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SIERRA LEONE COUNTRY ECONOMIC MEMORANDUM

From Potential to Progress: Structural Transformation and Job Creation on the Road to Middle-Income Status

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Photo credits: World Bank Group Depicting a 70 hectare mechanized onion farm in Lungi, Sierra Leone.

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Abbreviations and Acronyms

AfCFTA	African Continental Free Trade Agreement
AGOA	African Growth and Opportunity Act
BTI	Bertelsmann Stiftung's Transformation Index
BOS	Businesses of the state
CAC	Corporate Affairs Commission
CLSG	Côte d'Ivoire, Liberia, Sierra Leone and Guinea [regional transmission line]
COVID-19	Coronavirus disease of 2019
EBA	EU Everything But Arms Program
ECOWAS	Economic Community of West African States
EDSA	Electricity Distribution and Supply Authority
EPA	Environment Protection Agency
EU	European Union
FDI	Foreign direct investment
GDP	Gross domestic product
GoSL	Government of Sierra Leone
GVCs	Global value chains
HCI	Human Capital Index
HFO	Heavy fuel oils
MAB	Minerals Advisory Board
MFN	Most-favored-nation [tariffs]
MMDA	Mines and Minerals Development Act
NASSIT	National Social Security and Insurance Trust
NEET	Not in education, employment, or training
NLe	Sierra Leonean new leones
SLIEPA	Sierra Leone Investment and Export Promotion Agency
SOE	State-owned enterprise
SSA	Sub-Saharan Africa
Stats SL	Statistics Sierra Leone
TFP	Total factor productivity
TVET	Technical and vocational education and training
UK	United Kingdom
US	United States of Ameria
US$	United States dollars
WDI	World Bank World Development Indicators
WITS	World Bank World Integrated Trade Solution data
WTO	World Trade Orgnization

OVERVIEW

Introduction

Despite its many assets and a promising recovery from the devastating civil war, Sierra Leone remains one of the poorest countries in the world. A rich mineral endowment, a young and increasingly educated population, and plentiful arable land coupled with favorable rainfall are some of the notable factors that lend immense potential to the economy. And while some positive steps have been taken to harvest this potential–including a successful transition from the civil war and the subsequent stability, a policy focus on education and gender inclusion, and designing a relatively robust legal framework–there is still substantial progress to make, as the country falls notably short of its capabilities and lags behind other comparable countries. Sustaining long-term growth and development is likely to become even more challenging due to the rising pressures from climate change.[1] More than a quarter of the population remains in extreme poverty. Most strikingly, Sierra Leone has lost ground compared to other low-income countries–it had the 27th lowest per capita GDP in the world in 2002, it now has the eleventh lowest level.

The country is now at a crossroads. The choices made at this critical moment will determine whether the country can break free from its past and achieve sustained high growth and job creation, thereby lifting its people out of poverty and enhancing their living standards, or whether it will remain trapped in a low-level equilibrium, hindered by policies focused on addressing recurrent crises. To achieve the former, ambitious, farsighted, and difficult reforms are urgently needed. These must restore macro-stability as an immediate focus and leverage the country's strengths and endowments, including its rich natural resource and agricultural base, to make the necessary long-term investments in human, physical and institutional capital to allow business to flourish in the country. Appropriately leveraging its natural resource base by capturing revenues from mining activities and subsequently using these revenues for human and physical capital investments can help set up the foundation for private sector development and diversification to support job creation in the future.

With ambitious reforms, the country can aim to achieve middle-income status in a decade.[2] Heightened macro instability, limited gains in productivity, constrained capital accumulation, and slow human capital development are expected to be detrimental to Sierra Leone's long term growth trajectory, delaying the country's transition to middle-income until 2037 (under baseline assumptions). An ambitious strategy and steadfast implementation of reforms are necessary to leverage the country's natural resource base and reap the demographic dividend. To this end, this 2025 Country Economic Memorandum undertakes an analysis of the growth record and provides recommendations to help ignite and sustain higher and more stable growth over the coming decade.

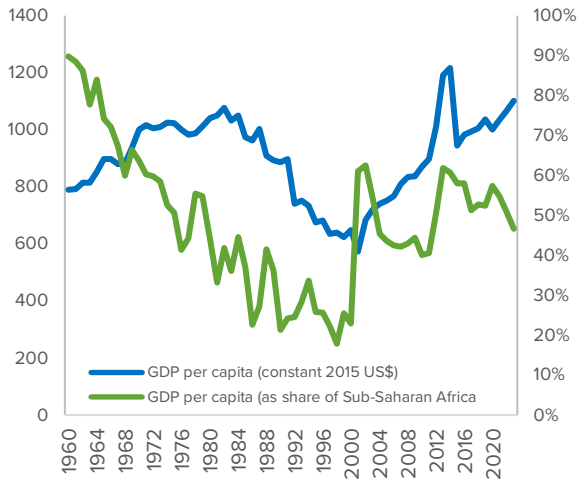
Growth and jobs: past record

A promising start after independence faltered after two decades. Upon gaining independence in 1961, the economy grew at an average rate of just under 4 percent in the next two decades, benefiting from strong exports, low inflation, and a stable exchange rate (Figure 1). Sierra Leone had promising prospects with a relatively good education system, rich natural resources, including diamonds and other minerals, plentiful agricultural and marine resources, and a stable democracy. The next two decades saw a sharp economic slowdown due to poor macroeconomic and fiscal policies exacerbated by external factors and the closure of mines. Inflation peaked at 180 percent in 1987, and the currency fell steadily. As a result, per capita incomes dropped, and poverty spread to 80 percent of the population, culminating in a decade long devastating civil war starting in 1991. GDP contracted by 23 percent in the 1990s, and per capita income declined by 27 percent. Economic progress has been uneven since the end of the civil war and fallen short of Sierra Leone's full development potential.

1 IPCC ranks Sierra Leone among the 15 worst-affected economies by climate change, with annual average temperature that could rise as much as 3.5°C by the end of the century. Warmer temperatures raise the risk of erratic rainfall, severe flooding, degraded land, and capital stock damages. Prolonged dry spells and intensified rainfall events are expected to be detrimental to growth prospects given the role of agriculture.

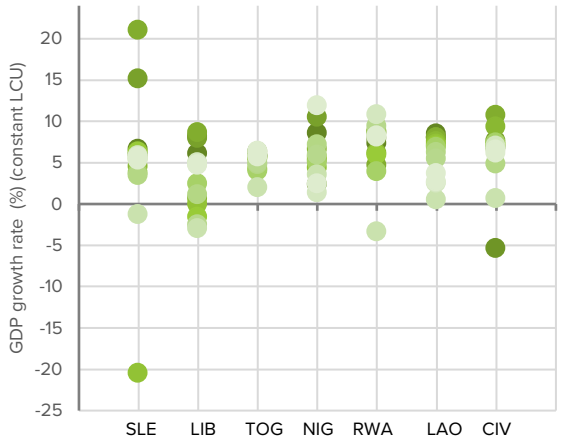
2 While this is two years earlier than the targets presented by the government in its 2024 Medium-Term National Development Plan, that target was based on GDP statistics before they were rebased. The rebasing increased GDP levels by over 50 percent (Box 1).

FIGURE 1:
GDP PER CAPITA (US$, % OF SSA), 1960-2023



Note: In constant 2015 US$; SSA = Sub-Saharan Africa.
Source: WDI, World Bank staff calculations.

FIGURE 2:
GDP GROWTH, SIERRA LEONE AND PEERS (%), 2010-23



Note: Sierra Leone is SLE. Structural peers were identified using a dynamic benchmarking analysis: Liberia (LIB), Togo (TOG), Niger (NIG), Malawi, and Guinea. Aspirational peers are Rwanda (RWA), Côte d'Ivoire (CIV), and Lao P.D.R. (LAO).
Source: WDI, World Bank staff calculations.

Slow progress in addressing underlying weak governance has been a core challenge in the first part of this century. While Sierra Leone has been successful in restoring and maintaining peace since the end of the war in 1999, institutional strengthening has not been at par with this positive trend. The management of the country's rich endowment of natural resources has not improved, with limited resources getting channeled to the development of human capital and physical infrastructure. Tax revenue collections are below 7.5 percent of GDP, amongst the lowest in the world and below the 10th percentile in SSA The enabling environment for the development of the private sector has lagged, with limited job opportunities for youth. Slow growth, high public debt that crowds out government spending on human and physical investments, and persistent inflationary pressures all find their origins in weak institutions of governance.

Growth has been volatile and inadequate to raise living standards

Short bursts of high growth have alternated with longer periods of stagnation or even contraction. The growth episodes were often driven by one-off forces, such as post-war reconstruction in the early 2000s and the start of iron ore mining operations in the early 2010s. Exogenous shocks, such as the COVID-19 pandemic, the Ebola outbreak, and commodity price shocks, were often compounded by policy missteps, leading to larger negative effects on the economy. Per capita GDP grew by 2 percent annualized between 2002 and 2023, helping improve some social indicators.[3] However, the pace has not been sufficient to improve living standards substantially, and there has been much greater volatility in the country's performance (Figure 2). As a result, the average Sierra Leonean is still not even twice as well off in monetary terms (adjusted for inflation) than two decades ago. Sierra Leone's peers, subject to many of the same shocks, in general have done better, with Rwanda quadrupling its per capita GDP and Ethiopia seeing a nine-fold increase.[4]

3 The expansion in access to basic education has been particularly impressive. The gross enrollment rate at the junior and senior secondary school levels increased significantly (by 28 and 35 percentage points, respectively) from 2003 to 2018. Moreover, girls have benefited more than boys with net enrollment rates for girls now higher than for boys at all levels of schooling.

4 Structural peers were identified using a dynamic benchmarking analysis: Liberia, Togo, Niger, Malawi, and Guinea. Aspirational peers are Rwanda, Côte d'Ivoire, and Lao P.D.R.

While agriculture remains the predominant economic sector, contributions from mining have increased substantially in recent years. Between 2002 and 2023, agricultural output grew at an average pace of 4.8 percent and accounted for nearly one-fifth of GDP growth. Consisting largely of subsistence farming, it accounts for one-third of GDP and more than half of all employment in the last two decades. The agro-processing industry grew significantly in the first half of the 2010s, but its contributions to exports remains limited. Industrial activity–historically dominated by the mining of diamonds–made only modest contributions to overall growth until the early 2010s with the start of iron ore mining. Since then, the contribution of industrial activity has become more prominent, accounting for more than 20 percent of output and over 40 percent of growth. With the increased prominence of mining, volatility in growth patterns in Sierra Leone has also intensified. The services sector has remained relatively stable and predominantly driven by trade and public administration.

Investment, a key driver for future growth, has been held back by low domestic savings and limited foreign investments. The gross savings rate is among the lowest in the world, averaging -1 percent of GDP during the last decade. Limited financial access and a shallow financial sector have further inhibited capital accumulation. Foreign direct investment (FDI) has accounted for the bulk of recent private investment, but it has been concentrated in mining (ranging from 32 percent of GDP during the peak of the mining boom to 3 percent of GDP in 2020).

Exports have been an important contributor of both growth and volatility in recent years but have immense untapped potential in mining and agro-processing. The share of exports in GDP rose from 13 percent in 2002-04 to almost 20 percent by 2023 but remained lower than export shares in structural and aspirational peers. According to World Bank estimates, based on a country's observable characteristics in a gravity model, Sierra Leone has the potential to more than double its current level of exports. Sectors such as mining, agriculture, and food processing have the most untapped potential for increasing and diversifying exports–similar to the country's existing export basket, which is concentrated in resource-based products, but allowing for more value addition or diversification of markets. Further, the limited export diversification of agricultural exports contrasts with the country's potential for producing a wide variety of crops.

Productivity growth has been slower than in comparator countries. Total factor productivity (TFP) growth was negative during the first half of 2010s. And although the latter part of the decade saw it turn positive, its pace has been slow. Both Rwanda and Côte d'Ivoire had positive TFP growth during the decade, which contributed to both countries having higher growth rates than Sierra Leone. Labor productivity trends mirrored those of TFP. Much of the improvement in labor productivity came from gains within agriculture, and there were virtually no gains in productivity from the movement of labor out of agriculture into more-productive sectors such as industry and higher-end services; labor movement has been slow and mostly into the low-productivity and informal sectors of trade and tourism.[5]

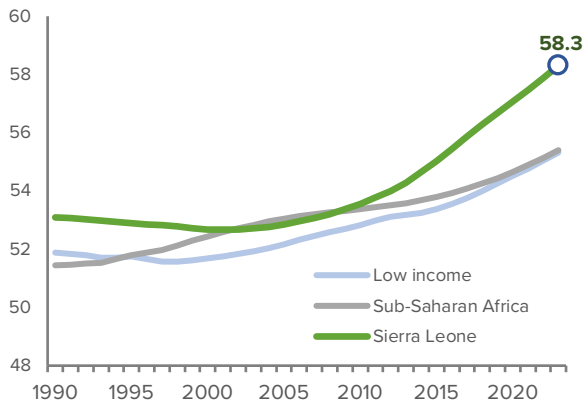
The growing population presents an opportunity for a demographic dividend, but job creation has not kept pace

Despite favorable demographics, benefits have been limited because of weak job creation. While the working-age population grew at 3.4 percent annually during 2001-21, the labor force participation rate declined from 66.3 percent in 2001 to 53.3 percent in 2022 on account of limited employment opportunities (Figure 3, Figure 4) . This decline in labor force participation is also visible in a rise in the proportion of the youth population that is not in education, employment, or training (NEET). Further, the unemployment rate has remained elevated, particularly among urban males, at over 10 percent. Amongst those that are employed, underemployment, especially amongst the educated, has worsened.

While the availability of skills has improved with greater access to education, a skills mismatch continues to constrain job creation. The expansion in access to basic education has been particularly impressive. Gross enrollment rates at the junior and senior secondary school

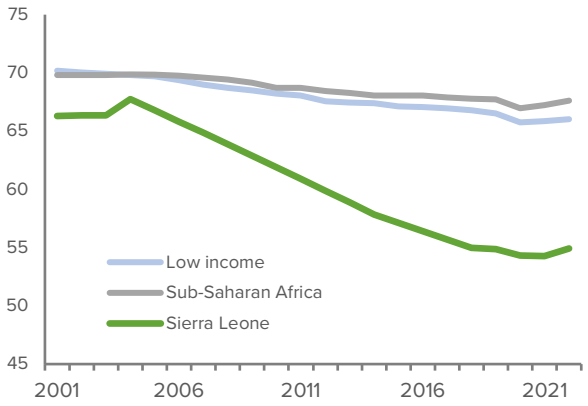
5 Further analysis of the labor market, including on productivity, is constrained by data. The last labor survey was conducted in 2014, the last household survey (with a labor module) was conducted in 2018, and the structure of the economy has changed significantly since. An update of the labor and household surveys is currently underway and can support further analysis when ready.

FIGURE 3:
SHARE OF WORKING AGE POPULATION, SIERRA LEONE AND COMPARATORS (%), 1990-2023



Source: WDI.

FIGURE 4:
LABOR FORCE PARTICIPATION RATE, SIERRA LEONE AND COMPARATORS (% OF POPULATION AGES 15-64), 2001-22



Note: Rate is modeled ILO estimate.
Source: International Labour Organization.

levels increased significantly (by 28 and 35 percentage points, respectively) between 2003 and 2018. Moreover, girls have benefited more than boys, with net enrollment rates for girls now higher than for boys at all levels of schooling. However, the better educated in Sierra Leone have higher unemployment rates, and those who are employed perform jobs for which they are overqualified. Youth with at least senior secondary education or technical and vocational education and training (TVET) are more likely to be in education, employment, or training (or not in NEET) than those with lesser qualifications. And about 39 percent of workers with tertiary education were found to be overqualified, with this share having increased by almost 50 percent between 2011 and 2018. Employers report difficulties in finding suitably qualified workers, particularly technicians in industries like mining, construction, and manufacturing, due to candidates' low technical skills and lack of practical experience.

These trends highlight the growing magnitude of Sierra Leone's jobs challenge. The country will need to create an additional 2 million jobs between 2020 and 2050 just to maintain its current employment-to-population ratio of 51 percent. This means that around 75,000 new jobs will be needed every year for new entrants in the working-age population for the next 30 years, compared to about 41,000 jobs that are currently generated by the economy. If Sierra Leone wants to achieve an employment-to-population ratio of 60 percent–the average of Sub-Sahara African countries--then an additional 100,000 jobs will be needed every year for new entrants. Unfortunately, outside mining and agriculture, the private sector remains small and constrained by infrastructure deficits, a poor business climate, and an overbearing state presence.

The private sector is small and uncompetitive, limiting the scope for economic diversification away from mining. Domestic private firms are small and either die young or fail to grow as they age, in contrast with the experience of more successful peers. Only 2 percent of Sierra Leonean firms export, and the composition of exports is still dominated by resource-based products, with extractives accounting for over half of goods exports and agriculture and foodstuffs almost a fifth of the total. Foreign direct investment remains small and concentrated in the extractives sector.[6] Foreign ownership in Sierra Leone is also much more limited than in other comparable countries. Only 3 percent of Sierra Leonean firms have foreign ownership, compared between a fifth and a third in Liberia, Malawi, and Togo.

6 FDI inflows peaked at 20.7 percent of GDP in 2011 with the opening of iron ore mining before easing to 4.8 percent in 2014, and fluctuated thereafter, falling to around 4.1 percent in 2022.

Growth and employment performances reflect interconnected policy choices

Sierra Leone faces numerous and interconnected challenges. Among the most significant constraints is chronic macroeconomic instability. Policy missteps, particularly persistently lax fiscal and monetary policies, have played a crucial role. Poor macroeconomic policy choices, in turn, are indicative of weak underlying institutional structures, particularly those related to government effectiveness, control of corruption, and accountability. Furthermore, weak institutional coordination and overlapping regulatory responsibilities have hindered effective economic management.

Macro-fiscal weaknesses, together with regulatory and infrastructure challenges, have discouraged the development of a viable domestic private sector. Private investment has been deterred, among other reasons, by the uncertainty regarding potential returns, particularly due to high and variable inflation and exchange rate depreciation, coupled with the low domestic savings rate. Government over-spending and borrowing has crowded out the private sector, aggravating the effects of macro instability on investment appetite. Further, a poor business environment and extensive state interventions have also impeded private sector expansion and diversification. Difficulties in accessing key inputs such as capital, power, and land have been driven by a combination of underdeveloped infrastructure (financial and physical), due to limited fiscal space or state capture of available resources, and inefficient monopolistic or non-competitive practices by state enterprises.

Macroeconomic policies have often been pro-cyclical rather than counter-cyclical, intensifying the effects of external shocks

Fiscal policy is routinely undermined by budgetary overruns and weak oversight. The actual fiscal deficit for a year is typically considerably higher than the budgeted target--by an average of 3 percent of GDP (during 2021-24). This is largely caused by spending overruns--especially capital spending and purchases of goods and services, exposing in part the weaknesses in public investment management as well as in institutional oversight. The fiscal excesses are financed with help from the central bank–which purchases government securities in the secondary markets to create liquidity and allow banks to buy more primary issuances. As a result, debt has been at high risk of distress for several years, with particularly pressing liquidity risks. The debt service to revenue ratio is in excess of 100 percent, and the non-concessional debt portfolio is dominated by short-term expensive domestic Treasury bills, aggravating rollover risks.

Poor enforcement of the tax code has resulted in inadequate resource mobilization, despite a substantial natural resource base. Extensive tax breaks and exemptions are applicable in Sierra Leone, undermining the provisions laid out in the tax laws. For instance, tax obligations as laid out in the Extractive Industries Revenue Act of 2022 are superseded by bilateral mining licensing agreements which offer exemptions and favorable tax terms to mining companies.

Monetary policy is de facto governed by its fiscal dominance. While the central bank has often used its policy rates to respond to inflationary pressures, raising rates from 14.3 percent at the start of 2022 to 22.3 percent by end-2024, for example, transmission has been impeded by fiscal dominance and a shallow financial sector. Base money growth, which serves as a more accurate metric of the monetary policy stance in this context of fiscal dominance, has remained elevated in tandem with the years of fiscal slippages. The fiscal indiscipline has, therefore, been fueled by monetary policy compliance which together compromised broader macroeconomic management. Inflation rose to a peak of 55 percent in October 2023, and the Leone depreciated by 58 percent during 2022-23, before both began to stabilize in 2024.

Weak financial management is a pervasive, cross-cutting constraint to fiscal policy credibility, effectiveness, and oversight. Public financial

management systems are underdeveloped, and practices do not live up to the promises of the law, causing spending to routinely exceed revenues and "bad spending" to go unchecked. Weak budget execution systems, poor internal controls, and insufficient auditing are glaring symptoms of an overall lack of transparency and poor executive accountability. Insufficient domestic revenue mobilization, low taxpayer morale, a narrow tax base together generate insufficient revenues for physical and human capital investments.

A skills mismatch and a shortage of skills in the economy have stifled growth by slowing structural transformation

Educational policies focus on access rather than quality, neglecting teacher management and performance monitoring. For instance, there is little or no focus on managing teaching staff, monitoring their performance, and linking evaluations to learning outcomes. In higher education, only 30 percent of students pursue degrees in science, technology, engineering, agriculture or mathematics; and the first mining engineering program began just a decade ago. Learning outcomes are poor compared to peers, worsened by the COVID-19 pandemic. Factors contributing to poor learning outcomes include inadequate teacher training and supervision, weak school leadership, a lack of prioritization of foundational learning, excessive class sizes (particularly at the lower end of primary and in many secondary classes) and low levels of community engagement in education.

The TVET system is underfunded and unresponsive to demand from private sector employers, contributing to the skills challenge. In the mining sector, for instance, employers often cite the lack of critical skills.[7] But there is little collaboration between the government, mining companies, and higher education institutions to develop a long-term strategy to address these gaps.[8] The incidence of firm-based training more generally is not sufficient to compensate for the inadequacies of the TVET system, with only about a fifth of firms offering formal training to staff. And few mining companies offer any training for their employees.[9]

A weak business environment, along with an overbearing state, has deterred private sector development

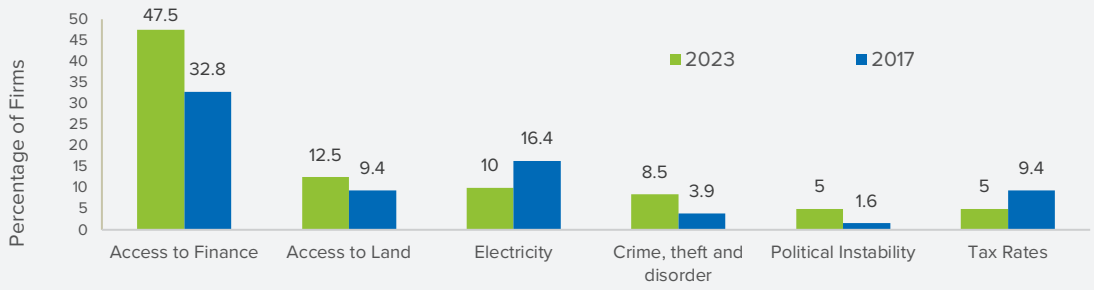
Three prerequisites for businesses have been lacking–credit, electricity and land–and have constrained all economic activities including mining (Figure 5)**.** First, access to credit is limited because banks prefer to hold high-yielding government securities. The underdeveloped financial market infrastructure, such as for collateral, further limits the ability and appetite of banks to take risks. Second, lack of adequate, reliable, and affordable electricity supply originated with the damage to infrastructure during the civil warm, but it remains far short of full rehabilitation, a situation worsened by inefficiencies in the power distribution utility (Electricity Distribution and Supply Authority, EDSA), which suffers high technical and commercial losses and has low collection rates. The result is that electricity is costly, and its supply is erratic, making it a major constraint to the expansion of private investment. Third, the country's weak land administration system and overlapping customary and statutory tenure systems create hurdles for private sector investment. Administrative and legal procedures make it difficult for private investors to acquire and dispose of land, especially in agriculture. Many investors are deterred by uncertainty regarding security of tenure, particularly under the customary tenure regime. Small landholdings hinder agricultural investments and affect farmer productivity and profitability. Land transactions can lead to conflicts between investors and communities, lowering returns on land-related investments.

7 International Labour Organization .2019. Enabling Environment for Sustainable Enterprises in Sierra Leone: Main Findings; Darwich, M .2018. Skills Needs Assessment Initiative of the TVET Coalition of Sierra Leone. Bonn: Internationale Zusammenarbeit (GIZ) GmbH

8 Sampablo, M et al .2022.

9 International Labour Organization .2019.

FIGURE 5:
TOP BUSINESS ENVIRONMENT CONSTRAINTS (% OF FIRMS), 2017 AND 2023



Source: World Bank Enterprise Survey.

Heavy-handed involvement of the state in economic activity has been distortionary. State interventions in various forms provide special privileges to public enterprises over their private sector counterparts, distorting the latter's ability to compete on a level playing field.[10] Through state-owned enterprises (SOEs) and other businesses termed "businesses of the state" (BOS), the government produces and supplies goods and services in domestic markets. The majority of the BOS operate in competitive sectors, holding dominant positions and deterring the entry of private and competition. Uncompetitive and unfair procurement processes by the government can also distort markets.

Mining firms, in particular, are exposed to state interventions and the variable enforcement of the legislative and regulatory frameworks. State interventions in mining have undermined investor confidence. While the country has made progress in reforming its legal framework for the mining sector with the Mines and Minerals Development Act 2023 which removes discretionary powers of key political and technical officials of regulatory ministries and agencies, but legal contradictions and inconsistencies remain. Further, most mining companies do not pay the standardized tax rates but rather negotiate different bilateral agreements with varied levels of tax concessions and treatments.

Trade and foreign investment policies have limited Sierra Leone's success in sustaining export growth and diversifying its export basket. These include: relatively high tariffs, including on machinery and intermediates; restrictions on services trade through limits on foreign direct investment in many sectors; and the inability to reduce high trade costs that stem from poor trade facilitation and inadequate logistics. Although the decline in commodity prices has discouraged FDI flows into mining, the overall situation has been exacerbated by policies that restrict foreign investments into some sectors, including services, as well as macroeconomic instability and political turbulence. Requirements for the screening and approval of FDI projects are unclear, and the investment protection framework is weak.

A New Growth Strategy

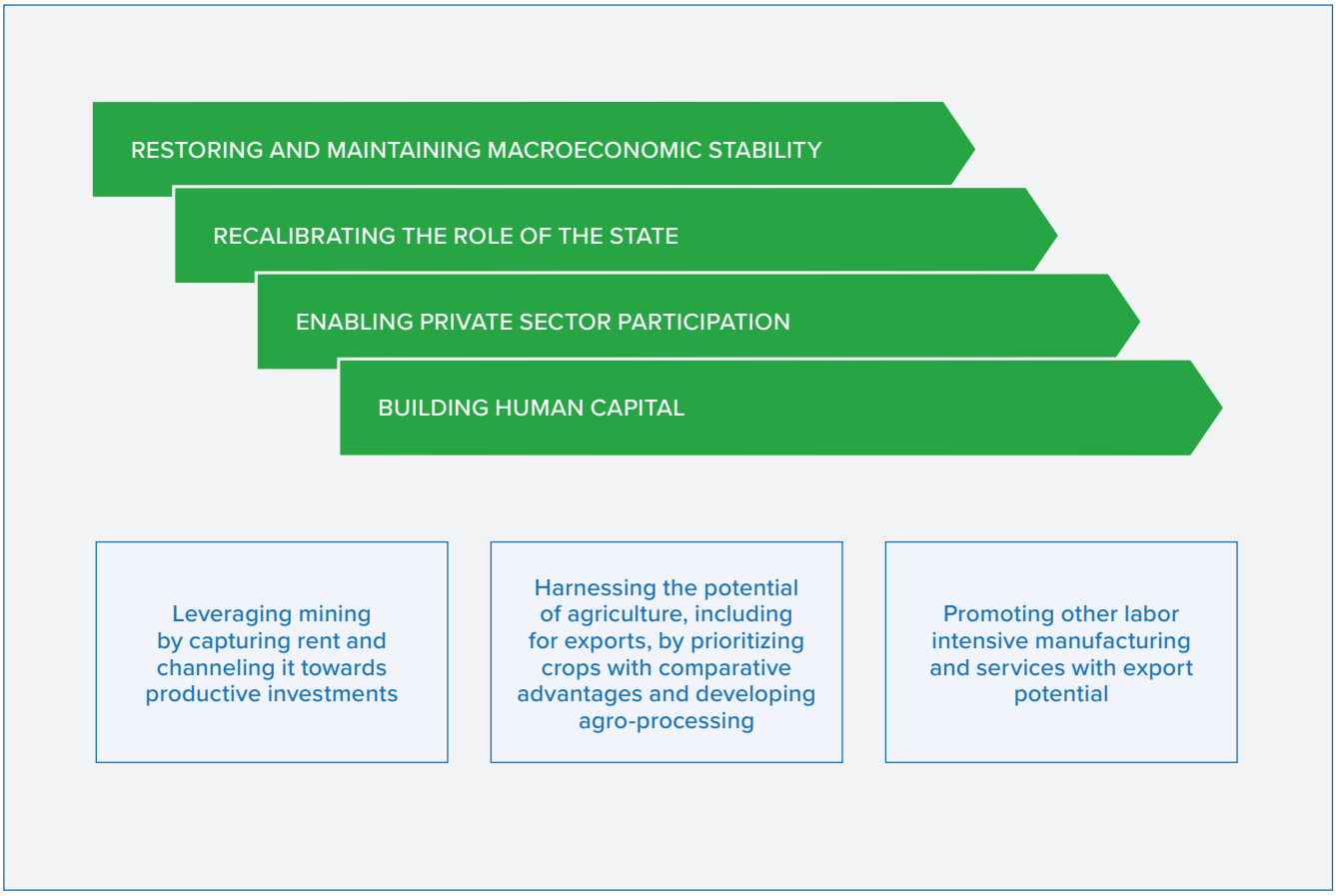
A growth strategy for Sierra Leone would leverage the country's innate strengths including a rich natural resource base, favorable conditions for agriculture, and a young demographic. The reoriented growth strategy should focus on three potential sources of future growth for Sierra Leone: mining, agriculture and related processing, and other labor-intensive manufacturing or services sectors with export potential (Figure 6). This will allow harnessing of the country's comparative advantages in natural resources, through mining and agriculture, and favorable demographics. Given the country's natural resource wealth, it is especially important that the revenues from these resources be converted into physical and human capital and into more effective institutions. Promoting policies to support climate-smart agricultural and natural resource

10 Public enterprises include state-owned enterprises (SOEs), which are businesses in which the government (mostly national) holds equity stakes (mostly directly) of 50 percent or more, as well as Businesses of the State (BOS), which are businesses that can have majority or minority ownerships and include the direct State businesses as well as their subsidiaries, whether owned by national, provincial, municipal, district, or city governments.

productivity will help ensure the sustainability of these resources. Future opportunities in agriculture will center on complementary objectives: competitive local production; and competitive export promotion and diversification. Drawing from the discussion of the earlier sections, such a strategy will require targeted efforts to address foundational shortcomings and address weaknesses in policies and institutions that currently limit the accumulation of physical and human capital and the pace of job creation.

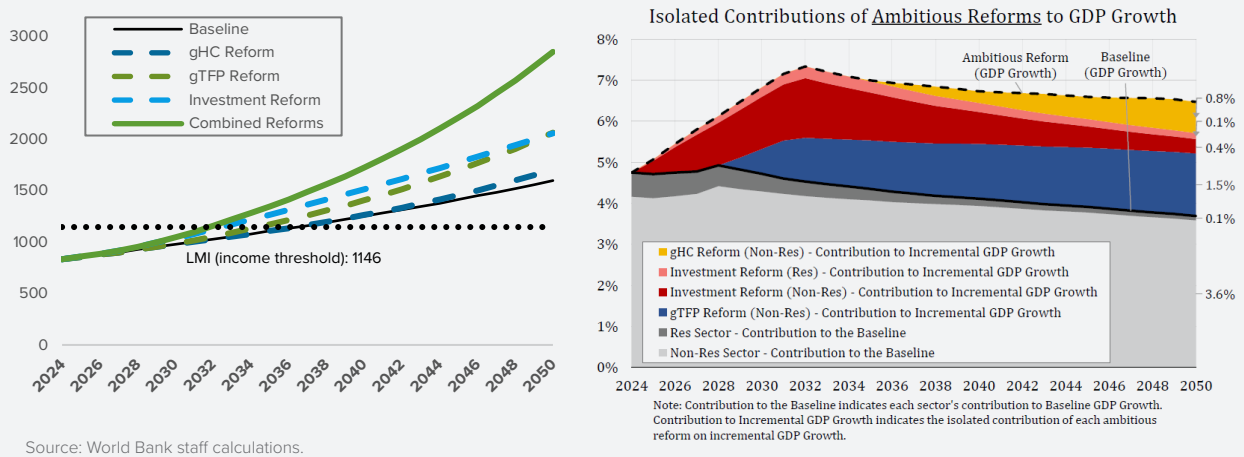
Achieving these objectives will require a reform agenda comprising of four key priorities. The *first* and foremost priority is to restore and maintain macroeconomic stability, which is a prerequisite for creating a conducive environment for private investments and generating fiscal space for addressing a debilitating infrastructure deficit. The *second* prerequisite and priority is recalibration of the role of the state to minimize market distortions through support for SOEs, strengthen market institutions (such as for market competition and protection of property rights), streamline regulatory policies, and focus on effective delivery of essential services and infrastructure to provide a credible setup for attracting investments. The *third* priority is promoting private sector development by addressing the barriers firms face in operating in Sierra Leone and help improve productivity by improving access to prerequisites such as power, credit, and land, which will affect all sectors of the economy. Trade policy reform and logistics improvements will allow Sierra Leone to avail of regional and global trade opportunities to enhance competitiveness of domestic firms and unlock the potential of mining and agro-processing sectors, and other labor-intensive services or goods. The *fourth* priority is skills development to allow alignment with the needs of a modernizing economy while nurturing entrepreneurial and business leadership talent essential for innovation and productivity gains and help create good jobs for the growing and favorable demographic.

FIGURE 6:
A FRAMEWORK TO ACHIEVE MIDDLE-INCOME STATUS IN A DECADE



There is an urgent need for focused reforms that can help accelerate Sierra Leone's transition to lower middle-income status. The impacts of a revamped strategy can be seen in two contrasting scenarios, each corresponding to different levels of reform ambition.[11] The first–the "ambitious reform scenario"–would allow Sierra Leone to reach lower middle-income status by 2032 (Figure 7) by boosting annual GDP growth to an average 6.3 percent during 2025-32. The second, less ambitious reform strategy (the "moderate reform scenario") would have Sierra Leone reaching lower middle-income status in 2034 with average annual growth of 5.5 percent during 2024-46. The four key priorities of the reform agenda are laid out in more detail below.

FIGURE 7:
IMPACT OF AMBITIOUS REFORMS



Source: World Bank staff calculations.

- **Restoring and maintaining macroeconomic stability: Restoring macro stability is a prerequisite for high and sustainable economic growth.** Achieving it will require a mix of policy measures in three main areas. First, there is an urgent need for fiscal consolidation. On spending, there needs to be greater scrutiny on the prioritization and effectiveness of public spending, and expenditures need to be reoriented towards pro-growth activities and building social safety nets, through the removal of excessive subsidies to energy and other transfers to loss-making SOEs and enforcing more discipline on discretionary expenses. On revenues, efforts are needed to reduce leakages from the current system while examining ways of raising more without additional distortions by expanding the tax base by addressing tax expenditures, formalizing sales to reduce informality in goods and services tax collections, and better capturing mining activities in corporate income tax collections by superseding any bilaterally agreed exemptions. Second, debt management needs to be improved. Active domestic debt management should be prioritized to develop the bond market, lengthen maturities, and broaden the investor base. Third, monetary policy needs to be less accommodative, with the central bank focusing mainly on stabilizing prices.
- **Recalibrating the role of the state: To minimize market distortions and strengthen market institutions, streamline regulatory policies, and focus on effective delivery of essential services and infrastructure.** The effectiveness of a growth strategy depends critically on the efficacy of government in managing the economy. First, it needs to reexamine its role in the economy and focus primarily on addressing market failures. In particular, the rationale for the presence of SOEs and BOSs in sectors where private firms are likely to operate competitively should be reevaluated to minimize market distortions and promote competitive neutrality and a credible competition regulatory framework. Second, clearly defining the role of the state as the custodian of natural resources is essential to appropriately capture rents and convert these to physical and human capital

11 Simulated using a neoclassical growth model, the Long-Term Growth Model- Natural Resource extension (LTGM-NR; Loayza et al. 2022).

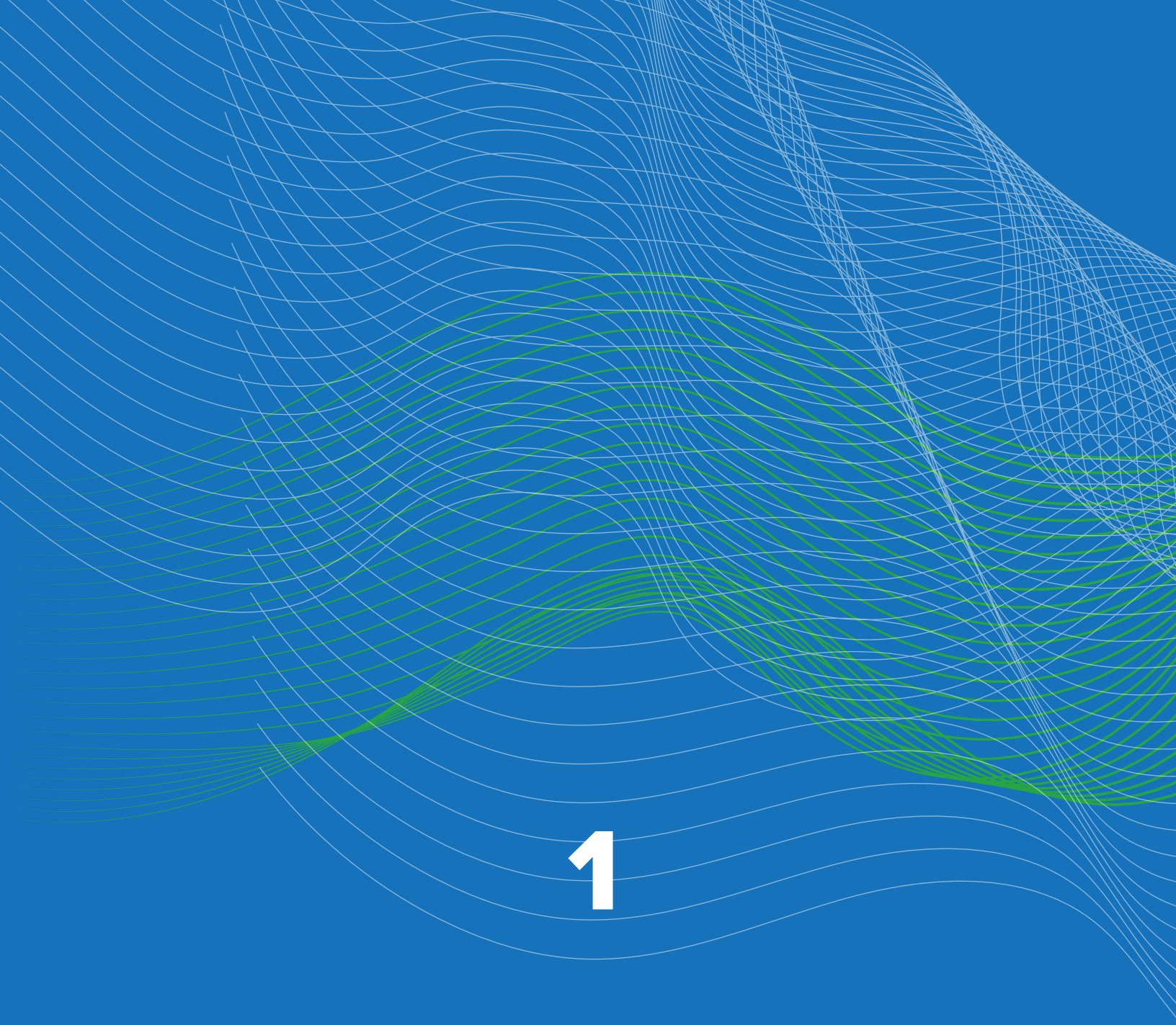
investments. Limited state participation in the mining sector is needed through clear governance principles. Third, the state needs to invest more in its responsibility as the provider of reliable climate resilient infrastructure, especially energy, to enable the private sector. Finally, fiscal institutions need to be strengthened. Expenditure management and budgetary control processes are critical if fiscal policy is to be effective. And the management of public investment needs to assure that public sector projects are well chosen and implemented effectively. Carefully crafted and simple fiscal rules should be deployed which can be effectively monitored and enforced to improve discipline.

- **Enabling the private sector: Reducing the barriers that private firms, whether they are domestic or foreign, face in operating in Sierra Leone will help them increase their productivity as well as their potential for job creation.** This will require action on several fronts. First and foremost is the availability of reliable infrastructure. Enterprises of all sizes, including in the mining sector and downstream processing industries, cite access to power as a major constraint. Efforts are needed to improve the cost, availability, and reliability of electricity supply through reforms of the power utility, EDSA, both in terms of its operation and its regulation as well as efforts to promote private sector participation in power generation. Second, most private domestic firms have limited access to credit domestically. While this is in part due to the crowding out of private borrowers by public sector borrowing to finance the fiscal deficit, it also reflects weaknesses in the credit infrastructure, which needs to be developed further. Barriers to foreign investment need to be reduced to improve access to international financing. This will require particular attention to the process of screening and approving foreign investments as well as the framework for investor protection. Addressing trade bottlenecks can also help improve the productivity of domestic firms. Third, barriers to private enterprises also arise from preferential treatment for SOEs, and reducing such preferences is the third area for action. It will require focusing on such aspects as the preferential access of SOEs to finance and public procurement. More broadly, the rationale for the presence of SOEs in sectors in which private firms are likely to operate competitively needs to be examined.
- **Building human capital: Upgrading skills and matching these better with employers' needs, while shifting the emphasis of education and training system towards better quality and greater relevance.** Improving learning outcomes will require addressing the quality and motivation of teachers. The inability to recruit and retain quality teaching staff is among the main reasons that learning outcomes at all levels of schooling continue to lag in Sierra Leone. Reversing this will require designing and implementing better systems for managing staff in schools. This will need to be complemented with measures that improve the monitoring of school performance. Skills development systems need to be aligned better with market demand and the needs of private sector employers. The current system, which is dominated by the public sector, is not well connected to the demand side.

Short and Medium-Term Priorities for Action

REFORM	NEAR-TERM	MEDIUM-TO-LONG-TERM
RESTORE AND MAINTAIN MACROECONOMIC STABILITY		
Revenue mobilization by implementing the recommendations of the Medium-Term Revenue Strategy: streamlining tax expenditures, including on mining, instating only legislative changes to tax rates such as excise, and investing in digitalization of revenue collections by introducing interoperability.	✓	
Adopting a multipronged approach to controlling inflation. The monetary policy rate should continue to be set at levels that contribute to lowering inflation. The central bank should limit the use of secondary market purchases to support government issuance and consider introducing its own short-term liquidity management operation.	✓	
Implementing active debt management: lengthening maturities and broadening the investor base, along with continued reliance on concessional sources of financing can help contain the servicing burden.		✓

REFORM	NEAR-TERM	MEDIUM-TO-LONG-TERM
RECALIBRATING THE ROLE OF THE STATE		
Fostering competitive neutrality in markets: level the playing field between public and private enterprises and develop an effective competition regulatory framework.		✓
Defining and limiting state participation in the mining sector by: articulating clear governance principles for the proposed Mines and Minerals Development Corporation, including its accountability to Parliament.		✓
Strengthening expenditure management, budgetary controls and oversight: along the lifecycle of the budget starting from budget preparation, to spending approvals, up to autonomous auditing of public finances.	✓	✓
UPGRADING SKILLS AND MATCHING THESE BETTER WITH EMPLOYERS' NEEDS		
Increasing access to schooling, particularly at the early childhood education level and secondary education level: using the School Catchment Area Policy Guidelines and tools developed utilizing data to identify localities where need is greatest, address disparities in access to quality education and promote gender equality and inclusive education, and focus on the implementation of the National Policy on Radical Inclusion.	✓	
Strengthening education workforce management and create better environments to recruit and retain the workforce: develop and implement staff management systems to attract and retain the best caliber education workforce.		✓
Establishing sector skills bodies to improve alignment between labor market supply and demand. These bodies would support dialogue between the private sector and the Government on TVET/Higher Education and labor market issues.	✓	
PROMOTING THE PARTICIPATION OF THE PRIVATE SECTOR		
Improving access to credit: reducing public sector borrowing needs; and upgrading the manual credit reference system.		✓
Improving access to electricity: integrating planning; improving governance; strengthening the regulatory regime; and expediting private sector participation.	✓	✓
Ensuring effective implementation of the new land laws by and addressing the constraints on agriculture and other sectors due to land ownership: providing strategic and operational support to the new National Land Commission, and developing the legal framework: a Land Title Registration Law, Land Title Adjudication Law, and a new Survey Law.	✓	✓
Harmonizing laws, regulations and policies governing the mining sector and natural resource extraction.	✓	
Reducing import tariffs on machinery, especially for mining and agricultural processing	✓	
Institutionalizing dialogue with private sector trade and logistics companies on steps to implement the World Trade Organization (WTO) Trade Facilitation Agreement.		✓
Clarifying policies for foreign direct investment (FDI) by: issuing an Investment Policy Statement could outline the Government's strategy and objectives for FDI; streamlining the screening and approval system for FDI; and strengthening the investor protection framework.	✓	✓



1

RECENT ECONOMIC PERFORMANCE AND FUTURE PROSPECTS

Sierra Leone's development record has been mixed, marked by fostering of some peace and political stability but also by the absence of economic growth to lift its people out of poverty. The country remains one of the poorest in the world despite its many assets: a rich mineral endowment, a young and increasingly educated population, and arable agricultural land coupled with favorable rainfall. The returns on these assets are often eroded by the country's vulnerabilities – weak institutions, poor infrastructure, reliance on volatile commodity exports, and of-late the vagaries of climate change. Over the past two decades, since the end of the civil war, economic shocks and volatile growth have derailed the implementation of a number of governments' development strategies.[12] Sierra Leone has the eleventh lowest per capita GDP in the world (current US$ 729) as of 2023, and growth has been amongst the most volatile in the world. This chapter will present recent trends in Sierra Leone's economy and prospects for growth.

Recent growth performance

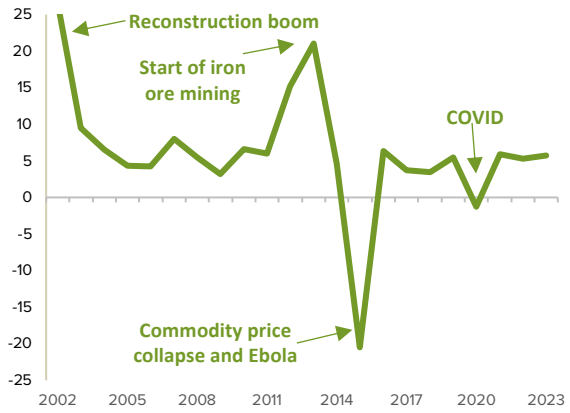
Sierra Leone has been unable to sustain growth and remains amongst the poorest countries in the world. Starting from a very low level following the civil war, Sierra Leone has lost further ground to other economies. In 2002, coming out of its civil war, Sierra Leone had the 27th lowest per capita GDP in the world; 21 years later it had the eleventh lowest per capita GDP at US$729. Despite a rich natural resource endowment (of minerals and fertile land), a growing share of working age population, and relative political stability since the end of the civil war, growth has been insufficient.

Moreover, economic growth has been highly volatile, often reversing earlier progress. Between 2002 and 2023, the country experienced two main growth spurts that failed to translate into sustained economic gains; the first was driven by the post-war reconstruction boom (in the early 2000s) and the second by the start of iron ore mining operations (in the early 2010s).[13] GDP per capita reached nearly US$1098 by 2014, but a series of shocks undercut growth: the Ebola outbreak (2014-16), the global commodity price collapse (2016), the COVID-19 pandemic (2020-22), and spillovers from the war in Ukraine (2022 onwards) (Figure 8). The impact of these shocks, coupled with weak macroeconomic management, disrupted economic progress and compromised macroeconomic stability. The twin shocks (Ebola and commodity price collapse) led to a GDP collapse of 20.5 percent in 2015 while the COVID-19 shock generated a modest contraction of 1.3 percent in 2020. Other structural factors have also played an important role: weak institutions, limited physical and human capital growth, and slow progress in diversifying the economy. When compared to its peers, Sierra Leone's growth has exhibited much greater volatility over the last decade (Figure 9). This volatility indicates not only the pervasiveness of shocks but also the underlying vulnerability of the economy, arising from its economic structure and its lack of resilience.

12 Post-war growth strategies included the National Recovery Strategy, Poverty Reduction Strategy (1 and 2) and Agenda for Prosperity that identified the foundations for the country to reach middle income country by 2035. The country is in the process of developing a new national development plan (2023-2028) following the expiration of the previous national development plan (2019-2023) which centers on human capital development, economic diversification and resilience, infrastructure and economic competitiveness, governance and accountability, and women and youth empowerment.

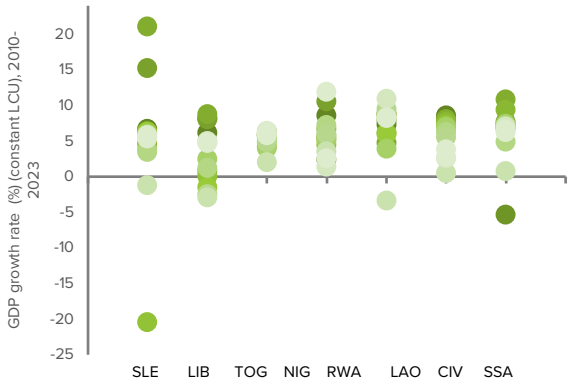
13 Sierra Leone's national accounts have recently been updated, revising GDP and its components (Box 1).

FIGURE 8:
REAL GDP GROWTH (%), 2002-23



Source: WDI, World Bank staff calculations.

FIGURE 9:
GDP GROWTH, SIERRA LEONE AND PEERS (%), 2010-23



Note: Sierra Leone is SLE. Structural peers were identified using a dynamic benchmarking analysis: Liberia (LIB), Togo (TOG), Niger (NIG), Malawi, and Guinea. Aspirational peers are Rwanda (RWA), Côte d'Ivoire (CIV), and Lao PDR (LAO).
Source: WDI, World Bank staff calculations.

BOX 1:

GDP Rebased

In July 2024, the Government published revised National Accounts using 2018 as the new base year and incorporating new GDP measurement methodologies. The size and structure of the economy changed substantially since the previous base year (2006), and GDP measuring methodologies have evolved. Changes in the economy are driven by the broader coverage and revisions of GDP measurement. In line with the United Nations System of National Accounts 2008, Statistics Sierra Leone (Stats SL) included activities not captured at all by previous GDP measurement or captured differently. These include mining, entertainment, research and development, patents and copyrights, financial intermediation services, and informal activities. Certain activities and products were reclassified: for example, information and communication technology-related activities, which were previously dispersed in different branches, are now grouped.

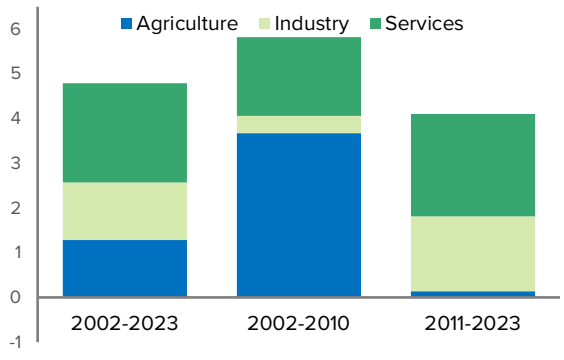
As a result of the rebasing and revisions, the size and structure of the economy are significantly different. Base year (2018) nominal GDP is NLe 50.7 billion (US$6.4 billion), which is 56.4 percent greater than the previous GDP estimate. The structure of the economy has a smaller agricultural sector (at 35 percent of GDP rather than 50.5 percent to for 2018) and larger industry (17.5 percent rather than 8.7) and services (44 percent rather than 37).

Supply and demand-side drivers of growth

The economy remains concentrated in agriculture, followed by mining, which contributes to the volatility in the economy. Agriculture, largely in the form of subsistence farming, is the dominant sector, and on average, has accounted for one-third of total output, more than half of employment, and one-fourth of total growth in the last two decades (Figure 10). However, despite the country's rich endowment of 5.4 million hectares of fertile arable land with an ample rainfall average of 3,800 millimeters per year, the country remains food insecure. Historically, industrial activity, dominated by the mining of diamonds (mostly artisanal), made modest contributions to overall growth. This situation changed significantly in the 2010s with the start of iron ore mining. Contributions from industrial activity became more prominent, accounting for 26 percent of output and over one-third of growth on average since the early 2010s while agriculture's contribution to growth disappeared. Moreover, Sierra Leone's industrial growth compares favorably with peer countries in recent years (Figure 11). Finally, the services sector has remained relatively stable and predominantly driven by trade and public administration.

Investments and exports played only temporary roles in boosting overall growth. Contributions to growth from investment peaked during the development of the iron ore mines in the early 2000s but averaged less than 20 percent of GDP growth during 2002-23 (Figure 12). Net exports have contributed positively in recent years after remaining a drag on growth (Figure 13). The country relies on imports for necessities such as food and fuel, capital goods, and most discretionary consumption expenditures, while exports remain concentrated in selected primary commodities (minerals, palm oil, cocoa). Broad-based reliance on imports has translated to a chronic trade deficit and widening current account balance that has left the country more vulnerable to external shocks stemming from commodity price fluctuations. Mineral exports accounted for over 80 percent of total exports in 2022, with iron ore accounting for over half of mineral exports. When compared to structural and aspirational peer countries, Sierra Leone has the lowest contribution to growth from investment, significantly trailing behind Rwanda, Niger, and Benin (Figure 13). Private household consumption has been the primary contributor to demand, accounting for about 85 percent of GDP and nearly three-fourths of average growth since 2002.

FIGURE 10:
CONTRIBUTION TO GDP GROWTH, SUPPLY SIDE (%), 2002-23



Source: WDI, World Bank staff calculations.

FIGURE 11:
GDP GROWTH, SUPPLY SIDE, SIERRA LEONE AND PEERS (%), 2010-23

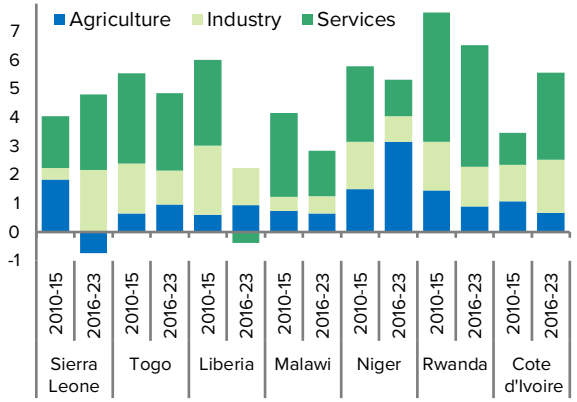
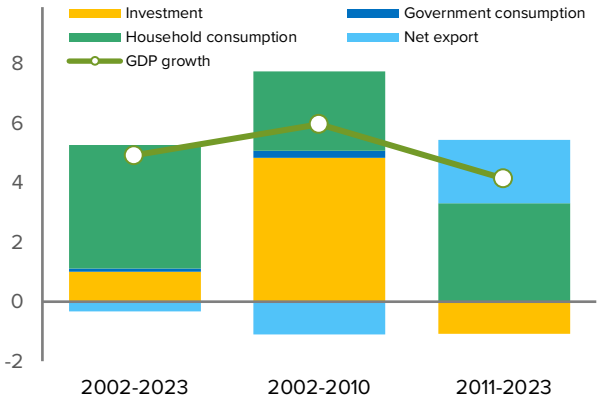
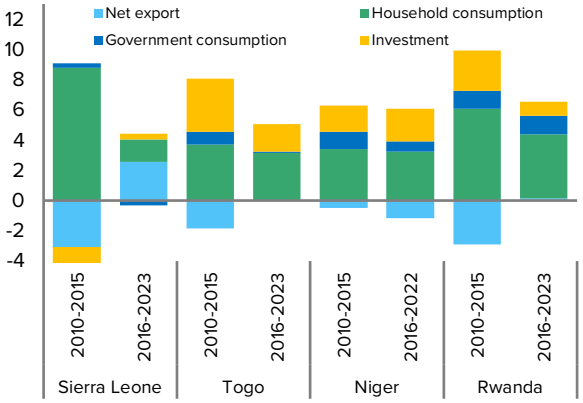


FIGURE 12:
CONTRIBUTION TO GDP GROWTH, DEMAND SIDE (%), 2002-23



Source: WDI, World Bank staff calculations.

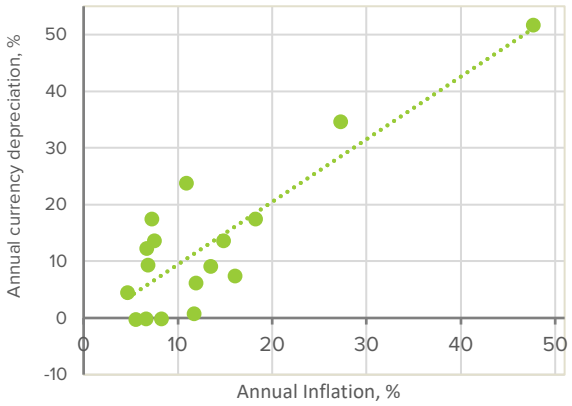
FIGURE 13:
GDP GROWTH, DEMAND SIDE, SIERRA LEONE AND PEERS (%), 2010-23



Role of macroeconomic policies

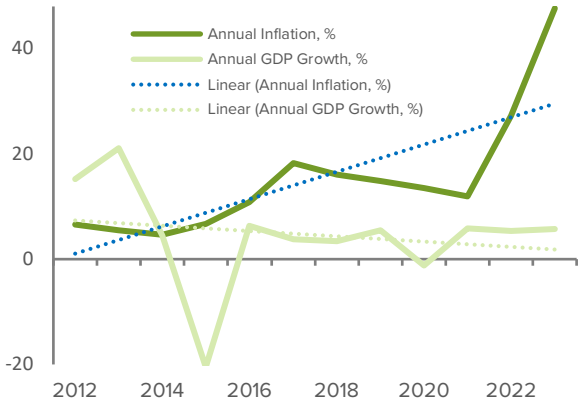
Macroeconomic stability has been severely undermined by policy missteps and exogenous shocks, disrupting economic momentum in the country. Weak macroeconomic management often aggravated the impact of initial shocks–resulting in periods of high inflation, a weakening currency, and heightened debt distress. High inflation has been correlated with greater currency depreciation for years in Sierra Leone, with recent years (2022 and 2023) providing extremes (Figure 14). For more than a decade, inflation has been trending upwards while growth has been trending down, suggesting a worrying decline in the country's potential output (Figure 15) as a result of macroeconomic policy choices. Such episodes of macroeconomic instability dampen investor confidence, erode household purchasing power, and limit the government's ability to finance important development spending–eventually compromising the country's ability to leverage its strengths to maintain growth.

FIGURE 14:
INFLATION AND CURRENCY DEPRECIATION (%), 2016-23



Source: WDI, World Bank staff calculations.

FIGURE 15:
INFLATION AND GDP GROWTH (%), 2013-23



Source: WDI, World Bank staff calculations.

Although Sierra Leone has been buffeted by a series of adverse shocks–both external and domestic–in recent years, inappropriate fiscal and monetary policies have generally made things worse. Even though GDP growth has averaged 5.5 percent since 2019, macroeconomic stability remains elusive. Fiscal policy has been expansionary since the onset of COVID-19 in 2020 due to both high expenditures (including COVID-related spending) and a fall in revenue collection (reflecting slower economic activity and tax deferments). In 2022, spillovers from the Ukraine war and fiscal and monetary policy slippages contributed to weak fiscal and external accounts, very high inflationary pressure, and heightened debt vulnerabilities. The fiscal deficit widened to nearly 6 percent of GDP in 2022 on the back of significant spending overruns while monetary policy remained broadly loose to finance the wider deficit, allowing inflation to soar to a peak of 54 percent in October 2023. Public debt had risen to over 50 percent of GDP by end-2022, more than reversing debt relief from the Heavily-Indebted Poor Country initiative in the early 2000s, and the risk of a debt crisis became high. Although monetary policy has sought to respond to inflationary pressures by raising rates from 14.3 percent at the start of 2022 to 22.75 percent by end-2024, transmission to the real sector has been weakened by fiscal dominance[14] and the shallowness of the financial sector.

Limited fiscal space adds to the challenge of longer-term growth and development. To sustain growth over the medium term and reduce income and non-income poverty, Sierra Leone needs to invest in human capital and physical infrastructure. It will also need to make the necessary investments to adapt to the growing risks posed by climate change. Although private investment can play a part, most of this financing will need to come from the public sector since many of these investments have attributes of public goods. However, years of borrowing to finance large fiscal deficits have left the country with high debt levels and little fiscal space to accommodate these public investments. An unfavorable global economic environment, in which growth in most advanced economies as well as in China is slowing, only adds to this challenge.

Chronic macroeconomic instability of the kind that Sierra Leone has seen for extended periods over the past two decades has adversely affected growth prospects through its impact on private investment. Private investment is deterred by the uncertainty of potential returns, particularly with threats of high and variable inflation and exchange rate fluctuations. These concerns can help explain why private investment rates in Sierra Leone stagnated even when global economic conditions were favorable before the onset of COVID-19. In turn, this drag on private investment has meant that there has been little or no structural transformation of the economy. A potentially potent source of productivity growth has thus been throttled.

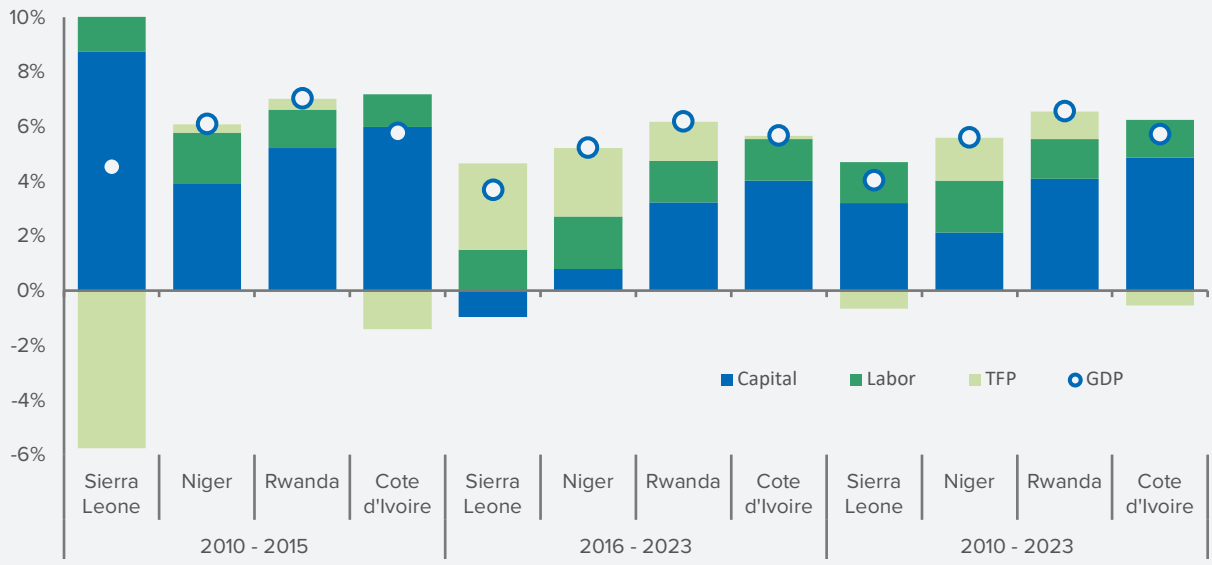
Contributions from factors of production

Decomposing growth into factor inputs reveals that gains from capital accumulation and total factor productivity have been volatile. Capital accumulation made positive contributions during 2010-15 as investment spiked during the mining boom (when the iron ore mines were being developed) added little thereafter in the wake of the commodity price collapse that spurred closure of two big iron ore mines (African Minerals and London Mining) (Figure 16). Labor inputs consistently drove growth during the entire period (2010-2023), but total factor productivity (TFP) reduced growth during 2010-15 followed by a small positive contribution during 2016-23. When compared to peers, the contribution from labor is above structural peers but relies heavily on labor intensive agriculture, while investment as a share of GDP is lower than peers and Sub-Saharan Africa (SSA) countries, signaling room for improvement.

Capital accumulation in non-mining sectors has been held back by the low domestic savings rate and limited foreign investments. Sierra Leone's gross savings rate is among the lowest in the world, averaging -1 percent of GDP during the last decade. Limited financial access and a shallow financial sector have further inhibited capital accumulation. Foreign direct investment (FDI) has accounted for the bulk of recent private investment, but it has been concentrated in mining and as such is very lumpy (ranging from 20.7 percent of GDP during the peak of the mining boom, to 2.6 percent of GDP in 2020).

14 In Sierra Leone, fiscal dominance refers to the Central Bank's lending to the government for fiscal reasons in excess of the legal threshold of 5 percent of the prior year's revenue.

FIGURE 16:
CONTRIBUTION TO GDP GROWTH BY FACTOR AND TFP, SIERRA LEONE AND PEERS (%), 2010-23

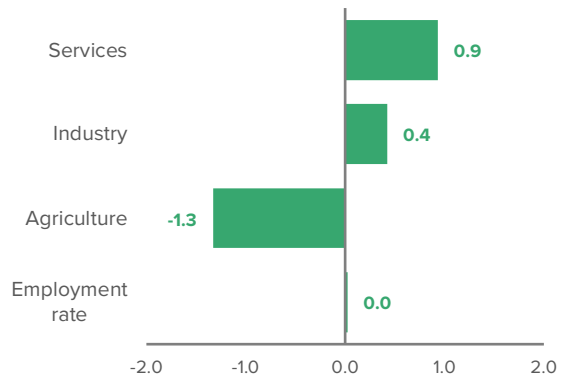


Note: Solow model estimates of TFP.
Source: WDI, World Bank staff calculations.

The sectoral composition of Sierra Leone's labor force has remained largely unchanged in recent decades, with agriculture continuing to dominate employment despite shifts in the economy's output structure. Labor has begun to move away from agriculture but at a very slow pace. The sector remains the largest provider of jobs in the country, with a sustained contribution of over 50 percent of total employment. This slow transition contrasts with the country's evolving economic output, where industry, particularly iron ore mining, has played an increasingly significant role in GDP. However, industry's growth has not translated into proportional employment gains. Most labor moving out of agriculture has been absorbed by the services sector, especially informal trade and tourism, rather than higher productivity industrial activities (Figure 17). Compared to similar economies undergoing structural transformation, Sierra Leone's shift away from agriculture has been notably slower, with the share of agricultural employment in Sierra Leone higher than three of its five identified structural peers.

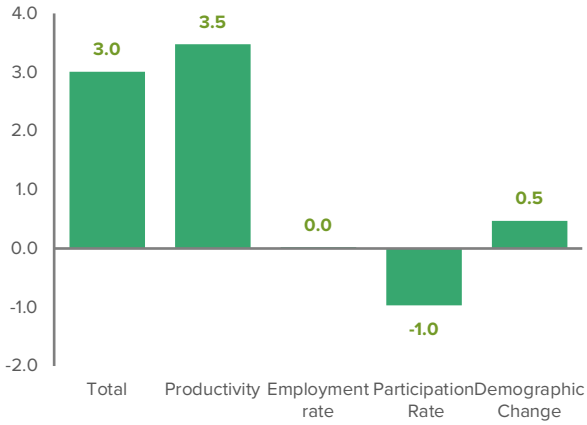
Labor productivity has improved, but economic gains from a growing population have been eroded by declining labor force participation and persistently high unemployment. Although Sierra Leone has a favorable demographic profile with a growing working-age population, this potential has delivered less than expected due to falling labor force participation rates. Further, the unemployment rate has remained elevated, particularly among urban males (at over 10 percent). Consequently, real GDP per capita growth has been driven more by productivity gains than by job creation (Figure 18). These productivity improvements have been concentrated largely within agriculture, limiting the extent to which they support broader structural transformation (Figure 19). While some modest positive productivity gains have resulted from labor shifting between sectors, the pace and scale of this reallocation have been insufficient (Figure 20), and growth attributable to rising labor productivity has lagged that of aspirational peers such as Rwanda. The economy has yet to fully harness its labor potential by facilitating more dynamic sectoral shifts and expanding employment opportunities beyond low-productivity segments.

FIGURE 17:
CONTRIBUTION TO PER CAPITA GDP GROWTH OF SECTORAL CHANGES IN EMPLOYMENT (%), 2001-22



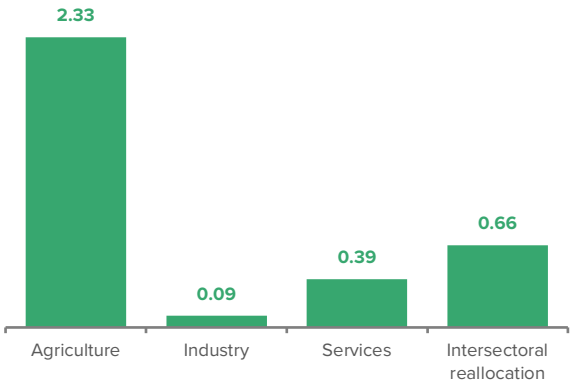
Source: WDI, World Bank staff estimates.

FIGURE 18:
CONTRIBUTION TO PER CAPITA GDP GROWTH, LABOR MARKET INDICATORS (%), 2001-22



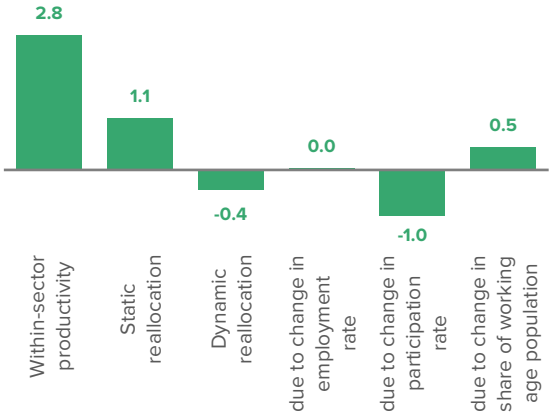
Source: WDI, World Bank staff estimates.

FIGURE 19:
TOTAL OUTPUT PER WORKER GROWTH, DECOMPOSITION BY SECTOR (% ANNUAL CONTRIBUTION) 2001-22



Source: WDI, World Bank staff estimates.

FIGURE 20:
TOTAL OUTPUT PER WORKER GROWTH, DECOMPOSITION BY COMPONENT (% ANNUAL CONTRIBUTION), 2001-22



Source: WDI, World Bank staff estimates.

Looking forward: growth prospects

Under prevailing conditions of heightened macroeconomic instability, limited gains in productivity, constrained capital accumulation and slow human capital development, the country will not be able to achieve its target of middle-income status by 2037. Repeated external shocks and weak macroeconomic management have affected Sierra Leone's growth trajectory, delaying the country's transition to middle-income status until 2037 (under baseline assumptions). Per capita GDP continues to rank amongst the lowest in the world, and annual per capita GDP growth is projected to average 2.5 percent over the next 10 years.[15]

15 Long-term growth projections have been derived using a human-capital adjusted Solow growth model, "The Long-Term Growth Model: Fundamentals, Extensions, and Applications, World Bank 2022." The Solow model explains long-run economic growth through capital accumulation, labor growth, and technological progress and has been augmented to include human capital.

The country can reach lower middle-income status earlier if reforms are more ambitious. Sierra Leone can become lower middle-income by 2032 by adopting an ambitious agenda that will help sustain long-term growth above 6 percent (Figure 22). The underlying reforms will: (i) raise the level of human capital by improving both access and quality of education (more in Chapter 3); (ii) enhance capital accumulation by raising the domestic savings rate, attracting more foreign direct investment and creating a more conducive business environment (more in Chapters 2 and 4); and (iii) improve productivity by addressing institutional and governance constraints to growth (addressed across chapters). Macroeconomic stability needs to be considerably strengthened–with emphasis on substantially lowering inflation and the public debt burden–to raise both the savings and investment rates and boost productivity growth. Annual GDP growth will need to average 6.3 percent during 2025-32. To sustain this pace, it is assumed that reforms yield: (i) annual growth of TFP in the non-resource sector (defined as the economy other than iron ore mining) of 2 percent by 2032 (and constant after that); (ii) investment as a share of GDP rising to 25 percent by 2031 and remaining at that level; and (iii) human capital reforms, including improvements in the quantity and quality of schooling, child nutrition, and adult survival that start to have effect from 2035 (as children with higher human capital enter the workforce). A more moderate reform scenario would delay lower middle-income status by two years (Figure 22). Details of the underlying assumptions are presented in Annex 1: Chapter 1.

FIGURE 21:
IMPACT OF MODERATE REFORMS ON GDP GROWTH, BY TYPE OF REFORM (GNI PER CAPITA IN US$), 2024-50

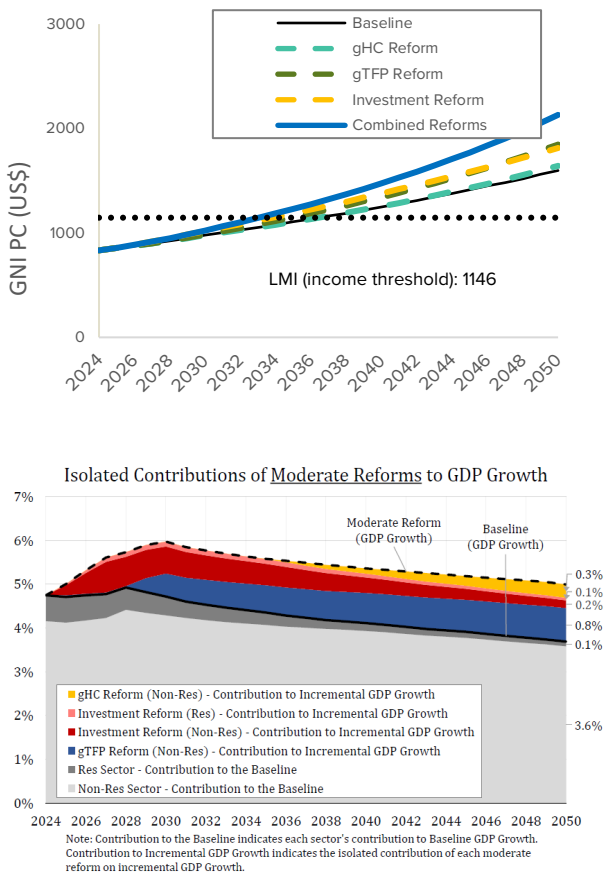
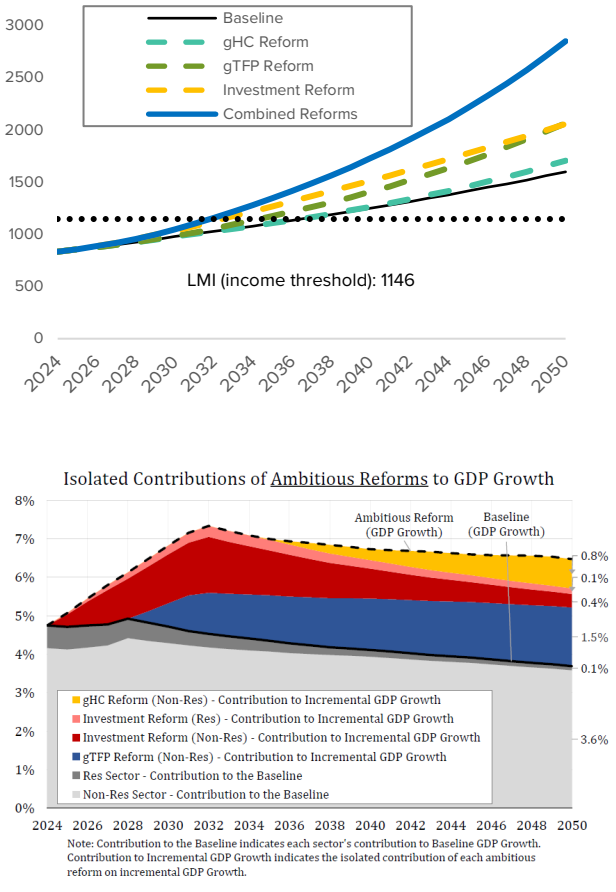


FIGURE 22:
IMPACT OF AMBITIOUS REFORMS ON GDP GROWTH, BY TYPE OF REFORM (GNI PER CAPITA IN US$), 2024-50



Note: gHC Reform = growth generated by reforms that boost human capital. gTFP Reform = growth generated by reforms that boost total factor productivity. LMI = lower middle-income. GNI PC = Gross national income per capita. Non-Res = non-resource sectors (sectors other than iron ore). Res Sector = iron ore sector.
Source: World Bank staff calculations.

The goal of reaching lower middle-income status is, however, a modest one that should be viewed only the next step towards a more sustainable and vibrant economy that delivers for the Sierra Leonean people. While Sierra Leone crossing the lower middle-income threshold by 2032 would be an accomplishment worth celebrating, its per capita income in 2032 would remain much lower than those of aspirational peers such as Lao P.D.R. and Côte d'Ivoire in 2023. Even with a per capita income of US$1146 in 2032, Sierra Leone would only have reached 55 percent and 46 percent of the 2023 per capita incomes of Lao P.D.R. and Côte d'Ivoire respectively. Policymakers in Sierra Leone need to remain ambitious in looking for ways to sustain rapid and consistent growth beyond the attainment of lower middle-income status in the coming years.

Risks from megatrends to long-term growth

An evolving regional and global environment and emerging megatrends will influence Sierra Leone's trajectory. From the COVID pandemic to the war in Ukraine to rising global interest rates to climate change, the world is experiencing more uncertainty and negative developments which can impinge on Sierra Leone's growth path.

Climate change

Sierra Leone's exposure to climate change hazards is high, and its economy is intrinsically linked to natural capital, making it vulnerable. Most of the country's economic activities are located in coastal areas, making it highly vulnerable to the damaging impacts of several natural hazards, including coastal erosion, sea-level rise, flooding, landslides, and tropical storms. In addition, the country has a very hot and wet climate, leading to periods of high heat and extreme rainfall. High temperatures and humidity together lead to a higher heat index, increasing the risk of heat-related health problems, as well as damages to the agriculture, construction, and energy sectors. Moreover, extreme rainfall events can lead to flash floods in urban areas, riverine flooding, and landslides, causing severe economic damage and loss of lives, with disproportionate impact on the poorest and most vulnerable. Epidemics and other health-related risks, including cholera and dengue fever outbreaks in the aftermath of floods, are another key concern. Extreme rainfall may be interspersed with periods of drought. With little storage capacity, more erratic rains can cause increasing seasonal water stress, driving long-range issues for water management, agricultural and food production, health, and other aspects of environmental management.

If no adaptive measures are taken, labor and crop productivity will decline, accounting for the most economic damage from climate change, while losses from capital stock damages are also substantial. Heat stress is expected to reduce labor productivity significantly due to rising temperatures. Most of the country has limited access to electricity and workers have little protection from extreme heat. Agricultural workers are especially vulnerable to heat stress as they work predominantly outdoors. While service and industry jobs have been growing over the last decade, many workers still spend long hours outdoors or in poorly ventilated environments with little to no cooling. Sierra Leone's agricultural activity falls under all climate scenarios. Essentially, there is no preferred climate scenario for Sierra Leone's crop production— whether it becomes hotter and drier or warmer and wetter. Under a dry/hot climate scenario, lower rainfall and higher temperatures will reduce water availability (for both irrigated and rainfed crops) and yields of crops that are sensitive to extreme heat, such as rice, cassava, and staple vegetables. In the other climate scenario, a wetter and warmer future would make crops less vulnerable to heat, but heavier rainfall would still lower crop yields through the risk of soil erosion and flooding.

The full macroeconomic impact of climate change is difficult to ascertain but is likely to be nearly 10 percent of GDP by 2050 under adverse climactic conditions. These estimates are based on a macro-structural model of Sierra Leone's economy and assume that the sectoral composition of its economy changes at a business-as-usual pace. The main affected areas are expected to be falling labor productivity for outdoor workers and those lacking temperature-controlled environments, accompanied by agricultural production, particularly rainfed crops, and soil erosion. Large one-time disasters such as floods or tsunamis continue to pose a risk. The agricultural sector is expected to be most impacted, while industry is expected to be the least affected.[16]

16 Risks and adaptation strategies to deal with climate change are discussed in more detail in the upcoming World Bank Country Climate and Development Report for Sierra Leone (2025).

Rising risks of debt distress

Debt in low-income developing countries has risen sharply in the last two decades. Public debt reached record levels during the pandemic, in both advanced economies and low- and middle-income countries. For the poorest and most fragile countries, high fiscal and debt vulnerabilities undermined macroeconomic stability. The most significant rise took place in IDA-eligible countries and particularly in low-income countries. On average, external debt as a share of GNI for IDA-eligible countries rose from 20 percent in 2010 to 36.2 percent in 2021. For low-income countries, 24 of which benefited from the Heavily Indebted Poor Country Initiative and Multilateral Debt Relief Initiative, the increase was even more pronounced. Today, 60 percent of the countries eligible for the Debt Service Suspension Initiative are assessed at high risk of debt distress or are already in debt distress.

Debt repayments have also become costlier. Along with rising debt levels, interest costs have also risen – both due to rising interest rates, and a strengthening US dollar which has caused developing country currencies to depreciate. The average interest rate on external borrowings has risen in the aftermath of COVID-19 – further compromising the ability of shock-stricken countries to repay their debt. The external debt service payments on public and publicly guaranteed debt by the world's poorest countries are estimated to have surged by 35 percent from 2021 to over US$62 billion in 2022. Five countries have been in default on their external debt obligations (Belarus, Lebanon, Ghana, Sri Lanka, and Zambia; Chad also restructured its debt). On average, sovereign defaults in 2020-22 are taking longer to resolve, albeit they constitute a limited sample size (Fitch, 2023). The median duration of defaults since 2020 is 107 days compared with 35 days for all defaults since 2000. Slow restructurings do not serve the interests of debtors or creditors and add to the costs of financing. The Common Framework was intended to facilitate creditor coordination but, so far, is not proving effective in resolving crises quickly. The risks from financial contagion are elevated. Rising risks of debt distress limit the capacity of lending institutions, multilateral, bilateral to continue providing financing. While the private sector may still be able to provide funds, the terms are likely to be increasingly unfavorable – further aggravating the risks of debt distress.

Sierra Leone faces rising risks of debt distress with already burdensome public debt levels in the face of higher global interest rates, limited capacity of bilateral and multilateral lending institutions, and high investment needs at home. The debt to GDP ratio has more than doubled over the last decade, from 22 percent in 2013 to nearly 50 percent in 2024, and the country is assessed to be at high risk of external and overall debt distress. This has been driven by spillovers from overlapping shocks (such as Ebola and the commodity price collapse in 2015-16, and COVID-19 and the war in Ukraine in 2020-22), which were aggravated by policy slippages. A widening fiscal deficit and loose monetary policies aggravated inflationary pressures and led to rapid currency depreciation – which further worsened the external debt burden. Debt is largely external (67 percent), of which 80 percent is owed to multilateral institutions. Net flows from most multilaterals still remain significant and positive, mitigating the risk of default. However, debt service is elevated and estimated at above 100 percent of revenues in the foreseeable future – driven in large part by short-term, high-interest domestic borrowings with high rollover risks. There has been a deterioration in both solvency and liquidity indicators. Sierra Leone needs to take urgent steps to address its risks of debt distress and avoid getting hit by a financial contagion.

Policy priorities for a way forward

» **Strengthen the macro-fiscal framework in the near term and fiscal and monetary policy institutions in the medium-term to help maintain stability going forward.** Restoring macroeconomic stability in Sierra Leone is a prerequisite for sustainable future growth: low and stable inflation, a stable currency, ample fiscal and external buffers to respond to shocks, and lower risks of debt distress.

- Enforcing fiscal discipline and renewing commitment to fiscal consolidation is crucial to ensure fiscal and debt sustainability. Near-term actions include: (i) improving domestic revenue mobilization by implementing priority measures in the Medium-Term Revenue Strategy, including those legislated in the 2023 Finance Act, such as streamlining tax expenditures and

strengthening tax compliance and administration by facilitating inter-operability and digitalization of revenue collections; and (ii) continuing with expenditure consolidation by containing the wage bill and reducing subsidies to state-owned enterprises.

- Strengthen expenditure management and budgetary controls along the lifecycle of the budget, starting from budget preparation to spending approvals to autonomous auditing of public finances. This reform can help contain expenditure overruns which have averaged over 15 percent in recent years.
- Monetary policy will need a multipronged approach to controlling inflation. The monetary policy rate should continue to be set at levels that contribute to lowering inflation. The central bank should limit the use of secondary market purchases to support government issuance and consider introducing its own short-term liquidity management operation, ideally with a standardized tenor, along with strengthened coordination with the Ministry of Finance on cash management. Over the medium term, a deeper financial market will allow for better monetary policy transmission.
- Active debt management can support debt sustainability and reduce vulnerabilities. In the near term, continued reliance on concessional sources of financing can help contain the servicing burden. Containing short-term high-interest domestic debt will play an important role in addressing emerging liquidity constraints by lengthening maturities and reducing crowding-out of private sector financing by broadening the investor base away from commercial banks.

» **Invest in human capital development.** Reforms that can support human capital development are discussed in more detail in Chapter 3 but broadly include: (i) quality education programs across primary, secondary and tertiary levels (including vocational training programs) to boost employability and close the gap between education and labor market; and (ii) science, technology, engineering, agriculture and mathematics training and digital training programs to empower workers to take up jobs in emerging industries and drive innovation.

» **Deepen capital accumulation.** Efforts to attract domestic and foreign capital are needed urgently to support the country's growth ambitions. Reforms that can support capital accumulation are discussed in more detail in Chapters 2 and 4 and address constraints faced by the domestic financial sector, in particular reducing the dominance of government borrowing from banks, which has crowded out private sector financing. Addressing the infrastructure deficit and facilitating connectivity and access to power will also address key constraints faced by businesses and support their appetite for investments.

» **Raise productivity by addressing institutional weaknesses.** Contributions from productivity have remained subdued, largely on account of bottlenecks created by regulatory overload, excessive state participation in non-competitive sectors, inadequate coordination within government entities, and inefficient implementation of laws. The rest of the report, across all chapters, will explore ways to address institutional weakness in creating an enabling business environment, attracting investments, and addressing regulatory or bureaucratic bottlenecks.

» **Prepare for climate change.** Climate change poses a major risk to Sierra Leone's future. The country has high exposure to climate impacts and high vulnerability to that exposure. To be able to meet its upcoming investment demands to adapt to climate change, Sierra Leone needs to gain additional access to financing. The country is already at high risk of debt distress, and fiscal space is very limited. It will need to explore innovative financing from development partners and leverage private financing and public-private partnerships while maintaining debt sustainability.

2

UNLOCKING THE POTENTIAL OF PRIVATE SECTOR PARTICIPATION

A vibrant private sector can be the driver of economic transformation and job creation, and a major source of tax revenue to finance public goods. These enterprises are the ones that can raise productivity to underpin growth while creating jobs on the scale needed for Sierra Leone's expanding labor force in the coming years. Most of its domestic firms remain small and relatively unproductive even after years of operation. Reducing the barriers that face private firms, whether they are domestic or foreign, will help them increase their productivity as well as their potential for job creation. This chapter seeks to provide a snapshot of private sector performance and tries to distill its drivers. It will also reflect on key constraints faced by firms and proceed to make policy recommendations to alleviate those constraints.

The private sector landscape in Sierra Leone

Sierra Leone has a private sector dominated by small firms, similar to other countries in the region. According to the 2022 Business Census, 165,514 business establishments are currently operating in Sierra Leone. Of these, 29 percent were permanent and regular business establishments, whilst the remaining 71 percent were non-permanent tiny businesses. 71 percent of these businesses are in the trade sector, with only 12 percent in manufacturing, 5 percent are hotels, restaurants, and bars, and 4 percent are in personal services. The Census reported a total of 235,413 workers, and two-thirds of the businesses recorded have only one or two workers. Most firms (91 percent) are sole proprietorship, making business owners fully liable in case of bankruptcy or failure. Nearly half of all enterprises (48 percent) are in the western provinces.

Informality is prevalent, household enterprises are an important source of livelihood options for over half of Sierra Leonean households, and rural poor households depend on subsistence agriculture. Around 50 percent of households in Sierra Leone operate a non-farm enterprise. 35 percent of households in the poorest quintile operate a non-farm enterprise, compared to 65 percent in the richest quintile, suggesting that rural poor households largely rely on subsistence agriculture for their livelihoods. 96 percent of non-farm enterprises do not employ anyone outside of the household, and 75 percent of enterprises are not registered with national or local authorities, 85 percent do not keep financial records, and less than 5 percent borrow from financial service providers to start their enterprise. Given the prevalent informality in Sierra Leone and the importance of household enterprises as livelihood options for over half of Sierra Leonean households, there is room for policy interventions to improve productivity in informal and household enterprises, including through expanding training and access to finance to informal firms.

A large share of firms are young (fewer than 10 years old) and small, consistent with findings across SSA. Countries in the region with similar GDP or population, such as Liberia, Niger or Togo, show a similar average age of firms (Figure 23). The average age of a firm in Sierra Leone is 15.1 years, marginally above the SSA average of 14.9. Further, most Sierra Leonean firms are small: 71 percent are small firms, 23 percent are medium-sized firms, and 6 percent are large firms (Figure 24).

FIGURE 23:
AGE OF FIRMS, SIERRA LEONE AND PEERS (AVERAGE YEARS), VARIOUS YEARS

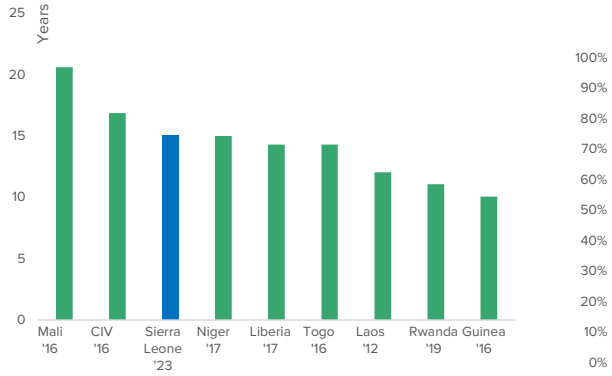
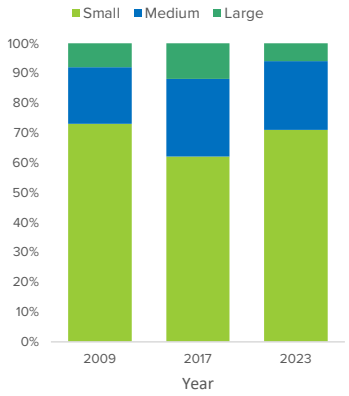


FIGURE 24:
FIRM SIZE (%), 2009, 2017, AND 2023



Note: Large firms have 100 or more employees, medium have 20–99, and small have 5–19.
Source: World Bank Enterprise Surveys and Stats SL Business Census.

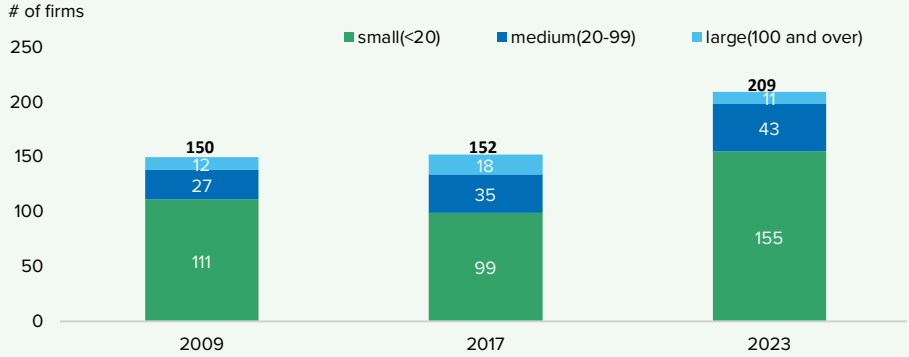
BOX 2:

Sierra Leone Enterprise Survey

The World Bank Enterprise Survey provides a representative sample of the non-extractive, non-agricultural, formal private economy, comparable across 155 countries. To be included in the survey, firms must have at least five employees, be formally registered, and have a minimum of 1 percent private ownership. Sector coverage includes the manufacturing, construction, and most services sectors, but excludes public utilities, government services, health care, and financial services. The Survey interview takes place with top managers and business owners. In Sierra Leone, business owners and top managers in 209 firms were interviewed between December 2022 and April 2023 for the latest survey. Enterprise data were also collected in 2009 and 2017.

The Survey data for Sierra Leone in 2023 includes 209 firms and is stratified to obtain a representative sample of large (100 or more employees) firms, medium-sized (20–99 employees) firms, and small (5–19 employees) firms (Figure 25). The Survey does not cover micro firms (with fewer than 5 employees). Firms in retail and other services account for 52 percent of firms, with the remaining share in manufacturing. Within the sample, 29 percent of employees are female, more than the average for SSA (23 percent), but only 19 percent of firms have female participation in ownership, less than the SSA average (27 percent).

FIGURE 25:
SIERRA LEONE ENTERPRISE SURVEY SAMPLE BY SIZE (NUMBER OF FIRMS), 2009, 2017, AND 2023



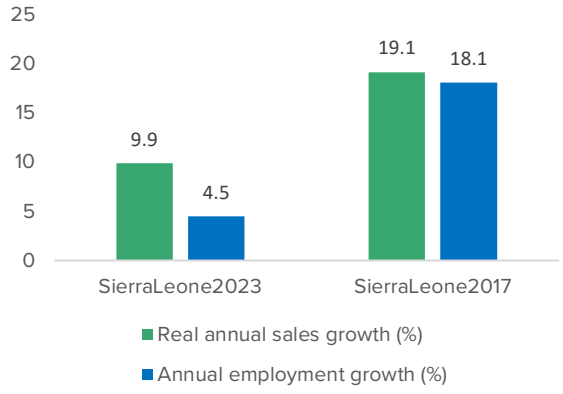
Source: World Bank Enterprise Surveys.

Firm-level performance

Sales, employment, and productivity

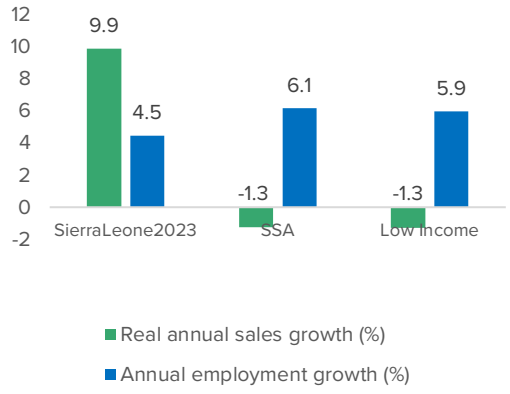
Both sales and employment growth has slowed in Sierra Leone, but firms continued to perform better than in other countries. This slowdown mirrors the performance of the overall economy, which also decelerated following the impact of overlapping economic shocks during 2020-22. Sales fell by 9.9 percent in 2023 in Sierra Leone (Figure 26). Large firms were most affected, reporting a contraction in annual sales by 5.3 percent, while small and medium-sized firms continued to grow. Low-income countries and African economies performed even worse, registering a decline in sales in 2023; however, employment in Sierra Leone suffered a much sharper slowdown than in comparators (Figure 27).

FIGURE 26:
SALES AND EMPLOYMENT GROWTH (%), 2017 AND 2023



Source: Enterprise Surveys, 2023, 2017.

FIGURE 27:
SALES AND EMPLOYMENT GROWTH, SIERRA LEONE AND COMPARATORS (%), 2023



Despite faster growth in sales, Sierra Leonean firms struggle to generate employment as they grow in size. Relatively fewer workers are employed in older firms in Sierra Leone compared to other countries, indicating that firms struggle to grow over time. A crucial driver for economic development is the speed with which the average business grows over its lifecycle.[17] Enterprise Survey data shows that post-entry performance in the Sierra Leone formal private sector is poor compared to regional peers. In Sierra Leone, firms 0-10 years of age account for 35 percent of all firm jobs, more than the average for Sub-Saharan Africa, where this number is 14 percent (Figure 28). A Sierra Leonean firm more than 21 years old has only 8 employees on average, compared to 38 employees in Liberia or 22 employees on average in Sub-Saharan Africa (Figure 29). These outcomes suggest that while firms perform well in terms of sales in Sierra Leone, they do not generate as much employment, especially as they grow in size. This phenomenon could also be a reflection of improvements in labor productivity in larger firms compared to smaller ones, or a greater capital intensity of large firms.

17 Hsieh, C.T. and Klenow, P.J., 2014. The life cycle of plants in India and Mexico. *The Quarterly Journal of Economics*, 129(3), pp.1035-1084; and Eslava, M., Haltiwanger, J. and Pinzón, Á., 2022. Job Creation in Colombia Versus the USA: 'Up-or-out Dynamics' Meet 'The Life Cycle of Plants'. *Economica*, 89(355), pp.511-539.

FIGURE 28:
EMPLOYMENT BY AGE OF FIRM, SIERRA LEONE AND PEERS (%)

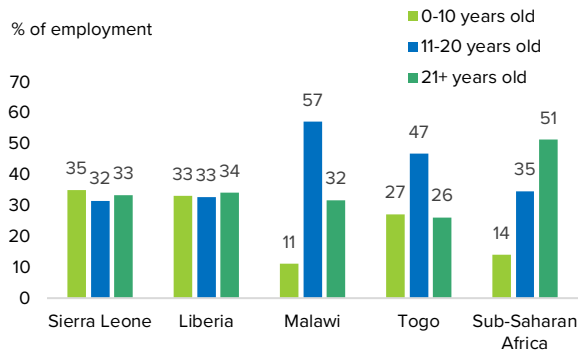
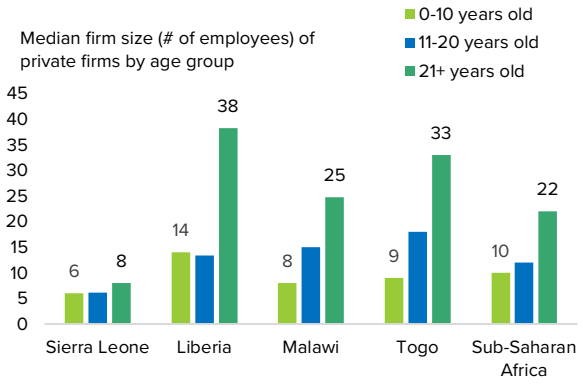


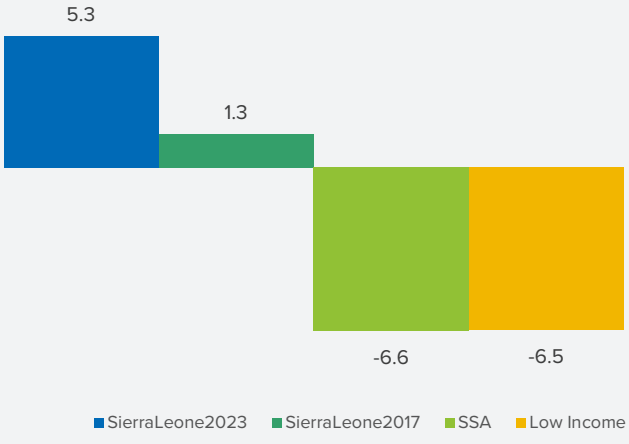
FIGURE 29:
FIRM SIZE BY AGE OF FIRM, SIERRA LEONE AND PEERS (NUMBER OF EMPLOYEES)



Sources: World Bank Enterprise Surveys for Sierra Leone (2023), Liberia (2017); Malawi (2014); Togo (2016); Sub-Saharan Africa (average over most recent survey in each country 2014-23). Results look similar using the Sierra Leone 2017 and 2009 cross sections.

Labor productivity has improved. Growth in labor productivity accelerated between 2017 and 2023, and Sierra Leone's rate in 2023 outpaced the performance in other low-income countries and across SSA (Figure 30). Several factors have been found to be associated with labor productivity.

FIGURE 30:
LABOR PRODUCTIVITY GROWTH, SIERRA LEONE AND COMPARATORS (%), 2017 AND 2023



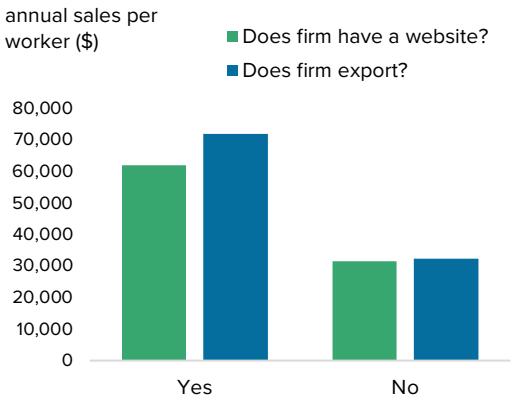
Source: Sierra Leone Enterprise Survey, 2023.

Correlates of firm-level productivity

Firms with access to larger markets through exports or by having a website are more productive. In Sierra Leone, a firm with a website has twice as many sales per worker than a firm without a website. This difference is roughly the same magnitude as the productivity premium for firms that export compared to those that do not export (Figure 31). The average firm with a website is also larger, with 20 employees on average, and the average firm without a website has only 7 employees (Figure 32). Exporting firms in developing countries are more productive than their non-exporting

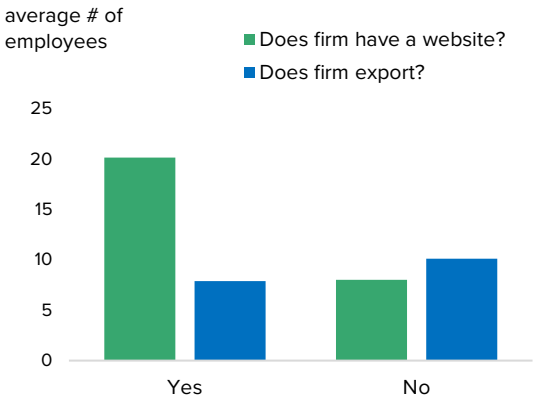
counterparts. International competition, economies of scale, specialization, and knowledge spillovers all contribute to increases in productivity over those firms only operating in domestic markets.[18] Relative to non-exporters, exporting firms also pay higher wages, have higher efficiency levels, and employ more workers.[19] Despite these positive implications of expanding markets, private firms in Sierra Leone lag those in peer countries in terms of international and domestic market access. Given the obstacles firms face in Sierra Leone, only 2 percent of firms export, and only 16 percent have a website. In comparison, across Sub-Saharan Africa, 66 percent of firms have a website, and 5 percent of firms export. A potential quick-win campaign could be an effort to get more firms to create their own websites and reach new domestic customers, as part of a longer-term program to expand international exports.

FIGURE 31:
SALES BY FIRMS, BY EXPORTING AND WEBSITE STATUS (US$ PER WORKER), 2023



Source: Sierra Leone Enterprise Survey 2023.

FIGURE 32:
AVERAGE EMPLOYMENT OF FIRMS, BY EXPORTING AND WEBSITE STATUS (NUMBER), 2023

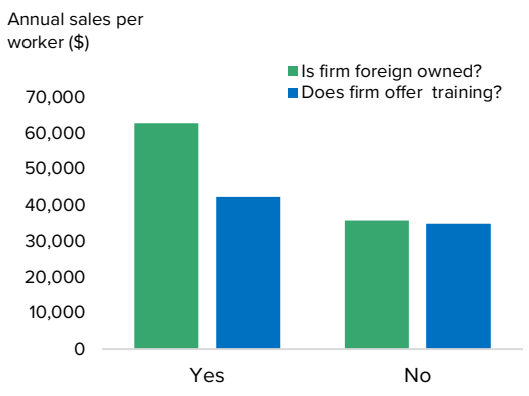


Firms with foreign investment are more productive and larger, suggesting foreign investment has helped to alleviate financing constraints. Foreign investment is one way through which firms can access finance when it is an obstacle. Countries at all levels of development seek to attract FDI for benefits, including knowledge spillover and technology and skills transfer.[20] Reflecting these benefits, in Sierra Leone, firms with foreign investment are about twice as productive as those without foreign ownership, with annual sales per employee almost doubled (Figure 33). Firms with foreign ownership also have more than twice as many employees as those who do not (Figure 34). Despite these benefits, in Sierra Leone, only 3 percent of firms have foreign ownership, compared to Liberia, Malawi, and Togo, where 23 percent, 21 percent, and 28 percent of firms have foreign ownership.

On-the-job training is also associated with greater productivity and more employees. 21 percent of firms in Sierra Leone provide training compared to the Sub-Saharan African average (14 percent), which may reflect skills shortages in Sierra Leone or simply greater investments in human capital. The Enterprise Survey does not ask whether skills adequacy is a constraint, but the correlation between offering on-the-job training and productivity is consistent with a model in which such training increases productivity and attracts workers.

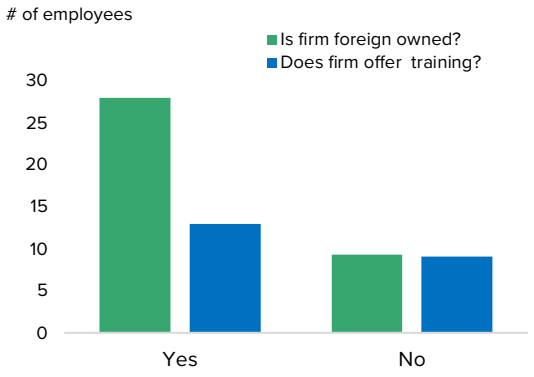
18 an Biesebroeck, J., 2005. Exporting raises productivity in sub-Saharan African manufacturing firms. *Journal of International economics*, 67(2), pp.373-391.
19 Esaku, S., 2021. Export markets and firm productivity in Sub-Saharan Africa. *a* 22(2), pp.254-273.
20 Alfaro, L. 2017. "Gains from foreign direct investment: Macro and micro approaches." The World Bank Economic Review 30, Supplement 1, March 2017: S2-S15.

FIGURE 33:
FIRM PRODUCTIVITY, BY FOREIGN OWNERSHIP AND EMPLOYEE TRAINING STATUS (US$ PER WORKER), 2023



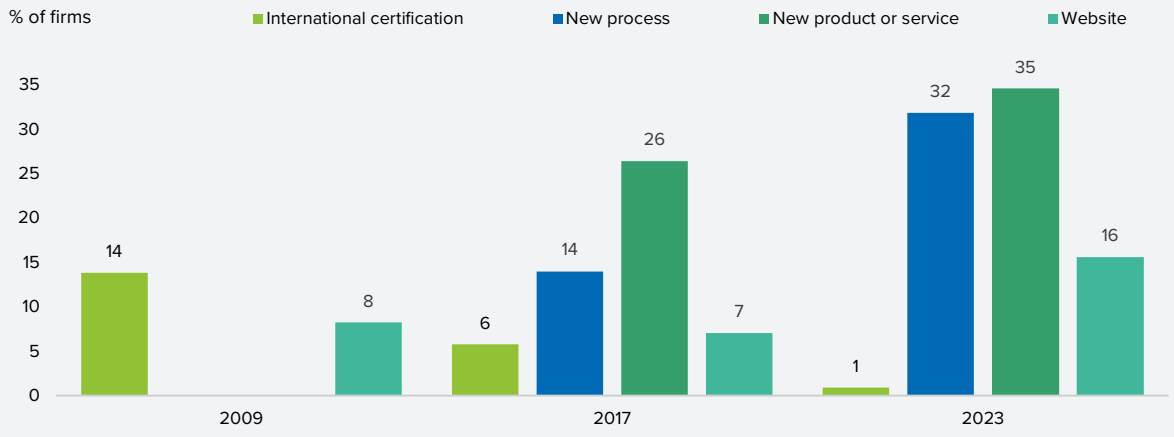
Source: Sierra Leone Enterprise Survey 2023.

FIGURE 34:
AVERAGE EMPLOYMENT OF FIRMS, BY FOREIGN OWNERSHIP AND EMPLOYMENT TRAINING STATUS (NUMBER), 2023



Innovation and adoption of technologies has also improved. An increasing number of firms are offering a product or service that is new to the firm's main market, and an increasing number have a website. In 2023, 35 percent of firms were offering a new product or service compared to only 26 percent in 2017. Similarly, use of websites and the introduction of a new process have doubled since 2017. The increase in share of firms with a website from 7 percent in 2017 to 16 percent in 2023 indicates momentum that can be built upon (Figure 35). However, firms in Sierra Leone are less likely to achieve international certifications, which can be essential for obtaining higher prices in key export markets such as cocoa.

FIGURE 35:
INNOVATIONS IN FIRMS, BY TYPE (% OF FIRMS), 2000, 2017, AND 2023

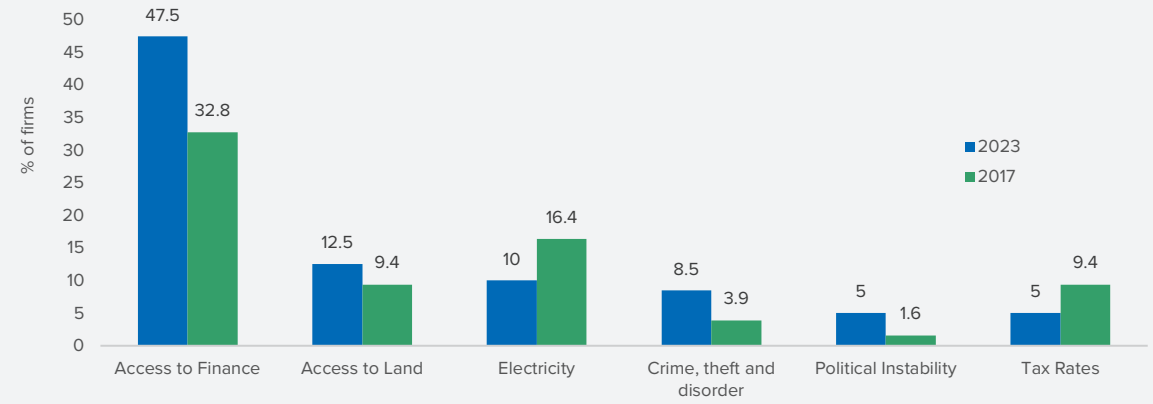


Note: No data on new process or product or service in 2009.
Source: Sierra Leone Enterprise Surveys.

Constraints to the growth of firms

Access to finance remains a key business environment constraint, followed by access to land and access to electricity. When asked to choose the biggest obstacle to their business constraints from a list of 15 business environment obstacles, business owners and operators named access to finance 47.5 percent of the time, followed by access to land (12.5 percent) and power (10 percent) (Figure 36). The percentage of firms who believe access to finance remains the most important constraint increased from 32.8 percent in 2017 to 47.5 percent in 2023. The second most important constraint, access to land, increased from 9.4 percent to 12.5 percent; and the third most important constraint, access to electricity, declined from 16.4 percent to 10 percent.

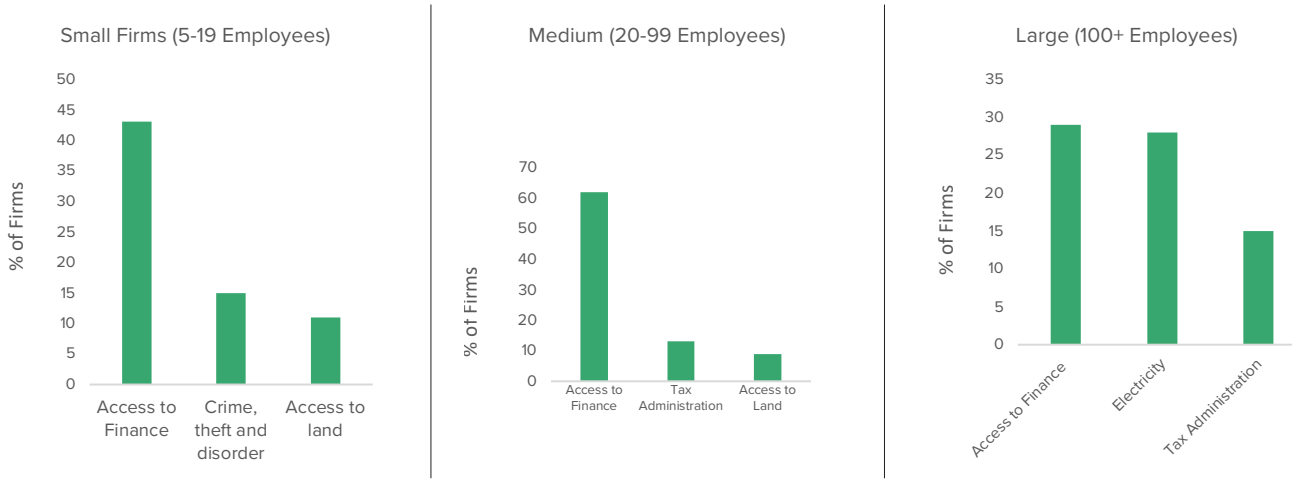
FIGURE 36:
TOP BUSINESS ENVIRONMENT CONSTRAINTS, BY CATEGORY (% OF FIRMS), 2017 AND 2023



Source: Sierra Leone Enterprise Surveys 2023, 2017.

The perception of constraints to business differs across different sizes of firms, except for access to finance. The second ranked constraints to firm growth after access to finance varies by firm size. For small firms, the second most binding constraint is crime, theft and disorder, while for medium-sized firms, tax administration comes in second, and electricity ranks second for large firms (Figure 37).

FIGURE 37:
TOP THREE BUSINESS CONSTRAINTS, BY FIRM SIZE (% OF FIRMS), 2023



Source: Sierra Leone Enterprise Survey, 2023.

Limited competition in markets stifles firm growth. Competition among firms drives shared growth through several channels, including productivity, investment, exports, and prices. Product market competition fosters aggregate productivity dividends through three main dimensions: within firms (productive efficiency), between firms (allocative efficiency), and entry/exit (market selection). The latest data from Bertelsmann Stiftung's Transformation Index (BTI) suggest that regulatory interventions that foster competition in Sierra Leonean markets are less developed compared to all comparator countries (Figure 38). (A description of the BTI index is provided in Annex 1: Chapter 1). However, policies to avert anticompetitive business practices appear to be slightly better than in the average SSA country and even some aspirational peers (Figure 39). The Government of Sierra Leone (GoSL) plays a role both as a seller and buyer of goods and services. These state involvements in markets end up shaping the extent of market competition and, thus, market outcomes in Sierra Leone.

FIGURE 38:
PERCEPTIONS OF MARKET COMPETITION, 2022 (HIGHER VALUE = BETTER COMPETITION-ENABLING ENVIRONMENT)

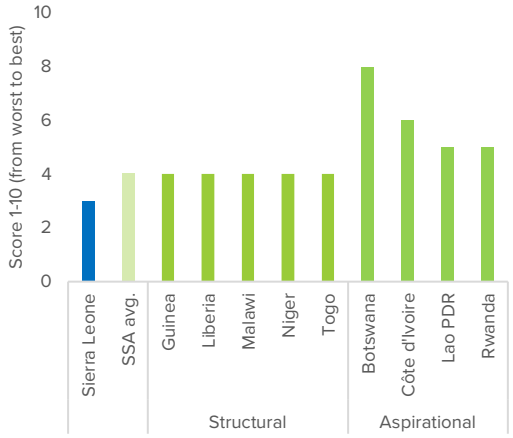
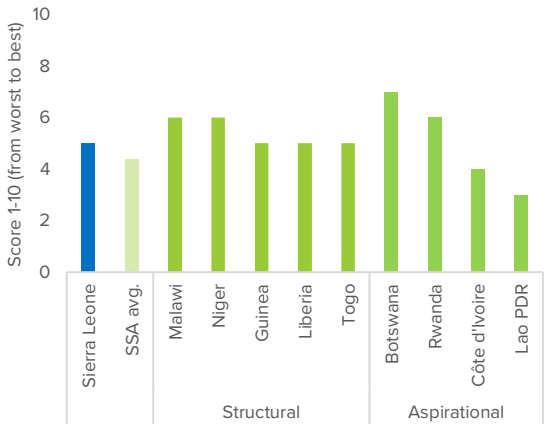


FIGURE 39:
PERCEPTIONS OF ANTI-MONOPOLY POLICY, 2022 (HIGHER VALUE = STRONGER POLICY IN PLACE)



Note: The Bertelsmann Stiftung's Transformation Index (BTI) reflects the views of country experts at the end of January 2021.
Source: World Bank staff calculations based on BTI, 2022.

Access to finance

Access to credit in Sierra Leone is very limited. At the end of 2022, credit to the private sector as a percent of GDP stood at 5 percent (a decline from 6 percent in 2020). This is one of the lowest levels of credit intermediation in low-income Sub-Saharan African countries. Firms depend on internally-generated funds which are usually short term and hence inconsistent with sustainable long-term investment and growth. The main source of financing is internal funds or retained earnings for 84 percent of small firms, 88 percent for medium, and 96 percent for large firms (Figure 40). This form of financing is necessarily short-term as a firm can only invest based on one business year at a time, which may be limiting the growth of firms. Suppliers, customers, and non-bank financial institutions are also used for financing, while banks only have a minor role in large firms (Figure 41). The low level of credit intermediation in Sierra Leone is caused by a number of factors, including the crowding-out effect of GoSL offering high-yielding government securities that carry zero risk-rating on banks' balance sheets and underdeveloped financial market infrastructure, limiting the ability of banks to take risks.

FIGURE 40:
FIRMS' FINANCING, BY SOURCE AND FIRM SIZE (%), 2023

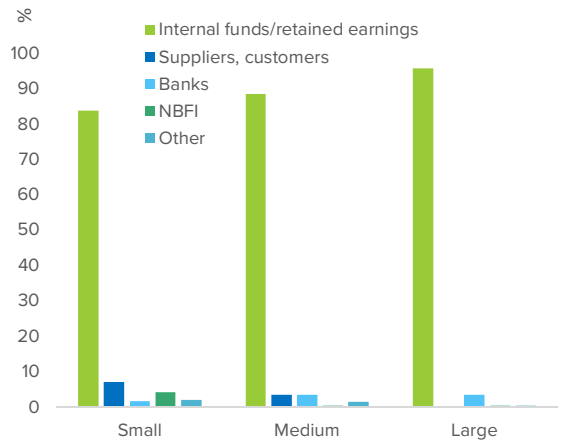
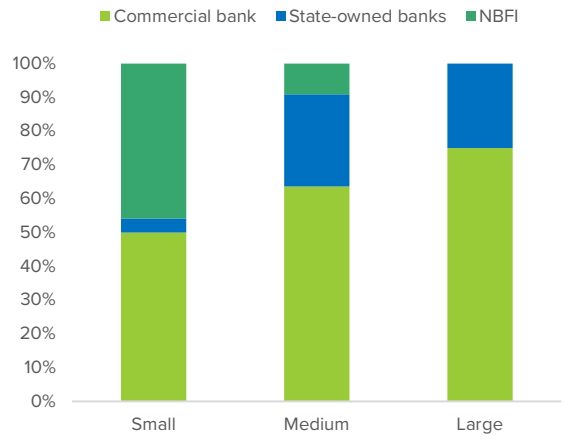


FIGURE 41:
FIRMS' FINANCING, BY TYPE OF INSTITUTION GRANTING LOAN AND FIRM SIZE (%), 2023



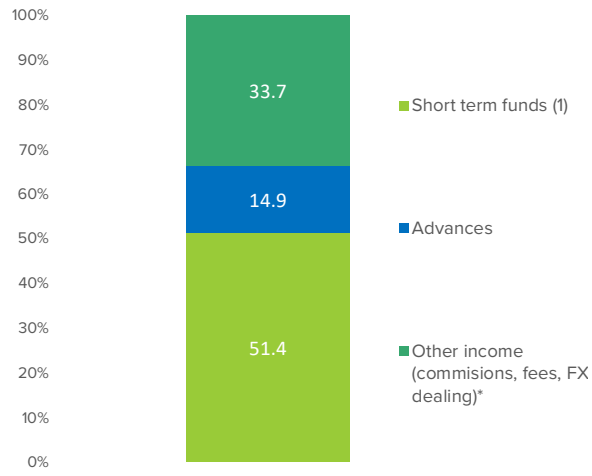
Note: NBFI = non-bank financial institutions.
Source: Sierra Leone Enterprise Survey 2023.

The domestic financial sector is highly concentrated with five banks holding 66 percent of financial assets and the largest bank being publicly owned. The financial sector consists of 230 institutions, including commercial banks, microfinance institutions, pension schemes, and other non-bank financial institutions, with total assets of 43 percent of GDP. The banking sector is the largest segment, accounting for over 80 percent of financial system assets and consisting of 14 licensed commercial banks: two state-owned (including the largest bank); two private domestic banks; and ten foreign banks, mainly Nigerian. In addition, there are more than 100 non-bank credit institutions that together add just 4 percent to financial sector assets. These include four deposit-taking microfinance institutions and 45 credit-only microfinance institutions, which serve different segments of the population with different financial products and services. An Apex Bank conducts delegated supervision of the 17 community or rural banks and 59 financial services associations, which are referred to as rural financial institutions. There are twelve insurance companies and one government owned and managed pension fund.

Government borrowing is crowding out private sector lending. Treasury bill holdings as a share of total assets increased from 16.8 percent at the end of 2010 to 39.1 percent at the end of June 2023, which was a slight decline from a peak of 43.5 percent in the third quarter of 2021. Conversely, during the same period, lending to the private sector decreased from 33.9 percent of total assets to 13.2 percent. Additionally, investments which consist mainly of holdings of GoSL Treasury bills, accounted for 51.4 percent of banking sector total income in mid-2023, well above loans or advances (of only 15.5 percent of total assets)[21]. One-year Treasury bills had a yield of 29 percent by August 2023, when inflation hit 54.5 percent just a month later, and the commercial bank average lending rate was 23 percent by late 2023.[22] With access to high-yield government debt, banks have little incentive to develop products for small and medium enterprises that require financing. Foreign exchange-related income represented another 33.7 percent of total income, mainly from placements with foreign banks. Assets placed with foreign financial institutions are significantly higher than the domestic private sector credit portfolio due to the recent increase in foreign currency deposits[23] and the fact that banks have not been allowed to lend in foreign currency to manage pressure on the Leone and reduce the incentive for dollarization. The central bank has recently lifted the ban on foreign currency lending, and banks will be able to lend to borrowers with foreign currency receipts, which should help stimulate investment export-oriented sectors and contribute to increased lending to the private sector.

21 Bank of Sierra Leone, Monetary Policy Report, September 2023.
22 Bank of Sierra Leone Statistics Data Warehouse.
23 About half of bank deposits are in foreign currency, representing 37 percent of all liabilities, creating a significant risk for the banks and the government given that most assets are denominated in local currency.

FIGURE 42:
BANKS' INCOME SOURCES, BY TYPE (%)



Note: (1): Mostly government bonds' income. *: Mostly foreign exchange (FX) dealing
Source: Bank of Sierra Leone, Monetary Policy Report.

The limited lending that goes to the private sector is concentrated in the trade and commerce sectors. At end-September 2023, the top three sectors in commercial bank credit portfolios were commerce and trade (26 percent), business services (14 percent), and personal services (12 percent). Manufacturing and construction followed with 10 percent and 8 percent shares. Very little credit is going to other sectors such as agriculture (with only 4 percent of total lending). This allocation of credit reflects several factors, including: (i) an economy with little diversification, mainly concentrated in trade activities; (ii) the short-term nature of banks' funding (relying on deposits, of which 90 percent carry maturities of less than one year), preventing bank lending to activities (e.g., in the manufacturing sector and agriculture) that usually require longer maturity loans;[24] (iii) risk averseness, exacerbated by high non-performing loans, which have been consistently above 10 percent for at least three years and stood at 13.4 percent of loan portfolios in the second quarter of 2023.

The inability to conduct proper credit risk assessments, due to the lack of a credit reference system and low capacity of credit officers within banks, which contributes to higher levels of non-performing loans. Consequently, the cost of credit is high, and collateral requirements in the form of immovable assets are high.

24 In Sierra Leone, there is little lending with maturities beyond 12-18 months.

A movable collateral registry was launched in December 2020, but issues with enforcement undermines the utility of the system. Therefore, lenders undervalue moveable collateral and prefer immovable collateral. However, whether the asset is immovable or movable, in practice collateral is mostly employed by financial institutions as a symbolic pledge since neither provide sufficient protection or recovery against credit risk. Seizing and recovering collateral is almost impossible: it would require a court order, which can be protracted (in some cases taking up to seven years) and costly. A functioning insolvency regime, which is essential for getting credit to flow to viable firms, is lacking. The legal, regulatory, and institutional frameworks need to be reformed to allow for the resolution of non-performing loans, facilitating business exit and reorganization, settling commercial disputes, and collecting debts.

Competition in the lending market is limited: private commercial banks are the main providers of finance despite the presence of large state-owned banks. Private commercial banks provide financing to 50 percent of small firms, 64 percent of medium firms, and 75 percent of large firms. Although the rationale for state-owned banks is to provide access finance to small and medium enterprises, this access has not been underway. Instead, the behavior of large, mostly public-sector-owned banks has provided incentives to private operators to follow the lead in pricing from inefficient market leaders, thus leading to higher costs of finance and lower coverage in the market. In addition, other financial institutions, who are more inclined to provide financing to the unbanked and micro, small, and medium firms, have limited capacity to meet the demand for credit due to their smaller capital bases and corresponding regulatory cap on how much they can lend. The Bank of Sierra Leone (BSL) guidelines for 'other deposit taking institutions' cap the maximum loan size to individual borrowers at 0.5 percent of the institution's capital base and to group loans at 1 percent. As a result, clients who graduate to larger ticket sizes and more sophisticated banking need to move to bigger institutions.

Foreign direct investments remain limited. FDI in Sierra Leone reached high levels during 2010-14 but then declined. Concerted efforts to attract FDI in conjunction with an upswing in commodity prices resulted in significant foreign investment in natural resources. FDI as a share of GDP peaked at 32 percent in 2011, before

easing to 7.5 percent in 2014, and fluctuated thereafter, declining with the 2014-15 Ebola crisis, increasing to 11 percent of GDP in 2017 before falling to around 1 percent in 2022. Major issues affecting FDI over the latter period included a decline in commodity prices that discouraged FDI in the natural resources sector and political turbulence. A more detailed analysis of access to foreign investments is included in Chapter 4.

Access to electricity

One of the major binding constraints to growth and poverty reduction in Sierra Leone is lack of adequate, reliable, and affordable electricity. During the decade-long civil unrest (1991-2001), the country's physical infrastructure, particularly electricity, water and sanitation, was severely damaged, and the associated human capital was greatly depleted. About 64 percent of the population do not have access to electricity, and those who do must deal with unreliable supply with frequent and long outages.[25] In 2021, the overall electricity consumption in Sierra Leone (of 329 gigawatt hours)[26] was roughly equivalent to the power consumed at just one medium-sized university in the United States, for example, Stanford University (324 gigawatt hours).[27] Per capita consumption was 39 kilowatt hours, less than a quarter of the median consumption in Sub-Saharan Africa (164 kilowatt hours).[28]

Unreliable power supply leads to losses of 16 percent in annual sales for firms in the country.[29] Over 6 in 10 firms report experiencing at least four outages lasting about nine hours in a typical month, leading to loss of 16 percent of sales. Comparable firms in Sub-Saharan Africa experienced similar number of outages but lasting for about four hours on average, leading to nearly 4 percent losses in annual sales, just one quarter of Sierra Leone's economic losses. There were over 18,000 interruptions on the grid in 2022. Firms are forced to rely on expensive and polluting generators to meet their power demands. Nearly 62 percent of firms in Sierra Leone own generators, relying on them for over a quarter of their power needs.

Generation capacity is inadequate to meet demand and is heavily dependent on heavy fuel oils (HFO), making its electricity supply expensive and carbon intensive. Currently, Sierra Leone has only four major sources of power generation: a hydropower plant (50 megawatts) that is able to supply less than 10 percent of its capacity in the dry season, the Côte d'Ivoire, Liberia, Sierra Leone and Guinea (CLSG) regional transmission line interconnector that supplies up to 27 megawatts, distributed HFO generation amounting to about 33 megawatts and a private HFO-based barge (Karpowership) that provides 30 to 60 megawatts depending on the season. Two solar plants (Newton, 6 megawatts, and Serengeti, 5 megawatts) have been added over the past year, and some district headquarters use HFO/diesel generator sets. As of December 2023, the country has an installed capacity of 235 megawatts (although only 159 megawatts is available due to maintenance issues), with renewables accounting for 104 megawatts (45 percent). While Sierra Leone has a higher share of renewables (45 percent) compared to its SSA compatriots (35 percent), its dependence on HFO makes its energy mix very expensive and vulnerable to international oil price swings.

The electricity distribution utility has high losses, low collections and is unable to pay for its power purchases nor meet current demand in the country. The Electricity Distribution and Supply Authority (EDSA) has extremely high aggregated technical and commercial losses at 50 percent and a low collection rate of 76 percent. This situation means that for every ten units of energy bought, five never reach the customer, and ultimately EDSA can collect bills for only three units. Thus, the utility is losing three-fourths of its revenues to inefficiencies. For an efficient Sub-Saharan African utility, the average system losses are expected to be around 13 percent. EDSA's losses are five times that level. Since 2021, EDSA has struggled to pay for power purchases, forcing the government to foot the bill. The resulting fiscal stress has only increased since the war in Ukraine began and oil prices rose, with the GoSL allocating over US$36 million in 2023 to electricity sector subsidies--7 percent of the total government expenditure for the year.

25 MTF 2021
26 EDSA 2021
27 US EPA
28 EIA Data 2021
29 Enterprise Survey.

Access to land

In Sierra Leone, weak land governance and unclear legal frameworks have led to investor-community conflicts, tenure insecurity, and accusations of displacement amid a surge in large-scale foreign land acquisitions following the 2007-08 global food crisis. The lack of clear legal and procedural avenues to acquire land has often led investors in Sierra Leone to choose land takings and informal disposition, generating conflict between investors and local communities and preventing desirable collaboration with local resource owners and labor. On the other hand, investor uncertainty on security of tenure has been high, particularly when investors interact with the customary tenure regime; this constraint has been particularly critical in agriculture where investors face possible disputes with communities if customary rights are not considered. Nevertheless, foreign investor interest in land surged following the global food price crisis of 2007 and 2008, as private firms sought land for agriculture and biofuels around the world, including in Sierra Leone. These land acquisitions, later to be labeled "land grabbing", often covered vast tracts of land in Africa, including in Sierra Leone (through long-term leases since foreign ownership is prohibited). Absent a land policy, land institutions, or good practice in land governance, these land concessions became problematic in Sierra Leone and were accused of displacing large numbers of people and contributing to conflict and poverty. [30]

Sierra Leone's dual land tenure system, marked by unclear records, lack of formal recognition for customary transactions, and absent centralized mapping, fuels widespread land disputes amid increasing land scarcity and value. The 1991 constitution recognizes a dual land tenure system that dates to the colonial period. Land in the Western Area, including Freetown, is administered under freehold tenure, while customary land in the provinces is covered by customary tenure systems (community and family tenure). World Bank assessments revealed that only a tiny percentage of land in the rural and urban areas are mapped and recorded, while institutional arrangements are opaque. Customary tenure tends to involve large, extended families with rights over a single parcel. Paramount Chiefs or traditional rulers who are members of landowning families serve as custodians of all land within their chiefdoms. Because of variations in customary land practices, there is no centralized registry and there are no boundary maps of family or communal land. As land becomes scarcer and more valuable, especially within cities and towns that have grown in the provinces, sales and leases are occurring even though their validity is not recognized by formal legislation. Records of land transactions are not consistently kept. Boundary disputes between Chiefdoms, between communities, between communities and private individuals or investors, and between extended families and individual households within families are a frequent source of conflict. It is estimated that 60 percent or more of all cases in Sierra Leone's High Court arise from land disputes.

In 2015 a national land policy was adopted, and new land laws were passed in 2022. The Land Policy outlines a pathway for strengthening customary tenure and improved land sector institutions while promoting investments that benefit communities. Subsequently, in 2022, a new Customary Land Rights Act and a National Land Commission Act were passed, replacing outdated land legislation from the 1960s. The laws are considered to be milestones as they: (i) harmonize the fragmented institutional framework for land administration; (ii) enable the systematic registration of customary land; and (iii) provide clear guidance for investors, government, and communities with regard to investments based on customary land. The laws follow regional and international best practice by conforming to the Framework and Guidelines for Land Policy in Africa[31] and the Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries, and Forests.[32]

Implementation challenges remain in reforming the land administration system. The Ministry of Lands, Housing, and Country Planning (MLHCP) and the new National Land Commission (NLC) are responsible for the administration of land. Going forward, the NLC will be positioned as the implementing agency for land administration while MLHCP will retain an oversight and

30 Studies demonstrate the disadvantages of large-scale land acquisitions that ignore local rights and avoid international standards for good governance. However, emerging models from private investment in land-based agricultural investments over the last decade illustrate that medium and larger scale investments can be successful when they conform to international standards for good land governance and responsible agricultural investment. These investments are often corporate in nature and involve local farmers as equal business partners, giving them an active role and leaving them in control of their land, and often include profit sharing arrangements.

31 A regional framework to improve land governance in African countries, endorsed in 2009, as a collaborative effort of the African Union Commission, the United Nations Economic Commission for Africa, and the African Development Bank.

32 An international framework to improve land governance globally, negotiated by member states of the United Nations Committee on World Food Security and endorsed in 2012.

supervision function as well as overall provision of policy directions to the land sector. NLC will be responsible for land title registration (including of customary land), subsuming functions of MLHCP and the current deeds registry in the Ministry of Justice. The challenge for the new NLC and MLHCP will be to reform the entire land administration system: most land in Sierra Leone has never been registered, the registration and survey functions have been separated, almost all existing land records are only held in paper format, and base maps have not been updated since the 1960s.

State interventions limiting competition in markets

The Government of Sierra Leone (GoSL) plays a role both as a seller and buyer of goods and services. Through state-owned enterprises (SOEs) and other businesses (Businesses of the State, BOS), the GoSL creates and sells or supplies goods and services in the domestic markets.[33] In addition, various ministries, departments, agencies, and SOEs buy or procure goods, services, and works on behalf of the government. These state involvements in markets end up shaping the extent of market competition and, thus, market outcomes in Sierra Leone.

As a supplier of goods and services

Businesses of the State (BOS) play a key role in the Sierra Leonean economy. There are currently about 30 active businesses linked to the government that operate in Sierra Leonean markets, some among the largest players in their respective markets.[34] The 30 BOS are, with few exceptions, wholly or majority owned by the state. Their (unconsolidated) revenues represented at least 3.7 percent of GDP in 2019, a relatively low share compared to the shares in other countries in SSA with similar BOS revenue and employment data coverage.[35] Their total employment represented less than 1 percent of formal sector jobs in 2019 (Annex 2: Chapter 2).[36]

Markets where the public is the main actor, such as the financial and electricity sectors, are logical places for BOS, but the majority of the BOS operate in competitive sectors where the risk of distorting markets is potentially higher. BOS operating in markets where the public is the main actor, such as the financial and electricity sectors, pursue both commercial and non-commercial goals, providing essential services, such as utilities (e.g., electricity and water), transportation (by road and water), telecommunications (e.g., fixed line, mobile services, and postal services), and financial and insurance services (e.g., banking). Some are among the largest players in their respective markets. (Figure 43, Figure 44). Twenty of the 30 BOS are in the services sector, the other ten are spread across manufacturing, electricity, water supply, and construction sectors. Sixteen of the 30 BOS operate in commercial or competitive sectors, and six operate in market segments that feature weak forms of market failures, referred to as contestable (Figure 45). Thus, the reach of the Sierra Leonean state in markets extends into sectors with little economic basis for government presence.[37]

33 SOEs are businesses in which the government (mostly national) holds equity stakes (mostly directly) of 50 percent or more, while the term BOS encompasses businesses with both majority and minority ownerships and captures the direct State businesses as well as their subsidiaries, whether owned by national, provincial, municipal, district, or city governments.

34 The number excludes BOS that are dormant (i.e., not active or operational) or flagged as undergoing resuscitation or as having ceased operations by the government or NASSIT. Twenty-three of the BOS report to the national government entities, of which 3 are subsidiaries, and 7 are indirectly owned by the government through the National Social Security and Insurance Trust (NASSIT).

35 These shares mostly reflect the active BOSs owned by the national government. Of the 23 active BOS owned by the national government, 18 have revenue data and 8 have employment data. However, of the 7 BOS owned by NASSIT, only 1 has revenue and employment data.

36 It is possible that Sierra Leonean BOSs are relatively smaller: they may have had lower revenue and employment given that size of the economy. It is also possible that the public services activities of Sierra Leonean BOS are not adequately compensated. So, whether the Sierra Leonean BOS are inefficient or are small players or both require a comparison with their Sierra Leonean privately owned counterparts. It is hard to draw a conclusion based on a comparison with BOS in other countries, especially given the difference in revenue/employment data coverage. Note that some countries have below 100 percent coverage for revenue and employment.

37 Dall'Olio 2022(b)

FIGURE 43:
BOS BY SECTOR (% AND NUMBER)

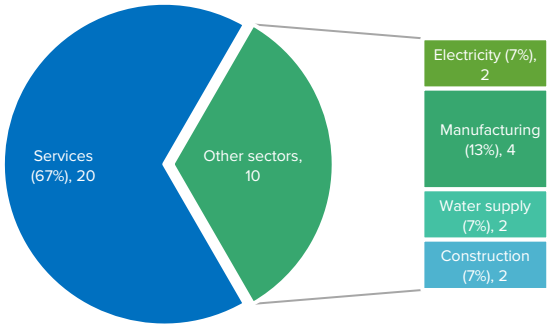
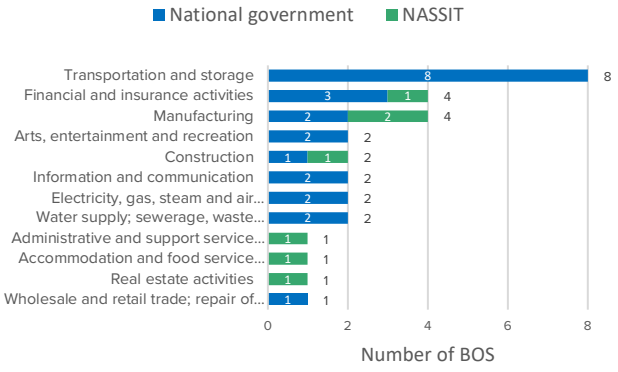
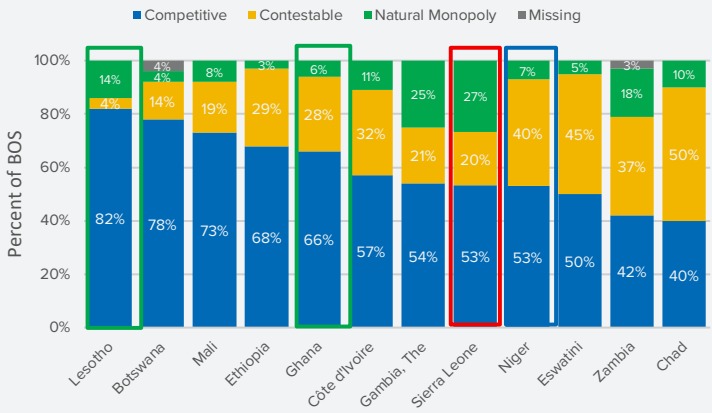


FIGURE 44:
BOS BY 2-DIGIT SECTOR AND OWNERSHIP (NUMBER)



Note: BOS = Businesses of the state; NASSIT = National Social Security and Insurance Trust.
Source: World Bank Businesses of the State (BOS) database.

FIGURE 45:
BOS BY SECTOR TYPE, SIERRA LEONE AND PEERS (% OF BOS)



Note: The distribution of Businesses of the State (BOS) by sector is based on number of firms by 4-digit NACE economic activity, excluding firms in industries that provide public goods (e.g., public administration and defense and activities of extraterritorial organizations) or are characterized by externalities (e.g., education and human health activities). Guinea, Lao P.D.R., Liberia, Malawi, Niger, Rwanda, and Togo do not yet have BOS data or have different revenue and employment coverage of BOS and so are not appropriate for comparison with Sierra Leone. NACE = European Union's Nomenclature of Economic Activities.
Source: World Bank Businesses of the State (BOS) database.

Several BOS operating in the competitive and contestable segments of services sectors are among the leading players in their industries. For instance, BOS are among the leading players in accommodation and insurance (Table 1), and two of the three BOS in commercial banking are the leading banks in Sierra Leone. Together, they account for over 35 percent of the assets of commercial banks and about 25 percent of credit.[38]

The competitive sector activities of some BOS are currently under the management of private partners. The government has entered into various long-term public-private partnerships arrangements to improve the efficiency and quality of service delivery. For instance, various services previously provided by the Sierra Leone Ports Authority and the Sierra Leone Airport Authority are now being performed by private players (see Annex Table 1 for a list of entities under such agreements).

38 World Bank, 2020.

TABLE 1:
BOS FIRMS, VARIOUS INFORMATION ABOUT BUSINESS AND COMPETITION

SECTOR	SUB-SECTOR	BOS	OWNER	STAKE	# OF FIRMS	MARKET SHARE	MARKET RANK	MARKET SHARE CRITERIA
Telecomm	Fixed line	Sierra Leone Telecommunications Company Ltd.	GoSL	100%	1	100%	1	Only operator with a fixed line
	Mobile network				4	100%	3	Mobile voice subscriptions for Q4 2019
Monetary intermediation		Sierra Leone Commercial Bank Ltd.	GoSL	89%	14	18.2%	1	Total assets for 2019
		Rokel Commercial Bank Ltd.	NASSIT	11%		13.2%	2	Total assets for 2019
		Commerce and Mortgage Bank PLC	GoSL	65%		3.8%		Total assets for 2017
Insurance		National Insurance Company Ltd.	NASSIT	98%	8	11.4%	1	Net premium for 2019
Transport	Road	Sierra Leone Road Transport Corp.	GoSL	100%	N/A	N/A	N/A	
	Water	MV Mahera Ferry	GoSL	100%	N/A	N/A	N/A	
Hotels		Radisson Blu Mammy Yoko Hotel	NASSIT	100%	132	N/A	N/A	

Source: World Bank Businesses of the State (BOS) and staff desk research based on data from various GoSL Ministry of Finance reports, NASSIT website, Bank of Sierra Leone reports, company annual report, and other sources. GoSL = Government of Sierra Leone. NASSIT = National Social Security and Insurance Trust.

Strengthening the corporate governance of BOS, particularly those in competitive sectors, is important to bring their performance up to par with their private peers. In countries with better SOE governance, SOE ownership rights are exercised through specialized agencies that are at arm's length from the government, and Chief Executive Officers (CEOs) are appointed by independent boards. However, in Sierra Leone, government agencies carry out the ownership and supervision functions of SOEs, and CEOs are appointed by public authorities (Figure 46, Figure 47). The recently developed State Ownership and Governance Policy for State-Owned Enterprises will align SOE oversight and governance with international best practices.[39] The GoSL also plans to adopt a Code of Corporate Governance providing for merit-based appointments to SOE boards, board independence, and board appointment of CEOs. The National Commission for Privatization Act (2002) will be repealed and replaced with an oversight entity to perform the ownership functions of SOEs. These improvements in governance should strengthen BOS performance, but it remains important to proceed with the privatization of majority and minority loss-making SOEs in competitive industries. Accelerating the reform of SOEs appears to be a critical pathway to sustainable growth.

39 MoF, 2022a. The State Ownership and Governance Policy for State-Owned Enterprises is available at https://mof.gov.sl/wp-content/uploads/2022/12/SOEPOLICY-Final.pdf.

FIGURE 46:
SOE SUPERVISORY AGENTS, BY TYPE, SIERRA LEONE AND COMPARATORS (%)

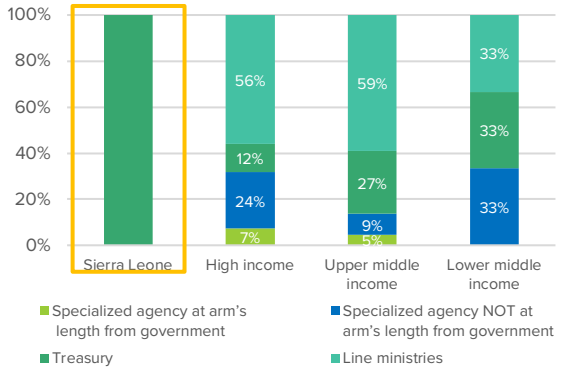
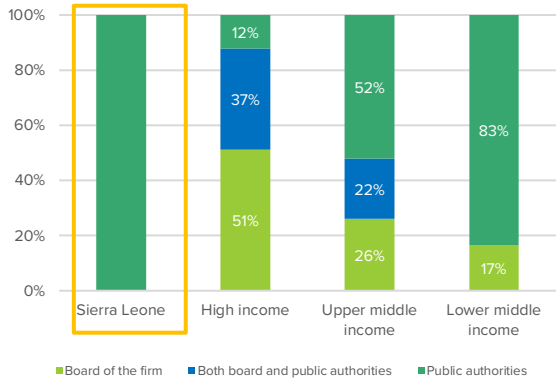


FIGURE 47:
SOE CHIEF EXECUTIVE OFFICER APPOINTMENT RIGHTS, BY TYPE, SIERRA LEONE AND COMPARATORS (%)



Source: World Bank staff calculations based on OECD and World Bank-OECD Product Market Regulation (PMR) database 2018-20 and data collected on selected questions of the 2018 PMR for 8 MENA countries in 2021 and Sierra Leone in 2023.

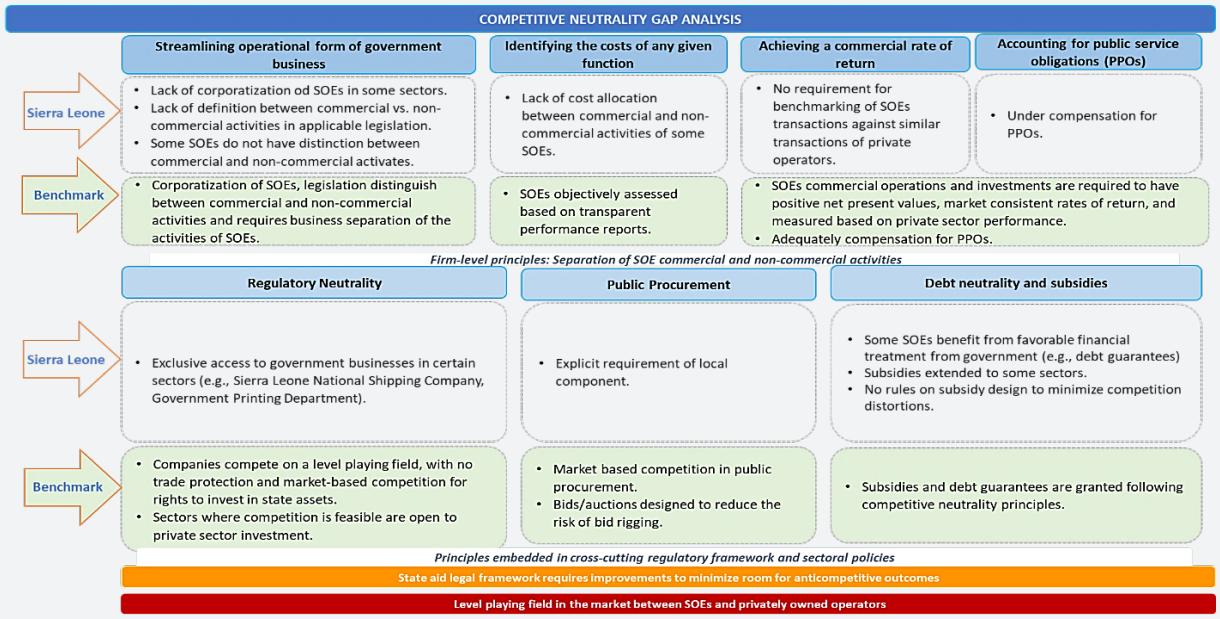
Sierra Leone can benefit from implementing competitively neutral policies to level the playing field between government-linked and privately owned businesses. The recently-developed State Ownership and Governance Policy of Sierra Leone states that SOEs and private firms are expected to, in principle, follow the same set of rules. SOEs should not benefit from preferential treatment, such as special access to products or financing, SOEs are required to pay all taxes, and SOEs should not benefit unduly from public procurement. In addition, SOEs should be properly compensated for non-commercial activities. However, there is still room for improvement in some dimensions of competitive neutrality in Sierra Leone, such as streamlining operational forms of government business, ensuring that SOEs achieve commercial rates of return, and fostering regulatory, tax, and debt neutrality (Figure 48). BOS and private firms do not have equal access to GoSL businesses in some sectors, and GoSL guarantees the debt of SOEs. Currently, some BOS are given preferential access to GoSL businesses. The GoSL requires all government agencies to use the Sierra Leone National Shipping Company for all clearing and forwarding services and the Government Printing Department for all printing, publication, and related services.[40] In addition, the GoSL provides debt guarantees for the loans contracted by some SOEs, which are estimated to be close to 1 percent of GDP at the end of December 2022.[41]

As a buyer of goods, services, and works

The GoSL also shapes markets through its procurement activities, and uncompetitive and unfair procurement processes can create market distortions and cause significant losses to the GoSL. Public procurement involves large amounts of money, about 16 percent and 17.5 percent of Sierra Leone's GDP in 2010 and 2017, respectively.[42] Anticompetitive business practices in public procurement processes—collusive agreements between bidders in a tender process or across tenders (i.e., bid rigging)—can generate large losses for the public purchaser and can distort competition in affected markets. Globally, bid rigging can inflate public procurement costs by up to 50 percent.[43] In Sierra Leone, various Auditor General's reports have noted some instances of bid rigging in the procurement process as well as several instances where public bodies did not follow the competitive procurement procedures.[44] Although the National Public Procurement Authority has taken steps to improve transparency of procurement contracts, a well-resourced competition authority can screen past public procurement contracts to detect instances of collusive bids and punish the actors to deter future practices.

40 See sections 31 and 39 of the Sierra Leone Finance Act, 2019 available at https://mof.gov.sl/wp-content/uploads/2019/09/The-Finance-Act-2019.pdf.
41 MoF, 2023.
42 World Bank 2012; Open Contracting Partnership 2020.
43 World Bank, 2022b. In Bulgaria, a conservative estimate suggests total direct losses of up to 0.3 percent of GDP caused by bid rigging (World Bank, 2022b).
44 Audit Service Sierra Leone, 2022.

FIGURE 48:
COMPETITIVE NEUTRALITY GAP ANALYSIS OF SIERRA LEONE AGAINST BENCHMARK



Source: World Bank staff analysis based on data collected on selected questions of the 2018 OECD and World Bank-OECD Product Market Regulation (PMR) for Sierra Leone in 2023 and desk research.

Sierra Leone's public procurement regulatory framework allows for both domestic and foreign firms to compete for public tenders on an equal footing. Public procurement policies are transparent and do not discriminate against foreign firms in favor of local private or state-owned firms in the procurement tenders for goods, services, and public works. However, a few preferences exist. For instance, the use of domestic personnel and/or goods is required for public procurement tenders for construction services and public works, which may impair competition for tenders and thus "value for money."[45]

As a market regulator and referee

Currently, Sierra Leone does not have a competition law or an independent body to ensure healthy competition across markets. While certain public bodies have a limited mandate to address anticompetitive practices, their role in preventing such practices is in some respects unclear (see Annex 2: Chapter 2 and Annex Table 2). As a member of the Economic Community of West African States (ECOWAS), Sierra Leone is subject to the ECOWAS Regional Competition Policy Framework,[46] enforced when there is a regional dimension by the ECOWAS Competition Authority.

Sierra Leone can strengthen competition in domestic markets by establishing a competition law framework and an independent competition authority responsible for enforcing all aspects of competition law. The independent competition authority should have an independent budget, board, and appropriate separation between investigative and adjudicative functions, equipped with the necessary resources expertise and tools to enforce the law effectively. The Ministry of Trade and Industry and Corporate Affairs Commission (CAC), which have the current mandate to prevent anticompetitive business practices and mergers are not independent (see Annex 2: Chapter 2). An independent competition authority is needed to check not only ex post business practices and behaviors that restrict competition (e.g., cartels) but also ex ante actions that can foster competition (e.g., merger reviews and advocacy).[47]

45 See the title (page 1) of the Public Procurement Act (2016) of Sierra Leone, available at https://www.parliament.gov.sl/uploads/acts/The%20Public%20Procurement%20Act,%202016.pdf.

46 The Regional Competition Policy Framework 2007, available here. Following this, two main legislations were enacted in 2008 by the ECOWAS Authority of Heads of State and Government to establish the framework for regional competition regulation and a body to oversee competition.

47 Independent in terms of budget and decision-making process.

Policy recommendations for a way forward

Increase access to finance

- **Continue to develop credit infrastructure:** The current manual credit reference system will need to be upgraded. Efforts to improve the efficiency of the commercial court and the judicial system in general would be helpful, along with regulatory reforms to introduce pre-insolvency informal out-of-court procedures for distressed debt.
- **Encourage financial product innovation:** A solid legal and regulatory framework is important for encouraging development of alternative products, which would include: (i) accounts receivable finance (for example, factoring and reverse factoring), (ii) secured revolving lines of credit (movable collateral), (iii) financial leasing, (iv) payment card receivables financing for merchants, and (v) person-to-person lending or crowdfunding. The legal framework would enable financial service providers to leverage improvements in the credit information system and collateral registry and take advantage of potential developments in the digital financial services space.
- **De-risk micro, small and medium enterprises (MSMEs):** the government could explore establishing a public partial credit guarantee scheme to incentivize formal credit to underserved segments such as MSMEs and agriculture. Partial guarantees would help facilitate access to finance by creditworthy MSMEs that are denied credit due to the lack of collateral. Such guarantees will be needed for all financial institutions but will be especially useful in the case of commercial banks who have excess liquidity but are not deploying it because of high perceived risk. Such a scheme would compensate for collateral shortfalls and increase risk appetite of financial institutions, especially during periods of market volatility.

Improve access to power

While several steps have been taken, much remains to be done to ensure that the power sector is able to support job creation and economic activity:

- **Integrate planning:** While a least-cost development plan has been adopted, comprehensive sector level planning that integrates access, generation, and transmission is necessary to move forward on a more systematic and least-cost path. The planning unit (currently supported through development partners) should be integrated into the Ministry of Energy and become part of day-to-day sector discussions.
- **Improving governance:** EDSA has been taking steps to improve its governance structure, but the utility lacks commonly accepted best practices in terms of its Board set up, appointment of senior management with technical expertise, and daily operations. Reforms include avoiding high turnover in senior management, introducing proper corporate governance, and installing adequate internal controls and institutional structures in EDSA, the Electrical Generation and Transmission Company, and others.
- **Regulatory regime to be strengthened:** The sector regulator, the Electricity and Water Regulatory Commission, has serious capacity issues and does not have the requisite authority or independence to carry out its task. The grid-connected tariff regime is currently opaque and not reflective of sector realities. A more transparent and independent process for setting tariffs is needed.
- **Regional integration:** The CLSG Interconnector is already providing up to 27 megawatts during certain hours of the day, against a planned output of 10 megawatts. Given the significant savings from CLSG compared to the Karpowership HFO-based barge or other fossil fuel-based generation, there is an urgent need to formalize increased capacity on CLSG.
- **Expediting private sector participation:** The government has shown willingness to move forward on the privatization of EDSA, but a number of issues need to be addressed for the process to move forward. First, the assets and liabilities of EDSA

and the Electrical Generation and Transmission Company need to be separated to provide clarity on both issues. Second, regulatory and governance issues highlighted above need to be addressed. Third, a clear policy framework for the sector is a must.

» **Navigate energy transition and overcome challenges that will be exacerbated by climate, such as rising energy demand, inequitable electricity supply, and reliance on expensive liquid fuels.** Develop the country's hydropower and other renewable potential and expand energy imports to attain energy security, lower costs, and reduce emissions from the sector. Achieve universal electricity access through increased grid electrification, mini-grids, and stand-alone solar systems. Take an integrated and cross-sectoral approach to creating an enabling environment that supports the development of the clean cooking market.

Facilitate access to land

» **Establish an efficient and accessible land administration system.** Land administration institutions require capacity building, especially strategic and operational support to the new National Land Commission, which will guide new local-level structures, such as District Land Commissions, Chiefdom Land Committees, and Village Area Land Committees. Further, additional legal reforms, including the development of a Land Title Registration Law, Land Title Adjudication Law, and a new Survey Law are necessary—all with the objective of enabling fit-for-purpose and participatory registration of all land, including in customary areas. To improve transparency and accessibility, all existing land records should be digitized, and a land information system established. Improvements in cadastral surveying can be achieved by setting up a geodetic network. Finally, statutory and customary land rights need to be registered. However, additional steps will need to be taken to ensure more responsible investments in customary land.[48]

» **Better monitor or collect data on private investments in the agricultural sector.** There are institutions that appear to the private sector to have unclear or overlapping responsibilities--such as the Sierra Leone Investment and Export Promotion Agency (SLIEPA) and the National Investment Board (NIB)--leading to confusion and insecurity for private firms and communities, possible conflict, weakened investor/investment confidence, and a loss of tax revenues for the national and district governments. Private firms sometimes enter the investment process by going directly to the district or local level and deal with communities or families owning land without informing national government. This practice is problematic because government cannot track where these investments are and may also inadvertently make promises to investors that physically overlap with investments already on the ground.

» **Provide geospatial and cadastral information systems to measure land attributes and where investments might be more successful—near roads, infrastructure, water, or markets.** Similarly, rural land rights are not recorded, creating challenges and conflicts for communities and investors when investment takes place. Currently, private firms "measure" and record land rights (such as boundaries and which families claim rights). The legal registration of land is, however, a public function. Further, land information obtained by the private sector is not transferred to any public sources, making this a costly effort that would have to be repeated by new investments or investors. This informal data should be formally captured by government.

Foster competitive neutrality in the markets

» **Level the playing field between public and private enterprises.** To help crowd in private investment, implementation of the competitive neutrality principles in sectors with both public and private enterprise participation should be strengthened. Actions include setting out the rationale for the presence of SOEs in competitive

48 The WB Sierra Leone Land Administration Project supports parts of this initiative.

or commercial sectors, privatizing perennial loss-making SOEs in commercial sectors, and ensuring competitive neutrality by removing regulatory provisions that mandate ministries, departments, agencies, and SOEs to use specific SOEs for their services and limiting distortions related to SOEs having preferential access to finance, including subsidies and debt guarantees, among others. Indeed, all BOS must be subjected to the discipline of market forces to ensure that they compete on a level playing field with private competitors.

» **Develop an effective competition regulatory framework.** Healthy market structures can be fostered by enacting a Competition Act—with provisions that are in line with international best practice and the ECOWAS Regional Competition Policy Framework—and consolidating the competition mandates of the Ministry of Trade and Industry and the Corporate Affairs Commission (CAC) under the Competition Act to ensure its effective implementation by establishing an independent Competition Authority under the Competition Act. In addition, sector regulators should have mandates to promote competition and ensure healthy market structures in their respective sectors through ex ante regulations. Besides, the Competition Authority and sector regulators should develop coordination mechanisms to avoid potential overlaps and minimize risks relating to inconsistent decisions, overlapping mandates, and uncertainty for market players.

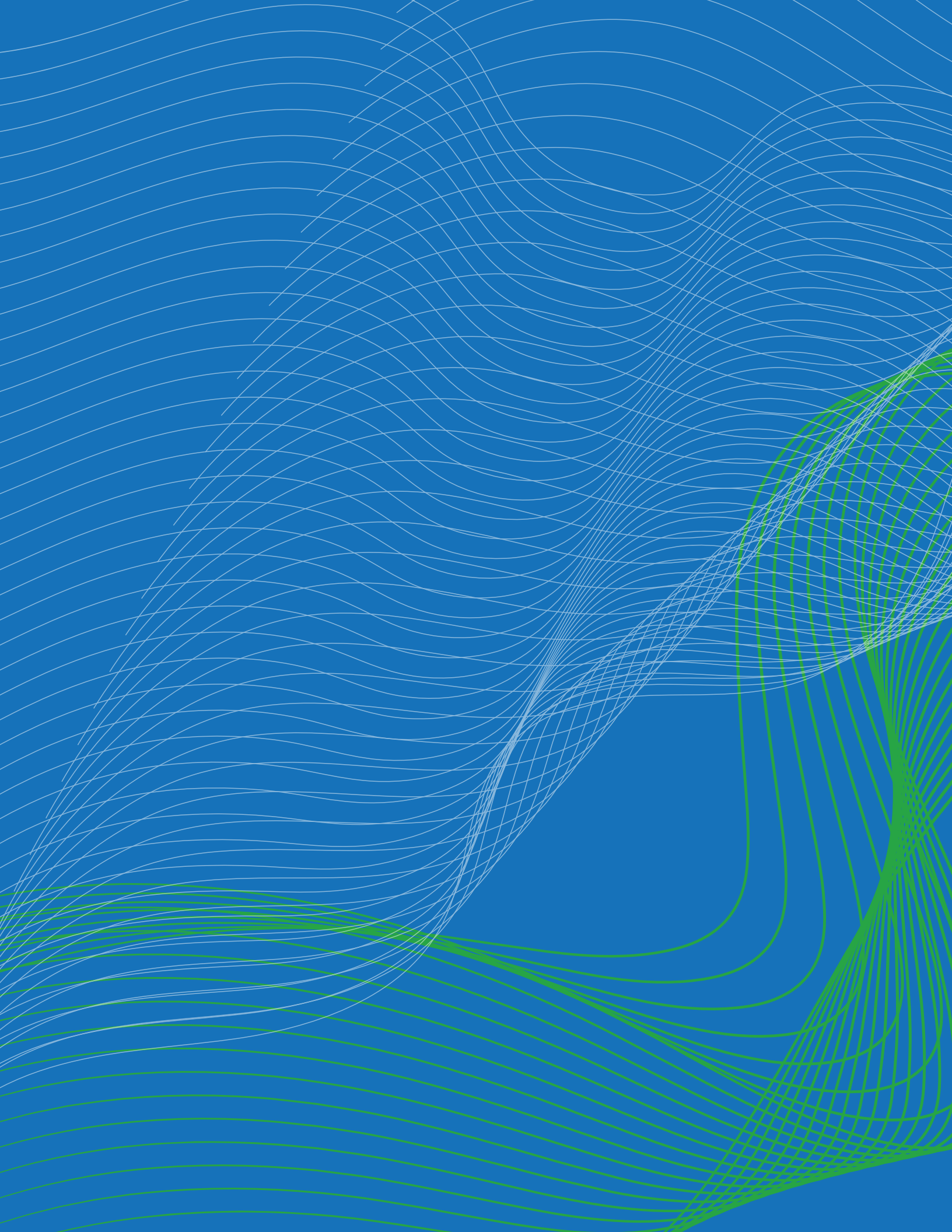
Improve firm-level productivity with select interventions

» **Implement a spatial approach (industrial parks and zones).** When tailored appropriately to the country context, an industrial park or economic zone can catalyze industry investments and spillovers. In the case of Sierra Leone, this approach could directly address access to industrial and basic infrastructure. A spatially targeted approach can support the generation of agglomeration economies and thus foster a more dynamic economy. Research work on special economic zones conducted by the World Bank shows that the performance of such zones in emerging economies is affected first and foremost by the zones' country- and region-specific contexts. Costs, industry structure, and proximity to large markets also influence zone dynamism. Generally, large zones in relatively poor areas that are not too far from the largest city, in countries with previous histories of industrialization, and with relatively easy access to developed country markets have performed best. Special zones have positively affected the economic performance of surrounding areas. Areas in the immediate vicinity of zones have benefited from spillovers emanating from the zone. However, this positive effect on neighboring areas suffers from steep distance decay. The effect declines sharply beyond 20 km and is barely evident beyond 50 km from the center of the zone.[49]

» **Facilitate firm level training.** On-the-job training is associated with greater productivity and more employees in firm surveys in Sierra Leone. This finding hints that on-the-job training increases productivity and attracts workers. Reductions in the finance and electricity constraints will allow firms to invest in human capital. These investments could potentially be facilitated by a training-of-trainers program in which workers are coached in on-the-job training.

» **Encourage the use of digital technology. An increasing number of firms are taking advantage of digital technology:** the share of firms with a website increased from 7 percent in 2017 to 16 percent in 2023, and 84 percent of firms have applied for an internet connection in the last two years. However, firms report an average loss of 12 percent of sales annually due to internet disruptions, underlining the need for improvements in Sierra Leone's internet access.

49 Susanne A. Frick, Andrés Rodríguez-Pose and Michael D. Wong (2018): Toward Economically Dynamic Special Economic Zones in Emerging Countries, Economic Geography, https://doi.org/10.1080/00130095.2018.1467732



3

EDUCATION AND SKILLING TO REALIZE THE DEMOGRAPHIC DIVIDEND

Sierra Leone's young population promises a substantial increase in the workforce in the coming years, an opportunity for boosting development. Development reaches people through jobs. Economic growth transforms societies, but it is through increases in labor income from jobs that people reap these gains. In the poorest economies like Sierra Leone, better jobs are people's surest way out of poverty. However, significant improvements in human capital will be required to ensure productive employment for these new workers. While there has been notable progress in recent years in improving access to education, continued efforts will be necessary to enhance learning and thus realize the full potential of the country's demographics. This chapter will analyze the state of the labor market and demographic trends, assess recent progress made in education and identify the persisting shortcomings in the sector that have constrained returns to human capital.

Improvements in human capital are essential to enable workers to obtain better jobs. Human capital consists of the knowledge, skills, and health that people accumulate over their lives. Higher levels of human capital are associated with higher earnings for people, higher income for countries, and stronger cohesion in societies. There is a strong correlation between the Human Capital Index (HCI), an international metric for human capital investment across countries, and per capita income (Figure 49).[50] Indeed, studies have shown that countries with good education and health performance are more likely to have prosperous economies.[51] Although higher income could lead to higher human capital (better access to education and healthcare), there is evidence of bi-directional causality between human capital and economic growth from Africa.[52]

Targeted investments in enhancing human capital can improve Sierra Leone's economic outlook and help in accelerating its transition to lower middle-income status. Results from growth modeling (Chapter 1) indicate that concerted efforts to implement ambitious reforms and enhance human capital can allow the country to reach lower middle-income status before the government's target of 2037. Human capital is formed in children, and effects of reforms take place as children enter the workforce (by 2035) and can add as much as 1.3 percentage points to annual GDP growth by 2050 under an ambitious reform scenario (Figure 50). Investments in education and health are required, to improve enrollment, learning outcomes, and child health. Efforts to address job-skills mismatch can support growth of the private sector (as also discussed in Chapter 2) and help improve investments, further contributing to long-term growth.[53]

50 The HCI reflects the human capital that a child born today can expect to attain by adulthood.

51 Bloom et al., 2004; Hanushek and Woessman, 2008; Barro, 2013; Qadri and Waheed, 2014; Ogundari and Awokuse, 2018.

52 Anoruo and Elike, 2015; Matashu and Skhephe, 2022.

53 World Bank. 2023. Sierra Leone Human Capital Review. Maximizing Human Potential for Resilience and Inclusive Development; and GoSL Education Sector Plan, 2022.

FIGURE 49:
CORRELATION BETWEEN HUMAN CAPITAL INDEX AND PER CAPITA INCOME, VARIOUS COUNTRIES, 2020

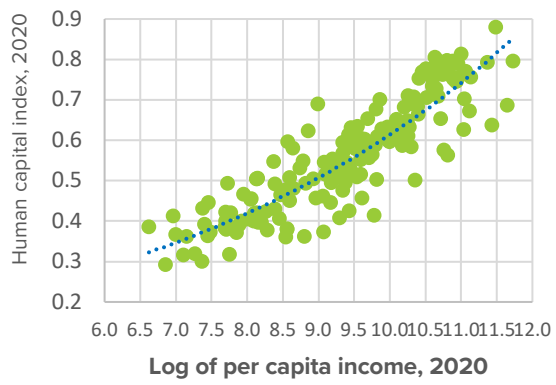
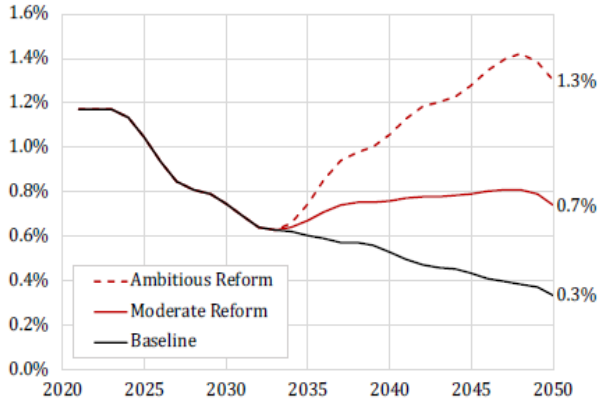


FIGURE 50:
CHANGE IN GDP GROWTH, BY POLICY SCENARIO (PERCENTAGE POINTS), 2030-50

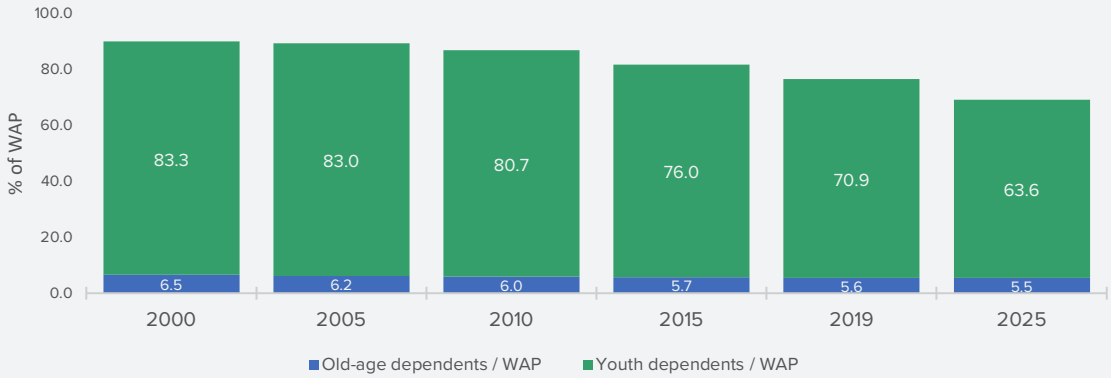


Source: World Bank data, staff calculations.

Demographic and employment trends

Sierra Leone's working age population is expected to continue to increase significantly in the next decades, and the dependency ratio is expected to drop. The working age population is projected to increase from 4.8 million in 2021 to 6.1 million people by 2030.[54] Capitalizing on this 'demographic dividend' to boost growth will require the rapid generation of productive employment. As young adults enter the labor market, the dependency ratio would decline as both fertility and mortality rates continue to drop. The population is particularly young: the ratio of youth dependents to the working force was 70.9 percent in 2019 (Figure 51) and is projected to decline further to 63.6 percent by 2025, making clear the need for more productive employment opportunities for the young population during the demographic transition period.

FIGURE 51:
DEPENDENCY RATIOS, SIERRA LEONE (% OF WORKING AGE POPULATION), 2000-19 AND 2025 (P)

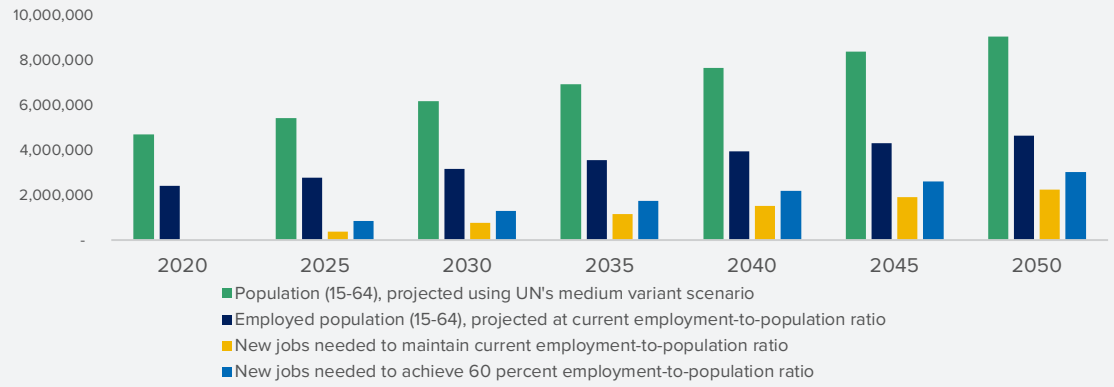


Note: WAP = working age population.
Source: World Population Prospects: 2017.

54 Projected growth rates from UN data. UN data version: File version: POP/DB/WPP/Rev.2022/POP/F02-2 and 3 (Dated July 2022. Last accessed Nov 2022).

The decline in the labor force participation rate, combined with the forthcoming rise in Sierra Leone's working-age population, presents a formidable challenge to the country. Based on estimates, Sierra Leone will need to create an additional 2 million jobs between 2020-50 just to maintain the meager employment-to-population ratio of 51 percent it achieved in 2020. Around 75,000 new jobs will be needed every year for new entrants in the working-age population for the next 30 years. Whereas if the country strives to achieve an employment-to-population ratio of 60 percent (the current average of SSA countries), an additional 100,000 jobs will be needed every year for new entrants in the working-age population between 2020 and 2050.

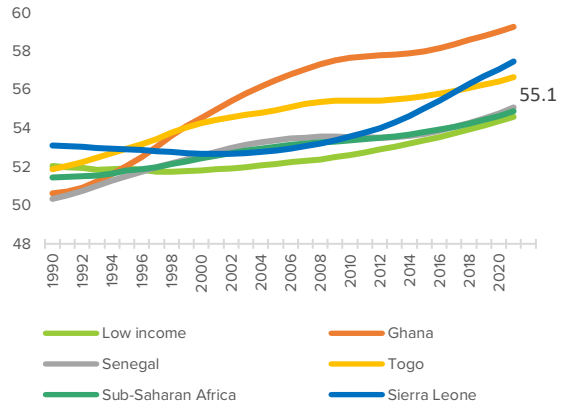
FIGURE 52:
DEMOGRAPHIC PROJECTIONS AND EMPLOYMENT GROWTH (NUMBER OF PEOPLE), 2020-50



Source: Demographic projections taken using the medium variant scenario of the United Nations – World Population Prospects, 2022. https://population.un.org/wpp/. Employment-to-population data (modeled International Labor Organization estimates for 2020) taken from the World Bank, World Development Indicators.

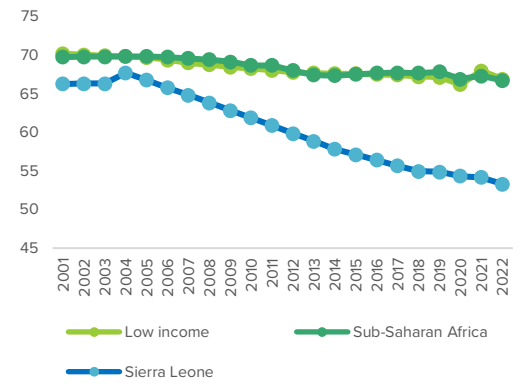
Recent trends have not been favorable to reap these potential demographic benefits: the working age population has expanded rapidly, but labor force participation has fallen. During 2000-21, the population grew at an annual average rate of 2.9 percent, while the working-age population (those between 15 and 64 years old) grew at 3.4 percent annually. Thus, the dependency ratio dropped. In 2022, of 8.6 million people living in the country, 57.9 percent were among the working-age population— higher than other sub-Saharan African and low-income countries (Figure 53). Over the same period, however, the labor force participation rate declined from 66.3 percent in 2001 to 53.3 percent in 2022, lower than the average labor force participation rate in SSA at 66.8 percent, while the unemployment rate remained roughly unchanged (Figure 54 and Figure 57). Thus, despite the decline in the dependency ratio, the employment ratio—the share of those employed to the total population—fell from 33.8 percent in 2000 to 30 percent in 2021.

FIGURE 53:
WORKING AGE POPULATION, SIERRA LEONE AND PEERS (% OF TOTAL POPULATION AGES 15-64), 1990-21



Source: WDI

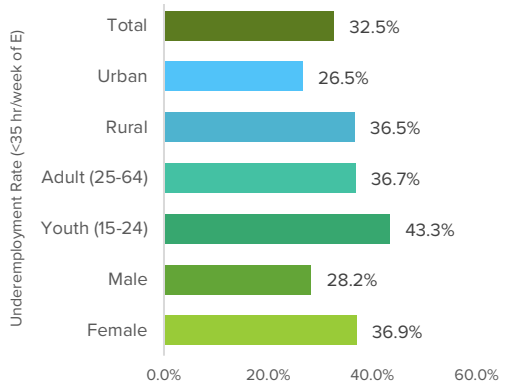
FIGURE 54:
LABOR FORCE PARTICIPATION RATE, SIERRA LEONE AND COMPARATORS (% OF TOTAL POPULATION AGES 15-64), 2001-22



Note: Participation rate is modeled International Labor Organization estimate.
Source: International Labor Organization

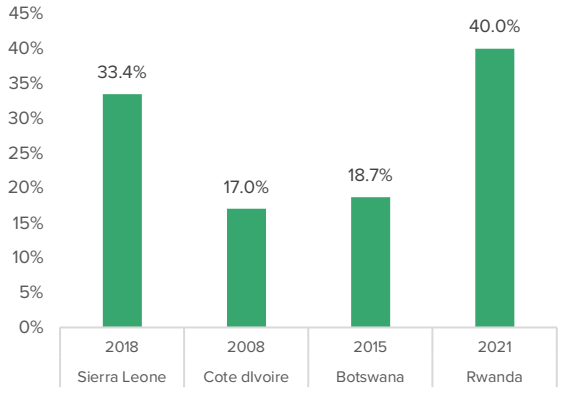
A significant number of people participate in the labor market but are underemployed, especially among youths and women. The underemployment rate is the percentage of individuals who are working an average of less than 8 hours a day. Although the unemployment rate is only 3.6 percent, the underemployment rate is 32.5 percent (Figure 55). This rate is higher than for earlier years in Côte d'Ivoire and Botswana, but lower than for more recent data in Rwanda (Figure 55). The rate is higher among women (36.9 percent) than among men (28.2 percent), and higher in rural areas (36.5 percent) than in urban areas (26.5 percent). 23 percent of youths who have completed secondary education are underemployed, which is higher than the 11 percent without formal schooling.

FIGURE 55:
UNDEREMPLOYMENT RATES, BY CATEGORY (%)



Note: Underemployment is working less than 35 hours per week.
Source: Sierra Leone Integrated Household Survey, 2018.

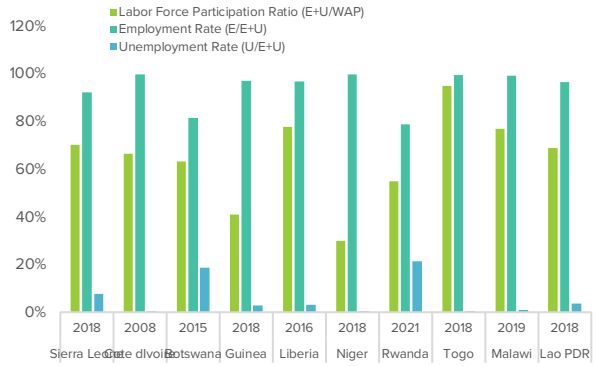
FIGURE 56:
UNDEREMPLOYMENT RATES, SIERRA LEONE AND PEERS (%), VARIOUS YEARS



Note: Underemployment is working less than 35 hours per week.
Source: WDI

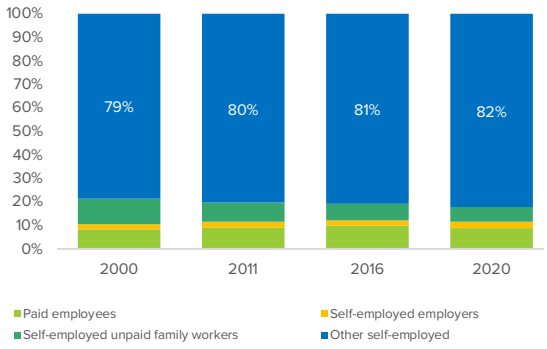
Most of those who have jobs are self-employed, and wage employment opportunities are limited. The share of wage workers declined from 11.3 percent in 2012 to 9 percent in 2021. By contrast, the share of wage workers averaged 25.3 percent in SSA and 19.2 percent in low-income countries. Among structural peer countries, Malawi and Togo had a larger share of paid employees at 39 percent and 22 percent, respectively (Figure 58). All Sierra Leone's aspirational peer countries have more than 20 percent of total employment as wage workers. More than 80 percent of workers are self-employed, among whom 3 percent were employers and 6 percent were unpaid family workers. In agriculture, which accounted for 56 percent of the employed population in 2018, only 0.9 percent of workers were paid employees, with the rest either nonpaid employees (40.8 percent) or self-employed (54.7 percent). In the services sector (35.4 percent of the employed population in 2018), 25.7 of workers were paid employees, and in industry (8.8 percent of workers), 45 percent were paid employees.

FIGURE 57:
LABOR FORCE PARTICIPATION, EMPLOYMENT, AND UNEMPLOYMENT, SIERRA LEONE AND PEERS (RATE IN %), VARIOUS YEARS



Source: WDI.

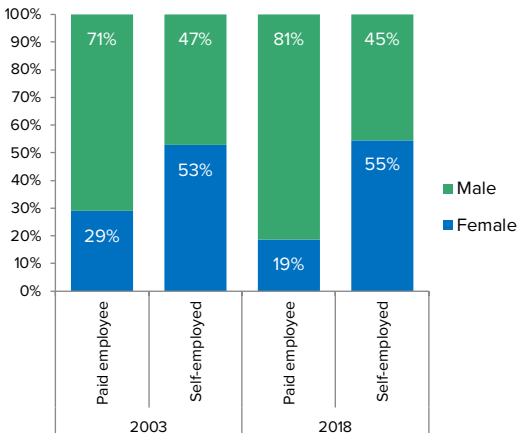
FIGURE 58:
EMPLOYMENT STATUS (% OF LABOR FORCE), 2000-20



Note: Self employed is broken down in the subcategories: employers, unpaid family workers, own-account workers, and members of producers' cooperatives.
Source: WDI.

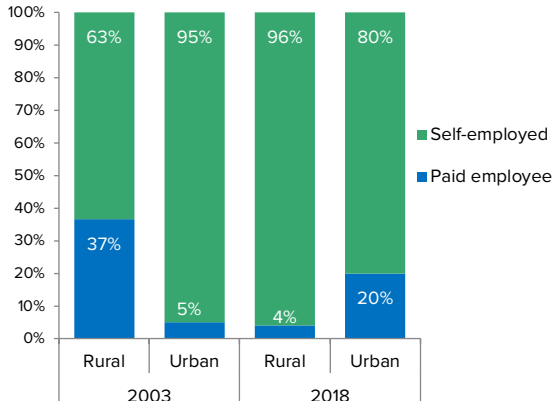
Wage employment is highly segmented by educational attainment, sector and location. Men accounted for more than 80 percent of wage employees in 2018, while more females were working as self-employed than men were (Figure 59). The share of workers with wage jobs increased in urban areas from 5 percent in 2003 to 20 percent in 2018, nearly mirroring the share of rural workers with wage jobs which fell from 36.5 percent in 2003 to 4 percent in 2018. Those who have a university education earn NLe 154,545 compared to 11,646 among those who just completed primary education. Public sectors, as well as financial and business services, offer better wages than other sectors. The agricultural sector and manufacturing sectors provided the lowest wages. Salaries in urban areas are much higher than salaries in rural areas. Across districts, Kono districts and Western Areas where Freetown is located reported higher wage income than other districts (Figure 60).

FIGURE 59:
PAID AND SELF-EMPLOYED WORKERS, BY GENDER (%), 2003 AND 2018



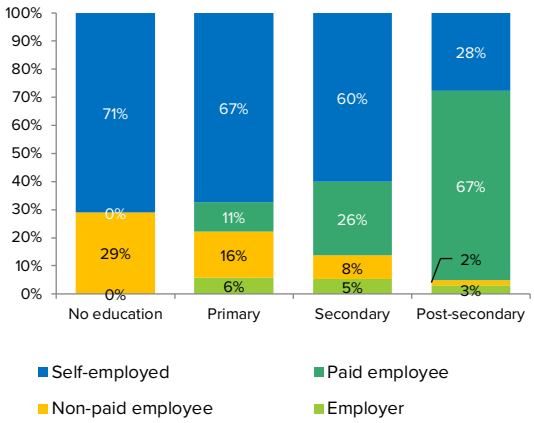
Source: Sierra Leone Integrated Household Survey 2003, 2018

FIGURE 60:
PAID AND SELF-EMPLOYED WORKERS, BY LOCATION (%), 2003 AND 2018



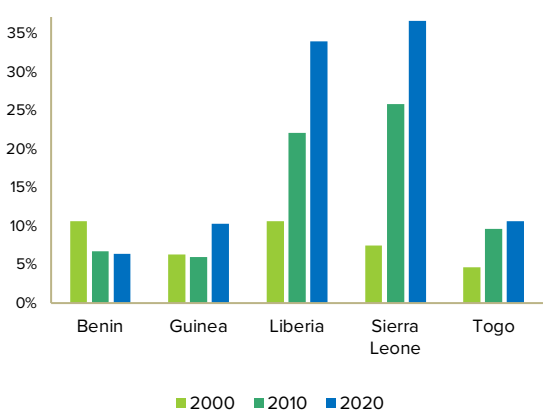
Both the quality of jobs and the incidence of unemployment increased with educational attainment. Among those with primary education, 67.4 percent of them were self-employed and 16.3 percent were non-paid employees (Figure 61). In contrast, 67.3 percent of the post-secondary education group had wage jobs, and only 27 percent were self-employed. However, individuals with low education were more likely to work: over 80 percent of those who had no education participated in the labor market compared to 60 percent among those who had completed secondary school. The educated workers who completed post-secondary education also show the highest share of unemployment–9.9 percent. Higher unemployment among the more educated may reflect higher incomes that enable them to choose leisure rather than work or to remain unemployed to wait for a good job, or may reflect a skills mismatch, implying that the country's schools are not preparing students for the kinds of skilled jobs available in the economy. Further, the share of tertiary educated migrants from Sierra Leone has also progressively increased in the last two decades, from below 10 percent of the share of international migrants in 2000 to above 30 percent in 2020. Compared to peer countries, Sierra Leone has the highest share of tertiary educated among the international migrants, perhaps reflecting that educated youth are seeking employment opportunities abroad as they face limited options in the country (Figure 62).

FIGURE 61:
EMPLOYMENT STATUS BY EDUCATION ATTAINMENT (%), 2018



Source: Sierra Leone Integrated Household Survey 2018

FIGURE 62:
TERTIARY-EDUCATED MIGRANTS, SIERRA LEONE AND PEERS (% OF INTERNATIONAL MIGRANTS), 2000, 2010, AND 2020



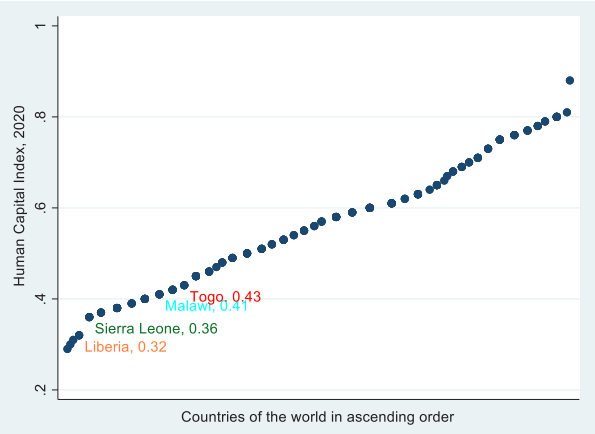
Source: World Bank. Global Bilateral Migration Matrix, 2020

Education and the implications for work

The level of human capital in Sierra Leone is low. The country's Human Capital Index (HCI) is 0.36, indicating that a child born in Sierra Leone will only be 36 percent as productive when they grow up as they would have been with complete education and full health (Figure 63).[55] This value lies below the averages for SSA and low-income countries and ranks seventh from bottom of the 173 countries with HCI data (as of 2020), and it is also fell below regional peer countries such as Malawi (0.41) and Togo (0.43).

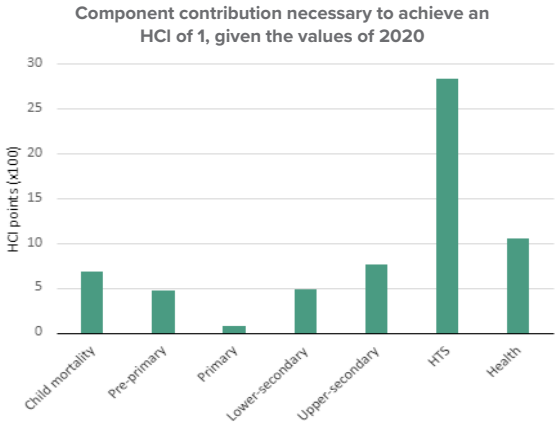
The poor HCI score is largely due to low learning outcomes. Figure 64 decomposes the component contribution required to achieve an HCI score of 1 for Sierra Leone, given the values of 2020. Stated differently, for each underlying indicator of the HCI, the figure shows the corresponding increase in the HCI score if each indicator were to achieve its maximum value. It is clear that the largest contribution to improve the country's HCI score would need to come from improvements in learning outcomes (as measured through Harmonized Test Scores), followed by improvements in child mortality and adult survival, and stunting.[56]

FIGURE 63:
EMPLOYMENT STATUS BY EDUCATION ATTAINMENT (%), 2018



Source: World Bank data, 2020.

FIGURE 64:
TERTIARY-EDUCATED MIGRANTS, SIERRA LEONE AND PEERS (% OF INTERNATIONAL MIGRANTS), 2000, 2010, AND 2020



Note: Component values are Sierra Leone in 2020. HTS = Harmonized Test Scores (or Harmonized Learning Outcome scores). Health = adult mortality and malnutrition indicator.

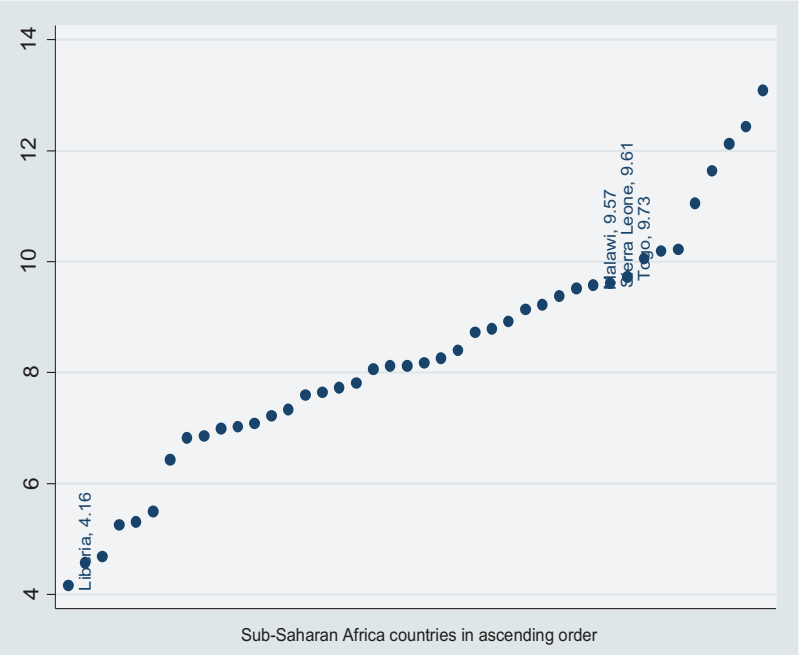
Educational attainment

The number of years of schooling a child is expected to achieve in Sierra Leone is higher than in many other Sub-Saharan African countries. For the HCI, the calculation of the expected years of schooling to be completed by age 18 is based on age-specific enrollment rates between ages 4 and 17. According to these calculations, children can expect to complete 9.61 years of schooling by age 18 (Figure 65). This is well above the expected years of schooling for a large number of SSA countries such as Liberia (4.16), similar to the expected years of schooling of other regional peer countries such as Malawi (9.57) and Togo (9.73), and lower than only a few other SSA countries.

55 As stated above, the HCI measures the amount of human capital that a child born today can expect to attain by age 18. It consists of two main components: health and education. The indicators making up the HCI include adult mortality rate, under-5 mortality rate, stunting rate, and learning-adjusted years of schooling, which is derived from harmonized learning outcome scores and expected years of schooling.

56 Harmonized Test Scores are national average scores from major international and regional student achievement testing programs, harmonized into common units. They use TIMSS-equivalent units where TIMSS is Trends in International Mathematics and Science Study (300 is minimal attainment and 625 is advanced attainment).

FIGURE 65:
EXPECTED YEARS OF SCHOOLING IN SIERRA LEONE RELATIVE TO SSA COUNTRIES



Source: World Bank data, 2020.

Enrollment

Access to basic education in Sierra Leone has increased in the past two decades. The gross enrollment rate at junior and senior secondary school levels increased significantly (by 28 and 35 percentage points, respectively) from 2003 to 2018, although significant scope remains for further increases (gross enrollment rates were 81 percent at the junior secondary level and 72 percent at the senior secondary level in 2018) (Figure 66). The gross enrollment rate at the primary level remained high, at 114 percent in 2018. The gap between primary gross enrollment rate and net enrollment rate fell between 2003 and 2018, suggesting improved efficiency due to fewer overage students and lesser repetition. However, the net enrollment rate is low, especially at the junior and senior secondary levels, indicating significant inefficiencies in the school system.

Some progress has been made in improving equity in access to education. Enrollment outcomes for females are better than for males across all school levels. The latest reported net enrollment rates for girls at the primary, junior, and senior secondary levels are 81, 31, and 17 percent, respectively, while for boys, the corresponding figures are 78, 27, and 15 percent (Figure 67). Gross enrollment rates for children in the poorest two wealth quintiles at the junior and secondary levels doubled and more than tripled, respectively, from 2003 to 2018. Over the same period, the urban-rural gap in net enrollment rates narrowed at the primary level but increased at the junior and senior secondary levels, suggesting (among other factors) an inadequate number of junior and senior secondary schools in rural areas in Sierra Leone.

FIGURE 66:
GROSS ENROLLMENT RATES IN PRIMARY, JUNIOR SECONDARY, AND SENIOR SECONDARY SCHOOLS, (%), 2003 AND 2018

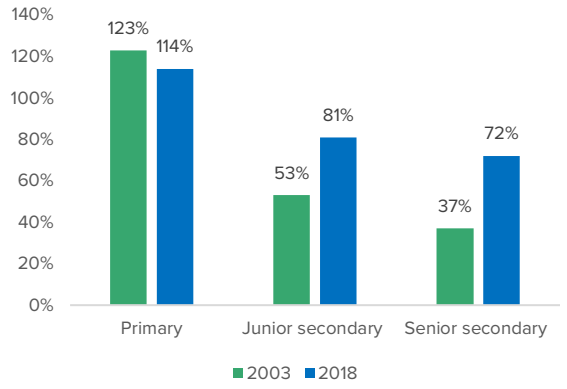
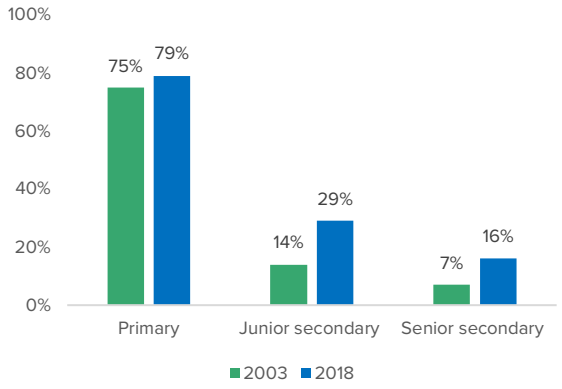


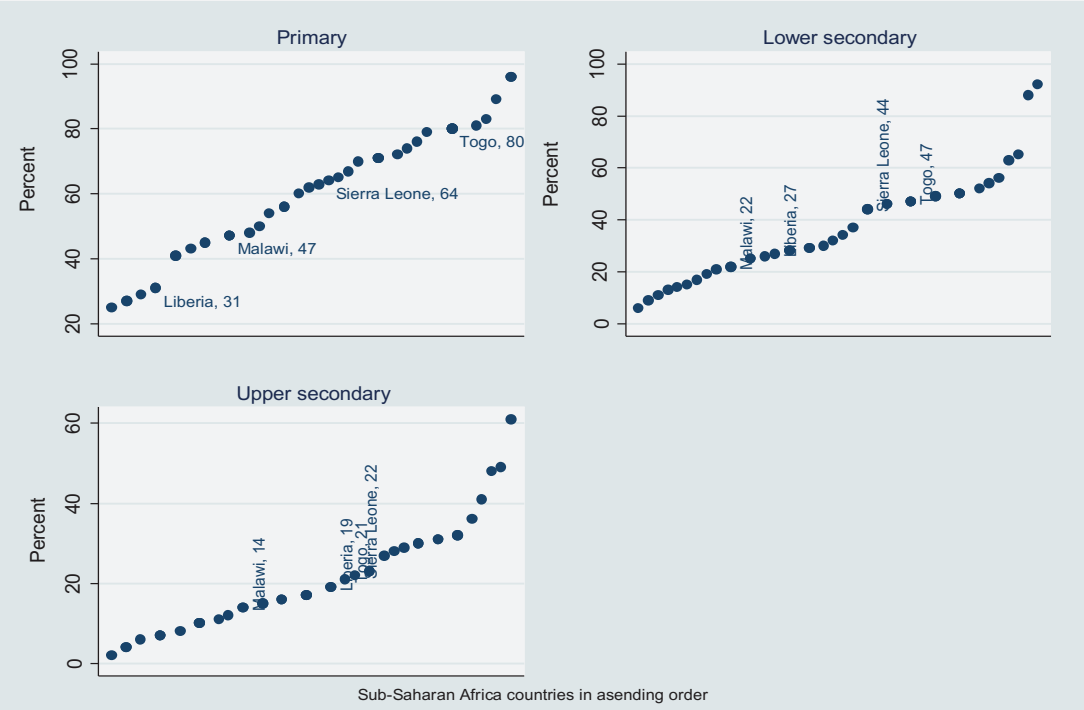
FIGURE 67:
NET ENROLLMENT RATES IN PRIMARY, JUNIOR SECONDARY, AND SENIOR SECONDARY SCHOOL, 2003 AND 2018



Source: Statistics derived from Sierra Leone Integrated Household Survey, 2003 and 2018

Completion rates are better in Sierra Leone than many SSA countries. The 2019 Demographic and Health Survey shows that the primary completion rate is 64 percent, higher than a number of regional peers such as Liberia (31) and Malawi (47) while lower than Togo (80) and several other SSA countries (Figure 68). The lower secondary completion rate is 44 percent, higher than many countries including Liberia (27) and Malawi (22), and lower than Togo (47) and some other SSA countries. The upper secondary completion rate is even lower at 22 percent, which is lower than several SSA countries but higher than many others, including Malawi (14), Liberia (19) and Togo (21).

FIGURE 68:
COMPLETION RATES BY EDUCATION LEVEL, SIERRA LEONE AND PEERS (%)



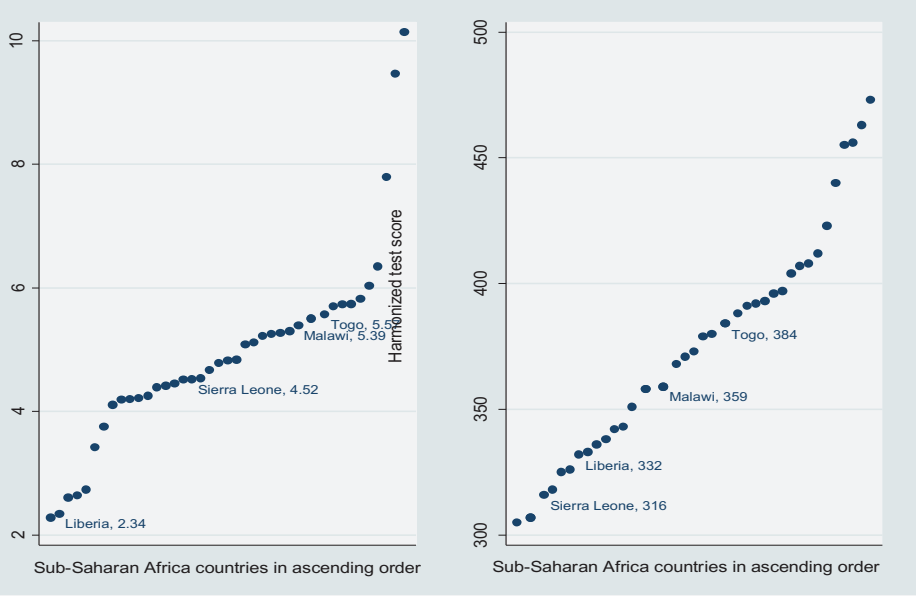
Source: Demographic and Health Survey 2019

Despite a substantial increase in school enrollment in recent years, more effort is needed to enroll out-of-school children and retain them in school. Approximately one out of every five children is out of school. While the percentage of out-of-school children decreased between 2003 and 2018 for both the 6 to 11-year-old and 12 to 17-year-old age cohorts, high percentages of children (19 percent between the ages of 6 to 11, and 22 percent between the ages of 12 to 17) remain out of school. It is estimated that out of the children who enroll in school, one in five leaves school before completing primary school.[57]

Learning

Despite improvements in access to education, learning outcomes remain very low, and children lack basic foundational literacy and numeracy skills. Examining the education quality component of the HCI relative to other countries in SSA, Sierra Leone is closer to the middle in learning-adjusted years of schooling and closer to the bottom in harmonized test scores (Figure 69). The learning adjusted years are only 4.52 compared to the 9.61 expected years of schooling; this is higher than Liberia (2.34) but lower than Malawi (5.39) and Togo (5.57); the harmonized test score is 316, lower than most comparators including Liberia (332), Malawi (359) and Togo (384).[58] Children lack basic foundational literacy and numeracy skills. Results from early grade assessments in grades 2 and 4 reflect that the average percentage of correct answers is only 0.5 percent in reading at both grades 2 and 4. Children fare better in numeracy than in reading: at grade 2 and grade 4 levels, students were able to answer 45 and 42 percent of questions related to addition correctly, respectively. Finally, 73 percent of grade 2 students and 62 percent of grade 4 students had a literacy score of zero (reading comprehension), and 58 percent of grade 2 students and 53 percent of grade 4 students had zero scores in numeracy (subtraction).

FIGURE 69:
LEARNING ADJUSTED YEARS AND HARMONIZED TEST SCORES, SIERRA LEONE AND PEERS (RANKING)



Source: World Bank data, 2020

Children's lack of basic foundational literacy and numeracy skills is more acute in rural areas and poorer households. According to the Sierra Leone Multiple Indicator Cluster Survey 2017, the urban-rural gap in literacy and numeracy skills is pronounced: in urban areas, 30 percent of children possessed foundational reading skills, and 22

57 GoSL, 2020.
58 625 represents advanced attainment, and 300 represents minimum attainment.

percent of children possessed numeracy skills in 2017 as compared to only 5 percent of children demonstrating literacy and numeracy skills in rural areas. Children from poor households are less likely to demonstrate foundational literacy and numeracy skills. Thirty-nine percent of children ages 7 to 14 in the richest wealth quintile demonstrate foundational literacy skills, compared to only 3 percent of children in the poorest wealth quintile. Similarly, one-quarter of children in the richest quintile possess basic numeracy skills, while only 3 percent of children in the poorest wealth quintile possess basic numeracy skills. There are also differences by sex–in quintiles two, three, and four, boys are more likely than girls to possess basic literacy and numeracy skills. While there is parity in literacy between boys and girls for the richest wealth quintile, the share of boys demonstrating basic numeracy skills was 4 percentage points higher than the proportion of girls.

Skills and employability

While the working-age population has become more educated over time, more than half of the population has not completed primary education. The share of the working-age population with less than a primary education fell from 68 percent in 2003 to 54 percent in 2018, while the share in higher education categories rose. Despite these gains, the adult literacy rate of 43.2 percent in 2020 is lower than the average for SSA (65.3 percent) and most comparators but higher than Guinea (40.0 percent) and Benin (42.0 percent). A large proportion of the workforce is uneducated, limiting the contribution of human capital to economic transformation (Figure 70).

In addition, skills acquisition is limited and a poor supply of market-relevant skills (in strategic industries) is a constraint to firm productivity and growth. According to a skill needs assessment study completed in 2018, employers face challenges in finding high-quality technicians in strategic industries such as mining, construction, and manufacturing.[59] In strategic sectors with high potential for economic growth and job creation, employers faced challenges in filling job vacancies due to low technical skills and lack of practical experience of candidates.[60]

At the same time, a high share of tertiary educated workers are employed in occupations that do not typically require tertiary qualifications. Approximately 39 percent of workers with tertiary education were found to be overqualified, and this number increased by 13 percentage points between 2011 and 2018 (Figure 71). While the overqualification rates of male workers (40 percent) is slightly higher than females (37 percent), this number increased substantially for females between 2011 and 2018.

FIGURE 70:
EDUCATION PROFILE OF WORKING AGE POPULATION, BY EDUCATION LEVEL (%), 2003 AND 2018

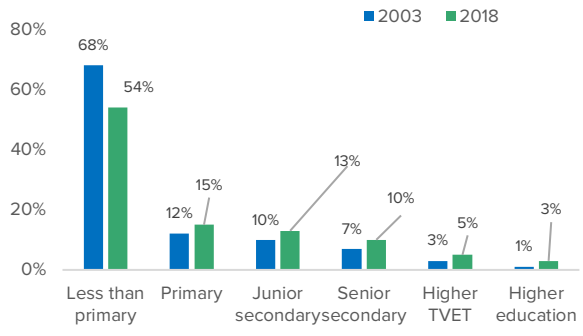
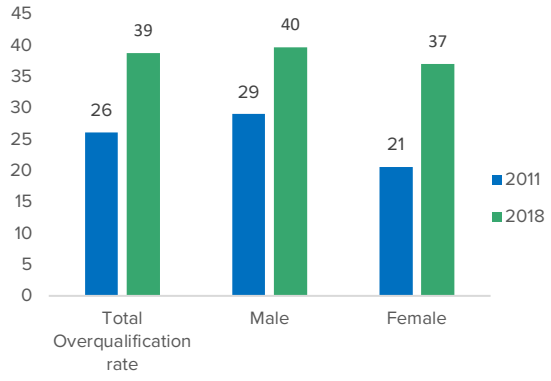


FIGURE 71:
OVERQUALIFIED WORKERS, BY GENDER (%), 2011 AND 2018



Notes: The overqualification rate is calculated as the total number of workers with tertiary-level qualifications (ISCED categories 5 to 8) employed in occupations that do not typically require tertiary qualifications (ISCED 4-9), divided by the total number of employed workers with tertiary qualifications (ISCED 5-8). ICSED = International Standard Classification of Education levels.
Source: World Bank staff calculations from Sierra Leone Integrated Household Survey, 2011, 2018.

59 GoSL Education Sector Plan, 2022.
60 GIZ, 2018.

The scarcity of technical skills and overqualification of tertiary-level graduates points to a mismatch between the supply and demand for skills. There is a discrepancy between the skills available in the labor market and the skills that are in demand by employers. According to a 2017 report by the International Labor Organization, skills mismatch captures a variety of scenarios, including: (i) vertical mismatch: where individuals are over- or under-qualified or skilled for a job, (ii) horizontal mismatch/ skill gaps: where firms are unable to attract the right skills for positions; and (iii) skill obsolescence: where individuals possess skills that have become obsolete or are outdated due to technological advancement and the evolution of the labor market. The issue of skills mismatch was identified as one of the key issues limiting youth employment outcomes during stakeholder consultations.

The skills mismatch is at least in part driven by the inappropriate allocation of resources in higher education. Technical and vocational education and training (TVET) has not received adequate attention, and the alignment between labor market demand and TVET is weak. Moreover, only three out of every 10 tertiary education students are enrolled in science, technology, engineering, agriculture and mathematics degree programs, and only one in five women compared to one in three men.

The incidence of firm-based training is very low in Sierra Leone, and even firms that do offer training do not manage to train all staff. Only 21 percent of firms offered formal training to staff, lower than the sub-Saharan Africa average of 27 percent. However, of the firms in the manufacturing sector that offer training, 54 percent of staff have been trained (higher than the sub-Saharan Africa average of 46 percent.[61]

Youth employment is a challenge and more so for skilled youth. 23 percent of youth aged 15 to 24 are not in education, employment, or training (NEET) (Figure 72 and Figure 73). While there is only a small difference between the NEET rates for females and males (26 and 23 percent, respectively), the urban-rural divide is significant as 31 percent of youth in urban areas are NEET compared to 17 percent in rural areas. These differences are largely driven by the significant disparities between rural and urban areas in youth employment, with 61 percent of youth employed in rural areas compared to 35 percent in urban areas. Using estimations from Sierra Leone Integrated Household Survey data, primary or less educated youth are more likely to be NEET than junior secondary-level educated youths. However, youth with completed senior secondary or higher or TVET are more likely to be NEET than primary or lower educated youth, which could reflect the nature of the labor market. While unskilled and less educated youth are engaged in low-productivity (and low-skilled) economic activity, there are likely fewer opportunities for more educated youth looking for relatively higher-paying and higher-skilled jobs. The same may hold for youth who have completed university education. Poverty status does not explain the variation in NEET, which is understandable as poor youth are more likely to work compared to their non-poor counterparts and are less likely to be in school.

61 World Bank, 2023. Skills deficit in the mining sector is discussed in Chapter 5.

FIGURE 72:
YOUTH NOT IN EDUCATION, EMPLOYMENT OR TRAINING, BY GENDER (%), 2003 AND 2008

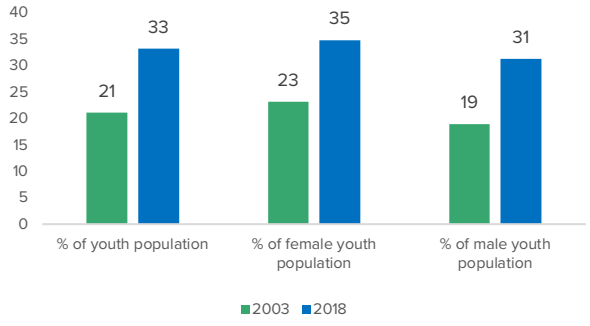
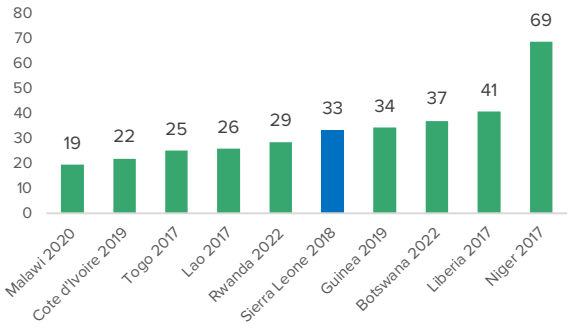


FIGURE 73:
YOUTH NOT IN EDUCATION, EMPLOYMENT OR TRAINING, SIERRA LEONE AND PEERS (%)



Note: Share of youth not in education, employment or training (NEET) is the proportion of young people who are not in education, employment, or training to the population of the corresponding age group: youth (ages 15 to 24); persons ages 15 to 29; or both age groups.
Source: World Development Indictors.

The correlates of the probability of being NEET for urban and rural youth differ, with more educated youth being particularly disadvantaged in rural areas. The probability of being NEET in rural areas for females is much higher relative to males than in urban areas after controlling for other factors. This is because rural female youth are less likely to work than males, while urban female youth are equally likely to work as males. For education levels, youths that have completed senior secondary (relative to those that have completed primary or lower) are more likely to be NEET in urban areas, although this is not the case in rural areas. Youths that have completed TVET are less likely to be engaged in economic activity in urban areas (relative to those that have completed primary or lower), and youths that have completed higher education are less likely to be engaged in the labor market than primary or lower educated youth, and this is more pronounced in rural areas than urban areas (potentially indicating a lack of opportunities for highly educated individuals in rural areas).

A relatively small proportion of NEET are actively seeking employment; financial constraints, a lack of skills/experience, and taking care of the home/family are the main obstacles to finding work. However, these reasons vary by location and gender. When asked about their intention to find a job, only 11 percent of the NEET youth tried to find a job in the last 4 weeks, and this is particularly low for rural and female youth (6 and 7 percent, respectively). NEET youth with a higher level of education are more actively job hunting, with 23 percent of the NEET youth with higher TVET and 12 percent with college education having tried to find a job in the last 4 weeks. The main reasons for not looking for work include a lack of financial resources and having to contribute to household work, followed by the lack of required skills and experience. However, these reasons vary by location and gender (Annex Figure 2). A lack of financial or other resources is the most important reason for not looking for work cited by urban youth (17 percent) and males (20 percent), while taking care of household work is the most important reason for rural youth (23 percent) and female youth (19 percent). Lack of required skills or experiences is important for urban youth (14 percent) but not as much of a factor for rural youth (6 percent) (Annex Figure 5 and Annex Figure 6).[62]

62 Sierra Leone Integrated Household Survey, 2018.

Barriers to improving human capital

Focus group consultations with students and teachers point to demand and supply-side barriers contributing to low access to education. Well-educated and highly-skilled individuals are more likely to get decent jobs and earn higher disposable incomes than their uneducated/less skilled counterparts. Demand-side factors that limit access to education include cost of schooling, income constraints and poverty, low parental support and awareness of the benefits of schooling, early pregnancy and marriage (for girls), and gender-based violence in school (especially for girls). Supply-side factors include low quality of schools, geographical inequities in access (e.g., distance to school) and inadequate financing. Factors contributing to poor learning outcomes include inadequate teacher training and supervision, weak school leadership, a lack of prioritization of foundational learning, excessive class sizes (particularly at the lower end of primary and in many secondary classes) and low levels of community engagement in education. Many students face various forms of abuse and feel disenfranchised both in and outside the classroom.

Financial constraints and poverty: Poor households face challenges in providing basic necessities such as uniforms, lunch money, and transport fares to get to school, and many need to send children to work or have them look after younger children in the household. Despite the elimination of school fees under the FQSE Program, a survey of out-of-school children found that about one-fifth of parents cited financial constraints in sending their children to school. [63]

Lack of interest and low perceived returns to schooling: Low parental awareness of the benefits of schooling and lack of parental support for education contributes to low levels of school participation. A survey of parents of out-of-school children (before the elimination of school fees) reports that almost two-thirds of parents did not value the education their children would receive.[64] This may reflect lack of information on returns to schooling, poor quality of schools and slow progress (e.g., in some parts of the country, up to 20 percent of primary school children are repeating a grade).

63 Samonova et al. 2021.
64 Sierra Leone Integrated Household Survey, 2018.

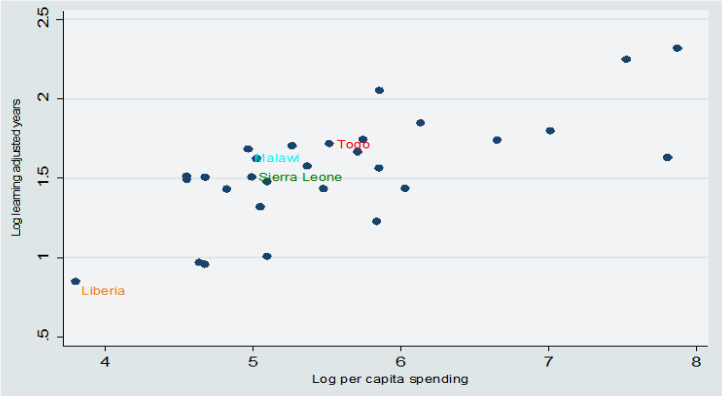
Distance to school: Greater distances to school increase direct transportation costs, safety concerns, and indirect costs (as the time travelling to school can be spent on other activities or work). Therefore, distance to school can be an important barrier to education, especially in rural areas and for adolescent girls. However, at the primary level only 5 percent of surveyed parents indicated that their child is out of school because school is too far (GOSL, 2020).

Gender norms and stereotypes, lack of self-belief and girls' safety: Gender norms contribute to differing aspirations regarding schooling and work for boys and girls within families. Girls may not enroll or may drop out because they are expected to do more domestic work, the perceived value of girls' education is low, or they may lack belief in their academic abilities, particularly in the absence of female role models. Early marriage and teenage pregnancy due to poor sex education and reproductive health services are barriers to girls' access to schooling. In addition, girls face sexual abuse and harassment in schools. Many children don't learn adequately to pass exams and get stuck repeating grades and exam classes. In the absence of strategic remediation approaches, repetition is a significant cause of drop out.

Inadequate public financing of education. Education increased from 13. 5 percent of government spending in 2017 to 20 percent in 2020, but at approximately 2.8 percent of the GDP, education spending is much lower than the threshold of 4–6 percent of GDP recommended by the Sustainable Development Goal (SDG4) framework. In comparison, Rwanda spends around 3.8 percent of GDP on education. Moreover, the majority of government spending on education is on primary (38 percent) and secondary education (30 percent) with very little left for pre-primary (below 0.1 percent) and TVET (3 percent) sub-sectors. Additionally, 99 percent of education spending is on recurrent expenditures, and there is insufficient funding for capital expenses such as infrastructure, teacher training, and other essential non-salary expenses. Further, a large share of recurrent spending is on teacher salaries but teacher absenteeism is high, resulting in significant wastage of public resources.

Inefficient education spending. Dropouts and repetition in early grades result in close to half of the resources being wasted at the primary level; it takes more than 12 student years to produce a primary graduate. The effectiveness of per capita spending in generating educational outcomes captured by the learning adjusted years of schooling is not high compared to other countries in the region (Figure 74). Countries like Malawi are similar to Sierra Leone in per capita spending but do better in learning adjusted years of schooling. Sierra Leone could achieve higher educational outcomes with a given level of spending by increasing the effectiveness with which resources are converted into access, attainment and learning. Virtually every aspect of school administration, including areas that receive the largest budget allocations, lacks evidence-driven, criterion-based policy making, which impedes rational planning and budgeting.

FIGURE 74:
LEARNING-ADJUSTED YEARS OF SCHOOLING AND LAGGED PER CAPITA PUBLIC SPENDING ON PRIMARY EDUCATION, SIERRA LEONE AND PEERS (YEARS AND CONSTANT US$)



Note: Learning adjusted years of schooling are for 2017; Per capita public spending on primary education is for 2012 in constant US$ at purchasing power parity.
Source: World Bank Education Statistics.

Inadequate decentralization of financing and devolution of functions. The devolution of functions on basic education to Local Councils is only partially implemented. Over 90 percent of education funds are spent at the central level while education spending at the local level is less than 10 percent and varies from year to year. There is extremely low capital education spending at the local level, leading to lack of effective long-term investment in schools. There is no clear written policy document, guidelines or mechanism that clarifies roles and responsibilities at the local level among the many different bodies charged with education service delivery leading to confusion and duplication of work among agencies.

Government policy

Education is at the core of the Government's development strategy and features prominently in the supplementary budget 2023. The Medium-Term National Development Plan 2019–2023 identified "education for development" as one of its eight strategic priorities. Over the last four years, Sierra Leone has kicked-off an ambitious schooling expansion, by introducing fee-free and 'Radical Inclusion' policies to support marginalized groups, including pregnant girls and the poorest children, to participate in school. Human capital is also featured as one of the 'Big Five' priorities in the government's manifesto, as articulated in the July 2023 supplementary budget.

Recent years have seen substantial government efforts to improve education outcomes as well as youth employability. To improve teaching quality, the government is implementing structured pedagogy based on updated teaching and learning materials in pre-primary and grades 1-4 for literacy, numeracy, and civics and applying in-person and digital teacher mentoring. To improve access by reducing households' out-of-pocket school expenditures, the FQSE Program removed school and exam fees and invested in furniture, teaching and learning materials, and other support for students. To ensure access and learning for vulnerable groups, the National Policy on Radical Inclusion in Schools focuses on pregnant girls and parent learners, disabled students, and students from poor and/or geographically remote backgrounds; similarly, the Sierra Leone Education Innovation Challenge offers a premium for improving learning outcomes for girls. Technology is being leveraged to improve service delivery; for example, the MBSSE's results-checker grants instant access to exam results and school placement.

To promote youth employability, a number of initiatives are being put into place to improve skills development. For example, the Ministry of Technical and Higher Education has taken steps to improve the quality and relevance of training and capacity-building programs. Through the National Council for Technical, Vocational and Other Awards, competency-based curricula for 25 priority occupations have been developed and will be rolled out. This is a departure from the previous method of training, which was theory-based with limited opportunities for practical training and assessing students' competencies. The Ministry is also developing a National Vocational Qualification Framework and a Dual Apprenticeship Policy[65] to finance job training by public and private training providers and businesses in priority sectors. The Ministry of Youth Affairs established 'Youth Connekt Centers' to improve access to capital and markets, skills development, and sustained investment in training, apprenticeship, and education.

Policy recommendations

This section presents key policy recommendations to improve human capital outcomes for Sierra Leone, focusing on: (i) improving access and learning outcomes, and (ii) enhancing the employability of youth. It also presents priorities and policy recommendations common to both.

Improving access and learning outcomes

- **Increase access to schooling,** particularly at the early childhood education level and secondary education level. This could involve engaging in public-private partnerships where government schools may not be available and constructing/

65 The National Vocational Qualification Framework will classify qualifications by level based on learning outcomes, which will help improve mobility between different education subsystems and transition to international labor markets. The apprenticeship policy will help provide an opportunity for job seekers to gain practical work experience, encourage learners and employers to participate in the DAP, and provide skills training that will lead to recognized occupational qualifications.

upgrading schools (particularly at the early childhood education level) but also using the School Catchment Area Policy Guidelines and tools that have been developed utilizing data to identify localities where there is the greatest need.

» **Address disparities in access to quality education** and promote gender equality and inclusive education and focus on the implementation of the National Policy on Radical Inclusion. Identify vulnerable groups such as children with disabilities, out-of-school children, and pregnant girls and provide the necessary support, working closely with key stakeholders such as other government agencies, school management committees, community leaders, and social workers.

» **Tackle other demand-side barriers to education services** to accompany investments that enhance the quality of education. These include: school-related gender-based violence, teenage pregnancy, and early marriage, in addition to the cost of schooling (which comprises both out-of-pocket and opportunity costs). Human-centered approaches that consider the specific needs and preferences of communities will be needed to remove barriers to access. In addition, while free basic education services will reduce out-of-pocket expenditure, vulnerable groups might need additional incentives and support to access and utilize such services. Social protection mechanisms (e.g., vouchers or transport allowances) should target these groups to ease financial barriers for education services.

» **Strengthen education workforce management** and create better environments to recruit and retain the workforce. Develop and implement staff management systems to attract and retain the best caliber education workforce. Ensure effective deployment of teachers, using various data, including annual school census data, information on the school environment (availability of teaching housing, district, approval status, electricity, and water availability, and main language of the chiefdom), and teacher data (new teachers, qualifications, years of experience, gender-- with priority given to females) to match teachers to schools. Ensure more effective deployment of teachers by leveraging robust data and use preference match models for teachers.

» **Improve institutional effectiveness:**

- Strengthen the school quality assurance system to monitor quality of teaching. A significant part of the education service delivery is managed by non-government entities, so the creation of standards, guidelines, and protocols is critical to ensure school quality assurance. The government needs to build a strong supervision mechanism at the local level and provide necessary support to schools. The MBSSE's recruitment of school inspectors at the district level is an important step in this direction.
- Strengthen capacity of local agencies at the district level with a clear division of labor. The devolution of functions on basic education to Local Councils is only partially implemented, while more than 90 percent of education funds are managed at the central level. Effectiveness of education service delivery at the local level is being undermined by unclear roles and responsibilities among local agencies engaged in education, such as the DEO, FQSE unit, regional TSC office, and Local Councils. They are taking increased responsibilities in supporting and monitoring school operations and service delivery. Increased investment is needed to train staff at the local level, better equip the offices, and employ more professionals at the local level.
- Promoting evidence-based decision-making. Effective implementation of education policies requires reliable and accurate data to inform decision-making. Sierra Leone has invested in developing comprehensive data management systems to track education indicators and support evidence-based decision-making. However, efforts should be made to collect more regular information on sector outcomes and beneficiaries, and service delivery.

Enhancing youth skills and employability

- **Establish sector skills bodies to improve alignment between labor market supply and demand.** These bodies would support dialogue between the private sector and the government on TVET/Higher Education and labor market issues.
- **Reprioritize investments in skills training based on evidence and labor market needs.** In addition to the information from employers regarding anticipated vacancies and potential growth occupations, there is a need to utilize information from tracer studies to assess which courses are leading to greater employment outcomes and which courses are contributing to the oversupply of labor. Financing should then be reprioritized based on this assessment.
- **Establish incubation hubs occupational groups/ cooperatives** (at higher education and TVET institutions) and provide post-training support (e.g., materials, equipment, credit, mentorship) to high-performing graduates to set up/expand their own enterprises. Further rolling out of the dual-apprenticeship system, based on the experience from the ongoing pilot activities, and strengthening of On-the-Job Training (OJT) for TVET and higher education students/graduates. Improve the quality and relevance of TVET and higher education sectors. More youths need to be better educated and equipped with the necessary competencies and skills needed in the labor market.
- **Strengthen partnerships with industry to increase involvement in skills training** (e.g., curriculum development, training, assessment of students, on-the-job training, and job placement). Re-align skills training course offerings to those for which there is demonstrated demand from the labor market. Prioritize digital skills (basic and intermediate level).
- **Promote female employability,** employers should be incentivized to provide on-the-job training opportunities, particularly for women, women should have increased opportunities to access credit for their enterprises, and there should be strict enforcement of the Gender Equality and Women's Empowerment Act 2022 (which introduces a 30 percent quota for women in public and private sector jobs, 14 weeks of maternity leaves, and guaranteed equal pay). Enhancing access to affordable childcare services is also essential to improve labor market outcomes for women, and one approach could be establishing community-based childcare centers to alleviate the burden of unpaid care work on women, enabling them to participate in the labor market.

4

TRADE AND INVESTMENT AS A CATALYST FOR GROWTH

As a small, low-income, resource-rich country, trade can be a key driver of the Sierra Leonean economy. While trade presents significant economic opportunities for sustained growth, it also presents risks by exposing the country to exogenous shocks and boom-bust cycles. Yet, there has been little recent analysis of the role trade and trade policies can play in supporting growth in Sierra Leone. This chapter provides an in-depth analysis of the opportunities and constraints posed by trade-driven sectors in supporting inclusive and resilient growth.

Sierra Leone has achieved rapid export growth over the past decades but remains one of the least open countries among comparators. Exports of goods and services increased by 8.9 percent per year since the civil war, one of the highest rates in Sub-Saharan Africa. The share of exports in GDP rose from 13 percent in 2002-04 to almost 17 percent in 2019-21 but remained lower than export shares in almost all structural and aspirational peer countries.[66] Sierra Leone's small market size and low income underline the importance of trade openness and growth. However, its specialization in commodity exports calls for stronger trade diversification and upgrading to foster stability, productivity, and value addition. Such a change requires more than moving out of the current area of concentration, i.e., extractive industries, into other sectors of the economy. It is also about introducing new export products, raising the quality of existing export products, reaching new export markets, and linking new domestic activities to global markets through value chain integration.

This chapter will undertake a Trade Competitiveness Diagnostic with a focus on boosting competitiveness and increasing economic diversification and upgrading. The diagnostic will analyze opportunities for growth through trade and value chain integration and will seek to identify features of products and markets that promote competitiveness, diversification and upgrading with a heavy focus on benchmarking relative to comparator countries.[67] The next section briefly reviews Sierra Leone's trade performance. Then the fundamental and policy determinants of exports in Sierra Leone are analyzed. The following section considers new trade opportunities through diversification and upgrading export products, and the last section discusses some of the policy implications of the analysis.

Sierra Leone's trade performance and specialization

Exports have grown rapidly over the past two decades but remain low as share of GDP relative to most peers. Exports of goods and services have increased by 8.9 percent a year in real terms since the end of the civil war. Exports rose strongly after recovery from the civil war and reached a peak in 2012 due to demand for iron ore from China (Figure 75). Subsequently, exports dropped in 2015 and remained sluggish through 2020, trailing export growth in many peer countries. Ebola and the disruptions in iron ore extraction at Marampa mine exacerbated the negative impact of the 2014-15 global commodity price slump, and the COVID-19 pandemic further limited export growth. Exports picked up again in 2021, when activity at the Marampa mines resumed and global commodity demand increased with recovery from the pandemic (Figure 76). Exports of goods and services equaled 12 percent of GDP in 2019-21, lower than in almost all structural and aspirational peers.

66 In order to avoid one-year spikes that might skew the data, three-year averages (2000-02 and 2019-21) of export values are used here and in much of the later analysis.

67 The most recent major trade study of Sierra Leone is the Diagnostic Trade Integration Study of 2006 which was updated in 2013.

FIGURE 75:
EXPORTS OF GOODS AND SERVICES (US$, BILLIONS), 2000-21

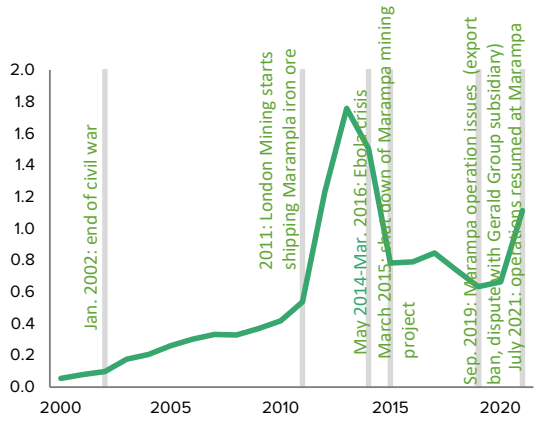


FIGURE 76:
EXPORTS OF GOODS AND SERVICES, (% CHANGE IN US$ AND IN VOLUMES), 2002-21

Source: World Bank staff calculations. International Monetary Fund Balance of Payments and World Economic Outlook.

The export basket is relatively diversified when compared to peers but is dominated by resource-based products. Between 2016 and 2021, extractives accounted for 57 percent of the goods export basket, followed by agriculture and foodstuffs with 18 percent, and wood and paper with 12 percent (Figure 77, Figure 78). Three other products groups (machinery and electronics, iron and steel, and transport equipment) accounted together for 10 percent. However, many of these export products could be re-exports or used equipment that mining companies operating in Sierra Leone are sending overseas to headquarters or other destinations.[68] Sierra Leone has a revealed comparative advantage[69] in many agricultural, foodstuffs and extractive product groups (Annex Table 5). Despite the concentration in resource-based products, Sierra Leone's exports are more diversified than those of all comparators except Lao P.D.R., Côte d'Ivoire, and Togo (Figure 78).[70] Exports have become slightly more concentrated over the past decade, a trend that characterized most peers, most strongly in Guinea, Rwanda but also Botswana.

FIGURE 77:
EXPORTS OF GOODS. BY PRODUCT (US$, BILLIONS), 2002-21

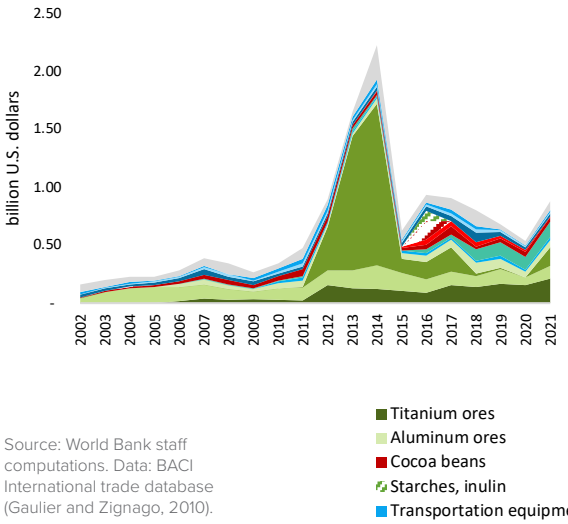
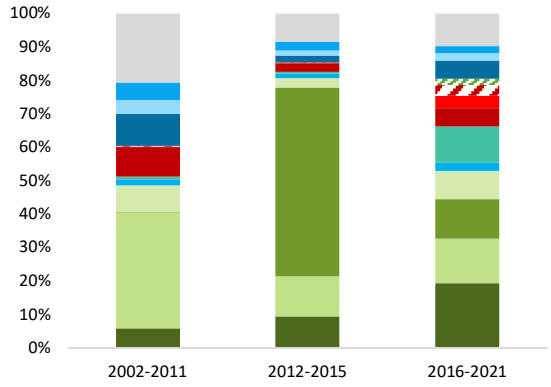
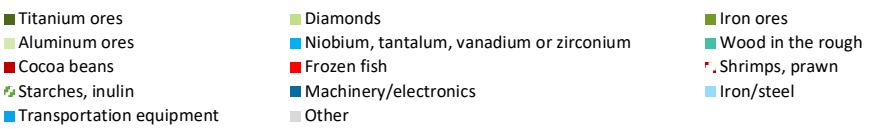


FIGURE 78:
EXPORTS OF GOODS, BY PRODUCT (% OF TOTAL), 2002-21





Source: World Bank staff computations. Data: BACI International trade database (Gaulier and Zignago, 2010).

68 In 2021, close to half of Sierra Leone's exported product lines were machinery and textiles/apparels, but these categories accounted together for only 3.5. percent of the goods exports in that year.

69 The Balassa revealed comparative advantage index measures the relative advantage or disadvantage of a certain country in a certain industry as evidenced by trade flows. An index above 1 indicates that a country's share of exports in that sector exceeds the global export share of the same sector. If this is the case, it can be inferred that the country has a comparative advantage in that sector. Since high export volumes can result from subsidies or other incentives, including under-valued exchange rates, it is argued that the revealed comparative advantage index captures competitiveness rather than comparative advantage (Siggel, 2006).

70 Export concentration is measured by the Herfindahl-Hirschman index; a lower value indicates a more diversified export basket. The index is computed as the sum of squared shares of each product in total exports. A country with a perfectly diversified export portfolio in terms of products will have an index close to zero, whereas a country with only one export product will have a value of 1.

FIGURE 79:
HERFINDAHL-HIRSCHMAN INDEX OF PRODUCT CONCENTRATION OF EXPORTS OF GOODS, SIERRA LEONE AND PEERS, 2009-11 AND 2019-21

Source: WITS, World Bank.

Services exports have fallen relative to goods and to GDP. From 2014 to 2021, Sierra Leone's share of services in total exports declined from 14 percent to 6 percent, and while goods exports underwent dramatic growth over the same period, services exports barely budged from 2002 levels (Figure 80, Figure 81). The fall in services exports after 2014 reflected the decline in travel services during the Ebola crisis and the COVID-19 pandemic, a decline in transport services due to falling goods trade, and a precipitous fall in telecommunications, computer, and information services, which in 2012-14 made up over half of services exports. Annex Table 6: Exports of services, by category (US$, millions, and % of total), 2006-08, 2012-14, and 2018-20). These trends contrast with the more rapid pace of global services trade relative to goods trade and the increasing importance of modern services.[71]

FIGURE 80:
EXPORTS, GOODS VS. SERVICES (US$, BILLIONS, AND % SHARE), 2002-11

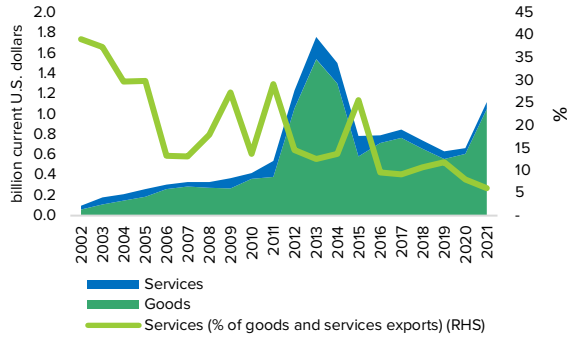
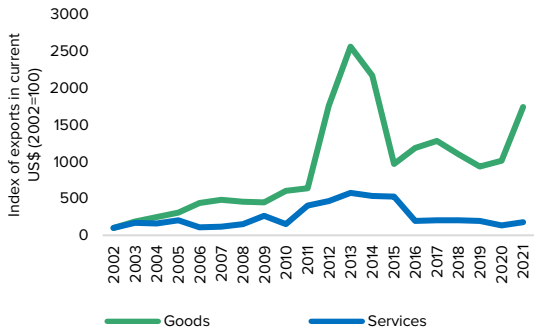


FIGURE 81:
EXPORTS, GOODS VS. SERVICES (INDEX), 2002-21



Note: Exports of goods and services in current US$, billions.
Source: World Bank staff calculations on International Monetary Fund Balance of Payments data.

71 Taglioni and Winkler 2016, World Bank-WTO 2023.

While the EU still represents the most important export destination, it has given way to the East Asia and Pacific region, driven by export growth to China. Despite its decline, the EU and UK still absorbed over 45 percent of Sierra Leone's exports in 2019-21, down from 62 percent one decade earlier (Annex Table 7). This pattern was driven by five main markets, most notably Belgium representing almost half of these exports (20 percent), while Romania, Germany, the Netherlands and France account for another 23 percent. Export shares of primary goods to the EU and UK declined by more than half from 13.2 to 6 percent over the period. By contrast, the export share going to East Asia expanded by over 13 percentage points within just one decade, to 34.7 percent in 2019-21, in large part driven by China's growing role, now absorbing 27 percent of exports up from 4 percent, while Japan and South Korea also showed some expansions, although to a lesser extent. East Asia's increasing role is driven by expanding resource-based export shares from 9.2 to 37 percent of Sierra Leone's total goods basket over the period (Annex Table 8). Sierra Leone's annualized export growth to its top 10 export markets in 2021 was larger than world export growth over the period 2011-21 with the exception of Romania.

Participation in global value chains (GVCs) is high. Sierra Leone's aggregate participation in GVCs (defined as trade flows that cross at least two country borders) accounted for 54 percent of goods and services exports in 2021, higher than for its peers (Figure 82, Figure 83, Figure 84, Figure 85). Total GVC participation can be decomposed into pure forward, pure backward and two-sided participation. The country's high level of forward GVC participation (i.e., the share of domestic value added that is re-exported by its bilateral trading partners) reflects its specialization in relatively unprocessed minerals and agricultural products, which are often shipped to third countries for further processing. From 2010 to 2020, Sierra Leone increased its backward GVC participation (the portion of imported inputs used in export production) from 12 to 16 percent of exports of goods and services and its two-sided participation (imported inputs that are exported by its export partners) from 5 to 10 percent. The increase in backward GVC participation in part reflects reliance on imported machinery to produce minerals, but backward participation also increased in other products, for example, food and beverages and wood, petroleum, and metals.

FIGURE 82:
GVC PARTICIPATION, TOTAL, SIERRA LEONE AND PEERS (% OF GOODS EXPORTS), 2010-21

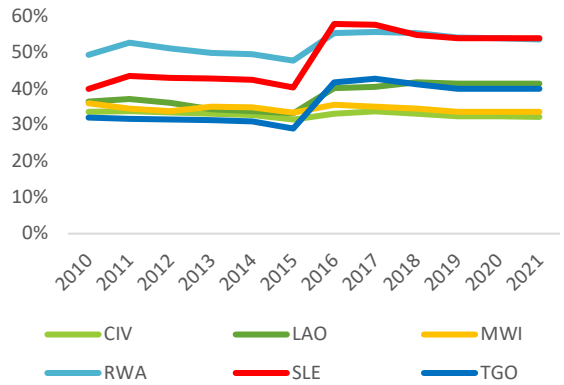


FIGURE 83:
GVC PARTICIPATION, PURE FORWARD, SIERRA LEONE AND PEERS (% OF GOODS EXPORTS), 2010-21

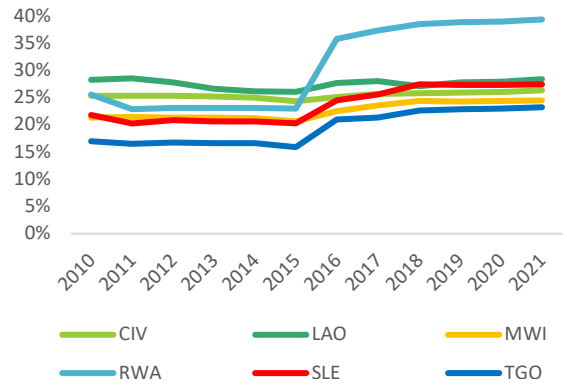


FIGURE 84:
GVC PARTICIPATION, TWO-SIDED, SIERRA LEONE AND PEERS (% OF GOODS EXPORTS), 2010-21

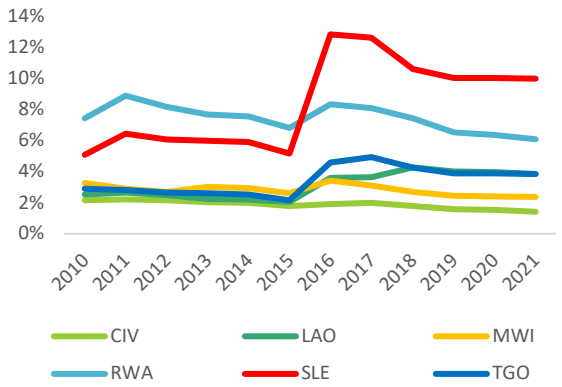
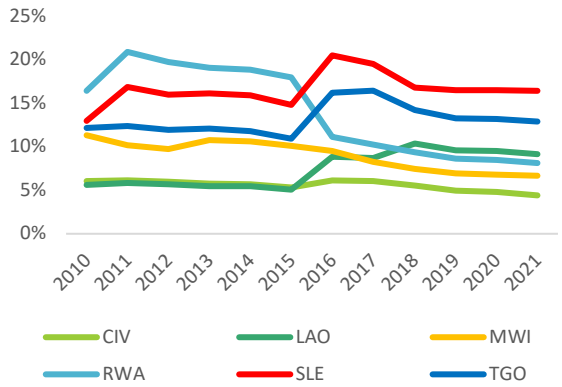


FIGURE 85:
GVC PARTICIPATION, PURE BACKWARD, SIERRA LEONE AND PEERS (% OF GOODS EXPORTS), 2010-21



Note: Pure backward GVC participation share measures the portion of imported inputs used in export production that is directly consumed in the partner country. Two-sided participation is the portion of imported inputs used in export production that is reexported by a country's bilateral trading partner (rather than consumed there). The sum of pure backward and two-sided participation is the traditional measure of backward GVC participation. Pure forward participation measures the share of domestic value added that is reexported by a country's bilateral trading partner (rather than consumed). Increases after 2015 may be linked to data anomalies in the underlying Eora Global Supply Chain (EORA) database from 2016 onwards.
Source: World Bank staff computations. EORA, based on Borin, Mancini and Taglioni (2021).

Determinants of trade and value-chain competitiveness

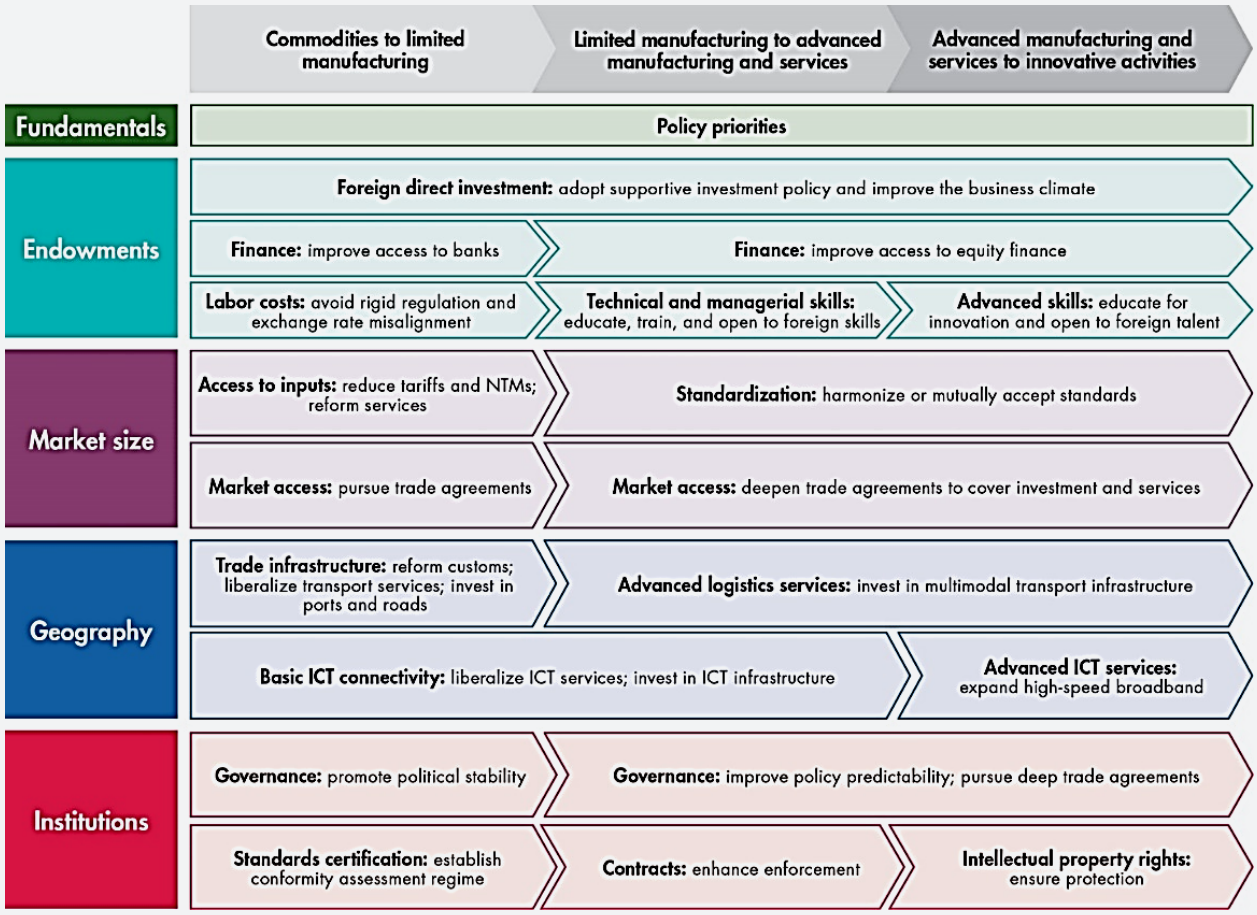
Market size, geography, factor endowments, the quality of institutions, and policies shape export performance. Appropriate policy choice can help overcome fundamental constraints. The following policy framework can be used to understand policy priorities that will support Sierra Leone to move from the limited participation in commodity-based export value chains towards more inclusive regional and GVC participation in sectors such as agribusiness as well as additional value-adding activities in traditional mineral-based export activities (Figure 86). Key policies include trade policy and the domestic regulatory environment, trade facilitation and logistics, and prospects for and barriers to regional integration.

Improve endowments by increasing FDI

Foreign direct investment in Sierra Leone reached high levels during 2010-14 but then declined. Concerted efforts to attract FDI during 2004-10 in conjunction with an upswing in commodity prices resulted in significant foreign investments in natural resources. Notably, this upswing in FDI was driven by the revival of the mining project at the Tonkolili iron ore mine.[72] FDI as a share of GDP peaked at 20.7 percent in 2011, before easing to 4.8 percent in 2014 (Figure 87). The FDI to GDP ratio fluctuated thereafter, similar to trade patterns, declining with the 2014-15 Ebola crisis, increasing to 7.1 percent of GDP in 2017 before falling to around 4.1 percent in 2022. Major issues affecting FDI over the latter period included a decline in commodity prices that discouraged FDI in the natural resources sector and political turbulence. Over 2005 to 2021, FDI averaged 5.3 percent of GDP, or over 50 percent higher the average FDI to GDP ratio in low-income countries during the same period. FDI in Sierra Leone has consistently been a larger share of total investment than in low-income countries on average (Figure 88). The concentration of Sierra Leone's FDI by source countries is about at the median across countries. After Luxembourg (which channels FDI from a wide range of countries),[73] China has the largest stock of FDI in Sierra Leone (US$106 million in 2021), followed by Belgium and the Netherlands (US$41 million each).

72 Tonkolili, the second-largest iron mine in Africa, resumed operations in 2012 after a substantial investment. The total projected investment for the project is approximately US$2.2 billion. (African Development Bank Group and Bill and Melinda Gates Foundation, 2015).
73 Investments channeled through Luxembourg may originate from a diverse range of countries, as numerous companies, regardless of their origin, opt for Luxembourg as a platform thanks to the tax benefits it offers for dividends and profits. While the residence principle remains relevant in FDI statistics, accurately tracing the route and original source of these investments poses a significant challenge that requires international coordination (BIS, 2020).

FIGURE 86:
POLICY PRIORITIES SUPPORTING TRANSITIONS BETWEEN TYPES OF GVC PARTICIPATION



Source: World Bank (2020, p. 187). Note: ICT = information and communication technology, NTMs = non-tariff measures.

FIGURE 87:
INVESTMENT, DOMESTIC AND FOREIGN, SIERRA LEONE (%), 2005-21

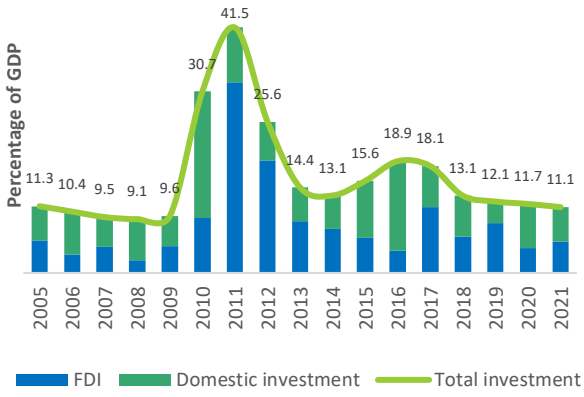
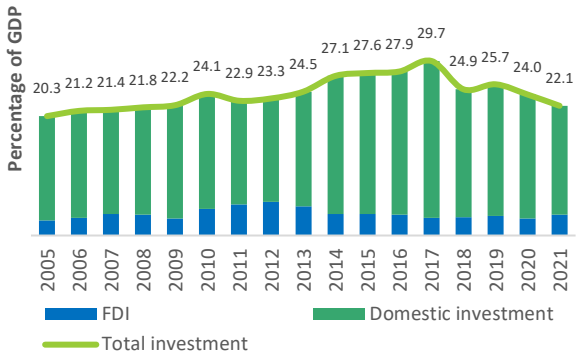


FIGURE 88:
INVESTMENT, DOMESTIC AND FOREIGN, LOW-INCOME COUNTRY AVERAGE (%), 2005-21



Source: World Bank staff calculations using WDI.

In 2021, Sierra Leone displayed a relatively diverse range of FDI sources, as indicated from Herfindahl-Hirschman Index concentration index of 0.15 (Figure 89). This metric underscores the presence of a broad array of countries contributing to the influx of FDI. Among its structural peers, Sierra Leone positioned itself as the third most diversified in terms of FDI origin, following behind Liberia (0.07) and Malawi (0.10). Notably, among aspirational counterparts of Sierra Leone, certain degrees of concentration in FDI sources were observed, including instances like Lao (0.11), Rwanda (0.16), and Côte d'Ivoire (0.19). Diversified FDI sources reduce reliance on a single origin, enhance crisis resilience through source substitution, and prevent sudden stops of inflows.

Over the 2019-21 period, China emerged as a substantial FDI source for Sierra Leone, even though a declining trend in FDI was apparent within this timeframe. In 2021, China's FDI stock amounted to US$106 million (Figure 90), placing it near other significant contributors such as Luxembourg with US$133 million and Belgium (US$41 million). This reflects the increased geo-political aspirations of China and its positioning as a major foreign investor in Africa and other developing regions, particularly in natural resources but also infrastructure. While European countries are more "traditional" source of foreign investment in West Africa.

FIGURE 89:
CONCENTRATION OF FDI SOURCES, SIERRA LEONE AND PEERS (INDEX), 2021

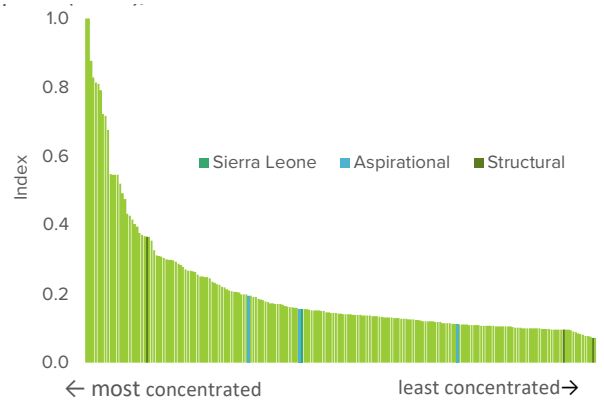
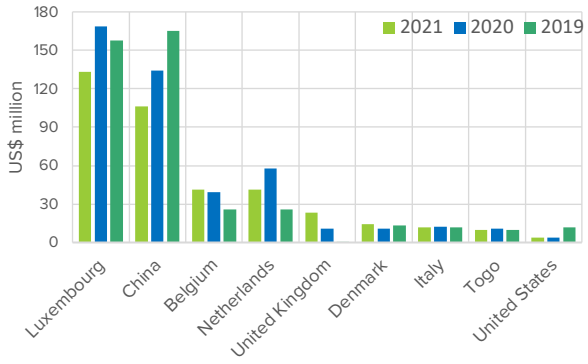


FIGURE 90:
MAIN FDI SOURCES, SIERRA LEONE, BY INVESTOR (STOCK IN US$, MILLIONS), 2019-21



Note: Concentration measured using the Herfindahl-Hirschman index.
Source: World Bank staff calculations using World Bank harmonized bilateral dataset.

The allocation of greenfield FDI inflows appears to be concentrated within a limited set of economic activities in Sierra Leone, as indicated by the available sectoral data. Notably, and perhaps surprisingly, when examining the period from 2017 to 2022, fDi Markets (a Financial Times proprietary database) shows that the majority of greenfield projects were centered around business services.

Agriculture and services sectors observe a higher concentration of greenfield FDI projects (Figure 91). An exploration of the period from 2017 to 2021 reveals a growing concentration of FDI projects within specific sectors. This shift towards heightened sectoral concentration raises considerations regarding potential economic vulnerabilities for Sierra Leone's economy (Figure 92). However, this trend also presents opportunities for economic diversification and progression, if harnessed effectively.

FIGURE 91:
GREENFIELD FDI ANNOUNCEMENTS, BY SECTOR (ESTIMATED TOTAL CAPEX AS SHARE OF TOTAL INVESTMENT IN 5-YEAR PERIOD), 2007-21.

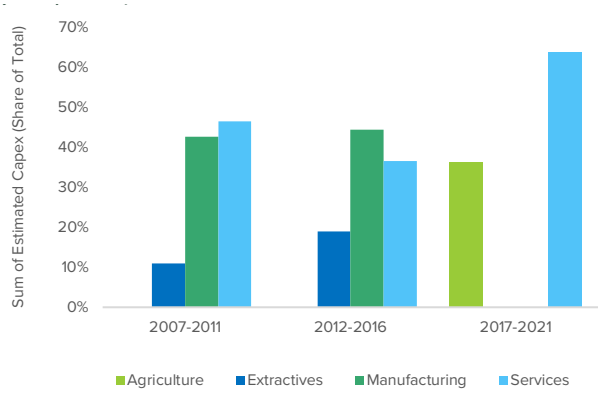
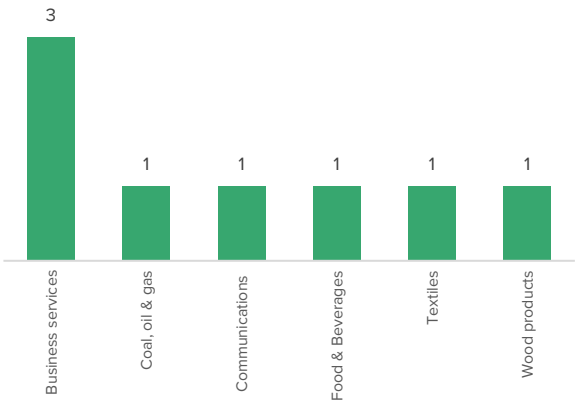


FIGURE 92:
PROJECTS, BY SECTOR (NUMBER), 2017-22



Note: FDi Markets, a Financial Times proprietary database, gathers data on cross-border greenfield investments through publicly accessible sources. It does not constitute official statistics.
Source: Financial Times fDi Markets.

Between 2017 and 2022, additional investments were observed in sectors such as tourism, energy, and transport infrastructure. Various public sources revealed additional projects not covered in Figure 9. For instance, within tourism, projects like Sierra Palms, Hilton hotels in Freetown, and Atlantic Lumley Hotel emerged.[75] In the energy sector, noteworthy developments occurred. The Chinese Hunan Group completed the Bankasoka Hydro Dam in Port Loko town for US$60 million in December 2017. Furthermore, in June 2018, the Government of Sierra Leone entered an agreement with Turkish company Karpowership to generate electricity from a docked ship in Freetown. They also partnered with Africa Growth and Energy Solutions for a collaborative 25 megawatt solar PV project in Bo, beginning with a 5 megawatt plant. Concerning transport infrastructure, additional investments were found. An MoU was signed between the GoSL and China for a new fish harbor, and Iceland collaborated on a US$3.2 million project to enhance fish processing facilities and hygiene standards. Additionally, in 2017 Nectar Group secured a 21-year port concession after converting its 10-year operational license, projecting to expand its port operations with a US$25 million investment.[76] While this compilation is not exhaustive, it contributes to insight into sectors that attract foreign investment interest. More recently, Sierra Leone is seeing interest from foreign investors from South and East Asia, the Middle East, and North America (e.g., the US, UAE, India, China) for projects around light manufacturing, including food and beverages, but also in cement.

The economic policy framework of Sierra Leone is supportive of FDI. Government statements support the objective of attracting FDI, and both foreign and domestic investors are invited to invest in all major economic sectors, especially in infrastructure and energy. Foreign investors have the right to establish and own business enterprises and are free to establish, acquire, and dispose of interests in business enterprises.

There are, however, some restrictions on FDI. Foreign investment is prohibited in some limited activities (arms and ammunition, cement block manufacturing, granite and sandstone excavation, manufacturing of certain consumer durable goods, and military and police apparel). Investment in small mining activities (less than US$500,000) requires a Sierra Leonean partner with at least 25 percent of the equity. A few limited restrictions to foreign investment in *"business services, financial services, and maritime and airport sectors"* were notified by Sierra Leone to the World Trade Organization (WTO) under the WTO General Agreement on Trade in Services schedule of commitments.[77]

75 Leading Edge, Sierra Leone 2017.
76 https://www.sliepa.gov.sl/invest-in-sierra-leone/investors-guide/p/item/14594/sierra-leone-investors-guide

77 US ICA 2023.

Requirements for the screening and approval of FDI projects are unclear. Under the mandate of the National Investment Board (NIB) Act of 2022, the newly established National Investment Board is expected to approve foreign investment projects after a thorough evaluation. However, it is not clear from reading the NIB Act whether all or only certain types of investment projects are subject to this process, what the steps are, how the evaluation or screening is done, and what criteria may be used. While it is expected to be clarified in the implementing legislation that is reported to be under preparation, the present lack of information creates uncertainty for foreign investors.

Key recommendations to increase FDI are:

- **Clarify the strategy and objectives of the country vis-a-vis FDI.** An Investment Policy Statement could outline the Government's strategy and objectives for FDI and identify priority sectors for FDI attraction and the type of treatment the country wants to extend to foreign investment and investors. While not essential, a clear investment policy statement could help build consensus around the strategy for FDI, underline the priority of improving the investment climate, provide clear guidance to government agencies and line ministries on the treatment of foreign investors and the design of reforms, and inform and reassure potential investors on Government policy.
- **Consider further opening of the economy to FDI.** The Government could consider whether the restrictions to foreign participation in cement, some forms of extractive activities, or manufacturing and services could be removed or reduced. This is also congruent with liberalization commitments and efforts that Sierra Leone is pursuing under various fora (e.g., WTO, ECOWAS, and the African Continental Free Trade Agreement, AfCFTA).
- **Clarify the screening and approval system for foreign investments.** A simple and streamlined process could be used to provide for rapid approval of projects, that minimizes the need for intervention and discretion. Limited screening or review could perhaps be applied only to investment projects in certain activities that may pose significant environmental or security risks. This would be in line with international initiatives such as the Investment Facilitation for Development (IF4D) agreement that was negotiated under WTO.

The investment protection framework as defined in the NIB Act 2022 falls short of best practice. On the one hand, positive elements are that Sierra Leone has acceding to the major international conventions enabling dispute resolution through international arbitration and there has been only one 'known case' of investor-state dispute, which was settled. On the other hand, the domestic legislation on direct investment seems to have a few significant gaps in terms of investor protection. The NIB Act includes only three of the six core guarantees characteristic of a robust protection framework for foreign direct investment (namely, the protection against unlawful expropriation, the guarantee on the transfer of funds/dividends, and the provisions allowing for various means of dispute settlement); it seems to omit national treatment, most favored nation treatment, and fair and equitable treatment. Moreover, the guarantees that are included can be clarified and strengthened. In particular, a mechanism to detect and resolve investor grievances at an early stage – in order to prevent Investor-State Disputes- could usefully complement the dispute resolution mechanism that is included in the NIB Act.

In addition, the consistency of Sierra Leone's domestic legislation on investment with international commitments should be reviewed. Further analytic work is required to determine whether Sierra Leone's domestic legislation is in line with the international commitments made by Sierra Leone through regional or plurilateral agreements dealing with investment (a list of which is provided in Annex Table 9). Work is also required to align the domestic legal framework with the soon to be finalized Investment Protocol of the AfCFTA (Annex Table 10), which includes strong guarantees for covered investment and investors. Members will have five years to align their domestic legislation with the Protocol once it enters into effect.

Recommendations on reforms related to investor protection are:

- **Strengthen the investor protection framework.** The Government could review the NIB Act of 2022 against best practices for investor protection as well as against the international commitments that Sierra Leone has made (e.g., the ECOWAS Investment Code), as well as against the AfCFTA Protocol, which is still under discussion.

- **Conduct a *de facto* assessment of the effectiveness of the investment protection guarantees.** An assessment of the effectiveness of the legal guarantees for foreign investment could identify shortcomings and bolster confidence in the FDI regime. For example, are their impediments to the transfer of dividends abroad, defects in the computation of fair compensation in the event of expropriation, or difficulties in relying on international arbitration to resolve investment disputes between foreign investors and the State of Sierra Leone.
- **Consider establishing a dispute prevention mechanism (IGM).** Best practice today is to put in place mechanisms for the prevention of investment disputes between the host State and investors. Establishing a process to resolve disputes before submission to arbitration, referred to as an investment grievance management process, would be consistent with the AfCFTA Investment Protocol.

Further analytic work is required to evaluate the legal and institutional framework for investment promotion. According to the US State Department's 2023 assessment of the investment climate, the National Investment Board is intended to serve as a one-stop shop to support investors and to regularize investment promotion activities "previously marred by bureaucracy and fraud." It will be necessary to evaluate the transition to the new framework and the plans for investment promotion, as well as the use of investment incentives. While investment incentives are provided under different pieces of legislation, it is not clear that the effectiveness of these incentives or their impact on the economy of Sierra Leone have been assessed.[78]

Local content requirements can have the unintended effect of dissuading foreign investors to invest or re-invest when they find these local content regulations too taxing or stringent. The Local Content Policy, mandated in the 2012 Local Content Act, requires a certain percentage of jobs in each sector to be held by nationals and the use of local suppliers where possible. The prices for all contracts are to be quoted and payable only in local currency, and a local content agency has been set up to assist with implementation.[79]

78 When the WTO conducted its Trade Policy Review in January 2017, it regretted that "There has been no assessment of the impact of these incentives schemes on the economy." On the positive side, it noted that: "Since 2013 all investment agreements containing incentives must be ratified by Parliament."

79 http://localcontent.gov.sl/

Recommendations on investment promotion and incentives are:

- **Assess the institutional framework and strategy for investment promotion.** The assessment would look, inter alia, at the transition between the Sierra Leone Investment and Export Promotion Agency and the National Investment Board, to identify areas for improvement and clarification, but also priority needs for support of the new Board and any eventual changes needed to the policy framework.
- **Review the investment incentive regime.** The review would evaluate its alignment with best practice and with policy objectives, but also its effectiveness (for instance through a cost-benefit analysis).
- **Review local content requirements.** The review would aim to determine whether they align with best practices, have been effective in supporting local production and the extent to which they may have impeded foreign investment (for the latter, a survey of foreign investors should be considered).
- **Consider other policy measures to foster linkages between domestic and foreign firms.** The usefulness of investment incentives and approaches to investment facilitation in the Sierra Leone context could be explored.

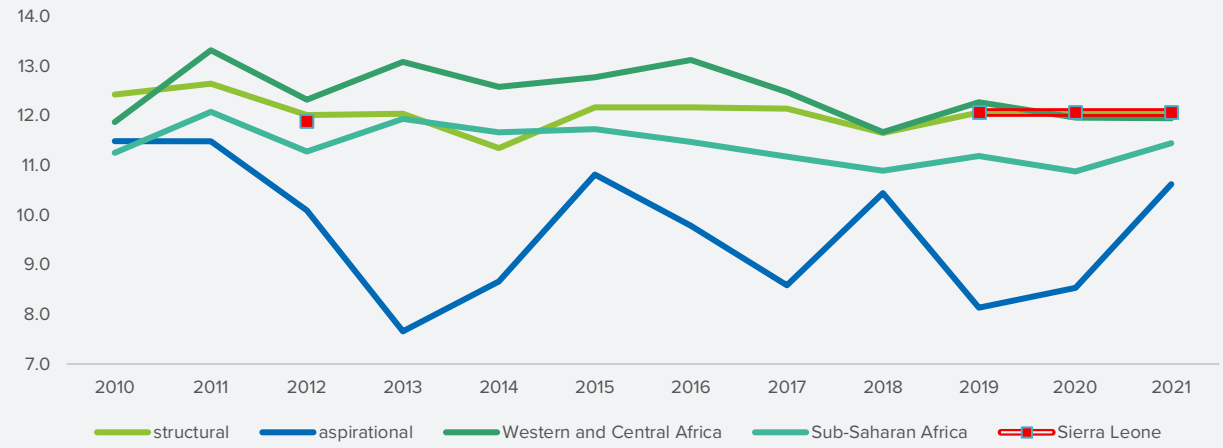
Enlarge the small domestic market through trade policy

Domestic market size influences a country's type of trade and value chain participation. Countries with small input and output markets tend to be more open to trade. They also have a smaller industrial capacity and dispose of a lower number of domestic suppliers, and thus tend to rely more on imported inputs in their exports, increasing their backward participation in GVCs (Fernandes, Kee and Winkler 2022). Sierra Leone's very small manufacturing market size could explain why its backward participation in GVCs is higher than for several of its comparators. Given its small and relatively stagnant domestic market and narrow sector concentration in natural resources, economic diversification requires openness to international markets to enlarge effective market size.

Favorable trade policies help countries enlarge effective market size, both on the sourcing and selling sides. Studies have confirmed the positive role of low tariffs for GVC participation and FDI spillovers because firms are less constrained by a country's market size,[80] are able to import low-cost and high-quality inputs, and are more exposed to international competitive pressures[81] or tend to adopt the newest technologies.[82]

Despite its small market size, Sierra Leone has in place high average tariffs, limiting access to foreign goods at competitive costs. While information on average tariffs is scarce for Sierra Leone, average most-favored-nation (MFN) tariffs over the past three years were around 12 percent, on par with its structural peers and Western and Central Africa, but higher than the SSA average and especially aspirational peers (Figure 93). Import tariffs on goods used in production can constrain output. For example, import tariffs on major inputs to the mining sectors, such as metal processing machinery, are 5 percent, indicating room to reduce tariffs to lower production costs. In agriculture, the tariffs range from 0 to 5 percent for key inputs like seeds and fertilizers but are 10 percent for cocoa bean roasting machinery, a primary input in the processing of both coffee and cocoa beans. Non-tariff measures can also be a source of higher costs and protectionist barriers. However, Sierra Leone is not included in the World Bank-WTO Non-tariff Measure database, so an assessment of how non-tariff measures affect Sierra Leone's export products is not possible.

FIGURE 93:
SIMPLE AVERAGE MFN APPLIED TARIFFS, SIERRA LEONE AND PEERS (%), 2010-21

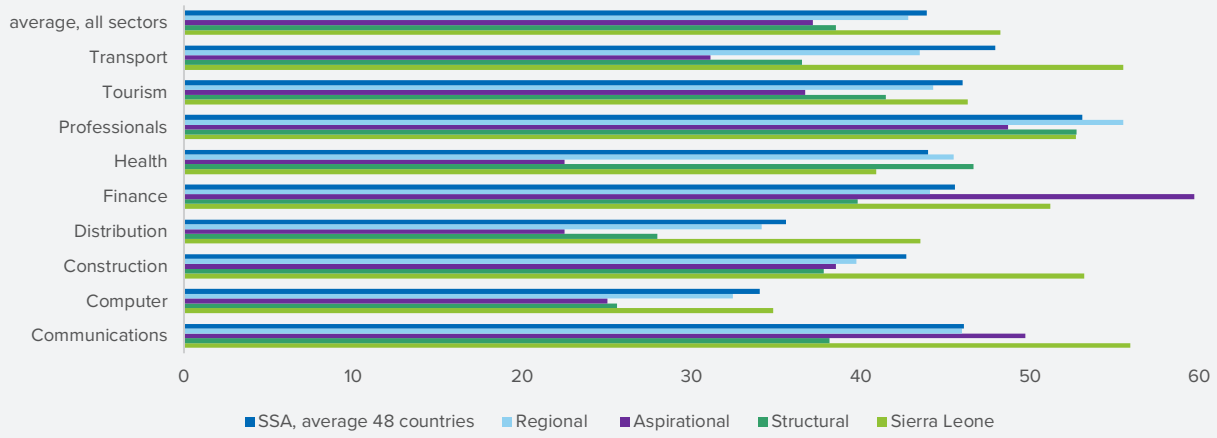


Note: Simple average duty.
Source: World Bank staff calculations using WTO data.

Similarly, there are very high trade restrictions across all major services categories (Figure 94). Compared to peers, the services sector is more closed to foreign services and service suppliers, overall but also across most services sectors, most notably transport, communications and construction services. The high level of restrictions also stands out in other services, including tourism, distributional, and computer services. Professional services, health and finance are the only categories in which the country is not the most restrictive. Aspirational peers and to a lesser extent also structural peers show more openness to foreign services trade in most categories.

80 Crespo and Fontoura 2007, Fernandes, Kee and Winkler 2022.
81 Havranek and Irsova 2011.
82 Meyer and Sinani 2009.

FIGURE 94:
SERVICES TRADE RESTRICTIONS, BY SECTOR, SIERRA LEONE AND PEERS (INDEX)



Note: The index ranges from 0 to 100, where 0 indicates that none of the restrictions underlying the index is applied, and 100 means that the subsector/mode is completely closed to foreign services and service suppliers. To obtain an overall STRI that combines the modes of supply in a subsector-level index, the trade restrictions by different modes were weighted according to their importance for the supply of the respective services in each subsector and then aggregated. Source: World Bank staff calculations. Data: World Bank-WTO STRI Database. Borchert, Gootiiz, Magdeleine, Marchetti, Mattoo, Rubio and Shannon (2019) – "Applied Services Trade Policy: A Guide to the Services Trade Policy Database and Services Trade Restrictions Index", WTO Staff Working Paper (ERSD-2019-14).

Sierra Leone's national African Growth and Opportunity Act (AGOA) response strategy (2019 to 2025) outlines major policy constraints on exports:[83]

- Ambiguous, unstable, and contradictory laws and procedures.
- Limited information on export processes, compliance with rules, levies and concessions.[84]
- Export inefficiencies caused by unnecessary bureaucracy, like requirements for annual export licenses[85] and a letter of authorization for every export package.
- Multiple agencies involved in exports, including quality and standard certification, leading to complexity and delays.
- Insufficient capacity at the Sierra Leone Standards Bureau for quality control due to equipment, inadequate testing kits (including reagents) and staff shortages.
- Lack of credible production and export data hampering public and private sector planning and investment attraction

Constraints related to endowments, specifically capital, finance, and land, include the following: significant post-harvest losses due to a lack of storage facilities, limited access to local financing due to high interest rates and other factors, and challenges in securing land for large industrial farms because of complex land tenure systems in various provinces.[86]

83 https://ustr.gov/sites/default/files/files/reports/2022/2022AGOAImplementationReport.pdf
84 Sierra Leone collects a tax on its major exports. According to the authorities, the purpose of the export tax is to encourage value addition and support the development of local communities. The tax is applied at 2.5% on agricultural products (cocoa, coffee, and palm oil), 3% on diamond, and 5% on gold (except gold produced by artisanal miners which attracts 3%). In addition, some mineral exports are subject to the goods and services tax and a valuation fee. Source: https://www.wto.org/english/tratop_e/tpr_e/s303_sum_e.pdf
85 Export licensing applies mainly to diamonds and gold. A permit is required for the export of traditional commodities such as cocoa, coffee, and rubber. Due to environmental regulations, a permit is required for the exportation of plants and charcoal. A ban on the exportation of raw logs has been in place since 2008.
86 Source: Ibid.

The common market access-related (marketing) challenges include:

- Inadequate advertising of the country's potential and investment opportunities.
- Lack of a well-developed and internationally accredited laboratory for standards and quality tests.
- Inadequate capacity and mechanisms to link farmers to international buyers.
- Local producers (farmers) lack sufficient knowledge of market conditions including prices.[87]

Access to the U.S. and EU markets could be improved through preferential programs. Only a very small share of Sierra Leone's exports enjoys preferential tariffs under the EU Everything But Arms (EBA) program and the US African Growth and Opportunity Act (AGOA) programs (Annex Table 11). This in part reflects the country's low level of exports to the US and the EU's zero MFN tariff on minerals, Sierra Leone's primary export to the EU. Nevertheless, greater benefits from these programs could be achieved through the following measures:

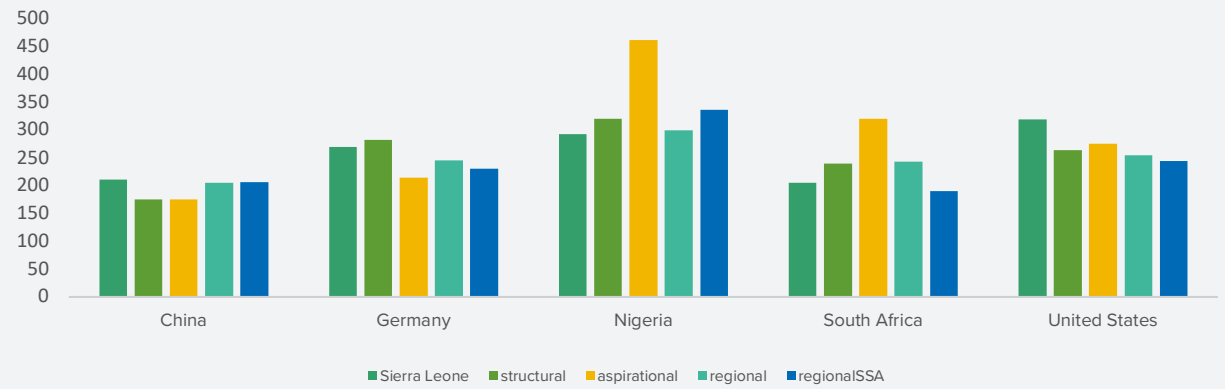
- Facilitating partnerships between larger Sierra Leonean traders and US/EU counterparts, with trade-supporting institutions serving as intermediaries. Sierra Leone Trade Attachés can promote collaborative arrangements with local companies while at their respective embassies.
- Promoting local demand in the US/EU through effective marketing strategies.
- Improving product labelling and packaging for export purposes. Labeling and packaging also serve as promotional tools, so they must be of high quality and legible to attract consumers.
- Strengthening the capacity to navigate the procedures required to establish preferential access in the US/EU and to handle import procedures more broadly within the US/EU market.

Overcome geographical disadvantages through trade facilitation and connectivity

Distance from major trading partners contributes to, but is not the only reason for, high trade costs. Longer geographical distances to the major GVC hubs—China, Germany, and the United States—have a strong negative impact on both backward and forward GVC participation (Fernandes, Kee and Winkler 2022). However, the geographical distance to key end-markets is not the only feature determining Sierra Leone's high bilateral ad valorem trade costs (Figure 95). The ad valorem equivalent bilateral trade cost between Sierra Leone and Nigeria for goods in 2018 was 293 percent. In other words, trading goods between Sierra Leone and Nigeria involved, on average for all tradable goods, additional costs amounting to approximately 293 percent of their value, relative to when the two countries trade these goods within their borders. This measure of ad valorem trade costs is much higher than for Sierra Leone's exports to China and comparable to that for exports to the US, so other factors beyond distance affect high trade costs, including trade facilitation, connectivity, and tariffs (for tariffs, see section 2.2). Nigeria's large market of over 200 million inhabitants and strong growth potential underline the value of focusing on Nigeria as a trading partner and engaging in regional value chain integration. Sierra Leone, however, has reduced its reliance on Nigeria over the past decade.

87 https://www.oecd.org/trade/topics/trade-facilitation/

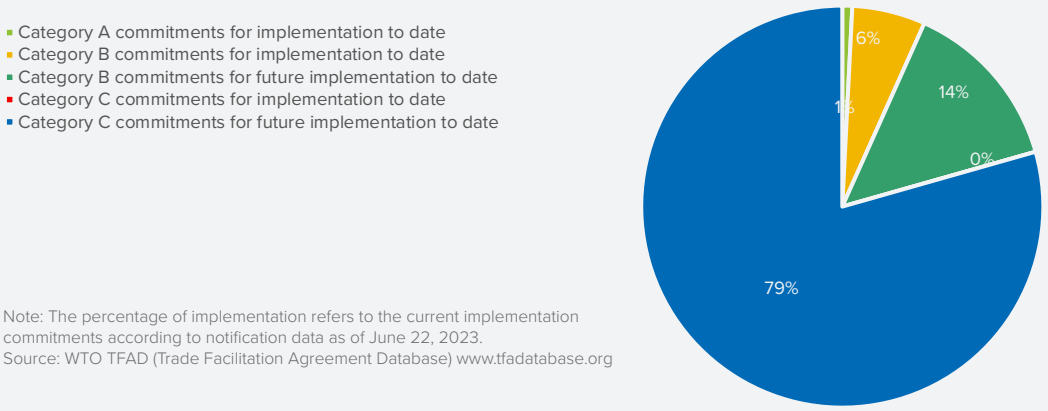
FIGURE 95:
AD VALOREM TRADE COSTS, SIERRA LEONE AND COMPARATORS (%), 2018



Note: Trade costs encompass not only international transport costs and tariffs but also other trade cost components, such as direct and indirect costs associated with differences in languages, currencies as well as cumbersome import or export procedures. See: https://www.unescap.org/sites/default/d8files/Trade%20Cost%20Database%20-%20User%20note.pdf
Source: World Bank staff calculations on data from ESCAP-World Bank trade costs database.

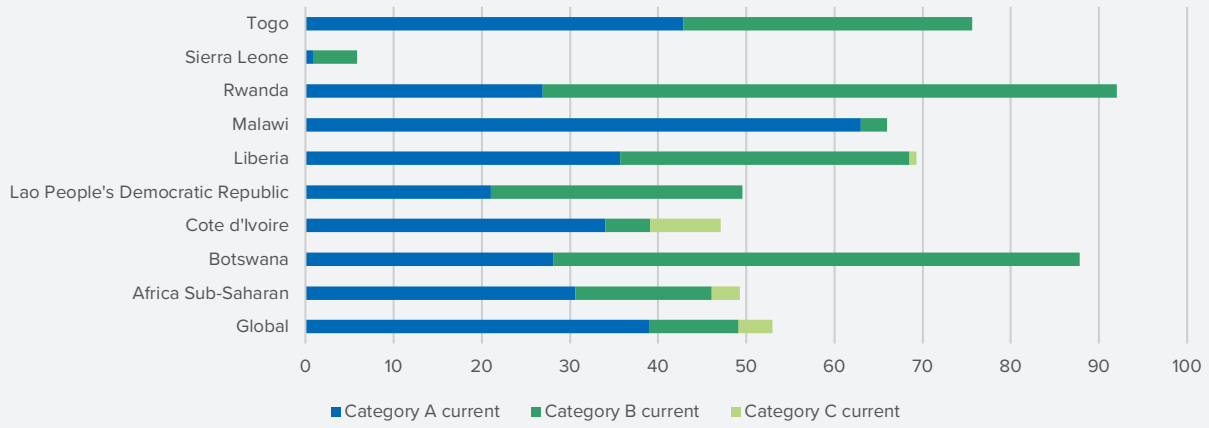
Sierra Leone's low trade facilitation performance, reflected in its low implementation rate of the World Trade Organization Trade Facilitation Agreement (WTO-TFA), contributes to high trade costs. There has been a significant delay in the adoption of the majority of trade facilitation measures as prescribed by the WTO-TFA, ratified in 2017 (Figure 96). The fact that almost 80 percent of the commitments are assigned as Category C reflects the apparent need to absorb more financial resources from the international community to assist with reform implementation. Sierra Leone has only implemented 6.7 percent of its WTO TFA obligations: Category A (0.8 percent); Category B (5.9 percent) and Category C (0 percent) (Figure 97). It substantially trails all its comparators, especially Togo, Botswana, and Rwanda who implemented already over 70, 80 and 90 percent of their commitments, respectively.

FIGURE 96:
WTO TRADE FACILITATION AGREEMENT IMPLEMENTATION, BY CATEGORY (% COMPLETED)



Note: The percentage of implementation refers to the current implementation commitments according to notification data as of June 22, 2023.
Source: WTO TFAD (Trade Facilitation Agreement Database) www.tfadatabase.org

FIGURE 97:
WTO TRADE FACILITATION AGREEMENT IMPLEMENTATION, BY CATEGORY, SIERRA LEONE AND COMPARATORS (% COMPLETED), 2022



Note: The percentage of implementation refers to the current implementation commitments according to notification data as of June 22, 2023. https://tfadatabase.org/en/implementation/comparisons?country=145
Source: World Bank staff calculations using data from WTO Trade Facilitation Agreement Database.

Sierra Leone's trade facilitation performance trails all its peers. In 2022, Sierra Leone's average trade facilitation performance, according to the OECD's Trade Facilitation Indicators, was the lowest among all structural, aspirational, and regional peers, scoring on average 0.52 out of a possible 2 (highest) (Figure 98). The measure of trade facilitation performance covers all types of border procedures and reflects not only the regulatory framework in the concerned countries, but also the state of implementation of various trade facilitation measures.[88] Sierra Leone's rating is particularly low compared to peers in border agency cooperation, governance and impartiality, and formalities, especially automation and procedures (Figure 99). On the positive side, Sierra Leone outperforms several peers in the area of e-fees and charges.

FIGURE 98:
TRADE FACILITATION INDICATORS, AVERAGE PERFORMANCE SIERRA LEONE AND PEERS (INDEX), 2022

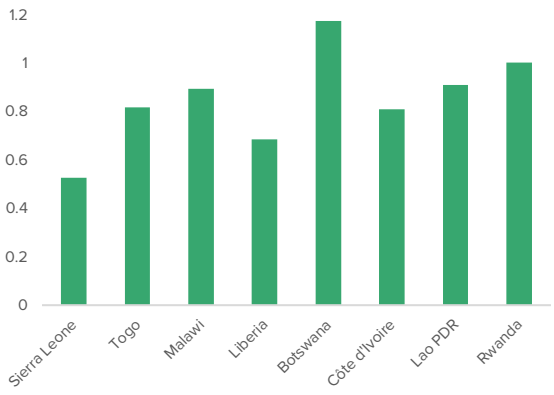
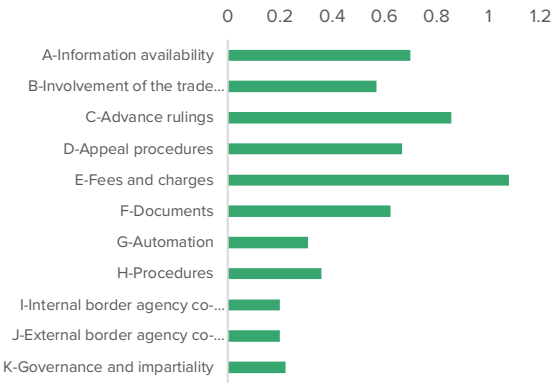


FIGURE 99:
TRADE FACILITATION INDICATORS, BY CATEGORY, SIERRA LEONE (INDEX), 2022

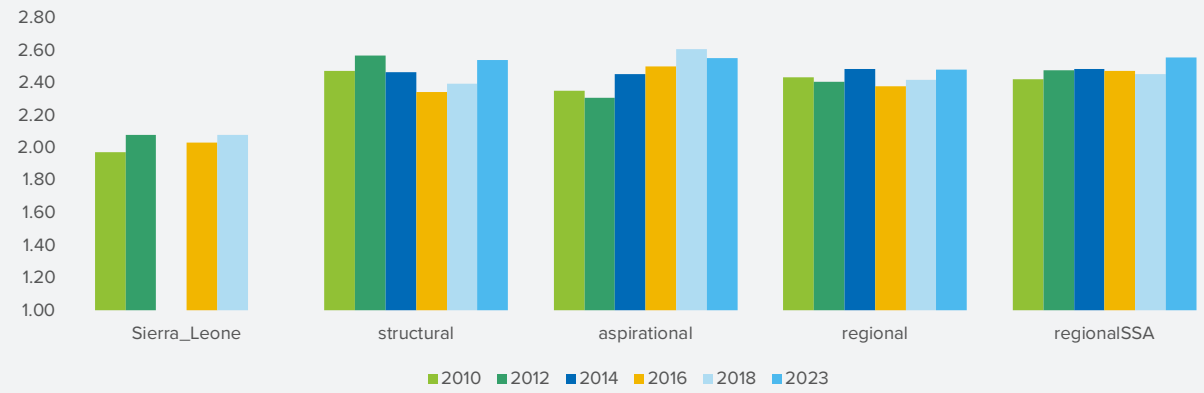


Note The TFIs take values from 0 to 2, where 2 designates the best performance that can be achieved. The variables in the TFI dataset are coded with 0, 1, or 2. These seek to reflect not only the regulatory framework in the concerned countries, but delve, to the extent possible, into the state of implementation of various trade facilitation measures. See: https://www.oecd.org/trade/topics/trade-facilitation/
Source: World Bank staff calculations on data from OECD Trade Facilitation Indicators (TFIs).

88 https://www.oecd.org/trade/topics/trade-facilitation/

Sierra Leone shows the lowest level of the logistics performance index overall and across all sub-components. Sierra Leone has made virtually no progress in its overall logistics performance since 2010 (Figure 100). While this is in line with its average regional comparators and SSA overall, aspirational peers showed strong improvements in logistics performance over the same period. Only structural peers performed worse, showing declines in their average LPI between 2010 and 2018. The gap between Sierra Leone's logistics performance and that of peers in 2018 was particularly large for customs and timeliness of shipments, while the country's rating for infrastructure was low relative to global best performers (Figure 101).

FIGURE 100:
OVERALL LOGISTICS PERFORMANCE INDEX, SIERRA LEONE AND COMPARATORS (INDEX), 2010-23



Source: World Bank staff calculations on data from World Bank LPI.

FIGURE 101:
LOGISTICS PERFORMANCE INDEX, BY SUB-INDICATOR, SIERRA LEONE AND COMPARATORS (INDICES), 2018

Source: World Bank staff calculations on data from World Bank LPI.

Strengthen institutional quality via engagement in trade agreements

While political stability is relatively better, there is room to improve on government effectiveness and to a lesser extent regulatory quality. Despite improvements over the past decade, Sierra Leone still scores low on government effectiveness compared to its peers, in particular aspirational ones (Figure 102). 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 credibility of the government's commitment to such policies. Sierra Leone also lags behind comparators in terms of regulatory quality, although to a lesser extent (Figure 103). 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.

FIGURE 102:
GOVERNMENT EFFECTIVENESS, SIERRA LEONE AND COMPARATORS, 2010-11 VS. 2020-21

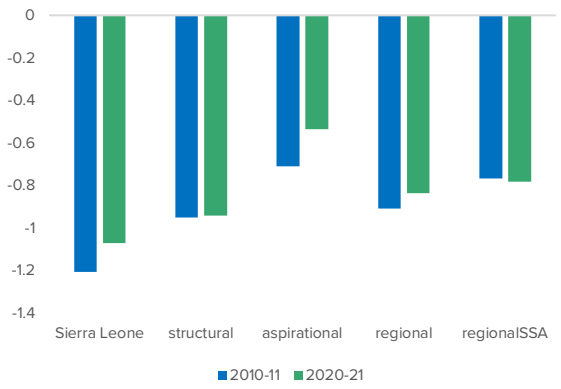
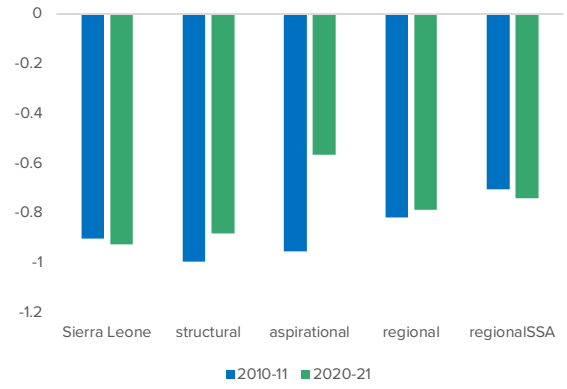


FIGURE 103:
REGULATORY QUALITY, SIERRA LEONE AND COMPARATORS, 2010-11 VS. 2020-21



Source: WGI, World Bank. Note: Estimate of governance in standard normal units ranging from approximately -2.5 (weak) to 2.5 (strong) governance performance. Based on data sources reporting the perceptions of governance of a large number of survey respondents and expert assessments worldwide

Engaging in deep trade agreements could be a means to enhance institutional quality, as it supports reform and can thus boost trade. Deep Trade Agreements extend to areas like investment, labor, intellectual property, and environmental protection, signifying a move towards comprehensive integration beyond mere market access.[89] Deep preferential trade agreements can enhance institutional quality and increase trade integration, and have been shown to enhance GVC participation.[90]

However, Sierra Leone is only engaged in one preferential trade agreement, the Economic Community of West African States (ECOWAS). ECOWAS is a customs union comprised of 15 preferential trade partners. Malawi and Rwanda, by contrast, engage in five trade agreements and have over 20 preferential trade partners. ECOWAS covers 20 policy areas of which only 8 are legally enforceable, while the Common Market for Eastern and Southern Africa covers 29 policy areas of which 11 are legally enforceable, and the East African Community covers 34 policy areas of which 12 are legally enforceable.

89 https://datatopics.worldbank.org/dta/about-the-project.html
90 See, e.g., Orefice and Rocha 2014, Kowalski et al. 2015, Johnson and Noguera 2017, and Laget et al. 2018.

TABLE 2:
PREFERENTIAL TRADE AGREEMENTS

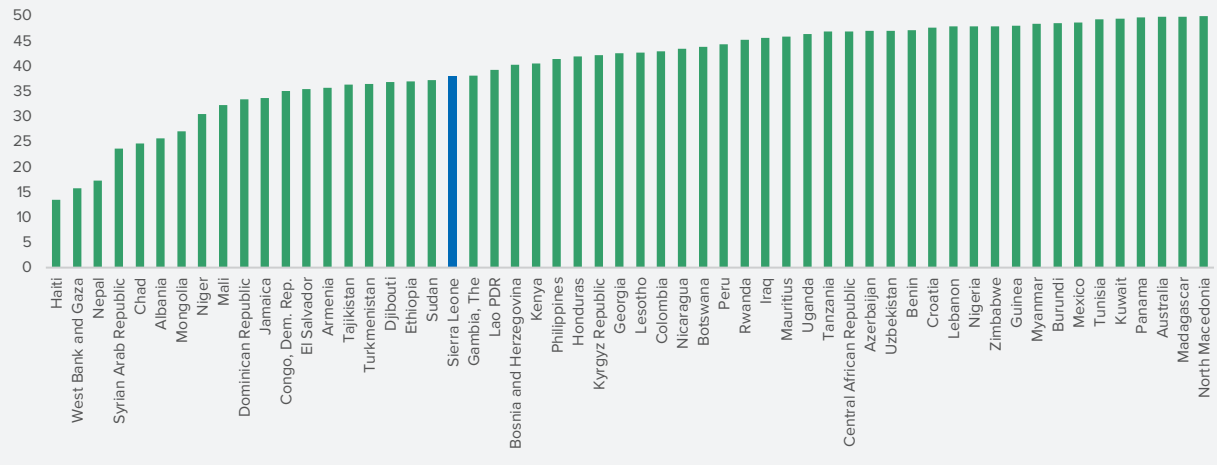
	SIERRA LEONE	LIBERIA	MALAWI	RWANDA	TOGO
Total PTA Participation	1	1	5	5	2
Number of Partners	14	14	28	23	14
Deepest Agreement	ECOWAS	ECOWAS	COMESA	EAC	ECOWAS

Note: COMESA = Common Market for Eastern and Southern Africa; EAC = East African Community.
Source: World Bank Deep Trade Agreement database.

New opportunities for trade diversification and upgrading

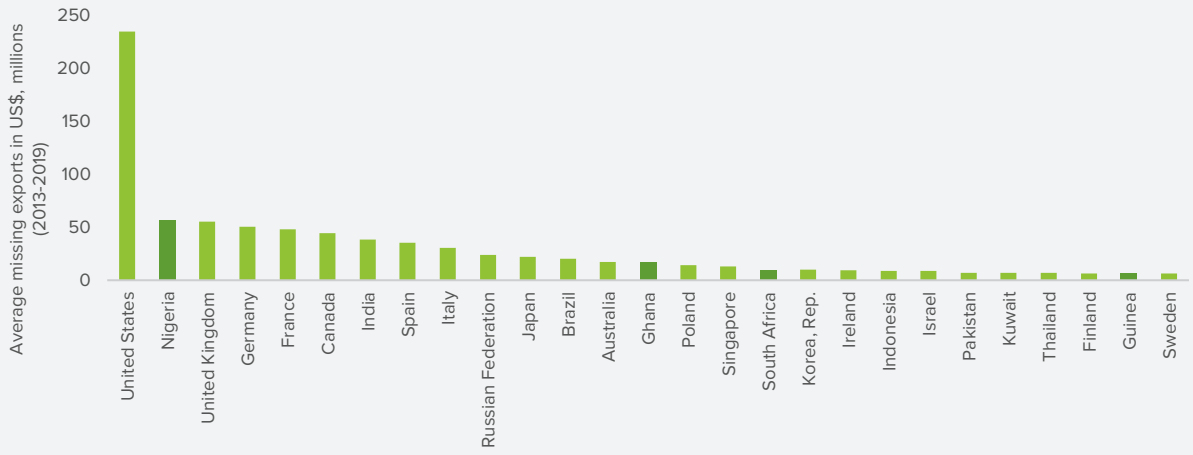
Sierra Leone's exports are functioning well below potential. A gravity model is used to estimate Sierra Leone's export potential with each trading partner, based on various observable characteristics (bilateral trade flows, bilateral trade agreements, economic size, and geographical distances between two countries which determine bilateral trade flows, see Annex 4: Chapter 4). The model estimates that Sierra Leone's exports are 38 percent below potential (Figure 104). In other words, based on each countries' observable characteristics in the model, one would expect Sierra Leone to more than double its current level of exports if it were to behave like the average country. Several reasons for Sierra Leone's "under-trading" have been discussed in the above section. Between 2013 and 2019, the export gap with the United States is estimated to have exceeded US$200 million and with Nigeria around US$50 million, with smaller gaps with Western European countries (United Kingdom, Germany, France), Canada and India. Besides Nigeria, Sierra Leone also shows export gaps with other regional partners, including Ghana, South Africa, and Guinea (Figure 105).

FIGURE 104:
INDEX OF REALIZATION OF EXPORT POTENTIAL, SIERRA LEONE AND COMPARATORS (INDEX), 2013-19



Note: See Annex 4: Chapter 4 for the model and data. The period is 2013-19.
Source: World Bank staff calculations.

FIGURE 105:
SIERRA LEONE'S EXPORT POTENTIAL, MISSING EXPORTS, BY PARTNER (US$, MILLIONS), 2013-19



Note: See Annex 4: Chapter 4 for the model and data.
Source: World Bank staff calculations.

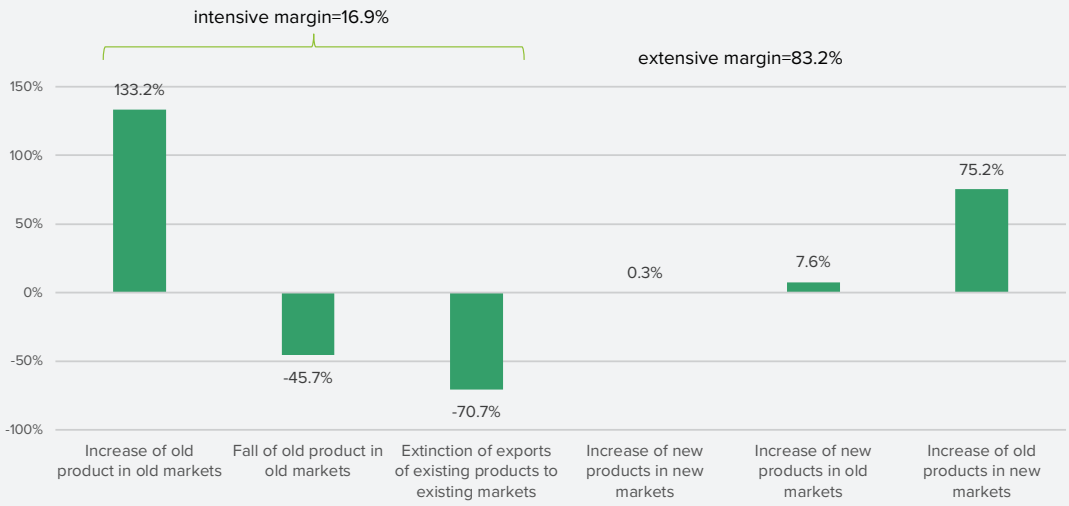
Sierra Leone has considerable potential to increase exports, growth and poverty reduction through participation in the African Continental Free Trade Agreement (AfCFTA). This agreement obliges participating countries to eliminate tariffs on 90 percent of products imported from other members, gradually open up service trade, and tackle various non-tariff barriers. Simulations indicate that AfCFTA's short-term effects on imports and tax revenues are generally minimal for most countries, including Sierra Leone.[91]

Fading opportunities for old export products

The decomposition of goods export growth at the product level highlights its strong reliance on existing export products, mostly in existing markets but also in new markets, while new products almost do not matter (Figure 106). Sierra Leone's export growth between 2009-11 to 2019-21 is decomposed into export growth: (i) at the intensive margin, i.e., increase, fall, or extinction of old export products in old markets, and (ii) export growth at the extensive margin, i.e. increase of new export products in new and old markets and increase of old export products in new markets. The intensive margin only accounts for 17 percent of Sierra Leone's export growth over the period, because the high growth of old products in old markets is offset by the extinction of other such products. Export growth at the extensive margin on the other hand accounts for more than 80 percent of exports, driven however by an increase of old products in new markets. In comparison to peer countries, Sierra Leone showed the third highest reliance of growth of old products to old markets (after Libera and Guinea Bissau). However, its growth of new products in old markets is relatively low, as is the increase of new products in new markets in comparison to peers, showing low dynamism.

91 Anticipated increases in imports are expected to remain below 0.5 percent. Losses in tariff revenue are projected to stay below 1 percent for approximately two-thirds of the countries, including Sierra Leone. These results align with ADB (2019) and UNECA (2017), which also suggest that, even with full liberalization, only a small number of countries are likely to experience substantial tariff revenue losses, and the use of exclusion lists has the potential to significantly reduce such losses.

FIGURE 106:
DECOMPOSITION OF EXPORT GROWTH, SIERRA LEONE (%), 2009-11 TO 2019-21



Source: World Bank staff calculations on data from WITS, World Bank. Trade mirror data (from trading partners) used.

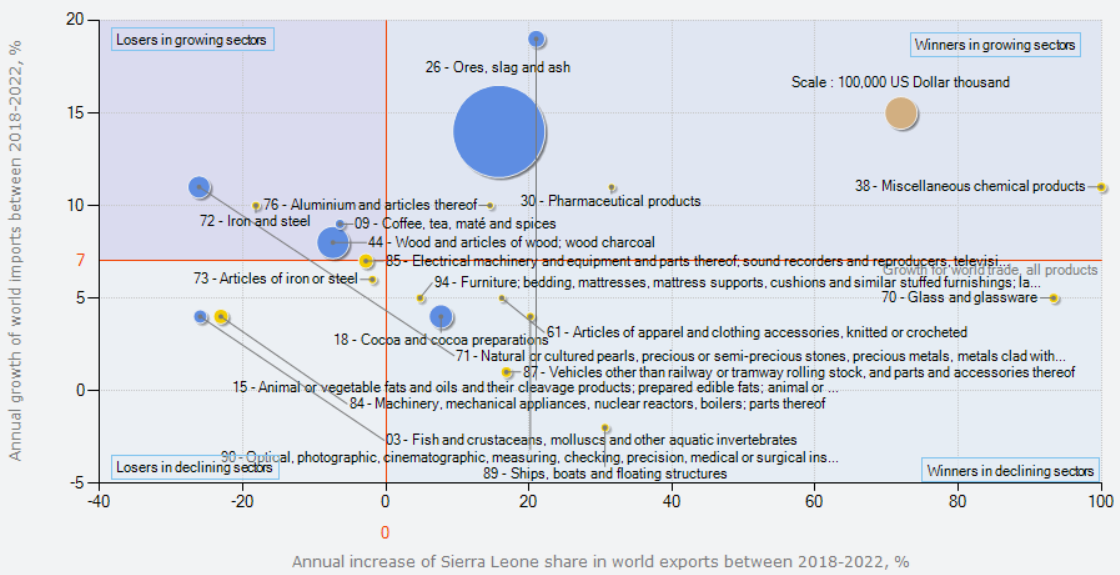
TABLE 3:
DECOMPOSITION OF EXPORT GROWTH, SIERRA LEONE AND PEERS, 2009-11 TO 2019-21

	SLE	BEN	GMB	GIN	GNB	LBR	ETH	MMR	RWA	KGZ
increase of old product in old markets	133.2	100.0	32.9	11.5	281.5	828.0	75.0	75.6	19.2	17.5
fall of old product in old markets	-45.7	-177.3	-24.1	-4.8	-11.5	-797.6	-35.9	-13.8	-19.2	-14.9
extinction of exports of existing products to existing markets	-70.7	-259.4	-52.6	-27.6	-254.1	-1145.1	-15.2	-4.7	-14.6	-12.9
increase of new products in new markets	0.3	0.1	0.1	0.0	13.1	0.7	0.2	0.0	0.4	1.5
increase of new products in old markets	7.6	33.9	13.2	1.1	40.3	260.4	6.9	5.3	5.3	4.6
increase of old products in new markets	75.2	402.6	130.5	119.9	30.7	953.6	69.0	37.7	108.9	104.1

Source: World Bank Staff calculations on data from WITS, World Bank. Trade mirror data (from trading partners) used.

Few of Sierra Leone's top 20 exports products, most notably ores, increased world market shares and met high world demand growth. Export products with growing export market shares between 2018 and 2022 that met world demand growth exceeding 7 percent ("winners in growing sectors", top-right quadrant) were in most cases characterized by smaller export values. Ores, the largest export product, is a major exception, as are animal fats, pharmaceuticals, and aluminum (Figure 107).

FIGURE 107:
SIERRA LEONE'S EXPORT GROWTH VS. WORLD GROWTH, BY PRODUCT, 2022



Note: Direct export data. Yellow circle = Sierra Leone is a net importer for this product, Blue circle = Sierra Leone is a net exporter for this product.
Source: Trade Map, International Trade Centre.

While wood and articles of wood and precious stones represented a growing sector globally, Sierra Leone's world market share declined. Two of Sierra Leone's largest sectors–wood and articles of wood and precious metals and stones–fall in the top-left quadrant ("losers in growing sectors") where the country lost world export shares over the period 2018-22 and global growth was high. Among the products that lost world market shares and faced falling global demand ("losers in declining sectors"), fish is Sierra Leone's most important export product.

Identifying export opportunities

An export opportunity analysis focused on Sierra Leone's mining, agriculture, and food processing highlights the potential for increasing and diversifying exports.[92] The purpose of this exercise is not to recommend investments or government support for particular products, but rather to indicate areas that could be explored to promote export growth. Concrete steps would have to be designed based on a more detailed analysis than possible here. The main areas with significant increased export potential include mining and agriculture and food processing,

There is significant scope for policies to support increased minerals exports. Removing bottlenecks in the contractual relationships with mining companies that led in the past to litigation and production stoppages could help to ramp up mineral ore exports. The successful shipment of high-quality iron powder from Sierra Leone to the global market in early 2023, primarily financed by Chinese company Leone Rock Metal Group, is a good example of a positive step towards increasing value-added production in the country's iron sector.[93] However, expensive technological requirements limit Sierra Leone's ability to upgrade to processing ores into metals in the short run.

92 The analysis is informed by the following indicators: the share of the products in Sierra Leone's goods exports, the Revealed comparative advantage (RCA), the growth in global demand, the growth in regional demand (defined as the imports by the three other members of the Mano River Union, i.e. Côte d'Ivoire, Guinea and Liberia), a competition index (based on the # of suppliers of a product), a demand index (based on the # of buyers of a product), and proximity in the product space. The analysis is also guided by two main questions: (1) Do Sierra Leone's top exports have good RCA rankings globally, robust demand (globally and/or regionally), good market conditions (not too many competitors, many buyers) and a relatively good proximity measure in the product space? (2) Are there products that currently have a small share in Sierra Leone's goods export basket or that are not exported, but show any of the following: a high RCA, robust global and regional demand, good market conditions, proximity in the product space?

93 https://www.leonerock.com/blog/celebrating-the-new-year-the-first-shipment-of-iron-concentrate-powder

TABLE 4:
PRODUCTS WITH EXPORT OPPORTUNITIES IN SIERRA LEONE'S MINING, 2021

	NET EX-PORTER	SHARE IN GOODS EXPORTS (%)	REVEALED COMPARA-TIVE ADVANTAGE		WORLD GROWTH (CAGR 2019-21)	REGIONAL GROWTH (CAGR 2019-21)	COM-PETITOR INDEX	BUYER INDEX	PROXI-MITY
			POISSON RANK	POISSON INDEX					
HS2614: Titanium ores	yes	24.1640	16	0.800	3.8	2292.1	10	9	0.03
HS2601: Iron ores	yes	18.7522	31	0.030	31.6	-100.0	2.9	2	0.01
HS7102: Diamonds	yes	12.1664	48	0.020	5.0	-63.3	8.7	8	n.a.
HS2606: Aluminum ores	yes	6.6295	22	0.900	1.1	1434.6	2.8	2	0.04
HS2615: Niobium, tantalum, vanadium, or zirconium ores	yes	3.1424	20	1.000	2.6	n.a.	10	6	0.02
HS7108: Gold	yes	0.5725	154	0.001	10.1	-97.4	15	11	0.01

Notes: HS classification is 2017, the codes presented are 4 digit. The competitor index is measured as the inverse of the Herfindahl index of exporter market shares, equivalent to the effective number of sellers in the Cournot model of competition. The Herfindahl index is the sum of the squared export market shares of each country within a product, measured between 0 and 1. The buyer index is inverse of the Herfindahl index of importer market shares.
Source: Data from BACI.

Several products could be developed to increase export revenue and value added in agriculture and food processing exports. Sierra Leone's agricultural exports are dominated by four products. These are cocoa beans, palm oil, frozen fish, and coffee, which accounted together for 93 percent of the country's agricultural exports in 2021. Areas to explore include identifying new markets for traditional products (palm oil, cocoa, fresh fish and coffee); ramping up production and exports of agricultural products for which a lack of modern equipment and other constraints limit production, for example rice, other cereals (cassava, maize and millet), nuts, fruits and vegetables; and starting or deepening specialization in manufacturing tasks related to food processing (cocoa powder and cocoa paste processing, fish fillet processing, fish packaging). Increased involvement in agriculture could be achieved by introducing hybrid seeds for crops like onions, ginger, cassava, rice and other crops, as well as importing machinery for cocoa bean, coffee, and palm oil processing. In the coffee sector, a strategic focus on increasing the cultivation of *Coffea Stenophylla*, a unique coffee variety native to Sierra Leone, is a sensible approach.

Each of the top four agricultural products exported by Sierra Leone shows strengths in various indicators that inform the export opportunity analysis, with palm oil emerging as better positioned for export success. In terms of revealed comparative advantage, all four products feature modest rankings relative to other countries: cocoa is ranked 65 among cocoa bean exporters, while palm oil, frozen fish and coffee are ranked 80, 125 and 124, respectively (Table 5). Nevertheless, the rankings for cocoa and palm oil are among the best in Sierra Leone's own agricultural export basket. As relates to the strength of global demand, palm oil is better positioned then the other three products, given that world imports of palm oil grew by 29.5 percent on average from 2019 to 2021. World imports of cocoa beans and coffee also grew, albeit at a significantly lower rate compared to palm oil. The world imports of frozen fish declined slightly. Regional imports of palm oil frozen fish and coffee increased, while those of cocoa beans declined. As relates to market conditions, palm oil and cocoa beans feature lower competitor indexes, hence better chance to benefit from exporting, while the opposite is true for frozen fish, which has a relatively high competitor index. Cocoa has a more favorable proximity in the product space measure compared to the other products.

In addition, there are export opportunities in products with limited shares in Sierra Leone's exports basket, notably rice, fish fillets, cocoa powder, cocoa paste, and some fruits and vegetables. Even though rice is a food staple in Sierra Leone, the country is a net importer because the domestic production is not enough to cover consumption despite favorable natural conditions to grow the crop. Indeed, the share of rice in Sierra Leone's exports is small and the revealed comparative advantage limited. However, the export opportunity analysis suggests that rice has seen its demand grow globally and regionally in recent years and that its competitor and buyer indexes are satisfactory. Similar arguments can be made for fruits, crustaceans, cashew nuts and lettuce. For the same reasons, it may also be worth climbing up the value chain to export fish fillet, cocoa powder, and cocoa paste.[94] There also are products with increasing global/regional demand that are currently produced for domestic consumption in Sierra Leone but not exported. Some examples include onions, millet, and citrus fruits.

TABLE 5:
PRODUCTS WITH EXPORT POTENTIAL IN SIERRA LEONE'S AGRICULTURE AND FOOD PROCESSING, 2021

	NET EX-PORTER	SHARE IN GOODS EXPORTS (%)	REVEALED COMPARA-TIVE ADVANTAGE		WORLD GROWTH (CAGR 2019-21)	REGIONAL GROWTH (CAGR 2019-21)	COM-PETITOR INDEX	BUYER INDEX	PROXI-MITY
			POISSON RANK	POISSON INDEX					
HS1801: Cocoa beans	yes	4.71	65	0.09	1.5	-90.5	5.0	11.0	0.03
HS1511: Palm oil	yes	2.17	80	0.02	29.5	35.4	2.7	17.0	0.01
HS303: Frozen fish	yes	0.85	125	0.02	-1.1	7.7	25.0	19.0	0.01
HS901: Coffee	yes	0.33	124	0.01	9.8	14.9	15.0	15.0	0.01
HS305: Fish, dried, salted, in brine, or smoked	yes	0.14	106	0.02	1.7	-32.9	16.0	18.0	0.01
HS1805: Cocoa powder	yes	0.06	126	0.00	11.8	-47.5	8.1	31.0	0.00
HS1513: Coconut (copra), palm kernel or babassu oil	yes	0.03	83	0.05	29.4	-7.3	4.6	13.0	0.01
HS804: Dates, figs, pineapples, avocados, guavas, mangoes, and mangosteens	yes	0.02	161	0.00	5.6	15.6	11.0	10.0	0.02
HS304: Fish fillets	yes	0.00	117	0.02	3.1	114.0	17.0	12.0	0.01
HS1006: Rice	no	0.00	157	0.00	5.8	16.3	6.0	45.0	n.a.
HS808: Apples, pears, and quinces, fresh.	no	0.00	129	0.00	5.9	3.7	12.0	34.0	0.01

94 Preparation for moving into fish processing/packaging activities has already started. In 2023, partnership agreements have been signed with China, one for constructing and industrial fish harbor complex with transshipment facilities, and another for improving fish smoke ovens, and water, sanitation, and hygiene.

HS306: Crustaceans	yes	0.00	118	0.01	10.0	3.8	13.0	7.2	0.01
HS801: Coconuts, Brazil nuts and cashew nuts	yes	0.00	145	0.00	13.7	1.4	7.5	7.7	0.02
HS904: Pepper, Piper, or Capsicum	no	0.00	109	0.01	13.7	25.0	7.4	17.0	n.a.
HS1803: Cocoa paste	yes	0.00	97	0.00	8.3	-62.3	7.4	17.0	n.a.
HS714: Manioc, arrowroot, salep, Jerusalem artichokes, sweet potatoes and similar roots and tubers with high starch or inulin content	yes	0.00	148	0.00	26.2	-55.2	6.5	5.7	0.01
HS807: Melons and papayas	no	0.00	142	0.00	0.3	-35.3	11.0	15.0	0.01
HS2002: Tomatoes, prepared or preserved	no	0.00	125	0.00	8.3	-2.9	4.5	25.0	0.00
HS705: Lettuce and chicory	no	0.00	128	0.00	6.0	28.5	6.5	13.0	0.01

Notes: HS classification is 2017, the codes presented are 4 digit. The competitor index is measured as the inverse of the Herfindahl index of exporter market shares, equivalent to the effective number of sellers in the Cournot model of competition. The Herfindahl index is the sum of the squared export market shares of each country within a product, measured between 0 and 1. The buyer index is inverse of the Herfindahl index of importer market shares.
Source: Data from BACI.

There is some potential to increase the processing of agricultural exports. Sierra Leone's top agribusiness export product is cocoa beans (whole or broken) which accounted for over 5 percent of the country's export of goods in 2019-21 but only contains primary processing. Nevertheless, cocoa beans offer a wide range of possible areas for value addition, mostly processing into chocolate, but also potential applications in animal feed derived from pod husks, as well as food and beverage products and syrups (food manufacturing). In addition, cocoa beans can also be used in the production of chemicals/pharmaceuticals such as soap and cosmetics (non-food manufacturing). Sierra Leone also exports refined palm-oil, which involves some processing and value addition. Apparently, the country is seeking to increase its value addition in its key export products: cocoa and palm oil.[95]

Sierra Leone has the potential to expand domestic services inputs into its exported goods. An important way of looking at GVC integration in services is to assess the proportion of gross export value in manufacturing that is made up of inputs sourced from services sectors (Johnson and Noguera 2012), distinguishing between domestic and foreign sourcing. On average across manufacturing sectors, Sierra Leone is one of countries with the lowest proportion of embodied services value added after Niger, Malawi and Rwanda (Figure 108). The mining and quarrying sector is

95 https://allafrica.com/stories/202305110306.html

supported primarily by domestic services at 20 percent of services value added, compared to 11 percent for Rwanda (Figure 109).

Services embodied in Sierra Leone's exports of metal products, wood and paper products, and food and beverages are primarily imported, while mining and quarrying exports contain a larger share of domestic services inputs. Sierra Leone could use linkages to services sectors, particularly in business activities and information and communication technology services, to boost the sophistication of the manufacturing sector ("servicification). Most of the domestic services that add value in the mining and quarrying business are financial intermediation and business activities as well as transport services. The foreign services supporting that industry are financial intermediation and business activities, as well as wholesale and retail trade services from the UK, China, USA, Japan, and Germany.

FIGURE 108:
SERVICES EXPORTS, SIERRA LEONE AND PEERS (% OF EXPORTS)

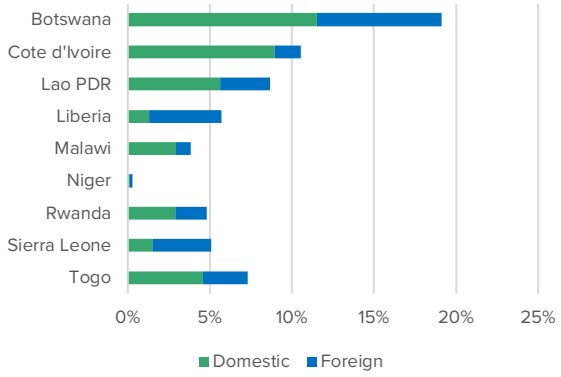
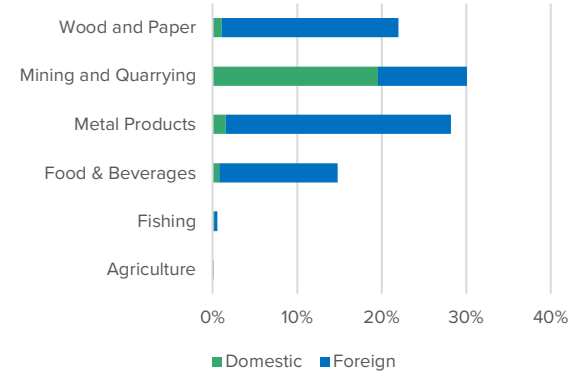


FIGURE 109:
SERVICES EXPORT, BY MANUFACTURING SECTOR, DOMESTIC AND FOREIGN (% OF EXPORTS)



Source: World Bank staff calculations using EORA data.

Policy recommendations

Sierra Leone is at a disadvantage related to several fundamental determinants of export performance. The country's remoteness from large trading partners and the GVC hubs, small market size and low capital endowment are obstacles to export growth. Political stability is high, but institutional quality in the areas of government effectiveness and regulatory quality show room for improvement. Key policies to overcome these limitations include lowering trade barriers, strengthening trade facilitation and logistics, and engaging in deep trade agreements.

Trade facilitation

High trade costs at and behind the border are driven by restrictive trade policies as well as low trade facilitation (implementation) and connectivity. Streamlining customs procedures, reducing bureaucratic hurdles, properly measuring trade facilitation performance, and investing in transportation infrastructure will help lower trade costs and improve connectivity, in particular: [96]

96 Based (a) on the information submitted by the government to the WTO (TFA database) and (b) on anecdotal information received by public and private stakeholders while on mission.

- **High levels of cargo inspections increase logistics costs and time spent at the borders. Effective application of risk-based inspection for international cargo is a priority.** Currently, the frequent and extensive cargo inspections at the borders lead to elevated logistics costs and prolonged wait times. With the vast majority of inbound and outbound cargo being subjected to checks, there's an urgent need for the Customs to increase the number of consignments channeled through the green lane, thereby reducing the volume sent to the more scrutinized red lane. Moreover, for a more holistic border management improvement, all border agencies, not just Customs, could design and adopt risk management policies to be linked to an overarching integrated risk management framework.
- **Private sector trade and logistics companies provide limited inputs to the decision-making process.** At present, there is limited domestic coordination for the implementation of the TFA's provisions. Institutionalizing dialogue between the trade community and border agencies is critical in ensuring that the trade processes and procedures are streamlined, transparent, and efficient. Sierra Leone finds it challenging to evaluate the current status of its trade facilitation and to pinpoint areas that require improvement. In this context, despite the promising vision behind Sierra Leone's NTFC's[97] inception, and even though it has been formally set up, it is not functioning as efficiently as anticipated. The reasons for its underperformance need to be identified and rectified by both the Ministry of Trade and Investment (MTI) and the Customs Administration of the National Revenue Agency (NRA), if Sierra Leone is to benefit from the committee's potential.
- **There are no systematic mechanisms for the proper measurement of trade facilitation performance.** The government could enhance its capacity to conduct time-release studies (TRS),[98] which determine the duration required for cargo clearance at designated entry points, by adopting the World Customs Organization (WCO) methodology.[99] The NTFC should take a central position in both designing and implementing these studies.

97 Corresponding to Article 23.2 of the WTO-TFA
98 The Time Release Study (TRS) is referenced in Article 7.6 of the WTO Trade Facilitation Agreement (TFA)
99 https://www.wcoomd.org/en/topics/facilitation/instrument-and-tools/tools/time-release-study.aspx

Trade integration

- **Regional integration and access to larger and more diverse markets through improved transport links will be crucial for maximizing the benefits of export diversification and integration into value chains.** Of particular importance will be the opportunities from deeper regional integration and the role that the African Continental Free Trade Agreement (AfCFTA) can play in realizing these. World Bank estimates suggest that Sierra Leone's changes in inward FDI stock in 2035 could increase by between 91 and 135 percent from the 2017 baseline as a result of implementing the AfCFTA.[100] Similar gains can be expected on the trade side with large-expected gains for poverty reduction.
- **Engaging in deep trade agreements could be a means to enhance institutional quality, as it supports reform and can thus boost trade.**
- **Access to the U.S. and EU markets could be improved through preferential programs.** Greater benefits from EBA and AGOA programs could be achieved through the following measures: (i) Facilitating partnerships between larger Sierra Leonean traders and US/EU counterparts, with trade-supporting institutions serving as intermediaries. Sierra Leone Trade Attachés can promote collaborative arrangements with local companies while at their respective embassies. (ii) Promoting local demand in the US/EU through effective marketing strategies. (iii) Improving product labelling and packaging for export purposes. Labeling and packaging also serve as promotional tools, so they must be of high quality and legible to attract consumers.

100 Echandi et al. 2022.

Trade diversification

- **Diversifying into resource-based manufacturing sectors is a natural pathway to pursue.** This includes opportunities in manufacturing that align with the country's resources, such as in agribusiness, chemicals, metals, wood processing and other products. To harness the potential in agribusiness, for example, the country should prioritize access to essential inputs like chemicals, seeds, and machinery. Strengthening diversification and value chain participation will require policies that facilitate the availability and affordability of these inputs, but also investments in technology and infrastructure to improve productivity.
- **An export opportunity analysis highlights ways to diversify into food processing / agribusiness, that are within Sierra Leone's reach in the short run due to the country's current specialization.** Some examples are ramping up production and exports of cocoa powder and cocoa paste and developing processing and packaging fish facilities (already envisaged in partnership agreements signed with China in 2023).
- **The analysis also identified a mismatch between Sierra Leone's market diversification of trading partners and its market potential in some countries it shifted away from.** There has been a shift in Sierra Leone's main trading partners away from the EU, North America and SSA towards China, MENA, and South Asia. However, estimates based on a gravity model indicate that Sierra Leone has strong export potential with the United States but also Nigeria and other SSA countries it diversified away from. While diversification helps Sierra Leone mitigate risks against market-specific shocks, it should not dismiss trade opportunities with its traditional trading partners, especially those within the SSA region.
- **In addition, there is scope to add domestic value by linking exports to domestic and foreign services sectors.** On average across manufacturing sectors, Sierra Leone has the lowest proportion among comparators of embodied services value added after Niger, Malawi, and Rwanda. Sierra Leone could use linkages to services sectors, particularly in business activities and information and communication technology services, to boost the sophistication of the manufacturing sector ("servicification").

Easing restrictions

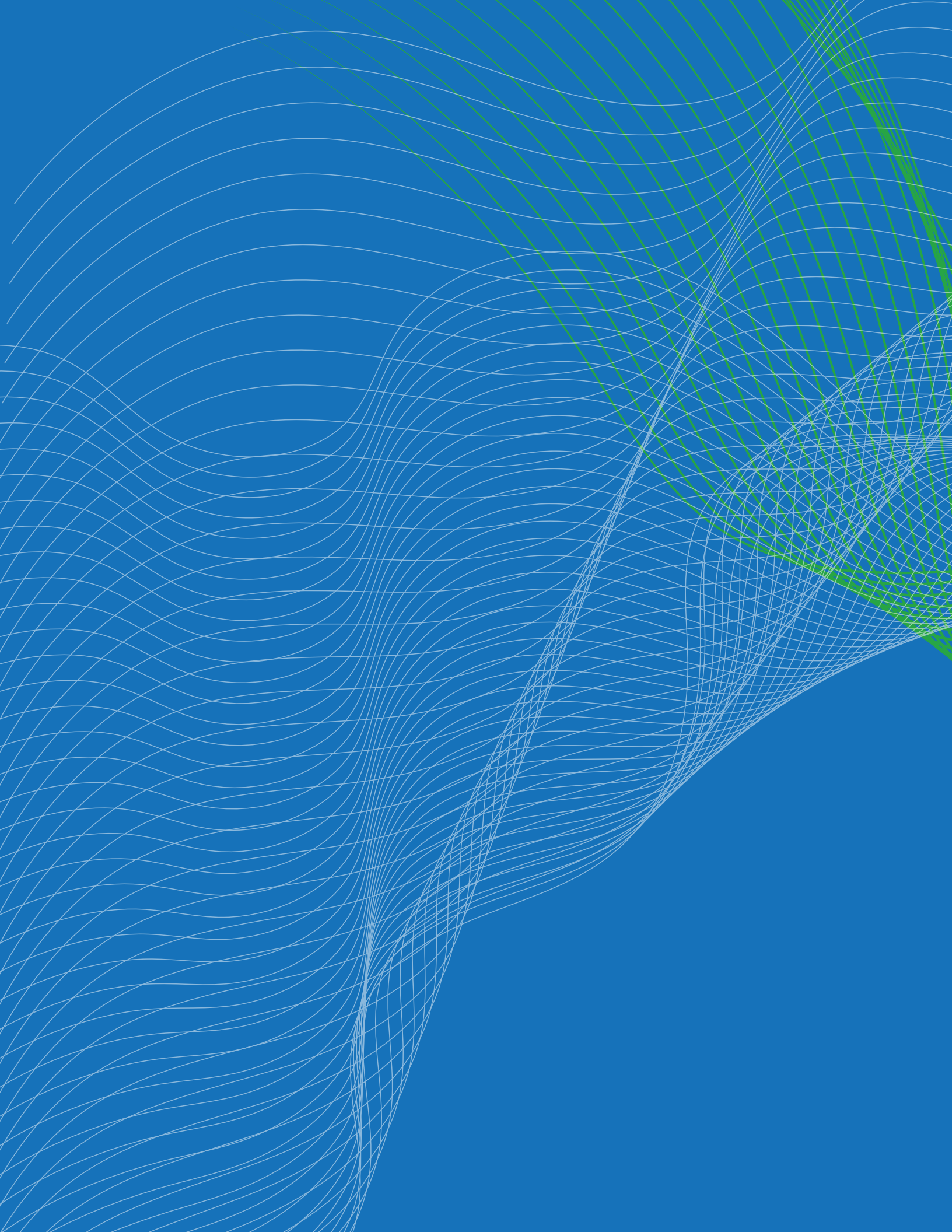
- **Consider further opening of the economy to FDI.** The Government could consider whether the restrictions on foreign participation in cement, some forms of extractive activities, or manufacturing and services could be removed or reduced. This is also congruent with liberalization commitments and efforts that Sierra Leone is pursuing under various fora (e.g., WTO, ECOWAS, and the AfCFTA).
- **Trade restrictions across all major services categories need to be lowered to boost competitiveness.** Services regulations remain highly restrictive, hampering the competitiveness of Sierra Leone's exporters. Given Sierra Leone's high reliance on foreign services in several sectors, its very high trade restrictions across all major services categories need to be lowered to boost the competitiveness of its goods exporters and facilitate diversification and upgrading. At the same time, developing a competitive domestic services sector that provides inputs to export sectors requires the necessary investment (including foreign) and worker capabilities in services sectors.

Investment policy to attract FDI

- **Clarify the strategy and objectives of the country vis-a-vis FDI.** An Investment Policy Statement could outline the Government's strategy and objectives for FDI and identify priority sectors for FDI attraction and the type of treatment the country wants to extend to foreign investment and investors. While not essential, a clear investment policy statement could help build consensus around the strategy for FDI, underline the priority of improving the investment climate, provide clear guidance to government agencies and line ministries on the treatment of foreign investors and the design of reforms, and inform and reassure potential investors on Government policy.
- **Clarify the screening and approval system for foreign investments.** A simple and streamlined process could be used to provide for rapid approval of projects, that minimizes the need for intervention and discretion. Limited screening or review could perhaps be applied only to investment projects

in certain activities that may pose significant environmental or security risks. This would be in line with international initiatives such as the Investment Facilitation for Development (IF4D) agreement that was negotiated under WTO.

- **Strengthen the investor protection framework.** The Government could review the NIB Act of 2022 against best practices for investor protection as well as against the international commitments that Sierra Leone has made (e.g., the ECOWAS Investment Code), as well as against the AfCFTA Protocol, which is still under discussion.
- **Consider establishing a dispute prevention mechanism (IGM).** Best practice today is to put in place mechanisms for the prevention of investment disputes between the host State and investors. Establishing a process to resolve disputes before submission to arbitration, referred to as an investment grievance management process, would be consistent with the AfCFTA Investment Protocol.
- **Assess the institutional framework and strategy for investment promotion.** The assessment would look, inter alia, at the transition between the Sierra Leone Investment and Export Promotion Agency and the National Investment Board, to identify areas for improvement and clarification, but also priority needs for support of the new Board and any eventual changes needed to the policy framework.
- **Review key dimensions of the existing framework:** (i) investment incentive regime - evaluate alignment with best practice and with policy objectives; (ii) local content requirements - determine whether they align with best practices, and have been effective in supporting local production (iii) *De facto* assessment of the effectiveness of the investment protection guarantees- identify shortcomings and bolster confidence in the FDI regime; (iv) consider other policy measures to foster linkages between domestic and foreign firms.



5

DEEP DIVE INTO HISTORICAL GROWTH ENGINES: MINING AND AGRICULTURE

Mining

Sierra Leone has a long history of mining. The country is endowed with vast mineral resources, including diamonds, iron ore, bauxite, rutile, gold, limonite, coltan, chromite, platinum, tantalite, zircon and columbite. This section seeks to assess why the country's mining sector has not accelerated economic growth and diversification in the broader economy, despite over 90 years of mineral extraction. This failure has been caused in large measure by an unstable investment climate in which regulatory and institutional framework has proven unpredictable. Various large-scale investments have not come to fruition, while operating mines have been forced to suspend production at critical junctures. This is compounded by limited forward and backward linkages caused by the absence of key enablers such as skills, sizable domestic market, infrastructure, and favorable investment climate.

Mining sector overview

Sierra Leone has a long history of mining. The exploitation of minerals including diamonds, gold and iron ore effectively commenced in the early 1930s and by the late 1970s, Sierra Leone had become a major producer and exporter of minerals. Production in recent years has hovered between 600,000 to 800,000 carats. Production and export of other minerals have also been volatile. The Sierra Leone Development Company (DELCO) started producing iron ore at the Marampa mine in 1933. In 1975 the company went into liquidation due to repeated losses. It is estimated that the company exported a total of some 60 million tons of ore, with annual output of 2.5 million tons at the height of its production.[101] Operations were not to fully recommence at the mine until 2011. Between 2005 and 2012, the sector attracted significant investments, expanding exploration, production, and export, with iron ore production peaking at 19.3 million MT by 2014. Despite this rapid acceleration of activity, Government decided in 2019 to issue a moratorium on new exploration licenses out of frustration with (i) lower than expected benefits from the mining industry and (ii) the slow pace of development of most mining projects. As a consequence, Government declared that the industry needed a re-set. It also signaled its intent to review all operational licenses and weed out companies that were failing to fulfill the terms of their licenses.[102] This moratorium was only lifted in September 2023. Critics contend that the moratorium has stifled investments and that few (if any) new projects are likely to come to fruition over the next three-to-five-year term.

Sierra Leone's mining sector is divided into three distinct but overlapping parts: (i) large-scale, (ii) small-scale and (iii) artisanal mining. The criteria used under Sierra Leonean law to distinguish between the three subsectors include size of concession (acreage), depth of mining activity, equipment used in mining, number of staff employed and level of formal incorporation.

The country's large-scale mining subsector is relatively diversified with companies currently mining a range of minerals including diamonds, iron ore, bauxite, rutile, and gold. There are signs that bigger and established mining companies are demonstrating

101

102 'Julius Maada Bio's mining putsch', *Africa Intelligence*, 12 June 2018; 'SL Mining Limited v. Republic of Sierra Leone'.

interest in the subsector. The lifting of the ban on the issuance of exploration licenses in September 2023, which had been in force since 2019, is expected to attract more investment to the sector. However, it has yet to be tested how the intricate approval process will work between multiple line ministries, statutory boards, and local authorities. At the time of writing, the National Minerals Agency (NMA) had on their books 11 registered and actively producing large-scale mining companies, including four engaged in mining of diamonds, three gold, two iron ore, one rutile (mineral sands) and one bauxite. Annex Table 12 shows the large-scale registered and active mining companies and minerals mined.

The minerals policy defines small-scale mining in relation to the depth of mines, which should not exceed 20 meters, also involving the use of "...sinking of shafts...or other various underground opening". As of October 2023, there were seven actively producing small-scale mines in the country, all of them producing titanium dioxide and zircon (Annex Table 13). The number of small-scale licenses, however, does not represent the full extent of mining operations that can be truly categorized as small-scale. This is because many artisanal miners use extraction methods of small-scale operations – in terms of depth and mechanization but without formal registration as such.[103] Registration is avoided due to the relatively high cost of environmental and social impact assessment fees imposed by the Environment Protection Agency (EPA),[104] as well as statutory and regulatory requirements such as community development agreements (CDA) with host communities.

Artisanal mining has traditionally been viewed mostly as a livelihood issue for rural populations and is estimated to employ between 300,000 to 400,000 people. Although both the 2018 Minerals Policy and MMDA 2023 exclusively restrict participation in the subsector to Sierra Leoneans, it has become a multimillion-dollar business that attracts investments from foreign players, including Chinese nationals.[105] While the financial or overall impacts of artisanal mining on Sierra Leone's economy are difficult to assess, one estimate suggests that in 2015, around 48 percent of all diamonds exported from the country were from the subsector.[106] A 2019 study found that that while most diamond production was being exported legally, 96 percent of estimated gold production was being exported illegally, with most of the gold smuggled to Guinea.[107] It argued that the root of the problem was the high cost of trading licences and a lack of reputable gold traders. Artisanal mining remains largely informal, with regulatory roles for chieftaincy authority and central government agencies, notwithstanding recurring attempts by the state to formalize it. The number of illegal artisanal mining operations far exceeds those registered with the authorities, which in December 2022 was 1,397, slightly less than the previous year's – 1,463. Most artisanal miners are mining diamonds and gold, but with the depletion of alluvial diamond deposits, a growing number is turning to small-scale agriculture or other critical minerals that have become much more lucrative due to the energy transition, including coltan, titanium dioxide and zircon.

Mineral production volumes and export values have seen a sizable increase since the end of the Ebola outbreak in 2015 as a result of investment expansions coming to fruition (and settlement of several high-stakes investment disputes). The increase is largely ascribed to the resumption of operations by the two large scale iron ore mining companies. Together, the two companies produced 4.37 million WMT with an export value of US$470 million in 2022.[108] While reliable mineral production and export data for large and small-scale mining operations is easily obtainable from the Precious Mineral Trading Directorate (for diamonds and gold), and from Nectar Sierra Leone Bulk Terminal (NSBT) for industrial and sand-based minerals including zircon, coltan and titanium, it is challenging to obtain reliable production data from artisanal mining, due to smuggling.

The mining sector contribution to GDP has gradually risen from around 10 to 15 percent over the past decade.[109] In nominal terms, mineral exports in 2016 were estimated at US$468 million. This figure increased to US$897 million in 2022 on the account of increased iron ore production (Figure 110).[110] Mineral production volumes and export values from industrial (large and small-scale mines) and artisanal mines for the period 2016 – 2022 are summarized in Figure 111.

103 See Conteh, F.M and Maconachie, R .2021. "Artisanal mining, mechanisation, and human (in)security in Sierra Leone". The Extractive Industries and Society. https://doi.org/10.1016/j.exis.2021.100983.
104 Maconachie, R and Conteh, F.M. 2021. "Artisanal mining policy reforms, informality and challenges to the Sustainable Development Goals in Sierra Leone". *Environmental Science and Policy,* 116, 38–46.
105 Conteh F.M and Maconachie, R .2021; Maconachie, R and Conteh, F.M. 2021.
106 Conteh, F.M and Maconachie, R .2021.
107 The tax rate for gold is significantly lower in Guinea.
108 National Minerals Agency data.
109 See Sierra Leone Extractive Industries Transparency Initiative "2020-2021 Report". Freetown: Office of the President.
110 National Minerals Agency data.

FIGURE 110:
MINERAL EXPORTS, BY MINERAL (%), 2022

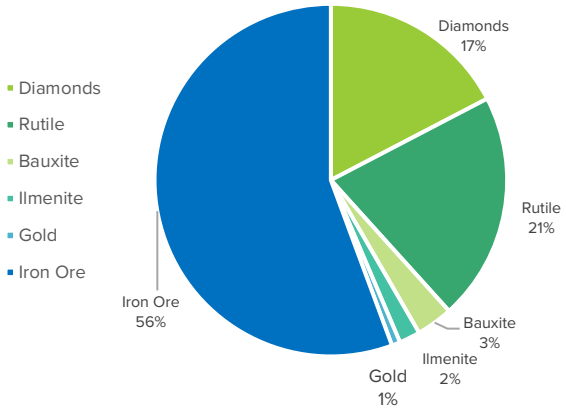
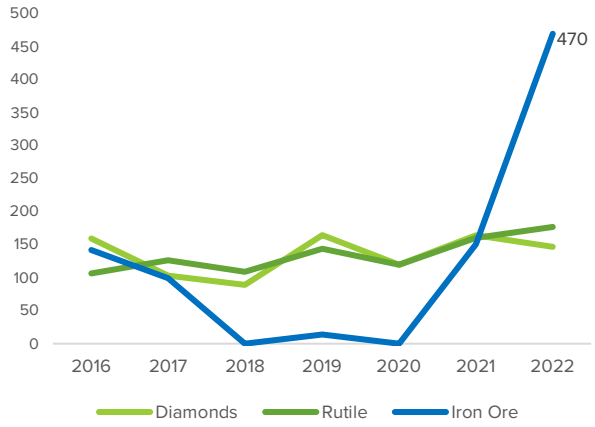


FIGURE 111:
SELECTED MINERAL EXPORTS (US$, MILLIONS), 2016-22



Source: National Minerals Agency data.

Sector policy and legal framework

Sierra Leone adopted a new Minerals Policy in 2018, with the goal of providing an adequate policy framework for Government to manage the minerals sector as a key driver of economic "transformation, growth and development for Sierra Leone".[111] Among the policy objectives, it is envisaged that it will enhance inter-agency and stakeholder coordination, in ways that will foster inclusive governance of the sector, and support a predictable and fair regulatory and fiscal regime capable of increasing market competitiveness in attracting productive investment. Government also strives to promote the application of international environmental standards appropriate for the country's categories of mineral rights. Some progress has already been recorded, notably the establishment of a Policy Directorate in the Ministry of Mines and Mineral Resources (MMMR) that is responsible for sector policy development and inter-agency coordination, as well as the adoption in 2023 of the revised Mines and Minerals Development Act. Also, the successful completion of geophysical surveys in 2019 has enhanced knowledge of Sierra Leone's geological base, and is expected to attract investor interest in the years to come as new information about the mineral resource base has emerged. Yet, as mentioned in the introduction, the past four-year moratorium on new exploration licenses has meant that the only sector expansion has come from existing operations, whereas no new large-scale deposits have been identified since 2019.

111 Minerals Policy 2018, p19.

Several challenges undermine the attainment of the policy's objectives. During the years of moratorium and investment review, the administration cancelled several large-scale mining licenses on various grounds that have later been disputed in courts. License holders have been awarded compensation in some cases, while others have reached settlements that have largely reinstated the licenses Government had sought to revoke. These cases have created an impression of weak protection of property rights and inadequate security of license tenures for prospective investors. In the years to come, Sierra Leone will need to overcome this perception of investor scepticism before the sector can be expected to flourish.

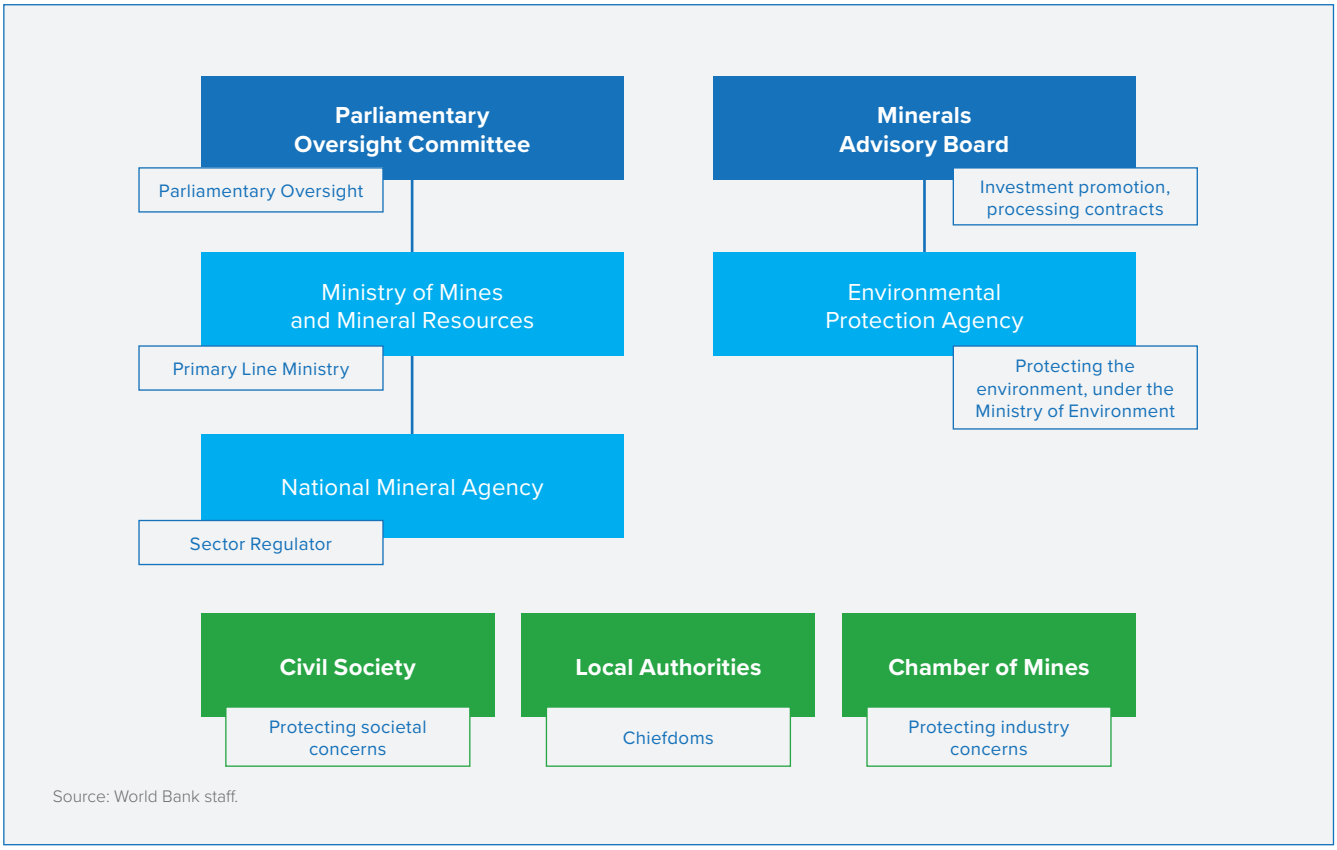
Despite the approval of sector policy statements and a revised legal framework, the actual application of the principles has yet to be confirmed – and investor confidence has to be restored. For instance, the Extractive Industries Revenue Act 2018, which was developed contemporaneously with the Minerals Policy in 2018 to ensure a predictable and fair fiscal regime in the sector, is not fully reflected in the negotiations of Mineral Lease Agreements (MLA). Special terms negotiated at the discretion of policymakers, which the law was meant to limit, continue to influence negotiations and implementation of fiscal provisions in MLAs. Also, a public oversight mechanism for monitoring the utilization of mineral revenues, a key policy objective, is yet to be established.

Sierra Leone has made commendable progress in reforming its legal framework for the mining sector. Nonetheless, legal contradictions and inconsistencies risk undermining investor confidence and rights of stakeholders, especially communities hosting mining operations. The Mines and Minerals Development Act 2023 (MMDA 2023) removes discretionary powers of key political and technical officials of regulatory ministries and agencies, while centralizing authority and power in designated ones, including the NMA, EPA, NRA among others. It also provides for beneficial ownership disclosure in small scale and large-scale mining operations; the promotion of equity for women, children and vulnerable groups; and the expansion of the legal framework and operational requirements for small-scale operators. Finally, the Act allows the state to hold "a non-dilutable free carried of interest of 10 percent"; and "up to 35 percent shares" in large-scale mining operations.

It is still far too early to evaluate the success of the MMDA 2023, both from the perspective of prospective investors and from the perspective of national stakeholders, such as communities adjacent to mines or civil society at large expecting monetary or in-kind benefits from the resource extraction. The new legislation does indeed allow for more objective and rules-based decision-making with clearer designation of areas of authority to other line ministries and local government structures.

Sector institutional arrangement

FIGURE 112:
DIAGRAM OF MINING SECTOR INSTITUTIONAL ARRANGEMENTS



Source: World Bank staff.

Mining sector reforms have led to the decoupling of policy and regulatory functions, to enhance accountability and sector governance. The Ministry of Mines and Mineral Resources (MMMR) is responsible for general oversight and regulation of Sierra Leone's minerals sector, including preparing the legal and regulatory framework and providing policy directions in line with national development objectives. To enable the MMMR to perform its policy and inter-

ministerial coordination role, a Policy Directorate was established in 2021. The MMMR has benefited from broader development partner-supported capacity building, but the individual and collective capacities of the Policy Directorate would need to be enhanced for it to effectively perform its envisaged role (Figure 112).

The National Minerals Agency is the leading mining regulatory institution, created in 2013 under a transformation plan for sector institutional governance. It is a semi-autonomous sector regulator and only survey institution and is responsible for mineral license management, collecting and disseminating geological information and regulating the trading of precious minerals. The MMMR Directorates of Mines (which includes the Mining Cadastre Office) and Geological Survey were transferred to the NMA on its establishment, leaving the Ministry to focus on its oversight, policy-making and law-making functions. Since its creation, the NMA has attracted highly trained and qualified young professionals needed to respond to the changing demands of the sector. Despite this, the agency has limited capacities in key areas including draft surveying and geodata interpretation, as it needs to enhance its laboratory capacity.

The Minerals Advisory Board (MAB) was first mandated by the Mines and Minerals Act of 1994. Its current responsibilities, as set out in MMDA 2023, are a) promoting Sierra Leone's competitiveness as a mining destination; b) monitoring and approving public tender processes; and c) advising the Minister on matters relevant to the grant, modification, suspension, or cancellation of mining licenses other than artisanal licenses. While the MAB is characterized by its broad-based representation of key stakeholders from parts of the administration and civil society, it lacks the detailed sector expertise required for an in-depth evaluation of the topics and proposals presented to the Board.

The Environment Protection Agency (EPA) is the principal Government institution responsible for the protection of the environment, including in the mining sector. Its current powers and responsibilities, as set out in the Environment Protection Agency Act of 2022, include a) conducting or promoting research on environmental issues in Sierra Leone; b) raising public awareness on the importance of environmental protection; c) ensuring that companies whose operations impact upon the environment comply with environmental laws and regulations; d) issuing Environmental Impact Assessment (EIA) licenses; and e) issuing permits and enforcement notices controlling industrial waste discharges and other sources of pollution. Due to capacity constraints the EPA has mostly focused on the operations of small- and large-scale operations and not those related to artisanal mining. The MMDA 2023 centralizes responsibility for the regulation of the environment in mining in the EPA, including the approval of impact assessment of operations. The agency is however challenged with capacity deficits, including lack of laboratory capacities to perform basic tests related to water, soil and air quality, when required.

Parliamentary oversight of mining governance is carried out by the Standing Committee on Mines and Minerals. Under the 1991 Constitution, Parliamentary standing committees have such powers, rights and privileges as are vested in the High Court at a trial to a) enforce the attendance of witnesses and b) compel the production of documents. A Minister may be summoned before a standing committee to give an account of any matter falling within their portfolio and/or to explain any aspect of government policy.

The National Investment Board, incorporated under an Act of Parliament in 2022, is the highest policy making body on investment in Sierra Leone and acts as a clearing house for all investment proposals and approvals (including public private partnership proposals). The functions of the Board's secretariat include the facilitation of investors' license and permit applications and the registration of investment projects.

Local authority in Sierra Leone is multifaceted and still bears the imprint of British colonial rule. Elected local councils and chiefdoms are responsible for the provision of social services and customary justice respectively, in areas outside of Freetown. Chiefdoms, whether singularly or in groups, also tend to serve as 'primary host communities' in mining-related Community Development Agreements (CDAs). Today, many people in rural areas still look to chiefs for governance and justice in the first instance, and it remains a chiefly prerogative to authorize customary land rights and transactions involving customary land.[112] For that reason, chiefs continue to play

112 It remains to be seen what impact, if any, the recent Customary Land Rights and National Land Commission Acts will have upon chiefs' ability to exercise these prerogatives.

a major role in the artisanal mining industry as brokers of surface rights agreements and license applications.[113] The paramount chiefs of these chiefdoms are effectively guaranteed a seat on the Community Development Committees (CDCs) managing the community development funds established under these agreements. Currently, local councils' direct involvement in mining governance is limited to the inclusion of their Chairs and Planning Officers in CDCs.

The platform for the coordination of state and mining industry relations spans several decades, with the establishment of the Chamber of Mines in 1965. The Chamber of Mines is a not-for-profit organization that represents the interests of mining and exploration companies, is represented in the Multistakeholder Group of the Extractive Industries Transparency Initiative (EITI) process and is also affiliated with the Ministry of Mines and Mineral Resources. However, the Chamber has sometimes struggled to dialogue with Government on key sector issues including legal and regulatory reforms. As such, the Chamber and individual companies have had to rely on third parties to influence Government's policy and action on key sector issues.

Sierra Leone has a long history of civil society organizations (CSO) participating in mining sector policy and regulatory dialogue.[114] The main CSO group working on extractives is the National Advocacy Coalition on Extractives (NACE), a coalition of national and international organizations that was established in 2003. It focuses on the policy and legal framework of the mining sector, as well as the social and environmental impacts of mining. Although NACE and its individual members have been participating in critical regulatory and policy dialogues, they have criticized the Government for extending "extraordinary" tax concessions to mining companies[115] and for provisions in MMDA 2023 hat allocate a portion of surface rent payments to Members of Parliament, local councils and chiefs, instead of allocating the full amount to landowners.[116]

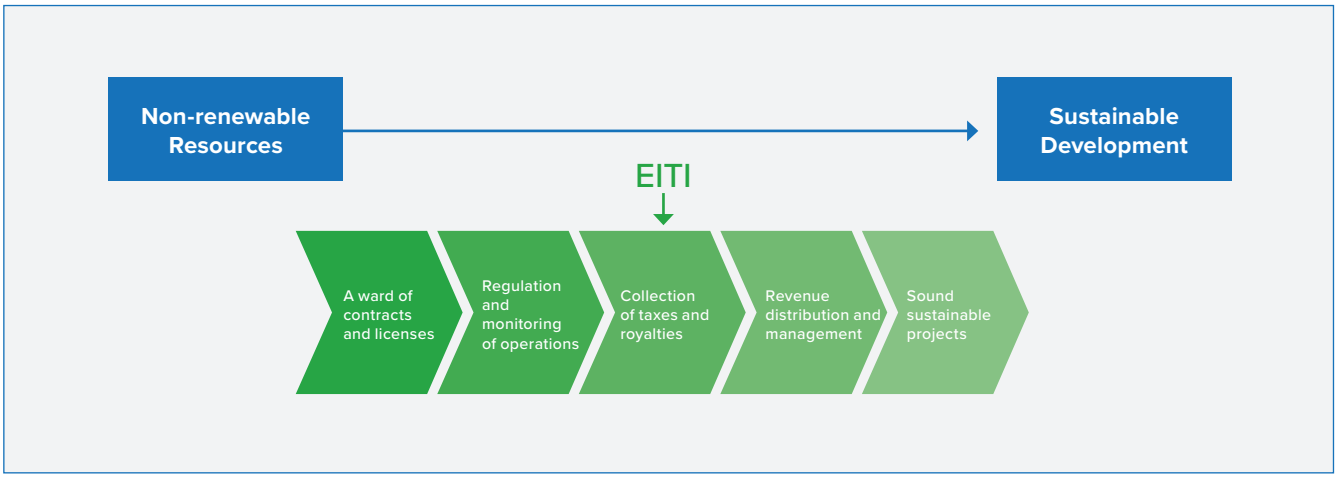
To promote interagency coordination, most sector ministries, departments, and agencies have signed memorandums of understanding (MOU). For example, the MOU between the NMA and EPA is intended for the two institutions to coordinate their operations, including joint field inspections of mining operations. Despite this, the relationship between them has not always been effective, due to different interpretations of law and views on how best to regulate the environmental impacts of mining operations. One concern expressed by operators is the high total cost for obtaining various mandatory approvals of which the EIA is central. The relatively high fees for licenses and approvals (business and EIA license, water and dredging permits) are said to have impeded investment in the sector.[117]

Bureaucratic weakness in Sierra Leone goes hand in hand with highly centralized and personalized decision-making. This situation helps explain the draconian decisions to revoke or award investment licenses which have been observed until very recently. The recent overhaul of the legislation (which also includes land administration, customary land rights, taxation and other topics) offers the promise of more predictable and transparent sector management. However, the continued reliance of statutory boards and designated committees, including introduction of new extra-governmental entities, risks exacerbating the discretionary governance traditions of the past.

113 A. Zack-Williams, *Tributors, Supporters and Merchant Capital: Mining and Under-development in Sierra Leone* (London, 1995).
114 Fanthorpe, R and Gabelle, C .2013.
115 National Advocacy Coalition on Extractives .2009. "Sierra Leone at the crossroads: Seizing the chance to benefit from mining". accessed September 25, 2023.
116 Kamara, C.A .2022. "Civil society criticizes Sierra Leone's new mining law". accessed September 25, 2023.
117 Discussion with senior EPA official, September 26, 2023, Freetown.

Analysis of the extractive industries value chain

FIGURE 113:
SUSTAINABLE MANAGEMENT OF NON-RENEWABLE RESOURCES AND EITI



Award of contracts and licenses

While the Minister is the final authority to approve or reject a mineral license, the NMA and MAB play important roles. The NMA is responsible for ensuring that all the paperwork accompanying license applications is in order and that the area covered by a proposed license is available for mining operations. It is, however, the responsibility of the MAB to determine whether the application is compliant with national laws and regulations. All recommendations must be recorded in the mining cadastre system. If a license application is refused, the Minister must provide the applicant with reasons for refusal in writing. The revisions and clarifications stipulated in the MMDA 2023 have yet to stand the test of time, since the MAB continues to suffer from lack of specialized sector expertise. This situation has produced previous examples of ministerial investment approvals or revocations which have been passed with little or no scrutiny by the MAB. Moreover, the introduction of the National Investment Board introduces another layer of uncertainty which confound the principles of accountability and transparency which are intended in the MMDA 2023.

The EPA issues EIA licenses following the applicant's submission of a satisfactory Environmental and Social Impact Assessment report. These reports include obligations related to (i) environmental and social performance, (ii) resettlement agreements, (iii) public disclosure and community consultations, as well as (iv) mine closure arrangements. Holders of large- and small-scale mining licenses must enter into Community Development Agreements (CDAs) with their Primary Host Communities and deposit no less than 1 percent of its annual gross revenue into a community development fund (an active CDA is not a condition of the award of a license). The explicit authority granted to the EPA should improve and simplify the review process of investment proposals since the award of a license is treated separately from the EPA certification.

The GoSL is currently seeking to develop arrangements for mandatory State participation in mineral investments. Section 161 of MMDA 2023 states that in respect of a large-scale mining license, the state shall acquire a non-dilutable free carried interest of 10 percent and up to 35 percent of company shares. The Mines and Minerals Development and Management Corporation Act (MMDMCA) of 2023 provides for the establishment of a corporation that will hold and manage state interests in mining projects. These interests will be managed by project companies and/or project partnerships. All project companies shall be wholly owned by the corporation. The corporation will be governed by a Board with participation by Ministers and presidential appointees, which may impair comprising of the Minister of MMR, the Attorney-General and Minister of Justice, the Minister for the Environment and Climate Change, the Minister of Lands and Housing, the Governor

of the Bank of Sierra Leone, and three 'eminent persons' appointed by the President. The Board will appoint the Executive Director and staff of the corporation. In the interest of transparency and it violates the basic principle of segregation of the political powers from the executive and corporate powers, it is concerning that the recent Mines and Minerals Development and Management Corporation Act states that the management board of the Corporation will comprise of government ministers (including the Minister of MMR) and presidential appointees.

MMDA 2023 states that an artisanal license application should be accompanied by a) a statement of the applicant's technical expertise and financial capacity to undertake mining operations; b) a plan of the proposed license area c) proof of consent to use land for mining operations from chiefdom authorities and/or local landowners; d) an environmental screening report e) a health and safety plan; and f) a local content plan. Licenses are valid for one year in the first instance and may be renewed on an annual basis for the commercial life of the deposit. License areas may cover no more than 1 hectare (2.5 acres) A maximum of three licenses may be issued to one person at any one time provided that the license areas are not adjacent to one another. All artisanal licenses are issued and monitored by the Director-General of NMA without reference to the MAB. The new Act allows holders of artisanal licenses to use excavators and earth moving machinery provided that they first obtain written permission from the Director-General and that they rehabilitate the mining site afterwards.

Regulation and monitoring of operations

The MMDA 2023 sets out general parameters for regulating and monitoring mining operations. According to the Act, the Ministry of MMR is responsible for preparing regulations and guidelines. The NMA's statutory responsibilities include regulation and supervision of all mining operations, the mining cadastre function, compliance and inspection, and compliance with license requirements. NMAA 2023 grants the Director of Mines (DoM) the authority to inspect mine sites and take samples of soil, tailings and minerals, ensure that mine operators are complying with regulations, examine books and accounts, and conduct pre-shipment inspections for all bulk mineral exports. The Director of Geological Survey also has authority under the Act to enter any lands to collect soil and mineral samples.

The roles of the authority of Environment Protection Agency have been increasingly solidified thanks to the EPA Act of 2022 and the MMDA of 2023. Both legislations state that the Minister responsible for the environment makes regulations regarding the criteria for the approval of Environmental and Social Impact Assessment and issues EIA licenses. Per section 133 of the MMDA, holders of a mining license are required to submit an annual report on environmental and social impacts and subsequent mitigation actions., while section 134 lists environmental screening reports, environmental impact assessments and environmental and social management plans as examples of environmental reports. It is not made explicit that reports of the latter kind, which are submitted to the EPA in the first instance, will fulfill the requirements of section 133.

Despite the mandates for compliance monitoring given to NMA and EPA, respectively, no systematic monitoring or reporting procedures exist to date. Lack of resources plays an important part in explaining this deficiency. The plans and commitments set out in the original license agreements are rarely monitored or acted on, largely due to lack of resources. Instead the ambitions of benefit-sharing and sustainable mining practices are managed through local-level committees and community funds. It is no secret that a community development fund can help a mine operator secure the goodwill of local people affected by its operations. The danger is that it encourages the local authorities who sit on CDCs to take a more relaxed view than they might otherwise have done towards negative project impacts, particularly environmental impacts. In that regard, an opportunity to establish a framework for robust monitoring of mining operations has been overlooked.

In recent years, the Parliamentary Committee on Mines and Mineral Resources has made its presence felt by calling representatives of the MMMR, NMA and EPA to meetings to discuss the award and cancellation of mining licenses. They have also investigated complaints made by mining companies against the government, undertaken site visits to mining operations and facilitated discussions between mining companies and local communities.

Collection of taxes and royalties

The First Schedule of the Extractive Industries Revenue Act (EIRA) of 2018 (amended by the Finance Act of 2022) sets out the royalty rates for minerals: 3 percent of sale value for minerals produced by artisanal mining; 6.5 percent for precious stones; 8 percent for special stones; 5 percent for precious metals; 3 percent for bulk minerals (e.g. iron ore, bauxite, rutile and titanium). The sale value is the value receivable in a transaction meeting the requirements of Section 95 of the Income Tax Act, 2000 (arm's length standard) at the time of export, processing or delivery under a contract of sale without discount, commission or reduction. The EIRA originally set the rate of income tax for mineral operations at 30 percent. The Finance Act of 2022 reduced the rate of income tax for mineral operations from 30 percent (set in the EIRA) to 25 percent to bring it into line with the standard corporate tax rate.

Most mining sector operators do not pay the standardized tax rates. The national Medium-Term Revenue Strategy finds that most operational mining companies are benefitting from MLAs that were in force before the EIRA of 2018. In some cases, tax holidays under these agreements have been in force for 15 years. It also notes that mining investors have routinely sought to be exempted from the goods and services tax system entirely. The Revenue Strategy finds that: (i) mining companies are able to demand tax concessions because Sierra Leone has weak bargaining power vis-à-vis international investors and historically has struggled to attract investors; and (ii) most operational mining companies are benefitting from MLAs that were in force before the EIRA of 2018 was enacted and are not, as a result, liable to standardized fiscal terms. The issue is not only longstanding MLAs. For example, after going to considerable lengths to renegotiate MLAs between 2019 and 2021, Government still granted various operators more generous concessions on the goods and service tax than the prevailing rates.

Sierra Leone achieved compliance with the Extractive Industries Transparency Initiative (EITI) in 2014. In October 2022, The EITI Board concluded that Sierra Leone had achieved a high overall score (87.5 out of 100 points) in EITI implementation.[118] The Sierra Leone EITI Secretariat (SLEITI) publishes an annual report comparing tax and royalty payments reported by mining companies against the corresponding receipts reported by GOSL agencies. The overall objective of this exercise is to assist the GoSL in identifying the positive contribution that mineral resources make to the economic and social development of the country and to realize their potential through improved resource governance that encompasses and fully implements the principles and criteria of the EITI. The latest SLEITI report, covering the years 2020-21, reports that the total revenues generated from the extractives sector in Sierra Leone (including social and environmental expenditure) rose from US$53.1 million in 2020, which reflected low revenues due to the COVID-19 pandemic, to US$71.5 million in 2021. Extractive revenues rose by 15 percent a year from 2017 and 2021. The improvement in 2021 reflected the return of the two leading iron ore mines to full operation and higher world market price of many minerals.

Backward and forward linkages in the mining sector

Limits to current linkages

Backward linkages in mining refer to the links between the mining industry and its suppliers of inputs, such as labor, materials, and equipment. The Local Content Agency Act 2016 stipulates that preference is given to goods produced by firms owned by citizens of Sierra Leone and located in the country.[119] Goods and services, however, need to meet international standards. Policy support is often necessary to help local suppliers compete for purchases by international mining companies, due to the low quality, high costs, skills deficits, limited availability, and weak competitiveness affecting many local firms.

Local firms play only a limited role as suppliers to mining companies. Of the 44 sub categories of goods and services identified in a 2019 assessment as procured by mining companies, only 16 were exclusively procured locally, while 28 were either "exclusively, partly or mostly" procured from overseas.[120] The limited categories of goods and services procured locally is indicative of an underdeveloped domestic market, incapable of meeting

118 EITI Report 2020-21, Sierra Leone Extractives Industry Transparency Initiative (SLEITI), March 2023, p. 13.

119 Bids with the highest local content (at least 5 percent more than the closest competitor) should be chosen if the tenders are within 5 percent in terms of price.

120 JenMAA Data Management Consultants .2019. Local Content and Linkages - Assessment of Local Business Opportunities to Improve Side-Stream Linkages to Mining: Assessment of SMEs' Participation in Mining Companies' Supply-Chain; and Supplier Development Feasibility Report. Freetown: Sierra Leone Local Content Agency.

the operational requirements of mining companies, even if they want to exclusively procure goods and services locally.[121] A study of local content opportunities in Sierra Leone's mining sector finds that local or Sierra Leonean owned businesses accounted for only US$62 million of the US$205 million in goods and services purchased by mining companies in 2018.[122]

Mining operations have resumed in the country's two large-scale iron ore mines since 2021, and the current value of mining sector local content may be significantly higher than 2018 figures suggest. In fact, data obtained from the National Minerals Agency for four mining companies for 2020-2021, excluding the only large-scale rutile mine and the two iron ore mines, suggest that total goods and services procured by the companies locally in 2021 was US$67.7 million dollars (Figure 114).[123] This suggests that the total value of mining local content is on an upward trend, especially if values for the other companies are included in the analysis.

FIGURE 114:
VALUE OF GOODS AND SERVICES PROCURED FROM LOCAL FIRMS BY FOUR SELECTED COMPANIES (US$, MILLIONS), 2020–21

Source: National Minerals Agency data

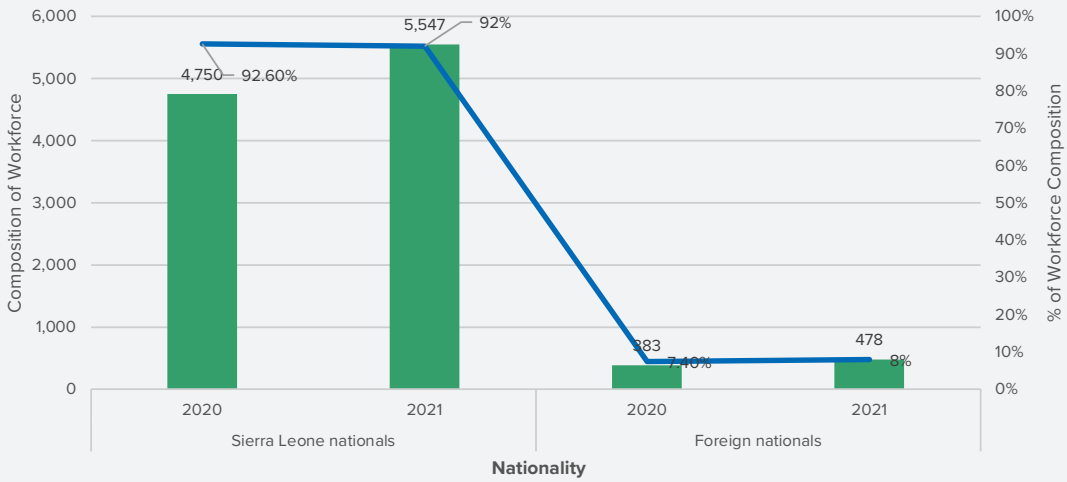
There are indications that a few Sierra Leonean firms are building their capacities to compete with international firms. For example, in May 2023, Sierra Rutile (the world's largest natural rutile producer), signed a three-year agreement worth US$100 million dollars with the wholly-owned Sierra Leonean mining and logistics company – Mano Mining Company. The contract, which is for the mining of rutile in the remainder of the company's current mine life,[124] represents the first time a large-scale company is outsourcing its mining operations to a Sierra Leonean owned company.[125] The agreement has sparked optimism that local firms are building their capacities on the one hand, and that mining companies are willing to contract them on a competitive basis over international firms, on the other. Mano Mining Company is however an outlier, as many local firms struggle to enter and maintain their presence in mining companies' supply chain, due to several constraints discussed below.

In addition to the development of Sierra Leonean goods and services, the creation of jobs in the mining sector is a key objective of the local content policy and law. However, mining sector employment is limited. Most jobs are in the highly informal artisanal mining (AM) subsector, which is estimated to provide 350,000 indirect jobs (Figure 115:).[126] Large-scale mines provide an estimated 30,000 direct and indirect jobs,[127] representing about 1.33 percent

121 JenMAA Data Management Consultants .2019a.
122 Sampablo, M et al .2022. "Strategy development for using potentials and overcoming barriers to increase local content related to the mining sector on the local, national, and regional level of the Mano River Union", Bonn: Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH
123 Marampa Mines resumed operations after two years of dispute with the Government.
124 The Calabash .2023. "Sierra Rutile Prioritizes Local Content: As Mano Mining Gets Mining Operation Contract…", Accessed 30 May 2023.
125 Discussion with Senior Government of Sierra Leone official, May 23, 2023.
126 De Jong, T, Keili, A, don-Williams, D, De Vries, P, Jorns, A and Gronwald, V .2020. Final Report: Baseline Study on Artisanal Mining. Freetown: Ministry of Mines and Mineral Resources.
127 Government of Sierra Leone .2019. Sierra Leone's Medium-Term National Development Plan 2019 – 2023. Freetown: Ministry of Development and Economic Planning.

of employment in 2020.[128] Jobs in the AM subsector are being threatened by the rapid depletion of alluvial deposits, especially in diamond mining, and the increasing use of heavy machines which are displacing human labor, even if they increase efficiency in mine operations.[129] There was high expectation that "lots of employment" would result from the resumption of operations in the country's two iron ore mines.[130] However, large scale mining only directly generated between five to six thousand jobs during 2019-21 (EITI). Measuring the indirect job creation by the sector is challenging due to measuring and monitoring capacity deficits,[131] although a recent study of the Newmont Ghana Gold Limited indicates the potential for significant indirect job creation by mining companies in Africa (Newmont's own employment was 1,700, but the study estimated a job multiplier of 3.8 in the company's direct value chain and nearly 50,000 jobs created elsewhere).[132]

FIGURE 115:
MINING COMPANIES' WORKFORCE, BY NATIONALITY (NUMBER AND %), 2020-21



Source: EITI 2020-21 Report.

Forward linkages represent connections between the mining industry and its output markets, such as construction, services, and manufacturing. Establishing forward linkages can be challenging due to low quality, high costs, weak competitiveness in processing industries and limited availability.[133] The promotion of greater value addition in Sierra Leone's mining sector is a key objective of the medium-term national development plan 2019 – 2023, with the goals of improving diversification, boosting growth, increasing employment, reducing poverty and raising the benefits of mining for local communities.[134] Despite this, downstream processing of minerals, especially for the major export commodities like diamonds, gold, and iron ore, is significantly lacking. Most of the minerals are exported in their raw or semi-processed form, with little value addition done within the country.

Although some attempts have been made to promote value addition for different minerals in Sierra Leone, most have either failed or stalled. The Diamond Cutting and Polishing Act in 2007 provided for licenses for diamond cutting and polishing activities, but uptake was weak; the diamonds produced in Sierra Leone are exported as rough stones to other countries for cutting and polishing. In sum, although the recent expansion of the mining industry augurs an

128 See Sierra Leone Extractive Industries Transparency Initiative "2020-2021 Report". Freetown: Sierra Leone Extractive Industries Transparency Initiative.
129 Conteh F.M, Maconachie R .2021.
130 Akam, S .2012. S.Leone in uphill battle to avoid 'resource curse'. accessed August 8, 2023.
131 The World Bank .2015. Practical Guide to Mining Local Procurement in West Africa. Washington DC. The World Bank.
132 The World Bank .2015.; Kapstein, E and Kim, R. 2011. The Socio-Economic Impact of Newmont Ghana Gold Limited. Haarlem: Stratcomm Africa.
133 Collaborative African Budget Reform Initiative .2016.
134 Government of Sierra Leone .2019.; English, P, Kamara, A.B, Mlceod, H and Showers, W. 2019. Promoting trade and investment in Sierra Leone. (F-19118-SLE-1). London: International Growth Centre.

acceleration of economic growth, the full potential of the mineral resources may not benefit the Sierra Leonean economy if the majority of the value addition is not realized in-country.

Constraints to developing more backward and forward linkages.

Mining companies have limited knowledge of the existence of local firms, sometimes even within the same communities hosting their operations.[135] Sierra Leonean businesses often lack the capacity and resources to effectively market or advertise their products to mining companies, a challenge that is compounded by limited networking opportunities between them and companies. Until early 2023, when the Sierra Leone Local Content Agency launched its small and medium enterprises (SMEs) database, there was no comprehensive database of SMEs through which mining companies could identify and interact with suppliers of goods and services.[136]

Inadequate supply of electricity limits efforts to increase the processing of minerals in Sierra Leone. Mining sector energy demand in 2015 was estimated at 187 megawatts,[137] almost double the country's installed energy capacity of 100 megawatts in 2021.[138] It is estimated that electricity generation would have to increase to 1,000 megawatts this year to meet the rising demand from the mining sector (particularly with the resumption of mining at the two iron ore mines), other industries and households. Mining companies have historically generated their own energy, and all mines remain unconnected to the main electricity grid. Apart from the two iron ore mines which are located relatively close to the single transmission line connecting Freetown to the hydro plant at Bumbuna in the north, other mines (including diamonds, rutile and bauxite) are located far from the main grid, undermining the potential for competitive blast furnaces, even if the country were generating sufficient energy. Local demand for processed products, such as steel, is insufficient to justify building blast furnaces using self-generated energy. As such, lack of access to low-cost energy is a significant hurdle inhibiting mining sector downstream processing.

135 Sampablo, M et al .2022
136 Discussion with the Director General, Sierra Leone Local Content Agency, Freetown, 2 June, 2023.
137 Jalloh, B .2017. Sector Scan: The Energy Sector in Sierra Leone. The Hague: The Netherlands Enterprise Agency
138 International Trade Administration .2021. Sierra Leone - Country Commercial Guide: Energy Infrastructure. Accessed August 12, 2023.

Inadequate transport infrastructure means that transportation costs are too high for downstream processing to be economically viable.[139] Sierra Leone is among the bottom ten Logistic Performance economies, ranking 156 out of 160 in 2018.[140] The African Development Bank's Infrastructure Development Index (AIDI) ranked Sierra Leone 46 out of 54 countries in 2022.[141] Under the sub-transport composite index, the country was ranked 35 out of 54.[142] Of Sierra Leone's estimated 11,300 kilometers of roads, only 904 is said to be paved.[143] Insufficient transportation infrastructure affects accessibility to mine sites, cost, and efficiency of exploration, extracting and exporting of minerals.

Inability to access finance starves businesses. Most local businesses struggle to access finance through the formal sector due to high interest rates, collateral requirements, information asymmetry, and lack of credit history. Increasingly, many SMEs fund their operations either through self-finance or informal loans from family and friends.[144] These constraints limit their ability to invest in capital, technology, and innovation, which are essential for enhancing their productivity and competitiveness within mining companies' supply chains. This is a particularly severe obstacles in cases where companies are required to prefinance contracts.[145]

Complex and exclusionary procurement methods that favor large international suppliers inhibit the participation of Sierra Leonean businesses in mining supply chains. Procurement processes and practices such as "bunching" and "bundling" through which goods and services mining companies previously purchased separately are aggregated and purchased together from a single order or provider (e.g., transportation and building maintenance),[146] have contributed to excluding many local firms. Similar provisions are inherent in framework agreements, such as the one between Sierra Rutile and Mano Mining, through which mining companies enter into long term procurement agreements with one or several big firms.[147] While bunching, bundling and

139 See Kiendrebeogo, Y and Mansaray, K .2019.
140 Arvis, J, Ojala, L, Wiederer, C; Shepherd, B, Raj, A, Dairabayeva, K, Kiiski, T. 2018. Connecting to Compete 2018: Trade Logistics in the Global Economy. Washington, DC: World Bank.
141 Africa Infrastructure Knowledge Program. 2022. Africa Infrastructure Development Index (AIDI)..
142 Africa Infrastructure Knowledge Program. 2022.
143 Brima, A.S .2019. Infrastructure in Sierra Leone: fixing the road to nowhere. Accessed August 21, 2023.
144 The World Bank .2022.
145 JenMAA Data Management Consultants.2019a.
146 The World Bank .2021. Guidebook for Setting-up and Operating Framework Agreements. Washington DC. The World Bank
147 The World Bank .2021

framework agreements are intended to leverage the benefits of larger contracts and economies of scale, the practices nonetheless result in larger and fewer contracts that are usually beyond the capabilities of Sierra Leonean firms to compete.

Many local businesses have limited understanding of procurement opportunities and processes. Companies continue to exhibit significant lack of preparedness to engage in business relationships with mining companies. One study found that of the 272 participating businesses, only 5.9 percent had responded to mining companies' procurement advertisements, and only 12.5 percent had sent in unsolicited proposals to mining companies pitching their goods and services; a significant 64 percent of surveyed businesses reported never having participated in any procurement process, regardless of the sector of the procuring entity. The recently launched SME database, which links mining companies and SMEs, is expected to ease this challenge once it becomes fully operational.

Unfavorable trade practices (such as tariff policies in trading partners) constrain downstream processing and value addition in Sierra Leone's mining sector. Tariff escalation, which results in the imposition of higher import duties on finished or semi-processed products[148] than on raw mineral, have made it difficult for mining companies to export, while Sierra Leone's extremely small market is unable to absorb the output of processing. [149]For example, tariffs on the country's exports to China, which accounted for about 73 percent of Sierra Leone's mineral exports in 2021, were zero percent on all raw materials, including minerals and wood, but significantly high on most processed products.[150, 151]

Concerns over the poor quality of local goods and services has undermined the demand for mining companies to expand scope for local businesses' participation in their supply chains. Officials of mining companies and SMEs agree that poor performance and quality of goods and services make local firms less competitive.[152] Lack of technical capacity combined with unreliable supply of production inputs, including electricity, hamper the quality of domestically-sourced products. As such, local firms resort to cost-saving measures in the production of goods or delivery of services, thereby undermining their chances of being reengaged by mining companies. As a result, mining companies either procure goods and services from international firms or rely on self-servicing – through which they run their production or service lines, in areas such as auto-repairs, civil works and light fabrication.

The poor quality of goods and services is reflective of a serious dearth in skills required to improve quality. Employers frequently cite the lack of critical skills necessary for employment, due to the quality of the country's educational system, which for long prioritized academic achievements over practical skills.[153] Yet few offer any training for their employees.[154] For a long time, meaningful collaboration between the Government, mining companies, higher education institutions and development partners to develop a long-term strategy on mining related training needs and programs, was lacking.[155] The first degree level mining engineering program was established in 2012 at Fourah Bay College, University of Sierra Leone. However, mining companies were not involved in the design and delivery of the program; and of the first 70 students that graduated in 2016, only 25 percent were employed by mining companies, given their limited absorptive capacity. Similar efforts and constraints have been found in technical and vocational education and training (TVET). The TVET Coalition of Sierra Leone, which brings together stakeholders including mining companies, the Government, development partners and TVET institutes, was established in 2013 to improve the employability of TVET graduates in Sierra Leone. Yet, many graduates benefiting from the project have struggled to gain formal employment.[156]

An unfavorable business environment and inconsistent policies constrain local business development. A key example is tax exemptions on imported goods that usually benefit big firms and are not extended to local suppliers, putting them at a cost disadvantage. As such, it is more cost effective for mining companies, their

148 WTO (n.d.). 'Tariffs'. Accessed August 10, 2023.
149 Östensson, O and Löf, A .2017. Downstream activities: The possibilities and the realities. WIDER Working Paper 2017/113. Accessed August 10, 2023. World Integrated Trade Solution .2020. China Product Imports from Sierra Leone 2020.. Accessed August 10, 2023.
150 National Minerals Agency Annual Report, 2021.
151 World Integrated Trade Solution .2020. China Product Imports from Sierra Leone 2020.. Accessed August 10, 2023.
152 JenMAA Data Management Consultants .2019a.
153 International Labour Organization .2019. Enabling Environment for Sustainable Enterprises in Sierra Leone:
Main Findings; Darwich, M .2018. Skills Needs Assessment Initiative of the TVET Coalition of Sierra Leone. Bonn: Internationale Zusammenarbeit (GIZ) GmbH
154 International Labour Organization .2019.
155 Sampablo, M et al .2022.
156 The World Bank .2023. Sierra Leone Skills Development Project: Implementation Status and Results Report. Washington, DC. The World Bank.

subsidiaries or international contractors to import goods than to procure them from Sierra Leonean suppliers.[157] An inconsistent tax policy and regulatory framework has also made it challenging for SMEs to file, pay taxes and remain compliant with regulation.[158] In April 2023, parliament approved a new Minimum Alternate Tax, requiring companies to pay 3 per cent of their turnover as corporate income tax, even if they make a loss.[159] While the new tax is intended to support the Government's revenue generation drive,[160] it risks pushing SMEs out of business in an already constrained investment environment.

Sierra Leone would need to significantly improve its business environment for economically viable downstream processing of mineral products to takeoff. The poor investment climate, including institutional constraints, is frequently cited by investors interested in manufacturing as one of the "worst obstacles to firm operations" in Sierra Leone.[161] Before the ease of doing business survey was discontinued, Sierra Leone ranked 163rd out of 190 countries, considerably below most African countries.[162] Sierra Leone remains a risky investment destination where long term payoff potentials are limited, given that the discriminatory application of regulations to firms poses a threat to investor protection.[163] The array of investment disputes between government and private investors which have characterized the mining industry in Sierra Leone continue to hamper sector development.

Policy recommendations

Legal, policy and regulatory reforms

- **Harmonize laws, regulations and policies governing the mining sector and natural resource extraction.** This would also include promotion of a culture of dialogue and cooperation among various stakeholders involved in the mining sector. The central legal texts include the Mines and Minerals Development Act 2023, Customary Land Rights Act 2023, Mines and Minerals Development and Management Corporation Act 2023, National Policy for Development-Induced Resettlement, and the National Land Commission Act. Regulatory uncertainties and at times conflicting provisions need reconciliation in a manner that fosters a predictable and supportive legal and regulatory framework. Application of these principles would also ensure a level playing field for all investors and operators in accordance with subjective performance criteria and decision parameters.
- **Capacity building for sector ministries, departments and agencies.** Conduct a comprehensive assessment of the current capacity situation, needs, challenges, and opportunities of key sector ministries, departments and agencies, including the Ministry of Mines and Mineral Resources, National Minerals Agency and Environment Protection Agency, in terms of their human resources, technical skills, institutional structures, operational procedures, and strategic plans. Provide adequate and recurring resources to those ministries, departments and agencies, including funding, staffing and equipment, for execution of their respective mandates. It is widely acknowledged that, as of today, staffing and operational expenses are vastly inadequate for sector agencies to perform their duties, such as routine inspections, data analysis, administrative management and more. This strengthening of relevant ministries, departments and agencies would also elevate and separate the authority of line agencies vis-à-vis statutory boards and committees which play, at times, an outsize role in decision-making or usurp the technical authority which should be vested in the line agencies.
- **State participation in the mining sector.** Define clear and consistent governance principles for the planned Mines and Minerals Development Corporation that is inclusive of key stakeholders, including parliamentarians, civil society and mining communities. Operational guidelines, performance indicators, and reporting mandates must ensure that the entity remains accountable to the public through the Parliament of Sierra Leone. Ensure that state participation in the mining sector is aligned with national development goals and priorities, such as structural transformation, industrialization, diversification, value addition, job creation, local

157 Ba, D.G and Jacquet, J.B .2022. Local content policies in West Africa's mining sector: Assessment and roadmap to success. *The Extractive Industries and Society*
158 The World Bank .2022.
159 The Bettesfirm .2023. Finance Act 2023 Summary. Freetown. The Bettesfirm.
160 International Monetary Fund. African Dept. 2023. IMF Country Report No. 23/214. Volume 2023: Issue 214
161 Kiendrebeogo, Y and Mansaray, K .2019, p.22; English, P, Kamara, A.B, Mlceod, H and Showers, W. 2019.
162 The World Bank .2020. Economy Profile Sierra Leone: Doing Business 2020. Washington DC: The World Bank.
163 English, P, Kamara, A.B, Mlceod, H and Showers, W. 2019.

content development, environmental protection, and social responsibility.

» **Formalize artisanal and small-scale mining and diversifying livelihoods.** Streamline and strengthen the licensing and registration process for ASM operators, by removing the bifurcated licensing regime (involving chiefdom authority and NMA), simplifying procedures, enhancing accessibility, and ensuring that ASM operators obtain and renew licenses and permits regularly.

- Promote awareness-raising and education among ASM operators on sustainable mining practices and health and safety, as well as the benefits and obligations of formalization. ASM operators should be provided with information and guidance on obtaining and maintaining licenses and permits, and on improving their mining practices and techniques. This may also include support to create associations or cooperatives. Awareness-raising and improvements in the incentive structure must be complemented with systematic compliance and enforcement mechanisms to ensure compliance with licensing terms.
- Develop and implement a comprehensive post-mining rehabilitation and restoration plan that aims to restore the environmental and social conditions of mining affected areas, such as reforestation, land reclamation, water quality improvement, biodiversity conservation, and livelihood support. Such efforts must go hand-in-hand with promotion of alternative and sustainable livelihoods for mining communities, such as agriculture, agroforestry, fisheries, handicrafts, tourism, and education, as well as supporting them with adequate skills training, financial assistance, market access, and social protection.

Actions to strengthen backward and forward linkages

» **Enhance mining companies' knowledge of Sierra Leonean firms.** Update the 2019 market assessment and mapping of the local suppliers of goods and services that are relevant to the mining sector, such as mining consumables, construction services, transportation services, catering services, and health and safety services, with a view to identifying the availability, quality, capacity, and competitiveness of local suppliers, as well as gaps and challenges they face.

- Sustain and expand the functionality of the database/directory of small and medium enterprise supplying goods and services relevant for the mining sector and make it accessible and updated for the mining companies. The functionality of the database should be expanded to include information such as the name, contact details, location, products, prices, certifications, and references of local suppliers.

» **Enhance competitiveness of Sierra Leonean firms.** Provide training and mentoring to SMEs on meeting the standards and expectations of mining companies, covering topics such as quality assurance, delivery time, contract management, invoicing, customer service, and marketing. This should be linked with the promotion of awareness and education of mining companies and local suppliers on the benefits and obligations of the local content policy and law, providing them with information and guidance on how to access and use available resources and support services for local content development. Mining companies and suppliers should also be encouraged to share their experiences and challenges and adopt best practices and standards for responsible mining and supply chain management.

- Strengthen the regulatory capacity of the Local Content Agency to effectively oversee and monitor the implementation and compliance of the local content policy and law by mining companies and local suppliers. The Agency should continue to facilitate dialogue and cooperation among the various stakeholders involved in the mining sector, such as

the government, mining companies, local suppliers, local communities, civil society organizations, and development partners.

- Review the tax incentives granted to mining companies to ensure that schemes for imports do not penalize domestic provisioning of goods and services. This is in light of the exemptions granted to investors for duty-free imports of goods that may put local suppliers at a disadvantage.

» **Address the skills gap and foster job creation.** Develop and implement a demand-driven skills development strategy that aims to enhance the quality, relevance, and accessibility of technical and vocational education and training (TVET) for the mining sector. The strategy should involve close collaboration and coordination among the government, mining companies, TVET providers, local communities, civil society organizations, and development partners.

- Strengthen the capacity and capability of TVET providers to deliver quality and relevant skills training for the mining sector, by providing them with adequate resources, equipment, materials, curriculum, trainers, accreditation, and quality assurance. Introduce certification and international accreditation of diplomas and graduate degrees from national technical schools and (in the longer term) academic institutions. This could be achieved through regional partnerships and twinning arrangements with peer countries possessing a stronger legacy of mining.

» **Addressing infrastructure deficits.** Using a mix of financing models, including private and public resources, invest in the rehabilitation and expansion of existing infrastructure, such as roads, railways, ports, power plants, transmission lines, water supply systems, to facilitate backward and forward linkages between the mining sector and the wider economy.

Agriculture

The agriculture sector in Sierra Leone is the cornerstone of the economy, accounting for a large share of GDP and employment. The sector is critical for socio-economic development across various dimensions, from food security and poverty alleviation to sustainable economic growth. The country has tremendous diversity and growing potential for agriculture in its upland and lowland ecologies but has been unable to fully exploit this potential. Future opportunities center on two strategic thrusts that have major implications for the competitiveness of specific value chains and for growth and value addition in the agricultural sector as a whole: (i) competitive local production; and (ii) competitive export promotion and diversification. This section studies recent trends in the agricultural sector, some key characteristics that highlight the shortcomings of the sector and then discusses opportunities to improve productivity and diversify by focusing on three crucial value chains, followed by policy recommendations.

Agriculture sector overview

Agriculture is the dominant economic sector but faces significant challenges. Agriculture accounts for two fifths of the labor force and over 60 percent of GDP, and is supported by plenty of arable land, abundant rainfall, a temperate climate, and great irrigation potential from several rivers. Yet, 75 percent of the fertile arable land (5.4 million hectares) is still uncultivated, the sector is dominated by smallholder subsistence farmers using traditional, outdated tools, and 80 percent of the foodstuffs consumed in the country is imported. Agricultural production is dependent on rain-fed agriculture, characterized by limited value addition leading to volatility of farmer incomes and food insecurity. Limited

access to formal markets prevents farmers from obtaining fair prices for their produce. Inadequate roads, storage facilities, and marketplaces leads to significant post-harvest losses. The sector lacks modern processing facilities, and access to modern technologies is limited.

The country has tremendous diversity and growing potential for agriculture in its upland and lowland ecologies but has been unable to fully exploit this potential. Since the end of the civil war in 2002, agricultural production in a few key crops accelerated dramatically but in an unbalanced manner, with rice and cassava far outpacing other crops. In 2019, these two crops made up 81 percent of total agricultural production. Just 7 percent of total production was in fresh vegetables, 3 percent in palm oil, and 2 percent in citrus fruits. Recognizing the unachieved potential and unbalanced development of the agricultural sector, the government's vision of agricultural development in Sierra Leone as set out in the National Agriculture Transformation (NAT) program to 2023 is to continue to prioritize rice self-sufficiency while simultaneously promoting crop diversification, livestock development, and sustainable forestry and biodiversity management.

Climate change is profoundly altering agroecological and climatic conditions in Sierra Leone. The impacts of climate change on Sierra Leone's agroecological and climatic zones and major agricultural commodity systems are expected to persist and intensify. Sierra Leone will find it more challenging to depend on agriculture and its natural resources for future growth and poverty reduction. By developing resilience in agriculture and natural resources productivity, which integrates nature-based solutions and social and governance dimensions, the country can enhance its adaptation capacity to absorb and rebound from climate disruptions. Adaptation to climate change requires tailored strategies across crop. Evidence suggests that agroecological, climate-conscious, and well-managed food systems are inherently nutrition-sensitive, gender-responsive, climate-smart, inclusive, and yielding low-cost, safe, and nutritious food with minimal harm to natural ecosystems.

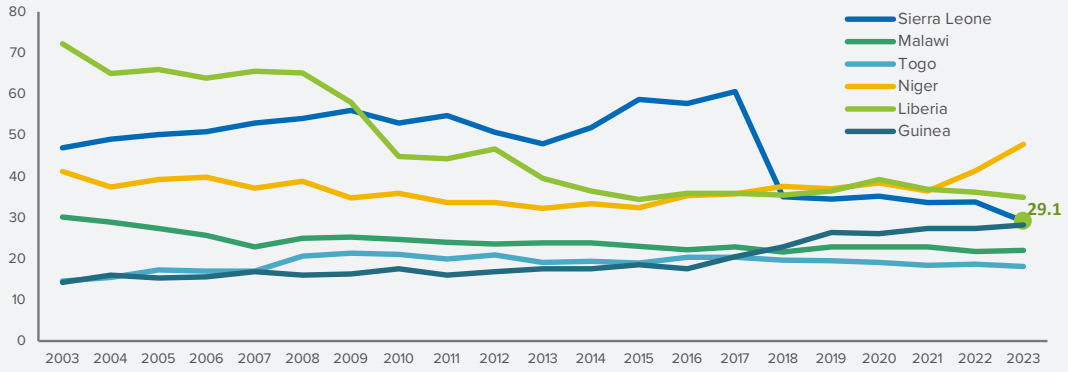
The rest of this section presents recent trends in the agricultural sector, some key characteristics that highlight the shortcomings of the sector and then discusses opportunities to improve productivity and diversify by focusing on three crucial value chains–rice, cocoa, and horticulture. Finally, some policy recommendations are presented to help achieve the full potential of the sector.[164]

Recent trends in agriculture

Agriculture production has shown resilience and steady growth over the last two decades. Despite several major shocks including the 2014 Ebola epidemic, and the 2019 COVID crisis, and now a global food crisis heightened by the war in Ukraine, the agricultural sector has remained relatively resilient, with an average 4.3 percent growth from 2015 to 2019, a 2.6 percent increase in 2020, and a rebound to 2.9 percent in 2022. But this level of growth has been insufficient to boost output and incomes at rates required to significantly reduce poverty and food insecurity in rural areas. The continued, high level of agriculture's share of GDP presents a sharp contrast with the declining trends observed in other African nations such as Botswana, Côte d'Ivoire, Liberia, Rwanda, and Malawi. While agriculture's GDP share remained roughly stable in Guinea, Niger and Togo, their agricultural GDP contributions were initially lower than that of Sierra Leone (Figure 116).

164 This analysis draws heavily from recent reports: World Bank, 2022. Sierra Leone: Priority Investments and Policy Reforms for Agricultural Transformation" and "World Bank. 2023. Sierra Leone: Pathways to a Transformation of the Agri-Food Sector"

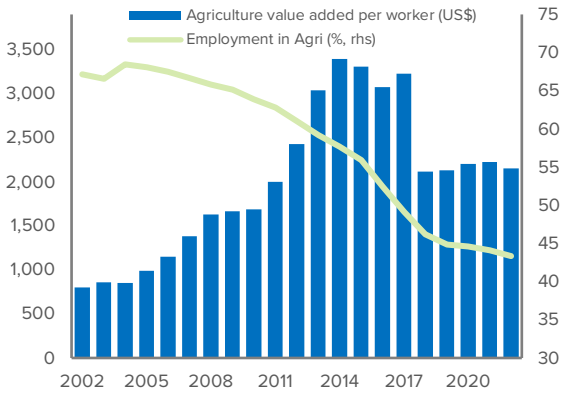
FIGURE 116:
AGRICULTURE SECTOR OUTPUT SIERRA LEONE AND PEERS (% OF GDP), 2003-23



Source: WDI.

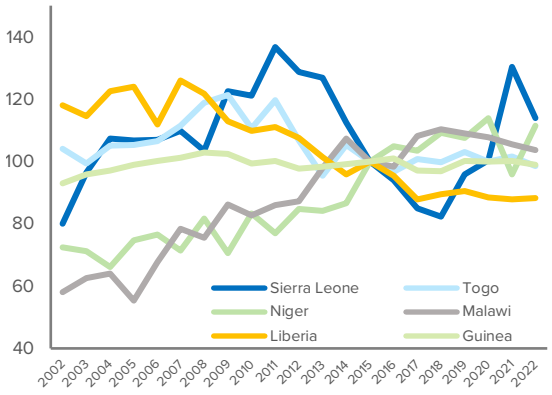
The high share of agriculture in GDP has been accompanied by a decline in the sector's share in employment. Agriculture's share of total employment fell from a little over 65 percent in 2002 to 41 percent in 2021, as labor productivity increased by 12.5 percent over the period (Figure 117). This rapid growth in labor productivity was also reflected in total factor productivity, Sierra Leone had a higher level of total factor productivity in agriculture than any of the structural (Togo, Guinea, Liberia, Malawi, Niger) peers adopted for this analysis (Figure 118). All in all, by 2021, Sierra Leone had one of the lower shares of employment in agriculture but the highest share of agriculture in GDP of both aspirational and structural peers.

FIGURE 117:
AGRICULTURAL SECTOR EMPLOYMENT AND VALUE-ADDED (% OF TOTAL AND US$), 2002-22



Source: FAOSTAT, WDI

FIGURE 118:
TOTAL FACTOR PRODUCTIVITY IN AGRICULTURE, SIERRA LEONE AND PEERS (INDEX), 2002-22



Source: United States Department of Agriculture.

Challenges and opportunities in the agricultural sector

Opportunities in agriculture

Sierra Leone has significant untapped agricultural resources. Less than 15 percent of the country's 5.4 million hectares of arable land is cultivated (Stats SL 2019). There is agroclimatic variation from lowlands to highlands (1,945 meters) that allows for cultivation of a wide variety of crops, including rice, cassava, maize, millet, cashew, rubber, ginger, vegetables, fruits, sugarcane, cocoa, coffee, and palm oil.

Future opportunities center on two strategic thrusts that have major implications for the competitiveness of specific value chains and for growth and value addition in the agricultural sector as a whole: (i) competitive local production; and (ii) competitive export promotion and diversification. Seizing both opportunities entails significantly enhanced productivity and performance in multiple agri-food value chains. Both competitive local production for very gradual import substitution, and competitive export promotion and diversification rest on competitiveness at sector, firm, and farm levels. The policy and investment approach must therefore be both targeted and comprehensive. A country's value chains must be able to deliver more efficiently to consumers products with higher quality or more unique form than the value chains of competing countries. Efforts to increase competitiveness at farm, firm, and industry levels are therefore interdependent. That entails rapid productivity growth. Given Sierra Leone's small size and overall exposure to international markets, productivity growth determines and reflects enhanced competitiveness and greater diversification of the production base.

Policy reforms and investments should seek to catalyze and sustain productivity growth, competitiveness and diversification focus on value chains with high potential for spurring broad-based growth and sustainable agricultural transformation. Available data and recent analysis point to the rice, cocoa, and horticulture value chains as highly appropriate in this regard. Individually, the three value chains support millions of livelihoods in Sierra Leone's rural and urban areas. Together, they capture major features of the country's agri-food system and reveal the needs and requirements for policy reform and investment for enhanced performance of the agricultural sector. The strategic opportunity in the rice value chain is competitive local production for gradual import substitution. In the cocoa value chain, competitive export promotion and diversification is the aim. In the horticulture value chain, both competitive local production and competitive export promotion and diversification have to be perused.

Rice

Rice is the most important production and consumption food in Sierra Leone. Half of all households, three-quarters of rural households, and about two-thirds of poor households grow rice (Graham, Tchale, and Ndiane, 2020). Not only is rice grown by farmers throughout the country, consumption per capita (fifth highest in the world at 185kg/year) applies equally to poor and wealthy households. Given the low yields and high per capita consumption, domestic demand exceeds supply by over 400,000 MT/year, requiring imports valued at US$200 million/year and growing at 5 percent per year.

Yields vary across ecosystems, are lowest in the upland areas that dominate production, and are consistently well below averages in neighboring countries and global peers. Sierra Leone's rice yield is higher than neighboring Nigeria's and Guinea's but lies well below that in other African countries, both in West Africa (Côte d'Ivoire, Ghana) and East Africa (Madagascar, Tanzania). It is less than half of India's and under one-third of Malaysia's and China's. First-order inefficiencies in Sierra Leone's rice value chain appear to be at farm level. Less than 20 percent of cultivated area is in Sierra Leone's vast lowland areas where agroecological conditions are highly suited to rice production, as evidenced by higher yields compared to upland areas. Under good management practices, yields in inland valley swamps (IVSs) can rise to 3 MT/ha (Kagbo, 2022). IVSs are located throughout the country and offer the possibility of double and triple cropping. Tapping the potential of IVSs is therefore vital to overall productivity growth.

Effectively, there are two rice value chains – the low-quality locally supplied value chain and the higher-quality (but not necessarily premium-quality) internationally supplied value chain that destroys incentives for domestic substitutes. The straight-milled or parboiled rice that moves through the high-cost traditional value chain usually contains impurities such as sand, colored grains ("black-black"), and bran, with over 35 percent broken

grains due to mixing of varieties (Spencer and Fornah, 2014). The end product is usually so costly yet also of such poor quality that it cannot compete with imported rice in price or in terms of consumer preferences for whiteness, grain uniformity, slenderness, softness, and aroma.

Improving productivity and competitiveness of the rice sector requires coordinated efforts at all levels of the commodity chain. Beyond low yields, inadequate post-harvest management practices and limited market infrastructure and linkages can lead to high losses. Tax exemptions often arbitrarily granted to rice importers have undermined the stability of domestic markets (Tondel et al., 2020). Weak enforcement of quality and food safety norms has allowed for the importation of substandard rice, which competes unfairly with local production.

Cocoa

Cocoa is one of Sierra Leone's leading exports, outside the mining sector. Either as raw product or as processed output, cocoa is the main source of income for over 13,000 smallholder farming households in the main producing districts of Kailahun, Kenema and Kono (World Bank, 2020). Sierra Leone's cocoa yield of 430 kg/ha compares quite favorably with those of major exporters. The yield gap to be bridged in Sierra Leone is therefore not especially large. Improved management of existing tree stands could generate significant returns in the near term.

Productivity is negatively impacted by the prevalence of crop diseases, advanced age of most cocoa trees, transaction costs, and limited access to inputs. Many plantations were abandoned during the civil war, and now require renewal, replacement, and expansion. There have been several recent initiatives to reinvigorate cocoa production, focusing on quality improvement, management of existing trees (e.g., pruning and disease control), replanting, and linking farmers to export markets. But most farmers still lack the resources or access to finance to replant or establish new cocoa plantations. Access to inputs and training is limited. Farmers and traders incur high transaction costs in the transportation of cocoa from farms to aggregation centers and to final export processing warehouses in Freetown. This adds significantly to overall costs, as the cocoa belt is in the eastern region of Sierra Leone where road infrastructure is poor.

Horticulture

Sierra Leone's agro-ecological endowments permit cultivation of a wide array of horticultural products – well beyond the tomatoes, peppers, okra, sweet potatoes, onions, melons, mango, pineapple, and citrus that currently feature most prominently. Available data suggest that up to half of all smallholders produce horticulture crops on plot sizes ranging from 0.1 ha (0.25 acres) to just over 1 ha. Reliable sub-national information about the scale and coverage of horticulture production is scarce. But available country-level data from FAO indicate that between 2011 and 2020, the area planted with vegetables grew from 50,000 ha to 125,000 ha, and harvested tonnage increased from 325,000 MT to 475,000 MT.

Productivity is still firmly within the group of countries with low-yielding horticulture production systems. Yields of both vegetables (4 MT/ha) and fruits (5.3 MT/ha) are not significantly different from those in Nigeria, Liberia, Guinea and Uganda. But Sierra Leone's performance is very poor relative to Ghana, Kenya, and countries in Asia and Latin America

Sierra Leone has yet to experience a business-led diversified demand-driven investment boom in the horticulture value chain with the participation of small- and medium-scale farmers. The potential of the domestic market thus remains largely unexploited. As a result, hotels, restaurants, and supermarkets still routinely source poor-quality in-season products from wet markets. Horticultural marketing is risky, involving retailers and traders who operate through weekly markets (lumas), daily markets, petty trade, and supermarkets. Retailers generally sell an array of products individually or in small sets, not by weight. Traders serve distant markets generally using non-refrigerated transport. Women and youth comprise most participants in the value chain (mostly due to backyard gardening and petty trading), and the average education level in the value chain is higher than in the rice and cocoa value chains.

Profitability of agricultural products

The three focus value chains are low in productivity, yet privately profitable at all levels. But are they competitive? How well are Sierra Leone's farmers and traders competing against those in other countries? How dependent are they on protectionist policies? How

much value is being destroyed due to inefficiencies in the value chain? Price-incentive analysis sheds light on these issues. Recognizing the challenges raised by data limitations, price incentives in the three priority value chains are analyzed using the nominal rate of protection (NRP) and the market development gap (MDG). The NRP (expressed as a percentage) is the difference between the domestic price and the international price at the farm gate or the wholesale or retail levels. A positive/negative NRP indicates that distortions from the policy environment and value chain market dynamics push prices above/below the reference price and provide price incentives/disincentives to produce (at farm gate) or commercialize (at wholesale or retail level) the analyzed product. A negative MDG indicates excessive market access costs facing farmers due to factors such as poor infrastructure, high processing costs due to obsolete technology, government taxes and fees, high profit margins captured by various marketing agents, illegal bribes, and other informal costs. All of these can impede the transmission of world prices to domestic markets, thereby penalizing farmers.

An analysis of NRPs and MDGs was carried out for rice, cocoa, and onions (proxy for horticulture). On average, between 2012 and 2021, the NRP for rice was 37 percent. In the same period, the NRP for onions averaged 55 percent, and the NRP for cocoa averaged -2 percent. The NRP varied from year to year, but these averages reflect the overall situation over this 10-year period for each of the three commodities. Rice and onions appear to have benefited from price incentives, whereas farmgate prices for cocoa were broadly in line with international levels. The positive NRP for rice reflects the fact that imported rice incurs several fees and taxes at the border, including inspection, transit and other fees, and a withholding income tax (GOSL 2018, USDOC, 2022). The almost neutral NRP for cocoa reflects the export-oriented policy regime that seeks to align Sierra Leone's export prices with those in international markets. The MDG for rice averaged -2 percent between 2012 and 2021. The MDG for onions averaged -3.6 percent, and the MDG for cocoa averaged -7 percent in the same period. Excess marketing costs linked to transport and commodity handling margins were therefore important for all commodities. They were especially significant for cocoa farmers and traders facing high transportation costs between farms and aggregation centers and export processing warehouses.

The gross-margin and profitability analysis suggests that, despite multiple challenges in the three value chains, all three generate positive returns for individual actors and on aggregate. The price-incentive analysis suggests that for rice and some horticultural products, some of this profitability can be traced to protectionist policies that push up NRP. These findings strengthen the imperative to boost productivity toward competitive local production in these value chains. For cocoa, the almost neutral NRP suggests high immediate returns on investments to boost farm productivity toward competitive export promotion. For all three value chains, the negative MDG suggests that investments to reduce farm-to-market transaction costs would promote both competitive local production and competitive export promotion and diversification. At issue is what needs to be done to seize these opportunities to improve competitiveness and efficiency in these three value chains, and, by extension, more broadly in Sierra Leone's agricultural sector. Following the logic of value chain analysis and the market-based perspective of the MAFS Policy Shift, three strategic action areas applicable to all three value chains are identified: (i) inputs, mechanization, and advisory services; (ii) harvest and post-harvest management; and (iii) output distribution and marketing. The unified set of recommendations are presented at the end of this chapter.

Processing of agricultural products

The agro-processing industry in Sierra Leone grew significantly in the first half of the 2010s, with rising foreign and domestic investments in cultivation and processing of food and industrial crops such as rice, oil palm, sugar cane, horticulture, and livestock (mainly poultry). Agro-processing investment opportunities are concentrated in oil palm (mainly for exports), and processed rice and poultry for domestic and regional markets. Some processors are involved in niche commodities, such as fruit juices, lemongrass, and rubber for exports, mainly to the European Union (EU) and the United States. The World Bank Sierra Leone Agro-processing Competitiveness Project (SLACP) has also supported progress in agro-processing by increasing competition and creating an enabling environment. Government agencies that support the agribusiness sector have been strengthened, including SLIEPA (whose functions have been assumed by the National Investment Board), the Sierra Leone Standards Bureau, the SME

Development Agency (SMEDA), the Ministry of Trade and Industry (MTI) and the Ministry of Agriculture and Forestry (MAF).

Nevertheless, domestic processing of agricultural products for export remains limited. Sierra Leone's top agribusiness export product is cocoa beans (whole or broken) which accounted for over 5 percent of the country's export of goods in 2019-21 but only involves primary processing. Smallholders mainly participate in the cultivation stage, which comprises tasks such as input supply, cultivation, harvesting and transportation. Commercial farms and farmer cooperatives, for their part, can be involved in both cultivation and primary processing, while multinationals are more involved in the non-cultivation stages (Kaiser Associates Economic Development Partners 2014).

Analysis presented in chapter 4 details the potential for diversifying agricultural exports, also further up the value chain in agro-processing. Sierra Leone's agricultural exports are dominated by four products. These are cocoa beans, palm oil, frozen fish, and coffee, which accounted together for 93 percent of the country's agricultural exports in 2021 (Figure 37). The limited export diversification of Sierra Leone's agricultural exports contrasts with the country's potential for producing a wide variety of crops. Each of the top four agricultural products exported by Sierra Leone shows strengths in various indicators that inform the export opportunity analysis, with palm oil emerging as relatively better positioned for export success. In addition, there are export opportunities in products with limited shares in Sierra Leone's exports basket, notably rice, fish fillets, cocoa powder, cocoa paste, and some fruits and vegetables.

Cocoa beans offer a wide range of possible areas for value addition. The different stages of the agricultural value chain include cultivation, primary processing, secondary processing for food and non-food manufacturing, distribution and sales (Figure 42). Generally, cocoa is mostly used to produce chocolate, but also offer potential applications in animal feed derived from pod husks, as well as food and beverage products and syrups (food manufacturing). In addition, cocoa beans but can also be used in the production of chemicals/ pharmaceuticals such as soap and cosmetics (non-food manufacturing). Besides crude palm oil, Sierra Leone also exports refined palm-oil which involves some processing and value addition. Apparently, the country is seeking to increase its value addition in its key export products cocoa and palm oil.

Excellent growing conditions for a wide variety of products, port access, and proximity to Europe, the Middle East, and other markets suggest important natural advantages for Sierra Leone as an agricultural exporter. In spite of low productivity, weak institutions, and policy-related distortions, there is still significant untapped potential to expand exports of such established products as cocoa, palm oil, and coffee, and further diversify exports by developing other value chains. In particular, Sierra Leone could follow the lead of other counties in the region (e.g., Côte d'Ivoire and Ghana) and take greater advantage of beneficial trade agreements such as the African Growth and Opportunity Act (AGOA), the EU's Everything But Arms (EBA), and the AfCFTA.[165]

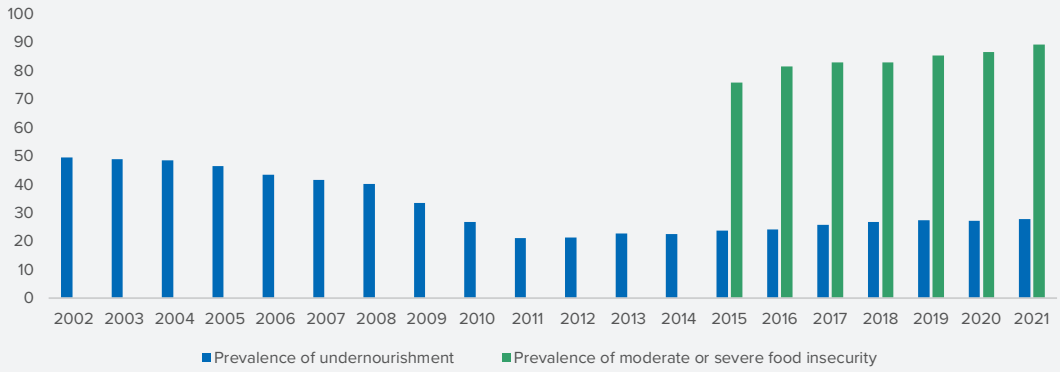
Challenges

Food adequacy and security

Sierra Leone faces difficult challenges in ensuring adequate food for its population. The share of the population that is undernourished (lacking sufficient food intake to meet daily energy needs) fell from around half in the early 2000s to a fifth by 2011 but has since increased to nearly 30 percent. By this metric, Sierra Leone's prevalence of undernourishment is somewhat above the average of peer countries (Botswana, Côte d'Ivoire, Guinea, Liberia, Malawi, Niger, Rwanda, and Togo). A different approach to measuring the adequacy of food consumption, the share of the population subject to moderate or severe food insecurity (those with limited access to food due to lack of money or other resources), rose from around 70 percent in 2015 to almost 90 percent in 2020. This level of food insecurity is the highest among peer countries. These data highlight that a vast majority of Sierra Leone's inhabitants face hurdles in consistently accessing sufficient amount, or quality, of food, and that lack of food is a somewhat more serious problem them among peer countries.

165 World Bank 2022 " Pathways to a transformation of the Agri-Food Sector"

FIGURE 119:
FOOD SECURITY, BY INDICATOR (%), 2002-21



Source: FAOSTAT

The substantially higher level of food insecurity compared to undernourishment points to broader issues beyond food availability. This includes economic instability, low household income, and limited market access, which exacerbate food insecurity. The disconnect between rapid growth in agricultural productivity and continued high levels of food insecurity suggests that improvements in agriculture are not adequately addressing food access issues.

Dependence on imports

Sierra Leone's dependence on imports for some critical foodstuffs has increased over time. A high dependence on imports for important foods that are widely consumed can signal a high risk of interruptions in food access in the case of external shocks. The cereal import ratio reached around 40 percent in 2016-18, close to the average of peers. Sierra Leone's rice production is stable at around 1,000 tonnes, but rice imports fluctuate, showing increased import dependency over time (Figure 120). Conversely, cassava production is robust, consistently over 3,000 tonnes until 2019, with very low imports, indicating strong self-sufficiency for this essential crop. On the other hand, Sierra Leone's palm oil production has consistently remained at about 70 tonnes, or well below national consumption estimated at 85 tonnes. Imports of palm oil were high in the second half of the last decade, but then dropped precipitously, to less than 5 percent of consumption in 2020. Sierra Leone's import dependency in these products remains lower than most of its peers from sub-Saharan Africa, particularly for cassava.

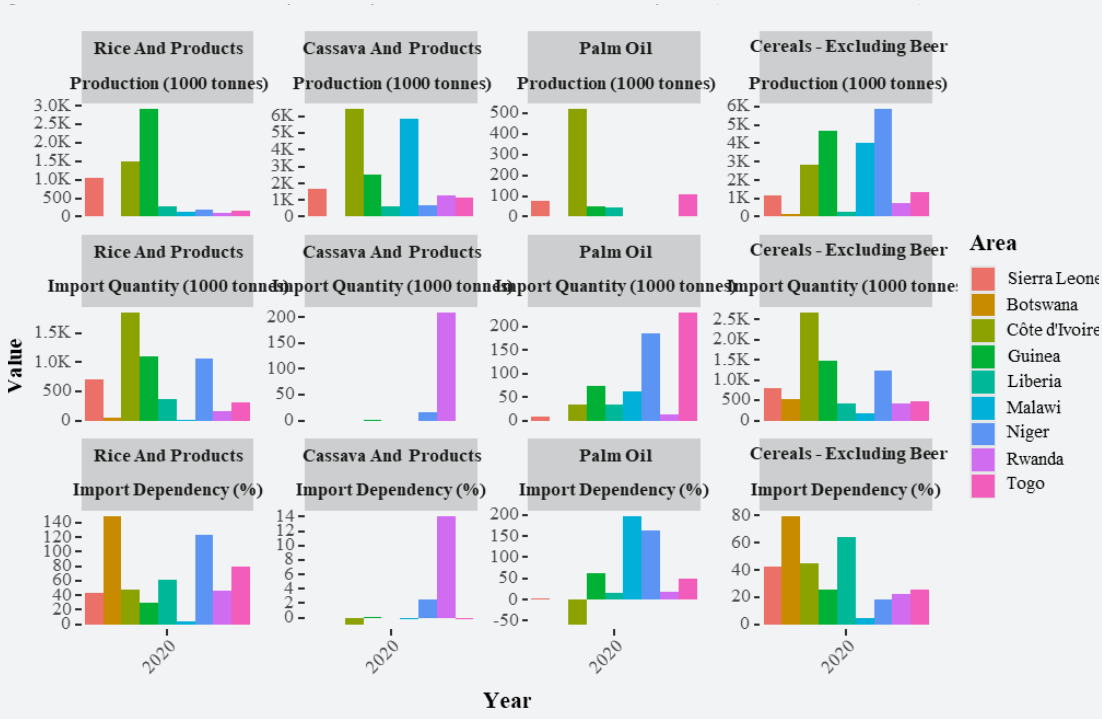
Limited access to markets and technology

Weak market linkages and insufficient access to technology are significant problems. Limited transportation infrastructure, a lack of market information, and inadequate agro-dealer networks impair market access, particularly to formal markets. This prevents farmers from achieving fair prices for their produce, discouraging investment and reducing the competitiveness of the agricultural sector. The Sierra Leone Agricultural Research Institute (SLARI) faces underfunding and capacity constraints, which hamper its ability to produce and maintain improved seed varieties. This results in a lack of access to high-quality seeds for farmers, directly affecting their ability to achieve optimal crop yields.

Dominance of smallholder producers

The average landholding in 2018 was 1.6 hectares, and 73 percent of agricultural households have landholdings of less than 2 hectares. Only 5 percent of landholdings are over 5 hectares, indicating the limited commercial scale of agriculture in the country (World Bank Poverty Assessment 2021). The small farm sizes are reflected in the poverty rate among farm households, which in 2018 had the highest incidence of poverty of any occupation at 75 percent. As is the case in many countries, smallholder farmers in Sierra Leone face a number of challenges, notably access to improved inputs including seeds, fertilizer, and pesticides. For seasonal crops, 41 percent of farmers purchase rather

FIGURE 120:
RICE, CASSAVA, AND PALM OIL PRODUCTION, SIERRA LEONE AND PEERS (METRIC TONNES,' 000S)



Source: FAOSTAT

than keep seeds, 8 percent apply inorganic fertilizer, and only 2 percent apply pesticide. Only 30 percent of rural households have land titles, which may limit access to credit.[166]

The chief barriers to diversification reside in challenges facing the private sector, most notably those facing Sierra Leone's millions of smallholder farmers. Successful agricultural transformation rests on overcoming these constraints and barriers and thereby improving prospects for the appearance of smallholder-oriented markets and agribusinesses across the country. Sierra Leone's agri-food sector features large numbers of dispersed smallholders lacking on-farm storage capacity, trading small quantities of bulky and relatively low-value products mainly to small-scale traders facing high risks in spatially thin markets. To boost productivity, farmers need sustained access to a package of inputs (improved seeds, fertilizer, labor), extension services, fixed and working capital, and market outlets. Potential service suppliers face uncertain demand for their services unless farmers are assured of access to other complementary services.

166 Stats SL 2019.

Government policies

The government's efforts to meet these challenges relies on an increased role for the private sector. The Enhancing Private Sector Participation in Agriculture Scheme (also known as "MAF Policy Shift") supports agricultural production and exports through a cautious balance of rationalized public spending and greater role for private sector participation.[167] Prior to the MAF Policy shift, Sierra Leone had pursued a two-pathway approach to agricultural development, with a focus on: (i) export-oriented cash crops (cocoa, coffee, ginger, and palm oil) to generate foreign exchange, and (ii) increased food production, aiming to enhance food security through rice-self-sufficiency. Given Sierra Leone's small size, its access to the sea, and its favorable location relative to major foreign markets, the first objective has been easier to achieve than has the second. Market exposure can be rewarding to export cropping but challenging for local food production that must compete with imports. The final price of rice in the domestic market is therefore a potent policy and political issue, subject to the so-called "food

167 The World Bank (2023) Sierra Leone Economic Update: Enhancing Value Chains to Boost Food Security: Washington.

price dilemma." Producers – most of whom are poor – want higher food prices; consumers – also largely poor and including most rice producers – want lower food prices.[168] The agrifood sector did not achieve the desired increases in productivity and incomes.

The recently-developed "MAF Policy Shift" to increase private participation in the sector includes improvements in market accessibility and the strengthening of resilient food systems. It is hoped that providing increased incentives for private initiative will boost the adoption of high-yielding seed varieties, improve the timeliness of input supply, and encourage more efficient marketing. At the same time, direct public spending on agriculture, especially subsidies, would be reduced. To the extent possible, the government's role should be limited to policy formulation, regulation, enforcement, and establishing appropriate incentives for private sector engagement in the agricultural sector, with any necessary interventions undertaken through public private partnerships.

Policy recommendations

» **Improve the efficiency and quality of rice production.** Modernize a seed system featuring public-private partnerships in the short-term, with public sector investment emphasizing institutional strengthening. Increasing funding and the capacity of the Sierra Leone Agricultural Research Institute (SLARI) would support the production and maintenance of improved seed varieties, enabling farmers to optimize yields.[169]

- Strengthen irrigation and water resource management in targeted regions with investments by both the public and private sectors.
- Support privatization of mechanization, with the public sector providing incentives and regulations.
- Increase the availability and capacity of extension agents to improve knowledge, skills, and agricultural practices (for example, planting techniques) among the small holder farmers. [170]
- In the medium term, support expanded modern contract farming arrangements, with the public sector providing incentives and investments by the private sector.
- In the medium term, support institutional food procurement from local producers with investments and institutional strengthening by the public sector.
- In the long-term, encourage importers to participate in the domestic rice value chain, where incentives and investments are made by the public and private sectors, respectively.

» **Enhance cocoa production.**

- Introduce climate-resilient technologies in the short-term with the public sector providing investment and knowledge.
- Rehabilitate over-age and disease-infested plantations in the short-term with investment by the public sector.
- Support cocoa research and seedling commercialization in the medium-term with the public sector having responsibility for investments, institutional, strengthening and knowledge formation.
- Support private investment in innovative processing technologies in the long-term with the private sector proving the investment.
- Strengthen institutions for cocoa policy implementation in the medium-term.
- Strengthen rural infrastructure in the medium term with investment by the public sector and increase access to credit for cocoa farmers.
- Develop a strategy and support its implementation to facilitate/expand access to domestic and AfCFTA market opportunities in the short-term, with the public sector providing knowledge.

168 Kagbo, 2022.

169 Mabaya, E., Waithaka, M., Turay, M.Y., Ngaujah, A.S., Tihanyi, K., Mugoya, M., Kanyenji, G. 2021. Sierra Leone 2021 Country Study - The African Seed Access Index (version October 2021)

170 Conteh, A. M., Yan, X., and Mvodo, M. E. S. (2013). Evaluating the effect of farmers' training on rice production in Sierra Leone: a case study of rice cultivation in lowland ecology. International Journal of Humanities and Social Sciences, 7(7), 1926-1933

» **Expand horticulture.**

- Develop a long-term national horticulture strategy for competitive export promotion and diversification.
- Support irrigation and related modern production infrastructure in the medium-term, with investment responsibility by both the public and private sectors.
- Promote climate-smart production practices aiming to meet minimum global quality standards in the medium-term, with the public sector having responsibility for investment and knowledge.
- Support high-value horticulture domestic and regional market development, leveraging demand from the hospitality and tourism industries in the medium-term, with public sector having responsibility for incentives and regulation and investments by the private sector.
- Facilitate learning from more advanced countries about horticulture export promotion pathways.
- Launch a local horticulture knowledge management platform, including market intelligence services in the long-term, with investment by the private sector.

» **A comprehensive reorientation of all participants in the agricultural and food production sector toward agroecological and systemic approaches helps to adapt to the challenges of the changing climate.** Building resilient and sustainable food systems in Sierra Leone should focus on the following key actions:

- Strengthen the policy, regulatory, and institutional framework; Invest in weather forecasting, early warning systems and insurance; and Introduce climate resilient and climate smart technologies and management practices

ANNEXES

Annex 1: Chapter 1

Simulating long-term growth paths using a Solow growth model: technical details

Long-term growth projections have been simulated using a human-capital-adjusted Solow growth model, "The Long-Term Growth Model: Fundamentals, Extensions, and Applications, World Bank 2022." The Solow model explains long-run economic growth through capital accumulation, labor growth, and technological progress and has been augmented to include human capital.

The model calibrates the long-term growth path for Sierra Leone until 2050 utilizing the Natural Extension of Long-Term Growth Model (LTGM-NR) and the Human Capital (HC) Extension. The LTGM-NR is based on the Solow-Swan growth model, decomposing the economy into resource (iron ore) and non-resource sectors and keeping track of effect of discoveries/depletion of reserves and commodity price shocks on investment and long-term growth, covering only the long-run supply side of the economy (not short-run demand).

The basic mechanics of the model for the non-resource sector using the aggregate Solow-Swan style model with a mining sector:

$$GDP_t = \underbrace{GDP_t^0}_{\text{non-resource GDP}} + \underbrace{P_{2015}^{Iron\ Ore} \quad Q_{2015}^{Iron\ Ore}}_{\text{iron-ore GDP}}$$

non-resource production function (sector 0)

$$GDP_t^0 = TFP_t^0 (h_t L_t)^{\beta} (Kt\text{-}1^0)^{1-\beta}$$

The non-resource GDP growth drivers are: (i) TFP growth (exogenous); (ii) human capital growth (ht: exogenous human capital of the workforce); (iii) labor force growth; and (iv) investment. The model assumes diminishing returns to capital.

The h_t in the production function measures the relative productivity of average workers due to human capital. While in the standard LTGM, h_t is based on years of schooling ("Mincer Return" as in the Penn World Tables), the model used a broader human capital definition based on World Bank Human Capital Index which includes health measures and adjusts years of schooling for the quality of education.

The resource sector depends on the iron ore sector's physical capital and reserves (and the model keeps track of reserves and exogenous discoveries). This design implies that as reserves deplete, more capital or technology is required to produce 1 metric ton of iron ore.

The standard capital accumulation identity is used in which capital is allocated to the non-resource and resource (iron ore) sectors based on the marginal product of capital (MPK), with capital moving to the highest return sector (but not immediately).

Key assumptions (non-resource sector)

- TFP growth for the total economy is an approximation for TFP growth for the non-resource sector and assumes growth increases from 0.1 percent in 2025 to 1 percent in 2028 and is constant thereafter.
- Investment as a share of output is assumed to go from 18.3 percent in 2023 to 16 percent by 2035 (lower than in SSA, LICs and peers) and maintains constant growth until 2050 (public investment as a share of total investment remains constant at 39 percent). The rate of depreciation is assumed to be 6 percent.
- The share of labor (59 percent) is above structural peers.
- Annual population growth is assumed to slow down from 2.2 percent to about 1.2 percent by 2050, and working age to total population is assumed to dip.

Key assumptions (resource sector)

- The model does not include other minerals (such as diamonds or rutile). Only iron ore was modelled for the resource sector.
- Iron ore prices are assumed to drop from US$102 in 2023 to US$65 by 2050.
- Exports of iron ore are assumed to remain stable at 6.6 percent of GDP during 2023-28.
- Decline in TFP productivity in the iron ore sector from 11.4 percent in 2024 to 9.2 percent by 2025, then decline to 0 percent by 2050.
- Iron ore reserves at Tonkolili Mines (13.7 billion tonnes with 64 percent iron concentration) and Marampa (1.7 billion tonnes with 32 percent iron concentration) were combined into the assumption of 15 billion tonnes with 62 percent iron concentration, normalizing the variation in grades and reserves at the two mines.
- Iron ore prices do not affect GDP directly. They indirectly affect GDP by boosting private and public investment.

Scenario Assumptions

The model is based on two types of scenarios, a moderate and an ambitious reform scenario.

Ambitious reform scenarios (non-resource sector)

Sierra Leone can reach lower middle-income country by 2032 with a sustained annual growth of 6.6 percent from 2025 onwards under the ambitious scenarios:

- TFP growth increases from 0.1 to 2 percent until 2032, and 2 percent growth onwards
- Investment as a share of GDP should have reached 25 percent by 2031
- Sustained improvement in human capital per worker to 1.3 percent by 2050 supported by improvement in years of schooling to 11 years by 2050, quality score, fraction of children not stunted and sustained improvement in adult survival rate to 0.80 by 2050.

Moderate reform scenarios

Sierra Leone can reach lower middle-income by 2046 under the moderate scenario with a sustained annual growth of 5.4 percent from 2025 onwards.

- TFP growth increases from 0.1 to 1.5 percent until 2030, and constant after that
- Investment as a share of GDP should reach at least 20 percent by 2026
- Human capital growth per worker to accelerate to 0.7 percent by 2035 (contributes 0.3 percentage points by 2050).

Annex 2: Chapter 2

World Bank BOS database

Data are from the World Bank BOS database, which contains the most comprehensive list of enterprises in which governments hold equity stakes. It maps the footprint of the state within the corporate sector and across economic activities based on a uniform definition. The database tracks all corporations (i.e., enterprises and their subsidiaries) where national or subnational governments have an ownership stake of at least 10 percent.[171]

In the BOS database, corporations are business entities that are: (i) capable of generating a profit or other financial gain for their owners, (ii) recognized by law as legal entities separate from their owners and with limited liability, and (iii) set up for purposes of engaging in market production. The database was built using data from ORBIS and complemented with data from government sources, such as business registries, central depositories, central oversight bodies, and Ministry of Finance. It tracks several variables such as company names, 4-digit NACE code, financial variables such as revenue, employment, and profit and loss as of 2019, percent of state ownership stake, and different layers of the ownership chain. State businesses operating in sectors such as public administration and defense and activities of extraterritorial organizations are excluded because corporations in these sectors provide public goods. Corporations operating in education and human health sectors are also excluded because they are characterized by externalities. In addition, some business entities operating in these excluded sectors are either not capable of generating profits or their purpose is not for market production. Thus, government participations in these sectors are justified or firms owned by governments operating in these sectors could not be categorized as State businesses under the above definition.

The Bertelsmann Stiftung's Transformation Index (BTI)

The Bertelsmann Stiftung's Transformation Index assesses the development status as well as the governance of the political and economic transformation processes in 137 developing and transition countries worldwide. The Index is based on the opinions of country experts who assess the extent to which 17 criteria (some of which are an aggregation of up to 6 subindexes) have been achieved. The BTI then aggregates the outcomes of the 17 criteria into two broad indices: the Status Index—which assesses where each country stands on its journey towards democracy in terms of the rule of law and a social market economy—and the Governance Index—which assesses the quality of political leadership in guiding the transformation processes. For further details, see the BTI methodology which is available at https://bti-project.org/en/methodology

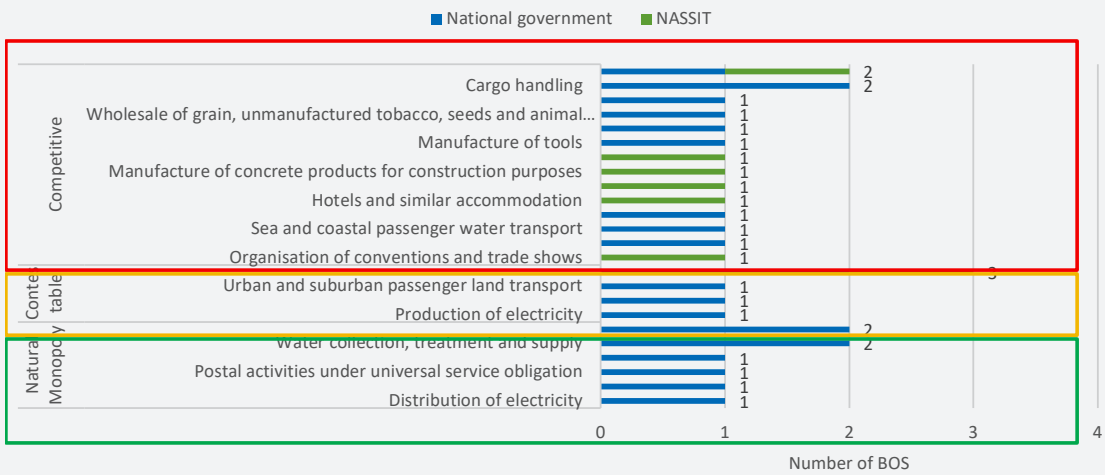
The BTI indicator on market competition answers the following question based on expert judgment: to what level have the fundamentals of market-based competition developed, including the low importance of administered pricing, currency convertibility, no significant entry and exit barriers in product and factor markets, freedom to launch and withdraw investments, and no discrimination based on ownership (state/private, foreign/local) and size. The scores range from 1 to 10, with higher values suggesting better competition-enabling environment.

The BTI indicator on anti-monopoly policy answers the following question based on expert judgment: to what extent do safeguards exist to prevent the development of economic monopolies and cartels, and to what extent are they enforced (including the existence of antitrust or competition laws and enforcement)? The scores range from 1 to 10, with higher values suggesting stronger policies in place.

171 Dall'Olio et al. 2022.

Supplementary figures and tables

ANNEX FIGURE 1:
MOST OF SIERRA LEONE'S BOS OPERATE IN COMPETITIVE AND CONTESTABLE SEGMENTS OF SERVICES SUBSECTORS.



Source: World Bank Businesses of the State (BOS) database. The distribution of BOS by sector is based on number of firms by 4-digit NACE economic activity. All businesses have information of economic activity. Some 4-digit NACE codes are excluded from the sector classification of BOS because firms in those industries provide public goods (e.g., public administration and defense and activities of extraterritorial organizations), while others are characterized by externalities (e.g., education and human health activities). In these excluded sectors, government interventions are justified because entities in these services are either not capable of generating profits or they were not set up for market production.

ANNEX TABLE 1:
BOS AND PARTNERSHIP ARRANGEMENTS WITH PRIVATE PARTNERS

BOS	PRIVATE PARTNER (CONCESSIONAIRE/ LICENSEE)	TYPE OF PUBLIC-PRIVATE PARTNERSHIP ARRANGEMENT	DESCRIPTION OF FUNCTIONS	TERM (YEARS)	DATE STARTED
Sierra Leone Ports Authority	Freetown Terminal Ltd. (Bollore)	Concession	Container handling	10	Nov 2011
	Nectar Break Bulk	Concession	Break bulk handling	21	Oct 2015
	Holland Shipyard	Concession	Maintenance of vessels	15	Sep 2014
	Mv Mahera Ferry	License	Ferry transportation	N/A	N/A
	Logistics Solutions and Services	License	Cargo tracking	N/A	2021
	Integrated Trade Services	License	Container scanning	N/A	N/A
Sierra Leone Airport Authority	Westminster Aviation Security Services	License	Security services	15	May 2012
	Sky Handling Partners SL Ltd.	License	Ground and cargo handling services	N/A	N/A
	Summa Airport (SL) Ltd.	Build, operate, and transfer	Airport operation and management	25	Jan 2023

Sierra Leone State Lottery Company Limited	Accord Logistics	Joint Venture	Gaming and betting	N/A	2022
Sierra Leone Telecommunications Company Ltd.	SENTINEL Telecommunications Company Ltd.	Concession	Operation and management	N/A	N/A
Government Printing Department	Excellent Printing Press of Ghana	Joint Venture	Printing	N/A	2013

Source: World Bank staff calculations and Ministry of Finance (2022a).

Regulatory gaps and uncertainty in Sierra Leone's competition and merger control framework

The Ministry of Trade and Industry has the mandate to regulate anticompetitive business practices,[172] although there are no domestic competition rules governing such practices including horizontal/vertical anticompetitive agreements or abuse of dominance. The Corporate Affairs Commission (CAC), established by the Companies Act of 2009, has the mandate to conduct merger control, pursuant to the Companies Regulations 2015 (the "2015 Regulations"), although it is not clear whether and to what extent the CAC assesses the competition impact of mergers in practice since there are no apparent merger notification thresholds. Under the 2015 Regulations, prior approval is required from the CAC before completing transactions. Approvals will be given if the transaction is: "not likely to cause a substantial restraint of competition or tend to create monopoly in any line of business enterprise"; one of the merging parties has proved to be failing; or "sufficient evidence is put forward to show that the liabilities of the acquiree have or shall be settled within a reasonable period of time."[173] The latter condition for approval is unclear in scope and appears to be beyond internationally recognized rationales for approving mergers. The 2015 Regulations also require that a post-merger inspection be carried out within six months of the CAC's decision for it to ascertain the level of compliance with its decision,[174] yet the provision does not mention monitoring of any merger remedies imposed. Whether compliance with conditions could be captured under this mechanism or whether the provision for imposing remedies is even established under the 2015 Regulations at all remains uncertain. Whatever the case, further legislation is required to clarify existing rules and establish other key aspects, including relevant merger notification thresholds and the procedural and substantive assessment. In addition, some sectoral regulators, such as the Sierra Leone Electricity and Water Regulatory Commission, the Sierra Leone Ports Authority, and the National Communications Authority have more general mandates to ensure fair competition in the electricity, water, ports, and communications sectors, respectively.

172 The statement that the Ministry of Trade and Industry has the mandate for the regulation of anticompetitive business practices is based on the following secondary sources: WTO reports, BTI 2022: Sierra Leone Country Report 2022, and the 2023 Investment Climate Statements: Sierra Leone.
173 Article 47, Companies Regulations 2015.
174 Article 48, Companies Regulations 2015.

ANNEX TABLE 2:
REGULATORY BODY AND COMPETITION MANDATES, BY SECTOR AND SUBSECTOR

SECTOR	SUBSECTOR	REGULATORY BODY	HAS A COMPETITION MANDATE?	HAS THE MANDATE TO ENSURE/ ADDRESS
Utilities	Electricity/water	Sierra Leone Electricity and Water Regulatory Commission	Yes	Fair competition
Transport	Air	Civil Aviation Authority	No	No
	Rail/road	Sierra Leone Public Transport Authority	No	No
	Water	Sierra Leone Maritime Administration	No	No
Ports	Port	Sierra Leone Ports Authority	Yes	Fair competition
Communications	Communications	National Communications Authority	Yes	Fair competition
Banking/insurance	Banking	Bank of Sierra Leone	No	No
	Insurance	Sierra Leone Insurance Commission	No	No
Mining	Mining/minerals	National Minerals Agency	No	No
Other sectors	All	Corporate Affairs Commission	Yes	Mergers and acquisitions
		Ministry of Trade and Industry	Yes	Anticompetitive practices

Source: World Bank staff. .

ANNEX TABLE 3:
PRIVATE SECTOR DETAILED POLICY RECOMMENDATIONS

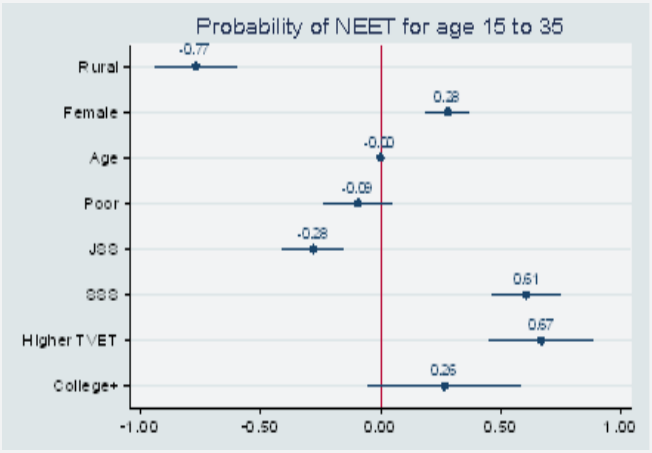
RECOMMENDATION	RESPONSIBILITY	PRIORITY
A. Lessen potential distortions associated with the presence of Businesses of the State (BOS) in markets:		
1. Subject all BOS to market discipline mechanisms by ensuring that they compete on an equal footing in sectors with private sector participation.	GoSL, Ministry of Finance, NCP	High
2. Separate costs and revenues of the commercial and non-commercial activities of SOEs and ensure that SOEs are properly compensated for the true cost of their public service obligations via explicit budget transfers.	GoSL, NCP	Medium
3. Improve the governance of BOS by minimizing conflicts of interest, given that government representatives sit on boards of majority BOS.	GoSL, Ministry of Finance, NCP	High
4. Ideally, limit BOS to industries where private participation is not viable; ensure the privatization of perennial loss-making BOS in competitive sectors with active private sector participation, depending on the extent of domestic private sector dynamics; ensure a differentiated approach to privatization depending on the type of market (e.g., for some SOEs, liquidation may sometimes be a better option than privatization); for some SOEs, the sequencing of reforms may matter, such as establishing the right legal framework prior to privatization.	GoSL, Ministry of Finance, NCP	High

B. Remove potential competition-limiting regulations in key sectors to foster competition		
1. Enact a Competition Law and establish an independent Competition and Consumer Protection Authority to tackle and deter anticompetitive business practices, prevent mergers that are likely to harm competition, protect consumers, and ensure that competition principles are embedded in the design and implementation of laws and regulations; consolidate all competition-related roles of other government ministries, departments, and agencies under this new authority.	GoSL	High
2. Ensure that existing competition mandates of sector regulators are consistent with the new competition law; develop coordination mechanisms, such as memorandums of understanding (MoUs), between sector regulators and the competition authority to eradicate any overlaps.	GoSL	Medium
3. Limit participation of industry associations in decision making of sector regulators and supervisory bodies.	GoSL	Medium
4. Foster more collaborations between sector regulators and other government institutions to identify regulatory restrictions to competition and remove them if and when necessary.	Sector regulators	Medium
5. Foster competitive neutrality by (a) removing from laws the provisions that mandate ministries, departments, agencies, NASSIT, and BOS to use specific BOS for their services to ensure that both BOS and POEs have equal access to GoSL businesses and (b) limiting SOEs' preferential access to finance not available to the private sector, including subsidies and debt guarantees.	GoSL, Ministry of Finance	High

Annex 3: Chapter 3

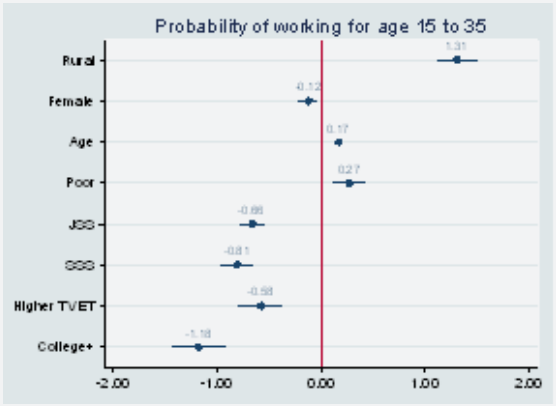
Supplementary figures and tables

ANNEX FIGURE 2:
DETERMINANTS OF NEET

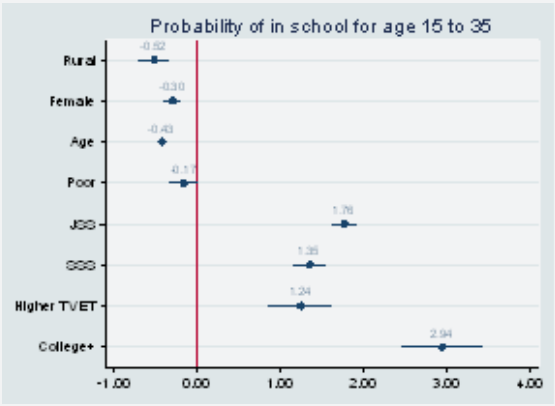


Source: World Bank staff calculations using Sierra Leone Integrated Household Survey 2018

ANNEX FIGURE 3:
DETERMINANTS OF WORKING, AGES 15-35

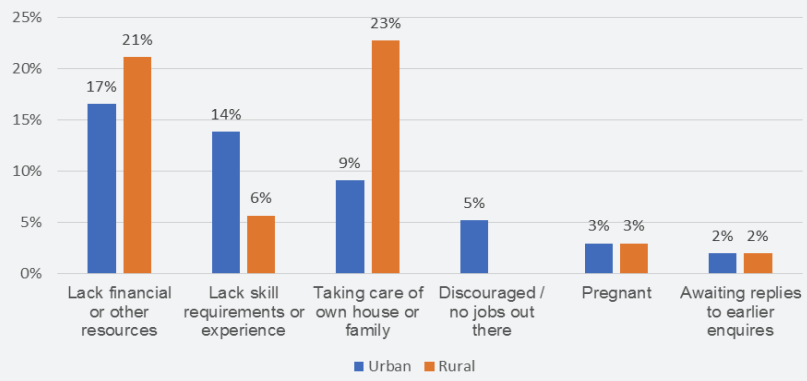


ANNEX FIGURE 4:
DETERMINANTS OF SCHOOLING, AGES 15-35



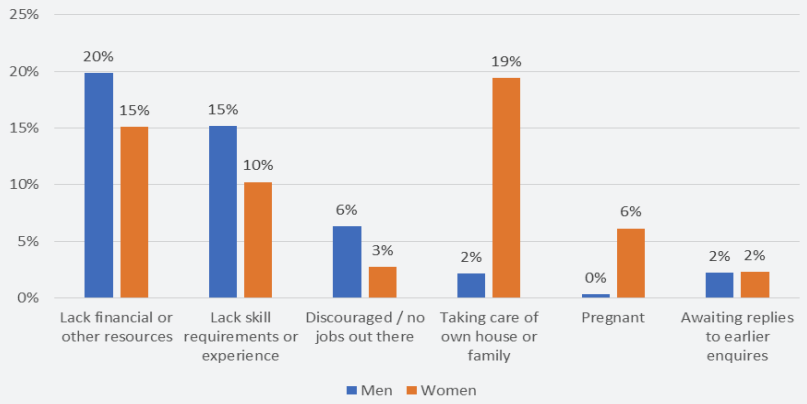
Note: Regressions are estimated using logistic regressions, and standard errors are clustered at the sampling cluster level. The variables included in the regression but not shown are household head education, welfare decile indicators of the household, and number of household members. The poor are defined as the poorest 40 percent in per capita expenditure.
Source: World Bank staff calculations using Sierra Leone Integrated Household Survey 2018.

ANNEX FIGURE 5:
REASONS FOR NOT LOOKING FOR A JOB, BY LOCATION (%)



Source: Sierra Leone Integrated Household Survey 2018

ANNEX FIGURE 6:
REASONS FOR NOT LOOKING FOR A JOB, BY GENDER (%)



Source: Sierra Leone Integrated Household Survey 2018

ANNEX TABLE 4:
EMPLOYMENT REGRESSIONS

VARIABLES	PROBABILITY OF HAVING A JOB	PROBABILITY OF HAVING A WAGE JOB	PROBABILITY OF BEING SELF-EMPLOYED
Male	0.000443	0.0811***	-0.111***
	(0.00128)	(0.00600)	(0.0160)
Married=1	-0.00569***	-0.0230**	-0.0802***
	(0.00212)	(0.00952)	(0.0172)
Primary incomplete	0.00895***	0.0375	-0.146*
	(0.00300)	(0.0378)	(0.0870)
Primary complete	0.00764**	0.0250	-0.159*
	(0.00315)	(0.0382)	(0.0885)
Secondary incomplete	0.00748***	0.0499	-0.154*
	(0.00271)	(0.0373)	(0.0864)
Secondary complete	0.00830**	0.0583	-0.107
	(0.00400)	(0.0388)	(0.0915)

Post secondary	0.00620*	0.171***	-0.355***
	(0.00346)	(0.0395)	(0.0889)
University incomplete or complete	0.00885	0.201***	-0.506***
	(0.00575)	(0.0408)	(0.0918)
Agriculture	0.984***	0.0195***	0.0786
	(0.00272)	(0.00617)	(0.0714)
Industry	0.984***	0.440***	0.0106
	(0.00267)	(0.0211)	(0.0732)
Services	0.986***	0.212***	0.220***
	(0.00235)	(0.00912)	(0.0709)
Other	0.984***	0.729***	-0.226***
	(0.00297)	(0.0195)	(0.0734)
Constant	0.0214***	-0.0611	0.907***
	(0.00571)	(0.0427)	(0.118)
Observations	12,059	12,029	6,846
& Squared	0.986	0.449	0.231

ote: Robust standard errors in parentheses. Controlling for district, age and relation to household heads.
*** p<0.01, ** p<0.05, * p<0.1
Source: World Bank staff calculations.

Annex 4: Chapter 4

Supplementary figures and tables

ANNEX TABLE 5:
EXPORTS OF GOODS, EXPORT SHARE, AND REVEALED COMPARATIVE ADVANTAGE, BY SECTOR (US$, MILLIONS, AND % OF TOTAL), 2009-11 AND 2019-21

		AVERAGE 2009-11		AVERAGE 2019-21		2009-11 TO 2019-21	AVERAGE 2009-11	AVERAGE 2019-21
		EXPORTS (US$, MILLIONS)	% OF TOTAL	EXPORTS (US$, MILLIONS)	% OF TOTAL	CAGR, %	RCA	RCA
01-05	Animal	2.1	0.6	18.1	2.4	30.8%	0.3	1.2
06-15	Vegetable	8.7	2.3	15.7	2.1	7.7%	0.7	0.6
16-24	Foodstuffs	47.9	12.7	44.0	5.8	-1.1%	4.1	1.8
18	incl. Cocoa beans, whole or broken	44.7	11.8	42.6	5.7	-0.6%	44.9	21.2
25-27	Minerals	94.9	25.1	361.8	48.0	18.2%	1.4	3.6
26	incl. Ores, incl. titanium	93.9	24.8	359.9	47.7	18.3%	16.6	27.4
28-38	Chemicals	4.5	1.2	6.6	0.9	4.7%	0.1	0.1
39-40	Plastic / Rubber	7.1	1.9	3.7	0.5	-7.8%	0.4	0.1
41-43	Hides, Skins	0.3	0.1	0.1	0.0	-17.0%	0.1	0.0
44-49	Wood	11.5	3.1	139.0	18.4	36.5%	1.2	8.1
44	incl. Wood in the rough	9.0	2.4	137.9	18.3	40.7%	3.3	22.4
50-60	Textiles, Clothing	1.7	0.4	0.6	0.1	-12.2%	0.3	0.1
61-63	Apparel	2.7	0.7	1.8	0.2	-4.8%	0.3	0.1
64-67	Footwear	0.9	0.2	0.7	0.1	-3.3%	0.3	0.1
68-70	Stone / Glass	18.0	4.8	0.6	0.1	-34.8%	5.2	0.1
71-83	Metals	116.1	30.7	120.9	16.0	0.5%	3.1	1.5
71	incl. Diamonds	98.5	26.0	103.5	13.7	0.6%	9.6	3.6
84-85	Mach/Elec	25.4	6.7	26.3	3.5	0.5%	0.3	0.1
86-89	Transportation	33.5	8.9	7.7	1.0	-16.8%	1.0	0.1
90-97	Miscellaneous	2.9	0.8	6.6	0.9	11.0%	0.1	0.1
Total		624.3	165.1	1398.0	185.4	10.6%		

Note: RCA = revealed comparative advantage. CAGR = compound annual growth rate. Trade mirror data (from trading partners) used.
Source: World Bank staff calculations on data from WITS.

ANNEX TABLE 6:
EXPORTS OF SERVICES, BY CATEGORY (US$, MILLIONS, AND % OF TOTAL), 2006-08, 2012-14, AND 2018-20

Services category	2006-08 average (US$, millions)	% of total	2012-14 average (US$, millions)	% of total	2018-20 average (US$, millions)	% of total
Services	**47.45**	**100.0%**	**201.20**	**100.0%**	**77.41**	**100.0%**
Transport	**16.65**	**35.1%**	**38.11**	**18.9%**	**11.84**	**15.3%**
Sea transport	10.98	23.1%	27.96	13.9%	4.30	5.6%
Air transport	5.15	10.9%	4.48	2.2%	2.87	3.7%
Other modes of transport (other than sea and air)	0.50	1.1%	0.77	0.4%	0.00	0.0%
Postal and courier services	0.01	0.0%	4.89	2.4%	4.68	6.0%
Passenger transport, All modes (ALT)	0.00	0.0%	n.a.	n.a.	0.00	0.0%
Freight transport, All modes (ALT)	0.00	0.0%	0.04	0.0%	0.00	0.0%
Travel	**26.31**	**55.5%**	**49.08**	**24.4%**	**39.97**	**51.6%**
Travel, Business	10.21	21.5%	26.72	13.3%	17.14	22.1%
Travel, Personal	16.10	33.9%	22.36	11.1%	22.83	29.5%
Other services	**4.48**	**9.5%**	**114.02**	**56.7%**	**23.77**	**30.7%**
Construction	0.00	0.0%	n.a.	n.a.	0.00	0.0%
Insurance and pension services	0.96	2.0%	0.45	0.2%	0.08	0.1%
Financial services	0.46	1.0%	0.70	0.3%	4.65	6.0%
Charges for the use of intellectual property n.i.e.	0.41	0.9%	3.25	1.6%	0.00	0.0%
Telecommunications, computer, and information services	0.29	0.6%	104.26	51.8%	2.79	3.6%
Other business services	2.34	4.9%	3.26	1.6%	0.00	0.0%
Personal, cultural, and recreational services	0.00	0.0%	n.a.	n.a.	0.00	0.0%
Government goods and services n.i.e.	0.02	0.0%	2.09	1.0%	7.76	10.0%

Note: Services (BPM6) compiled from various international and national data sources. Blue indicates larger values, white medium values and red low values.
Source: UNCTAD.

ANNEX TABLE 7:
EXPORT SHARES AND GROWTH, BY DESTINATION MARKET (%), 2019-21 VS. 2009-11

		2009-11	2019-21	CAGR, %	2021
EU+UK	Regional	62.1%	45.7%	-3.8%	38.8%
	Belgium	24.0%	20.0%	-2.3%	17.0%
	Romania	8.0%	9.0%	1.5%	7.0%
	Germany	6.0%	7.0%	1.9%	4.0%
	Netherlands	4.0%	5.0%	2.8%	8.0%
	France	6.0%	2.0%	-12.8%	0.0%
East Asia and Pacific	Regional	11.0%	34.7%	15.5%	45.5%
	China	4.0%	27.0%	27.0%	42.0%
	Japan	1.0%	4.0%	18.9%	1.0%
	Korea, Rep.	1.0%	3.0%	14.7%	1.0%
	Indonesia	1.0%	0.0%	-100.0%	0.0%
	Australia	2.0%	0.0%	-100.0%	0.0%
MENA	Regional	1.0%	6.4%	26.5%	7.8%
	United Arab Emirates	0.3%	6.0%	45.5%	7.2%
	Egypt, Arab Rep.	0.14%	0.18%	3.2%	0.4%
	Morocco	0.08%	0.07%	-1.7%	0.1%
	Saudi Arabia	0.29%	0.05%	-19.7%	0.1%
	Bahrain	0.001%	0.02%	45.4%	0.001%
South Asia	Regional	1.9%	3.6%	8.1%	1.6%
	India	1.0%	3.0%	14.7%	2.0%
	Sri Lanka	0.0%	1.0%		0.0%
	Pakistan	0.0%	0.0%		0.0%
	Nepal	0.0%	0.0%		0.0%
	Maldives		0.0%		0.0%
Sub-Saharan Africa	Regional	8.6%	3.1%	-11.8%	2.9%
	Ghana	0.4%	0.4%	0.0%	na
	Senegal	0.2%	1.2%	25.1%	1.8%
	Côte d'Ivoire	1.8%	0.4%	-17.1%	na
	Nigeria	3.9%	0.5%	-22.6%	0.6%
	South Africa	0.5%	0.2%	-10.8%	0.1%
Other countries	Regional	15.4%	7.1%	-9.3%	3.4%
	United States	8.0%	5.0%	-5.7%	2.0%
	Kazakhstan	0.0%	1.0%		
	Turkey	1.0%	0.0%	-100.0%	0.0%
	Canada	3.0%	0.0%	-100.0%	1.0%
	Switzerland	0.0%	0.0%		0.0%

Note: Data for UAE and Saudi Arabia are averages for 2012 and 2013.
Source: World Bank staff calculations on data from WITS, World Bank.

ANNEX TABLE 8:
SIERRA LEONE'S EXPORT SHARES AND GROWTH, BY DESTINATION MARKET, SHARE AND GROWTH, 2019-21 VS. 2009-11

		US$, MILLIONS		2009-11 TO 2019-21		SHARES, %		2009-11 TO 2019-21	
TYPE	REGION	2009-11	2019-21	CAGR, %	2021	2009-11	2019-21	CAGR, %	2021
High technology		11.2	12.2	1.1%	14.3	3.0%	1.6%	-7.3%	1.5%
	EU+UK	5.5	4.5	-2.3%	5.3	1.4%	0.6%	-10.3%	0.5%
	East Asia and Pacific	2.4	0.9	-11.9%	1.6	0.6%	0.1%	-19.2%	0.2%
	MENA	0.2	0.1	-7.8%	0.1	0.0%	0.0%	-15.5%	0.0%
	Rest of world	1.7	4.6	13.4%	5.8	0.4%	0.6%	4.0%	0.6%
	South Asia	0.5	1.6	16.5%	1.3	0.1%	0.2%	6.9%	0.1%
	Sub-Saharan Africa	1.1	0.5	-9.1%	0.3	0.3%	0.1%	-16.6%	0.0%
Low technology		28.4	8.5	-14.0%	7.5	7.5%	1.1%	-21.1%	0.8%
	EU+UK	6.7	4.7	-4.4%	3.5	1.8%	0.6%	-12.3%	0.4%
	East Asia and Pacific	1.0	0.8	-2.8%	1.0	0.3%	0.1%	-10.8%	0.1%
	MENA	0.1	0.6	18.6%	0.5	0.0%	0.1%	8.8%	0.0%
	Rest of world	1.7	2.0	1.6%	1.8	0.5%	0.3%	-6.8%	0.2%
	South Asia	0.8	0.1	-23.8%	0.2	0.2%	0.0%	-30.1%	0.0%
	Sub-Saharan Africa	18.0	0.4	-37.5%	0.5	4.8%	0.1%	-42.7%	0.1%
Medium technology		54.6	29.1	-7.6%	34.8	14.4%	3.9%	-15.2%	3.6%
	EU+UK	17.2	9.4	-7.3%	9.7	4.5%	1.2%	-14.9%	1.0%
	East Asia and Pacific	2.6	2.2	-2.2%	3.2	0.7%	0.3%	-10.2%	0.3%
	MENA	0.2	1.8	29.4%	4.4	0.1%	0.2%	18.7%	0.5%
	Rest of world	20.3	12.2	-6.2%	15.4	5.4%	1.6%	-13.9%	1.6%
	South Asia	0.8	0.1	-21.6%	0.2	0.2%	0.0%	-28.0%	0.0%
	Sub-Saharan Africa	13.6	3.5	-15.5%	1.8	3.6%	0.5%	-22.5%	0.2%
Primary products		56.6	68.2	2.4%	61.7	15.0%	9.0%	-6.1%	6.4%
	EU+UK	50.0	45.7	-1.1%	44.9	13.2%	6.1%	-9.3%	4.6%
	East Asia and Pacific	1.1	12.3	35.3%	9.9	0.3%	1.6%	24.1%	1.0%
	MENA	2.2	1.7	-3.1%	2.1	0.6%	0.2%	-11.1%	0.2%
	Rest of world	2.1	1.9	-1.0%	2.5	0.5%	0.3%	-9.2%	0.3%
	South Asia	0.2	0.2	-2.8%	0.5	0.1%	0.0%	-10.9%	0.0%
	Sub-Saharan Africa	1.0	6.4	25.9%	1.8	0.3%	0.9%	15.5%	0.2%
Resource based		221.0	630.5	14.0%	840.3	58.4%	83.6%	4.6%	86.7%
	EU+UK	149.0	257.9	7.1%	312.9	39.4%	34.2%	-1.8%	32.3%
	East Asia and Pacific	34.6	279.1	29.8%	425.4	9.2%	37.0%	19.1%	43.9%
	MENA	0.5	41.1	72.2%	57.8	0.1%	5.4%	58.0%	6.0%
	Rest of world	29.5	20.1	-4.7%	7.0	7.8%	2.7%	-12.6%	0.7%
	South Asia	5.0	19.2	18.4%	13.4	1.3%	2.5%	8.6%	1.4%
	Sub-Saharan Africa	2.4	13.1	23.5%	23.7	0.6%	1.7%	13.3%	2.4%
Other		**6.3**	**5.5**	**-1.8%**	**11.1**	**1.7%**	**0.7%**	**-9.9%**	**1.1%**
TOTAL		**378.2**	**754.0**	**9.0%**	**969.8**	**100.0%**	**100.0%**	**0.0%**	**100.0%**

Note: type of products is based on the Lall (2000) classification: https://unctadstat.unctad.org/en/classifications/dimsitcrev3products_ldc_hierarchy.pdf..
Source: World Bank staff calculations on data from WITS, World Bank.

ANNEX TABLE 9:
MAIN INTERNATIONAL AGREEMENTS APPLYING TO SIERRA LEONE

NO.	SHORT TITLE	STATUS	DATE OF SIGNATURE	DATE OF ENTRY INTO FORCE	DATE OF TERMINATION
BILATERAL INVESTMENT TREATIES (BIT'S)[175]					
1	Sierra Leone - United Arab Emirates BIT (2019)	Signed	22/12/2019		
2	China - Sierra Leone BIT (2001)	Signed	16/05/2001		
3	Sierra Leone - United Kingdom BIT (2000)	In force	13/01/2000	20/11/2001	
4	Sierra Leone - United Kingdom BIT (1981)	Terminated	08/12/1981		20/11/2001
5	Germany - Sierra Leone BIT (1965)	In force	08/04/1965	10/12/1966	
REGIONAL AND PLURILATERAL AGREEMENTS WITH INVESTMENT CHAPTERS					
1	ECOWAS Common Investment Code (ECOWIC) (2019)	In force	22/12/2019	22/12/2019	
2	ECOWAS - US TIFA (2014)	Signed	05/08/2014		
3	ECOWAS Supplementary Act on Investments (2008)	In force	19/12/2008	19/01/2009	
4	ECOWAS Energy Protocol (2003)	Signed	31/01/2003		
5	Cotonou Agreement (2000)	In force	23/06/2000	01/04/2003	
6	Revised ECOWAS Treaty (1993)	In force	24/07/1993	23/08/1995	
7	AU Treaty (1991)	In force	03/06/1991	12/05/1994	
8	OIC Investment Agreement (1981)	In force	05/06/1981	01/02/1988	
9	ECOWAS Protocol on Movement of Persons and Establishment (1979)	In force	29/05/1979	08/04/1980	
10	ECOWAS Treaty (1975)	Terminated	28/05/1975	20/06/1975	
11	AfCFTA Investment Protocol (2023)	Pending			

Source: World Bank IPP Team based on the UNCTAD Investment Policy Hub accessed 10/24/23 at: https://investmentpolicy.unctad.org/international-investment-agreements/countries

175 Only two of the five BIT's signed by Sierra Leone are currently in force. One has been terminated and two were signed but are not in force, presumably meaning that the internal ratification process has not been completed. These two BIT's have no legal effect until then.

ANNEX TABLE 10:
COMPARISON OF SIERRA LEONE'S CURRENT AND PREVIOUS INVESTMENT LEGISLATION AND THE AFCFTA INVESTMENT PROTOCOL (SUMMARY TABLE)

Issue	Investment Promotion Act (2004)	SLIEPA (2007)	NIB (2022)	AfCFTA Investment Protocol (2023)
1/ Objective or Scope of Application				
	Establishment and role of SLEDIC (Sierra Leone Export Development and Investment Corporation) but substantive provisions on entry, investor rights, and incentives.	Establishment and role of SLIEPA (Sierra Leone Investment and Export Promotion). Amends (but does not repeal) IPA 2004	Establishment of the New Investment Board (in charge of investment promotion, assistance and IC improvements). Repeals both IPA 2004 and SLIEPA 2007.	Applies to investment by a company in one Member State on the territoryof another member State (host economy). Intra-African FDI. Does not replace/repeal domestic legislation on FDI but States will have 5 years to align. Regional economic communities will also have to align. Will replace Intra-African BITs.
2/ Market Access. Investment Entry.				
Sectors open or closed, restricted	(-). Unclear. Reference to right to invest in any legitimate business enterprise. Law does not apply to investment into arms, military apparel.	(-)	(-). Unclear. Few direct provisions on Entry.	(-). Left to domestic laws and regulations of every State party.
Investment Procedures	(-). Unclear. Several references to SLEDIC's role include permits, licenses and certificates needed (Sections 5 and 6).	(-)	(-). Unclear. Few direct provisions on entry procedures. However, references to NIB's role include the review of investment proposals and approvals (Section 7.2.c). Same with role of the NIB Secretariat (Section 12.2.b).	(-). Left to domestic laws and regulations of every State party.
3/ Treatment of Investors (Rights and Obligations)				
Scope of protection	Unclear, but probably post-establishment	(-)	Unclear, but probably post-establishment	Post-establishment
National Treatment (NT)	(-)	(-)	(-)	(+). Art 12. Exceptions: Art 13.
Most Favored Nation (MFN)	(-)	(-)	(-)	(+) Art 14. Exceptions. Art 15.
Fair and Equitable Treatment (FET)	(-)	(-)	(-)	(+), qualified
Full Protection and Security (FPS)	(-)	(-)	(-)	(+), qualified. Art 18.

Protection against expropriation	(+). Section 11. Covered both domestic and foreign investment. Covered both direct and indirect expropriation.	(-)	(+), however general provision on "compulsory acquisition". No mention of direct and indirect expropriation. (Section 35.1)	(+), qualified. Art 19-20. Covers both direct and indirect expropriation. 4 best practice elements are included.
Compensation in the event of Expropriation	(+),Prompt and adequate compensation. Section 11	(-)	(+). Section 35.2. Prompt, fair and adequate compensation. Transferrable.	(+), qualified. Art 19.d. and Art 21. Fair, prompt and adequate compensation
Free transfer of capital	(+). Sections 8 (Salaries) and Sections 9-10 (profits). Unqualified	(-)	(+). Section 36. A bit limited in scope.	(+), qualified with exceptions. Art 22-23.
Policy space protection	(-)	(-)	(+). Limited. Section 35.3.	(+). For instance: • Art 13.1. and 15 provide exceptions to NT and MFN that protect legitimate policy objectives such as public morals, health, climate,national security interests. • Article on expropriation also seeks to protect policy space. • Art 24 on "Right to Regulate".
Investor-State dispute	(+), Section 16. Amicable Settlement. National courts. Arbitration including UNCITRAL. No ICSID reference.	(-)	(+), Section 37. Amicable settlement. National courts. Arbitration including ICSID	(?) The status is unclear. It is reported that some countries requested that this issue be removed or renegotiated.
Dispute Prevention (Investor Grievance Management)	(-)	(-)	(-) but can be deduced from one article.	(+). One important innovation of the Investment Protocol. Art. 45 asks Member States to take action in this area.
Land Access	(+). Limited. Section 15	(-)	(-)	
Visas and work permits for expatriates.	(+). Limited. Sections 13-14	(-)	(-)	Parties shall favorably treat permit applications and temporary entry and stay of high-level personnel and family members
Investor obligations	(-)	(-)	(+). Section 34. In Part V "Protection of Investors".	(+) Chapter V devoted to obligations of Investors. Includes provisions on: • Ethics, Human Rights, Labour Standards (Art 33) • Environmental Protection, Indigenous Peoples. Local Communities, Corruption (Art 34-37) • Art 47 on Investor Liability in Chapter 7 (Management and Settlement of disputes)

4/ Investment Promotion and Facilitation				
Scope	(+). More focused on promotion and institutional framework than on facilitation.	(+). More focused on promotion and institutional framework than on facilitation.	(+). More focused on promotion and institutional framework than on facilitation.	(+) Entire chapter (Chapter 2) is devoted to Investment Promotion and Facilitation.
Institutional set up	(+). This Act was about the institutional set-up (SLEDIC).	(+). This Act was essentially about the institutional set-up: creation of new agency (SLIEPA), its structure, functions, and budget.	(+). This Act is essentially about the institutional set-up: creation of new Board, its structure, functions, and budget.	(+). Requires States to designate a National Focal Point (Art. 9) Creates a Committee on Investment (Art 41) Seeks creation of Pan-African Trade and Investment Agency (Art 42)
Inter-Agency Coordination within the Government	(+). Section 6.2	(+). Limited references to coordination function of SLIEPA. Section 11.2.j	(+). Section 28.	This is a matter for each Member State.
5/ Incentives				
	(+). But vague. Section 7.	(-). Vague references to investment encouragement.	(+). Sections 30 to 33. Board can offer incentives. Some criteria for eligibility. Incentive certificate.	(+). Article 8. Right of Member States to introduce Incentives. Encouragement to harmonize (but no obligation).
6/ Other Key Topics				
Sustainable investment	(-)	(-)	(-). Reference to "Scarce Resource" (Section 29). But meaning unclear.	(+). Multiple provisions: • Minimum Standards on Environment, Labor and Consumer Protection (Art 25) • Climate Change (Art 26) • Public Health (Art 27) • Human Resource Development (Art 29) • Corporate Social Responsibility (CSR)(Art 38) • Corporate Governance (Art 39). • Taxation and Transfer Pricing (Art. 40)
Other Development-related issues	(-)	(-)	(-)	(+). Development goals (Art 28). Transfer of Technology (Art 30).
Transparency and Publication	(-)	(-)	(-)	(+) Publication of Information (Art. 10). Anticorruption (Art 37).

Note: (+) indicates the provision exists, while (-) that it does not.
Source: World Bank staff.

Everything But Arms (EBA) Program and the African Growth and Opportunity Act (AGOA)

The European Union provides comprehensive preferential access under the Everything But Arms (EBA) program. This initiative, active since March 2001, grants tariff-free and quota-free entry to Sierra Leone for all goods except weapons. EBA preferences are exclusively applied to ten specific product categories. The leading product category that benefits from EBA preferences is vegetable oils and fats, with palm oil being the primary product within this group (Annex Figure 7). Additionally, the Cotonou Agreement fosters collaboration between European Union member states and the African, Caribbean, and Pacific Group of States.[176]

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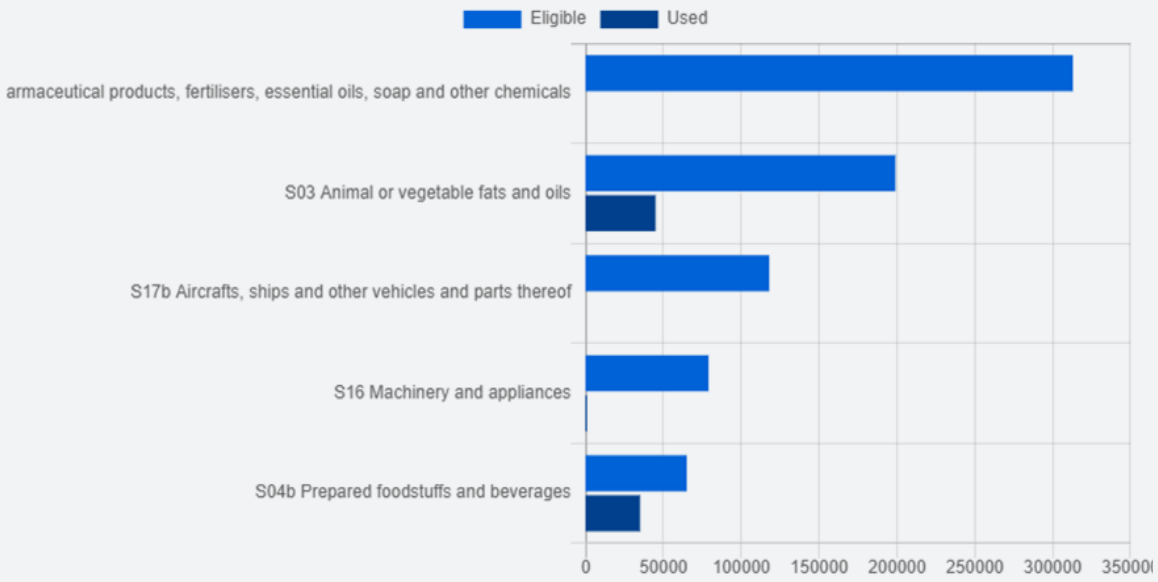
There may be scope for Sierra Leone to capture more benefits from the EBA program. In 2021, overall EU imports from Sierra Leone were approximately €272 million, of which only €113,000 qualified for EBA preferences, compared to €944 million from Mozambique or €270 million from Ethiopia. Sierra Leone's low level of EBA coverage is largely because the country's primary exports to the EU consist of minerals, which are subject to zero MFN tariffs. Nevertheless, an expansion of Sierra Leone's exports of palm oil (which now account for over 60 percent of preferential EU imports from Sierra Leone) along with agricultural products and prepared foodstuffs, could increase the goods provided free access to the EU market under the EBA program.

ANNEX FIGURE 7:
EXPORTS TO THE EU UNDER EBA, BY PRODUCT SECTION (€, MILLIONS), 2023



Source: https://gsphub.eu/country-info/Sierra%20Leone

The African Growth and Opportunity Act (AGOA) regulates entry into the U.S. market, granting duty-free access for various goods. Recently, this legislation was extended until 2025, maintaining significant opportunities for trade expansion. Trade between Sierra Leone and the US is relatively low as most of the country's exports go to China and some EU countries. In 2019, Sierra Leone completed its national AGOA strategy in high priority industries and products such as agricultural and food processing (cashew, cocoa, processed cassava–"gari", ginger, and palm oil; smoked/dried fish; natural honey) and textiles, apparel, footwear, and leather products. It's important to emphasize that products not specifically highlighted as focus or priority items can still be exported to the U.S. at the preferential rate, provided they fall within the 6,400 product lines eligible for AGOA preferential treatment (Annex Table 11).

ANNEX TABLE 11:
SOME DERIVATIVE (VALUE-ADDED) PRODUCTS FROM FOCUS PRODUCTS ELIGIBLE UNDER AGOA

Product	AGOA Eligible Derivative Product
Cashew	Cashew apples, mameyes colorados, sapodillas, soursops and sweetsops, frozen, in water or containing added sweetening
	Cashew apples, mameyes colorados, sapodillas, soursops and sweetsops, otherwise prepared or preserved
Cocoa	Cocoa paste, wholly or partly defatted
	Cocoa powder, not containing added sugar or other sweetening matter
	Cocoa powder, o/65% but less than 90% by dry wt of sugar
	Cocoa powder, sweetened,
	Cocoa powder, o/90% by dry wt of sugar
Ginger	crushed or ground
	Ginger root, preserved by sugar (drained, glace or crystallized)
	Sweet ginger, otherwise prepared or preserved
Honey	Natural honey D
	Sugar syrups, artificial honey, caramel
Oil palm	Industrial monocarboxylic fatty acids or acid oils from refining derived from coconut, palm-kernel, or palm oil

Source: https://ustr.gov/sites/default/files/files/reports/2022/2022AGOAImplementationReport.pdf

Estimating export potential using a gravity model

The gravity model has become a workhorse tool for empirical analysis of international trade. The model has been widely used to estimate impact of geography and institutions on trade flows since the first application by Tinbergen (1962). In its simplest form, which is derived from the physical gravity equation, trade increases proportionally with the exporter and importer economic size and decreases with physical distance. In other words, countries tend to trade more intensively with large and nearby trading partners. Over time several other determinants that impede or promote trade among countries have emerged, these include policy variables such as the presence of trade agreements or historical characteristics such as colonial history that determine bilateral trade frictions.

The gravity model can be used to assess how much each country-pair is expected to be trading based on their observable characteristics. Using information on actual exports and comparing them to predicted flows obtained from a gravity regression can be used to evaluate countries' export performance and to quantify the amount of missing exports (see methodology and data). These results should be interpreted with caution as countries' performance depends on which variables are included in the gravity regression. For instance, two countries may have high values of missing trade because of political reasons and if controls for political tensions are included in the model, this missing trade would disappear. In other words, the gravity model provides an empirical benchmark based on the variables that are included in the regression, which assumes that countries behave as the "average" country in the sample.

To assess Sierra Leone's export potential, a gravity equation is estimated using data for 160 countries over the 2013-19 period.[177] Bilateral exports are modeled as a function of exporter and importer nominal gross domestic products (GDPs), factor endowments, economic development (GDP per capita), and remoteness indexes. Trade costs are proxied by policy variables such as the level of applied tariff duties and presence of trade agreements in addition to distance and controls for sharing a common border, language, or colonial ties.[178]

177 See Mulabdic and Yasar (2021) and World Bank (2022).The index is defined as

$$Export\ Potential\ Index_{i,t} = \left(\frac{\sum_j \hat{X}_{ij,t} - \sum_j X_{ij,t}}{\sum_j \hat{X}_{ij,t} + \sum_j X_{ij,t}}\right) * 100$$

where $X_{ij,t}$ are observed exports from country i to j, while $\hat{X}_{ij,t}$ are the predicted flows based on a gravity model

178 Nyawo (2023).

Methodology and data

Bilateral trade data at the HS 6-digit (HS 2002) are from the CEPII's BACI database. The data cover 160 countries across all geographic regions for the 2013-19 period. The sample is restricted to countries with population greater than 1 million. Population data are from the WDI database.

To assess empirically if Sierra Leone's is under exporting, a simple gravity model is estimated, which is widely used in the trade literature to assess the effects of trade policy changes on trade flows.[179] As it is standard in the trade literature, a Poisson Pseudo Maximum Likelihood (PPML) estimator is used to estimate the following gravity equation:

$$X_{ijt}^{Industry} = exp\Big(\beta_1 \ln(1 + tariff_{ijt}) + \beta_2 RTA_{ijt} + \beta_3 \ln(Dist_{ij}) + \beta_4 Contig_{ij} + \beta_5 Lang_{ij} + \beta_6 Colony_{ij} + \beta_7 \ln(GDP_{it}) + \beta_8 \ln(GDP_{jt}) + \beta_9 Resource\ Rich_i + \beta_{10} Resource\ Rich_j + \beta_{11} \ln(Rem\ Exp_{it}) + \beta_{12} \ln(Rem\ Imp_{jt}) + \beta_{13} \ln\left(\frac{K_{it}}{L_{it}}\right) + \beta_{14} \ln\left(\frac{K_{jt}}{L_{jt}}\right) + \beta_{15} \ln(GDPpc_{it}) + \beta_{16} \ln(GDPpc_{jt})\Big) + \varepsilon_{ijt}$$

where $X_{ijt}^{Industry}$ is the bilateral trade flow from country *i* to country *j* in a specific industry, $tariff_{ijt}$ are bilateral applied tariff duties, RTA_{ijt} comes from Mario Larch's Regional Trade Agreements Database[180] and is an indicator variable that takes value of 1 if i and j have a trade agreement in year t, $Dist_{ij}$ is the geographical distance between i and j, $Contig_{ij}$ is a variable that takes value of 1 for country-pairs that share a border, $Lang_{ij}$ is a binary variable equal to 1 if i and j share the same language, and $Colony_{ij}$ captures the presence of any colonial ties. Bilateral tariff duties are from the Market Access Map (MAcMap) database while all the other variables come from CEPII's gravity database.

Additional controls include exporter and importer GDPs as well as per capita GDPs, to account for the level of development that can affect the composition of imports and exports and their quality as well, are from the World Bank's World Development Indicators. Finally, additional controls are included for factor endowments: natural resources and capital per worker.[181] First, to control for the presence of resource rich countries, data from the World Bank is used to construct variables equal to 1 if average rents from oil, coal, and mineral exceed 10 percent of GDP for the 2013-19 period. Second, following Levchenko and Zhang (2014), variables are constructed for capital stock per worker based on data from the Penn World Tables 9.1. Missing information for trade agreements and capital-labor ratios for recent years are replaced with the most recent data available.

To control for the unobservable multilateral resistance terms, "remoteness indexes" are constructed.[182] A popular alternative to this method requires the inclusion of exporter-year and importer-year fixed effects. Fixed effects account for multilateral resistance terms as well as any country specific time determinants of trade. However, in a PPML model, fixed effects impose a perfect fit in terms of total exports and total imports for each country, which implies that countries' total exports would be always perfectly predicted and never departing from their potential.

179 See Head and Mayer 2014
180 from Egger and Larch (2008).
181 Chor, 2010; Romalis, 2004.
182 Baier and Bergstrand 2007; Wei 1996. See Mulabdic and Yasar (2021) for details.

Annex 5: Chapter 5

ANNEX TABLE 12:
REGISTERED AND ACTIVE LARGE-SCALE MINING COMPANIES

LARGE-SCALE MINING COMPANY	MINERAL MINED
Koidu Limited	Diamonds
Meya Mining Ltd	Diamonds
Sierra Diamonds Ltd	Diamonds
Tonguma Ltd	Diamonds
Kingho Mining Company Ltd	Iron ore
Marampa Mines Ltd	Iron ore
Cheng Li Trading Mining Company	Gold
Dayu Mining Ltd	Gold (concentrate)
Wongor Investment and Mining Corporation	Gold
Sierra Mineral Holding	Bauxite
Sierra Rutile Ltd	Rutile, Ilmenite, and zircon

Source: National Minerals Agency.

ANNEX TABLE 13:
REGISTERED AND ACTIVE SMALL-SCALE MINING COMPANIES

LARGE-SCALE MINING COMPANY	MINERAL MINED
CFS Construction and General Supplies (SL) Ltd	Titanium Dioxide, Zircon
Afro-Asia Mining Corporation Ltd	Titanium Dioxide, Zircon
DZT Resources Limited	Titanium Dioxide, Zircon
Kasino Mining Company Ltd	Titanium Dioxide, Zircon
Foison Resources SL limited	Titanium Dioxide, Zircon
WGT Minerals Company Limited	Titanium Dioxide, Zircon
F.S. Mining Company	Titanium Dioxide, Zircon

Source: National Minerals Agency.

SIERRA LEONE COUNTRY ECONOMIC MEMORANDUM

From Potential to Progress:
Structural Transformation and Job Creation
on the Road to Middle-Income Status

THE WORLD BANK