INTERNATIONAL MONETARY FUND

IMF Country Report No. 25/133

NAMIBIA

SELECTED ISSUES

June 2025

This paper on Namibia was prepared by a staff team of the International Monetary Fund as background documentation for the periodic consultation with the member country. It is based on the information available at the time it was completed on May 28, 2025.

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NAMIBIA

SELECTED ISSUES

May 28, 2025

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CONTENTS

NAVIGATING WEATHER SHOCKS: CHALLENGES AND INVESTING TO STRENGTHEN AGRICULTURE RESILIENCE IN NAMIBIA[1]

Namibia's arid climate makes it highly susceptible to severe weather shocks. The prolonged drought in 2023–24 caused a sharp decline in crop yields and exacerbated food insecurity. This chapter documents Namibia's vulnerabilities to future weather shocks, including droughts and changes in rainfall patterns, discusses potential economic and fiscal implications, and explores public investment strategies. Investing in agricultural resilience, including water infrastructure, drought-resistant crops, and farmer insurance schemes, can mitigate climate-induced economic losses and improve food security.

A. Introduction

1. Namibia is one of the most arid countries in the world, rendering it vulnerable to severe weather shocks. With 92 percent of Namibia's land classified as arid, much of the country is inhospitable, owing to severe water scarcity causing challenges in sustaining agriculture and human settlements. The country is ranked as the 21st most water stressed countries globally.[2] This arid environment affects food security, as 11 percent of Namibian households depend on subsistence or commercial farming as the main source of livelihood, which makes them highly vulnerable to drought and water shortages.[3] It also has implications for energy security, as the bulk of domestic electricity generation comes from hydropower, which is planned to be expanded further.[4] During 2020–24, imports accounted for an average of 67 percent of total electricity demand in the second half of the year, a predominantly dry season with lower hydropower generation. In contrast, the import share averaged 54 percent in the first half of the year, which is typically wetter (The Villager, 2024) (NSA, 2024).

2. The vulnerability of the economy, notably agricultural and water-dependent sectors, has been exposed by the drought since 2023. The drought has sharply reduced crop farming output,[5] contributing to slower GDP growth in 2024 and causing serious socio-economic consequences, as agriculture supports 70 percent of the Namibian population directly or indirectly

[1] Prepared by Ankita Goel, Hajime Takizawa (both AFR), Chen Chen and Nooman Rebei (both ICD), Koralai Kirabaeva (MCD).

[2] Aqueduct Country Ranking.

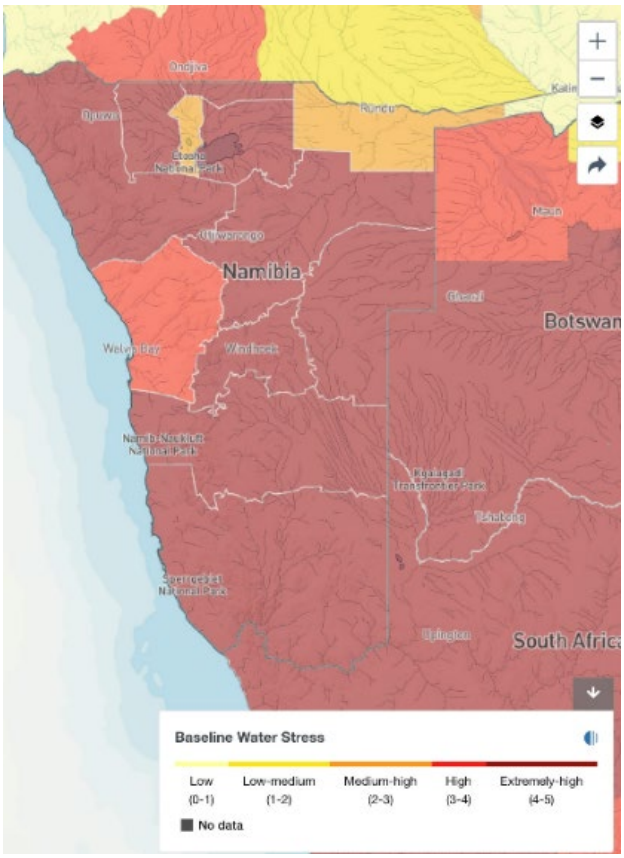
[3] 2023 Population and Housing Census.

[4] For example, Ruacana Hydro Power Station accounted for 79 percent of locally generated electricity in August 2024 when import increased to make up for insufficient domestic supply due to the drought condition.

[5] According to the national accounts data (2024), crop farming was down by 31.7 percent and 6.6 percent in 2023 and 2024, respectively. The crop yields in Namibia were already below the regional average. According to the World Bank, crop yields in Namibia were 649kb per hectare compared with the Sub-Saharan Africa (SSA) average of 1,613 kg per hectare in 2022.

(FAO, Namibia). It led to a sharply higher incidence of food insecurity compared to past years, with approximately 40 percent of the population already facing high levels of acute food insecurity and 84 percent of food reserves exhausted as of September 2024.[6] Furthermore, dam water levels declined by 70 percent, constraining activities in other water-intensive sectors (Reliefweb, 2024).

Figure 1. Water Stress in Namibia



Source: WRI Acqueduct.

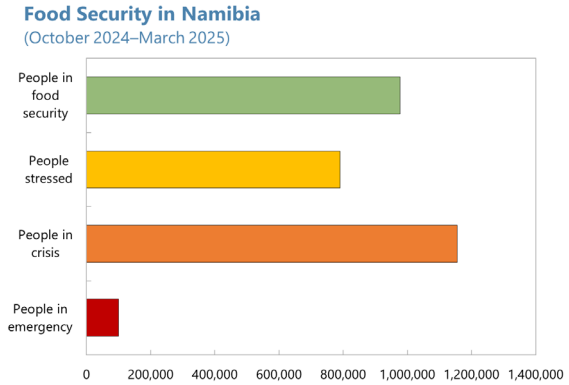
3. Namibia's already vulnerable economy could be exposed to even greater weather shocks in the future. More severe or frequent weather events could increase food and energy insecurity, which could in turn accelerate an internal migration, mostly from rural to urban regions, increase pressures on infrastructure and social services, and exacerbate the already high pressure to address the acute unemployment problem.

4. This paper reviews Namibia's vulnerabilities to extreme weather events and discusses public investment policy options. It reviews historical data on the impacts of severe weather

[6] Food insecurity data as of September 2024. According to the Integrated Food Security Phase Classification (IPC) Acute Food Insecurity Analysis, July 2024–June 2025, prepared by the Namibia Vulnerability Assessment Committee (NamVAC). This analysis has been conducted under the patronage of the MVAC (e.g. Ministry of Agriculture).

events and presents likely future scenarios, followed by a model-based analysis of the need for public investment to mitigate its effects. Since the impact on agriculture will likely be the most prominent channel for such shocks to have macroeconomic and socio-economic consequences in Namibia, it builds on a two-sector model encompassing the agricultural sector. Key recommendations include scaling up public development investment aimed at raising productivity in the agricultural sector, increasing public adaptation investment to build climate resilience of the sector, and improving public investment management.

Figure 2. Impact of Drought in 2024



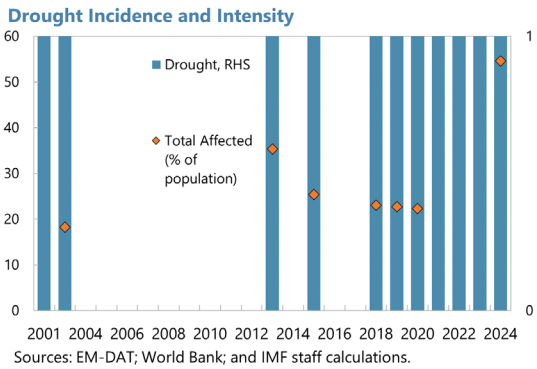
Source: Namibia, IPC Acute Food Analysis, July 2024–June 2025.

B. Namibia's Vulnerability to Severe Weather Events and Climate Change

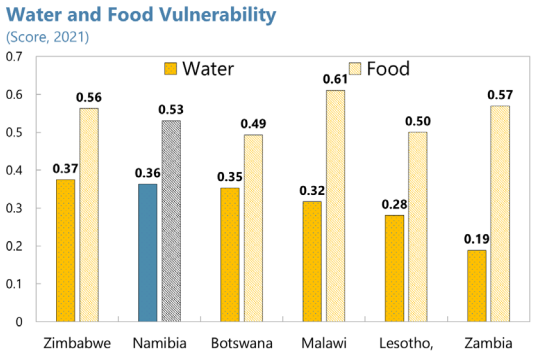
5. Namibia's climate has undergone significant changes over the past century, marked by rising temperatures. The average annual temperature in Namibia has increased by 1.2°C, reflecting a broader global warming trend.[7]

6. Rainfall patterns in Namibia have become more unpredictable and variable. Namibia is facing more frequent droughts and a steady decline in annual rainfall, with the incidence of natural disasters rising over the past few decades (Figure 3, left panel).

Figure 3. Climate Vulnerabilities



Sources: EM-DAT; World Bank; and IMF staff calculations.
Note: Years 2001, 2021, 2022 and 2023 have missing data on people affected.



Sources: IMF-Adapted ND-GAIN Index.
Note: Higher score indicates more vulnerability.

7. Namibia is vulnerable to severe weather events. According to the ND-GAIN Index, Namibia ranks 109th out of 187 countries for climate vulnerability, with heightened vulnerabilities in water (in dam capacity) and food security (in agricultural capacity) (Figure 3, right panel). The country also ranks 77th out of 163 nations on the Children's Climate Risk Index, placing it at a

[7] Namibia - Climatology | Climate Change Knowledge Portal.

medium-high risk level. Furthermore, Namibia's INFORM Climate Change Risk Index score of 3.2 reflects a moderate level of risk, driven by high exposure to droughts, floods, and epidemics.[8]

8. Concurrently, severe weather events have caused socio-economic damages in Namibia. Drought and flood have been their major causes, often affecting a large share of the population (3 million in 2023):

- Droughts between 2013 and 2016 affected approximately 450,000 people and caused wide-spread food insecurity across the country. Another drought in 1991 impacted over 550,000 people, including around 200,000 children, and resulted in damages worth 4 percent of GDP.[9] (UNICEF Namibia, 2019).

- Flooding events have also intensified, affecting roughly 70,000 people each year. In 2011, a major flood impacted nearly 500,000 people, displacing over 60,000, with 19,000 requiring relocation camps and resulting in 65 fatalities (UNESCO, 2021).

- According to the 2023 Housing and Population Census, 6.1 percent of total deaths between October 2022 and September 2023 were caused by natural disasters.

9. Water resources in Namibia are also facing significant strain. Water accessibility has worsened over decades in urban Namibia (Figure 4, left panel). The reduced water levels in the Kunene River have caused water shortages for both domestic use and agriculture including livestock and has also affected the output of the Ruacana hydropower plant, a key source of electricity for Namibia (IFRC, 2022) (Namibia Economist, 2023) (News24 Business, 2022). Worsening water availability could weigh on other water intensive sectors such as food and beverages (Figure 4, right panel). Erratic floods can lead to damages worth 0.4 percent of GDP by 2030.[10] And water stress in Namibia is projected to be extremely high for the next 30 years.[11]

10. Namibia has a legal framework and regulations for water resource management in place, but effective implementation requires further work. Namibia's traditional water sources include groundwater (45 percent), perennial border rivers (33 percent), and impoundments on ephemeral river (22 percent).[12,13] Persistent future droughts are likely led to falling ground water tables and reduced surface water flows, posing challenges to water supply infrastructure and

[8] INFORM Climate Change Risk Index is a tool designed to assess the risk of humanitarian crises and disasters influenced by climate change.

[9] IMF staff calculations using data from EM-DAT and World Economic Outlook.

[10] WRI Acqueduct Floods and IMF staff calculations.

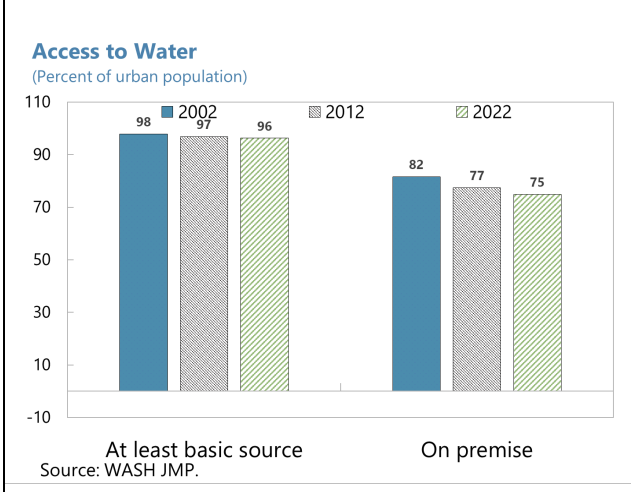
[11] In the business-as-usual scenario by WRI Acqueduct Water Risk Atlas.

[12] Namibia. (2020). Fourth National Communication to the United Nations Framework Convention on Climate Change.

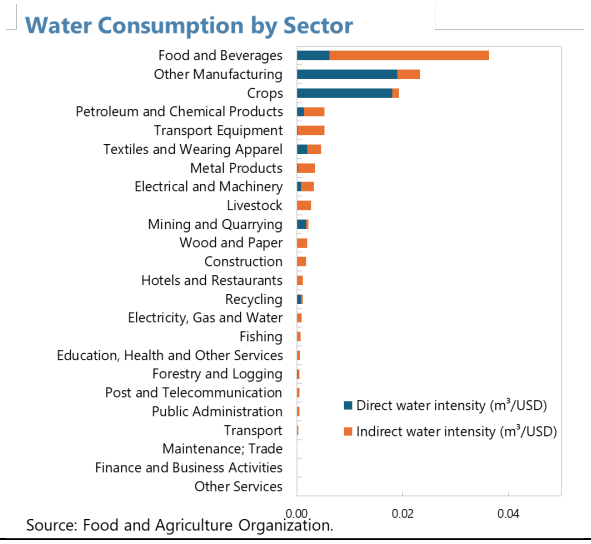
[13] Additionally, unconventional water sources (e.g., desalinated water) have been adopted to augment the limited traditional sources.

water quality. Against this backdrop, Water Resources Management Act of 2013 outlines the sustainable management, use, and protection of water resources in Namibia. It also provides for regulation and monitoring of water services providers to ensure proper management of these resources. The 2023 Water Resources Management Regulations operationalize the Act by enforcing water use licensing, infrastructure registration, and groundwater protection. However, effective implementation has been hindered by several factors, including institutional capacity and financial constraints, administrative burdens for rural users, high compliance costs, inadequate data and monitoring infrastructure, and limited public awareness. This prompted the authorities to enhance financing mechanisms, strengthen cross-border water cooperation, build institutional and human capacity in water resource management, and promote more efficient water use.

Figure 4. Water Utility by Households and Producers



Source: WASH JMP.

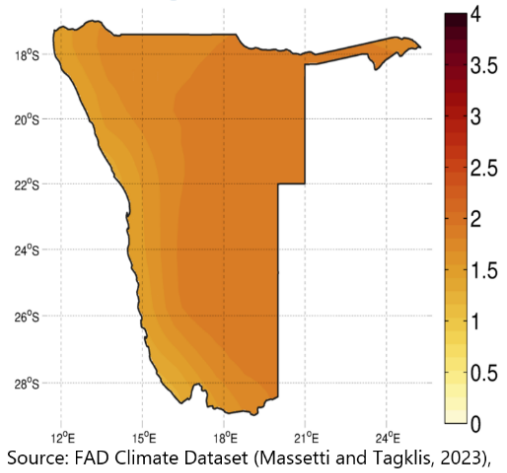


Source: Food and Agriculture Organization.

11. Namibia's vulnerability to climate change is expected to intensify over time, with rising temperatures, shifting rainfall patterns, and more frequent extreme weather events. There is strong confidence in an increase of Namibia's average annual temperatures by at least 2˚C by 2050. Under a high-emissions scenario, this rise could reach 4˚C, while a low-emissions scenario suggests a range of 1.1–3.1˚C. Additionally, both daily minimum and maximum temperatures are projected to rise, with 15 to 40 more days each year expected to exceed 35°C across the country. Such conditions are likely to affect disproportionately vulnerable groups, especially the elderly, and will heighten demand for public health services. While precipitation projections are less certain, the staff has moderate confidence that Namibia will become generally drier and average rainfall may fall by 12 percent by 2050 (Figure 5).

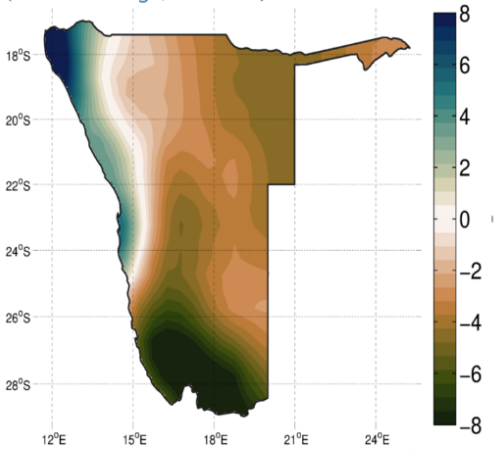
Figure 5. Weather and Precipitation Projections Under SSP2–4.5

Projected Increase in Temperature by 2050
(Units Celsius Degrees, SSP2–4.5)



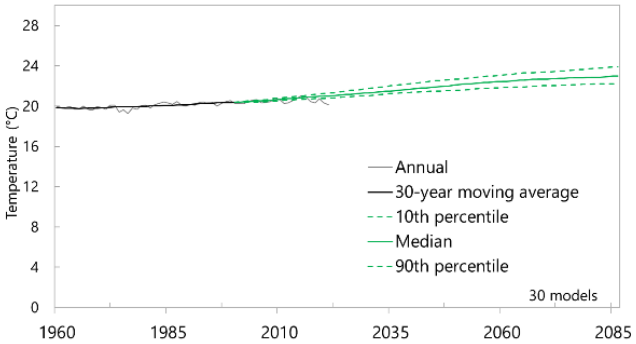
Source: FAD Climate Dataset (Massetti and Tagklis, 2023), using Climate Research Unit data (Harris et al., 2020).

Projected Increase in Precipitation by 2050
(Percent change, SSP2–4.5)



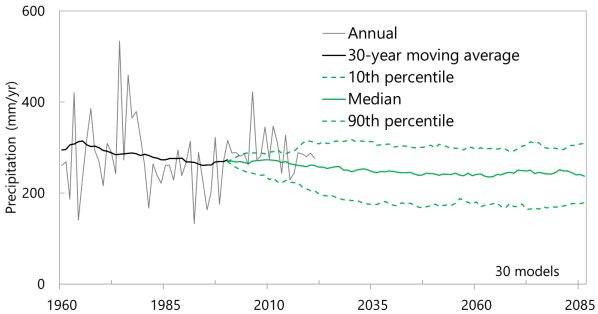
Source: FAD Climate Dataset (Massetti and Tagklis, 2023), using Climate Research Unit data (Harris et al., 2020).

Historical and Simulated Annual Average Temperature
(SSP2-4.5)



Source: FADCP Climate Dataset (Massetti and Tagklis, 2024), using CRU data (Harris et al., 2020), and CMIP6 data (Copernicus Climate Change Service, Climate Data Store, 2021: CMIP6 climate projections).

Historical and Simulated Annual Average Precipitation
(SSP2-4.5)



Source: FADCP Climate Dataset (Massetti and Tagklis, 2024), using CRU data (Harris et al., 2020), and CMIP6 data (Copernicus Climate Change Service, Climate Data Store, 2021: CMIP6 climate projections).

12. Overall, climate change impacts will likely have substantial economic and fiscal consequences. Historical data are indicative of the climate shocks increasing vulnerabilities in the agricultural and energy sectors. A simple VAR analysis indicates that a severe drought condition is estimated to have an adverse impact on GDP growth (Figure 6).[14] As climate change progresses, traditional agriculture production may drop by 40 percent in moderate climate scenario to 80 percent in an extreme climate scenario, and livestock carrying capacity could fall by 20–50 percent by 2050 (IIED, 2007). In terms of energy, rising temperatures alongside Namibia's progressive industrialization and urbanization will drive electricity demand higher. However,

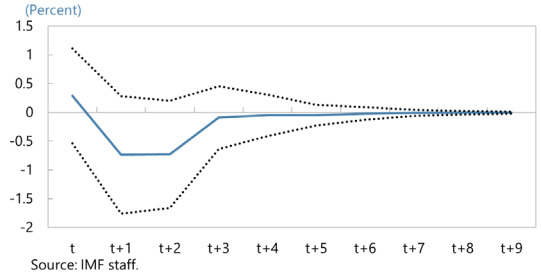
[14] GDP growth is estimated to have been lowered by 0.7 percentage points in the year following a drought shock.

increased heat could reduce hydroelectric supply and potentially limit imports, on which Namibia currently depends for half of its electricity needs.

Figure 6. Impact of Drought on Real GDP

Impulse Response Function for Real GDP Growth Following Severe Drought 1/

(Percent)



Source: IMF staff.

1/ Based on a VAR encompassing agriculture GDP growth, real GDP growth and a dummy variable for precipitation. Dotted lines represent 90 percent confidence interval. t=year.

13. Responding to the impacts of the drought has required fiscal resources. The government made a cumulative budgetary allocation of 0.9 percent of GDP in FY23/24 and FY24/25 to respond to the crisis caused by the drought. It rolled out a nationwide drought relief program aimed at supporting over half of the country's population across all 14 regions. The program includes food assistance (through distribution of food and food voucher), provision of seeds and horticultural supplies, support for the sale of livestock, and improvement of water access.[15]

C. Public Investment Strategy to Improve Agriculture Resilience

14. It is important to strike a balance between ex-post intervention to deal with damage in the agricultural sector and ex-ante building of resilience. The significant fiscal outlays related to the drought relief program in the past two years have highlighted the importance of building resilience. Furthermore, balancing investments between adaptation and broader development goals would help minimize climate-related losses while using fiscal resources more efficiently.

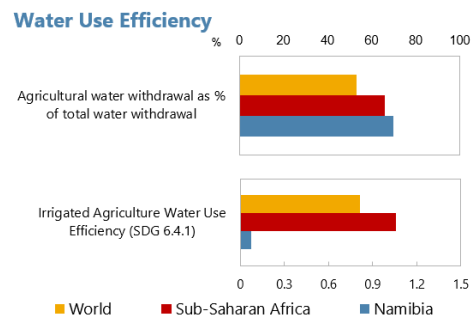
15. Efforts to build resilience are already under way. The government is developing a National Resilience Building Strategy to implement cost-effective adaptation and resilience measures for key hazards identified in a national risk profile. It is also preparing for a Green Climate Fund project aimed at strengthening climate information and early warning systems to enhance adaptation planning. To strengthen resilience to increasing aridity, the government envisages scaling up capital expenditure on water infrastructure as laid out in the FY24/25 budget, at the annual cost of 0.3 percent of GDP on average over the Medium-Term Expenditure Framework for FY24/25–26/27.

16. There remains ample room to improve adaptation capacity. Despite the high share of water used in agriculture, efficiency of irrigated agriculture water use in Namibia is lower than the Sub-Saharan Africa region (Figure 7, left panel). Disaster preparedness of Namibia, which is a measure of adaptation capacity, is well below those of comparator country groups (Figure 7, right panel).

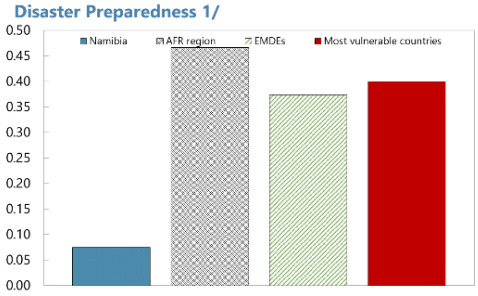
[15] The authorities' efforts are also complemented by international communities. For example, United Nations is allocating $3 million through the Central Emergency Response Fund (CERF) for drought relief efforts. The funding will be used to provide cash assistance, rehabilitate water supply points, treat acute malnutrition, and support survivors of gender-based violence.

17. This chapter explores public investment strategies to mitigate the climate-related damage to the agricultural sector. Agriculture is highly vulnerable to climate change. Indeed, extreme weather events in Namibia have affected primarily the agricultural sector, with consequences for food security given the prevalence of subsistence farming. Investment in agriculture is important for raising productivity and reducing future damages to output that could be caused by intensified weather-related shocks.

Figure 7. Water Efficiency and Disaster Preparedness



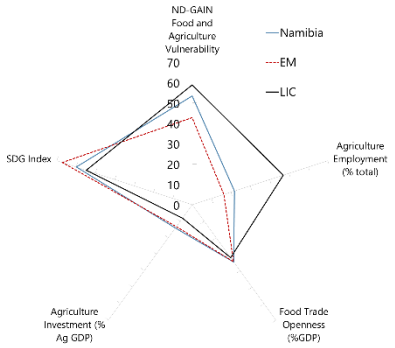
Source: IMF staff estimates using FAO Aquastat.



Sources: ND-GAIN Vulnerability Index; and subcomponents.
1/ Disaster preparedness is one element of the ND-GAIN Vulnerability Score. Specifically, disaster preparedness is an adaptive capacity indicator within the Vulnerability Score. Higher score indicates more preparedness.

18. We use a Climate Adaptation and Food Security model to study investment needs for agricultural adaptation, taking into accounts broader development needs (Chen, 2024). The model incorporates both agricultural and non-agriculture sectors, international trade, and two types of public capital stocks used in the agricultural production. Food import is an important component to help ensure food security, although its role as a mitigating factor against local weather shocks might diminish as the climate change could increasingly affect the agricultural output and prices globally. Furthermore, subsistence farming is prevalent in Namibia. Strengthening climate-resilience in the agricultural sector is therefore key to ensuring food security. The model distinguishes broad development capital, which enhances production, and adaptation capital, which also mitigates climate change damages and costs more to build. Examples include promotion of climate-resilient farming technology and enhancement of climate resilience of infrastructure.

Figure 8. Elements of Balanced Adaptation Strategy in Namibia, 2019



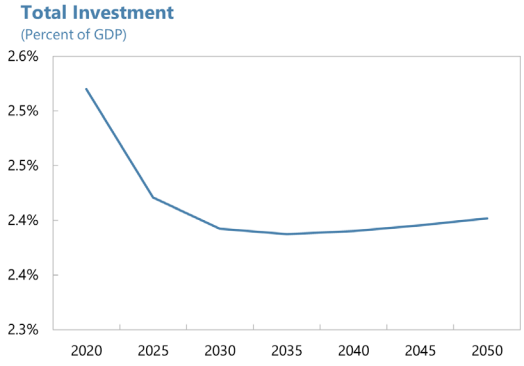
Sources: ND-GAIN Index; IMF, World Economic Outlook; World Bank, Sustainable Development Report; and Food and Agriculture Organization.

19. The model is calibrated to capture salient features of the Namibian economy. The current level of public spending on agriculture is estimated at 0.7 percent of GDP, while the share of agricultural consumption from imports is comparatively high at 39 percent. The model uses the country-specific central projection from Cline (2007) to calibrate a parameter that determines agricultural productivity loss from climate change. In particular, 3.3˚C warming is projected to lead to

agricultural productivity loss by 27 percent in Namibia without adaptation. Efficiency of adaptation investment capital, which determines the extent of loss-mitigation effect of the capital, is calibrated based on the SSA average reported in Agrawala (2010). Specifically, adaptation investment rate of 0.01 percent of GDP per year reduces climate change-induced damage by 30 percent. There are, however, great uncertainties regarding the efficiency of adaptation investment. An alternative assumption that 0.1 percent of GDP adaptation investment per year is needed to achieve the same reduction in damage is also explored to illustrate how lower efficiency of adaptation investment (by ten folds) affects the optimal mix of investments.

20. The analysis shows that offsetting fully climate change-induced damages requires substantial scaling-up of development investment. If no financing constraint is imposed, the model estimates that 2.4–2.5 percent of GDP investment in development capital per year through 2050 will mitigate a substantial part of climate change damages (Figure 9).

Figure 9. Total Investment Under no Financing Constraints



Source: IMF staff.

21. In light of limited fiscal space, analysis is conducted on the effect of allocating resources between development and adaptation investment. In particular, two public investment policy options— (1) only standard development capital and (2) a combination of both development and adaptation capital— were simulated under a binding financing constraint of 1.5 percent of GDP, the resulting endogenous variables (output, investment, exports, and imports) are presented as percentage deviations from a counterfactual of "no climate change" baseline (Figure 10).

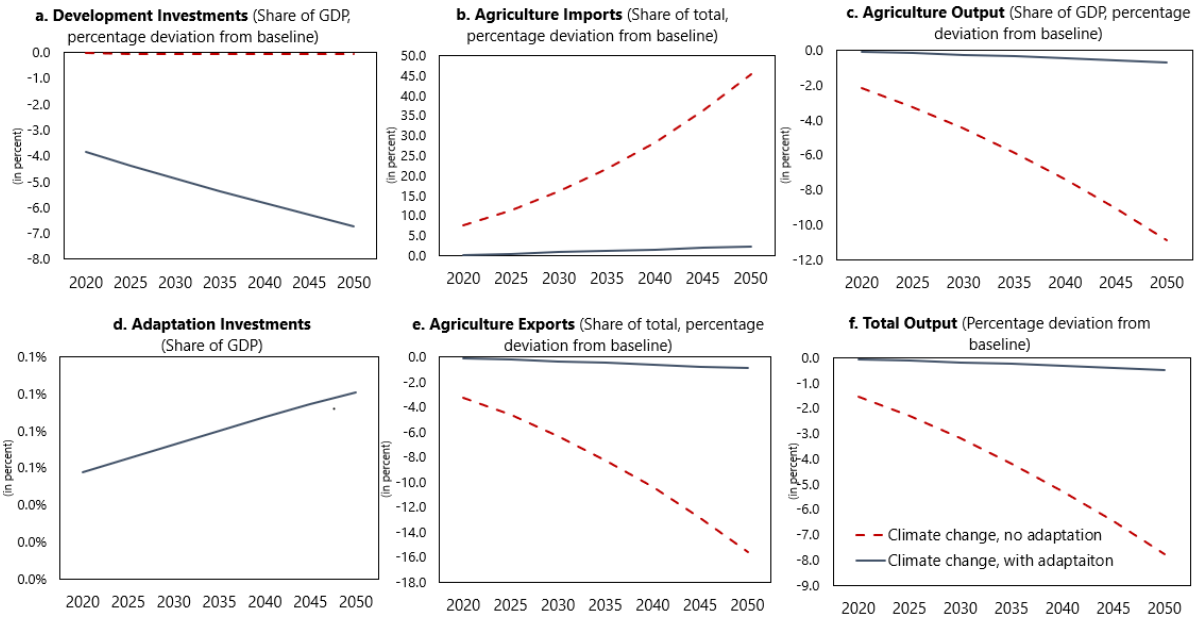
22. The simulation shows the significant benefit of a modest amount of allocation for adaptation investment under a binding financing constraint. Underinvesting in adaptation would require a higher level of total development investment to contain the impacts of climate-related shocks.

- Under the binding financing constraint, climate change is projected to result in substantial damage over time if investment is made only for development capital. A lack of investment in adaptation is projected to lower agricultural output by ten percent and total outputs by seven percent relative to the no-climate change counterfactual in 2050 (dashed red lines in Figure 10). Similar impacts are also observed for agricultural net imports: imports are projected to increase by 45 percent relative to the baseline, while exports are 16 percent lower.

- However, reallocating a modest amount of public development investment to adaptation investment would reduce damages considerably. Investing in adaptation would entail reallocating part of financing from investing in standard development (blue solid lines in Figure 10), while keeping the total amount of public investment at 1.5 percent of GDP. Under this

second policy option, a total output loss would be limited in within 0.5 percent by 2050 compared with the no-climate change counterfactual, reflecting the damage-mitigating effect of adaptation investment. Other key variables also improve substantially under this policy option.

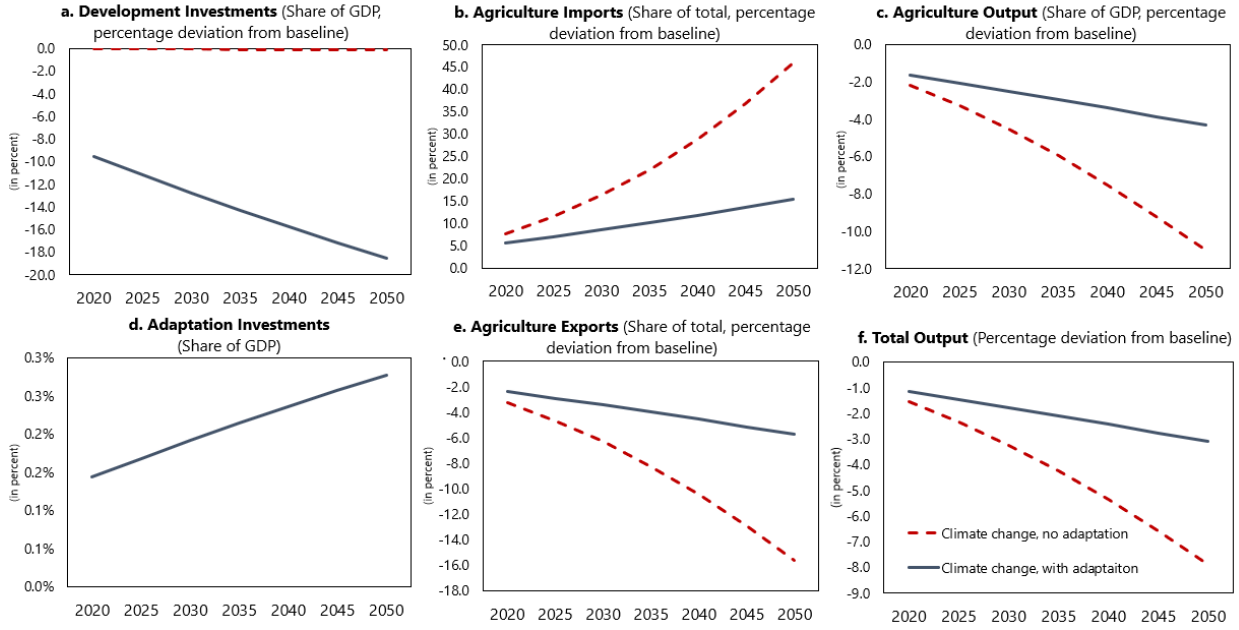
Figure 10. Two Public Investment Policy Options—Default Assumption on Efficiency of Adaptation Investment



Source: IMF staff.

23. The model suggests that a cost-effective mix of development and adaptation investment in Namibia can be achieved with a modest amount of allocation to adaptation investment. The optimal split is a combination of adaptation investment of 0.1 percent of GDP and development investment of 1.4 percent of GDP. The result of an alternative assumption about efficiency of adaptation investment is qualitatively similar but tilts the optimal mix toward a slightly larger allocation to adaptation investment (0.3 percent of GDP) than the default case, with an output loss of 3.1 percent by 2050 (Figure 11). The relatively low optimal level of adaptation investment reflects high food import dependency and significantly larger productivity gap between agricultural and non-agricultural sectors (therefore greater room to close it) compared with those in similar income-level countries. However, continued high reliance on food imports exposes the economy to regional and global shocks, including impacts of climate change and trade fragmentations, which limits trade and the scope for food imports as other countries prioritize meeting their own food consumption needs. In the event, the country would be forced to increase investment to raise agriculture productivity. Likewise, closing of the productivity gap implicit in the model might not materialize given the prevalence of subsistence agriculture.

Figure 11. Two Public Investment Policy Options—Alternative Assumption on Efficiency of Adaptation Investment



Source: IMF staff.

D. Conclusions

24. It is crucial to plan and implement a sound and fiscally feasible adaptation investment strategy to boost the resilience of agriculture. Climate-related shocks will likely cause more frequent or severe economic damage, leading to increased fiscal costs to mitigate the associated damage, as evident from the experience of the ongoing drought. The authorities are appropriately aiming to increase public investment to build climate resilience.[16] The model-based analysis suggests that investment needs for public development capital to offset climate-related production loss in the agricultural sector could be large but cost-effective combination of development and adaptation investment could reduce such loss at relatively modest costs. To realize the benefits of such investment, it is crucial to improve public investment management as there currently is a significant scope for improvement, as highlighted in Public Investment Management Assessment (PIMA) and Climate-PIMA undertaken in 2024. It is also advisable to reduce reliance on food imports by implementing measures to raise agriculture productivity.[17]

25. Continuing complementary efforts to strengthen adaptation are also important. The ongoing development of the National Resilience Building Strategy provides an opportunity to improve practices that help increase agriculture productivity and food security. Potential measures include encouraging greater adoption of drought resilient crops and livestock and mixed farming,

[16] FY 2024/25 Mid-Year Budget Review Statement.

[17] As recommended by GIZ Sector Brief: Namibia 2022 and A Growth Diagnostic of Namibia, 2022.

improving water management system, and strengthening early warning system. Expanding access to insurance mechanisms could help distribute risks, thereby cushion individuals and economies from financial shocks of climate-induced natural disasters and facilitate recovery efforts. Development and adoption of crop and animal insurance could be encouraged. Other insurance products could mitigate shocks against natural disasters.[18] Together, these efforts help alleviate the financial burden of disasters, enabling affected populations to recover more efficiently and sustainably.

[18] One notable initiative is the Global Index Insurance Facility (GIIF), launched by the World Bank, which provides affordable insurance solutions to farmers and micro-entrepreneurs in emerging economies, particularly in Sub-Saharan Africa. The program aims to shield vulnerable communities from climate-related risks such as droughts and floods. Similarly, the InsuResilience Global Partnership focuses on strengthening the financial resilience of poor and vulnerable populations.

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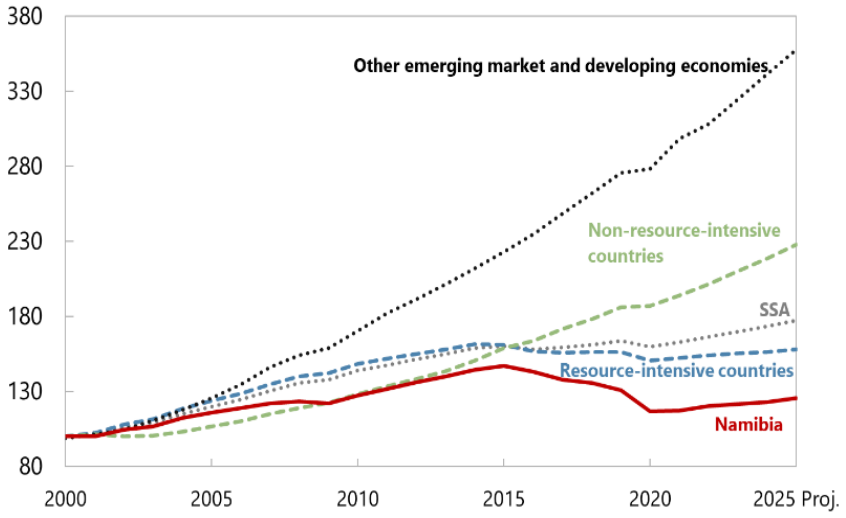
NAMIBIA: LABOR MARKETS AND RESOURCE DEPENDENCE [1]

With high unemployment, especially among the youth, Namibia lags behind resource-intensive economies and the SSA region on labor market outcomes. Between 2012 and 2018, there was a structural shift in the economy from agriculture to services, as younger workers took up service sector jobs. However, labor productivity in the services sector remains low. A shift-share analysis highlights that resources are not allocated to relatively more productive firms in the services sector, consistent with the weak real GDP per capita growth in recent years. The ongoing oil and gas exploration (and potential production in the future) offers an opportunity for economic growth and job creation, but also presents risks of worsened labor market outcomes. To unlock the full potential of its labor force, Namibia should develop a comprehensive strategy to reduce skill mismatches, address skill gaps, improve the education and Technical Vocational Education and Training (TVET) systems, implement balanced local content policies, prioritize infrastructure, and reduce regulatory barriers.

A. Introduction

1. Per-capita GDP growth in Namibia has slowed in the last decade. While Namibia has experienced remarkable growth since gaining independence in 1990, real GDP per capita growth has weakened in recent years, and now lags behind other resource-intensive countries and the broader SSA region (Figure 1), despite the overall weaker performance of resource-intensive economies following the commodity price shock of 2015 (IMF REO, 2024). Namibia ranks 2nd globally in income inequality (based on the Gini index). Weak per-capita growth and inequality jeopardize economic development and Namibia's prospect for convergence towards other

Figure 1. Real GDP Per Capita (Index: 2000=100)



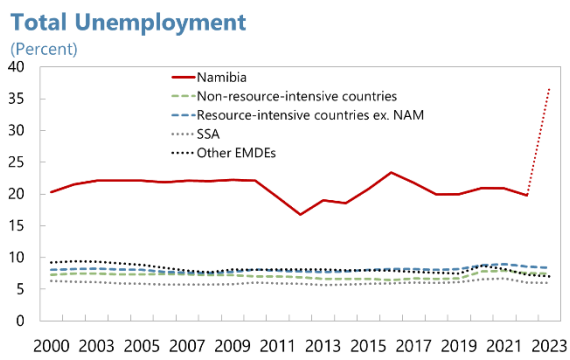
Sources: IMF, *World Economic Outlook*; and IMF staff calculations.
Note: The series show the evolution of GDP per capita in constant local currency. Country group composites are calculated as the arithmetic average of data for individual countries weighted by GDP valued at purchasing power parity as a share of total group GDP. SSA = sub-Saharan Africa.

[1] Prepared by Sanghamitra Mukherjee.

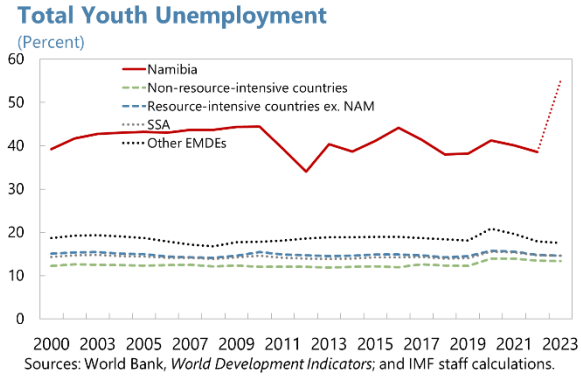
Emerging Market and Developing Economies (EMDEs)[2].

2. Namibia has also done relatively poorly in terms of labor market outcomes. With an unemployment rate of 36.9 percent (54.8 percent among youth) in 2023 (based on the 2023 labor force survey (LFS)), Namibia is an outlier relative to countries in SSA and EMDEs (Figure 2)[3]. A high dependence on resources is partially responsible for this outcome. The mineral sector contributes 13.6 percent to Namibia's GDP in 2023. However, due to its high capital intensity, it employs only about 1.4 percent of the population (based on 2018 labor force survey). Furthermore, mining sector rents are not well redistributed. Figure 2 also shows that resource rich countries lag behind non-resource-rich countries in SSA on employment outcomes, particularly so in fuel-rich countries.

Figure 2. Unemployment: Namibia vs. Comparators



Sources: World Bank, *World Development Indicators*; and IMF staff calculations.
Note: SSA=sub-Saharan Africa. EMDE=Emerging Market and Developing Economics.



Sources: World Bank, *World Development Indicators*; and IMF staff calculations.
Note: SSA=sub-Saharan Africa. EMDE=Emerging Market and Developing Economics.

Note: The dotted line (Namibia) between 2018 and 2023 highlights that the numbers cannot be compared due to a change in the methodology.

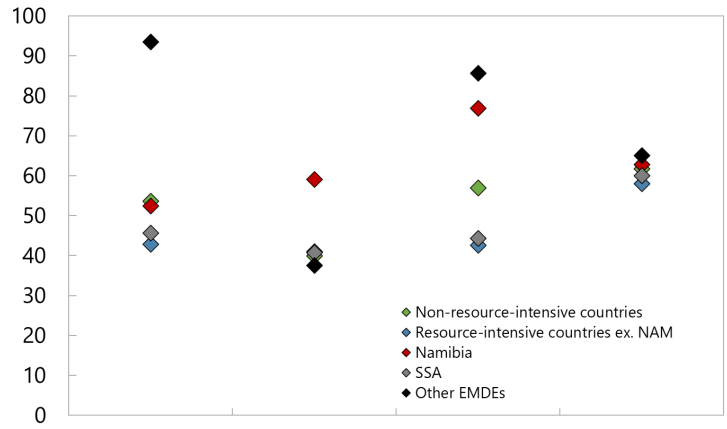
3. Job creation emerged was a top priority in the ruling party's fall 2024 election campaign, and is a central pillar of its implementation plan. The SWAPO party promised to create a quarter million jobs (absorbing approximately 24 percent of the labor force) in sectors such as agriculture, construction, and oil and gas in the next five years by investing over N$85 bn (nearly 30 percent of 2024 GDP) in priority projects. Given that the government is already the largest employer, the scope for further increasing public sector employment is limited, highlighting an urgent need to cultivate a dynamic private sector and diversify the economy (IFC, 2018).

[2] The very fast growth in non-SSA EMDEs has been largely driven by China. Excluding China from the chart, non-SSA EMDEs have grown at roughly the same rate since 2000 as SSA non-resource-intensive countries.

[3] Unemployment statistics are based on the "strict" definition of unemployment as per the 13th ICLS standards or the main unemployment definition in the 19th ICLS standard to be consistent across countries and over time. This definition excludes workers who have not taken specific steps in a specified recent period to seek paid employment or self-employment. This excludes discouraged workers who may want to work but have stopped actively seeking employment due to barriers such as skill mismatches or repeated rejections, or who looked for work outside of the specific reference period.

4. Namibia faces both opportunities and challenges as it seeks to unlock its growth potential and tackle unemployment. On the one hand, while lagging behind EMDE, Namibia performs better than peers in SSA on key measures such as access to electricity, secondary education, and the business environment (Figure 3). Oil exploration (and potential oil production) offers an opportunity for economic growth and job creation. However, given the low labor intensity of this sector, ensuring that oil wealth is translated into meaningful job growth and reduction of inequality will require policies that allow the whole society to benefit. Local content policies that are geared towards increasing local procurement and increasing spillovers to the supporting manufacturing and service sectors are important, while avoiding creating obstacles to hinder investment (Box 1).[4] Given the persistent and structurally high unemployment rate, a comprehensive strategy for hiring and training domestic workers is key.

Figure 3. Selected Structural Indicators



Sources: World Bank, *World Development Indicators*; World Bank, *World Governance Indicators*; Fraser Institute; and IMF staff calculations.

Box 1. Developing Local Content— Lessons from Other Resource–Rich Countries

Foster technology and spillover effects (Tordo et al., 2013):

- Kazakhstan set up a Registry of Domestic Producers and Foreign Investors to provide local firms and suppliers with information on tender opportunities.
- Brazil mandates oil and gas companies to invest a minimum percent of their gross revenue in oil- and gas-related R&D.
- Malaysia provides tax incentives for R&D localization.
- Trinidad and Tobago set up a joint venture to increase local skill.

Measure local content and audit its compliance (Pereira et al., 2018):

- Brazil offers a certification system to help assess compliance of the relevant metrics agreed in the host granting instruments.

[4] Empirical evidence of the impact of performance requirements on employment is mixed (WTO, 2002). The effectiveness of local content requirements depends on the nature of the requirement, the fit between the requirement and its intended purpose, the circumstances in the host country including existing (or a plan to develop) suppliers of the labor, goods, and services necessary to meet specified local content targets, among other factors (Johnson, 2016).

Box 1. Developing Local Content— Lessons from Other Resource–Rich Countries (concluded)

Avoid imposing high administrative and compliance costs (Tordo et al., 2013):

- Kazakhstan uses standard reporting templates to improve transparency and enhance comparability of information across operators.

Help to develop clusters and regional trade synergies (Tordo et al., 2013):

- Malaysia implemented a comprehensive package of policies in 2010 aimed at making the country a regional hub for the oil related services and equipment.

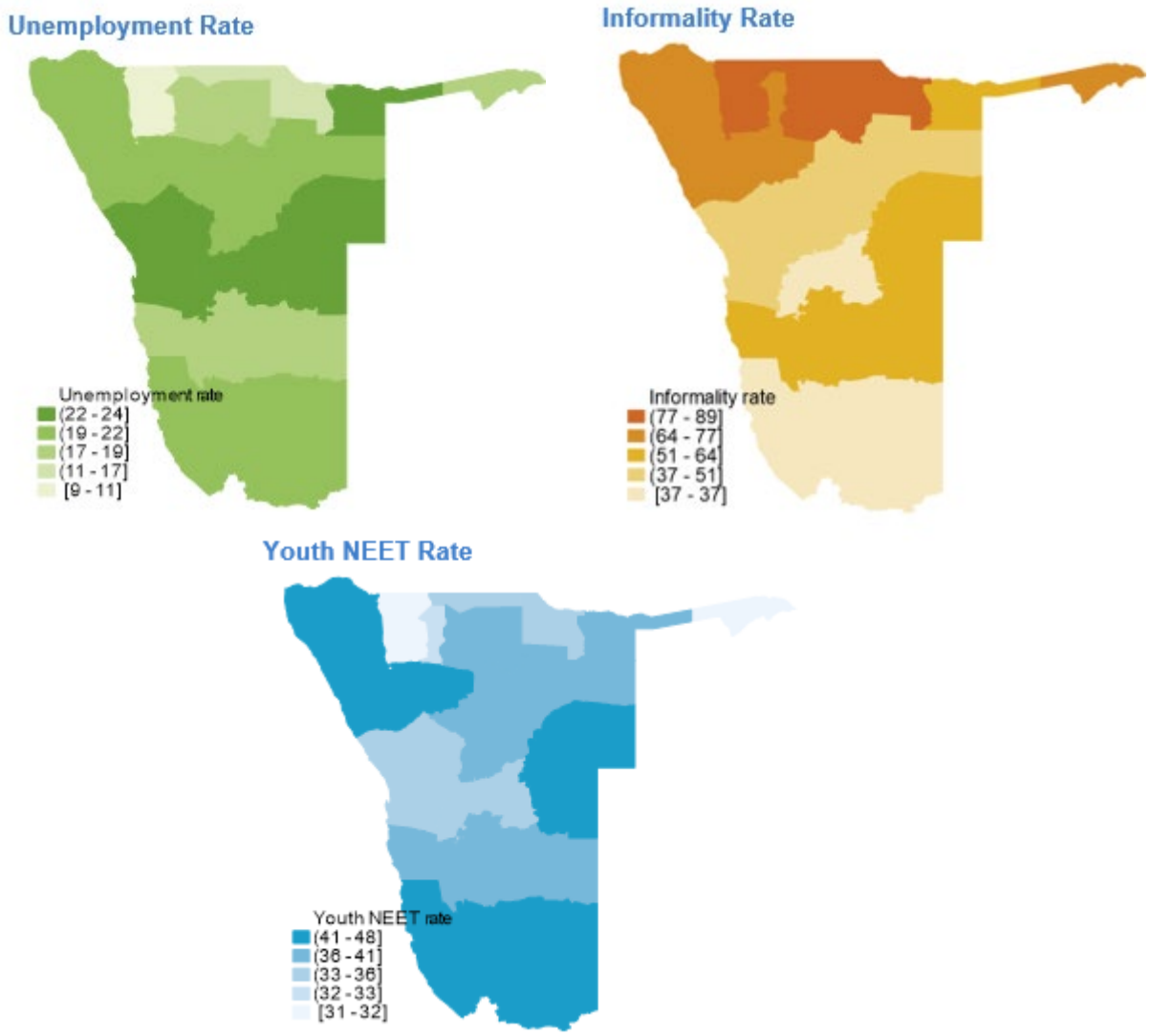
The paper focuses on the spatial and temporal dynamics of the labor market, to form a basis for understanding the issues and designing effective policies.

B. Unemployment Landscape

5. Between 2012 and 2018, Namibia's labor market underwent significant changes, shaped by economic shifts and regional employment dynamics. This analysis is based on four rounds of national labor force surveys (2012, 2013, 2016, and 2018) and examines labor force participation, unemployment, and informality. It also analyzes indicators for the youth, including those "not in education, employment, and training" (NEET). Using ILO definitions, data from these surveys are harmonized across rounds. The information is derived from sample household-based surveys rather than a panel dataset. Nevertheless, comparing averages over time across various sub-groups offers insights into labor market dynamics.

6. While urban areas are characterized by high unemployment, rural regions exhibit high informality (Figure 4). Based on the 2018 LFS, unemployment is highest in the Khomas region (which includes the capital city of Windhoek) and nearby regions of Erongo and Omaheke. In contrast, northern rural agriculture regions, such as Omusati, Ohangwena, and Kavango West, experienced high levels of informality. Additionally, youth NEET rates were concerningly high, particularly in the regions of Kunene, Omaheke, and Karas, where 41-49 percent of young people were neither in school nor employed. Migrant patterns reflected these disparities, with the largest share of workers migrating from the sparsely populated northern region of Ohangwena and Omusati to the more populated Khomas region for employment (Figure 5). The prominent mining regions of Erongo and Karas offer limited employment opportunities, leading to a net outflow of workers from these areas. Ongoing oil and gas exploration activities in the Erongo (Walvis Bay) and Karas (Lüderitz) region could provide employment opportunities by fostering linkages to the domestic economy.

Figure 4. Spatial Distribution of Employment Outcomes in Namibia

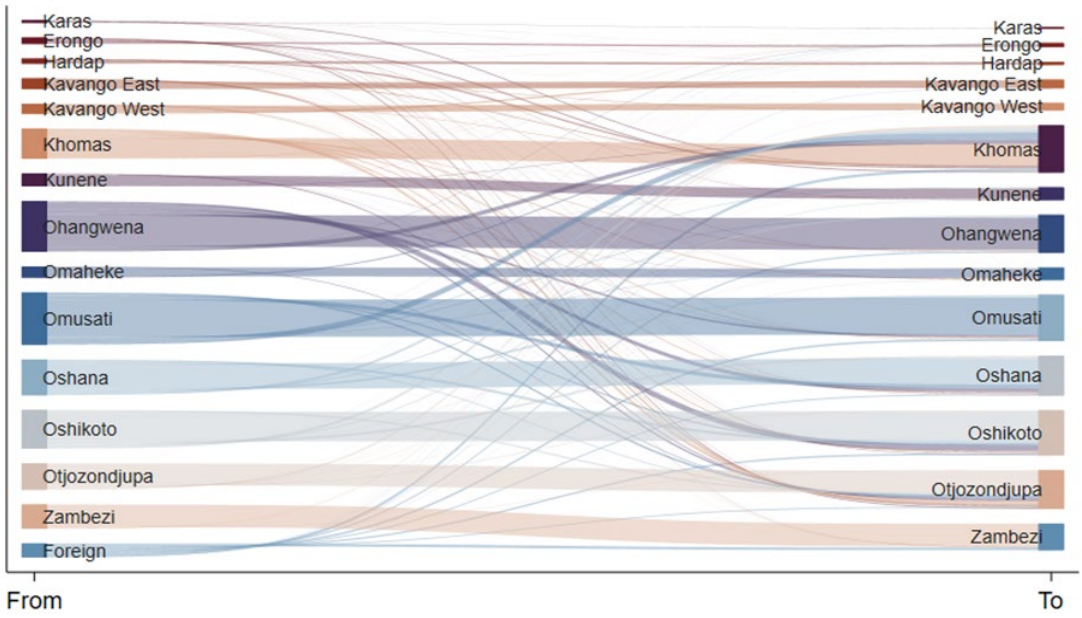


Sources: 2018 LFS; and IMF staff calculations.

7. Between 2012 and 2018, Namibia's economy experienced a structural shift from agriculture to services. While mineral extraction does not directly create much employment, it has had significant spillover effects in Namibia, stimulating employment in manufacturing and services that support mining activities. Between 2012 and 2016, employment expanded across mining, manufacturing, and services, while employment in agriculture and subsistence fell (Figure 6). However, the commodity price shock of 2015 disrupted this trend, leading to a contraction in mining and subsequently reallocation of workers from manufacturing and services back to agriculture and subsistence[5].

[5] "Agriculture" represents firms engaged in agriculture, forestry, and fishing for commercial purposes while "Subsistence" refers to household that produce for own consumption.

Figure 5. Labor Flows

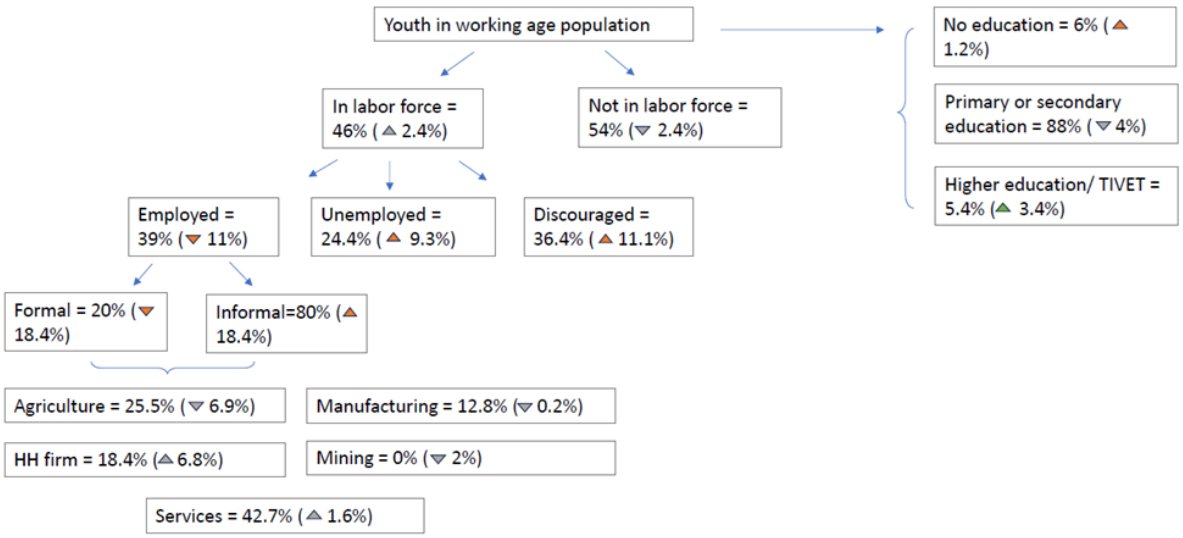


Sources: National Labor Force Surveys; and IMF staff estimates.

8. Younger workers were particularly affected by these economic shifts. Multiple rounds of LFS surveys were used to trace labor movements across sectors for age cohorts over time (Figure 8). Age cohorts react differently to the commodity price shock of 2015. Prior to the shock, all age cohorts were increasingly moving towards services, but the trend was sharpest for younger workers. After the shock, the probability of younger workers working in the service sector continues to increase, while older workers sharply pivot back to agriculture. Meanwhile, the increase in subsistence after the shock was the sharpest for the youngest cohort, with subsistence likely to be their starting position in the labor force.

9. The probability of that a young person in the labor force would be in employment fell by 11 percentage points between 2012 and 2018 (Figure 6), while the probability of being unemployed or discouraged from looking for a job increased by 20.4 percentage points. In addition, amongst employed youths, the probability of being in the informal sector rose by 18.4 percentage points. Equally striking is the small share of the youth in TVET or higher education (only 5.4 percent). Given the new government's focus on job creation, especially for the youth, this highlights important gaps to be addressed.

Figure 6. Change in Unemployment Landscape from 2012 to 2018 1/



Sources: National Labor Force Surveys; and IMF staff estimates.

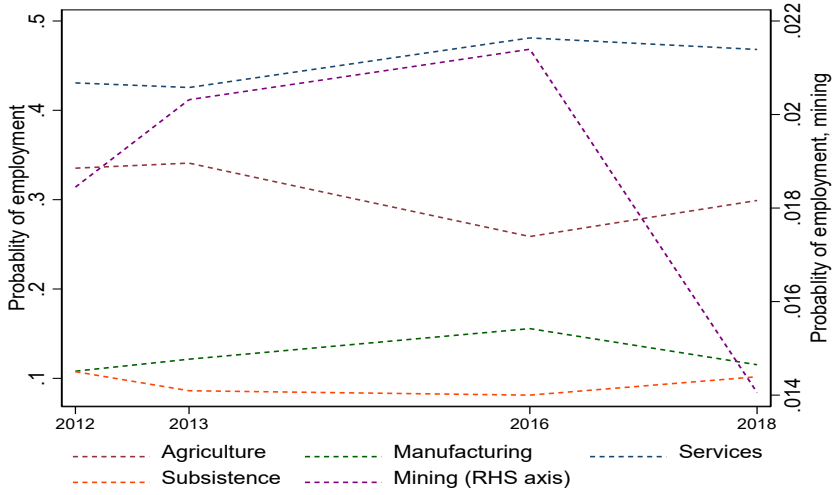
1/ Data for 2023 was collected as part of the Labor module in the 2023 National Census and therefor does not have granular information on the unemployment landscape. Hence, we compare the earliest and latest data available on unemployment for Namibia.

C. Service Sector Labor Productivity

10. If current oil and gas exploration projects in Namibia result in investment decisions and extraction, employment opportunities could arise in the services sector that support extraction activities—many of which primarily employ youth. Service industries, such as retail, trade, accommodation, and food services are well suited to this expansion. However, for workers to take full advantage, they must have the required skills.

11. While there was employment growth in the services sector, labor productivity has remained low. Using data from Dieppe and Matsuoka (2021), labor productivity and employment trends across sectors and over time in Namibia are compared to those in other resources-intensive countries in SSA. Between 1995 and 2018, employment in services increased, but labor productivity showed no improvement (Figure 9). To help make service jobs more rewarding for the youth, it is important to investigate the root causes of low productivity.

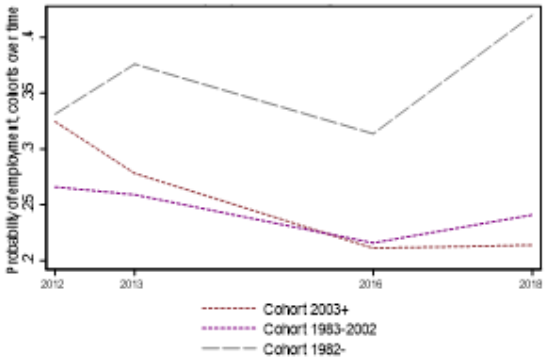
Figure 7. Sectoral Dynamics of Unemployment



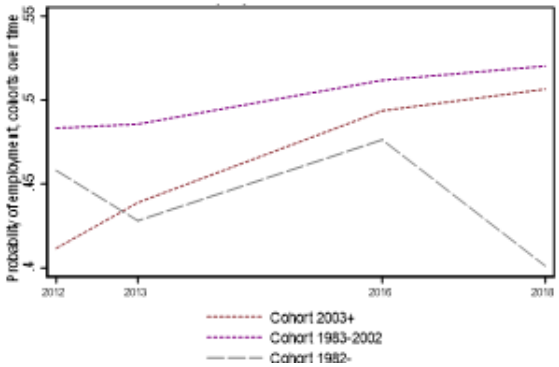
Sources: National Labor Force Surveys; and IMF staff estimates.

Figure 8. Tracing Cohorts Over Time

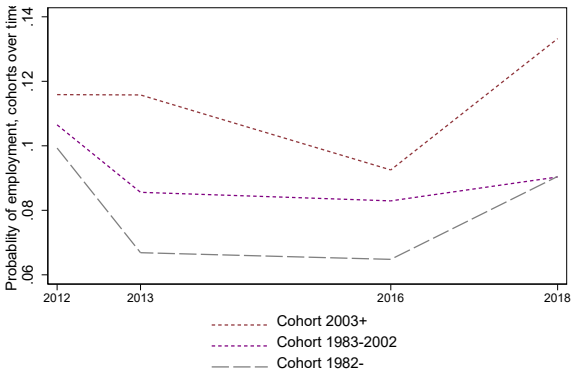
Employment in Agriculture



Employment in Services



Employment in Subsistence



Sources: National Labor Force Surveys; and IMF staff estimates.

12. To examine labor productivity in the services sector between 1995 and 2018, a shift share analysis is used. Following de Vries et al. (2012), McMillan et al. (2014) and Diao et al. (2018), aggregate labor productivity is decomposed into the within-sector and between-sector effects as follows:

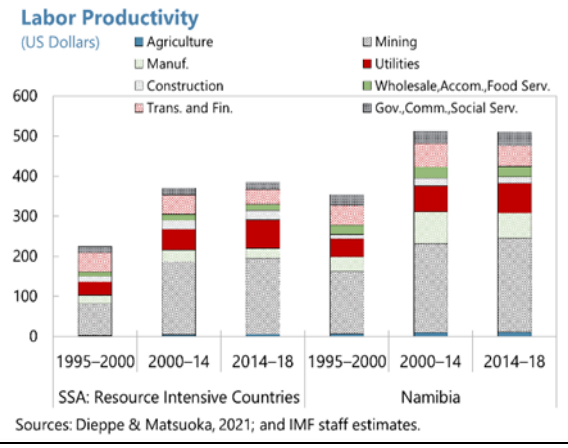
$$\underbrace{\frac{\Delta y}{y}}_{\text{Aggregate}} = \underbrace{\sum_{j=1}^{k} \frac{y_j}{y}\left[\frac{\Delta y_j}{y_j}\right]}_{\text{Within}-j} + \underbrace{\underbrace{\sum_{j=1}^{k}\left[\frac{y_j}{y}\right]\Delta s_j}_{\text{Static}} + \underbrace{\sum_{j=1}^{k}\left[\frac{y_j}{y}\left[\frac{\Delta y_j}{y_j}\right]\Delta s_j\right]}_{\text{Dynamic}}}_{\text{Between}} \quad (1)$$

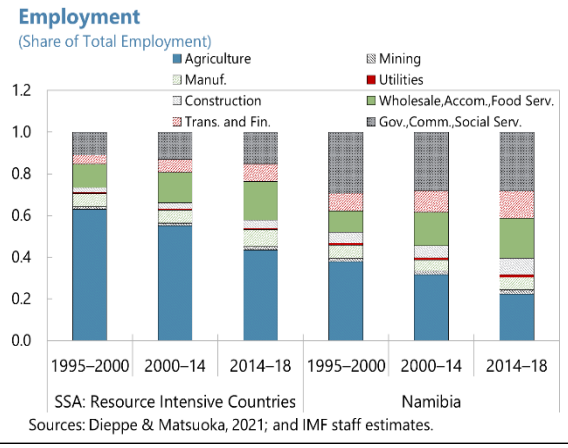
where, y is aggregate labor productivity, y_j is labor productivity of sector j, Y_j is initial value-added of sector j, and s_j is the employment share of sector j.

a. **Within-sector** productivity growth reflects the effects of improvements in human capital, investments in physical capital, technological advantages, or the reallocation of resources from the least to the most productive firms within each sector.

b. **Between-sector** effects are driven by the change in employment share across sectors.

Figure 9. Sectoral Labor Productivity and Employment





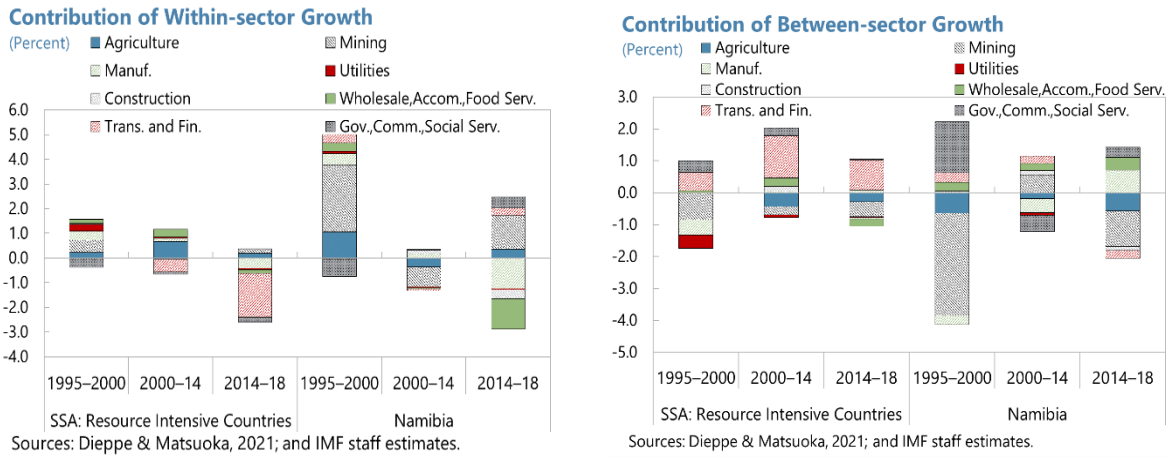
13. Within-sector productivity growth was negative while between-sector productivity growth was positive in Namibia during 1995-2018:

a. **Within-sector** productivity growth for services was negative, indicating a reallocation of resources towards less productive firms (Figure 10). The service sector likely hires youth not because of high skills but because they are willing to work at lower wages.

b. **Between-sector** productivity was positive, indicating that labor moves towards services which has higher productivity than other sectors (Figure 10). This captures

the movement from agriculture, a sector with relatively lower productivity, to services which has relatively higher productivity.

Figure 10. Shift-Share Decomposition



D. Conclusion and Policy Recommendations

14. Namibia has experienced notable growth since independence, but in recent real GDP per capita growth has slowed, while unemployment and inequality have remained high. While the country's resource-intensive sectors contribute significantly to GDP, their capital-intensive nature limits direct employment opportunities, exacerbating labor market challenges. Additionally, Namibia's labor market exhibits stark regional disparities, with urban areas experiencing high unemployment and rural regions dominated by informality.

15. While labor has shifted toward services, which are more productive than agriculture, the sector's productivity has been declining, and resources are not allocated to the relatively more productive firms. The growth in youth employment in services seems driven more by low wages rather than high skills.

16. Long-term economic resilience requires a shift toward a more diversified and dynamic economy, reducing the dependence on the extractive sector. Oil exploration presents an opportunity to bolster growth, but polices are needed to ensure that its benefits are broadly distributed to avoid exacerbating inequality and unemployment. Strengthening education, vocational training, and private sector engagement will be critical in fostering a more inclusive labor market.

17. In this context, policy priorities include:

- **Addressing skills mismatches and skill gaps**. Skill gaps and skill mismatches are significant challenges; however, more recent data are needed to inform policy actions. The last skills audit, from 2006, is extremely outdated. A crucial first step is to collect new data on skill mismatches

and gaps. On the supply side, the national education and TVET system should develop a strategy to train workers with requisite skills and qualifications.[6] This is a foundation for fostering stronger linkages between the mining sector and the local economy.

- **Balancing the need to foster local economy and a conducive environment for the oil and gas industry**. The oil and gas industry is highly capital-intensive and requires complex and specialized technology, limiting both forward and backward linkages to the domestic economy (Tordo et al., 2013).[7] Overly ambitious local content targets could cause supply bottlenecks. With the recent passage of a local content policy bill, careful implementation to strike a balance between attracting FDI while ensuring tangible benefits for the local economy is essential.

- **Implementing a comprehensive and consistent labor market strategy.** Addressing youth unemployment, skill mismatches, and skill gaps requires greater policy alignment. Strengthening the education and TVET systems, implementing a balanced local content policy, prioritizing infrastructure, and reducing regulatory barriers will be key to enhancing labor market resilience and economic diversification.

[6] Approaches for generating fiscal space to support TVET activities differ from one country to another. For example, since Botswana spent almost half of its social spending on tertiary education, redirecting public funding from tertiary education to vocational training and various social programs could help improve social protection's ability to reduce poverty and inequality (IMF Selected Issues. Paper No. 24/287).

[7] Backward linkages include supplying input to the local economy through technology transfer, local ownership and control, and local employment opportunities. Forward linkages include processing output before exporting. For example, through establishment of refineries etc.

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CREDIT DEVELOPMENTS AND MACRO-FINANCIAL RISKS IN NAMIBIA[1]

This chapter examines the evolution of bank credit in Namibia over the past two decades. It highlights notable trends and the composition of credit growth, with a particular focus on the private sector. Additionally, it identifies potential macro-financial vulnerabilities and provides policy recommendations to mitigate associated risks. Furthermore, it underscores the importance of promoting access to credit by businesses

A. Introduction

1. The Namibian financial system is relatively large. As of end-2024, Namibia 's total banking assets amounted to 91 percent of GDP. Most Namibian banks are South African subsidiaries. The non-bank financial sector, twice the size of the banking sector, is mainly comprised of a fully funded government pension (GIPF) and other pension funds, insurance funds, and collective investment schemes. Commercial banks heavily rely on wholesale funding from non-bank financial institutions, representing 15 percent of GDP at end-2024.

2. Taking stock of Namibia's credit developments over the past two decades reveals two salient features concerning trends and composition.

- Trends: Following an initial phase of financial deepening, Namibia's bank credit to the non-financial private sector (households and businesses) stabilized at approximately 50 to 60 percent of GDP since 2005. However, this ratio began to decline during the COVID-19 pandemic, resulting in a negative credit gap. Before the pandemic, the gap was positive.

- Composition: Approximately half of Namibia's bank credit to the private sector has consistently gone to mortgages, a notably high proportion relative to the country's level of financial development, while a growing proportion of credit has been allocated to the public sector.

B. Credit Developments: Trends and Composition

3. Prior to the COVID-19 Pandemic, Namibia experienced growth in domestic credit as a percentage of GDP from 2009 to 2019. During this period, Namibia's credit-to-GDP ratio approached the regional average. The trend reversed after the onset of the COVID-19 pandemic, causing the ratio to dip after peaking in 2020, even though claims on public sector (in percent of GDP) rose as noted below. Since then, the ratio has been declining, underscoring the challenges in credit growth recovery in the aftermath of the pandemic

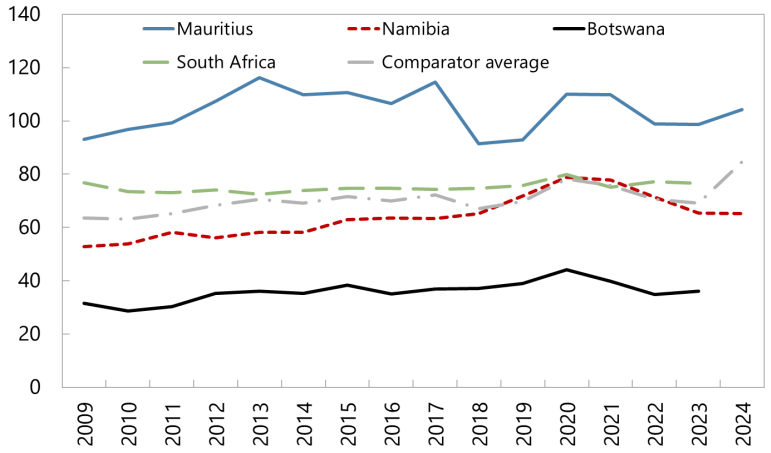
[1] Prepared by Lilian Muchimba and Yumeng Gu with special thanks to the MCM team, Xu Teng Teng and Gurnain Kaur Pasricha for their useful comments.

4. Since 2014, the share of credit to the public sector in total domestic credit has increased steadily to finance the budget deficit (Figure 2)**.** Rising public current expenditures, particularly in wages and salaries, have outstripped revenue, turning the fiscal balance from a surplus of 6.2 percent of GDP in 2007 to a deficit of 4.7 percent of GDP in 2014 (Figure 3). The fiscal expansion was part of the Targeted Intervention Initiative announced in the FY2011/12 budget, which aimed at promoting job creation and fostering a more diversified economy. Claims on the public sector (in percent of GDP) rose further with the onset of the COVID-19 pandemic, coinciding with the widening fiscal deficit.

Figure 1. Domestic Credit: Comparison

Domestic Claims ex. Other Financial Corporations

(Percent of GDP)

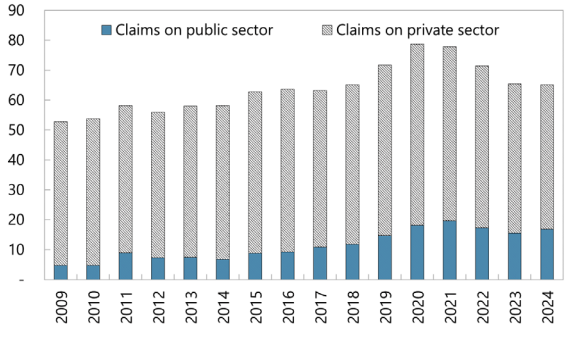


Sources: Haver Analytics; Country Authorities; and IMF staff calculations.

Figure 2. Credit Developments

Breakdown of Domestic Claims

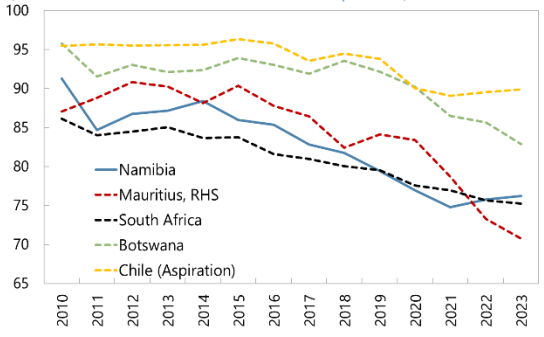
(Percent of GDP)



Sources: Country authorities; and IMF staff calculations.

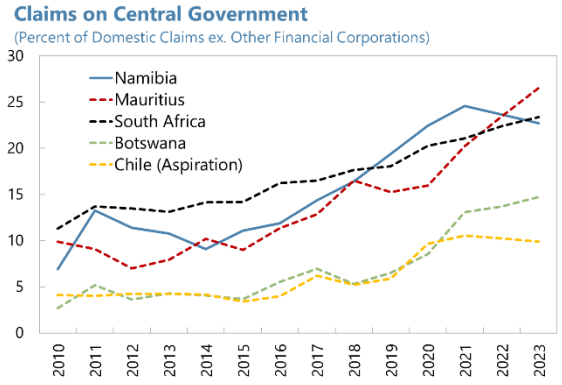
Claims on Private Sector

(Percent of Domestic Claims ex. Other Financial Corporations)

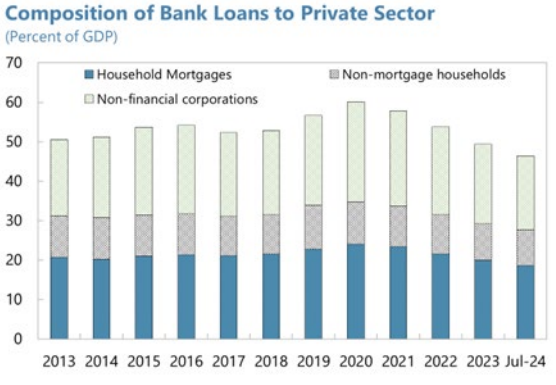


Sources: Haver Analytics; Country authorities; and IMF staff calculations.

Figure 2. Credit Developments (concluded)



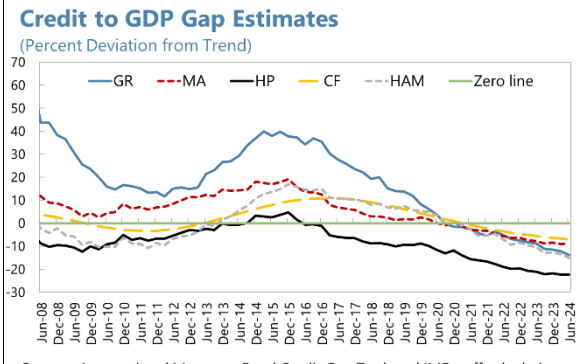
Sources: Haver Analytics; Country authorities; and IMF staff calculations.



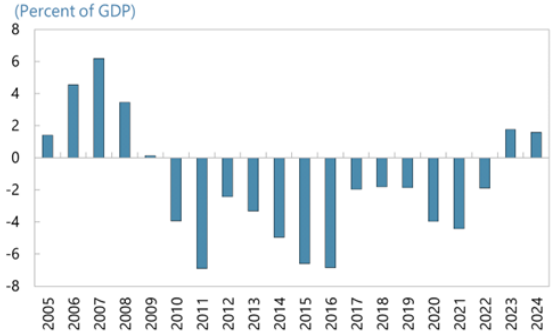
Sources: Bank of Namibia; and IMF staff calculations.

5. Meanwhile, bank credit to the private sector, both as a share of total domestic credit and as a percent of GDP, has declined since the pandemic, resulting in a negative credit gap. Estimates of the credit gap based on the private sector credit per capita[2] show a similar pattern across the five methodologies used: credit gap rose in the early 2010s, peaked around 2015, and then started to fall. Four of the methods entered negative territory at the onset of the COVID-19 pandemic. By the end of the analysis period, all methodologies indicated that Namibia' credit gap was negative as of mid-2024 (Figure 3).

Figure 3. Credit Gap Estimates and Fiscal Balance



Sources: International Monetary Fund Credit Gap Tool; and IMF staff calculations.
Note: GR=Growth Rate, MA=Moving Average, HP=Hodrick-Prescott Filter, HAM=Hamilton Filter.



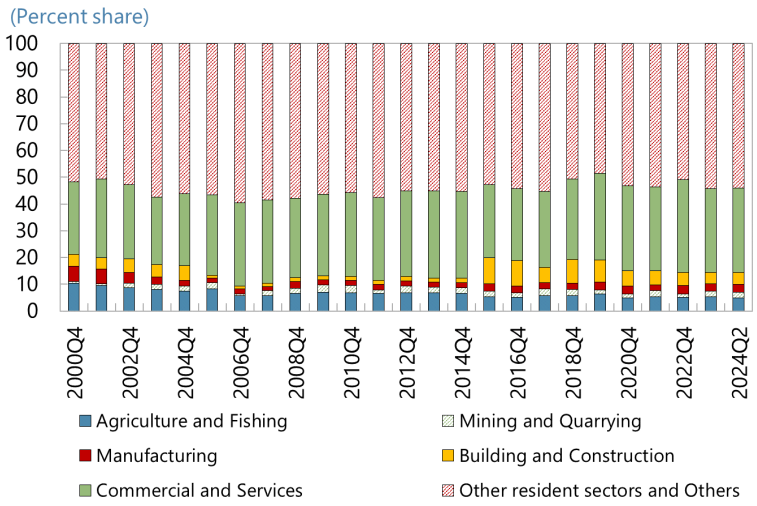
Sources: Country authorities; and IMF staff calculations.

6. Of the bank credit to the non-financial private sector, households have consistently accounted for more than half of the private sector credit over the past two decades. Additionally, mortgages dominate credit to households. Within lending to businesses, credit extended to the commercial and services sectors constituted approximately 30 percent of private

[2] The credit gap estimates are calculated using the Hodrick Prescott (HP), Hamilton, and Christiano-Fitzgerald (CF) filters, along with the Growth Rate (GR) and Moving Average (MA) methods. The analysis utilizes quarterly data from 2002Q1 to 2024Q3 on real claims on the private sector per capita (expressed in constant local currency values adjusted by the CPI index). The HP trend is determined using the standard HP Filter (λ=400,000). The Hamilton Filter is applied with a forecast horizon of 20 and a regression lag of 4.

sector credit. In contrast, credit to the tradable sector, including mining and quarrying, agriculture, and fishing, accounts for less than 20 percent of private sector credit (Figure 4).

Figure 4. Credit Share of Economic Sectors



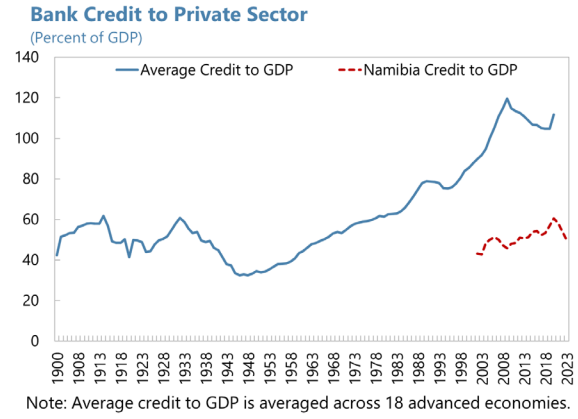
Sources: Bank of Namibia; and IMF staff calculations.

7. The high share of bank credit to mortgages is noteworthy. Figure 5 plots total bank credit to the private sector as a percentage of GDP and share of mortgage in credit to the private sector, comparing Namibia and a group of 18 advanced economies (AEs). It is evident that Namibia has reached a much higher share of credit to mortgages compared with these comparators when they were at a similar credit-to-GDP level (50-60 percent) during the first seven decades of the 20th century[3]—except during significant contractions like the Great Depression and World War II. Namibia's share of mortgage lending in total bank lending has consistently exceeded 50 percent (Figure 5).[4] This level of mortgage lending was not observed in AEs until the early-2000s, a period marked by a credit boom that saw their bank credit-to-GDP ratios approaching 90 percent and continuing to rise beyond 100 percent (Jordà, Schularick, and Taylor, 2017). Within the mortgage sector, on average 77 percent of credit is for residential purposes. In this context, an examination of Namibia's housing price dynamics could help detect potential vulnerabilities.

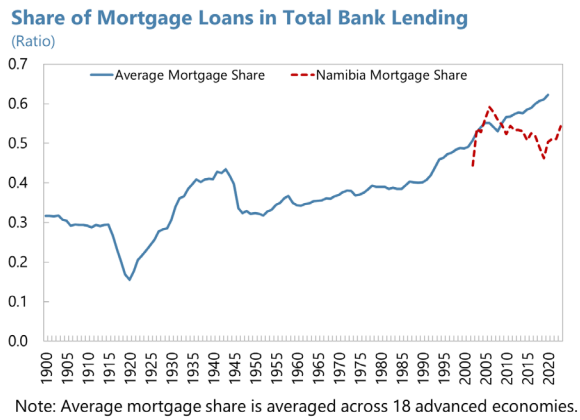
[3] The average bank credit-to-GDP ratio is based on bank credit to the non-financial private sector (businesses and households) in 18 AEs, making it comparable to the metric used for Namibia. The series is reported as a percentage to GDP and then averaged across all 18 advanced economies in the sample of the Jordà-Schularick-Taylor (JST) Macrohistory Database. These countries are Australia, Belgium, Canada, Denmark, Finland, France, Germany, Ireland, Italy, Japan, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, the United Kingdom, and the United States.

[4] The JST's average mortgage ratios are calculated based on mortgages loans to private sector (businesses and households) relative to total bank lending. For Namibia, the mortgage ratio series is derived from credit allocation to other resident sectors; the series contains non-mortgage credits to households (accounting for less than a third) but does not include mortgage credits to businesses. An alternative series for Namibia calculates the ratios according to JST's definition but coverage only started in 2013. This shorter series also shows that Namibia's mortgage shares have remained above 50 percent during 2013-2023.

Figure 5. Namibia's Credit Developments: A Comparison



Note: Average credit to GDP is averaged across 18 advanced economies.

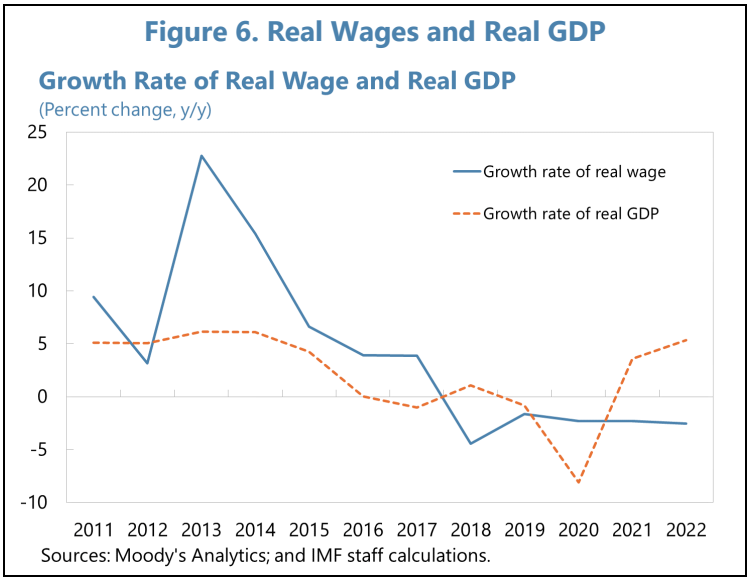


Note: Average mortgage share is averaged across 18 advanced economies.

Sources: Jordà-Schularick-Taylor Macrohistory Database; Bank of Namibia; and IMF staff calculations.

8. Structural issues largely shape housing prices in Namibia. Demographic changes and urbanization have led to unmet housing demand in Namibia, mainly due to a shortage of serviced land. Urban migration and supply constraints have driven up land and housing prices. The easing of the supply-side constraints, marked by an uptick in land delivery from 2017, has exerted downward pressure on housing prices (First National Bank Residential Property Report, December 2020). On the demand side, real wage growth in Namibia has slowed since 2013 and turned negative in 2018, as economic performance weakened, partly due to the 2015 downturn in commodity price cycles (Figure 6). The combination of demand-side challenges and the easing of supply-side constraints has contributed to downward pressure on housing prices since 2017, despite continued credit growth until 2020. Meanwhile, the correlation between household mortgage loans and housing prices has been weak. Figure 7 illustrates that after rising rapidly since the early 2000s, the real housing price peaked in 2017 and began to decline as the housing sector entered a downturn. The correlation between

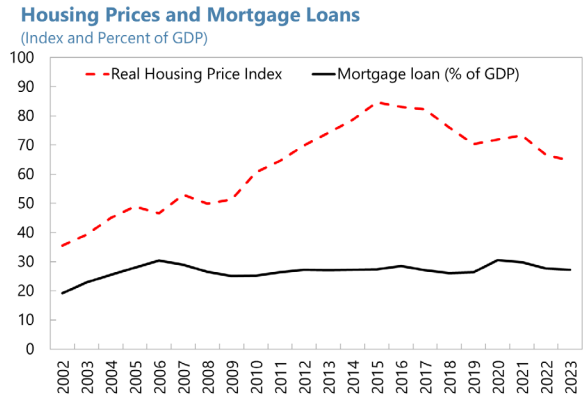
Figure 6. Real Wages and Real GDP



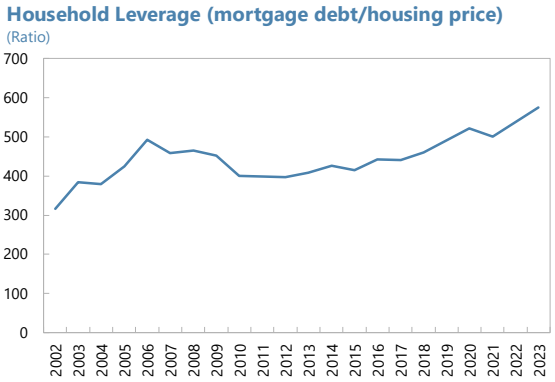
Sources: Moody's Analytics; and IMF staff calculations.

mortgage (in percent of GDP) growth and real housing prices growth has been weak (0.41), and the correlation further declined in the post-2017 sample (0.26).[5]

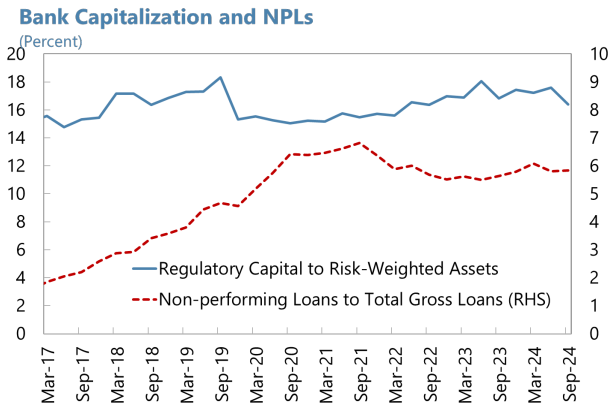
Figure 7. Macro-financial Risks in Namibia



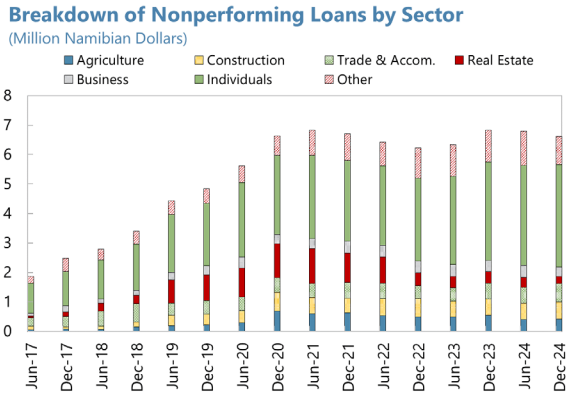
Sources: Bank of Namibia; and IMF staff calculations.



Sources: Bank of Namibia; and IMF staff calculations.



Sources: Bank of Namibia; and IMF staff calculations.



Sources: Bank of Namibia; and IMF staff calculations.

9. Given that mortgage accounts for half of banks' credit to the private sector, the housing sector is key to banking stability. Household mortgage loans have contributed about half of the non-performing loans (NPLs), which have increased significantly since 2017. A slow recovery in housing prices has caused household mortgage debt to outpace asset values, resulting

[5] Following convention in this literature, the three-year growth in credit-to-GDP (and likewise, the three-year growth in real housing price) is used to study the contemporaneous correlation. This is motivated by the empirical observation that credit expands rapidly over three to four years during credit booms (Mian, Sufi, and Verner, 2017). Many empirical studies have documented a link between the growth of credit to mortgages and construction and the associated risks to financial stability (Jordà, Schularick, and Taylor, 2016; Müller and Verner, 2024). This linkage becomes more pronounced when the rapid increase in mortgage lending coincides with rising housing prices and higher household leverage ratios (Greenwood et al. 2022). This simultaneous surge in housing prices and credit often leads to "bad credit booms," which are typically followed by deeper recessions and prolonged recoveries.

in higher household leverage ratios (Figure 7).[6] The decline in real wages and rising interest payments since 2022 (as the BoN started hiking the policy rate to contain inflation) may also contribute to higher household debt service payments to income ratios.[7] Despite the easing of monetary policy since mid-2024, the debt servicing burden on households remains high. The rising NPLs on banks' balance sheets since 2017 have strained profitability and likely prompted more cautious lending. Despite ample liquidity in the banking system, credit growth in the wake of the pandemic has been sluggish.

10. The Loan-to-Value (LTV) ratios adopted by the BoN in March 2017 serve as an important mechanism for containing risks related to commercial banks' exposure to the mortgages. Under these regulations, prospective home loan applicants for a second mortgage property were required to pay at least 20 percent of the property's market value, with the bank financing up to 80 percent. For the third and subsequent properties, down payment requirements increased progressively. However, in 2023, LTV ratios were revised to stimulate credit growth in the property market, eliminating downpayments on the purchase of both first and second residential properties.

11. The high share of household mortgage and low share of credit to businesses are consistent with the lack of private-sector-led growth in the non-resource sectors. As a resource-rich country, mining companies are the largest business entities in the economy, and they often rely on intra-company loans from their parent instead of bank loans.[8] Meanwhile, the non-mining private sector faces challenges in accessing bank credit due to collateral requirements, among other factors as noted below.

12. Survey data suggests that limited access to bank credit is a significant obstacle for private sector firms. According to the World Bank's Enterprise survey conducted in Namibia in 2024, 203 out of 307 Namibian firms surveyed (or 66 percent) view access to finance as an obstacle, ranging from "minor" to "very severe". Access to finance is the top obstacle identified by firms in the survey, surpassing other challenges such as regulatory burdens, security and stability, and infrastructure (Figure 8). Only 110 firms (or 36 percent) reported having a line of credit or loan from a financial institution.[9] A simple regression analysis suggests a positive correlation between having a line of credit and experiencing sales growth, indicating that access to credit could foster growth

[6] Leverage ratio is defined as the ratio of household mortgage debt to the value of residential real estate. A concerning development in the housing sector is that many market participants may have not experienced any nominal appreciation in their properties since 2017.

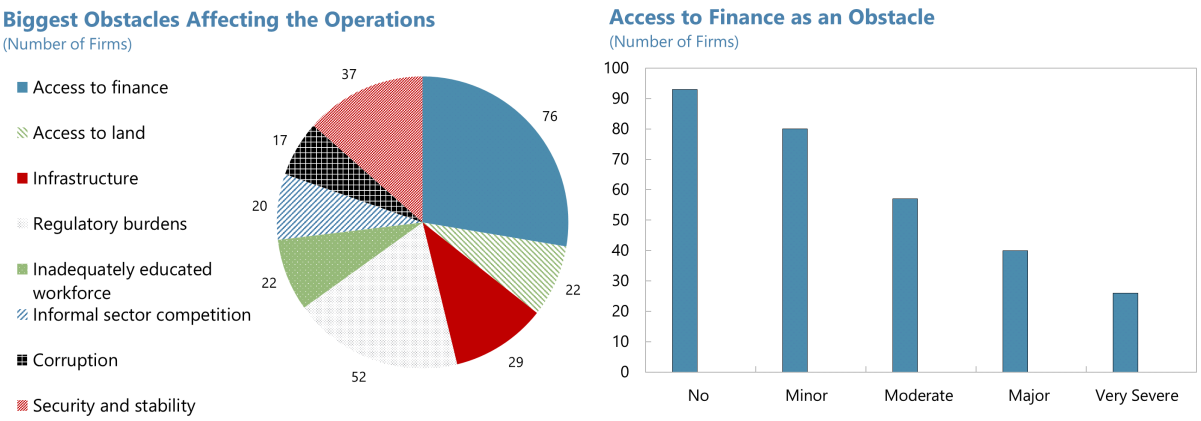
[7] Since most mortgages in Namibia are at variable rates, leveraged property owners are vulnerable to interest rate and income shocks, which could result in a further increase in NPLs within the banking system.

[8] Bank of Namibia Financial Stability Report, April 2025.

[9] An important caveat is that the firms surveyed by the World Bank are small, medium, and large enterprises that are formally registered. Among those that did not apply for loans, the majority indicated that they "did not need a loan, as the establishment had sufficient capital" as their primary reason. A smaller proportion of firms cited high collateral requirements as the main factor. It is reasonable to assume that the situation is more challenging for informal and micro businesses.

and investment for Namibian businesses.[10] In terms of constraints, the survey shows that the most important constraint is the high collateral requirement on the demand side. On the supply side, potential constraints worth investigating include the cost of funding, regulatory and capital requirements, administrative and hedging expenses, and the assessment of borrowers' credit risks (Rule, 2015).

Figure 8. Demand Side Constraints for Credit Growth



Sources: World Bank Enterprise Survey; and IMF staff calculations.

C. Banking Resilience

13. Despite the slowdown in credit growth since 2020, the banking system in Namibia has remained resilient. Banks remained liquid, profitable, and well-capitalized (Figure 5). Like many countries, Namibia's banking asset quality deteriorated during the pandemic. As noted previously, household mortgages continued to be primary contributors to NPLs in Namibia. NPLs peaked at 6.8 percent in March 2021, breaching Namibia's supervisory threshold, but moderated to 5.6 percent in December 2024. The moderation is on account of recent recovery in nominal credit growth, which has surpassed the growth in NPLs. Nonetheless, banks have maintained adequate capital levels, and NPLs are sufficiently provisioned to cover expected losses during the review period.

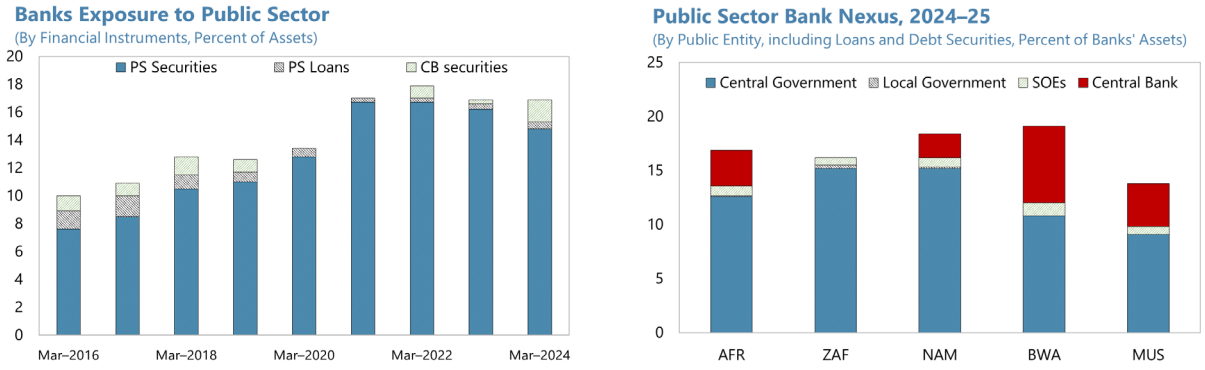
14. Meanwhile, the bank-sovereign nexus has deepened as domestic credit to the public sector more than doubled over the past decade. As noted earlier, this development corresponds with the increased government financing needs. Banks' exposure to the public sector (excluding the central bank) is above the African average. In comparison to countries with similar income status, Namibia's exposure is on par with South Africa but exceeds that of Botswana and Mauritius (Figure 9).[11] Relative to upper middle- and high-income countries in the Euro area, Namibia's exposure is lower than Albania, Romania, Hungary, and Poland but significantly higher than Denmark and the

[10] Although viewing access to finance as an obstacle does not necessarily translate to genuine challenges in obtaining it—evident in Namibia, where most firms with a line of credit still report perceived access difficulties—having access to credit is associated with improved outcomes at the firm level.

[11] African countries with an upper middle-income status.

Netherlands, with their exposures as low as 0.4 percent (Figure 10). Non-bank financial institutions (NBFIs) also hold a significant amount of government debt. As of the end of December 2024, NBFIs held domestic debt amounting to 20 percent of GDP.[12] This increased connectedness poses a risk to the Namibian financial system.

Figure 9. Public Sector Exposure

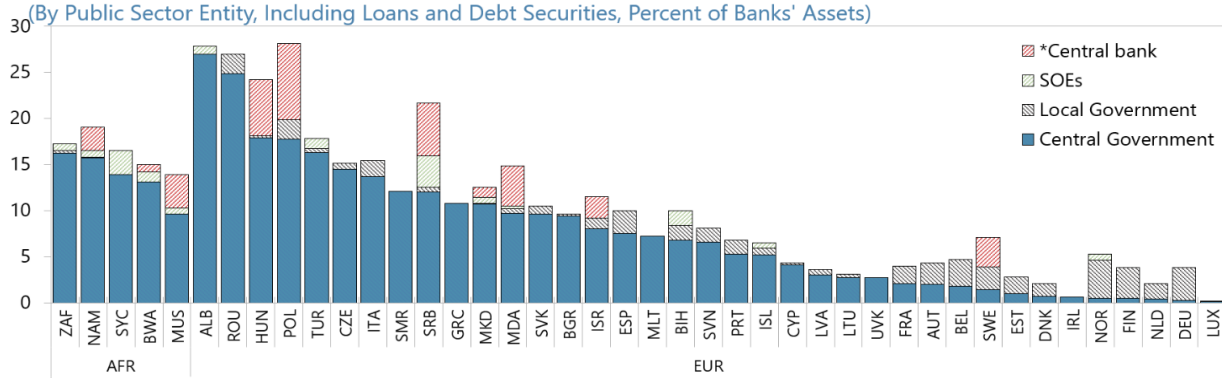


Sources: IMF, MFS Database; and IMF staff calculations.
Last Update: August 14, 2024.

Sources: IMF, MFS Database; and IMF staff calculations.
Note: Central bank excludes deposits. Last Update: August 14, 2024.

Figure 10. Public Sector Exposure: Comparison

(December 2024)



Sources: IMF MFS; and Dehmej (2025).

D. Policy Recommendations

15. To assist in managing risks associated with the credit cycle, the Bank of Namibia (BoN) should continue enhancing its macroprudential toolkit. The countercyclical capital buffer (CCyB) framework is set to be implemented in the last quarter of 2025, allowing for capital accumulation during credit booms to be released during downturns.[13] Given that Namibia is a small open

[12] At the end of December 2024, total domestic debt (comprising Treasury bills and Government bonds) was 51 percent of GDP. Out of this 51 percent, Depository corporations held 14 percent of GDP and NBFIs held 20 percent of GDP. Data on NBFIs holdings of government debt was sourced from NAMFISA.

[13] Bank of Namibia Financial Stability Report, April 2025

economy exposed to structural vulnerabilities, a positive-neutral CCyB could enhance banking resilience.[14] Namibia's vulnerabilities to external and commodity price shocks and a fixed exchange rate underscore the need for a resilient financial system. Additionally, structural vulnerabilities such as banks' reliance on wholesale NBFI financing and significant exposures to the sovereign make it essential to have releasable capital that can be used to sustain credit growth in the face of negative shocks.[15] BoN should also consider implementing targeted measures, such as a systemic risk buffer for sovereign exposures that surpass a certain threshold. BoN should also conduct a further analysis of the structure of exposures in both banking and trading books to ensure appropriate risk weights.[16]

16. Given the large share of credit to the housing sector and existing vulnerabilities, BoN should reverse the elimination of downpayments on first and secondary residential properties. Maintaining minimum lending standards is crucial for preventing future NPLs. In addition to stock-based measures, the BoN should also consider collecting data on flow measures such as debt-to-income (DTI) ratios and debt service-to-income (DSTI) for new property buyers. This data would be valuable for analysis and the formulation of targeted borrower-based macroprudential measures.

17. In light of the limited credit to private business, the authorities are rightly promoting access to financing while safeguarding financial stability. As Namibia seeks to diversify its economy and foster private sector-led growth, it is important to develop solutions that support sound lending to non-financial corporations, where credit availability remains relatively limited. Conducting further studies to identify constraints hindering businesses in accessing credit would be critical for designing and implementing effective policies. Such analysis could also shed light on the key drivers of Namibia's credit cycles, which will become increasingly important as the economy diversifies and transitions to being more driven by the private sector. In turn, this would lead to a stronger interconnection between credit and business cycles.

[14] In line with the recommendations of the IMF TA on Macroprudential Policies and Systemic Risks

[15] A crucial consideration is that there must be demand for credit that would otherwise go unmet due to banks' capital requirements. Furthermore, banks ultimately need to view lending as profitable based on their assessment of risks. In Namibia, the Capital Conservation Buffer (CCoB) was relaxed for a two-year period in response to the COVID-19 Pandemic in April 2020. The relaxation was later extended. However, slow credit growth during the period suggests banks' lack of willingness to use the temporarily relaxed capital requirement to supply credit.

[16] As highlighted in the IMF's technical assistance on systemic risks and macroprudential policies in Namibia.

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