, tax fraud, illicit money flows or financial secrecy are not counted for the CPI calculation. The index is regularly reviewed by independent assessors to ensure the reliability of the results and its methodology provides consistency at both statistical and conceptual levels. In short, its methodology follows four basic steps: selection of source data, rescaling of source data, aggregation of the rescaled data, and then reporting of an uncertainty measure. The calculation process also incorporates a rigorous quality control mechanism consisting of parallel independent data collection and calculations conducted by two in-house researchers and two academic consultants with no affiliation to Transparency International. Based on the parameters described above, Germany's ranking is 9 and Nigeria's is 150 [(Transparency International b), s.d), (Transparency International c), s.d)].

Control of corruption is a measure that captures the perception through which public power is used for private gain, including from minor to grand corruption as well as measuring government corruption done through elites or private interests, this measure comprises values between -2.5 to 2.5 with the higher the better. Nigeria has a corruption control of -1.07 (World Data Bank data) which places it 163rd out of 192 countries, while Germany has a value of 1.81 which places it 10th in the table [(The Global Economy c), 2021), (The Global Economy d), 2021)].

Looking at these two countries and their internal corruption indices it can be seen that there is a large disparity and Germany is able, with the measures implemented, to better mitigate this problem. Nigeria by applying these measures could help reverse the situation of corruption, which would lead to the release of more internal resources, and, if they were well applied, would lead to its economic development and the attraction of external investors, in turn increasing its partnerships with other countries.

## 3.3. Methodologically orientated reflection on the economic field

#### 3.3.1. Economic Growth

Generally speaking, economic growth is differentiated from economic development, as the latter is measured through the increase in production and services as well as consumption of them, and is therefore a quantitative rather than qualitative measure [(Poliduts & Kapkaev, 2015), (Son & Kakwani, 2004)].

Despite being a quantitative measure, it is one of the best instruments for reducing poverty and improving the quality of life of the inhabitants of that country, since greater economic growth is directly related to the increase in the supply of jobs in the markets, as well as the emergence of new investors who can promote measures favourable to the development of the country. However, for this to happen, the capital gained through this economic growth must be shared by the population in general and not just retained in the upper classes, this makes the quality of life of the population grow as a whole. Better economic growth requires the development of policies and laws that allow the entire population, regardless of their social and economic stratum, to participate in the new opportunities presented by economic growth, as well as in its growth [(Department for International Development, s.d.), (Son & Kakwani, 2004)].

#### **Nigeria**

Nigeria is in the 10 worst countries for EDI (<sup>10</sup>), this is due to the fact that most of the economy is directly and indirectly dependent on the oil industry, this creates a long term problem as the fluctuation of the markets will directly influence the growth or decline of that country, in that period. The fluctuation of prices in this industry is heightened by the fact that in the last decade 90% of exports have been linked to this area. This exposure causes large shocks to the national economy with fluctuating prices. These economic shocks affect the capital that the government manages, which in turn affects its ability to respond to these shocks [(United Nations Nigeria, 2022), (The World Bank, 2023), (World Government Summit, 2023)].

The initial boom in the economy resulting from oil exploration created migration of population from rural to urban areas, which gave rise to three problems (1) lack of employment in urban areas for the migrant population, (2) decline in arable land and people working in the agricultural sector and (3) conflicts in the Niger Delta region. Due to the decline in the agricultural sector, Nigeria is facing a food shortage across the country. This has resulted in the increase in prices of food products produced within the country as well as forced the importation of food products. In this importation, the Nigerian government loses a lot of capital in exchange rates, which makes the imported product more expensive. In order to combat this decline in the agricultural sector and reduce the cost of imports in these products the government has banned the importation of certain food products to promote increased local production [(Falola & Udo, 2023), (ReliefWeb, 2022), (Falayi, 2019)].

<sup>&</sup>lt;sup>10</sup> Economic Diversification Index measures and ranks countries on the extent of their economic diversification from a multidimensional angle, exploring diversification of economic activity, international trade, as well as government revenues (away from a reliance on natural resources or commodity revenues). World Government Summit (2023)

One of the major challenges in economic growth remains the country's dependence on the oil and gas industry, with a lack of industrial diversification as well as a lack of investment and development. The low or lack of infrastructure or even its state of disrepair, hinders industrial development, for this and due to the high cost that infrastructure development entails, the Nigerian state seeks the involvement of the private sector through partnerships (Ministry of Budget & National Planning, 2017).

As we will see later, unemployment, especially in the younger age group, continues to be a hindrance to economic growth, and a programme is being developed to support the creation of new businesses, in order to not only have more employment opportunities, but also to diversify the economy and emphasise "Made-in-Nigeria" products, as well as encouraging through certain benefits for young people to enter the agriculture and construction industry (Ministry of Budget & National Planning, 2017).

In relation to the agricultural sector, this has been one of the fastest growing sectors in Nigeria, so there is a great potential in the sector, being also one of the sectors with the highest import expenses its development can be one of the solutions for cost reduction, as well as for growth and job creation. One of the biggest barriers remains the fact that most of the agriculture done in Nigeria is not for production but for subsistence, although means are being developed to facilitate the emergence of new enterprises in the sector to ensure the prioritisation of food security for its population (Ministry of Budget & National Planning, 2017).

In the energy sector, increasing exports of natural gas and oil, as well as increasing their production, remain a priority as well as investing in the refining sector because, despite being one of the largest exporters of oil, it has to be imported refined due to the lack of means to do so domestically. The power sector continues to be badly affected by constant shortfalls and therefore investment efforts have been planned in the sector, both expansion and optimisation of existing plants (Ministry of Budget & National Planning, 2017).

The regulatory processes of forming and implementing a business and all its red tape remains a major impediment when looking at encouraging investment both domestically and in acquiring international investors, smoothing these processes by making the economy more business-friendly will promote economic growth (Ministry of Budget & National Planning, 2017).

#### Germany

Germany has one of the largest economies in the world, with a GDP growing annually. Most of its economy is based on an aggregate of small and medium-sized enterprises, and the fact

that they are of different sizes allows the acceleration of innovations in various sectors, as they can pivot more easily, as well as their disruptive capabilities, being able to look at a need in the markets and meet it. Making these companies often world pioneers in their various business areas. The ability of small and medium-sized enterprises to co-operate with multinationals (large companies) allows them to increase the value chain of both, often these multinationals use the services of these companies externally (outsourcing) in order to create an interconnected web that brings benefits to both. This coexistence allows the German economy and industry to be a pioneer in markets and research, as well as promoting its flexibility, versatility and efficiency [(OECD Economic Surveys, 2020), (Federal Ministry for Economic Affairs and Energy, 2019)].

In order to enable the continue emergence of new small businesses, as well as to attract and enable domestic and national investment, a number of measures have been promoted to make it easier to raise the funds needed to set up businesses and funds for their development and to ensure their financial health. Programmes have been put in place to facilitate the recruitment of specialised employees and employees in areas where the company is lacking, as well as measures to facilitate the hiring and attraction of people from outside Germany [(OECD Economic Surveys, 2020), (Federal Ministry for Economic Affairs and Energy, 2019)].

Due to the emergence of protectionist measures in the markets, and outside the principles of free markets, as well as the emergence of developing economies, which do not take into account international rules of competitiveness and which violate international company laws, as well as companies that compete with others with the help of state subsidies, markets are much more competitive. Despite this competitiveness, Germany has not changed its development and competitiveness strategy, which is mainly based on the modernisation of its industry, the production and consequent offer of higher quality products and services and the commitment to development and research in order to create disruptive companies in the markets [(OECD Economic Surveys, 2020), (Federal Ministry for Economic Affairs and Energy, 2019)].

The strongest German economic sectors are: the automotive and automation sector, the heavy metal industry, the pharmaceutical and chemical industry, as well as the electrical industry, among others. This versatility and range of products means that Germany is the third largest exporter in the world, making around 47% of its GDP from the export of products and services, and its biggest partners are countries within the European Union, China and the United States [(The World Data Bank b), 2021), (OEC a), s.d)].

### Comparison

Germany had a GDP of USD 42589.93 billion in 2021, which represents 1.91% of the world economy, it is the fourth largest GDP in the world and one of the largest economies in the world. Its growth was 2.6% when compared to last year, a stable economy with a high level of development. According to forecasts, its economy will continue to grow at a steady pace [(Trading Economics b), 2022), (The World Data Bank e), 2021)].

Nigeria, on the other hand, had a GDP of \$440.83 billion in 2021, which represents 0.2% of the world economy. This makes Nigeria the largest economy by GDP on the African continent. Its growth was 3.6% when compared to last year. Nigeria has an emerging economy with a lot of growth potential today. According to forecasts, its economy could continue to grow at a rate of 3% per year until 2028 [(Trading Economics b), 2022), (The World Data Bank e), 2021)].

Germany's focus for economic growth is on specialising its economy in innovative products and services, which require a high level of skilled labour. Innovation is one of the most important aspects for its economy and takes into account the flexibility of its SMEs to penetrate markets with disruptive products, this is driven by the implementation of state aid for the development of these companies and for them to have the necessary funds to compete against other international companies. The international paradigm shift towards high technology levels allows these companies to make effective changes in their operating models, always requiring highly specialised professionals with the know-how to implement these changes.

The automotive industry continues to be a major driver of the German economy and technological advances in this area provide an opportunity for growth and penetration into diverse markets in countries with emerging economies, making it the largest exporting industry within the country. The mechanical engineering industry is also a major contributor to the German economy, being a very diverse and innovative industry using about 11% of the capital allocated to research and development, Germany is the third country that develops and produces more machinery only behind China and the United States. Competitiveness with international markets and with other countries that can produce cheaper and with increasingly better quality means that German companies need to constantly innovate and use digital technologies in their economic models in order to remain competitive in the markets [(OEC a), s.d), (Federal Ministry for Economic Affairs and Climate Action b), s.d), (Parella & Hernández, 2018), (McKinsey & Company, 2013)].

Nigeria's economy is still heavily dependent on crude oil and natural gas, both of which account for 87.3% of its total exports. However, the country's most imported product is refined oil, which indicates that despite the strength of its oil industry, the country still does not have

the refining capacity necessary to be self-sufficient, something that the Nigerian government intends to change by 2025 - the emergence of foreign investment supported by the government in this area aims to make Nigeria the African country that refines the most oil by 2025. This focus on the sector serves to grow the sector and the continued increase in exports in the oil sector. However, the Nigerian economy has a low degree of diversification, which could put the country in difficulty when the barrel of oil gets cheaper, damaging its overall economy. This is exactly how the Nigerian government intends to utilise the capital acquired through the oil sector to expand other sectors of its economy [(OEC b), s.d), (Izuaka, 2023), (Onuah, 2022), (Ighosewe et al., 2021)].

The focus on the agricultural sector has been strong on the part of the government, as 70% of Nigerians engage in subsistence farming. The blockade of importation of some products came in a bid to revitalise the sector, which, however, still relies heavily on subsistence farming and little specialised and industrialised farming. The government intends to invest in the sector as well as seek international partners for the sector and bring in the know-how to make the sector sustainable, structured and marketable [(Feed the Future, s.d), (Yao & Liu, s.d), (FAO, s.d)].

However, one of the sectors in need of further development - which could provide economic growth as it interconnects other sectors - is its infrastructure system, which is in decay or in need of repair, or in many cases non-existent. This problem extends from the constant power outages, which is detrimental in the long run to businesses that need to spend resources on oil generators to continue their activities, as well as the lack of (proper) roads, railways, which makes the movement of products within the region very expensive, makes it impossible to transport them effectively and reduces the expansion that industrial sectors could have. It is estimated that about US\$1.5 trillion is needed over 10 years to reduce this gap [(Okpaloaka, 2021), (Kari et al., 2019)].

#### 3.3.2. Unemployment Rate

The unemployment rate is calculated by dividing the number of unemployed people (these are people who are not working but are actively looking for a job) by the labour force multiplied by one hundred (Bondarenko, s.d).

This rate is one of the main indicators when it comes to measuring the well-being of the economy and tends to fluctuate according to the business cycle, increasing or decreasing during recessions or growths, respectively (Bondarenko, s.d).

As it is mostly analysed by policymakers, investors and the general public, the former together with central banks analyse fluctuations in the rate in order to adapt fiscal and monetary policies to the state of the economy (Bondarenko, s.d).

As far as researchers and the general public are concerned, this rate ultimately evaluates the government's stewardship, meaning that the higher it is, the more it shows the economy's inability to generate jobs for people who are looking (Bondarenko, s.d).

The consequences that high unemployment can bring to the economy are varied, but mainly the reduction of foreign investment, the reduction of consumption and demand for goods, social problems, increased monetary burden on the state (by the amount of subsidies to be paid) (Bondarenko, s.d).

Potential output translates into the ability of the economy to produce goods and services when the available resources (labour and capital) are fully utilised, thus correlating the growth rate of potential productivity with labour supply. We can see the influence that each of these factors has on GDP, because if the employment rate is high, real GDP falls short of potential GDP (Levine, 2013).

The situations that can arise are in the absence of productivity growth, that as long as each professionally active person is employed, the rate remains stable, when the rate of output growth is higher than the rate of labour force growth, more job vacancies arise and the opposite is also true. Only in the second situation will the unemployment rate fall, and in turn GDP, in the long run, will grow (Levine, 2013).

#### **Nigeria**

Nigeria has one of the highest unemployment rates in the world, this coupled with the fact that it also has one of the highest growth rates in the world makes the country's ability to create new jobs and generate wealth for the population quite difficult (Business Day, 2023).

One of the biggest problems plaguing unemployment in Nigeria is the difficulty in accurately documenting the number of workers who are actually working, as most of Nigeria's companies are state-owned, their CEO's often register workers who have actually died or retired in order to continue receiving their salaries from the state coffers. This exponentially increases the recurrent administrative costs and expenses of the state. Another major problem is that most of the people in employment are either overqualified or underqualified, often not being allocated to the respective positions that would be most beneficial to them, and there is therefore a lack of realisation of human capital potential. Education therefore does not guarantee access to more productive and profitable labour, and there is often no meritocracy (Okeowo et al., 2022).

The number of illiterate people is around 31%. Most of the population that lacks literacy is concentrated in the agricultural sector. These figures therefore reveal a difficulty and limited access to education, as well as a low level of education. Around 20% of the population aged 25-34 is not working, studying or active training. And 90% of the population works in the informal economy sector (economic sector that has economic activities without contributing to the state, without paying taxes and without the knowledge of it) (United Nations Nigeria, 2022).

Looking at the picture of the employed population, 73.1% of workers still work in the agricultural sector or for their own company. However, it is possible to see a shift from subsistence farming to agricultural workers earning a wage and working for a company, as the number of subsistence agricultural workers is only 5%, 13.4% work in the business and service sector, 10.7% work in domestic businesses, 2.6% work as an apprentice or trainee and 0.2% help family members who are employed (National Bureau of Statistics, 2023).

Of the 73.1% of workers who either work in the agricultural sector or have their own companies, the majority still work in micro-sized companies, most of which do not have any kind of employment contract and often their companies are not registered, and their industrial area is retail and wholesale markets. However, these companies represent a substantial slice of Nigerian GDP, contributing around 16% of it. Although most of the retail sector is informal and fragmented, mostly through street vendors and small shops, there is a fast growth of larger shopping centres and modern shops. The potential growth of this sector has attracted foreign investors (Fiorini et al., 2013).

The agricultural sector is the largest sector of Nigeria's economy, and it is home to the most workers (even though most of them farm for a living), accounting for 36% of its economy's GDP. Despite these factors, there is a large shift in population from agriculture to other sectors of industry. The Nigerian government wants to bring new investment into this sector in order to speed up food production, as well as further automate the sector. At the moment large commercial farms are not yet a factor in the country, but in the future they could be, if there is foreign investment bringing with it new job opportunities [(Fiorini et al., 2013), Federal Ministry of Agriculture and Rural Development, 2022)].

One of the biggest concerns for new investors and current companies, which affects their growth and the increase in new job opportunities, is the weak and unreliable electricity grid that often does not have the capacity to supply the various sectors of the economy and which causes barriers to the expansion of the various companies in it. This often forces some companies and industries to install their own generators, which drastically reduces interest in Nigeria as a country suitable for new investments (Airoboman et al., 2016).

Oil and gas account for 88% of Nigerian industry's total exports, providing the capital needed to buy and import processed products and food. Taxes in this sector contribute to the highest profit generated by the government, making it one of the most attractive sectors for new investment. However, attracting jobs in this sector often depends on skilled labour that has to come from other countries, due to the low level of education of the general population. Therefore, if there is an increase in education, it will be a sector that brings new job opportunities [(PWC, 2016), (Nigeria: Economy, n.d.)].

#### Germany

Germany has an employment rate of 77.3% in 2022, the highest ever. Despite this, the employment market has seen significant changes due to globalisation, technological advances and demographic shifts, which have caused a decline in labour-intensive industries [(Trading Economics a), 2023), (Duell & Vetter, 2020). (Engborn et al., 2015)].

Unemployment in Germany mainly affects certain groups - young people, people with low levels of education and people with long periods of unemployment. The social consequences of unemployment can be social exclusion, increased poverty and psychological problems. In relation to the economy, it affects economic output, leads to an increased dependency on social services and a reduced consumer spending. Due to these factors, Germany has implemented several policies to combat unemployment: (I) training and upskilling programmes so that people have the necessary skills to apply for new jobs, (II) payment of unemployment and housing benefits, (III) legislation to protect workers, (IV) laws facilitating the hiring of new workers in order to increase the flexibility of the labour market and (V) the creation of training programmes for future jobs [(International Labour Organization a), s.d), (International Labour Organization b), s.d), (Duell & Vetter (2020). (Engbom et al., 2015), (Federal Ministry of Finance, 2022)].

The unemployment rate in Germany is around 3.6%. Some reasons that can be pointed out are: the incentives created by the State in the creation of more jobs; the reduction of taxes for companies; the investment in infrastructure; the high rate of education (which ends up better qualifying workers) [(Duell & Vetter (2020), (Engborn et al., 2015)].

### Comparison

Looking at the two countries, the diversification of the German economy, combined with a strong network of small and medium-sized enterprises that ensure its economic flow, allows it to quickly generate the necessary jobs for its inhabitants. A strong industrial sector as well as

the availability of means allows innovation as well as the formation of new companies which makes job formation high (Duell & Vetter, 2020).

Some groups of German residents do not find it so easy to find a job, particularly those who are not well enough educated to become viable members of the country's business community. There is a lack of jobs available for immigrants. However, the country's policies allow those who are unemployed to receive assistance in order to avoid poverty. (Duell & Vetter (2020))

In order to reduce the gap of those who are most disadvantaged, several efforts have been made to implement various vocational trainings and different training systems, this with the aim of decreasing unemployment rates, namely in disadvantaged youth (Duell & Vetter, 2020).

Unemployment in Nigeria currently stands at 33.3%. These figures are projected to increase in the short term. This problem stems from a lack of economic diversification, continued population growth without adequate economic support and a lack of new business creation.

With population growth there continues to be a lack of accessibility in education, which causes a lack of population that has the skills and knowledge needed for certain entrepreneurial positions, which leads to the young population not having the characteristics needed for the jobs that are available. The high costs of living and low wages of many Nigerian labourers means that the general population is unable to raise the money to start their own businesses - which would help to reduce unemployment nationally. Insecurity in many parts of Nigeria linked to armed conflict prevents international companies from partnering with the country, as well as making it difficult for them to invest and set up businesses - which prevents the creation of new jobs.

Unemployment problems in Nigeria increase crime levels as many jobless individuals see no other solution than to engage in illegal acts to ensure sustainability. It increases poverty levels in the country as citizens without jobs are unable to buy essential goods - which also results in economic stagnation as these individuals do not actively participate in the country's economy.

High levels of unemployment cause struggle among people, which often results in demonstrations that worsen the reality of political stability, with the aggravation that these conflicts may become more frequent.

In order to reverse the situation, the Nigerian state has tried to encourage: investment and the emergence of entrepreneurs by reducing taxes and fees to facilitate access to credit; investment in education to train more skilled labour capable of meeting business demands; the development of infrastructure - many of which are in decay and in need of investment - and the

promotion of economic growth. As a result, is creating an ideal environment for foreign and domestic investment to emerge (Jenq et al., 2021).

## 3.4. Methodologically orientated reflection on the social domain

#### 3.4.1. Population growth and age distribution

Population growth and age distribution are not only linked to each other, but also to a country's economy.

Population growth can have a negative influence if it is rapid and in a developing country, because it not only means greater economic investment, greater public spending on health, education and other essential services, but also greater social and economic development. ("Why Population Growth Matters for Sustainable Development," 2022).

From another perspective, if this growth is in a younger age group, it creates more opportunities for economic development, because if there is a concentration of the working-age population, this eventually supports an accelerated increase in per capita income. Reducing the birth rate can, on the other hand, invert the pyramid, with a greater concentration of older people ("Why Population Growth Matters for Sustainable Development," 2022).

Investments in health and education, as well as promoting employment for all, can have a positive impact on the economy, offsetting the decline in fertility ("Why Population Growth Matters for Sustainable Development," 2022).

## Nigeria

The Nigerian population has been growing steadily since 2007, as shown in Annex 1, and is forecast to continue to grow, although it is declining in percentage terms. This population growth makes Nigeria the African country with the largest population. By 2050, Nigeria is projected to become the fourth most populous country in the world. Consequently, given its geographical territory and population growth, Nigeria is one of the most densely populated countries per square kilometre in Africa [(Macrotrends a), s.d.), (The World Data Bank c), 2020), (Kamer, 2022)].

Its age distribution is structurally pyramid-shaped, with the majority of its population aged 0-4 years. From an economic point of view, this makes Nigeria a very attractive country, as it has a very large labour potential, both in the present and in the future, but this requires the development of its educational system (CIA, 2023).

Despite high population growth, and the opportunities that come with it, this growth can also have adverse consequences. Greater population means greater investment by the State in order to provide conditions for it, if there is not, in proportion, a growth in employment opportunities, it can lead to an increase in the population poverty, a state that worsens with food shortages. If economic growth does not keep pace with population growth, the distribution of capital per capita will be lower, which worsens the wage income of workers, causing a reduction, also, in the productivity of workers causing a cyclical effect on the economy, making it difficult to recover. ("Why Population Growth Matters for Sustainable Development," 2022).

One of the biggest problems that the country may face is the lack of economic development at the same level as population development, which can aggravate problems such as hunger, unemployment, diseases, reduction in the amount of resources available per inhabitant and the consequent reduction in the conditions and quality of life of its inhabitants [(Meshach & Rashidat, 2019), (Kulu (2021)].

Population growth can be explained by the lack of "old age security", which makes families want to have more children to ensure their security at an older age. As well as economic incentives, because due to the low minimum wage, the more people working for the family the better [(Meshach & Rashidat, 2019), (Kulu (2021)].

However, this population increase unlocks huge economic potentials if the country is fast enough to develop, as there is more young labour that despite needing proper education and development, can cope with the skilled and qualified labour problems that the country has. As well as if given the tools and support to energise the economy, with the introduction of innovations and new entrepreneurs [(Meshach & Rashidat, 2019), (Kulu (2021)].

### Germany

The German population grew steadily from 2007 to 2021, but in 2022 it started to decline and according to United Nations projections this decline will continue (Statistics times a), 2021).

Weak population growth and decline have transformed the age distribution in Germany over the years into an inverted pyramid scheme. Population ageing may cause constraints on the economy since the working population is smaller than the inactive population, namely pensioners [(Kle & Vogt, 2019), (David, 2022)].

The fact that the average number of births per woman is 1.53 results in a non-renewal of the population, as the value needed for this to happen is 2.1. Since 1971 this value has not been seen and the fact that the population between the years 2007 to 2021 has continued to grow is

due to migration in Germany, because since 1981 the net migration has been 2.1 [(The World Data Bank g), 2020), (Craig, s.d)]. (11)

Some measures that can be implemented in order to reverse this situation are free schooling from nursery school onwards; reduced housing costs; more flexible working hours for pregnant women and new parents; and, finally, reduced costs and greater ease for fertility treatments. (Craig, s.d).

## Comparison

Germany currently has an estimated total population of 83.294.633, this population is mainly due to the continuous increase of immigration in the country with the constant arrival of people from outside the country, mainly refugees from countries affected by conflicts [(World Population Review, 2023), (Schengenvisa, 2022)].

This population growth is in direct contrast to the average births per woman, which are currently below what is needed for population renewal and growth. This problem is accentuated in social terms with population ageing that could jeopardise the proper economic and social functioning due to the ageing of the working population. These low birth rates are due to the financial efforts present in families to have children as well as the lack of support often present or the flexibility at work in case of women. Despite these problems, several measures are being implemented to reverse these issues and because of this, we have seen an increase in the birth rate when compared to past years (The World Data Bank g), 2020).

Nigeria is currently the most populous country in the African continent with about 213.4 million, not necessarily having such a vast geographical territory, its population density is beginning to be a problem especially in the more urban areas (The World Data Bank h), 2021).

Projections of the number of inhabitants in the country show a continuous increase in population. This could be worrying as the country is already experiencing worrying levels of poverty, with 4 in 10 Nigerians below the poverty line and only 17% of Nigerian workers earning wages that enable them to escape poverty. If the country continues to experience such high population growth, these problems could worsen (Nigeria Poverty Assessment, n.d.).

The birth rate per Nigerian woman is 5.3 births, making it one of the countries with the highest birth rate in the world, this plus the addition of the reduction in infant mortality rate due to developments in its medical service and public health infrastructure [(Macrotrends b), s.d), (Statistics Times b), 2020)].

-

<sup>&</sup>lt;sup>11</sup> This figure is calculated by the difference between immigration and emigration.

This high birth rate can be explained by the fact that most families have a lot of children to help with subsistence farming, which remains one of the main economic means of the country to ensure food, as well as to help parents when they get old due to the lack of aid for the ageing population who cannot afford to support themselves (Araromi, 2015).

This growth, however, means that Nigeria has the emergence of many young people with potential. If they are given the necessary tools and means (education) to become a skilled labour population, and given both employment and social opportunities to have the ability to develop the country's economy, they can help reverse the poverty situation in the country, however, changes and government aid are needed for this to happen (Meshach & Rashidat, 2019).

#### 3.4.2. Education

Education plays a fundamental role in economic growth, not only by increasing the efficiency of each worker, increasing value chains, but also by creating new jobs and increasing wages. It also empowers people to help each other, to be safe and to reduce corruption (Grant, 2017).

A country's productivity can be boosted through education, by increasing productivity and speed in the execution of tasks. By providing the transfer of knowledge, mainly in secondary and higher education, in the areas of information, technology and products, which increases the capacity in the creation of these new products and technologies, as well as increasing creativity (Grant, 2017).

Increased investment in primary and secondary education can be a pathway out of poverty for less developed countries, while also promoting future prosperity. These countries still find it difficult to fill these gaps, and their education in terms of imparting knowledge is still far inferior to that of developed countries (Grant, 2017).

## Nigeria

According to 2022 data from The World Data Bank, Nigeria has a literacy rate of 62%. About 20 million children are currently out of school. Despite the problems in education and being an area for skills development of its population, there has been a reduction of the education budget which in 2015 was 10.79% of the state budget and in the year 2022 has reduced to 5.39% [(Alabi, 2022), (Zoe Talent Solutions, 2023)].

According to data presented by Statista in 2022, in 2018, in Nigeria, there were 406,800 classrooms suitable for primary schooling, with about 640,000 classrooms needed - this creates a negative pressure on the Nigerian education system, as the average number of students per

classroom is 51, which constrains teaching and overburdens teachers, also affecting the quality of teaching in relation to the attention given to each student (Sasu, 2022).

The main problems of education in Nigeria: (1) lack of capital, (2) rapid increase in education costs, (3) poor salaries for teachers, (4) failure to update the teaching programme/curriculum, (5) lack of flexibility of the education system, (6) lack of libraries and scientific equipment, (7) rapid population growth (which increases the burden on existing schools) and (8) lack of adequate infrastructure (Dr. Birabil & Dr. Ogeh, 2020).

- (1) Lack of capital, given that the country has been spending less and less on education, especially higher education, about 5.39%, while UNESCO recommends allocating between 15 to 20% of the State Budget to education [(Ogunode & Hayab, 2021), (Zoe Talent Solutions, 2023), (Eromosele, 2022), (Unesco, 2021)].
- (2) Rapid increase in the cost of education, especially in quality and higher education, the increase in inflation in the country has also brought an increase in university fees and reduced purchasing power, which jeopardises the attainment of studies as there is a lack of policies to support students, for example scholarships [(Ogunode & Hayab, 2021), (Dr. Birabil & Dr. Ogeh, 2020)].
- (3) Poor salaries for teachers, which underpins a lack of commitment and productivity and a shortage of teachers, which directly affects the education system, with classes having too many students, making it impossible to provide more specialised education. The lack of planning to train more teachers has been exacerbated by the increase in the total population. Disparities between teaching methods also make it difficult to standardise teaching and train specialised people. The exodus of teachers is also recurrent, being an increasingly common phenomenon, and the lack of recognition and career advancement, the latter often being used as a gateway to more prestigious jobs [(Ogunode & Hayab, 2021), (Dr. Birabil & Dr. Ogeh, 2020)].
- (4) Failure to update teaching/curriculum programme, failure to update curriculum plans as well as lack of supervision of teachers results in stagnation/ misunderstanding of aspects that should be improved and developed, which leads to loss of quality and efficiency [(Ogunode & Hayab, 2021), (Dr. Birabil & Dr. Ogeh, 2020)].

According to the World Data Bank, Nigeria has one of the worst records in student learning compared to other countries - and this is due to the poor quality of its education, for example, according to international standards, a child completing the third grade can read and write and Nigerian children, 66%, can only read one in three words. The training of students who complete college is also poor and their absorption into the business network is often not done

with a preference for students who graduate outside the country [(The World Data Bank d), 2021), (National Population Comission, 2015), (Ogunode & Hayab, 2021)].

## Germany

In 2018, 87% of Germans aged 25-34 had obtained at least upper secondary education, above the OECD average (12) of 85%. On the other hand, higher education was at 32%, the average being 44% (OECD, 2020).

The management of education in Germany is divided among its 16 states, each of which has its own minister of education and can legislate in its schools and universities, as long as they do not go against the German Basic Law. This is one of the strengths of German education, as it is easier to detect problems at the sub-national level and to better solve them. This also leads to easier implementation of these solutions, as the fact that no central government approvals are required makes the processes faster. States, in addition to managing education, are also responsible for all investments in students (which are above the OECD average and mainly in secondary school students), research and development in universities [(OECD a), 2018), (OECD, 2020)].

One of the measures adopted by the government was the abolition of payments for preschool education, in order to facilitate and not cause so many economic constraints for parents. This abolition takes into account families with greater financial difficulties. In view of the increased population growth, mainly brought about by immigration, capital needs to be acquired at state and local level in order to take into account the growth in the number of students in the education system, the disparities in budgets within the various German states, with certain states having more funds than others - measures that should be regulated in institutional terms (OECD, 2020).

According to PISA (13) 2018, the biggest disparity in the scores of different students within the German national education system is the socio-economic background of different students, with students from more favourable socio-economic backgrounds generally scoring better (OECD, 2020).

Germany has a strong vocational education and training model, and many jobs that in other countries require a university degree can be done in Germany with a vocational training

<sup>13</sup> The Programme for International Student Assessment, developed by the OECD, aims to assess the knowledge

of students aged 15 - the end of compulsory schooling.

<sup>&</sup>lt;sup>12</sup> Organization for the Economic Cooperation and Development that includes 37 countries

certificate. However, Germany therefore scores below average when it comes to the percentage number of university students compared to the average of OECD countries (OECD, 2020).

Regarding the immigrant population, there are barriers to education and employability, as about 18.9% of immigrants aged 15-24 drop out of school compared to about 8.9% of the total population (OECD, 2020).

In primary education, there is a lack of training for new teachers, a problem that is exacerbated by strong population growth. This problem, coupled with the fact that 42% of teachers in Germany are over 50 years old, compared to only 36% of the average OECD country, means that the future reduction in the number of teachers is imminent, as 42% of teachers are approaching retirement age. One of the incentives given by the government was the salary increase for teachers, which, compared to the rest of the OECD countries, is one of the highest, improving not only their working conditions but also their motivation (OECD, 2020).

In order to combat the differences between the schools in the different German states, a school evaluation system was set up to create a more homogeneous system and to preserve the quality of the schools, so that there is a standard of quality in them (OECD, 2020).

# Comparison

The German education system is structured in 4 stages: primary, secondary and higher education, with vocational schools. This system differs somewhat from state to state, with each state having its own education system, but only the same "grading system" and standardised compulsory education throughout the country. It is free and accessible throughout the country, and is compulsory until secondary school. The higher education system is free in almost all public universities and in almost all courses, not only for German citizens, but also for anyone else who wants to study in Germany; it also promotes research and problem solving, relying heavily on the practical side.

The vocational education system is well developed, with a wide range of curricula in various fields. This system offers the possibility for students to opt for the vocational route or to continue on the academic route through higher education.

Nigeria has a six-year primary education system, followed by a six-year secondary education system. Primary education is compulsory and free in public institutions, however, accessibility remains the biggest challenge, both in terms of infrastructure, geographical positioning, security issues and lack of means (such as teachers), to ensure uniform and standardised education

across the country. Higher education requires the payment of tuition fees, which jeopardises its accessibility to the general population due to poverty rates.

The education curriculum can vary from region to region, as well as its quality. Vocational education is also available, but not all regions have access to it.

The lack of suitable teachers, as well as the disparity between them, jeopardises education in the country and there are big differences in the quality and learning of education, often resulting in classrooms full of students because there are not enough teachers in some regions.

Reduced budgets jeopardise the proper functioning of schools, as well as the minimum conditions for students to have an adequate education.

# 3.5. Methodologically orientated reflection on the technological domain

Technology is one of the factors for economic development. There are several stages for technological progress, which are "discovery (invention), application of the innovation and diffusion of other entities", ending in the degradation of the invention (Nikoloski, 2016).

Throughout history we can count four milestones of technological development. And what they have in common is the technological development that came from it, and, consequently, economic growth. Globalisation is linked with this progress and also with the evolution of electronic services, which contributes to the increase of connections and connectivity of the world economy, and, consequently, globalisation which ends up bringing greater competitiveness internationally - because countries with greater technology have an advantage over others (Nikoloski, 2016).

Energy, communication, transport and industrial machinery are examples of technological progress that have led to economic developments and the benefits that have accrued to society at large (Nikoloski, 2016).

The transfer of technology is aimed at accelerating their development and economy. There remains a serious problem in this transmission to developing countries, leading to problems not only in economic development, but also in social and governmental areas. Many of these countries serve as a place for the production of equipment and technologies for the development of more modern countries, but end up depending on the latter for their own technological evolution, with a clear monopoly on the sources of technological development on the part of the developed countries. An example is that of oil in Nigeria, something that will be developed later (Nikoloski, 2016).

#### **Nigeria**

Nigeria's ICT (<sup>14</sup>) sector has been one of the fastest growing, in 2001 less than 1% of GDP was linked to this sector and it has increased to 10% of GDP according to OC&C Consulting data in 2018. This leads to the creation of new start-ups, linked to new technologies and innovation, with around 55 tech hubs active (OC&C Strategy Consultants, 2018).

Looking at the internet sector - given that 23% of users on the African continent come from Nigeria and that over 50% of the population has access to both internet and mobile phones - it is a very appealing market for new investments and for new opportunities, both for economic growth and growth in the employability sector. [(Kamer, 2022), (Kemp, 2023)].

There has been a large emergence of new companies within the country linked to e-commerce, as well as tech firms that have been established in various sectors, namely in the agriculture sector, energy, banking systems, transport, logistics, health and the financial system. In the Nigerian tech sector, private companies are also trying to find existing gaps left by the mismanagement of governments and find creative solutions to these problems, notably in the education sector (edutech) (Ramachandran et al., 2019).

Taking the example of a successful start-up linked to new technologies, one of the biggest difficulties within the markets in Nigeria, when it comes to SMEs, has to do with their access to reliable and economical sources of companies that do their accounting, being a very relevant factor, as it is one of the biggest reasons for Nigerian companies to fail (bad accounting). To this end, one company, Chioma Ifeanyi-Eze, looking at this gap within the market, decided to set up an accounting hub, bringing together various accountants and consultants to be able to offer a quality service available online, allowing SMEs to pay quickly and efficiently for their services, it also launched a platform with courses for SME owners with basic bailment and accounting programmes (Ramachandran et al., 2019).

There is currently a cluster of start-ups located in Yaba, which began with just 10 start-ups and now has close to 100 companies. There is a lot of investment from the Nigerian government to continue expanding this cluster, as well as attracting international partners such as Facebook and Google. As a result, there is huge potential for employment in these new companies, with most companies doubling their workforce from their inception to 2018. However, in some sectors, namely Software Development, there may be a lack of specialised workers in the companies, which may be explained by low wages and lack of career advancement

-

<sup>&</sup>lt;sup>14</sup> Information and Communication Technologies

opportunities when compared to the opportunities that international companies can offer (Ramachandran et al., 2019).

Most tech-related companies in Nigeria focus their business on business-to-consumer services or products (around 73% of companies) and only 27% of companies focus on business-to-business products or services. This is due to the ease of negotiating directly with the consumer due to the low costs in acquiring new customers that can be done through digital platforms, and most of the population that purchases this type of products and services are young people who have access to these digital platforms (it also correlates with the population growth of Nigeria, a country that has more and more young people). However, despite these positive points, it has been difficult for companies to scale and grow within the market, which may be related to the general lack of purchasing power among the population (Ramachandran et al., 2019).

The potential for the expansion of companies that focus on B2B (<sup>15</sup>) remains great, as there are a large number of small companies that would benefit from the growth of the technology sector, ultimately helping these companies to expand their businesses, namely by increasing income, productivity, the number of workers and especially by giving greater focus to the younger population. However, despite the influx of capital for technological expansion both from the state and from external investment, there are still major barriers and obstacles to the expansion and growth of companies. These barriers are: (1) access to capital, (2) a reliable source of electricity, (3) lack of finance and credit, (4) political instability and corruption, and (5) fees and courts (Ramachandran et al., 2019).

- (1) Access to capital is one of the major difficulties of Nigerian businesses as well as the high interest rates earned by banks towards them which ultimately discourages them from seeking investment constraining their growth, lack of knowledge on the part of business owners to submit proposals to secure loans from banks creates unnecessary risks for banks making it difficult to provide capital and lastly discrimination by the Nigerian banking system by not taking risks in financing SMEs such as start-ups (Mercy et al., 2015).
- (2) Reliable source of electricity despite the country being Africa's largest oil producer, there continue to be major power and electricity outages, most notably there are almost daily major power outages in the city of Lagos, forcing most companies to rely on private oil generators. The company MTN, one of the largest telecoms operators on the African continent, spent 70% of its operating costs on oil alone for its private generators. Due to these factors,

-

<sup>&</sup>lt;sup>15</sup> Business to Business.

poor access to cost-effective electricity is one of the main problems for companies (on average there are around 30 power outages per month). Despite the country being one of the largest in terms of the number of users in Africa, the quality of the internet network is still very low. Although access to the general population continues to grow, the efficiency of the network when providing its services to larger organisations such as schools, companies and government organisations remains weak due to the number of users who have to be online at the same time. This problem is due to the underdeveloped installations of its digital networks, due to the excessive expenses required for the installation of cables, in addition, combined with the energy problems mentioned and power cuts, it aggravates the connectivity problems of users as well as speed problems, placing Nigeria in 146th place in the world out of 176 countries when it comes to network speed, another problem when it comes to the Internet is the high monthly broadband costs that reach 80 dollars a month compared to the national minimum wage of 50 dollars [(Wisevoter, s.d), (Ramachandran et al., 2019)].

- (3) Lack of finance and credit due to the difficulty in analysing credit risks, banks are often reluctant to lend capital to small businesses, further coupled with the fact that these SMEs have to meet a number of requirements before their loans are granted, discouraging many businesses from applying for credit. When looking at external financing, international investors often favour companies whose owners are foreigners and who have studied in developed countries, putting the country's entrepreneurs at a disadvantage in obtaining foreign credit. Due to the high risk presented by many tech start-ups, they have a hard time securing funding or aid from the state, which puts the development of their innovations and products at a disadvantage (Ramachandran et al., 2019).
- (4) Political instability and corruption due to the lack of security and internal armed conflicts, the expansion of companies and their development is jeopardised, as is the measurement of risks against rewards in this climate of instability. Risks related to violence, such as attacks, robberies, kidnappings and police harassment that is often only solved with bribes, put at risk the smooth and optimal operation of companies, as well as jeopardising the attraction of investment both domestically and internationally (Ramachandran et al., 2019).
- (5) Fees and courts companies are often wary of courts, particularly their ability to resolve disputes relating to contracts and commercial disputes fairly, efficiently and without high costs. Obtaining business licences is a very costly process, often with a lot of bureaucracy that slows it down and incurs a lot of expense. High tax rates that are not prepared to assist or help small businesses often put them in financial difficulties, as these fees are often not only levied by

federal agencies, but also state and local ones, causing tremendous pressure on businesses (Ramachandran et al., 2019).

Currently, The National ICT policy has been implemented in order to help solve problems and provide incentives for the use and development of new technologies by reducing taxes and providing incentives for trade, providing guarantees and specific statuses for pioneering companies in order to encourage investments (this status allows the company to secure a tax exemption for a period of 3 years that can be extended to 2 more, as well as a 10% deduction in mandatory taxes on shareholders' income), guaranteeing tax support for the production of ICT products as well as the development of software and adopting financial models to promote investments in the technological sector (Ramachandran et al., 2019).

The problems with these models are that companies must have a total asset of 100 million Nara (local currency) in order to have access to these benefits, which often excludes small local technology entrepreneurs and puts them in direct competition with international companies, with no differentiation between domestic and international companies. Although this can foster competitiveness, which is positive because it promotes development and innovation, it causes economic and financial impediments, and these small entrepreneurs don't have the financial resources they need to compete. There are also currently no financing products from commercial banks such as Nigerian state banks for the technology sector, which continues to place huge amounts of tax causing excessive pressure on these small companies (Ramachandran et al., 2019).

#### Germany

Germany is considered one of the leaders when it comes to innovation (<sup>16</sup>). However, competition for innovation worldwide is increasing and therefore measures need to be taken to facilitate innovation within companies [(The Global Economy f), 2022), (The Federal Government b), s.d)].

It is a priority to create a competitive environment in the industrial sector with high employability rates which can produce products and services capable of competing on the international market and which are innovative. Creating dynamism within start-ups and facilitating their access to capital and an environment that promotes their growth. Continuous investment in research and innovation are the pillars of Germany's prosperity, and Germany depends on this investment to turn innovations easily and quickly into final products and

-

<sup>&</sup>lt;sup>16</sup> 8th in the world.

services. Implementing a continuous and intensive competitive environment in order to bring about continuous innovation and expanding cooperation between universities and research institutions, with companies and international partners, creating links and new cooperations between these different partners. Close co-operation with European countries and the European Union in order to make the European market more competitive and able to compete with other international markets. To this end, the High-Tech Strategy was created, based on five pillars (1) prioritising the areas of greatest focus, (2) improving networking and transfer of capacities within the scientific and industrial areas, (3) improving dynamism in innovation, (4) improving the framework and (5) intensive and transparent dialogue (The Federal Government b), s.d).

- (1) Prioritising the areas of greatest focus the life cycle of products is becoming shorter and shorter, which is why it is important to innovate. Through the development of digital technologies, this innovation can take place more easily. Within these technologies there are eight groups that can be highlighted (a) industry 4.0, (b) smart devices, (c) smart data, (d) cloud computing, (e) digital networking, (f) digital science, (g) digital education and (h) digital life environments (The Federal Government b), s.d).
- (a) Industry 4.0 consists of the production of increasingly specialised and individualised products, highly flexible means of production, hybrid products that directly link their production and maintenance through services and increased quality of corporate cyber security (The Federal Government b), s.d).
- (b) Smart services create and optimise processes, products and services in order to refine the industry in which they are involved, planning in such a way as to enable German companies to guarantee total control in the value creation chains of these processes (The Federal Government b), s.d).
- (c) Smart data, Big data technologies improve and speed up decision-making within a company in order to optimise its processes, but often its implementation is almost impossible for small and medium-sized companies, so the German Federal Government's development of "Smart Data" allows small and medium-sized companies to obtain the same benefits (The Federal Government b), s.d).
- (d) Cloud computing is ideal for small and medium-sized businesses because it allows them to access technological innovations via the cloud that would often only be accessed by large companies. To this end, the "trusted cloud" was created to guarantee secure and legal access to technological innovation programmes via the cloud for SMEs. (<sup>17</sup>).

-

<sup>&</sup>lt;sup>17</sup> Small and Medium Enterprises (SME)

- (e) Digital networking is the use of information and communications technologies to boost the areas of education, energy, health, mobility and administration (The Federal Government b), s.d).
- (f) Digital science is the support of the scientific sector in order to ensure its transformation to a more digital basis, to strengthen digital scientific information infrastructures and to allow greater accessibility and utilisation of it (The Federal Government b), s.d).
- (g) Digital education is necessary for the effective preparation of the population for the optimised use of digital technologies and the media, in order to provide the necessary know-how in these areas. Efforts will be made to implement and use "digital media" in schools and consequently develop the tools needed for students' digital learning (The Federal Government b), s.d).
- (h) Digital life environments, taking into account technological advances and their involvement in both our professional and personal lives, create new opportunities and new potential for generational interactions in society, but open up gaps for those enterprises that learn these new technologies and those who don't keep up with this progress. To this end, support has been created for families to gain access to these new technologies, as well as how to deal with them. (The Federal Government b), s.d).

In order to achieve sustainable economic and energy growth, the utilisation of resources and products needs to be done more efficiently and with consideration for the environment and society as a whole and, in turn, there needs to be a focus on Energy Research through the development and use of stationary energy reservoirs (with the use of battery systems, windhydrogen coupling and thermal energy storage systems), development of new electricity grids (in order to optimise their planning, construction and security), promotion of the use of innovative technology (to use renewable energy inside buildings, in cities, and to make them self-sufficient) and development and research in the energy area in order to make energy use more efficient within the industrial sector. It is also necessary to ensure the delivery of raw materials (technological development and research in order to make obtaining these resources more efficient, increase the recyclability of these materials, and obtain substitute resources when possible that are obtained more easily and more abundantly), the promotion of research developed for the future of work in a digital world (development of measures and frameworks that support both technical advancement and the social factors of workers, as well as their rights, development of workers' competences in these new media in order to make workers the main focus and not simply technology), development of technologies and systems for monitoring workers' skills (in order to understand whether the new technologies are being acquired at both a professional and academic level and to be able to take action if there are gaps in learning new technologies in any of these sectors), development of infrastructures linked to public and individual transport (due to a population growth in urban areas, there needs to be a strong commitment to developing and promoting innovative means and sustainable solutions, both in terms of the environment and means of transport prepared for extreme adverse conditions. The development of electro-mobility, more specifically the development with the help of the central government of battery technology, power electronics and construction using lightweight materials, as well as the combination in the automotive sector of smart cars (grid-connected electric vehicles), smart grids (intelligent energy systems), smart traffic systems (intelligent transport traffic systems), the integration of these systems and funding by the federal government to establish future projects to test their usability in a fully urbanised context) and the development and funding of fuel cell and hydrogen technologies to be implemented and used primarily in public transport (The Federal Government b), s.d).

- (2) Improving networking and the transfer of capacities within scientific and industrial areas through the creation by the federal government of sustainable incentives for technological development in scientific clusters (universities and development centres) and the transfer of these same advances for use in industry and society, funding for faculties for development within their regions of focus in order to attract private cooperation with faculties to accelerate technological development, promoting agreements between universities and private companies for cooperation and effort in the development, implementation and improvement of technology in order to shorten the gap that often exists between academic research and its industrial implementation and applicability, and promoting internationalisation and cooperation with European companies and universities in order to harmonise standards and norms with regard to technological development and research in order to eliminate existing barriers (The Federal Government b), s.d).
- (3) Improving dynamism in innovation due to the size of SMEs, their ability to innovate is usually greater than large companies due to their flexibility and concentration in the markets, which allows them to understand the gaps in the different sectors as well as the need of different target audiences, however, they often do not have the ability to finance themselves and because of this, they have difficulty implementing their innovative products and technologies in a competitive market, because of this the federal government has created an easily accessible fund that offers the capital needed to quickly and effectively implement these products/ technologies in the markets, betting and developing through a programme that will focus on increasing the world market share in the microelectronics sector, various programmes for

financing and creating new start-ups mainly in technological areas in order to boost and accelerate the growth of the technological sector and strengthening the infrastructures of the western states, which have weakened structural capacity and as a result their capacity for innovation and implementation is reduced. (The Federal Government b), s.d).

(4) Improving the framework - the ability to increasingly supply the labour market with people who have the technical skills and know-how required for increasingly innovation-oriented areas, for this purpose an initiative has been created in order to promote training for school leavers and certified and qualified training for specialised areas, development and continuous investment in the education system in order to guarantee various flexible options for academic growth and training in order to facilitate introduction into the labour market, use of skills assessment centres in order to support SMEs with their search for people with specialised training, increasing academic opportunities, through available funds, in order to meet the need in the markets, instruments that guarantee the vocational recognition of qualifications of people outside Germany in order to attract these workers to opportunities in the German market to meet the internal demands of the markets, efforts to standardise accreditations and market conditions in order to harmonise and facilitate international cooperation by eliminating barriers and tariffs for international trade and the creation of bilateral agreements with emerging economies in order to make investment more appealing (The Federal Government b), s.d).

(5) Intensive and transparent dialogue - providing the population with detailed and impartial information on the different objectives in technological development so that there is greater transparency, access to forums that promote discussion and that there is detailed information on the new policies implemented, and changes can be suggested that will be analysed to understand their viability, improving scientific dialogue, translating technological research and technological advances into more traditional language in order to facilitate their understanding by the entire population, and transparency in obtaining and facilitating the necessary funds for business development in order to guarantee relevant and necessary information for all stakeholders (The Federal Government b), s.d).

# Comparison

Nigeria has invested heavily in its ICT sector (<sup>18</sup>), with this sector being one of the largest on the African continent. This is mainly recorded in the use of the mobile network and the use

-

<sup>&</sup>lt;sup>18</sup> ICT (information and communication technology)

of and investment in internet networks. Despite attempts to penetrate the domestic and foreign ICT market, there is still a lack of reliable access, especially outside urbanised areas. This, coupled with the recurring problem of power outages, still jeopardises the smooth functioning and operability of this sector [(Bank Group, 2021), (Chete et al., s.d)].

Despite investment and the emergence of some innovative and technological companies, this sector is still developing and the emergence of some technological hubs coupled with the increase in incentives and the emergence of more investment results in greater attractiveness in this sector. However, when it comes to the manufacturing industry, there are still plenty of challenges at the moment, especially when it comes to developing the necessary infrastructure to make the sector profitable, as well as the lack of expertise in the labour force, which is currently a challenge and an obstacle. Despite these obstacles, efforts are being made to revitalise the sector, especially in the development of a better electricity grid that would help the various companies to function better [(Bank Group, 2021), (Chete et al., s.d)].

To solve the problems of the electricity sector, there are currently a number of renewable energy projects to overcome not only the dependence on fossil fuels but also to find the means available to meet the country's constant energy needs, projects linked to solar energy and wind energy, due to their high potential, especially in the north of the country. The problem currently facing the further development of this sector continues to be the lack of investment in both the execution of projects and the implementation of associated infrastructures and their continued operation. However, despite intentions to invest in this area, it is still at a very early stage of development [(Newson, 2012), (Irena, 2023)].

One of the most developed areas within Nigeria's technology sector is e-commerce and digital services, mainly from its two largest companies, Jumia and Konga, two large companies in the sector for both B2C and B2B sales, which is beneficial because it reduces the obstacles for Nigerian companies to get affordable products and better business in general, but there are still obstacles to the development of the sector, namely high levels of poverty, illiteracy and the lack of specialised personnel for the development and correct implementation of these systems. (Okolie & Ojomo, 2020).

Germany is one of the most developed countries in the world and its ICT structure is one of the best in the world, with very high internet speeds and a strong emphasis on digital innovation. Its small and medium-sized enterprises are market leaders in many sectors linked to innovation and the constant financial support and ease of setting up companies and their connectivity allows them to remain highly competitive in international markets as well as having high levels of innovation. Its industrial sector continues to be one of the pioneers in development and one

of the engines of the German economy, especially the automotive and mechanised sectors, which continue to be one of the main exporters of the German economy, making German companies highly innovative and efficient (Federal Ministry for Economic Affairs and Climate Action c), s.d).

Germany continues to invest heavily in the renewable energy sector and in the development of new projects as well as innovation. 46% of German electricity comes from renewable sources, with photovoltaics 21.1%, wind energy 49% and 21.4% from biomass being the areas of greatest focus. The German government intends to continue expanding this sector through incentives for development and research [(Federal Ministry for Economic Affairs and Climate Action d), 2022), (Appunn & Wettengel, 2022)].

The focus and commitment to Industry 4.0 continues to be the main development, based on the production of products and services that are increasingly specialised and specific to each client, which is correlated with the increase in the quality of industrial digitalisation. In order to facilitate its implementation, systems have been created to coordinate and cross-reference information between different industrial sectors in order to facilitate access to information and develop the cooperation necessary for its development. There is a strong commitment to this sector, both at state level with support and efforts to approve and implement projects, as well as in the private sector, which wants to gain more competitive advantages over its competitors, both domestically and in emerging markets, so that it is possible to achieve innovation and development at national level and transfer it globally (European Comission c), 2017).

# 4. Discussion and Findings

The aim of this dissertation was, by using a PEST analysis, to understand and analyse the main differences between these two countries through the different parameters of this analysis, as well as to make a comparison in which it would be possible to verify whether the implementation of some of the measures that are not common to them would bring the levels of development of both countries closer.

Despite the efforts made in the last decade by Nigeria to improve the quality of life of its population and try to lift them out of poverty, as well as the sharp growth of its economy, which has become the largest on the continent, greater vigilance and action is needed to combat the corruption inherent in the country, business development as well as the development of the economy, industry and infrastructure within the country, reducing its energy and economic dependence on oil derivatives, something that would increase the complexity of its economy as well as promoting the development and emergence of new entrepreneurs and companies through innovation.

Germany is a benchmark country when it comes to many of these parameters, serving as an example for measures and models that can be implemented in order to guarantee economic growth and social development. Strong anti-corruption measures, a focus on the intellectual development of its citizens, providing the necessary education for their specialisation in order to provide for their development, as well as guaranteeing the necessary manpower to ensure capable workers for its SMEs, leads to its economic growth being boosted, in turn requiring greater investment in the education sector, not only in adequate training but also in adequate specialisation for its population.

With regard to government policies and international trade, Nigeria's weaknesses are protectionism, which, despite being aimed at creating independence from imported products, can lead to a lack of them in the future, high barriers and tariffs for international trade, which ultimately affect the population and economic development, and, finally, the reduced port infrastructure causes a deficit in trade with international partners. The strengths are based on trade agreements with strategic international partners as well as membership of the African Continental Free Trade Area Agreement which when fully implemented will greatly reduce tariffs between African partners.

In Germany, due to its openness to international markets and the fact that it belongs to the European Union, this creates greater competitiveness, which can jeopardise German companies that don't adapt to the markets and don't innovate accordingly. The strengths are the free

movement of products and services within the European Union market without the imposition of tariffs, which promotes a more open and dynamic market, opening up the possibility of internationalisation.

Political stability in Nigeria is precarious due to high levels of electoral corruption, which jeopardises the legitimacy of governments, the exploitation of power figures in relation to companies and the way in which they are linked to the management of those same companies, using their influence for their own gain, and armed conflicts resulting from political differences, which leads to the rise of militia groups, which in turn leads to instability and insecurity in the country. In contrast, Germany is a democratic country made of 16 states, each of which has its own management and autonomy, decentralising and preventing the emergence of a totalitarian government.

Corruption, which is closely linked to the stability and political situation of each country, can cause mistrust and lack of confidence in the government's capacities or the opposite. In Nigeria, corruption is very pronounced within various public sectors, which leads to an increase in bribery, a practice that has become commonplace in speeding up processes, nepotism is present in public sector recruitment, which calls into question the ability of workers to fulfil the job. Germany is a country with little corruption and strong legislation to combat active corruption, and the sector most affected by this problem is the financial sector.

In terms of economic growth, Nigeria has a strong economy, especially when compared to the other countries on the continent, with heavy investment in the agricultural sector in order to reduce import costs and, consequently, create more job opportunities, but despite this, it is a poorly diversified economy that is mostly dependent on the oil sector, jeopardising the country's financial wealth when there is a downturn in the sector, and there is also a heavy dependence on the import of some products, which ends up making them more expensive with the taxes they carry. Germany is one of the largest economies in the world, based on the innovations created by its SMEs as well as the technology and quality of its products. There are also many large companies that focus on exporting specialised products, mainly in the automotive and industrial markets, and state support for the creation of start-ups. On the other hand, since it is an export-dependent economy, the protectionist measures applied in some countries can harm its growth and it is also very dependent on international markets for energy.

The unemployment rate in Nigeria is high, which means that the population is more dependent on state support, leading to high poverty rates, and the fact that half of the active population works in the agricultural but subsistence sector means that economic growth is jeopardised. On the other hand, the fact that the majority of the population is young and

unemployed can create new economic opportunities. In Germany the unemployment rate is low, having reached a record in 2022, the lowest on record, and the fact that there are plenty of incentives from the government to mitigate this problem for unemployed citizens and training support for these same people, means that the rate is falling more and more.

Nigeria has the largest population on the African continent and one of the highest fertility rates in the world, which exacerbates the problems of poverty and unemployment in the country, as well as a reduction in food distribution. However, due to the emergence of a young population, this can help their economic needs if they are given the necessary opportunities and education. In Germany, there is a low fertility rate and the population is declining, a problem that is counteracted by the rates of immigration that have been recorded. The fact that there is an ageing population can cause economic constraints as well as aggravating state costs.

Nigeria has a high level of illiteracy, education is not standardised which leads to a variation in learning standards, a lack of government investment which means that the population is not as qualified for positions that require more knowledge and study, obligating someone without qualifications being placed in that position, which can compromise the smooth running of companies. On the other hand, Germany has a low level of illiteracy, and there is independence in the management of the education system between the states, with the same basis for the assessment method, which means that the parameters are transversal for all states, and investment in higher education, leading the German population to be better prepared for well paid jobs.

Technology in Nigeria has been boosted by the ICT, which is the largest on the African continent and contributes around 10% of GDP, there is a strong commitment on the part of the government to invest in and support technology start-ups, the creation of a tech hub with the help of international partners, on the other hand, there is a gap in the energy sector, the lack of study means that there are fewer qualified people in these areas, and lengthy and costly processes for setting up new companies, which dissuades outside investors and could jeopardise the growth of the sector. Finally, Germany is one of the world leaders when it comes to innovation and technology, creating a competitive business environment in order to bring constant innovation in different sectors, close co-operation with its European economic partners in order to share knowledge and make the European market more competitive in the face of emerging markets.

There are, however, some limitations in terms of the data presented and the way it has been presented. It is understood that the lack of concrete data, particularly from Nigeria, can negatively influence what has been found.

From the macro perspective of comparing management between the continents, there is not enough data to portray the specific realities of each continent. Although it is possible to take information that is relevant from a micro perspective and expand on it, this can lead to errors of judgement without the necessary studies to support these conclusions.

Greater investment in education and development with a reduction in active corruption seem to be the best way of reducing Nigeria's difficulties in the medium term, leading to an approximation with Germany. Education being the big point when it comes to changing the economic and social reality and the fastest way to bring about economic acceleration.

More research and studies would be needed on both continents on the best ways to bring about an approach in terms of the standard of living of their inhabitants. It has not been possible in this study to make this concrete approximation. A number of comparative correlations between different countries would be necessary, and it may never be possible to make such a comparison because each country has its own culture and socio-economic reality. These studies would always have to take into account the specific reality of each country, trying to reach a consensus when analysing the continents in question.

# 5. Final considerations

Although the central theme is comparative management between two continents, it was felt that the extension would lead to a more in-depth study and would require an understanding of the various countries that underpin the continental reality, so a conscious and deliberate choice was made to look at a micro-scale perspective, thus looking at two countries with significant degrees of economic development when compared to their respective regions. The aim of this study was therefore to try to better understand and compare two different realities from different points of view using PEST analysis. Despite several studies in the chosen areas, a gap was identified when it came to comparing the chosen domains in the two countries in question. The analysis was carried out by first collecting relevant information on the various topics and then comparing the common and distinct aspects and the different impacts of the two countries from a socio-economic and cultural perspective, as well as the measures currently being considered or suggested to overcome these barriers.

Through this analysis, it was possible to understand the various shortcomings that are still present in a country like Nigeria when compared to Germany, as well as the measures that are being considered, especially with regard to intervention and investment in the areas of education and economic development and diversification, which, when linked to population growth, can generate a strong evolution in the country. The continuous expansion, development and specialisation of the German economy and its technology mean that the country continues to be one of the world's great technological pioneers and economic drivers. However, there are problems with the ageing population and the consequent decline in the population, which could cause long-term problems in terms of sustainability.

From a macro perspective, the measures that developing countries can adopt in order to boost their growth are the promotion of investment and entrepreneurship, creating a favourable environment for business creation, namely by reducing bureaucratic complications, incentives from the state in order to promote foreign and domestic investment. Ease of access to credit from banks and a reduction in interest rates, which would help both the creation of companies and their growth. Promotion of economic diversification, with investment and reinforcement both in heavy industry where there are raw materials, as well as investment in research and development. Reducing barriers and tariffs when it comes to trade, and making agreements with other countries in order to promote greater exports and imports. Reducing protectionist laws in order to implement a less restricted and freer economy. Providing good quality education at all levels, with competent and available teachers. School support programmes, e.g. technical

schools to develop the necessary skills of its population. Supporting and investing in faculties in order to promote research and innovation in various areas. Development of its infrastructure, particularly in terms of access, such as roads, bridges, trains and buses, in order to facilitate and reduce the cost of transporting not only goods and merchandise, but also its population, which drastically reduces the cost of production and transport, making the market more attractive to investors. Reliable access to electricity that has the capacity to support the economy and development, reducing costs associated with generators. Development and implementation of renewable energy. Development of information and communication technologies, making the competitiveness of its population accessible as well as the availability of digital information. Political stability and government transparency, strengthening legal and independent institutions. Combating corruption and anti-corruption measures and laws. Securing the public financial system and guaranteeing its efficiency and transparency. Promoting social participation and cohesion in order to guarantee trust and transparency in governance.

The conclusion of this dissertation is that, despite the efforts that have been made to develop countries like Nigeria, there are still many barriers and obstacles that stand in the way. More comparative research should be carried out in order to understand the different realities from a cultural, social and economic point of view and how they can be a catalyst for a detailed understanding of the measures that need to be adopted in order to move closer to developed countries, such as Germany, as well as raising awareness and knowledge among the population.

# **Bibliography**

# Cientific Articles

Ababa, A. (s.d). The Digital Transformation Strategy for Africa (2020-2030). *African Union* Abasiakan, L.T., Sani, Z. & Obiezue, T.O. (2021, March). Determinants of Nigeria's International Trade Services. Central Bank of Nigeria, 59(1), pp. 29-34

Aderemi, R. & Ikeola, E. (2016, April). Trends of Political Instability in Nigeria: The way forward. *Nigerian Journal of Social Studies*, pp. 50-58

Afonso, O. (2011, May). The Impact of International Trade on Economic Growth. Faculdade de Economia – Universidade do Porto, pp. 25-27

Airoboman, A. E., Amaize, P. A., Ibhaze, A. E. & Ayo, O. O. (2017). Economic Implication of Power Outage in Nigeria: An Industrial Review. International Journal of Applied Engineering Research ISNN 09703-4562, 11(7), pp. 4930-4933

Aisen, A., & Veiga, F. J. (2010). How Does Political Instability Affect Economic Growth? SSRN Electronic Journal. https://doi.org/10.2139/ssrn.1560524

Akça, H., Ata. A. Y. & Karaca, C. (2012). Inflation and Corruption Relationship: Evidence from Panel Data in Develop and Developing Countries. *International Journal of Economics and Financial Issues*, 2(3), pp. 289-290

Araromi, M. A. (2015). Protecting the Rights of Old People in Nigeria: Towards a Legal Reform. *Journal of Law, Policy and Globalization*, 40, pp. 131-143

Ashindorbe, K., & Danjibo, N. (2022, October 1). Two Decades of Democracy in Nigeria: Between Consolidation and Regression. Journal of African Elections, 21(2), 168–183. https://doi.org/10.20940/jae/2022/v21i2a8

Dierckx de Casterlé, B., Gastmans, C., Bryon, E., & Denier, Y. (2012, March). QUAGOL: A guide for qualitative data analysis. *International Journal of Nursing Studies*, 49(3), 360–371. https://doi.org/10.1016/j.ijnurstu.2011.09.012

Chêne, M. (2014). The Impact of Corruption on Growth and Inequality. *Transparency International* 

Chete, L. N., Adeoti, J. O., Adeyinka, F. M. & Ogundele, O. (s.d). Industrial development and growth in Nigeria: Lessons and Challenges. *Africa Growth Initiative*, 8

Chiamogu, A. P. & Chiamogu, U. P (2019, July). Ethnic and Nepotic Issues in Nigeria: Exploring the Bane to Public Sector Performance in the Fourth Republic. *International Conference on Social Sciences in the 21st Century*, pp.2-4

Chilaka, E. (2022). River Port and Deep-Sea Port Developments in Nigeria: Implications for West African Gateways and Hinterland Markets. American Journal of Industrial and Business Management, 12(04), 531–561. <a href="https://doi.org/10.4236/ajibm.2022.124029">https://doi.org/10.4236/ajibm.2022.124029</a>

Cima (s.d). PEST Analysis. Chartered Institute of Management Accountants.

Department for International Development (s.d.). Growth: Building Jobs and Prosperity in Developing Countries, pp. 2

Dr. Birabil, S. T. & Dr. Ogeh, O. W. M. (2020). Education in Nigeria: Challenges and Way Forward. *International Journal of Academic Research and Reflection*, 8 (1)

Duell, N. & Vetter, T. (2020, May). The Employment and social situation in Germany. Policy Departement for Economic, Scientific and Quality of Life Policies, pp.12-31 e pp. 44-49 Eissel, D. (2020, March). The European Union's Role in Regional, SOcial, and Economic Integration. Asian Development Bank Institute Working Paper Series, 1102

Engbom, N., Detragiache, E., & Raei, F. (2015). The German Labor Market Reforms and Post-Unemployment Earnings. SSRN Electronic Journal. <a href="https://doi.org/10.2139/ssrn.2653615">https://doi.org/10.2139/ssrn.2653615</a> Erikson, F. (s.d) The Economic Benefits of Globalization for Business and Consumers. European Centre for International Political Economy.

European Comission c) (2017, January). Germany Industrie 4.0: Digital Transformation Monitor.

Federal Ministry for Economic Cooperation and Development (2012). Anti-Corruption and Integrite in Germany Development Policy, 4, pp. 3-21

Federal Ministry for Economic Affairs and Energy (2019, November). Industrial Strategy 2030: Guidelines for a German and European industrial policy, pp. 7-13

Federal Ministry for Economic Affairs and Climate Affairs (2023, February). Development of Renewable Energy Sources in Germany in the year 2022, pp. 5-56

Federal Ministry of Finance (2022). German Stability Programme.

Federal Ministry of Agriculture and Rural Development (2022). National Agricultural Technology and Innovation Policy (NATIP). ISBN: 978-978-790-413-8, pp. 1-9

Fiorini, R., Hattingh, D., Maclaren, A., Russo, B. & Sun-BAsorun, A. (2013, December). Africa's growing giant: Nigeria's new retail economy. *McKinsey&Company*.

Folkerts-Landau, D. & Schneider, S. (2016, December). Beacon of Stability: The foundations of Germany's success. *Deutsche Bank Research* 

Freeman, D., Meijerink, G. & Teulings, R. (2022, January). Trade benefits of the EU and the Internal Market. *CPB Netherlands Bureau for Economic Policy Analysis* 

Grant, C. (2017, March). Contribution of education to economic growth. *Knowledge*, evidence and learning for development, Institute of Development Studies, pp. 2-3

Ghazanchyan, M., Corvino, D., Oeking, A., Hlatshwayo, S., Shukla, A., & Leigh, L. (2018, August). The Measurement and Macro-Relevance of Corruption: A Big Data Approach. *IMF Working Papers*, 2018(195), 1. <a href="https://doi.org/10.5089/9781484373095.001">https://doi.org/10.5089/9781484373095.001</a>

Ighosewe, E. F., Akan, D. C., & Agbogun, O. E. (2021). Crude Oil Price Dwindling and the Nigerian Economy: A Resource-Dependence Approach. Modern Economy, 12(07), 1160–1184. https://doi.org/10.4236/me.2021.127061

International Labour Organization a) (s.d). Public Employment Services in Europe: Germany.

International Labour Organization b) (s.d). Employment Policy Implementation Mechanisms in Germany and the United Kingdom.

Irena (2023). Renewable Energy Roadmap Nigeria. *International Renewable Energy Agency*.

Itodo, S. & O'Regan, D. (2018). Nigeria's Movement for Transparency and Accountability: Bringing the Pieces together. United States Institute of Peace, pp. 2-13

Jenq, C., Lain, J. & Vishwanath, T. (2021, September). Good jobs for a New Generation: Delivering Quality Jobs for Young Nigerians After COVID-19, pp. 5-19 e pp. 44-47

Kari, U., Collins, O. & Ernest, E. (2019, June). The Challenges of Infrastructural Development in Nigeria: An Assessment of The Pains and The Gains. *Academic Research, Journals*, 7(4), pp. 101-108

Karimo, T. M., Krokeyi, W. S. & Ekainsai, S. Z. (2016). Factors Influencing Nigeria's Trade. *Department of Economics, Niger Delta University*, 6(1), pp.36-38, pp.40

Levine, L. (2013, January). Economic Growth and the Unemployment Rate. *Congressional Research Service*.

Lim, K.Y. (2017). The Dynamics of Corruption and Unemployment in a Growth Model with Heterogenous Labour. *Lancaster University: Management School* (2017/026), pp. 2-6

Mercy, F. A., Oloruntoba, L. O., Josephyaro, A. O., Musa, L. & Yinusa, A. (October, 2015). Problems of Funding Small and Medium Scale Enterprises in Nigeria. *Journal of Research & Method in Education*, 5 (5)

McKinsey & Company (2013). The future of German mechanical engineering: Operating successfully in a dynamic environment, pp. 12-14

Ministry of Budget & National Planning (2017, February). Economic Recovery & Growth Plan 2017-2020. *Federal Republic of Nigeria*, pp. 11-15, 19-20, 28-32

National Bureau of Statistics, (2023, August). Nigeria Labour Force Statistics Report Q4 2022 & Q1 2023. *The World Data Bank and International Labour Organization*, pp. 15-17 National Population Comission (2015, December). Nigeria 2015 Nigeria Education Data Surveys (NEDS). *National Bureau of Statistics*, pp. 7

Newson, C. (2011, June). Conflict in the Niger Delta. United States of Peace, pp. 2-16

Newson, C. (2012). Renewble Energy Potential in Nigeria: Low-carbon approaches to tackling Nigeria's energy poverty. *Renewable Energy Potential in Nigeria*, pp. 7-18

Nikoloski, K. (2016). Technology and economic development: Retrospective. Journal of Process Management. New Technologies, 4(4), 45–50. <a href="https://doi.org/10.5937/jouproman4-11468">https://doi.org/10.5937/jouproman4-11468</a>

Nomor, D. T., & Iorember, P. T. (2017, April). Political Stability and Economic Growth in Nigeria. *IOSR Journal of Economics and Finance*, 08(02), 45–53. https://doi.org/10.9790/5933-0802034553

OC&C Strategy Consultants (2018). Tech enterpreneurship ecosystem in Nigeria. Google.

Odozi, J. C., & Uwaifo Oyelere, R. (2019). Violent Conflict Exposure in Nigeria and Economic Welfare. SSRN Electronic Journal. https://doi.org/10.2139/ssrn.3445836

OECD (2020, June). Education Outlook Germany, pp. 3-19

OECD Economic Surveys (2020, December). Germany, pp. 4-18

Ogunode, J. N. & Hayab, J. F. (2021, August). Nigerian Educational System: Problems and Way Forward. *Central Asian Journal of Social Sciences and History*, 2 (8), pág-24-32

Okenna, N. P. (2020). The Importance of International Trade to the Economies of Developing Countries. *SSRN Electronic Journal*, pp.1 and pp.5. <a href="https://doi.org/10.2139/ssrn.3664322">https://doi.org/10.2139/ssrn.3664322</a>

Okolie, U. C., & Ojomo, A. H. (2020). E-Commerce in Nigeria: Benefits and Challenges. *Humanities and Social Sciences: Latvia*, 28(2), 69–90. <a href="https://doi.org/10.22364/hssl.28.2.05">https://doi.org/10.22364/hssl.28.2.05</a>

Okpalaoka, C. (2021, December 31). Infrastructural Challenges in Nigeria and the Effect on the Nigerians Economy: A Review of Literature. *Environmental and Earth Sciences Research Journal*, 8(4), 159–162. <a href="https://doi.org/10.18280/eesrj.080403">https://doi.org/10.18280/eesrj.080403</a>

Okeowo, G., Oluwatosin, I., Fatoba, I., Olufowose, O. & Pabiekun, M. (2022) Remedying the Scourge of Ghost Workers in Nigeria. *BudgiT*.

Oyejide, A., Ogunkola, A. & Bankole, A. (s.d). Import Prohibition as a Trade Policy Instrument: The Nigerian Experience. *World Trade Organization*, Case Study 32

Parella, J. F. & Hernández, G. C. (2018, June). The German Business Model: The Role of the Mittelstand. Journal of Management Policies and Practices, 6 (1), pp. 10-16

Pavcnik, N. (s.d.). The Impact of Trade on Inequality in Developing Countries. *Journal of International Economics*, pp. 61-66, pp. 99-102

Poliduts, A. & Kapkaev, Y. (2015) Economic Growth: Types and Factors. *International Conference on EurAsian Economies*, pág-62

Preston, S. H. & Donaldson, P. (s.d.) Population Growth and Economic Development: A discussion of eight major relationships that link demographic patterns and economic processes. 2 (1), pp. 3-40

PWC, (2016, March). Nigeria: Looking beyond Oil. *The Lagos Chamber of Commerce & Industry*, pp. 17

Rajaguru, G., Srivastava, S., Sen, R., & Mukhopadhaya, P. (2023, May). Does globalization drive long-run inequality within OECD countries? A guide to policy making. *Journal of Policy Modeling*, 45(3), 469–493. https://doi.org/10.1016/j.jpolmod.2023.04.004

Ramachandran, V., Obado-Joel, J., Fatai, R., Masood, J. S. & Omakwu, B. (2019, November). The New Economy of Africa: Opportunities for Nigeria's Emerging Technology Sector. *Center for Global Development and the ONE Campaign*.

Sammut-Bonnici, T. & Galea, D. (2015, January). PEST Analysis. University of Malta.

Sanford, J. E. (1997, August). Comparing Countries' Levels of Development. *Congressional Research Service Report for Congress*, 97-759

Segal, U. (2019, July). Globalization, migration, and ethnicity. *Public Health*, 172, 135–142. https://doi.org/10.1016/j.puhe.2019.04.011

Silas, D. (s.d). The Role of African Union in African Development Process. *Journal of Political Sciences and Public Affairs*, 10 (1000418)

Son, H. & Kakwani, N. (2004, August). Economic Growth and Poverty Reduction: Initial Conditions Matter. *International Poverty Center, United Nations Development Programme*, pp. 2

The Federal Government b) (s.d). The new High-Tech Strategy Innovations for Germany.

Why Population Growth Matters for Sustainable Development. (2022, April 25). UN Department of Economic and Social Affairs (DESA) Policy Briefs. <a href="https://doi.org/10.18356/27081990-130">https://doi.org/10.18356/27081990-130</a>

Woolcock, S. (2019, April). The Role of the European Union in the International Trade and Investment Order. *Dahrendorf Forum*, 10

World Government Summit 2023 (2023). Global Economic Diversification Index 2023, pp. 12-33

United Nations (2007, November). Developing Countries in International Trade 2007: Trade and Development Index. *United Nations Conference on Trade and Development*, pp. 5-10 United Nations Nigeria (2022, February). Common Country Analysis, pp. 12-14

United Nations Office on Drugs and Crime (December, 2019). Corruption in Nigeria: Patterns and Trends, pp. 7-9 & 37-41

United States Trade Representative (2021), National Trade Estimate Report on Foreign Trade Barriers Nigeria, - pp. 379-385

University of Birmingham (s.d). CIFORB Country Profile – Nigeria.

Yao, J. & Liu, Y. (s.d). Diversification of the Nigerian Economy. Intrenational Monetary Fund, pp.16-37

Zamfir, I. (2022, November). African Union instruments to protect human rights and democracy. *European Parliament Research Service* 

#### Thesis

Kulu, S. E. (2021, June). Population Growth and Economic Development in Nigeria: An Assessment of the Role of National Population Comission.

Meshach, Z. R. & Rashidat, O. L. (2019, January). The effects of population on Economic Growth in Nigeria.

## **Books**

Tanzi, V. (1999). Governance, Corruption and Public Finance: An Overview. Salvatore Schiavo-Campo. Governance (Ed.), Corruption and Public Financial Management, pp. 8-17. Asian Development Bank.

Mariadoss, B. J. (2018, June). Core Principles of International Marketing. Texas Tech University (Ed.), pp. 164-168. Libre Texts.

# Websites

Nigeria Poverty Assessment. (n.d.). World Bank. <a href="https://www.worldbank.org/en/news/press-release/2022/03/21/afw-deep-structural-reforms-guided-by-evidence-are-urgently-needed-to-lift-millions-of-nigerians-out-of-poverty">https://www.worldbank.org/en/news/press-release/2022/03/21/afw-deep-structural-reforms-guided-by-evidence-are-urgently-needed-to-lift-millions-of-nigerians-out-of-poverty</a>

Bank Group, A. D. (2021, October 27). Boost industrial manufacturing to accelerate economic growth and development in Nigeria, African Development Bank head says. African Development Bank Group - Making a Difference. <a href="https://www.afdb.org/en/news-and-">https://www.afdb.org/en/news-and-</a>

events/press-releases/boost-industrial-manufacturing-accelerate-economic-growth-and-development-nigeria-african-development-bank-head-says-46462

Nigeria, G. (2022, September 8). Fulani militia working with terrorists to attack Nigeria, Ortom alleges | The Guardian Nigeria News - Nigeria and World News. The Guardian Nigeria News - Nigeria and World News. <a href="https://guardian.ng/news/fulani-militia-working-with-terrorists-to-attack-nigeria-ortom-alleges/">https://guardian.ng/news/fulani-militia-working-with-terrorists-to-attack-nigeria-ortom-alleges/</a>

Alabi, M. (2022, September). UPDATED: Nigeria now has 20 million out-of-school children – UNESCO. *Premium Times*. <a href="https://www.premiumtimesng.com/news/headlines/551804-breaking-nigeria-now-has-20-million-out-of-school-children-unesco.html?tztc=1">https://www.premiumtimesng.com/news/headlines/551804-breaking-nigeria-now-has-20-million-out-of-school-children-unesco.html?tztc=1</a>

Appunn, K. & Wettengel, J. (2022, December). Germany's 2022 renewables and efficiency reforms. *Clean Energy Wire*. <a href="https://www.cleanenergywire.org/factsheets/germanys-2022-renewables-and-energy-reforms">https://www.cleanenergywire.org/factsheets/germanys-2022-renewables-and-energy-reforms</a>

Beautmont, P. (2021, October). Failed state? Why Nigeria's fragile democracy is facing na uncertain future. *The Guardian*. <a href="https://www.theguardian.com/global-development/2021/oct/25/failed-state-why-nigerias-fragile-democracy-is-facing-an-uncertain-future">https://www.theguardian.com/global-development/2021/oct/25/failed-state-why-nigerias-fragile-democracy-is-facing-an-uncertain-future</a>

Bondarenko, P. (s.d) Unemployment Rate. *Britannica Money*. <a href="https://www.britannica.com/money/unemployment-rate">https://www.britannica.com/money/unemployment-rate</a>

Business Day. (2023, July 10). Disaster looms as Nigeria's population is rising faster than our economy. *Businessday NG*. https://businessday.ng/opinion/article/disaster-looms-as-nigerias-population-is-rising-faster-than-our-economy/

Central Bank of Nigeria (s.d.). Monetary Policy. <a href="https://www.cbn.gov.ng/MonetaryPolicy/afcfta.asp">https://www.cbn.gov.ng/MonetaryPolicy/afcfta.asp</a>

CIA, (2023, April). Explore All Countries – Nigeria. <a href="https://www.cia.gov/the-world-factbook/countries/nigeria/#people-and-society">https://www.cia.gov/the-world-factbook/countries/nigeria/#people-and-society</a>

Craig, J. (s.d). Replacement level of fertility and future population growth. *National Library of Medicine*. <a href="https://pubmed.ncbi.nlm.nih.gov/7834459/">https://pubmed.ncbi.nlm.nih.gov/7834459/</a>

David, K (2022, December). Population of Germany, by age group. *Statista*. https://www.statista.com/statistics/454349/population-by-age-group-germany/

Eromosele, F. (2022, August). ASUU Strike: FG's budgetary allocation to education lowest in 2022 Report. *Vanguard*. <a href="https://www.vanguardngr.com/2022/08/asuu-strike-fgs-budgetary-allocation-to-education-lowest-in-2022-report/">https://www.vanguardngr.com/2022/08/asuu-strike-fgs-budgetary-allocation-to-education-lowest-in-2022-report/</a>

Europian Comission a) (s.d.). Anti-Dumping measures. <a href="https://policy.trade.ec.europa.eu/enforcement-and-protection/trade-defence/anti-dumping-measures\_en">https://policy.trade.ec.europa.eu/enforcement-and-protection/trade-defence/anti-dumping-measures\_en</a>

Europian Comission b) (2023, March). Critical Raw Materials: ensuring secure and sustainable supply chains for EU's green and digital future. https://ec.europa.eu/commission/presscorner/detail/en/ip\_23\_1661

Facts about Germany a) (s.d). Federal State. <a href="https://www.tatsachen-ueber-deutschland.de/en/politics-germany/federal-state">https://www.tatsachen-ueber-deutschland.de/en/politics-germany/federal-state</a>

Facts about Germany b) (s.d). Federal States. <a href="https://www.tatsachen-ueber-deutschland.de/en/glossary-">https://www.tatsachen-ueber-deutschland.de/en/glossary-</a>

overview/336,336,327,329,336,329,324,252,249,250,325,326,252,324,336,254,239,329,328,3 36,326,333,323,335#324

Falayi, K. (2019, August). Why Nigeria has restricted food imports. *BBC News*. <a href="https://www.bbc.com/news/world-africa-49367968">https://www.bbc.com/news/world-africa-49367968</a>

Falola, T. O., Udo, R. K. (2023). Nigeria. *Britannica*. https://www.britannica.com/place/Nigeria

FAO (s.d). Nigeria Agriculture at a Glance. *Food and Agriculture Organization of the United Nations*. https://www.fao.org/nigeria/fao-in-nigeria/nigeria-at-a-glance/en/

Federal Ministry for Economic Affairs and Climate Action a) (s.d.). Fostering international trade and reducing barriers. https://www.bmwk.de/Redaktion/EN/Dossier/trade-policy.html

Federal Ministry for Economic Affairs and Climate Action b) (s.d). The German Mittelstand as a model for success. <a href="https://www.bmwk.de/Redaktion/EN/Dossier/sme-policy.html">https://www.bmwk.de/Redaktion/EN/Dossier/sme-policy.html</a>

Federal Ministry for Economic Affairs and Climate Action c) (s.d). Made in Germnay: Industrial Strategy 2030. <a href="https://www.bmwk.de/Redaktion/EN/Dossier/industrial-strategy-2030.html">https://www.bmwk.de/Redaktion/EN/Dossier/industrial-strategy-2030.html</a>

Feed the Future (s.d). Nigeria. The U.S. Governmental's Global Hunger & Food Security Initiative. <a href="https://www.feedthefuture.gov/country/nigeria/">https://www.feedthefuture.gov/country/nigeria/</a>

Fize, E., Martin, P. & Delpeuch, S. (2021, February). Trade impablances and the rise of protectionism. *VoxEu*. <a href="https://cepr.org/voxeu/columns/trade-imbalances-and-rise-protectionism">https://cepr.org/voxeu/columns/trade-imbalances-and-rise-protectionism</a>

Freedom House (s.d.). Freedom in the World 2022: Germany. <a href="https://freedomhouse.org/country/germany/freedom-world/2022">https://freedomhouse.org/country/germany/freedom-world/2022</a>

Glucroft, W. N. (2022, January). Corruption watchdog says Germany has work to do. *DW*. https://www.dw.com/en/transparency-international-corruption-index-2021/a-60535533

Green, M. A. & Carson, J. (2023, March). The Pursuit of Democracy: The Importance of Nigeria's Elections. *Wilson Center*. <a href="https://www.wilsoncenter.org/article/pursuit-democracy-importance-nigerias-election">https://www.wilsoncenter.org/article/pursuit-democracy-importance-nigerias-election</a>

International Trade Administration a) (2021, October). Nigeria – Country Commercial Guide. <a href="https://www.trade.gov/country-commercial-guides/nigeria-trade-agreements">https://www.trade.gov/country-commercial-guides/nigeria-trade-agreements</a>

International Trade Administration b) (2021, October) Nigeria – Country Commercial Guide. <a href="https://www.trade.gov/country-commercial-guides/nigeria-trade-barriers">https://www.trade.gov/country-commercial-guides/nigeria-trade-barriers</a>

International Trade Administration c) (2022, August) Germany – Country Commercial Guide. <a href="https://www.trade.gov/country-commercial-guides/germany-trade-agreements">https://www.trade.gov/country-commercial-guides/germany-trade-agreements</a>

Izuaka, M. (2023, February). Nigeria could become Africa's biggest oil refiner by 2025 – Report. *Premium Times*. <a href="https://www.premiumtimesng.com/news/more-news/580423-nigeria-could-become-africas-biggest-oil-refiner-by-2025-report.html">https://www.premiumtimesng.com/news/more-news/580423-nigeria-could-become-africas-biggest-oil-refiner-by-2025-report.html</a>

Kamer, L. (2022, August). Countries with the highest population density in Africa 2021. *Statista*. <a href="https://www.statista.com/statistics/1218003/population-density-in-africa-by-country/">https://www.statista.com/statistics/1218003/population-density-in-africa-by-country/</a>

Kamer, L. (2022, July). Africa: number of internet users in selected countries 2022. Statista. https://www.statista.com/statistics/505883/number-of-internet-users-in-african-countries/

Kimberly, A. (2022, March). What Is Trade Protectionism?. *The balance*. https://www.thebalancemoney.com/what-is-trade-protectionism-3305896

Kemp, S. (2023, February). Digital 2023: Nigeria. *DaterPortal*. https://datareportal.com/reports/digital-2023-nigeria

Kle, F. & Vogt, T. (2019, June). The fiscal impact of population ageing in Germnay: An unequal challenge for different levels of government. *OECD iLibrary*. <a href="https://www.oecd-ilibrary.org/sites/6a9e8863-en/index.html?itemId=/content/component/6a9e8863-en#section-d1e4977">https://www.oecd-ilibrary.org/sites/6a9e8863-en/index.html?itemId=/content/component/6a9e8863-en#section-d1e4977</a>

Lain, J. & Engel, J. (2022, May). Barriers to trade, barriers to poverty reduction? How Nigeria can harness trade to lift people out of poverty. *World Bank Blog*. <a href="https://blogs.worldbank.org/africacan/barriers-trade-barriers-poverty-reduction-how-nigeria-can-harness-trade-lift-people-out">https://blogs.worldbank.org/africacan/barriers-trade-barriers-poverty-reduction-how-nigeria-can-harness-trade-lift-people-out</a>

Macrotrends a) (s.d.) Nigeria Population Growth Rate 1950-2023. <a href="https://www.macrotrends.net/countries/NGA/nigeria/population-growth-rate">https://www.macrotrends.net/countries/NGA/nigeria/population-growth-rate</a>

Macrotrends b) (s.d). Nigeria Infant Mortality Rate 1950-2023. <a href="https://www.macrotrends.net/countries/NGA/nigeria/infant-mortality-rate">https://www.macrotrends.net/countries/NGA/nigeria/infant-mortality-rate</a>

McDonald, B. (s.d.). International Trade: Commerce Among Nations. International Monetary

Fund. <a href="https://www.imf.org/en/Publications/fandd/issues/Series/Back-to-Basics/Trade">https://www.imf.org/en/Publications/fandd/issues/Series/Back-to-Basics/Trade</a>

Nigeria: Economy. (n.d.). Nigeria: Economy >> globalEDGE: Your Source for Global Business Knowledge. <a href="https://globaledge.msu.edu/countries/nigeria/economy">https://globaledge.msu.edu/countries/nigeria/economy</a>

OEC a) (s.d). Germany. <a href="https://oec.world/en/profile/country/deu">https://oec.world/en/profile/country/deu</a>

OEC b) (s.d). Nigeria.

https://oec.world/en/profile/country/nga?yearlyTradeFlowSelector=flow1

OECD a) (2018, September). Percentage of decisions taken at each level of government in public lower secondary education. *OECD Indicators*. <a href="https://www.oecd-ilibrary.org/education/education-at-a-glance-2018/percentage-of-decisions-taken-at-each-level-of-government-in-public-lower-secondary-education-2017\_eag-2018-table214-en">https://www.oecd-ilibrary.org/education/education-at-a-glance-2018/percentage-of-decisions-taken-at-each-level-of-government-in-public-lower-secondary-education-2017\_eag-2018-table214-en</a>

Onuah, F. (2022, November). Nigeria aims to end imports of pretoleum product next year. *Reuters*. <a href="https://www.reuters.com/business/energy/nigeria-end-imports-petroleum-products-next-year-minister-2022-11-29/">https://www.reuters.com/business/energy/nigeria-end-imports-petroleum-products-next-year-minister-2022-11-29/</a>

ReliefWeb (2022, June). Trackling food insecurity in Nigeria. <a href="https://reliefweb.int/report/nigeria/tackling-food-insecurity-nigeria">https://reliefweb.int/report/nigeria/tackling-food-insecurity-nigeria</a>

Sanni, K. (2020). Nepotism, root cause of corruption in Nigeria – Sanusi. *Premium Times*. <a href="https://www.premiumtimesng.com/news/top-news/403851-nepotism-root-cause-of-corruption-in-nigeria-sanusi.html?tztc=1">https://www.premiumtimesng.com/news/top-news/403851-nepotism-root-cause-of-corruption-in-nigeria-sanusi.html?tztc=1</a>

Sasu, D. D. (2022, February). Classrooms in public elementary schools in Nigeria 2018, by zone. *Statista*. <a href="https://www.statista.com/statistics/1130132/classrooms-in-public-elementary-schools-in-nigeria-by-zone/">https://www.statista.com/statistics/1130132/classrooms-in-public-elementary-schools-in-nigeria-by-zone/</a>

Schengenvisa (2022, December). Germnay: Population Up by 2.8 million Due to Forced Immigration but Working-Age Population od Decreasing. <a href="https://www.schengenvisainfo.com/news/germany-population-up-by-2-8-million-due-to-forced-immigration-but-working-age-population-is-decreasing/">https://www.schengenvisainfo.com/news/germany-population-up-by-2-8-million-due-to-forced-immigration-but-working-age-population-is-decreasing/</a>

Statista a) (2022). Gross domestic product at current market prices of selected European countries in 2022 (in million euros). <a href="https://www.statista.com/statistics/685925/gdp-of-european-countries/">https://www.statista.com/statistics/685925/gdp-of-european-countries/</a>

Statista b) (2022). African countries with the highest Gross Domestic Product (GDP) in 2022 (in billion U.S. dollars). <a href="https://www.statista.com/statistics/1120999/gdp-of-african-countries-by-country/">https://www.statista.com/statistics/1120999/gdp-of-african-countries-by-country/</a>

Statistics Times a) (2021, August). Population of Germany. <a href="https://statisticstimes.com/demographics/country/germany-population.php">https://statisticstimes.com/demographics/country/germany-population.php</a>

Statistics Times b) (2020, April). List of countries by fertility rate. <a href="https://statisticstimes.com/demographics/countries-by-fertility-rate.php">https://statisticstimes.com/demographics/countries-by-fertility-rate.php</a>

The Federal Government a) (s.d). Politics & EU. <a href="https://www.make-it-in-germany.com/en/living-in-germany/discover-germany/politics-eu">https://www.make-it-in-germany/com/en/living-in-germany/discover-germany/politics-eu</a>

The Global Economy a) (2021). Germany: Political stability. https://www.theglobaleconomy.com/Germany/wb\_political\_stability/

The Global Economy b) (2021). Nigeria: Political stability. <a href="https://www.theglobaleconomy.com/nigeria/wb\_political\_stability/">https://www.theglobaleconomy.com/nigeria/wb\_political\_stability/</a>

The Global Economy c) (2021) Nigeria: Control of Corruption. <a href="https://www.theglobaleconomy.com/Nigeria/wb\_corruption/">https://www.theglobaleconomy.com/Nigeria/wb\_corruption/</a>

The Global Economy d) (2021) Germany: Control of Corruption. <a href="https://www.theglobaleconomy.com/Germany/wb\_corruption/">https://www.theglobaleconomy.com/Germany/wb\_corruption/</a>

The Global Economy e) (2021). Government effectiveness – Country rankings. https://www.theglobaleconomy.com/rankings/wb\_government\_effectiveness/

The Global Economy f) (2022). Innovation Index – Country rankings. <a href="https://www.theglobaleconomy.com/rankings/gii\_index/">https://www.theglobaleconomy.com/rankings/gii\_index/</a>

The Observatory of Economic Complexity (s.d.) Germany and Nigeria. https://oec.world/en/profile/bilateral-country/deu/partner/nga

The World Bank (2023, March). The World Bank in Nigeria. <a href="https://www.worldbank.org/en/country/nigeria/overview">https://www.worldbank.org/en/country/nigeria/overview</a>

The World Data Bank a) (2021). Trade (% of GDP). <a href="https://data.worldbank.org/indicator/NE.TRD.GNFS.ZS?locations=DE-NG">https://data.worldbank.org/indicator/NE.TRD.GNFS.ZS?locations=DE-NG</a>

The World Data Bank b) (2021). Exports of goods and services (% GDP) - Germany. https://data.worldbank.org/indicator/NE.EXP.GNFS.ZS?locations=DE

The World Data Bank c) (2020). Population density (people per sq. Km of land area) - Nigeria. <a href="https://data.worldbank.org/indicator/EN.POP.DNST?locations=NG">https://data.worldbank.org/indicator/EN.POP.DNST?locations=NG</a>

The World Data Bank d) (2021). Harmonized Learning Outcomes. https://datacatalog.worldbank.org/search/dataset/0038001

The World Data Bank e) (2021). GDP growth (annual %) - Germany. https://data.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG?locations=DE

The World Data Bank f) (2021). GDP growth (annual %) - Nigeria. https://data.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG?locations=NG

The World Data Bank g) (2020). Fertility rate, total (births per woman) – Germany. https://data.worldbank.org/indicator/SP.DYN.TFRT.IN?locations=DE

The World Data Bank h) (2021). Population, Total – Germany, Nigeria. <a href="https://data.worldbank.org/indicator/SP.POP.TOTL?locations=DE-NG">https://data.worldbank.org/indicator/SP.POP.TOTL?locations=DE-NG</a>

Trading Economics a) (2023). Germany Employment Rate. <a href="https://tradingeconomics.com/germany/employment-rate">https://tradingeconomics.com/germany/employment-rate</a>

Trading Economics b) (2022). Germnay GDP. <a href="https://tradingeconomics.com/germany/gdp">https://tradingeconomics.com/germany/gdp</a>
Trading Economics c) (2022). Nigeria GDP. <a href="https://tradingeconomics.com/nigeria/gdp">https://tradingeconomics.com/nigeria/gdp</a>

Trading Economics d) (2022). Germany – Political Stability and Absence of Violence/Terrorism: Percentile Rank. <a href="https://tradingeconomics.com/germany/political-stability-and-absence-of-violence-terrorism-percentile-rank-wb-data.html">https://tradingeconomics.com/germany/political-stability-and-absence-of-violence-terrorism-percentile-rank-wb-data.html</a>

Trading Economics e) (2021). Nigeria Unemployment Rate. <a href="https://tradingeconomics.com/nigeria/unemployment-rate">https://tradingeconomics.com/nigeria/unemployment-rate</a>

Transparency International a) (s.d). About. <a href="https://www.transparency.org/en/about">https://www.transparency.org/en/about</a>

Transparency International b) (s.d). The ABCs of the CPI: How the Corruption Perceptions Index is Calculated. <a href="https://www.transparency.org/en/news/how-cpi-scores-are-calculated">https://www.transparency.org/en/news/how-cpi-scores-are-calculated</a>

Transparency International c) (s.d). Corruption Perception Index. <a href="https://www.transparency.org/en/cpi/2022">https://www.transparency.org/en/cpi/2022</a>

UNESCO (2021, November). UNESCO Member States unite to increase investment in education. <a href="https://www.unesco.org/en/articles/unesco-member-states-unite-increase-investment-education">https://www.unesco.org/en/articles/unesco-member-states-unite-increase-investment-education</a>

Wisevoter (s.d). Internet Speed by Country. <a href="https://wisevoter.com/country-rankings/internet-speed-by-country/">https://wisevoter.com/country-rankings/internet-speed-by-country/</a>

World Data (s.d). Country Comparison: Germany VS. Nigeria. <a href="https://www.worlddata.info/country-comparison.php?country1=DEU&country2=NGA">https://www.worlddata.info/country-comparison.php?country1=DEU&country2=NGA</a>

World Government Summit (2023). Global Economic Diversification Index 2023. <a href="https://www.worldgovernmentsummit.org/observer/reports/2023/detail/global-economic-diversification-index-2023">https://www.worldgovernmentsummit.org/observer/reports/2023/detail/global-economic-diversification-index-2023</a>

World Population Review (2023). Germany Population 2023. https://worldpopulationreview.com/countries/germany-population

World Trade Organization (1995). Understanding the WTO. <a href="https://www.wto.org/english/thewto\_e/whatis\_e/who\_we\_are\_e.htm">https://www.wto.org/english/thewto\_e/whatis\_e/who\_we\_are\_e.htm</a>

Zoe Talent Solutions (2023, March). Education Statistics for Nigeria. https://zoetalentsolutions.com/education-statistics-for-nigeria/

 $\underline{https://zoets.b-cdn.net/wp-content/uploads/2023/03/What-is-the-Literacy-Rate-in-Nigeria.jpg}$ 

# **Attachments**

		Central (1)	State		regional		Sub- regional (4)		Local (5)				Multiple levels (7)	Total (8)
D Count ries														
Austra lia Austri			48		0	a	0	a	0		52		0	10 0 10
a Canad a		0	<ul><li>22</li><li>33</li></ul>		0		0		0 52		<ul><li>46</li><li>15</li></ul>		0	0 10 0 10
Chile Czech Repub		8	0		0		0		31		48		13	0
lic Denm ark		2 21	0		4 0		0		26 22		68 29		0 28	0 10 0
Estoni a Finlan			0		0		0		13		58		29	10 0 10
d France		0 x(7) 55			0 16		0		0	x(7)	0 10		100 8	0 10 0
Germa ny		0	63		10		10		0		17		0	10 0 10
Greece Hunga ry	l .	52 2		a a	4	a	4 19		8		8 29		<ul><li>23</li><li>50</li></ul>	0 10 0
Icelan d		8		a		a		a	31		60		0	10 0 10
Ireland Israel		42 69		a a	4	a			0 8		46 19		13 0	0 10 0
Italy		52			11				0		30		6	10 0 10
Japan Korea		13 29			<ul><li>33</li><li>15</li></ul>				21 8		<ul><li>21</li><li>15</li></ul>		13 33	0 10 0

1 1	1		Ì		l		Ì		1				l		10	
Latvia	1	8		a		a		a	19		64		0		0	
Luxem	1	· O		а		а		а	1)		0+		U		10	
bourg	8	3	0		0		0		0		17		0		0	
Mexic															10	
0	4	.9	34		0		0		0		17		0		0	
Nether															10	
lands	0	)	0		0		0		0		92		8		0	
New															Ì	
Zealan															10	
d	2	21	0		0		0		0		52		27		0	
Norwa															10	
y	2	2.5		a		a		a	29		15		31		0	
Poland		m		m		m		m		m		m		m		m
Portug															10	
al	7	7	0		0		0		0		15		8		0	
Slovak																
Repub															10	
lic	4	-8		a	0			a	8		44		0		0	
Sloven															10	
ia	4	-2		a		a		a	0		50		8		0	
															10	
Spain	8	3	47		22		0		0		10		13		0	
Swede	_														10	
n	2	21		a		a		a	35		35		8		0	
Switze			4.0						20		0				10	
rland	O	)	48		ì	a		a	29		8		15		0	
Turke		12	0		10		0		0		0		0		10	
y 	/	'3	0		19		0		0		8		0		0	
United	0		8			0		0	72		16		4		10 0	
States	O		0			a		a	12		10		4		U	
Econo	ł															
mies																
Flemis																
h																
comm.																
(Belgi															10	
um)	0	)	38		0		0		0		63		0		0	
French																
comm.																
(Belgi															10	
um)	0		42		0			a	0		27		31		0	
Englan															10	
d (UK)	0	)		a		a		a	6		65		29		0	
Scotla																
nd															10	
(UK)	0	)		a		a		a	44		48		8		0	

<b>OECD</b>								
								10
averag e	24	11	4	1	13	34	14	0
EU22	<b>-</b>	11	7	1	13	J <b>4</b>	17	
averag								10
e	24	9	3	2	8	38	16	0
				_			10	
Partn								
ers								
Argent								
ina	m	m	m	m	m	m	m	m
Brazil	m	m	m	m	m	m	m	m
China	m	m	m	m	m	m	m	m
Colom								
bia	m	m	m	m	m	m	m	m
Costa								
Rica	m	m	m	m	m	m	m	m
India	m	m	m	m	m	m	m	m
Indone								
sia	m	m	m	m	m	m	m	m
Lithua								10
nia	29	a	a	0	27	42	2	0
Russia								
n								
Federa								10
tion	42	a	21	a	10	23	4	0
Saudi								
Arabia	m	m	m	m	m	m	m	m
South								
Africa	m	m	m	m	m	m	m	m
G20								
averag								
e	m	m	m	m	m	m	m	m
OEC								
D								
avera								
ge incl								
incl. Lithu								10
zimu ania	24	10	4	1	13	34	14	0
EU23	<b></b>	10	7	_	13	J <b>T</b>	17	
avera								
ge								
incl.								
Lithu								10
ania	24	9	3	2	9	38		0

Attachment 1: Percentage of decisions taken at each level of government in public lower secondary education