AFRICA EXPORT COMPETITIVENESS REPORT 2023

BADEA
Arab Bank for Economic Development in Africa

THE AFRICAN CAPACITY BUILDING FOUNDATION | FONDATION POUR LE RENFORCEMENT DES CAPACITÉS EN AFRIQUE

SHIFT
PROFIT WITH PURPOSE

IFC | INSTITUTE *for* COMPETITIVENESS

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Africa Export Competitiveness 2023

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Abbreviations

ACBF	African Capacity Building Foundation
AEC	Africa Export Competitiveness
AfCFTA	African Continental Free Trade Area
AfDB	African Development Bank
AGOA	African Growth and Opportunity Act
AIFC	African Institute for Competitiveness
ATM	Automated Teller Machine
AU	African Union
bcm	Billion cubic metres
BRICS	Brazil, Russia, India, China, and South Africa
CAGR	Compound Annual Growth Rate
COMESA	Common Market for Eastern and Southern Africa
DCTF	Directorate of Customs and Trade Facilitations
DSL	Digital Subscriber Line
EAC	East African Community
ECOWAS	Economic Community of West African States
EPA	Economic Partnership Agreement
EPI	Export Preparedness Index
EU	European Union
FDI	Foreign Direct Investment
GDP	Gross Domestic Product
GNI	Gross National Income
GVCs	Global Value Chains
HDI	Human Development Index
ICBT	Informal Cross-Border Trade
ICCP	International Cluster Competitiveness Project
ICT	Information and Communication Technology
IEA	International Energy Agency
IFC	Institute for Competitiveness India
IFCA	Institute for Competitiveness Africa
IMF	International Monetary Fund
IP	Intellectual Property
IT	Information Technology
KMO	Kaiser-Meyer-Olkin
LDCs	Least Developed Countries
LFPR	Labor Force Participation Rate
LSI	Liner Shipping Index
NEPAD	New Partnership for Africa's Development
NTMs	Non-Tariff Measures
OECD	Organization for Economic Cooperation and Development
PCA	Principal Component Analysis
R&D	Research and Development
RECs	Regional Economic Communities
RTA	Regional Trade Agreement
SADC	Southern African Development Community
SDGs	Sustainable Development Goals
SME	Small and Medium Enterprise
TCP/IP	Transmission Control Protocol/ Internet Protocol
UNCTAD	United Nations Conference on Trade and Development
UNEP	United Nations Environment Programme
USD	United States Dollar
WGI	Worldwide Governance Indicators
WTO	World Trade Organization

FOREWORD
Towards a More Inclusive Africa

H.E. DR. SIDI OULD TAH
President, Arab Bank for Economic Development in Africa (BADEA)

As President of the Arab Bank for Economic Development in Africa (BADEA), it is with great pleasure and pride that I introduce the 2023 Africa Export Competitiveness Report. Consistent with our strategy BADEA 2030, this report underscores our commitment to Africa's economic growth, private sector development, and capacity building.

At BADEA, we firmly believe Africa's prosperity lies in its ability to enhance export competitiveness. This report is a comprehensive analysis of Africa's export potential, shedding light on the opportunities and challenges ahead. It provides valuable insights into sectors with high growth potential, identifies emerging trends, and offers actionable recommendations to unlock Africa's full export potential.

Private sector development is a cornerstone of BADEA's Strategy 2030, as we recognise the crucial role entrepreneurship and private enterprises, especially SMEs, play in driving economic growth and job creation. Through our financial and technical support, we strive to create an enabling environment for the private sector to thrive. By facilitating access to finance, promoting investment, and fostering innovation, we empower African businesses to seize export opportunities under AfCFTA and compete globally.

Technical assistance and capacity development are intrinsic to BADEA's mission. We understand building skills and knowledge of African governments, institutions, and individuals is essential for sustainable development. Through targeted programmes and initiatives, we equip stakeholders with the tools and expertise to navigate the complexities of international trade, ensuring effective participation and competitiveness in regional and global arenas.

The timeliness of this report cannot be overstated. Under the BADEA 2030 Strategy, our focus is on infrastructure, private sector development and trade financing, agricultural value chains, SMEs, and women and youth entrepreneurship. Capacity development is a cross-cutting pillar. As BADEA continues to intervene and support African countries, insights presented will guide actions and shape approach. It provides a thorough understanding of the export landscape, enabling us to tailor interventions to address specific challenges, harness new opportunities and drive sustainable economic growth across the continent.

I want to express my sincere appreciation to the dedicated team of experts and researchers who have contributed their time, knowledge, and expertise to produce this remarkable report. Their commitment to excellence and passion for Africa's development is evident in the depth and quality of the analysis presented.

I extend my gratitude to African countries and our esteemed partners for their trust and collaboration. Partnership with African Capacity Building Foundation (ACBF), Shared Value Africa Initiative (SVAI), and Institute for Competitiveness has been instrumental in creating a timely and relevant report. Together, we can forge a path towards a more prosperous and inclusive Africa, where export competitiveness is both a goal and reality.

INTRODUCTION
Charting New Frontiers

MAMADOU BITEYE
Executive Secretary of the ACBF

TIEKIE BARNARD
CEO and Founder of Shift Impact Africa and the Shared Value Africa

DR. AMIT KAPOOR
Honorary Chairman at the Institute for Competitiveness, India

In a rapidly evolving global landscape marked by shifting geopolitics and post-pandemic recovery, Africa stands poised at a transformative juncture. The continent's active engagement in enhancing trade and competitiveness is pivotal for its economic growth and integration into the global marketplace. The Africa Export Competitiveness Report 2023 represents a landmark collaborative effort among Shift Impact Africa, the Institute for Competitiveness Africa (IFCA), the Institute for Competitiveness, India (IFC), and the African Capacity Building Foundation (ACBF).

This report is a critical instrument of research, delineating the readiness of the continent to navigate the intricate dynamics of continental and international trade and to capitalise on the opportunities afforded by the African Continental Free Trade Area (AfCFTA).

Guided by Dr. Amit Kapoor, Honorary Chairman at the Institute for Competitiveness, India, this cross-continental initiative has generated a comprehensive analysis evaluating the export landscapes of 30 African nations. The insights furnished by this collective endeavour are crucial in shaping policy decisions and strategic directions, ultimately aiming to bolster Africa's export competitiveness and economic synergy. Dr. Kapoor's acumen, supported by Barassou Diawara, Senior Knowledge Management Expert at ACBF, alongside an array of dedicated researchers, analysts, and specialists, has been instrumental in crafting a framework that is not only robust but also attuned to the unique challenges and opportunities that African nations encounter.

The analytical framework of the report encompasses four fundamental pillars: Policy, Business Ecosystem, Export Ecosystem, and Export Performance. This comprehensive approach underlines the critical aspects of assessing Africa's export readiness, stressing the significance of intra-African trade, sector-specific insights, and the necessity for resilient value chains, innovation, and an enabling environment conducive to trade facilitation and investment.

Mamadou Biteye, Executive Secretary of the ACBF, emphasises the essential role of capacity development in fostering sustainable economic growth. The ACBF's Strategic Plan for 2023-2027 mirrors a staunch commitment to aiding Africa's economic transformation through focused capacity-building endeavours. By aligning these efforts with the goals of the AfCFTA, the plan seeks to empower African nations and institutions to fully exploit the benefits of regional integration and global trade.

Shift Impact Africa CEO, Tiekie Barnard, underscores the importance and the urgent need to support the implementation of the AfCFTA and to furnish pivotal data that can accelerate policy implementation and informed decision-making. The partners' contribution to this report and the ongoing dialogue around AfCFTA implementation highlights the commitment to not only understanding the complexities

of global trade but also acting as catalysts for change and development across the continent.

As we navigate the new frontiers of Africa's economic trajectory, the partnership between our institutions exemplifies the power of collaborative research and peer learning. By pooling resources, sharing best practices, and fostering collaboration among African nations, regional economic communities, the private sector, and development partners, we are equipped to confront the challenges and harness the opportunities that the AfCFTA presents.

We encourage policymakers, business leaders, and stakeholders to use the insights from the Africa Export Competitiveness Report 2023 as a strategic tool to achieve export-led growth and unlock the continent's vast economic potential. Together, we can elevate Africa's export competitiveness to unprecedented levels and actualise our collective vision of a prosperous, integrated, and globally competitive Africa.

Dr. Amit Kapoor: "It is through our shared endeavours and mutual insights that we can transform challenges into stepping stones for prosperity. The Africa Export Competitiveness Report is a testament to our collaborative spirit and our unwavering commitment to Africa's economic ascent."

Mr. Mamadou Biteye: "Capacity building is the cornerstone of sustainable development. Our strategic initiatives, as outlined in the ACBF's recent plans, are designed to build the capabilities that African nations need to thrive in the era of free trade and beyond. This Report is a testament to collaborative excellence and paves the way for a transformative journey within the African continent. As partners, we hope to empower our African countries to seize the boundless opportunities of the AfCFTA via export competitiveness, fostering economic growth, sustainable development, and a prosperous future for all."

Ms. Tiekie Barnard: "At Shift Impact Africa and the IFCA, we are driven by a vision of an interconnected African economy where trade barriers are diminished, and opportunities are accessible to all. This report is a crucial step towards realising that vision, providing actionable insights and a clear path forward for all stakeholders involved in Africa's trade ecosystem."

African Capacity Building Foundation (ACBF)

The African Capacity Building Foundation (ACBF) is a Pan-African organisation established in 1991 with the mandate to develop human capital and accelerate institutional development to enable the African continent to address its current and future development challenges. The ACBF Strategic Plan 2023-2027 seeks to enhance Africa's transformation ecosystem with fit-for-purpose delivery capabilities for inclusive growth and sustainable development. The Plan has four key impact areas, namely (a) Climate Change and Energy for Productive Use; (b) Agribusiness and Food Sovereignty; (c) Trade as an Engine of Economic Development; and (d) Economic and Social Governance. Throughout the years, the ACBF has supported the creation and/or strengthening of some 50 think tanks, government institutions, and CSOs across the continent. The ACBF has helped to establish them as sustainable institutions that are active drivers of policy debates as well as reliable conduits and sources of technical and advisory support to stakeholders along the policy value chain. The ACBF has also increased access to knowledge platforms for capacity development and generated more than 500 knowledge products in research studies, and publications covering close to 200 development topics.

Institute for Competitiveness (IFC)

Institute for Competitiveness, India is the Indian knot in the global network of the Institute for Strategy and Competitiveness at Harvard Business School. The Institute for Competitiveness, India is an international initiative centred in India, dedicated to enlarging and purposefully disseminating the body of research and knowledge on competition and strategy, as pioneered over the past 25 years by Professor Michael Porter of the Institute for Strategy and Competitiveness at Harvard Business School. The Institute for Competitiveness, India conducts and supports indigenous research; offers academic and executive courses; provides advisory services to corporates and governments, and organises events. The institute studies competition and its implications for company strategy; the competitiveness of nations, regions and cities and thus generates guidelines for businesses and those in governance; and suggests and provides solutions for socio-economic problems.

Shift Impact Africa Group

Shift Impact Africa Group is a Pan-African, women-owned advisory, business development, and consulting enterprise, comprising Shift Impact Africa and the Shared Value Africa (SVA). We operate across the continent with a focused mission to drive African businesses towards becoming the economic powerhouses of the future. Our approach assists and guides organisations in unlocking the potential of creating shared value – profitably addressing critical issues that impede their progress. We champion the ethos of 'profit with purpose', believing that businesses can simultaneously generate economic value and societal benefits.

The Shared Value Africa, as a regional partner of the global Shared Value Initiative, collaborates with a network of businesses united by the goal of building prosperous and sustainable economies. We focus on nurturing forward-thinking businesses that leverage the Shared Value model to address social and environmental challenges, guided by the UN Sustainable Development Goals. This model not only fosters economic growth but also contributes to solving the unique challenges faced by the African continent through innovative and locally driven solutions.

AFRICA EXPORT Competitiveness REPORT 2023

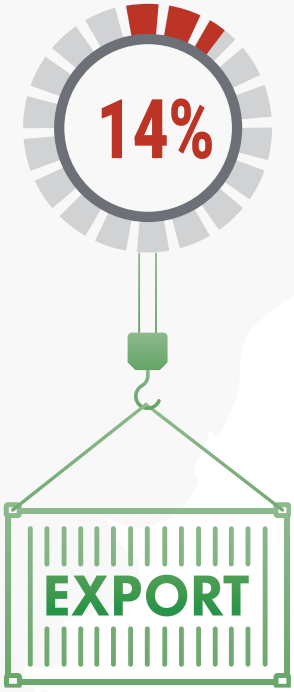
Africa's Momentum

Africa is home to a substantial domestic market that presents significant opportunities and challenges.

01

AFRICA'S MOMENTUM
A World of Promise?

Africa, abundant in natural resources, grapples with economic challenges and vast disparities. Despite its potential, intra-Africa trade is low at 14.12%, hindered by infrastructure issues and corruption. Efforts are underway to boost continental integration, but external trade with Asia and Europe remains dominant.



Intra-Africa trade stands at only 14.12% of total exports for the continent

Africa is home to a substantial domestic market that presents significant opportunities and challenges. Africa as a region possesses an abundance of natural resources, including but not limited to forests, wildlife, arable land, water, energy, and natural gas.

A vast majority of the world's renewable and nonrenewable natural resources are located on this continent. Approximately 20% of the global hydrocarbon reserves, 8% of the global natural gas reserves, and 30% of the global mineral reserves are located in Africa. The continent is home to up to 90% of the world's chromium and platinum and 40% of its gold. Africa contains the most substantial quantities of cobalt, diamonds, platinum, and uranium on a global scale. Ten percent of the world's internal renewable pure water source and 65% of the world's arable land are located within the continent (UNEP). However, African countries continue to encounter obstacles in the process of fully harnessing their potential.

The abundance of natural resources has not translated to economic prosperity for the continent. Out of the 46 least developed countries (LDCs) in the world, 33 are in Africa.[1] Around 424 million people in the region live in extreme poverty.[2] The economic development disparities among African nations are enormous, as are those between Africa and developed nations. Over the past 20 years, many African countries have seen an increase in GDP per capita, as seen in Figure 1, indicating economic growth and development.

The uneven income distribution among African countries is also clearly visible. Some 39 African countries have a per capita income of less than $8,000, while three others have more than $20,000. Positive is that many African countries achieved high real growth rates during the 2000s. For example, Ethiopia and Rwanda registered CAGRs of 8.33% and 6.83%, respectively, between 2000 and 2021. This growth can be attributed to improved governance, foreign investment, and natural resource exploitation.

However, challenges like income inequality, unemployment, and poverty persist in these nations, highlighting the need for further efforts to ensure the benefits of economic growth are shared among a broader population.

Given its combined national income of $2.8 trillion in 2023 and its population of about 1.4 billion, it is home to 18.13%[3] of the world's population. But this translates to only an average per capita income of $1,976[4] in African nations, which is roughly one-sixth of the global average.

The economic struggle of the countries in the region is depicted by the rising levels of government debt in the region increasing by 183% since 2010 (UNCTAD). Apart from the concerning economic conditions, various countries in the region suffer high levels of political instability and high incidences of political violence. The continent has seen seven military coups in the past three years and 35 of the 54 nations are currently experiencing some sort of mass violence[5].

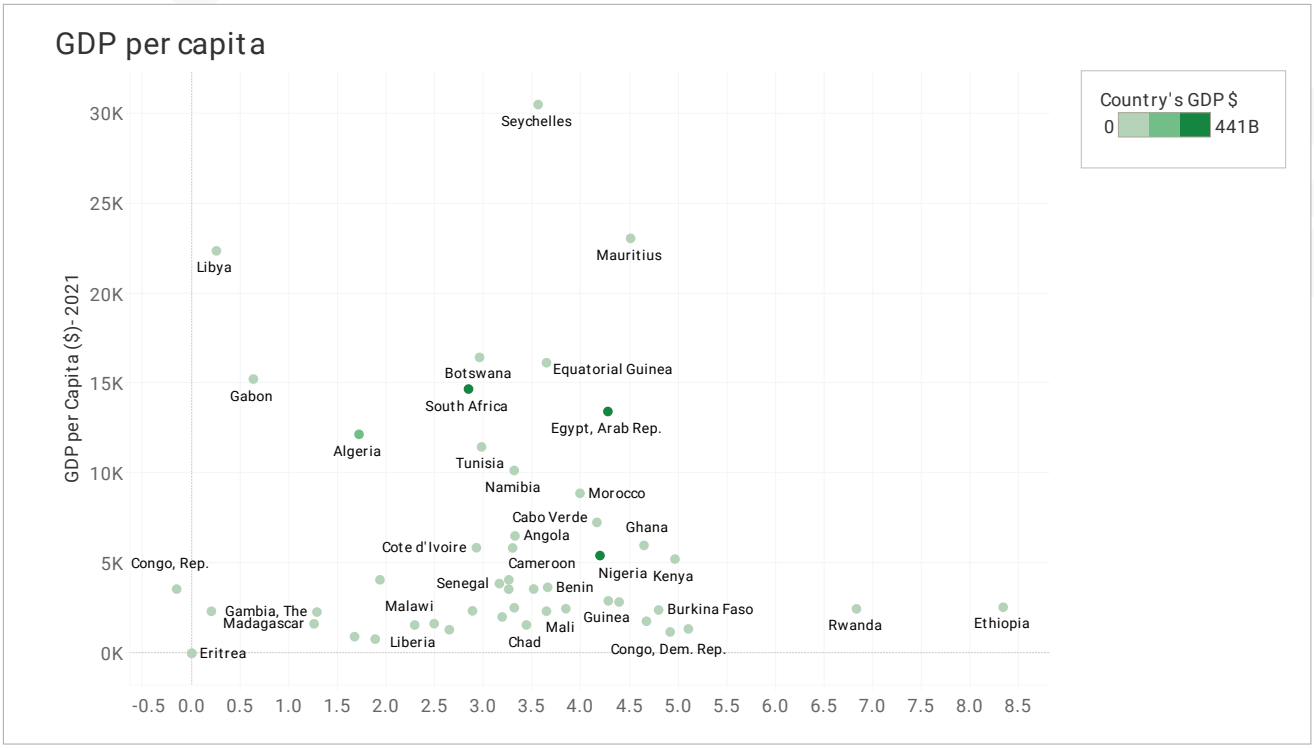
The dismal economic situation coupled with the level of political unrest has led Africa to be unable to reach its potential in terms of prosperity and well-being.

ADDRESSING KEY CHALLENGES: Low Intra-Africa Trade

One of the key reasons for the weak performance is the low level of intra-Africa trade. Intra-Africa trade stands at only 14.12% of the total exports for the continent, which is significantly lower, compared to 56.59% in the European Union and 67.24% in OECD, as shown in Figure 2. Intra-African trade is crucial for Africa's integration ambition, but its fragmented structure may pose a challenge for continent-wide integration due to different paces of integration across the continent.

Africa is home to significant global reserves, including 90% of the world's chromium and 40% of its gold. Yet, 33 of its nations are among the world's least developed countries.

FIGURE 1: GDP PER CAPITA



Source: World Bank

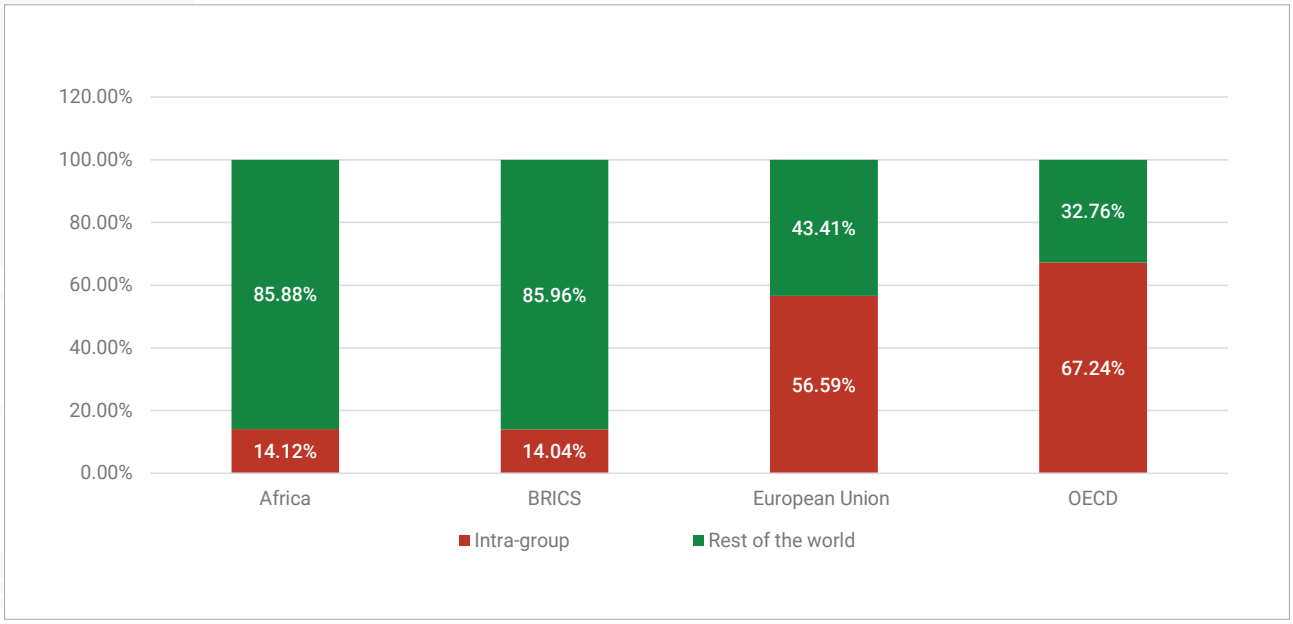
While intra-African trade is experiencing notable growth, it still remains at relatively modest levels.

Intra-Africa trade is still dominated by primary products but has a higher percentage of knowledge products compared to extra-African trade. A higher level of intra-regional trade for a region is beneficial in improving the infrastructure of the region and protects its exports from high volatility due to factors external to the region.

Several factors have been identified for Africa's lack of intra-regional trade, including trade barriers, poor infrastructure, and high incidents of corruption (Onley, 2022). Another key observation of the study was the positive relationship between road infrastructure and intra-regional trade on the continent, indicating the importance of road infrastructure as a key element for facilitating intra-Africa trade.

African nations are acutely cognisant of the significant potential and opportunities, as well as the formidable challenges that underpin their respective economies. Notably, while intra-African trade is experiencing notable growth, it still remains at relatively modest levels. The trade in merchandise continues to dominate Africa's international trade landscape, even though there has been a noteworthy surge in trade in services over the past few decades. Over time, the impressive expansion in intra-African trade, albeit partly attributed to the recent decline in fuel prices, has contributed to a heightened share of intra-African trade. Nonetheless, it is pertinent to acknowledge that Asia and Europe persist as the principal trading partners of African nations (UNCTAD, Key Statistics and Trends in Regional Trade in Africa, 2019).

FIGURE 2: SHARE OF INTRA TRADE IN TOTAL (%) - 2022



Source: Data calculated from https://unctadstat.unctad.org/datacentre/dataviewer/US.IntraTrade

AfCFTA PAVES THE WAY

for harnessing intra-Africa trade

The African Continental Free Trade Area (AfCFTA) represents a significant milestone in the continent's efforts to enhance trade, foster economic growth, and reduce poverty. Ratified by 54 African nations, the agreement was officially launched in May 2019 and saw its operational phase commence on 1 January 2021. It stands as the world's largest free trade agreement, following the World Trade Organization. AfCFTA aims to be negotiated in two phases, with the first phase concentrating on four critical aspects of the trade environment.

The first phase emphasises the trade of goods, committing to the removal of tariffs on 90% of product lines within five years. It also focuses on the reduction of non-tariff barriers to facilitate regional trade. In services, the AfCFTA seeks to liberalise areas such as business, communication, finance, tourism, and transport. Member countries are encouraged to delineate the sectors they wish to open, promoting market access and healthy competition. The agreement also introduces a robust Dispute Settlement Mechanism, comprising a Dispute Settlement Body, Adjudicating Panels, and an Appellate Body, to ensure transparency and trust among member nations. Further, the Directorate of Customs and Trade Facilitation plays a significant role in streamlining customs procedures and enhancing trade across Africa.

In the second phase, AfCFTA will explore areas such as intellectual property rights, investment, competition policy, digital trade, and the engagement of women and youth in trade. The overarching goal is to improve the trade environment and foster economic development.

The IMF's research underscores the potential of AfCFTA. With comprehensive reforms, such as tariff reductions and enhancements in infrastructure and security, intra-African trade can surge, possibly leading to a real per capita income rise of over 10% for most nations. Such changes can deepen Africa's integration into global value chains. However, it is crucial to concurrently strengthen social safety nets, offer vocational training, and ensure macroeconomic stability to truly capitalise on these opportunities and achieve higher growth and job prospects.

South Africa started trading under the African Continental Free Trade Agreement (AfCFTA) on 31 January 2024, enabling enterprises to export certain products duty-free or with reduced charges to 12 African nations. This decision may also inspire global corporations to invest and produce in South Africa. President Cyril Ramaphosa and Minister Ebrahim Patel declared the start of preferential trade under the AfCFTA, with additional nations likely to join the deal by 2024. It is envisaged that all 55 African Union member nations would join AfCFTA in the next few years.

Navigating the Complexities of Intra-African Trade

from the Lens of Informal Cross-border Trade

In recent decades, recorded cross-border trade in Africa has increased only modestly, with merchandise trade expanding at a limited rate and services trade remaining stagnant. Contrary to the more diversified trade within the region, which comprises a greater proportion of processed products, the continent's exports to other countries are predominantly composed of commodities.

The observed trade patterns align with the continent's restricted participation in global value chains (GVCs), which is indicative of its fragmented trade policy environment characterised by multiple regional economic communities, and a challenging trade environment with structural deficiencies such as transport networks, customs and border procedures, and access to finance. Simultaneously, informal cross-border trade seems to be substantial, albeit difficult to measure (IMF, 2023).

A precise definition for informal cross-border trade is elusive, as it encompasses a wide range of activities, including both formal and informal production and trade. Informal trade, particularly small-scale activities, is challenging to quantify due to its undocumented nature. Although estimates vary, it accounts for a significant proportion of official imports and exports. The compilation of data on the activities of informal cross-border merchants within regional economic communities (RECs) and at the national level has been complicated due to the divergent conceptual approaches to informal cross-border trade (FAO, 2017).

There is currently no permanent and continent-wide system for monitoring and quantifying informal cross-border trade in Africa. Accurate informal cross-border trade data is crucial for understanding intra-African trade, as it helps in maximising the potential benefits of the African Continental Free Trade Area for inclusive growth. In the absence of precise informal cross-border trade data, a comprehensive depiction of intra-African trade is not possible.

Monitoring Informal cross-border trade is crucial for identifying sensitive products and tariff reduction modalities for enhanced market access under the African Continental Free Trade Area. This data can inform policy formulation to exploit its potential impact on job creation and microenterprises.

Most cross-border traders are small-scale producers, and a better understanding of traded commodities can boost their efficiency and competitiveness. This can lead to value addition and regional value chains, as noted by the World Bank (UNCTAD, 2021).

However, it must be noted that the economic significance of intra-African trade is underestimated. Informal cross-border trade (ICBT) is a significant global phenomenon, generating nearly $18 billion annually and accounting for over two-thirds of trade flows in some African countries (Koroma, 2017). This trade is most intensive in smaller landlocked countries and is higher in certain sub-regions, accounting for 30%-40% of total trade within the Southern African Development Community (SADC) and Common Market for Eastern and Southern Africa (COMESA).

Studies suggest that intra-African trade is systematically underreported, with some authors putting it even higher, at nearly half of formal sector trade. The sheer length of African borders often inhibits tight controls, making it difficult to control.

One of the recent papers from the Brookings School of Global Studies challenges the conventional narrative of low intra-African trade levels, arguing that it holds greater economic significance than previously perceived. The paper examines global drivers of trade growth, emphasising the role of regional trade agreements. It argues that previous studies claiming ineffectiveness of regional integration efforts in Africa were flawed due to econometric and methodological errors.

Recent research indicates that these agreements have on average increased intra-African exports by 27%-32%. Contrary to prevailing wisdom, existing levels of intra-regional trade in Africa are not extraordinary and surpass trade integration observed in comparable regions globally.

The paper also recalibrates the intensity of intra-African trade, accounting for structural economic differences and the prevalence of informal cross-border trade. It finds that for non-oil resource-intensive and landlocked countries, the average share of exports directed towards the African market is as high as 38%-42% of total trade (Mold,2023).

To optimise the benefits of the African Continental Free Trade Area for vulnerable actors engaged in informal cross-border trade, a strategic shift from an exclusive focus on trade policy to an emphasis on formalisation and operational enhancement for entrepreneurs, firms, and merchants becomes imperative.

Furthermore, the establishment of a continental initiative aimed at defining informal cross-border trade comprehensively and instituting a standardised framework for data collection is advocated to enhance policy efficacy in supporting vulnerable groups and fostering a more nuanced understanding of the actors and drivers involved (UNCTAD, 2021).

AFRICA EXPORT Competitiveness REPORT 2023

Africa Trends

02

Despite a surge in merchandise exports in recent years, Africa's global market share remains modest.

GLOBAL TRENDS:
Africa's Position in World Trade

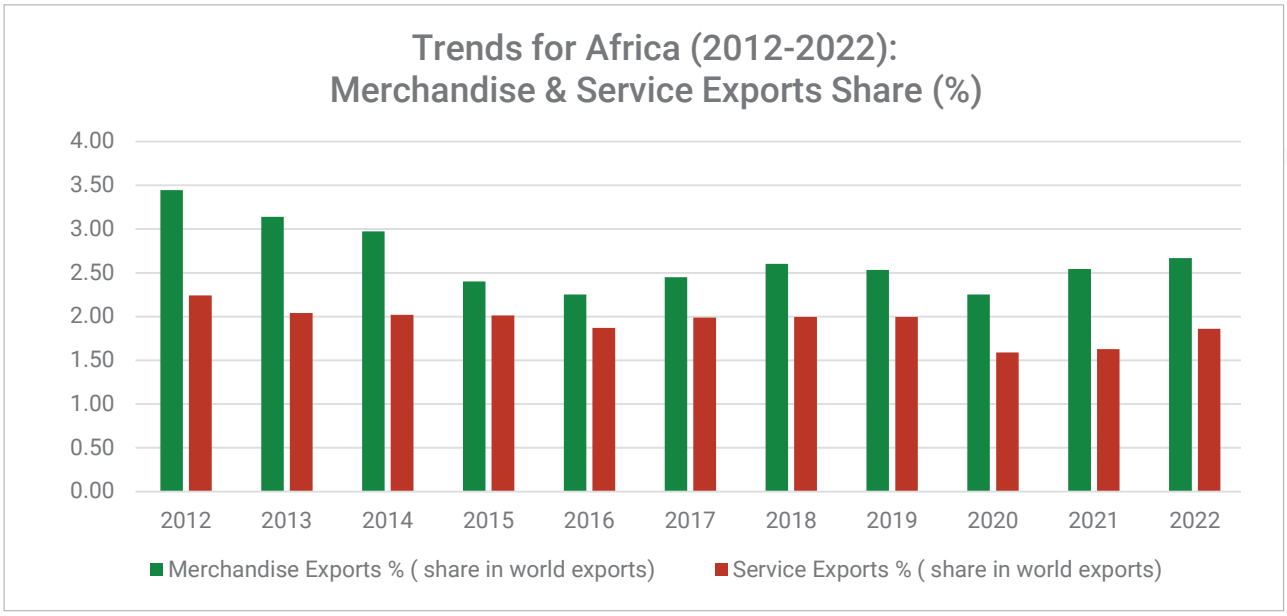
In 2022-23, Africa's exports, mainly minerals and IT services, reached $665.4 billion but were still below 3% of global exports. South Africa, Morocco, and Nigeria led the export market. Asia, particularly China, has surpassed Europe as the main export destination. Diversification and investment are key to enhancing Africa's global competitiveness.

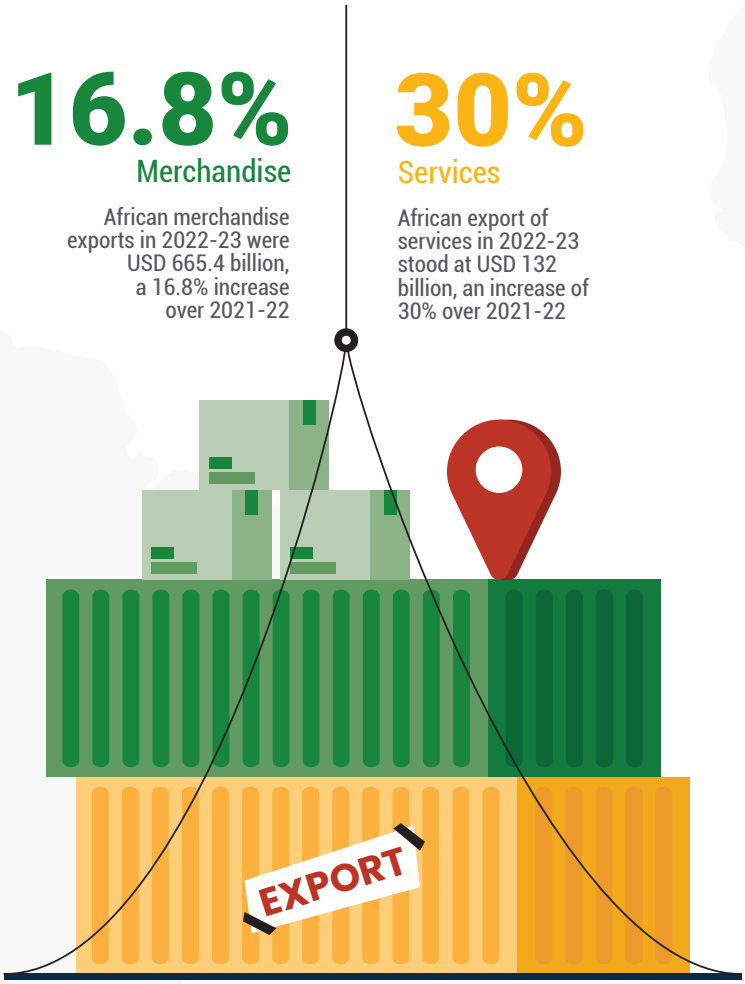
TRENDS FOR AFRICA: Merchandise & Service Exports

Africa's merchandise exports' share of world exports is quite low. The value of merchandise exports by Africa in 2022-23 was $665.4 billion, a 16.8% increase from 2021-22 (UNCTAD). The world recovered considerably from the lows of the pandemic in 2022-23, total world merchandise exports stood at $7.2 trillion, which is far higher than before the pandemic.

Africa's trade seemed to be aligned with the world trend as it registered $665 billion in merchandise exports, which is 16.8% higher than in 2021-22.

FIGURE 3: TRENDS FOR AFRICA (2012-2022)





The trade in services also showed a similar trend as African exports of services stood at $132 billion, which was an increase of 30% from the previous year[7] (UNCTAD). The percentage increase in African services exports was even higher than experienced by the world as a whole during the same period.

Despite recording the highest global trade value for merchandise goods and services in 2022-23, Africa has yet to position itself as a leading export hub. It can clearly be seen by the fact that the share of Africa in total merchandise exports has not crossed the level of 3% since 2014, standing at a mere 2.67% as of 2022.

In the past 10 years, Africa has accounted for merely 2.84% of the total merchandise exports in the world on average, the lowest among all the continents, barring Oceania and signif-icantly lower than Asia, which had an average share of 39% during the same period. A similar trend can be seen in the share of services exports, Africa has not been able to cross a 2% threshold since 2016 and has averaged 1.90% in the past 10 years, significantly lower than Asia and Europe averaging 28.3% and 49.18% respectively.

EXPORT BASKET: Need for Diversification

Merchandise exports from Africa have always been dominated by mining, agri-cultural and extractive products (UNCTAD, Economic Development in Africa Report, 2022). In 2021, minerals made up 39.57% of all merchandise experts, followed by precious stones at 17.82%. Agricultural products stood at 12.91% and metals had an 8.61% share in merchandise exports for Africa (Growth Lab: Atlas of Economic Complexity). The dominance of mineral products as a share of African merchan-dise exports can be seen from the fact that mineral products have been the most exported product category since 1995.

In the period 2000-2021, we see that metal products' share in exports has not varied much ranging from around 4%-8%. The share of agricultural products has seen a U-shaped trend in recent years with agricultural products reaching a level of 16.05% in 2002 and then falling to their lowest share in 2008 at 8.8% before rising back to its 2002 levels by 2020. The share of stones in the merchandise export basket has seen significant and continuous increases from 7.53% in 2000 to 17.82% in 2021, showcasing a shift

from mineral products but still expanding into a primary industry.

The most significant trend can be seen in the share of mineral products as part of exports in the time period. Petroleum products have experienced a continuous decline in their share of exports with a significant drop occurring in 2015. The share of minerals dropped from 54.64% in 2014 to 42.98% in 2015 owing to the oil price plunge in 2014.

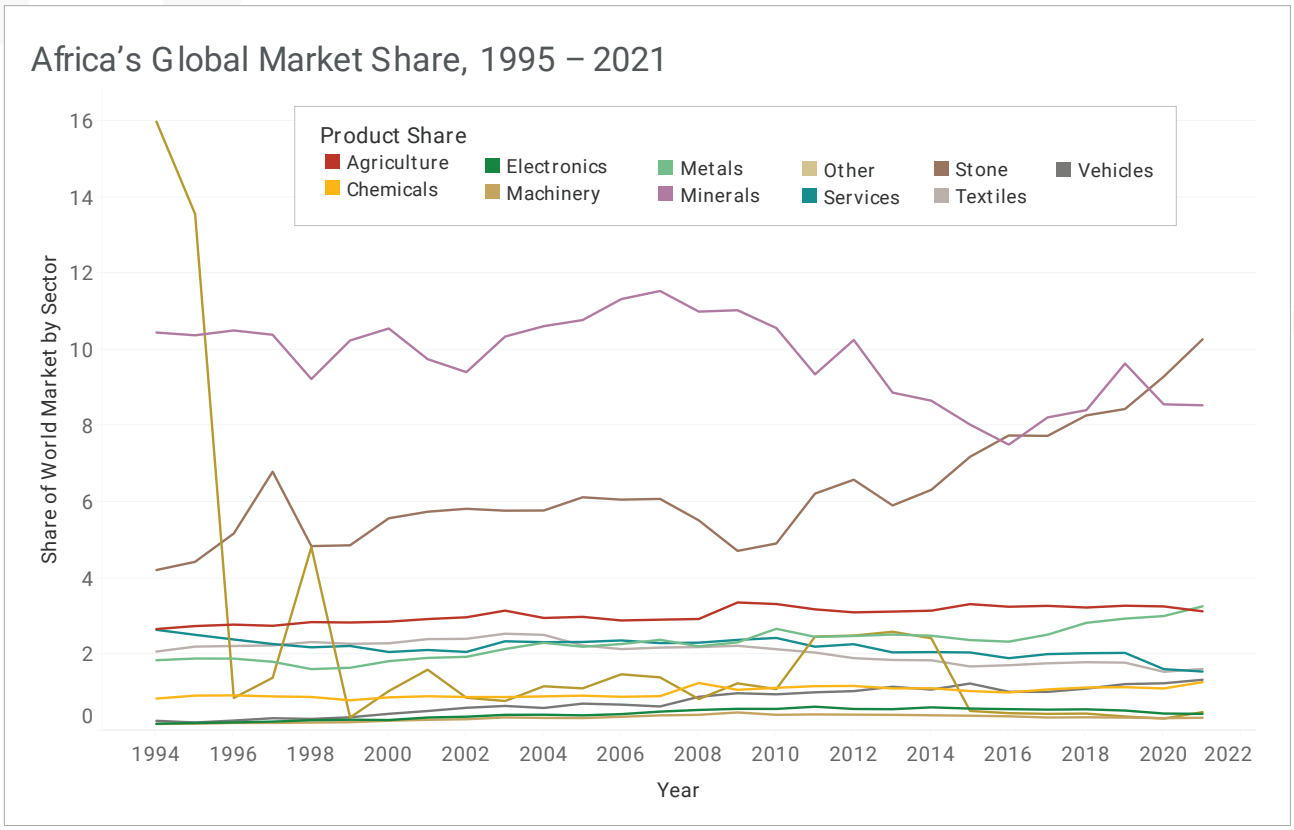
The reason for the oil price drop was the breakthrough in the production of shale oil in the United States turning it into a major exporter of oil products and thus reducing demand for African petroleum exports (Essandoh-Yeddu, 2015).

Russia's invasion of Ukraine in 2022 also impacted the landscape of oil exports of African countries in 2022. In 2022, Europe was the recipient of almost 60% of the oil exports from Russia (International Energy Agency, 2023).

The sanctions imposed on Russia motivated Europe to diversify its sources of oil imports. This led to an increase in demand for African oil from the EU in 2022-23. The EU's imports of oil products from Angola increased by 500% in the year. The increase in demand from the EU did not lead to an increase in overall exports for Angola as the increase was a result of a shift of oil exports away from Asian countries towards European nations (Suzan & Bounfour, 2023).

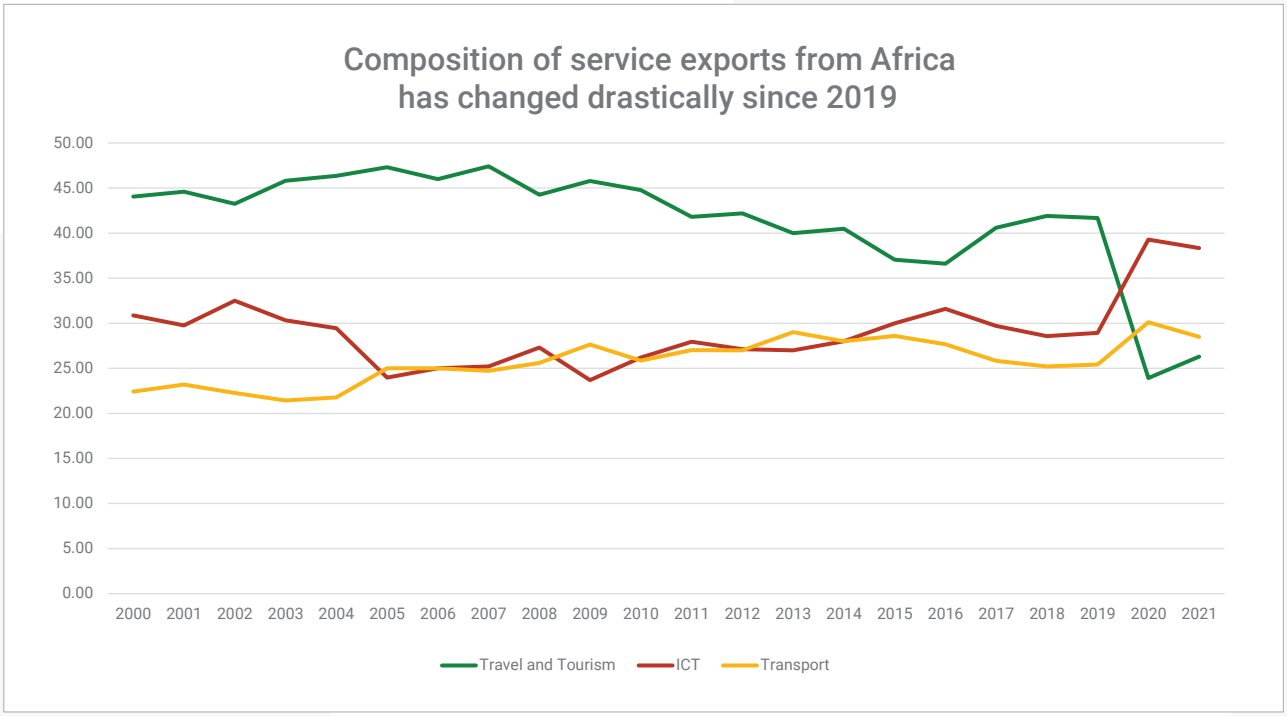
The share of stones in the export basket increased from 7.53% in 2000 to 17.82% in 2021

FIGURE 4: AFRICA'S GLOBAL MARKET SHARE, 1995-2021



Source: Growth Lab at Harvard University, The Atlas of Economic Complexity

FIGURE 5: AFRICA'S SERVICE EXPORTS – A DYNAMIC TRANSFORMATION POST-2019



Source: Growth Lab at Harvard University, The Atlas of Economic Complexity

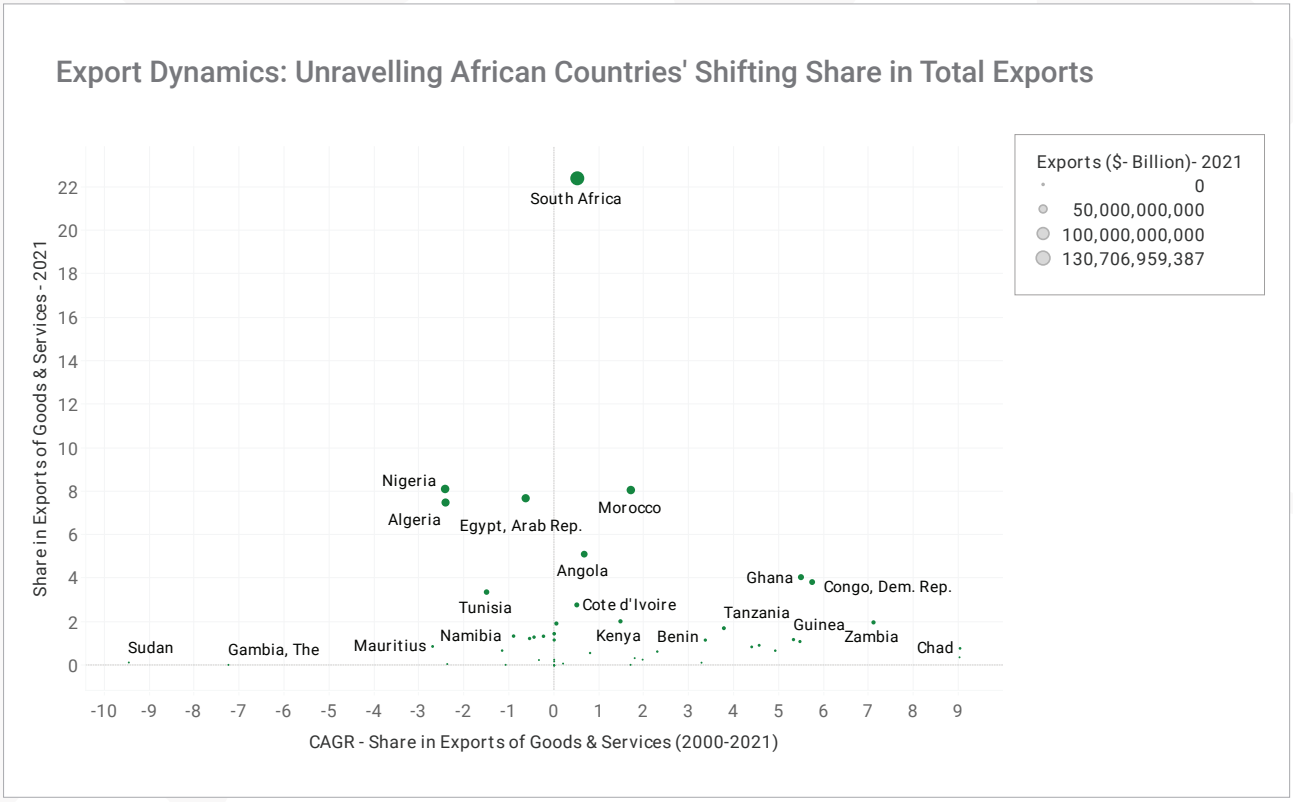
In 2020 and 2021, information technology services led the region's services exports, holding 39.28% and 38.35% shares respectively.

It is noted, however, that African nations have significant opportunities as a result of the worldwide shifts in energy markets and supplies since the Ukraine crisis. According to Reuters, the International Energy Agency (IEA) estimates that Africa could replace up to one-fifth of Russia's gas supplies to Europe by 2030. A Paris-based watchdog estimated that 30 billion cubic metres (bcm) of African gas may flow to Europe annually by then.[8]

The African services export landscape was stable until the COVID-19 pandemic, with travel and tourism being the most dominant category. This accounted for around 40% of the total export of services, followed by ICT and transportation services. The continent's services exports were largely reliant on traditional sectors, with tourism and transportation accounting for two-thirds of all exports. However, the pandemic and travel restrictions significantly impacted the continent's services exports composition, disrupting the travel and tourism sectors' dominance and necessitating a reassessment of the continent's services export landscape. The pandemic's impact on the continent's services export landscape remains significant.

In 2020 and 2021, information technology services emerged as the leader of services export in the region, accounting for a significant share of 39.28% and 38.35%, respectively. However, despite this strong performance in the IT sector, according to Odongo (2019), African countries still face a comparative disadvantage in modern service sectors such as ICT and financial services.

FIGURE 6: EXPORT DYNAMICS



Source: World Bank

The primary reason for the lack of expertise in modern information services in Africa can be attributed to the lack of research and innovation in the region indicated by the low levels of expenditure on knowledge creation by African economies.

Focusing on increasing R&D activities and matching pace with the rapidly improving technological landscape of the world can help Africa to diversify its services exports and move away from traditional services and increase its share of ICT and high-technology services, which will continue to be in high demand and thus improve its services export performance and share in the world.

EXPORT DYNAMICS: Unravelling African Countries

After examining the export trends of the African continent as a whole, it becomes imperative to delve into the specific export trends of individual countries. It is evident that the majority of exports within the African continent are consistently dominated by selected African countries. South Africa, Morocco, and Nigeria are the dominant players in Africa's export dynamics, accounting for a significant share of total exports.

These countries, except Nigeria, have consistently shown growth in export share over the past two decades.

In 2022, South Africa contributed to nearly one-fourth of total exports within the region.

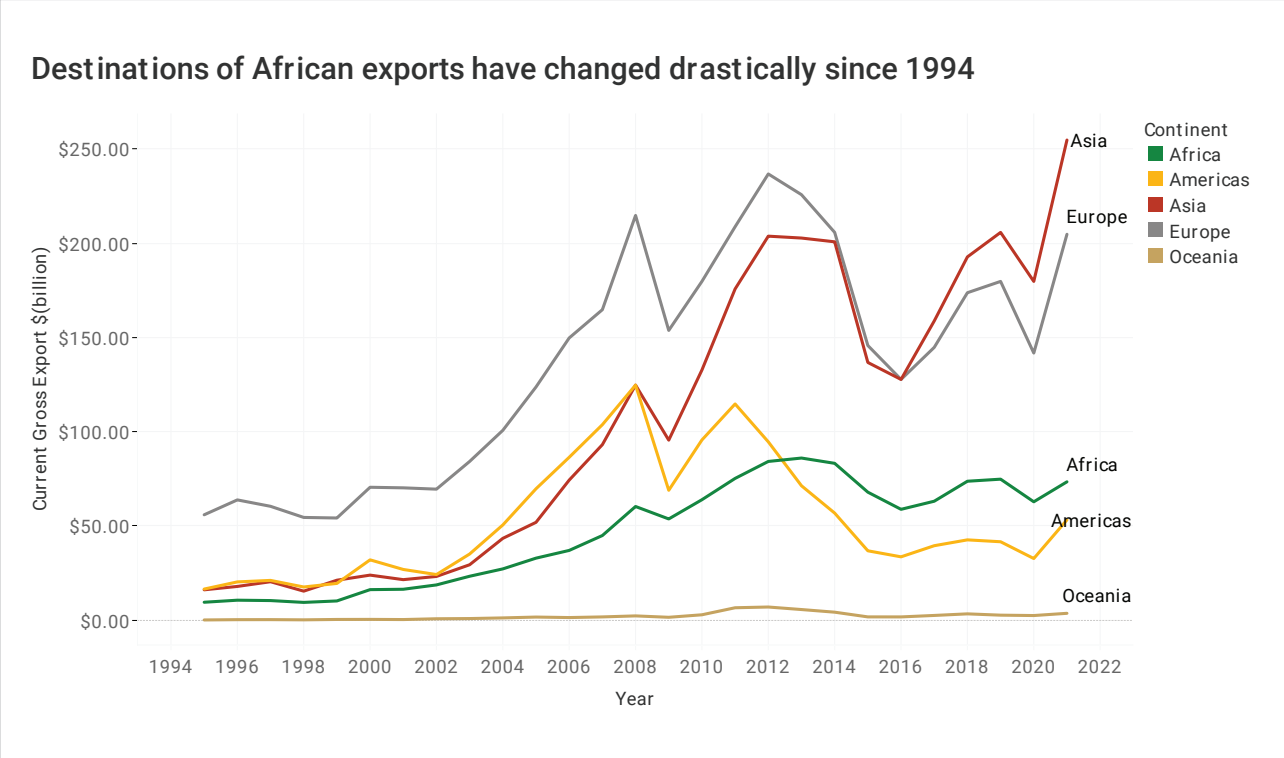
The combined share of Africa's top five exporting nations consistently exceeded 50% of the region's total exports.

However, several other African nations, despite having a lower export share, are experiencing remarkable growth in their exports. This highlights the diverse and evolving export landscape across the continent. Further analysis and exploration of the factors driving these trends is needed to understand the intricate export dynamics within African countries.

In 2022, South Africa emerged as the foremost exporter on the African continent, followed by Egypt, Algeria, Morocco, and the Democratic Republic of Congo. South Africa, in particular, played a pivotal role, contributing to nearly one-fourth of the total exports within the region, while Egypt accounted for 12% of African exports. Notably, South Africa exhibited an improved performance in 2022, with its share of Africa's exports rising marginally from 22.41% in 2021 to 23.38% in 2022.

This consistent prominence over the years underscores its position as a leading exporter of goods and services on the African continent. Throughout the years spanning 2000 to 2021, South Africa, as the primary contributor to African exports, maintained a positive CAGR in its share of African exports, registering an increase of 0.51%. This enduring trend affirms South Africa's sustained dominance as the highest exporter of goods and services over the specified period.

FIGURE 7: DESTINATIONS OF AFRICAN COUNTRIES' EXPORTS



Source: Growth Lab at Harvard University, The Atlas of Economic Complexity

Conversely, some countries experienced notably lower CAGRs during this timeframe, with Sudan and Gambia exhibiting negative rates of -9.46% and -7.25%, respectively. Consequently, by 2021, their contributions to total exports stood at a mere 0.13% and 0.02%, highlighting their limited share in the overall export landscape.

It is worth noting that despite commendable growth rates, certain countries such as Chad, Rwanda, and Zambia, with growth rates of 9%, 7.1%, and 7.1% respectively, were still unable to make substantial contributions to Africa's overall exports in 2021.

This underscores the overarching theme of high concentrations of export volumes among a select few countries within the region, as the combined share of the top five exporting nations consistently exceeded 50% of the region's total exports, reaffirming the uneven distribution of export capabilities across the African continent.

Over the years, the export destinations for African exports has also changed significantly. In the early 2000s, Europe was the most favoured continent for exports from African countries. The trend continued until 2016, when Asia took over from Europe as the favourite for African exports, a trend that has continued.

On a country level, in 2000, the USA received 18% of all African exports, making it the top destination for all exports from Africa. The USA remained the highest importer of goods from the continent and its share continued to increase until the 2008 financial crisis. The USA as a favoured destination for African exports started declining in 2008 with China emerging as a prominent destination for African products, eventually taking over from the USA as the biggest importer of African Exports in 2012, and has maintained this position. Recent years have also seen the emergence of United Arab Emirates as the second highest importer of African products with a share of 6.84% in 2021.

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AFRICA EXPORT Competitiveness REPORT 2023

Export Drivers

03

A closer look at the root causes that have played a role in Africa's export underperformance.

FACTORS DRIVING Africa's Exports

Africa's export performance has faced considerable challenges. The ability of a region to engage in international trade effectively is intertwined with a complex web of economic, political, and social factors. In Africa's case, its underperformance in the realm of exports can be largely attributed to the absence of an ecosystem necessary for nurturing a strong export ecosystem. In this section, we examine Africa's present condition concerning these factors and elucidate on the root causes of its underperformance.

1. STRENGTHENING BASIC INFRASTRUCTURE

Infrastructure is a major factor impacting the exports of a particular country or region. Infrastructure of a region comprising an efficient transport, telecommunication, energy and financial sector has a positive impact on the growth of exports and a negative impact on the trade deficit of a region/economy (Faheem Ur Rehman, 2010). The presence of adequate R&D and export promotion zones also influence a region's ability to create a viable export environment and increase its export competitiveness

1.1 Access to finance

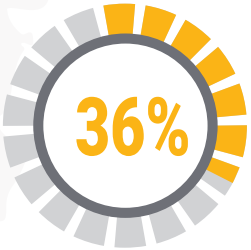
Access to finance, particularly the extent of the banking sector's outreach to the populace, has been identified as an important factor influencing an exporter's entry into the market (Durairaj Kumarasamy, 2018). Africa stands as the world's most underbanked region, with approximately 80% of its one billion inhabitants lacking access to formal banking services, a stark contrast to the global average where 69% of adults have a bank account.

Sub-Saharan Africa, in particular, faces a considerable challenge, with only an estimated 24.8% of adults holding a bank account and merely 14.8% possessing a debit card on average, according to World Bank data (Makina, 2019). Moreover, broader access to banking services in Africa is far from satisfactory. The continent maintains a meagre 7.5 bank branches and 13.3 ATMs per 100,000 people, significantly lagging behind the global average of 18.9 bank branches and 48.3 ATMs per 100,000 individuals. This lack of access to adequate finance discourages exporters from entering the export market and prevents them from expanding their business to more markets.

Lack of access to adequate finance discourages exporters from entering the export market and prevents them from expanding their businesses to more markets.

In 2021, only 48.1% of people in Eastern and Southern Africa had access to electricity

In 2021, only 54.2% of people in Western and Central Africa had access to electricity



Only 36% of the African population has broadband internet access

1.2 Research & Development

The presence of a robust R&D infrastructure, coupled with knowledge cultivation and a highly skilled workforce, assumes a central role in nurturing a dynamic export environment. This amalgamation significantly amplifies a region's ability to manufacture sophisticated, superior products, consequently elevating its competitiveness on the global stage. Effective R&D facilities stimulate innovation and product enhancement, ensuring that exports align with stringent international quality standards.

The R&D outlook for the African continent remains grim as it produces only 2% of the world's research output and 1.3% of the world's R&D expenditure takes place on the continent (Signé, 2022). The state of R&D expenditure and innovation in Africa has led to a lack of technological sophistication on the continent with high-technology exports forming only 4% of the total manufactured exports in sub-Saharan Africa and ICT services only contributing 7.8% of all service exports, which is lower than the EU at 16% and 18.4% respectively. This highlights how the lack of R&D in Africa is constraining the continent from gaining from the wave of increasing technological and information technology services trade (World Bank).

1.3 Power Availability and Access to Internet

Access to electricity is a major issue for all African countries as only 48.1% of the people residing in Eastern and Southern Africa and 54.2% of the people in Western and central Africa had access to electricity in 2021, which is far lower than the global average of 91.4% (World Bank). It showcases the need for Africa to increase investment in its energy sector, as energy is a major factor in significantly decreasing the export competitiveness of the region. In a growing world of e-commerce and electronic integration, access to quality internet is key in determining the level of trade integration a region is able to accomplish. Access to quality internet can assure businesses of access to newer geographical markets thus expanding and diversifying the export potential of a region.

The World Bank, through its Digital Economy for Africa initiative, has made significant developments in ensuring access to quality and affordable internet for the African continent but despite its efforts, only 36% of the African population has access to broadband internet (World Bank). Access to quality internet not only opens new markets for exporters in terms of geographical markets, but through facilitating online transactions, the internet increases security in terms of receiving timely payment and also reduces the time required to complete a trade transaction, thus facilitating more trade (UNCTAD, 2008).

1.4 Transport connectivity

One of the most important pillars used to gauge the export infrastructure of a region is the quality of its transport networks. These transport networks broadly include railways, roadways, waterways and airways (Piermartini, 2004). Port efficiency is found to be the most important transport factor for trade in a region. Africa also relies heavily on sea ports to

facilitate the transportation of its exports. Africa's seaport trade amounted to 1.3 billion tons in 2021; i.e., 6.9% of the total goods loaded at seaports in the world (UNCTAD, Review of Maritime Transport 2022).

Despite its significant share of the world's sea trade, only two out of more than 100 African container ports were featured on the top 100 container ports list issued by Lloyd's List in 2022 (Lloyd's List, 2023). This indicates that even though there is a higher number of ports, they do not have the physical capacity to manage huge volumes of goods individually. This lack of capacity has led to handling costs of goods at African ports being on average 50% higher than in other parts of the world.

The lack of established infrastructure extends to rail services and roads. The road network on the continent facilitates movement of 80% of the goods manufactured in Africa, yet only half of the population has access to an all-season road (African Development Bank Group). Better road infrastructure can result in a significant reduction in the inland travel time of goods, with a one day reduction possibly leading to a 7% increase in the region's exports thus making road infrastructure a key focus area for increasing export competitiveness of the continent (Caroline Freund, 2011).

2. EXPORT CONCENTRATION AND DIVERSIFICATION

Export diversification for a region can be defined as the extent of product categories that form part of a country's export basket. Export diversification is key for increasing the competitiveness of exports for a region as unstable demand conditions for a small basket of products exported by a country can cause major fluctuations in the export earnings of a region (Ostrey, 1994).

Data from the Observatory of Economic Complexity (OEC), as shown in Figure 8 on page 26, reveals that a colonial legacy links many African countries to their continued reliance on raw material exports. Despite six decades of advice for diversification, the trend persists, including in renewables, arable land, and strategic minerals. This "resource curse" hinders broader economic development and is linked to challenges such as volatile commodity prices, Dutch disease risk, and increased conflict susceptibility. However, there are signs of diversification as some countries are widening their export profiles, focusing on agricultural exports like cocoa, coffee, and cotton and industrial exports like cars, boats, and turbines.

Africa has always performed poorly in terms of diversifying its exports as merchandise exports have been dominated by primary product categories such as mining, and the agricultural and extractive industries. According to UNCTAD (2022), 45 of the 54 countries in Africa remain dependent upon exports from the above categories, depicting the continued reliance on primary products.

The lack of diversification of African exports can also be inferred by examining the performance of the Concentration Index by UNCTAD. The product concentration index shows the degree to which the exports and imports of individual economies or groups of

> Export diversification is key for increasing the competitiveness for exports for a region

economies are concentrated on a few products rather than being distributed in a more homogeneous manner among several products. In 2022, Africa was assigned a score of 0.232 on the product concentration index. Africa's score was second highest among all the continents after Australia (0.34).

The declining trend of export concentration in Africa shows some promising signs for the continent. The degree of export concentration has been decreasing in recent years, dropping from its highest level of 0.467 in 2008 to its lowest level 0.192 in 2020, highlighting some level of reduction in export concentration for the region but still way higher than the rest of the world[32] .

Evaluating the diversification index for exports is also crucial as it indicates to what extent the structure of exports or imports by product of a given economy or group of economies differs from the world pattern.

Africa was awarded a score of 0.548 in 2022, considerably higher than the scores for Asia and Europe at 0.189 and 0.179, respectively. This highlights how Africa is struggling to align itself with the patterns of world trade.

Further analysis of the index for Africa over the years depicts the region's struggle to match the world's pattern as it has continued to have a high diversification index score since the early 2000s, when compared to Asia, Europe and South America.

3. FDI INFLOWS IN AFRICA

Foreign direct investment (FDI) in Africa amounted to $44 billion in 2022, a significant fall from the record breaking $80 billion in 2021. The fall in Africa's FDI inflow aligned with global trends as FDI inflows declined by 12% in 2022 from $1.47 trillion in 2021 to $1.3 trillion. Africa's share of global FDI amounted to 3.47%, which is the lowest among the continents.

Africa's share in global FDI has remained below 5% for more than two decades with the exception of 2021.

Among African countries, a high level of concentration among the receivers of FDI can be seen (UNCTAD). In 2022, around 50% of the FDI inflow was received by just five countries, namely Egypt, South Africa, Ethiopia, Senegal and Lithuania having shares of 25.3%, 20.1%, 8.1%, 5.75 and 4.7%, respectively. This highlights the uneven distribution of FDI in African countries, resulting in unequal access to foreign capital among these nations.

In 2022, renewable energy, power, and petrochemicals were the main sectors receiving international finance projects in terms of total value; renewable energy

> Africa's share in global FDI has remain below 5% for more than two decades with the exception of 2021.

was the leader in terms of number of projects announced. Among the greenfield projects, the communication and information sector garnered the highest number of projects for the same year[29].

In conclusion, Africa's export landscape presents a multifaceted challenge that encompasses inadequate infrastructure, limited access to finance, and a scarcity of research and development efforts. Access to power and the internet, as well as transport connectivity, are vital pieces of the export puzzle that require substantial improvements.

While the road ahead is challenging, it is important to recognise that addressing these challenges can lead to enhanced export competitiveness.

To revitalise Africa's export performance, there's a pressing need for increased investments to meet infrastructure deficits. Power availability and widespread access to the internet are essential for tapping into global markets. By bolstering transport connectivity and diversifying exports, Africa can reduce its dependence on primary product categories, ultimately creating a more competitive presence in the global trade arena.

AFRICA EXPORT Competitiveness REPORT 2023

Methodology

04

The Africa Competitiveness Index 2023 evaluates export conditions, highlighting key drivers and challenges.

METHODOLOGY

The 2023 Africa Export Competitiveness Index applies the competitiveness framework developed by Prof. Porter (Porter, 1990) to gain a comprehensive perspective on the multiple factors that drive the performance of African economies. It provides a detailed analysis of export conditions, identifying key drivers and challenges. The index assesses export capacity and ecosystems nationally, ranking 30 of 54 countries according to their scores.

2023 Africa Export Competitiveness Index

CONCEPTUAL FRAMEWORK

The Africa Export Competitiveness (AEC) Index comprehensively evaluates countries based on several key pillars and sub-pillars, encompassing multiple dimensions critical to export competitiveness. These dimensions are instrumental in understanding a country's preparedness and potential for international trade.

The main pillars include "Enabling Environment", which comprises "Export Policy", "Basic Infrastructure", "Knowledge Workforce and Creation", and "Administration". Additionally, the index delves into "Demand Sophistication" through the sub-pillar of "Income Distribution". Furthermore, it assesses "Business Dynamism" by evaluating the "Business Environment". Lastly, the "Export Performance" pillar explores "Growth and Orientation of Exports".

This holistic approach offers insights into various facets of a nation's readiness and prospects for thriving in the global trade arena, contributing to a deeper understanding of export competitiveness. An in-depth discussion of the framework is provided in the analysis section.

The AEC framework faced constraints due to limited availability of country-wide data for key parameters like research and development (R&D) as a percentage of GDP and indicators related to access

The AEC Index evaluates export conditions in 30 of 54 African countries. It considers factors such as infrastructure, business environment, and export growth to gauge trade readiness.

TABLE 1: AEC PILLARS AND SUB-PILLARS

PILLAR	SUB PILLAR
Enabling Environment	Export Policy
	Basic Infrastructure
	Knowledge Workforce and Output
	Administration
Demand Sophistication	Income Distribution
Business Dynamism	Business Environment
Export Performance	Growth and Orientation of Exports

to finance. These variables are crucial for determining a country's export competitiveness, but their omission from the index is not indicative of their diminished importance. The decision to exclude these variables is not indicative of their marginal significance, but rather reflects data limitations encountered during the research process.

We remain committed to refining the methodology and addressing data gaps to enhance the Competitiveness Index's comprehensiveness in future.

Geographical Coverage

The Africa Export Competitiveness Index covers 30 countries. The index recognises the heterogeneity and vastness of the African continent in terms of geographical size, language, culture, and policies, which present complexities in analysing the index.

Dealing with Data

There were a few indicators where updated data was unavailable in the public domain. In such cases, data from the previous year or national average of countries was considered. The issue was experienced in the indicators provided in the appendices.

Data Transformation

All the indicators in the final set are modified so that a greater value means a higher score for the state. For instance, the cost to export i.e., border compliance will have a negative impact on the index. Therefore, transformations are applied to make such indicators' impact positive.

As all the indicators are measured in different units, it is important to standardise them so they become comparable. Otherwise, a variable that has relatively less variance, but is measured on a larger scale, may appear to have much greater variation than it actually does. Standardisation solves this problem by making all the indicators unitless as it rescales using a mean of zero and a standard deviation of one.

Indicators are normalised using either total Africa exports or population to enable relative country comparison. This implies that changes in individual indicators may either be driven by the numerator or normalisation factor. Moreover, assessing year-on-year performance relies on consistent data collection over time that is not collected for all indicators.

COUNTRIES

1. Angola
2. Benin
3. Botswana
4. Burkina Faso
5. Burundi
6. Cabo Verde
7. Cameroon
8. Cote d'Ivoire
9. Egypt, Arab Rep.
10. Gambia, The
11. Ghana
12. Kenya
13. Madagascar
14. Malawi
15. Mali
16. Mauritania
17. Mauritius
18. Morocco
19. Mozambique
20. Namibia
21. Niger
22. Nigeria
23. Senegal
24. Seychelles
25. South Africa
26. Tanzania
27. Togo
28. Tunisia
29. Uganda
30. Zambia

Therefore, a change in definition or old variable data could create movements in the rankings that are unrelated to performance. Thus, inferences about the performance of the states and union territories based on a year-on-year ranking can be misleading.

Evaluating the Fit

The indicator selection process includes those that best describe the pillar's concept and are conceptually linked to each other. The rigour of the AEC methodology is strengthened by assessing multiple aspects of fit between those indicators.

First, an exploratory factor analysis is used to test the underlying factors among the set of selected indicators in each pillar. In this process, the indicators that are statistically incompatible are removed. Furthermore, the AEC methodology involves evaluating the fit between the individual indicators by calculating Cronbach's alpha for each pillar.

Devised by Lee Cronbach in 1951 to quantify the internal consistency of a test or scale, alpha is expressed as a number between 0 and 1 (Tavakol & Dennick, 2011). Internal consistency refers to the degree to which all items in a test assess the same notion or construct; hence, it is linked to the interrelationships between items on the test. It describes the extent to which all the items in the test measure the same concept or construct; hence, it is connected to the interrelatedness of the items within the test. Internal consistency can be employed for research or examination purposes to ensure validity. An applied practitioner's rule of thumb is that the alpha value should be above 0.7 for any logical grouping of variables (Cortina, 1993).

The alpha values are significantly lower, i.e., 0.6 for demand sophistication. We acknowledge this shortcoming, but it is important to keep some indicators in the index due to their importance in the export landscape of Africa. This is also due to non-availability of data for African countries other than selected parameters.

Aggregation

After calculating each pillar, the goodness of fit is evaluated using the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy. The KMO index ranges from 0 to 1; as a rule of thumb, KMO scores should be above 0.5 (Williams, Onsman, and Brown, 2010). The results of this analysis are shown in Table 2 below. The KMO of all the pillars is above the set standards.

The Africa Export Competitiveness Index uses the Principal Component Analysis (PCA) to calculate the indicators' weights within a pillar. The pillar values are calculated by summing up the weighted scores using the following formula:

TABLE 2: CRONBACH ALPHA AND KAISER-MEYER-OLKIN

PILLAR	SUB PILLAR	ALPHA	KMO
Enabling Environment	Export Policy	0.69	0.65
	Basic Infrastructure	0.86	0.74
	Knowledge Workforce and Output	0.85	0.72
	Administration	0.97	0.86
Demand Sophistication	Income Distribution	0.60	0.49
Business Dynamism	Business Environment	0.71	0.68
Export Performance	Growth and Orientation of Exports	0.86	0.71

QUICK GUIDE TO THE AFRICA EXPORT COMPETITIVENESS INDEX

PURPOSE

Assess African countries' export readiness and potential.

KEY PILLARS

- Enabling Environment: Covers policy, infrastructure, workforce, and administration.
- Demand Sophistication: Focuses on income distribution.
- Business Dynamism: Evaluates the business environment.
- Export Performance: Analyses growth and export orientation.

GEOGRAPHICAL SCOPE

30 African countries.

DATA HANDLING

- Adjustments made for missing data.
- Transformation and normalisation for comparability.

ANALYTICAL TOOLS

Factor analysis, Cronbach's alpha, KMO measure, and PCA.

SCORING

- 0 to 100 scale transformation.
- Average dimensions to determine the final index.

PERFORMANCE ANALYSIS

Relative comparison using GDP-defined peer groups, visualised with colour-coded scorecards.

The last step in determining the pillar score involves transforming the values to a 0 to 100 scale. This is done by calculating the scores using the best- and worst-case scenarios in addition to the regional dataset. The best- and worst-case scenarios are either actual best- and worst-case values from the dataset or adopted from global best practices.[9]

$$\text{Pillars} = \Sigma (wi * \text{indicator})$$

This method enhances comparability as well as comprehensiveness across the dataset.

The calculation is done using the following formula:

$$= (X_j\text{-Worst Case}) / (\text{Best Case-Worst Case}) *100$$

Where X_j represents the raw pillar score values.

Dimension Scores

Each dimension score is taken to be a simple average of its pillars. The rationale being the absence of any theoretical or empirical proof to weigh any of the pillars higher than the others.

$$\text{Dimension}_d = 1/4 (\text{Enabling Environment} + \text{Demand Sophistication} + \text{Business Dynamism} + \text{Export Performance})$$

Index scores

The four dimensions are believed to reflect equally important aspects of export competitiveness. Therefore, priority has not been given to any dimension while calculating the index. Equal weights have been assigned to each of them to highlight their roles.

$$\text{Africa Export Competitiveness Index} = 1/2 \Sigma \text{Dimension}_d$$

Relative Performance of Countries

The AEC Index evaluates the performance of countries based on their relative performance rather than absolute scores. Instead of using absolute scores, the index focuses on comparing a country's performance with its peers.

AFRICA EXPORTS Competitiveness REPORT 2023

Analysis

The Africa Export Competitiveness Index comprehensively evaluates countries across multiple dimensions critical to export competitiveness

05

ANALYSIS

1. OVERALL AEC ANALYSIS

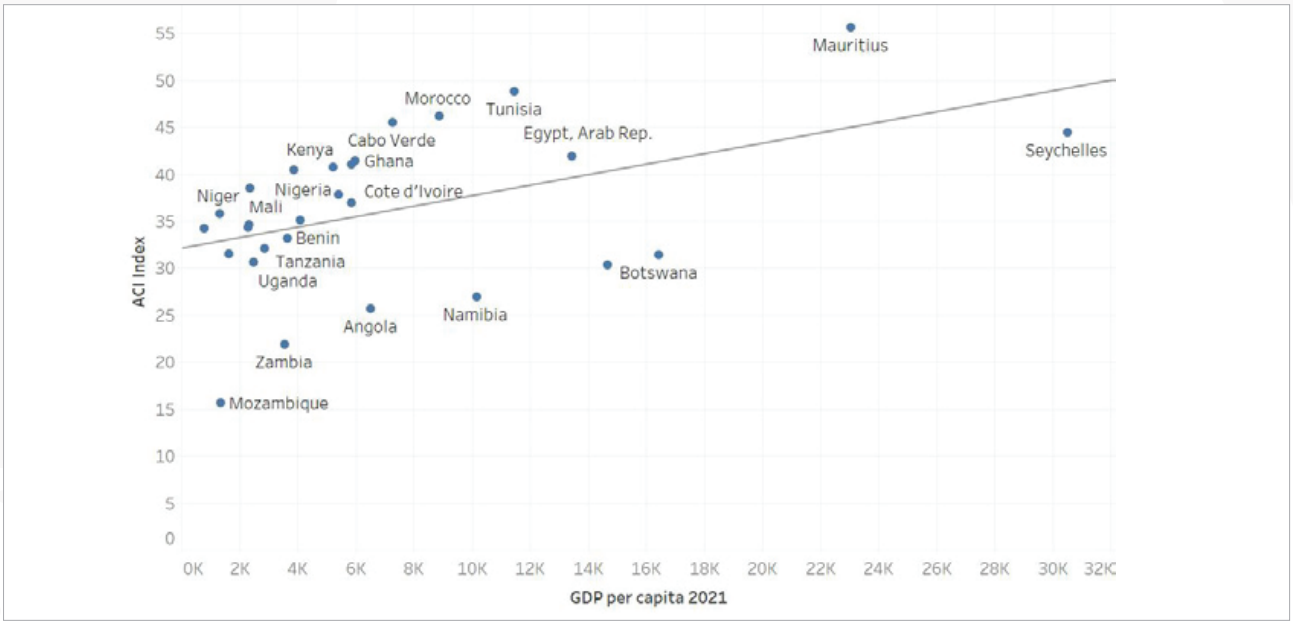
Examining the Relationship Between Export Competitiveness and GDP Per Capita

The analysis underscores a positive correlation between a country's GDP per capita in 2021 and its ACI Index score, indicating that nations with higher GDP per capita tend to demonstrate greater export competitiveness, as evidenced by elevated ACI scores.

A closer examination of countries with comparable GDP per capita reveals intriguing insights into how certain nations achieve heightened levels of export competitiveness despite similar economic indicators.

The importance of this relationship is further emphasised by GDP per capita as a fundamental measure of wealth and prosperity. At the country level, the findings from the Africa Competitiveness Index suggest that despite relatively lower levels of GDP per capita, nations exhibit limited variation in export competitiveness. When considering GDP per capita levels, however, a notable divergence emerges, with more countries positioned at higher GDP per capita tiers.

FIGURE 8: CORRELATION BETWEEN EXPORT COMPETITIVENESS AND GDP PER CAPITA



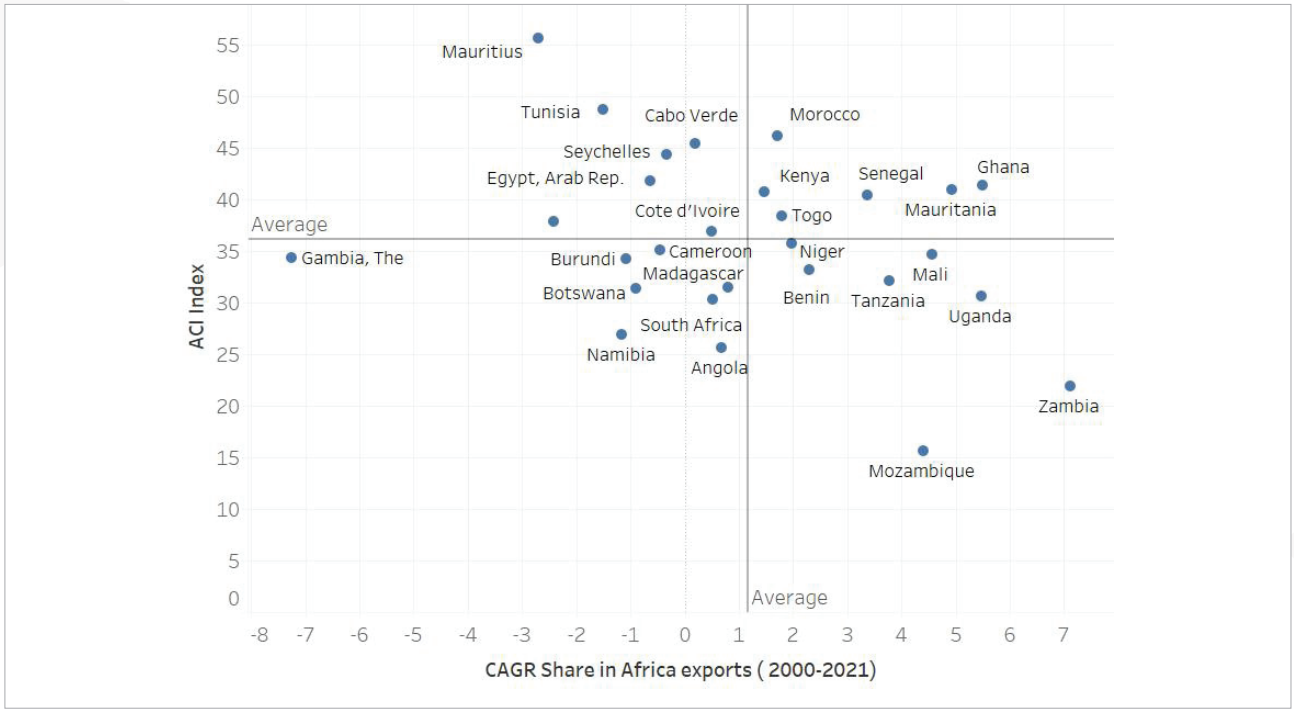
For instance, Egypt surpasses South Africa in export competitiveness with a significantly higher ACI score (41.88 compared to 30.29), despite slightly lower GDP per capita ($13,441 versus $14,689). Similarly, Morocco outperforms Egypt in export competitiveness with a lower GDP per capita ($13,441 versus $8,892), showcasing a substantial difference in ACI scores (46.15 versus 41.88). Furthermore, countries like Mauritius and the Seychelles exhibit substantial gaps in GDP per capita ($23,064 and $30,503). However, this disparity does not manifest in their export competitiveness scores, as evidenced by Mauritius scoring 55.65 and the Seychelles scoring 44.39 on the ACI Index.

Examining the Relationship Between Export Competitiveness and Export Share Growth

Based on the countries' performance in terms of the ACI Index and the compound annual growth rate (CAGR) of their export shares from 2000 to 2021, the analysis identifies four quadrants.

1. **The countries positioned in the Top Right Quadrant (High ACI and High CAGR) have demonstrated significant growth in their export share between 2000 and 2021.** Countries in this quadrant have high ACI Index scores and significant growth in their export share between 2000 and 2021. This indicates strong export capabilities, combined with a growing export market share. Notable countries in this quadrant include Ghana, Kenya, Mauritania, Morocco, Senegal, and Togo.
2. **Bottom Right Quadrant (Low ACI and High CAGR):** Countries falling into this quadrant demonstrate low performance on the ACI Index but experienced high growth in their export share from 2000 to 2021. This suggests that they are emerging exporters with a growing export market share. Examples of countries in this category include Zambia, Uganda, Tanzania, Mozambique, Mali, and Benin.

FIGURE 9: COMPARING AFRICA'S COMPETITIVENESS: ACI INDEX VS. EXPORT MARKET PRESENCE



3. **Top Left Quadrant (High ACI and Low CAGR):** This quadrant comprises countries with a high ACI index but a low CAGR in their export share between 2000 and 2021. Although established exporters, these countries are not seeing significant growth in their export market share. Cabo Verde, Cote d'Ivoire, Egypt, Mauritius, the Seychelles, and Tunisia are among the countries located in this quadrant.
4. **Bottom Left Quadrant (Low ACI and Low CAGR):** Countries positioned in this quadrant demonstrate low scores on the ACI Index and experience minimal growth in their export share from 2000 to 2021. This suggests weak export capabilities and a stagnant export market share. Examples of countries in this quadrant include Angola, Botswana, Burundi, Cameroon, and Madagascar, among others.

Export Policy

The pillar evaluates the extent to which nations have implemented favourable export policies that foster competition, remove trade impediments, and offer financial and marketing incentives.

Basic Infrastructure

The pillar assesses access to finance, electricity and broadband internet, the cost of exports, air and sea transport, and road density. Infrastructure enhancements are crucial for increasing the competitiveness of exports.

Administration

The pillar evaluates the quality of governance, encompassing the efficacy of the government, adherence to the rule of law, suppression of corruption, and regulatory standards. Good governance is essential for the development and expansion of a country's economy.

Knowledge Workforce and Output

The pillar pertains to the presence of a workforce, the capacity for innovation, and the advancement of human resources. An innovative and knowledge-based workforce is critical for fostering economic development.

2. ENABLING ENVIRONMENT

Countries are thoroughly assessed in the "Enabling Environment" dimension, which encompasses critical pillars such as "Export Policy", "Basic Infrastructure", "Administration", and "Knowledge Workforce and Output".

1. EXPORT POLICY

Establishing a conducive atmosphere for exports is imperative for countries seeking to promote their economies as export hubs. A well-designed export policy can play a key role in creating such an environment. It promotes exports and competitiveness, facilitates the elimination of trade barriers, and offers financial and marketing incentives. The "Export Policy" pillar assesses whether the requisite conditions for export-driven growth in these countries have been established as the outcome of policy measures.

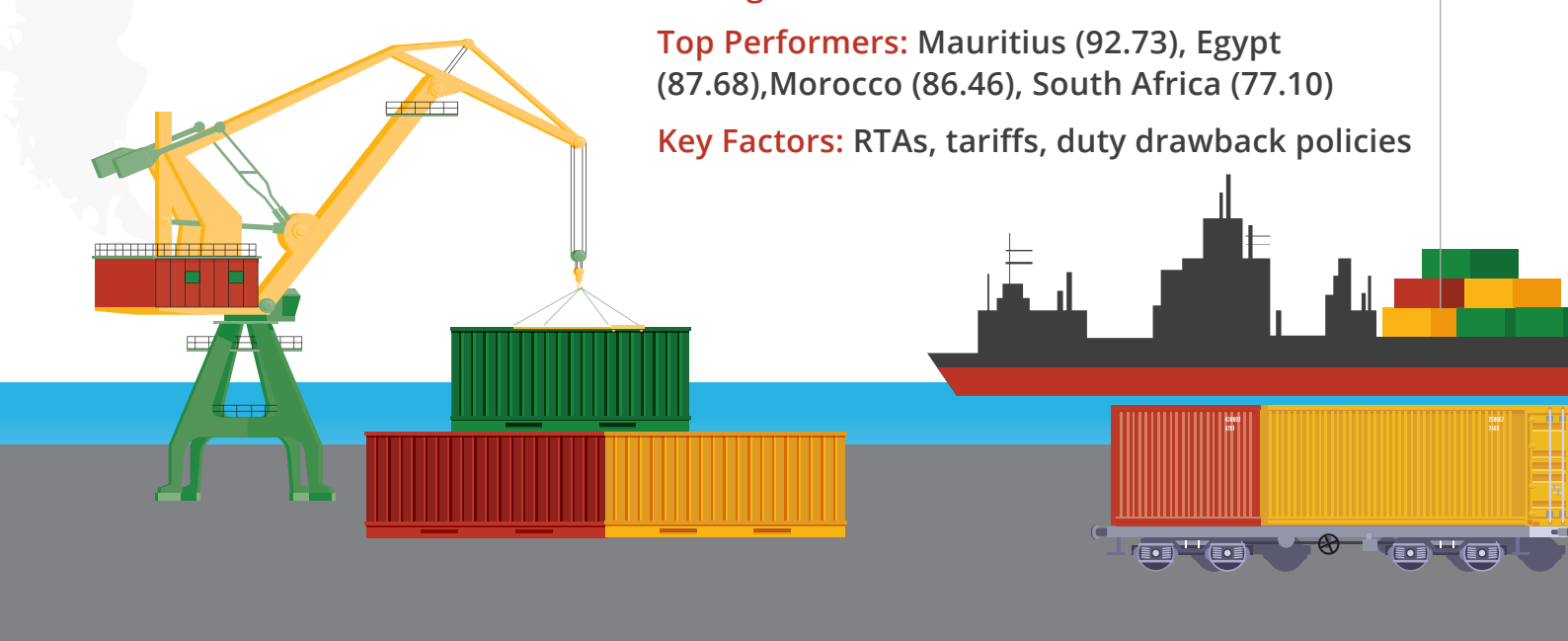
Only 10 out of 30 countries scored above the pillar average, i.e., 37.63. Mauritius,

EXPORT POLICY

Average Score: 37.63

Top Performers: Mauritius (92.73), Egypt (87.68),Morocco (86.46), South Africa (77.10)

Key Factors: RTAs, tariffs, duty drawback policies



Egypt, Morocco, and South Africa scored the highest, i.e., 92.73, 87.68, 86.46, and 77.10, respectively. Mauritania (6.39), Cabo Verde (14.66), Gambia (15.21), and Mali (16.84) scored the lowest. Mauritius scored the highest due to a higher number of RTAs (10), an export promotion policy, the lowest share of tariff in international peaks (2.32%), and claiming a duty drawback on import duties paid on intermediate goods. As per the Trade Policy Review Body's latest documents, only 11 out of 30 countries assessed have an export promotion policy, out of which only 4 countries – Senegal, South Africa, Mauritius, and Morocco – claim a duty drawback on import duties paid on intermediate goods to their exporters. Mauritius, the Seychelles, and Egypt are the only countries whose share of tariff in international peaks is lower than 15%, whereas Cameroon has a 54.70% share of tariff in international peaks. It is further noted that most African countries are engaged in regional trade agreements, except for Mauritania.[8]

TABLE 3: EXPORT POLICY PILLAR SCORES & RANK

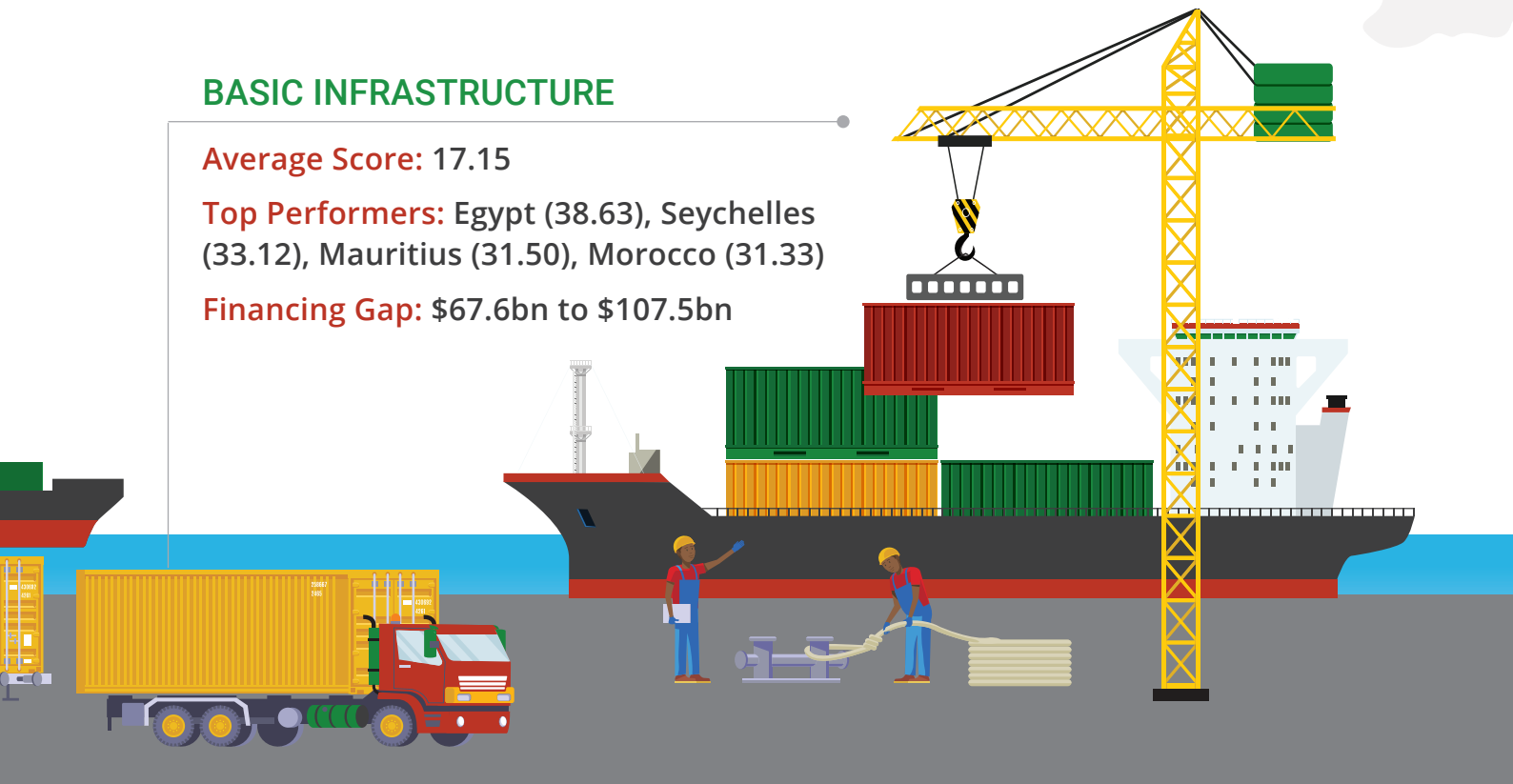
COUNTRIES	OVERALL RANK	EXPORT POLICY
Mauritius	1	92.73
Egypt, Arab Rep.	2	87.68
Morocco	3	86.46
South Africa	4	77.10
Seychelles	5	67.64
Namibia	6	51.38
Zambia	7	46.11
Botswana	8	45.84
Tunisia	9	44.78
Senegal	10	41.65

BASIC INFRASTRUCTURE

Average Score: 17.15

Top Performers: Egypt (38.63), Seychelles (33.12), Mauritius (31.50), Morocco (31.33)

Financing Gap: $67.6bn to $107.5bn



The "Basic Infrastructure" pillar highlights an alarming deficit in essential amenities, especially electricity and transport connectivity, necessitating substantial financial investments

2. BASIC INFRASTRUCTURE

The "Basic Infrastructure" pillar is vital for creating an environment that fosters export competitiveness. Improved access to electricity, broadband internet facilities, efficient transport connectivity, and accessible financial services are all integral components of this ecosystem. This pillar evaluates countries based on a set of critical indicators, including Access to Electricity, Fixed Broadband Internet Subscribers (per 100 people), Cost to Export (Border Compliance in US$), Air Transport (Freight in million per km), Liner Shipping Index, Road Density, and Commercial Bank Branches per million population.

The average score on this pillar is 17.15, which is among the lowest, only 12 countries out of 30 scored above this, reflecting the dire need to work on strengthening infrastructure for facilitating business and an export ecosystem. Countries that scored high on this pillar are Egypt (38.64) and Seychelles (33.12). They are closely

TABLE 4: BASIC INFRASTRUCTURE PILLAR SCORES & RANK

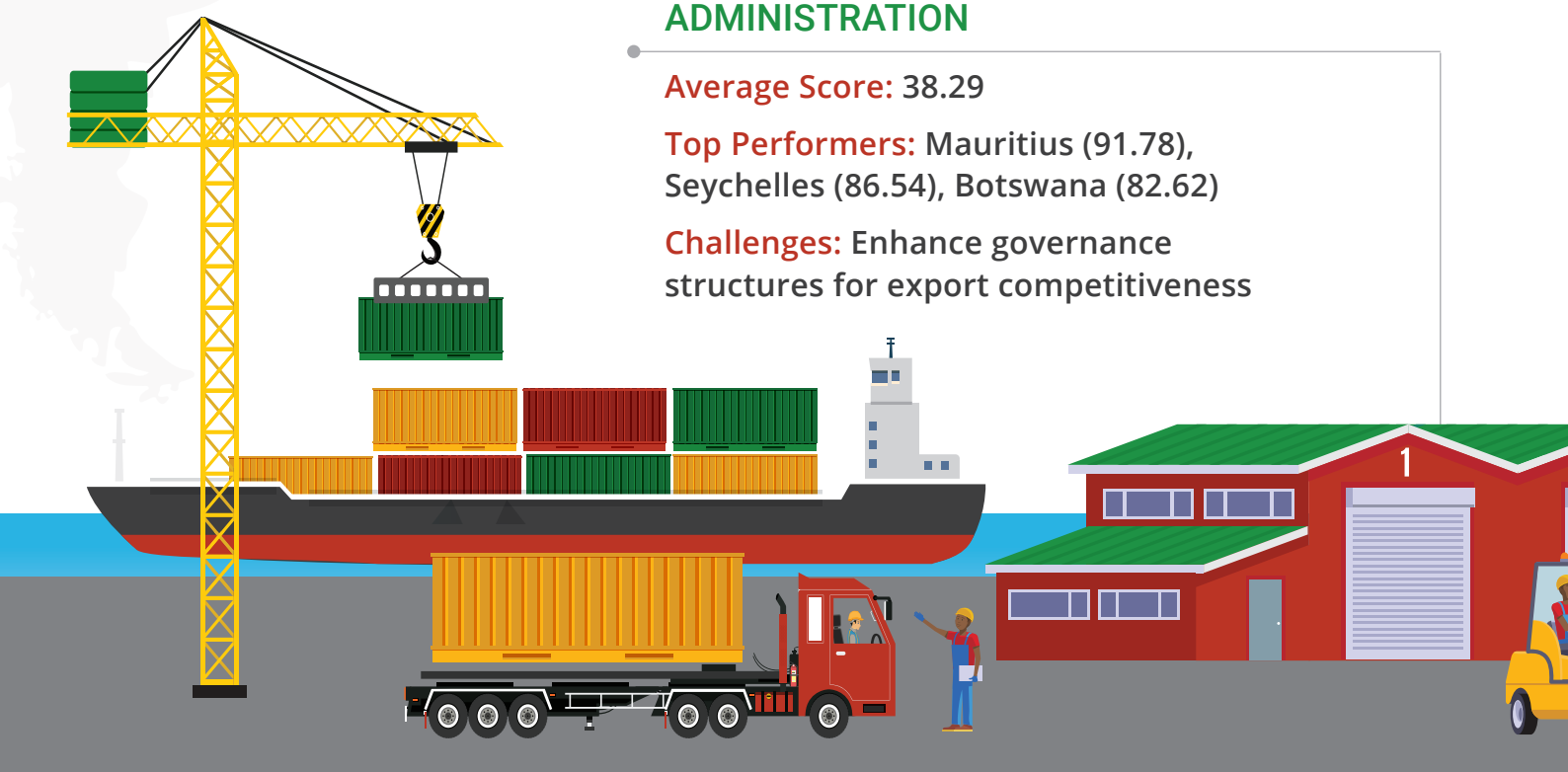
COUNTRIES	OVERALL RANK	BASIC INFRASTRUCTURE
Egypt, Arab Rep.	1	38.64
Seychelles	2	33.13
Mauritius	3	31.50
Morocco	4	31.33
Cabo Verde	5	28.17
Kenya	6	24.43
Ghana	7	21.64
Cote d'Ivoire	8	21.38
Mauritania	9	20.85
Togo	10	20.70

ADMINISTRATION

Average Score: 38.29

Top Performers: Mauritius (91.78), Seychelles (86.54), Botswana (82.62)

Challenges: Enhance governance structures for export competitiveness



followed by Mauritius and Morocco at 31.50 and 31.33, respectively. These countries have performed well relative to other countries on all these parameters; however, their performance is still low when compared to global benchmarks. Countries that scored low such as Burundi, Malawi, Niger, and Burkina Faso struggle with basic facilities such as access to electricity, road networks, air transport, freight, and financial services.

Developing robust road, port and air infrastructure is critical for improving transport connectivity as it is a critical link in the export supply chain. By addressing these aspects and enhancing basic infrastructure, countries in Africa can boost their export competitiveness and fully leverage their economic potential in the global marketplace.

The latest estimates by the African Development Bank (AfDB) show the annual expenditure required for infrastructure development on the continent is between $130 billion and $170 billion, with a financing gap ranging from $67.6 billion to $107.5 billion.[9] There is a need to address this in order to improve basic infrastructure for competitiveness of exports of the countries in the region.

3. ADMINISTRATION

The "Administration" pillar of the index is a critical dimension that assesses countries using key governance parameters of the Worldwide Governance Indicators (WGI), including the Rule of Law, Control of Corruption, Government Effectiveness and Regulatory Quality. Good governance is crucial for sustainable development, fostering economic growth, human capital development, and social cohesion. It promotes transparency, accountability, and progress in nations, ultimately contributing to global development and prosperity. The rigorous assessment of these governance parameters is essential.

Out of 30 countries, 12 scored above the pillar average i.e., 38.29. Mauritius, Seychelles and Botswana scored the highest, 91.78, 86.54 and 82.62, respectively. Whereas Burundi and Nigeria scored the lowest i.e., 1.87 and 7.92, respectively.

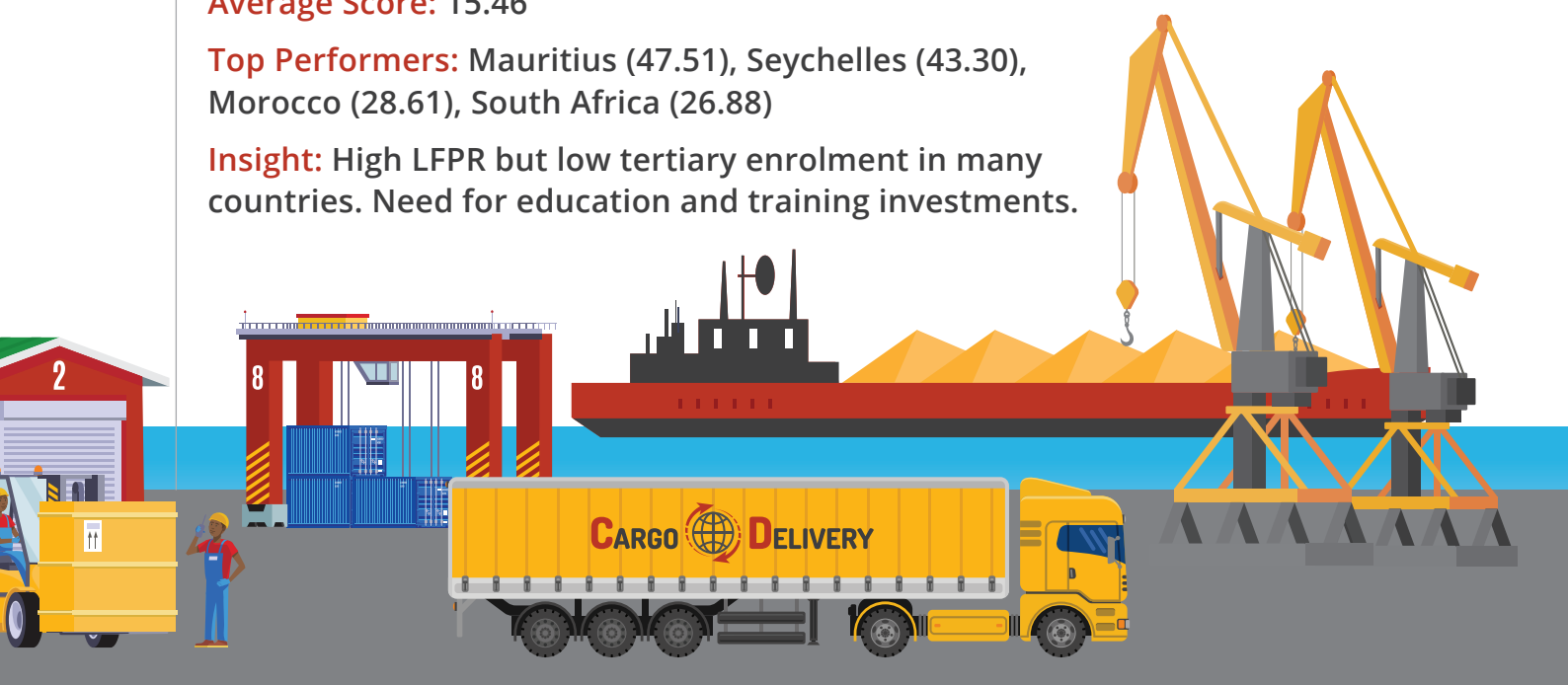
> Despite high labour force participation rates, there is a significant investment gap between tertiary education and training needed to nurture a workforce suitable for a knowledge-based economy

KNOWLEDGE WORKFORCE AND OUTPUT

Average Score: 15.46

Top Performers: Mauritius (47.51), Seychelles (43.30), Morocco (28.61), South Africa (26.88)

Insight: High LFPR but low tertiary enrolment in many countries. Need for education and training investments.



Despite high labour force participation rates, there is a significant investment gap between tertiary education and training needed to nurture a workforce suitable for a knowledge-based economy

TABLE 5: ADMINISTRATION PILLAR SCORES & RANK

COUNTRIES	OVERALL RANK	ADMINISTRATION
Mauritius	1	91.78
Seychelles	2	86.54
Botswana	3	82.62
Cabo Verde	4	72.91
Namibia	5	65.93
Ghana	6	55.11
South Africa	7	52.83
Senegal	8	51.78
Morocco	9	49.82
Tunisia	10	47.51

The disparity in governance quality between these countries is underscored by the scores on the Administration pillar. The countries with higher scores exhibit a more favourable environment for business and economic development, whereas those with lower scores face significant obstacles that must be confronted in order to foster advancements and expansion. Strong governance and administration lead to a more competitive export sector, while weak governance may hinder global market competitiveness. Countries with lower scores may need to enhance their governance and administrative structures.

4. KNOWLEDGE WORKFORCE AND OUTPUT

A skilled workforce is essential for strengthening the innovative capacities of businesses in countries and for leapfrogging in becoming a knowledge-based economy. The productivity, competitiveness and innovation potential of any country depends on the efficiency of its workforce.

There are a total of five indicators in the given pillar. It takes into account indicators such as Tertiary Institution Enrolment percentage, reflecting the presence of a highly educated workforce. The Labour Force Participation Rate (LFPR) among individuals aged 15-54 measures the potential workforce available for knowledge-intensive sectors. Trademark and Patent applications per 100,000 population showcase a nation's innovative capabilities and its capacity to protect intellectual property. Additionally, the inclusion of the Human Development Index (HDI) score offers a comprehensive view of overall development and living standards.

The average score of countries on this pillar is 15.46 and only 9 countries out of 30 scored above this, indicating that these countries have a long way to go in nurturing their ecosystem for a knowledge-based workforce, which is crucial for economic growth and development. Mauritius, Seychelles, Morocco and South Africa scored high on this pillar i.e., 47.51, 43.30, 28.61 and 26.88, respectively. These countries also have high HDI scores, trademark and patent applications per 100,000 population, reflecting a degree of innovation and knowledge generation.

TABLE 6: KNOWLEDGE WORKFORCE AND OUTPUT PILLAR SCORES & RANK

COUNTRIES	OVERALL RANK	KNOWLEDGE WORKFORCE
Mauritius	1	47.51
Seychelles	2	43.30
Morocco	3	28.61
South Africa	4	26.88
Egypt, Arab Rep.	5	23.20
Botswana	6	22.06
Tunisia	7	21.10
Cabo Verde	8	17.54
Namibia	9	17.53
Kenya	10	15.96

In most of the countries, LFPR is high and above 60, at the same time they lag behind in basic parameters such as tertiary institution enrolment percentage, which is low in most of the countries except for Mauritius and Morocco at 44.39% and 38.55%, respectively. It is of significant importance for all countries to invest in skilled human resources, as they are vital for enhancing competitiveness or the country may lose its competitive edge.

With the right investments in education and training, African countries can transform their potential workforce into a skilled one, especially if it has a demographic dividend.

3. DEMAND SOPHISTICATION

"Demand Sophistication" assesses the income distribution and sophistication of countries by considering several key indicators. Firstly, it considers the share of the urban population, reflecting the level of urbanisation in each country. This is often related to higher incomes and rising demands for a broader range of products and services. Secondly, it evaluates the top 10% share of wealth – net personal wealth – which indicates concentration of wealth among the wealthiest 10% of a population, reflecting income inequality.

AT A GLANCE

PILLAR: Demand Sophistication

KEY INDICATORS:

- Urban population share (reflects urbanisation and income level)
- Wealth held by top 10% (indicates income inequality)
- Pre-tax national income of top 10%

PILLAR AVERAGE SCORE: 61.58

COUNTRIES ABOVE AVERAGE: 18/30

LOWEST SCORERS: South Africa, Mozambique, Namibia, Zambia, and Botswana

NOTEWORTHY STATS:

- 14/30 countries have >50% urbanisation
- In these, top 10% hold 60% of wealth & 50% of income

TABLE 7: DEMAND SOPHISTICATION PILLAR SCORES & RANK

COUNTRIES	OVERALL RANK	DEMAND SOPHISTICATION
Mauritania	1	97.81
Tunisia	2	97.67
Nigeria	3	91.19
Mali	4	87.92
Gambia, The	5	85.18
Senegal	6	77.75
Mauritius	7	77.73
Cabo Verde	8	74.81
Ghana	9	74.66
Niger	10	73.74

Lastly, it assesses countries based on the "Top 10% share of pre-tax national income", which reveals a significant gap in income held by the top 10% of the population. All these indicators together provide insights into a country's income distribution and potential market for products and services, thereby aiding in the assessment of the country's demand sophistication, an important statistic for evaluating export competitiveness.

A total of 18 out of 30 countries scored above the pillar average, i.e., 61.58. South Africa, Mozambique, Namibia, Zambia, and Botswana scored the lowest in demand sophistication with scores of 7.70, 12.99, 16.17, 20.71, and 31.28, respectively. It is noted that in 14 out of 30 countries, the rate of urbanisation is more than 50%. In these countries, on average, the top 10% of individuals possess 60% of the wealth and 50% of the national income.

Most of these countries are characterised by a significant preponderance of wealth and income inequality, as evidenced by the high proportion of the top 10% in national income and wealth. Particularly noteworthy is that countries such as South Africa exhibit the highest degree of wealth concentration, with the top 10% controlling around 85% of the nation's wealth and contributing approximately 65.41% of the national income. This reflects significant income and wealth inequality. This inequality can lead to a skewed distribution of purchasing power where a small minority has substantial financial resources, potentially driving demand for luxury and high-end goods and services.

However, the majority of the population may have limited economic capacity to engage in more sophisticated consumption, thereby impacting the overall market for advanced or specialised products.

4. BUSINESS DYNAMISM

"Business Dynamism" plays a central role in determining the export competitiveness of countries. Boosting business dynamism is key to driving economic growth through international trade. The pillar underlines

the importance of improving financial accessibility, administrative efficiency, manufacturing growth, and FDI attraction, which are all integral components for enhancing a nation's capacity for fostering export competitiveness and driving economic growth through international trade.

Some 17 out of 30 countries scored above the pillar average i.e., 49.92, reflecting the need to improve business dynamism. Mauritius scored highest on this dimension i.e., 65.59 closely followed by Morocco with a score of 64.90. These countries performed well on the following parameters: Cost of starting a business, domestic credit to private sector (% of GDP), time required to start a business and manufacturing value added (annual growth rate). Whereas countries, such as Gambia, Mozambique, Burkina Faso and Mali scored lowest i.e., 28.44, 33.57, 33.71 and 35.80, respectively. These countries performed poorly based on parameters such as relative

AT A GLANCE

PILLAR: Business Dynamism

KEY INDICATORS:

- Cost of Starting a Business
- Domestic Credit to Private Sector (% of GDP)
- Time Required to Start a Business
- Manufacturing Value Added (annual growth rate)
- Percentage of FDI Inflow Increment

PILLAR AVERAGE SCORE: 49.92

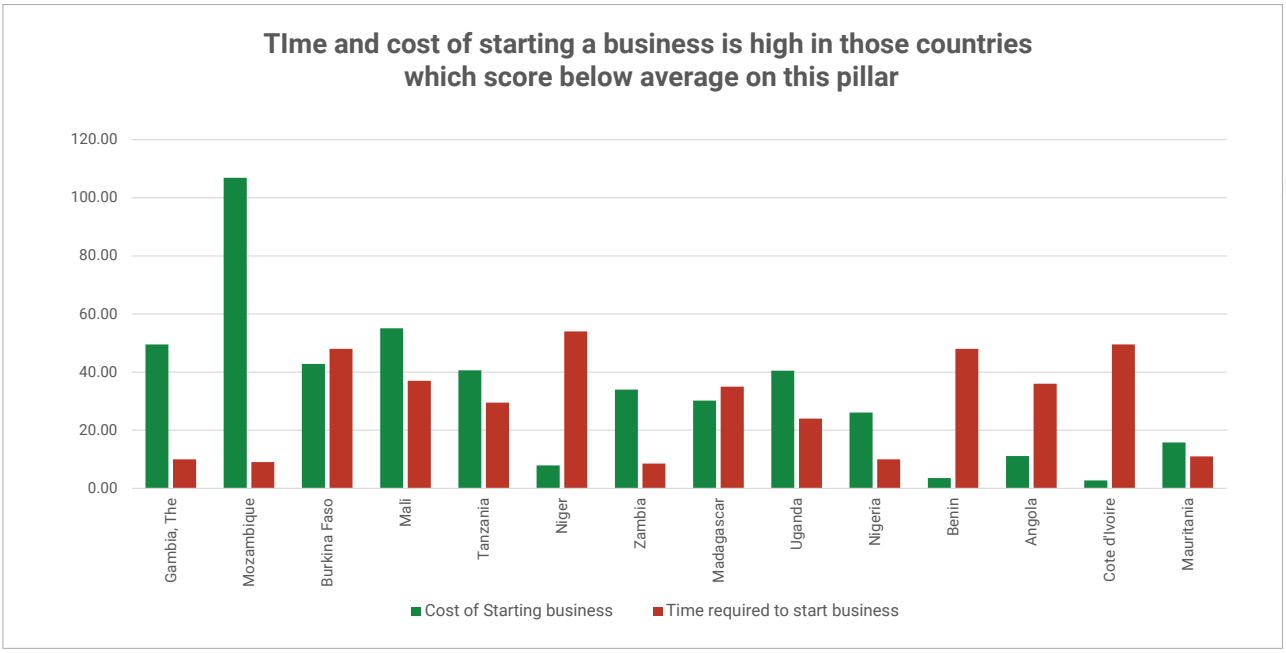
COUNTRIES ABOVE AVERAGE: 17/30

LOWEST SCORERS: Gambia (28.44), Mozambique (33.57), Burkina Faso (33.71), Mali (35.80)

NOTEWORTHY STATS:

- Top countries excel in busines startup efficiency, private sector credit access, and manufacturing value added.

FIGURE 10: TIME AND COST OF STARTING A BUSINESS



Source: Growth Lab at Harvard University, The Atlas of Economic Complexity

TABLE 8: BUSINESS DYNAMISM PILLAR SCORES & RANK

COUNTRIES	OVERALL RANK	BUSINESS DYNAMISM
Mauritius	1	65.59
Morocco	2	64.90
Cabo Verde	3	62.31
Cameroon	4	61.96
Seychelles	5	60.25
Togo	6	57.92
Malawi	7	56.82
South Africa	8	56.68
Namibia	9	56.15
Burundi	10	56.04

ease of doing business, with higher costs and more time required to start a business.

The countries that have demonstrated a gain in the parameters assessed – growth rates for the percentage of FDI inflow, manufacturing value added, and gross fixed capital formation – are limited to Madagascar, Angola, Tanzania, Uganda, Tunisia, and Seychelles. Most of the countries have not performed well due to various factors such as the after effects of COVID-19, which have varied across different African countries, and other factors such as political instability, infrastructure gaps, bureaucratic hurdles, geopolitical and security concerns, market access, environmental and climate challenges, and resource dependency.[10]

5. EXPORT PERFORMANCE

The "Export Performance" dimension offers a comprehensive snapshot of how well various African countries are faring in terms of their export performance. Export performance examines the reach of an export footprint and diversification across all countries on the African continent.

The export performance dimension comprises several crucial indicators of export performance, including exports by the top 10 clusters, market penetration, service exports (% share), merchandise exports (% share), and the share of high-tech exports relative to the overall exports. Additionally, the dimension evaluates the contribution of bio trade as a percentage of total exports.

The average score on this pillar stands at 7.72, representing the lowest score across all the dimensions under consideration. Notably, only 11 out of 30 countries managed to surpass this average score, implying a significant need for improvement in terms of enhancing export growth and reorienting their export strategies.

Among the top-performing countries in this dimension, South Africa takes the lead with a score of 23.72. South Africa's export performance benefits from strong market penetration, a notable share of services

exports, and a substantial contribution from high-technology exports. These attributes underscore the importance of diversification within export portfolios. A common trend observed among the leading countries, such as South Africa and Kenya, is the diversity in their export clusters, which contributes to their high performance.

Conversely, lower-performing countries face substantial challenges characterised by low market penetration, limited proportions of high-technology exports, and reliance on primary products. These challenges hinder their capacity to enhance their export competitiveness and diversify their export basket, thus underscoring the critical need for addressing these issues.

This further highlights the importance of diversification, market penetration, and technological advancements as key drivers of export performance. It also emphasises the importance of addressing challenges such as overdependence on primary products and limited technology-intensive exports to foster economic growth and development through enhanced export competitiveness.

AT A GLANCE

PILLAR: Export Performance

KEY METRICS:

- Exports by top 10 clusters
- Market penetration
- Service exports (% of total)
- Merchandise exports (% of total)
- High-tech exports (% of total)
- Bio trade contribution (% of total exports)

PILLAR AVERAGE SCORE: 7.72
(Lowest among dimensions)

COUNTRIES ABOVE AVERAGE: 11/30

TOP PERFORMER: South Africa (Score: 23.72)

KEY TRENDS:

- Top countries show diverse export clusters (e.g., South Africa, Kenya)
- Lower-performers lack market penetration & high-tech exports, rely on primary products

TABLE 9: EXPORT PERFORMANCE PILLAR SCORES & RANK

COUNTRIES	OVERALL RANK	EXPORT PERFORMANCE
South Africa	1	23.72
Cote d'Ivoire	2	13.86
Niger	3	13.80
Mauritius	4	13.41
Tunisia	5	12.72
Egypt, Arab Rep.	6	12.58
Kenya	7	12.09
Morocco	8	11.07
Malawi	9	9.24
Ghana	10	8.18

Exploring Export Specialisation via Cluster Profiling

In 2021, South Africa accounted for a substantial share, approximately 22%, in the total exports of the African continent, whereas Mauritius' share amounted to a more modest 0.87%. This discernible variance in export performance can be attributed to several factors, including the divergence in the types of products each country exports and the varying degrees of market penetration.

Notably, a significant portion of Mauritius' exports is attributed to the bio trade domain, constituting approximately 75% of its total exports, while South Africa's bio trade exports account for only around 16% of its overall exports.

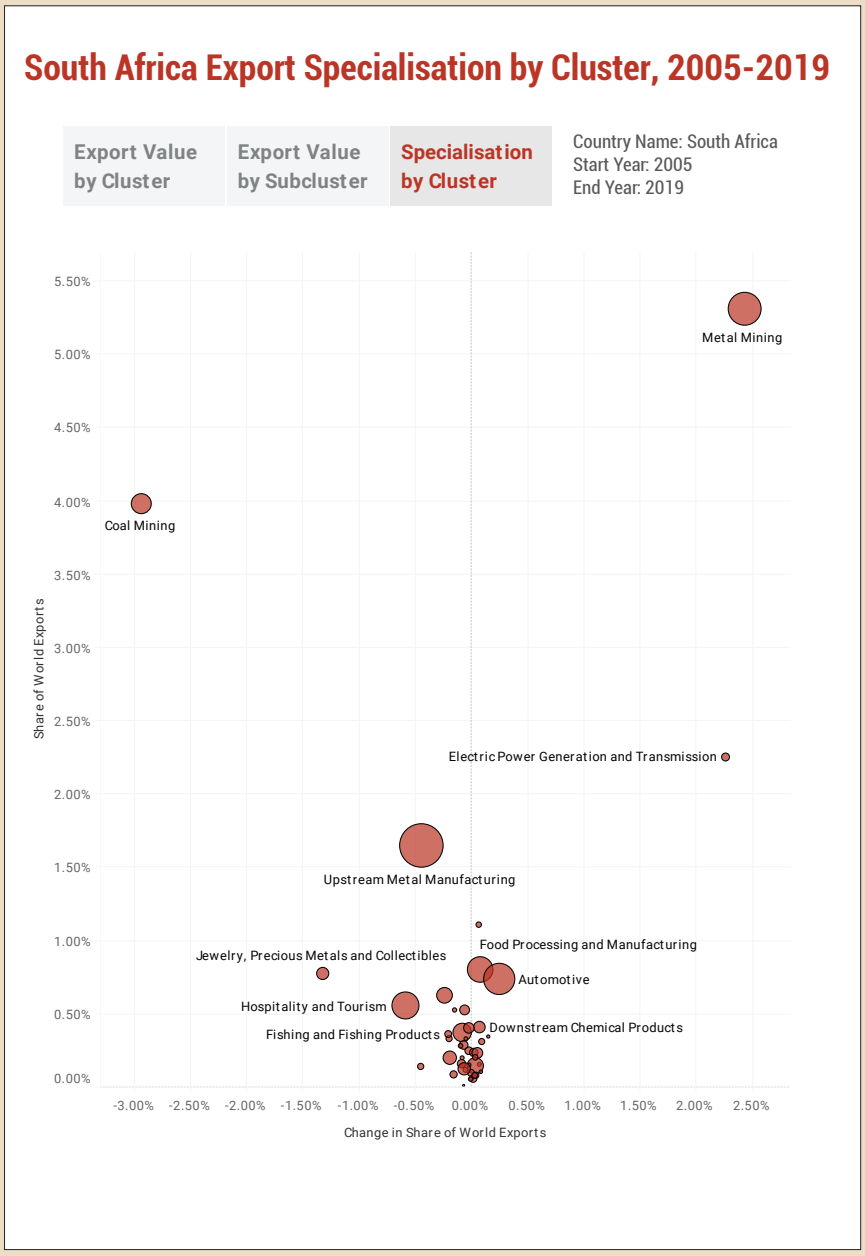
On assessing these countries based on export specialisation, South Africa's foremost export product is "Metal Mining", indicating a substantial competitive advantage in this sector. In stark contrast, Mauritius' principal export product is "Hospitality and Tourism",

Figure 11: Mauritius Export Specialisation by Cluster, 2005-2019

Source: International Cluster Competitiveness Profiles (Porter M. E., 2019)

Examples of Mauritius and South Africa

Figure 12: South Africa Export Specialisation by Cluster, 2005-2019



Source: International Cluster Competitiveness Profiles (Porter M. E., 2019)

which underscores its robust standing in this industry. The data also suggests that both nations boast competitive clusters in additional sectors, such as automotive, upstream metal manufacturing, apparel, and fishing, hinting at the potential for further diversification within their respective economies.

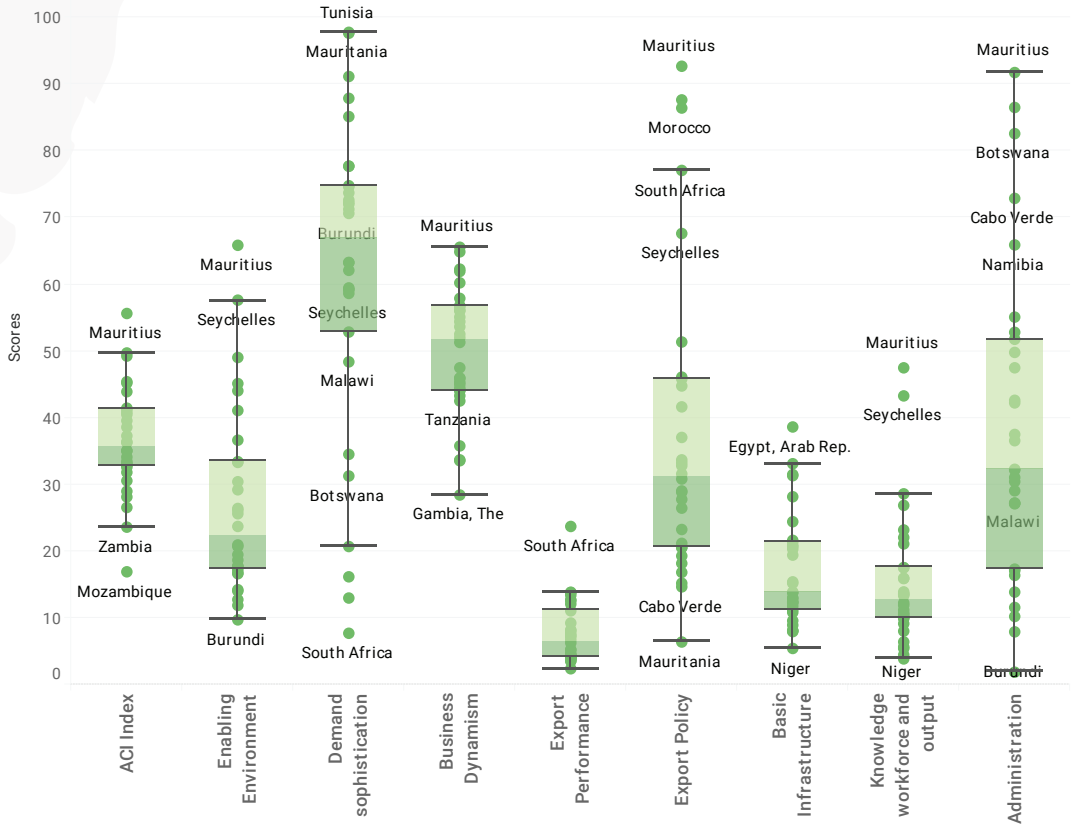
However, identifying top export products is only one crucial step in enhancing export competitiveness and economic development. Other factors such as infrastructure development, quality workforce, and global demand dynamics must also be considered to fully realise the benefits of diversification and foster sustainable export growth.

Nevertheless, the insights gleaned from the International Cluster Competitiveness Profile serve as a robust foundation upon which strategic planning can be built to enhance export competitiveness.

6. OBSERVATION FROM VARIANCE OF SCORES

- Overall, it is apparent from Figure 14 that the median scores for enabling environment and export performance dimensions is low.
- Firstly, in the enabling environment dimension, the median scores for basic infrastructure and knowledge workforce and output, are significantly lower, with scores between 0 and 40 out of 100 for a large number of countries.
- Secondly, the high average score of 61.58 in the demand sophistication dimension may initially suggest that African countries perform well in terms of market income distribution and sophistication. However, this high score is primarily a result of the prevailing wealth and income concentration among the top 10% of the population in many countries. This concentration can distort the perception of market sophistication. While it may appear favourable, it often masks underlying issues related to income inequality and the true potential for a diversified and sophisticated market in these countries. The actual market dynamics might be quite different from what the initial score implies, and addressing income inequality and creating a more inclusive and genuinely sophisticated market remains a critical challenge for these nations.
- Thirdly, export performance with a national average of 7.72 and a median score of 13 suggests that many African countries struggle to enhance their export performance, diversify their export baskets, and expand their export footprint on the global map. While low scores for most countries in this dimension could be attributed to the indicators themselves, which attribute it to lack of a diverse export basket, low market penetration and high tech exports.

FIGURE 13: BOXPLOT OF SCORES ACROSS AEC DIMENSIONS



LEARNINGS and recommendations

Enhancing export competitiveness is a pivotal endeavour for African countries to unlock their economic potential and secure sustainable growth.

In this comprehensive analysis, we delve into key dimensions or pillars that critically influence the export environment. These dimensions encompass Export Policy, Basic Infrastructure, Administration, Knowledge Workforce and Output, Demand Sophistication, Business Dynamism, and Export Performance. To foster export competitiveness, tailored recommendations have been crafted for each of these pillars on the basis of AEC insights.

To thrive in the global economy and bolster resilience against economic fluctuations, especially due to volatile commodity prices, African nations must diversify their exports. Currently, Africa is on the cusp of significant economic transformation, fuelled by a drive for increased competitiveness and diverse trade. Realising export diversification and continued growth depends on key factors: the successful rollout of the African Continental Free Trade Area, the growing middle class, a rising consumer market, greater uptake of financial services and technology, and active participation of private entrepreneurs.

Nevertheless, an in-depth look at export share highlights the often overlooked potential of the services sector as a key driver of industrial, manufacturing, and agricultural productivity in many African nations. Moreover, many export diversification strategies overlook the role of the financial services and private sectors in achieving their objectives.

The private sector, especially SMEs, can effectively drive African economies' diversification and transformation. Financial services can offer SMEs sustainable access to funds, helping them to tap into new markets, diversify exports, enhance productivity, and boost competitiveness (UNCTAD, Economic Development in Africa Report 2022).

Nurturing export competitiveness in African countries demands a strategic approach, focusing on multiple aspects of a conducive environment. Our recommendations provide policymakers and stakeholders with a practical guide for fostering export-driven growth. Through these strategies, African countries can maximise economic performance, encourage innovation, reduce inequality, improve infrastructure, refine governance, and access global markets.

While many of these suggestions may not be novel, their critical importance lies in addressing persistent challenges impeding export growth. These pragmatic suggestions, including the cluster approach to export specialisation, offer a comprehensive method to unlock Africa's export capabilities and overcome barriers to economic advancement and sustainability.

This all-encompassing strategy sets the stage for a future where African exports significantly contribute to global economic dynamics, enhancing prosperity and sustainable growth throughout the region.

PILLAR	RECOMMENDATION 1	RECOMMENDATION 2	RECOMMENDATION 3
Export Policy	Most of the countries lag in formulating export promotion policy. Develop and implement a comprehensive export promotion policy that addresses all aspects of export development, from production to marketing. Learnings from countries like Mauritius and South Africa.	Reduce trade barriers and tariffs to facilitate the export of goods and services using RTAs and FTAs.	Provide financial and marketing incentives to exporters.
Basic Infrastructure	Invest in developing robust road, port, and air infrastructure to improve transport connectivity.	Efficient logistics are the key requirement to reduce costs of transport and transit time.	Ensure quality and affordable access to electricity and the internet facilities.
Administration	Combat corruption and ensure the rule of law is upheld.	Strengthen governance and administrative structures to promote transparency, accountability, and progress.	Improve the regulatory environment for businesses.
Knowledge Workforce and Output	Invest in education and training to nurture a skilled and innovative workforce. Emphasise tertiary school enrolment and innovation capabilities.	Promote innovation and research and development.	Encourage the transfer of technology from developed countries.
Demand Sophistication	A growing and affluent middle class is imperative for addressing challenges to sophistication of demands.	Reduce income inequality and promote inclusive growth.	Invest in infrastructure and social services to improve the social progress of the region.
Business Dynamism	Create a business-friendly environment to attract foreign direct investment. Learn from the best practices of countries like Mauritius and Morocco.	Stimulate policies for manufacturing growth, which is crucial for business dynamism and export competitiveness.	Simplify administrative processes and reduce bureaucratic hurdles to make business operations smoother.
Export Performance	Countries need to analyse data on export performance to identify areas for improvement.	Develop targeted interventions to support specific export sectors or industries.	Promote export diversification to reduce reliance on a few key products or markets.

WHAT'S NEXT?
The Way Forward

This report aims to evaluate the export competitiveness of African countries at the national level by analysing their performance in fostering export ecosystems. The assessment uses the African Export Competitiveness (AEC) Index, which evaluates countries based on their relative performance rather than absolute scores. The index emphasises comparing a country's performance with its peers to provide valuable insights into areas requiring improvement.

Key findings underscore the imperative for African countries to prioritise the establishment of robust policy frameworks and the development of essential infrastructure to bolster export competitiveness. The export policy framework should place emphasis on enhancing business infrastructure, improving transport connectivity, diversifying export portfolios, and expanding market reach globally. Furthermore, it is essential to promote unique products as a means of transitioning away from primary commodity exports. Additionally, understanding export dynamics at the sub-national level, such as within provinces, is crucial for devising effective strategies. We advocate for enhanced coordination and collaboration among stakeholders to address obstacles hindering Africa's export performance.

Finally, with the advent of the African Continental Free Trade Agreement (AfCFTA), recognising Africa's vast size, complexity, and internal heterogeneity becomes paramount. Countries need to promote tailored, context-specific strategies to effectively address regional disparities and leverage AfCFTA opportunities. Fostering inter- and intra-trade cooperation and competition should be emphasised to mitigate economic development disparities stemming from historical legacies such as colonialism.

The way forward for African countries is to prioritise cost competitiveness and technological advancements in exports to enhance their share in global trade, particularly in a world dominated by global value chains and technological advancements.

APPENDIX 1:
Rationale for Indicators

DIMENSION	INDICATOR	RATIONALE
Export Policy	Existence of an Export Promotion Plan	The existence of an export promotion plan reflects a nation's commitment to developing a strategic approach to enhance its exports, which has far-reaching implications for its economic stability and global standing. By formulating a well-defined strategy, governments can identify target markets, products, and industries with export potential. This not only facilitates the allocation of resources but also encourages the private sector to align its activities with national export goals. An export promotion plan is essential for improving the overall competitiveness of a nation's products and services.
	Number of Regional Trade Agreements	The number of trade agreements reflects the extent to which a nation is integrated into the global economy and its commitment to fostering international trade relationships. A higher number of trade agreements typically signifies a country's proactive approach towards expanding its export markets. It also serves as a clear measure of a country's commitment to free trade and economic openness. Nations that actively engage in negotiating and signing trade agreements demonstrate their willingness to reduce trade barriers, such as tariffs and quotas, thereby creating a more conducive environment for their domestic industries to access foreign markets.
	Claiming a Duty Drawback on Import Duties Paid on Intermediate Goods	Claiming a Duty Drawback on Import Duties Paid on Intermediate Goods embodies the principle of reducing production costs, which is vital for enhancing a country's export competitiveness. When a country allows exporters to claim a refund on import duties paid for intermediate goods used in the production process, it effectively lowers the cost of production. This reduction in costs can make the country's products more competitive on international markets by offering competitive pricing, thus increasing demand for its exports.
	Share of Tariff with International Peaks	This indicator evaluates the presence of tariff peaks in a nation's trade policy. Tariff peaks refer to unusually high import duties imposed on particular commodities or product categories. A high proportion of tariffs with international peaks indicates that certain industries may be subject to substantial trade barriers, which can have a negative impact on the competitiveness of domestic firms in those industries. The reduction of tariff peaks can make exports more competitive.
	Cost to Export Border Compliance	Cost and efficiency of export processes, including compliance at borders, are crucial export competitiveness factors. There are fewer financial and administrative obstacles for exporters if exporting is less expensive. Streamlined border compliance procedures can reduce the time and cost of transporting products across borders, thereby increasing the competitiveness of exports.

APPENDIX 1: Rationale for Indicators (cont.)

DIMENSION	INDICATOR	RATIONALE
Basic Infrastructure	Access to Electricity	Export-oriented industries require dependable and extensive access to electricity. It ensures that businesses are able to function effectively and maintain production schedules. A high percentage of access to electricity indicates a reduced risk of production disruptions and can attract investments, which rely on a stable power supply, to the region.
	Fixed Broadband Subscriptions (per 100 people)	Access to high-speed internet is essential for an environment conducive to business. It allows exporters to communicate with customers and partners worldwide, access global markets, and gather market intelligence. A higher number of fixed broadband subscriptions per 100 people indicates better connectivity, which is advantageous for export competitiveness.
	Cost to Export: Border Compliance	Cost and efficiency of export processes, including compliance at borders, are crucial export competitiveness factors. There are fewer financial and administrative obstacles for exporters if exporting is less expensive. Streamlined border compliance procedures can reduce the time and cost of transporting products across borders, thereby increasing the competitiveness of exports.
	Air Transport, Freight (million per km)	Efficient air freight transport infrastructure is essential for exporting goods quickly and reliably, especially for perishable or time-sensitive products. The volume of air cargo transported is an indicator of the capacity and efficacy of the air transport system, which is significant for export-dependent industries that rely on air transport.
	Liner Shipping Index	The Liner Shipping Index (LSI) is a robust indicator of a country's export competitiveness because it directly reflects the costs associated with shipping goods to international markets. Lower LSI values indicate cost-efficient shipping, which can significantly enhance a country's competitiveness in global trade. When a country can transport its products at a lower cost, it is better positioned to offer competitive prices to international buyers, thus increasing its market share and export volumes.
	Road Density	Road density is a fundamental infrastructure measure that underpins a country's logistics and transportation network. A well-developed road network facilitates the efficient movement of goods from production centres to ports and borders, reducing transportation costs and transit times. It allows businesses to reach remote areas and tap into previously untapped markets, thereby broadening the export potential for a nation's goods and services.
	Commercial Bank Branches (per million population)	Access to banking services is essential to a thriving business ecosystem in order to assist exporters in procuring finance, managing international transactions, and mitigating financial risks.

APPENDIX 1: Rationale for Indicators (cont.)

DIMENSION	INDICATOR	RATIONALE
Knowledge Workforce and Output	LFPR (15-64)	The Labour Force Participation Rate (LFPR) for the population aged 15–64 is a key indicator for export competitiveness. A high LFPR indicates that a substantial proportion of the population of working age is actively employed. This can be advantageous for export competitiveness because it implies a larger pool of potential employees with diverse skills and expertise, which can contribute to increased productivity and the capacity to meet increased export demand.
	Tertiary School Enrolment (%)	For export competitiveness, the percentage of the population enrolled in tertiary education institutions (universities, colleges, etc.) is crucial. Tertiary education typically imparts sophisticated knowledge and abilities, which are frequently required in export-oriented industries. A higher enrolment rate in tertiary education indicates that the labour force is more likely to possess the specialised knowledge and qualifications required for success in industries with high export potential.
	Human Development Index	The HDI provides a holistic view of a country's development status by considering key dimensions of human well-being, such as life expectancy, education, and per capita income. These factors are not only indicative of a nation's overall quality of life but also influence its economic capabilities. A country with a high HDI is more likely to have a skilled and healthy workforce, which is crucial for enhancing export competitiveness.
	Patent Applications by Residents (per million population)	The number of patent applications filed by residents per million inhabitants demonstrates the region's innovative capacity. Innovative products and technologies can provide exporters with a competitive advantage in global markets. Higher patent application rates indicate that the region is actively engaged in the creation and protection of intellectual property, which can be used to boost export competitiveness.
	Trademark Applications by Residents per Million Population	Trademark applications by residents per million population contribute to export competitiveness. They illustrate the significance of branding and intellectual property protection, which are essential for establishing trust and recognition on international markets. Strong trademark activity suggests that companies in the region are investing in the branding and export positioning of their goods and services.
Administration	Rule of Law	Rule of law encompasses a set of principles and institutions that ensure that all individuals and entities, including businesses, are subject to and accountable under the law. In countries where the rule of law is strong, businesses can operate confident that their contractual agreements will be upheld, property rights will be protected, and disputes will be resolved fairly through a transparent legal system. This predictability reduces transaction costs and risks associated with exports and increases competitiveness.

APPENDIX 1: Rationale for Indicators (cont.)

DIMENSION	INDICATOR	RATIONALE
Administration	Control of Corruption	A low level of corruption is essential for fostering a fair and transparent business environment. When corruption is pervasive, businesses are often forced to engage in corrupt practices to navigate bureaucratic hurdles, obtain permits, or secure contracts. Countries with strong control over corruption ensure a level playing field for all businesses, promoting healthy competition and encouraging investment in innovative industries. A high level of corruption can lead to inefficiencies, red tape, and unpredictable costs, which can significantly hinder a nation's export competitiveness. Inefficient customs processes, for instance, can delay shipments and increase trading costs, making products less competitive on the global market.
	Government Effectiveness	Government effectiveness evaluates the efficiency, transparency, and capability of a government to provide essential services, maintain law and order, and execute policies that foster a conducive environment for businesses to thrive. A government that functions efficiently, with minimal bureaucracy and corruption, simplifies regulatory processes, reduces red tape, and facilitates smoother business operations. This, in turn, reduces the cost of exporting goods, making a country more competitive on the global market.
	Regulatory Quality	Regulatory quality evaluates the effectiveness and consistency of a nation's regulatory framework, encompassing a wide range of factors such as the transparency of regulations, the ease of doing business, and the strength of institutions responsible for enforcing these rules. It also directly impacts the predictability of business operations. When regulations are clear, stable, and consistently enforced, businesses can plan their operations with confidence, leading to increased investment in export-oriented ventures. Investors and entrepreneurs are more likely to commit resources to long-term export strategies in countries with high regulatory quality, as they can better anticipate the rules governing their operations.
Income Distribution	Urban Population	A high urban population indicates a market with greater income levels and access to a diverse range of goods and services. This dynamic contributes to more demand for sophisticated products, including luxury items and advanced technology. For exporters, targeting urban areas can be crucial because they offer customers who are willing and able to purchase luxury goods.
	Top 10% Share of Wealth Net Personal Wealth	This indicator assesses the concentration of wealth among the top 10% of the population. A higher share of wealth held by the wealthiest individuals may indicate income inequality. In the context of export competitiveness, extreme income inequality can lead to social and political tensions, potentially affecting economic stability and the investment climate, which can indirectly impact a country's export competitiveness.

APPENDIX 1: Rationale for Indicators (cont.)

DIMENSION	INDICATOR	RATIONALE
Income Distribution	Top 10% Share Pre-tax National Income Share	Similar to the Top 10% Share of Wealth indicator, this measures the share of pre-tax national income held by the top 10% of the population. A higher concentration of income among the wealthiest individuals can result in disparities in access to education, healthcare, and other resources that are crucial for a competitive and skilled workforce.
Business Environment	Cost of Starting a Business	The cost of establishing a business is an evaluation of the financial costs and regulatory requirements associated with launching and operating a new business. A decrease in the cost of starting a business can attract entrepreneurs and encourage the establishment of new businesses. This may contribute to a more competitive and dynamic business environment, which is advantageous for export competitiveness.
	Time Required to Start a Business	The time required to start a business reflects the efficacy and simplicity of registration and start-up processes. A shorter period to establish a company is advantageous for entrepreneurs and can encourage the formation of new businesses. This can result in a more competitive business environment and may encourage the expansion of export-oriented enterprises.
	Manufacturing Value Added (Annual Growth Rate)	Manufacturing value added assesses the contribution of the manufacturing sector to a country's gross domestic product. A robust and competitive manufacturing sector is able to produce goods for export markets, substantially enhancing export competitiveness. In this context, the expansion and vitality of the manufacturing sector are crucial.
	FDI Inflows Increase %	An increase in FDI inflows can have a profound impact on a country's export competitiveness by contributing to economic growth, technology transfer, diversification of export products, and access to international markets. Therefore, studying FDI inflow is essential for comprehensively assessing a country's export competitiveness and formulating effective export promotion strategies.
	Gross Fixed Capital Formation Growth	This indicator measures the growth in investments made by businesses in physical assets like machinery and buildings. A positive growth rate in this indicator can be a sign of a dynamic business environment where firms are investing for expansion. It is suitable for assessing business dynamism, as increased investment often reflects confidence in the business environment.
	Domestic Credit to Private Sector (% of GDP)	Access to credit is essential for businesses to finance their operations, invest in technology, and increase production. The ratio of domestic credit to the private sector to GDP indicates the availability of capital for businesses. A greater proportion indicates that businesses have improved access to credit, which can support their growth and competitiveness in export-oriented industries.

APPENDIX 1: Rationale for Indicators (cont.)

DIMENSION	INDICATOR	RATIONALE
Growth and Orientation of Exports	Exports by Top 10 Clusters	This indicator analyses the export composition of a country by identifying the top 10 export clusters or sectors. It facilitates comprehension of export concentration and diversification. Diverse export clusters indicate a more resilient export sector, whereas a country's reliance on a few export clusters may expose it to export vulnerability.
	Market Penetration	Market penetration measures a country's ability to expand its exports into new markets. It evaluates the competitiveness of a country's exports by examining the extent to which it has entered and succeeded in different global markets. High market penetration indicates a strong presence in a variety of markets, which can enhance export competitiveness.
	Service Exports %	Service exports play a vital role in enhancing a country's export competitiveness. They contribute to economic diversification, job creation, innovation, and overall economic resilience. A strong service export sector complements goods exports and can be a significant driver of economic growth and prosperity.
	Merchandise Exports %	This indicator measures a nation's standing in global merchandise trade. It measures the proportion of a nation's exports in the global trade of goods. A higher merchandise share indicates that the country is a significant player in international trade, possibly indicating a competitive export sector.
	High Tech Exports % (total exports)	This indicator assesses the proportion of high-tech exports within a nation's overall exports. High-tech exports typically consist of technologically advanced electronics, machinery, aerospace products, pharmaceuticals, and other products. A greater proportion of high-tech exports indicates that a nation is producing and exporting technologically advanced, high-value goods, which can contribute to increased export competitiveness and export revenues.
	Biotrade % (total exports)	Information and communication technology (ICT) service exports include information technology, telecommunications, software development, and other ICT-related activities. This indicator gauges the value of a country's exported ICT services. A strong presence in ICT service exports indicates a competitive ICT sector and a skilled labour force, thereby contributing to overall export competitiveness, particularly in the rapidly expanding digital economy. Exports of ICT services demonstrate the competitiveness of a nation's technology and services sector, which can attract foreign investment, create employment, and generate export revenue.

APPENDIX 2:
Indicator, Year, Source, Definition

SUB PILLAR	INDICATOR	YEAR	SOURCE	DEFINITION
Export Policy	Existence of an Export Promotion Plan	Latest available	Trade Policy Review, WTO	The Export Promotion Policy is a public policy measure aimed at enhancing export activity at the national level. It is a metric used to assess whether a country has implemented a structured and documented strategy or plan specifically aimed at promoting its exports. This indicator draws its information from each country's Trade Policy Review conducted by the World Trade Organization (WTO), which is a comprehensive evaluation of a nation's trade policies and practices.
	Number of Regional Trade Agreements (RTAs)	As of October, 2023	WTO Regional Trade Database	The number of Regional Trade Agreements (RTAs) is an indicator that quantifies the extent to which countries engage in formal, mutually agreed upon arrangements to facilitate trade and economic cooperation within a specific geographical region. This indicator is a count of the distinct RTAs that a particular country or group of countries is party to, each representing a legally binding agreement designed to reduce trade barriers, enhance market access, and promote economic integration among the participating nations within the defined geographic region.
	Claiming a Duty Drawback on Import Duties Paid on Intermediate Goods	Latest available	Trade Policy Review, WTO	The Claiming a Duty Drawback on Import Duties Paid on Intermediate Goods indicator refers to a measure that assesses the extent to which a country's customs and trade policies allow for the reimbursement or refund of import duties paid on intermediate goods used in the production process. Intermediate goods are raw materials, components, or other inputs that are not meant for final consumption but are incorporated into the production of finished products.
	Share of Tariff with International Peaks	2020	World Bank	Share of Tariff with International Peaks is the share of lines in the tariff schedule with tariff rates that exceed 15%. It provides an indication of how selectively tariffs are applied.

APPENDIX 2: Indicator, Year, Source, Definition (cont.)

SUB PILLAR	INDICATOR	YEAR	SOURCE	DEFINITION
Basic Infrastructure	Access to Electricity	2021	World Bank	Access to electricity is the percentage of the population with access to electricity. Electrification data are collected from industry, national surveys and international sources.
	Fixed Broadband Subscriptions (per 100 people)	2022	World Bank	Fixed broadband subscriptions refers to fixed subscriptions to high-speed public internet access (a TCP/IP connection) at downstream speeds equal to, or greater than 256 k/bits. This includes cable modem, DSL, fibre-to-the-home/building, other fixed (wired) broadband subscriptions, satellite broadband and terrestrial fixed wireless broadband. This total is measured irrespective of the method of payment. It excludes subscriptions that have access to data communications (including the Internet) via mobile-cellular networks. It should include fixed WiMAX and any other fixed wireless technologies. It includes both residential subscriptions and subscriptions for organisations.
	Cost to Export Border Compliance	2019	World Bank	Border compliance captures the time and cost associated when complying with the country's customs regulations and with regulations relating to other inspections that are mandatory in order for the shipment to cross the country's border, as well as the time and cost for handling that takes place at its port or border. The time and cost for this segment includes time and cost for customs clearance and inspection procedures conducted by other government agencies.
	Air Transport, Freight (million per kilometre)	2021	World Bank	Air freight is the volume of freight, express, and diplomatic bags carried on each flight stage (operation of an aircraft from takeoff to its next landing), measured in metric tons times kilometres travelled.

APPENDIX 2: Indicator, Year, Source, Definition (cont.)

SUB PILLAR	INDICATOR	YEAR	SOURCE	DEFINITION
Basic Infrastructure	Liner Shipping Connectivity Index	2023	UNCTAD	The Liner Shipping Connectivity Index captures how well countries are connected to global shipping networks. It is computed by the United Nations Conference on Trade and Development (UNCTAD) based on five components of the maritime transport sector: number of ships, their container-carrying capacity, maximum vessel size, number of services, and number of companies that deploy container ships in a country's ports. For each component a country's value is divided by the maximum value of each component in 2004, the five components are averaged for each country, and the average is divided by the maximum average for 2004 and multiplied by 100. The index generates a value of 100 for the country with the highest average index in 2004.
	Road Network Density	2019	International Road Federation, World Road Statistics	Road Network Density is a measure that indicates the extent of a country's road infrastructure in relation to its land area. It is calculated by dividing the total national road length (km) by the land area (sq km). The road network includes all roads in a country: motorways or highways, main or national roads, secondary or regional roads, as well as other roads.
	Commercial Bank Branches (per million population)	2021	World Bank	Commercial bank branches are retail locations of resident commercial banks and other resident banks that function as commercial banks that provide financial services to customers and are physically separated from the main office but not organised as legally separated subsidiaries.
Knowledge Workforce and Output	LFPR (15-64)	2021	World Bank	Labour force participation rate is the proportion of the population aged 15-64 that is economically active: all people who supply labour for the production of goods and services during a specified period.
	Tertiary School Enrolment (%)	2019	World Bank	Gross enrolment is the ratio of total enrolment, regardless of age, to the population of the age group that officially corresponds to the level of education shown. Tertiary education, whether or not to an advanced research qualification, normally requires, as a minimum condition of admission, the successful completion of education at secondary level.

APPENDIX 2: Indicator, Year, Source, Definition (cont.)

SUB PILLAR	INDICATOR	YEAR	SOURCE	DEFINITION
Knowledge Workforce and Ouput	Human Development Index	2021	United Nations Development Indicators	The Human Development Index (HDI) is a summary measure of average achievement in key dimensions of human development: a long and healthy life, being knowledgeable, and having a decent standard of living. The HDI is the geometric mean of normalised indices for each of the three dimensions. The health dimension is assessed by life expectancy at birth, the education dimension is measured by mean of years of schooling for adults aged 25 years and above, and expected years of schooling for children of school entering age. The standard of living dimension is measured by gross national income (GNI) per capita. The HDI uses the logarithm of income, to reflect the diminishing importance of income with increasing GNI. The scores for the three HDI dimension indices are then aggregated into a composite index using the geometric mean.
	Patent Applications by Residents (per million population)	2020	World Bank	Patent applications are worldwide patent applications filed through the Patent Cooperation Treaty procedure or with a national patent office per million population.
	Trademark Applications by Residents (per million population)	2020	World Bank	Trademark applications filed are applications to register a trademark with a national or regional intellectual property (IP) office and designations received by relevant offices through the Madrid System. A trademark is a distinctive sign that identifies certain goods or services as those produced or provided by a specific person or enterprise. A trademark provides protection to the owner of the mark by ensuring the exclusive right to use it to identify goods or services, or to authorise another to use it in return for payment. The period of protection varies, but a trademark can be renewed indefinitely beyond the time limit on payment of additional fees. Resident application refers to an application filed with the IP office of or acting on behalf of the state or jurisdiction in which the first-named applicant in the application has residence. Class count is used to render application data for trademark applications across offices comparable as some offices follow a single-class/ single-design filing system, while others have a multiple class/design filing system.

APPENDIX 2: Indicator, Year, Source, Definition (cont.)

SUB PILLAR	INDICATOR	YEAR	SOURCE	DEFINITION
Administration	Rule of Law	2022	Worldwide Governance Indicators (WGI)	Rule of Law captures perceptions of the extent to which agents have confidence in and abide by the rules of society, and in particular the quality of contract enforcement, property rights, the police, and the courts, as well as the likelihood of crime and violence. Percentile rank indicates the country's rank among all countries covered by the aggregate indicator, with 0 corresponding to lowest rank, and 100 to highest rank.
	Control of Corruption	2022	Worldwide Governance Indicators (WGI)	Control of Corruption captures perceptions of the extent to which public power is exercised for private gain, including both petty and grand forms of corruption, as well as "capture" of the state by elites and private interests. Percentile rank indicates the country's rank among all countries covered by the aggregate indicator, with 0 corresponding to lowest rank, and 100 to highest rank.
	Government Effectiveness	2022	Worldwide Governance Indicators (WGI)	Government Effectiveness captures perceptions of the 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 quality of government's commitment to such policies. Percentile rank indicates the country's rank among all countries covered by the aggregate indicator, with 0 corresponding to lowest rank, and 100 to highest rank.
	Regulatory Quality	2022	Worldwide Governance Indicators (WGI)	Regulatory Quality captures perceptions of the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development. Percentile rank indicates the country's rank among all countries covered by the aggregate indicator, with 0 corresponding to lowest rank, and 100 to highest rank.

APPENDIX 2: Indicator, Year, Source, Definition (cont.)

SUB PILLAR	INDICATOR	YEAR	SOURCE	DEFINITION
Income Distribution	Urban Population	2022	World Bank	Urban Population refers to people living in urban areas as defined by national statistical offices. The data are collected and smoothed by the United Nations Population Division.
	Top 10% Share Wealth Net Personal Wealth	2021	World Inequality Database	Net personal wealth share held by the p90p100 group. Net personal wealth is the total value of non-financial and financial assets (housing, land, deposits, bonds, equities, etc.) held by households, minus their debts. The personal or household sector – in the national accounts sense – includes all households and private individuals (including those living in institutions), as well as unincorporated enterprises whose accounts are not separated from those of the households that own them. The population is comprised of individuals over age 20. The base unit is the individual (rather than the household) but resources are split equally within couples. [Net personal wealth] = [Personal non-financial assets] + [Personal financial assets] - [Personal debt]
	Top 10% Share Pre-tax National Income Share	2021	World Inequality Database	Pre-tax national income share held by the p90p100 group. Pre-tax national income is the sum of all pre-tax personal income flows accruing to the owners of the production factors, labour and capital, before taking into account the operation of the tax/transfer system, but after taking into account the operation of the pension system. The central difference between personal factor income and pre-tax income is the treatment of pensions, which are counted on a contribution basis by factor income and on a distribution basis by pre-tax income. The population is comprised of individuals over age 20. The base unit is the individual (rather than the household) but resources are split equally within couples. Pre-tax national income = Pre-tax labour income [total pre-tax income ranking] + Pre-tax capital income [total pre-tax income ranking]

APPENDIX 2: Indicator, Year, Source, Definition (cont.)

SUB PILLAR	INDICATOR	YEAR	SOURCE	DEFINITION
Business Environment	Cost of Starting a Business	2019	World Bank	Cost to register a business is normalised by presenting it as a percentage of gross national income (GNI) per capita.
	Time Required to Start a Business	2019	World Bank	Time required to start a business is the number of calendar days needed to complete the procedures to legally operate a business. If a procedure can be speeded up at additional cost, the fastest procedure, independent of cost, is chosen.
	Manufacturing Value Added (Annual Growth Rate)	2022, 2021	World Bank	Annual growth rate for manufacturing value added is based on constant local currency. Aggregates are based on constant 2015 prices, expressed in U.S. dollars. Manufacturing refers to industries belonging to ISIC divisions 10-33. Value added is the net output of a sector after adding up all outputs and subtracting intermediate inputs. It is calculated without making deductions for depreciation of fabricated assets or depletion and degradation of natural resources. The origin of value added is determined by the International Standard Industrial Classification (ISIC), revision 4.
	FDI Inflows Increase %	2022, 2021	World Bank	Foreign direct investment (FDI) refers to direct investment equity flows in the reporting economy. It is the sum of equity capital, reinvestment of earnings, and other capital. Direct investment is a category of cross-border investment associated with a resident in one economy having control or a significant degree of influence on the management of an enterprise that is resident in another economy. Ownership of 10% or more of the ordinary shares of voting stock is the criterion for determining the existence of a direct investment relationship. Data are in current U.S. dollars.
	Gross Fixed Capital Formation Growth	2022, 2021	World Bank	Average annual growth of gross fixed capital formation based on constant local currency. Aggregates are based on constant 2015 prices, expressed in U.S. dollars. Gross fixed capital formation (formerly gross domestic fixed investment) includes land improvements (fences, ditches, drains, and so on); plant, machinery, and equipment purchases; and the construction of roads, railways, and the like, including schools, offices, hospitals, private residential dwellings, and commercial and industrial buildings. According to the 2008 SNA, net acquisitions of valuables are also considered capital formation.

APPENDIX 2: Indicator, Year, Source, Definition (cont.)

SUB PILLAR	INDICATOR	YEAR	SOURCE	DEFINITION
Business Environment	Domestic Credit to Private Sector (% of GDP)	2022	World Bank	Domestic credit to private sector refers to financial resources provided to the private sector by financial corporations through loans, purchases of non-equity securities, and trade credits and other accounts receivable that establish a claim for repayment. For some countries these claims include credit to public enterprises. The financial corporations include monetary authorities and deposit money banks, as well as other financial corporations where data are available (including corporations that do not accept transferable deposits but do incur such liabilities as time and savings deposits). Examples of other financial corporations are finance and leasing companies, money lenders, insurance corporations, pension funds, and foreign exchange companies.
Growth and Orientation of Exports	Exports by Top 10 Clusters	2019	Harvard: International Cluster Competitiveness Profile	Clusters are geographical concentrations of industries linked by knowledge, skills, inputs, demand, and other factors. They positively impact regional and industry performance, including job creation, patenting, and new business formation. The International Cluster Competitiveness Project (ICCP) is a Harvard Business School research initiative that examines the relationship between industrial clusters and the international competitiveness of exports. The ICCP has identified 46 clusters of goods and services export activity in over 150 countries, measuring the international competitiveness of exports using indicators such as world export share, export growth, and export intensity. Clusters provide companies with advantages such as access to specialised inputs and services, knowledge spillovers, and collaboration and networking. The competitiveness of a country's exports in a cluster can vary depending on its stage of development. For this indicator, the top 10 clusters were considered for each country.

APPENDIX 2: Indicator, Year, Source, Definition (cont.)

SUB PILLAR	INDICATOR	YEAR	SOURCE	DEFINITION
Growth and Orientation of Exports	Market Penetration	2021	ICT	Market Penetration Index measures the extent to which exports from a country reach already proven markets. It is calculated as the number of countries to which a country exports a particular product divided by the number of total countries that import that product in a year.
	Service Exports %	2021	UNCTAD	Value of total service exports as percentage of total world service exports.
	Merchandise Exports %	2022	UNCTAD	Value of total merchandise exports as percentage of total world merchandise exports.
	High-Tech Exports % (Total Exports)	2020	World Bank	High-technology exports are products with high R&D intensity, such as in aerospace, computers, pharmaceuticals, scientific instruments, and electrical machinery.
	Biotrade % (Total Exports)	2021	UNCTAD	Biotrade as a Share of Total Trade refers to the proportion of international trade of the country that involves the exchange of biological resources and related products in a manner that promotes sustainability, conservation, and equitable benefit sharing among the stakeholders involved.

APPENDIX 3:
TPR documents link

COUNTRIES	TRADE POLICY REVIEW
Angola	https://www.wto.org/english/tratop_e/tpr_e/s321_e.pdf
Benin	https://www.wto.org/english/tratop_e/tpr_e/s362-01_e.pdf
Botswana	https://www.wto.org/english/tratop_e/tpr_e/tp424_e.htm
Burkina Faso	https://www.wto.org/english/tratop_e/tpr_e/s362-02_e.pdf
Burundi	https://www.wto.org/english/tratop_e/tpr_e/s384-01_e.pdf
Cabo Verde	https://www.wto.org/english/tratop_e/tpr_e/s322_e.pdf
Cameroon	https://www.wto.org/english/tratop_e/tpr_e/s445-02_e.pdf
Cote d'Ivoire	https://www.wto.org/english/tratop_e/tpr_e/s362-03_e.pdf
Egypt	https://www.wto.org/english/tratop_e/tpr_e/s367_e.pdf
Gambia	https://www.wto.org/english/tratop_e/tpr_e/s365_e.pdf
Ghana	https://www.wto.org/english/tratop_e/tpr_e/s427_e.pdf
Kenya	https://www.wto.org/english/tratop_e/tpr_e/s384-02_e.pdf
Madagascar	https://www.wto.org/english/tratop_e/tpr_e/s318_e.pdf
Malawi	https://www.wto.org/english/tratop_e/tpr_e/s335_e.pdf
Mali	https://www.wto.org/english/tratop_e/tpr_e/s362-05_e.pdf
Mauritania	https://www.wto.org/english/tratop_e/tpr_e/s371_e.pdf
Mauritius	https://www.wto.org/english/tratop_e/tpr_e/s417_e.pdf
Morocco	https://www.wto.org/english/tratop_e/tpr_e/s329_e.pdf
Mozambique	https://www.wto.org/english/tratop_e/tpr_e/s354_e.pdf
Namibia	https://www.wto.org/english/tratop_e/tpr_e/s324-02_e.pdf
Niger	https://www.wto.org/english/tratop_e/tpr_e/s362-06_e.pdf
Nigeria	https://www.wto.org/english/tratop_e/tpr_e/s356_e.pdf
Senegal	https://www.wto.org/english/tratop_e/tpr_e/s362-07_e.pdf
Seychelles	https://www.wto.org/english/tratop_e/tpr_e/s433_e.pdf
South Africa	https://www.wto.org/english/tratop_e/tpr_e/s324-03_e.pdf
Tanzania	https://www.wto.org/english/tratop_e/tpr_e/s384-04_e.pdf
Togo	https://www.wto.org/english/tratop_e/tpr_e/s362-08_e.pdf
Tunisia	https://www.wto.org/english/tratop_e/tpr_e/s341_e.pdf
Uganda	https://www.wto.org/english/tratop_e/tpr_e/s384-05_e.pdf
Zambia	https://www.wto.org/english/tratop_e/tpr_e/s340_e.pdf

APPENDIX 4:
Indicators Weightages

DIMENSION	INDICATOR	WEIGHTAGE %
Export Policy	Existence of an Export Promotion Plan	31.17
	Number of Regional Trade Agreements	26.62
	Claiming a Duty Drawback on Import Duties Paid on Intermediate Goods	11.47
	Share of Tariff with International Peaks	30.75
Basic Infrastructure	Access to Electricity	12.47
	Fixed Broadband Subscriptions (per 100 people)	15.53
	Cost to Export: Border Compliance	7.88
	Air Transport, Freight (million per km)	14.93
	Liner Shipping Index	17.05
	Road Density	16.29
	Commercial Bank Branches (per million population)	15.85
Knowledge Workforce and Output	LFPR (15-64)	23.96
	Tertiary School Enrolment (%)	6.38
	Human Development Index	24.35
	Patent Applications by Residents (per million population)	22.97
	Trademark Applications by Residents (per million population)	22.34
Administration	Rule of law	26.00
	Control of Corruption	30.00
	Government Effectiveness	24.00
	Regulatory Quality	20.00
Income Distribution	Urban Population	8.00
	Top 10% Share of Wealth – net personal wealth	41.00
	Top 10% Share – pre-tax national income share	51.00
Business Environment	Cost of Starting a Business	13.48
	Time Required to Start a Business	18.95
	Manufacturing Value Added (annual growth rate)	15.22
	FDI Inflows Increment %	15.09
	Gross Fixed Capital Formation Growth	19.82
	Domestic Credit to Private Sector (% of GDP)	17.44
Growth and Orientation of Exports	Exports by Top 10 Clusters	20.90
	Market Penetration	20.96
	Service Exports %	9.10
	Merchandise Exports %	13.78
	High-tech Exports (% of Total Exports)	14.18
	Biotrade (% of Total Exports)	21.08

APPENDIX 5:
References

FIGURES

TABLES

APPENDIX 5: References (cont.)

FOOTNOTES

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APPENDIX 6:
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