Namibia

Sectoral Scenarios for Namibia

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Stability scenario

The Stability scenario represents reasonable but ambitious reductions in risk of regime instability and lower levels of internal conflict. Stability is generally a prerequisite for other aspects of development and this would encourage inflows of foreign direct investment (FDI) and improve business confidence. Better governance through the accountability that follows substantive democracy is modelled separately.

The intervention is explained here in the thematic part of the website.

Namibia gained independence from South Africa in 1990 after a long and drawn-out fight. Since then, the country has enjoyed stability. The ruling South West Africa People's Organisation (SWAPO) Party of Namibia has won all elections in the country with an overwhelming majority since 1990. However, the party lost its supermajority in the 2019 general elections after failing to obtain two-thirds of the seats in the national assembly which it had achieved since 1994. Also, President Hage Geingob won his re-election bid by a narrow margin of 54% compared to the 87% he obtained in 2014 — the lowest in the history of the party. The dwindling fortune of SWAPO and the growth of opposition parties is good for multiparty democracy in the country but also signals a changing environment in the decades to come.

The score of Namibia on the governance security index for 2019 was 0.74, which was slightly above the average of 0.72 for upper middle-income countries in Africa and above 0.69 for Africa. In the Stability scenario, Namibia's score on the governance security index is projected to increase 0.89, about 9% above the Current Path forecast by 2043 and 15.6% above the Current Path average of 0.77 for upper middle-income countries in Africa in the same year.

The GDP per capita for Namibia in 2019 was US\$10 419, which was 18.6% lower than the average of US\$14 235 for upper middle-income countries in Africa. In the Stability scenario, GDP per capita is projected to reach US\$15 729 by 2043, representing about 3% (US\$436) increase over the Current Path forecast for that year. This estimation is, however, 12.7% below the Current Path average of US\$17 734 for upper middle-income countries in Africa. The expected economic growth

in GDP in the Stability scenario can be explained by the fact that regime stability and good governance in the form of rule of law, transparency and accountability and reduced corruption attract larger inflows of foreign investment, which eventually promote economic growth.

In 2019, the number of poor people living on less than US\$5.50 in Namibia was 1.67 million (65.8% of the population). In the Stability scenario, the number of poor people is projected to reach 1.74 million (45.7% of the population), compared to the Current Path forecast of 1.79 million people (47% of the population) in 2043. This means that the Stability scenario could result in a decline in extreme poverty by 50 000 additional people, which is equivalent to a 1.3 percentage point reduction. The projection in this scenario is also 6 percentage points higher than the Current Path average of 39.7% for upper middle-income countries in Africa in 2043.

Demographic scenario

This section presents the impact of a Demographic scenario that aims to hasten and increase the demographic dividend through reasonable but ambitious reductions in the communicable-disease burden for children under five, the maternal mortality ratio and increased access to modern contraception.

The intervention is explained here in the thematic part of the website.

Demographers typically differentiate between a first, second and even a third demographic dividend. We focus here on the contribution of the size of the labour force (between 15 and 64 years of age) relative to dependants (children and the elderly) as part of the first dividend. A window of opportunity opens when the ratio of the working-age population to dependants is equal to or surpasses 1.7.

In 2019, there were 1.47 working-age persons for every dependant in Namibia. This was 25.9% lower than the average of 1.85 for upper middle-income countries in Africa. Namibia will achieve the minimum ratio of 1.7 by 2033 in both the Current Path forecast and the Demographic scenario, after which it enters a period of potentially higher economic growth given its larger labour force compared to dependent children and elderly.

By 2043, the ratio of the working-age population to dependants is projected to be 1.93 in the Demographic scenario, which will be slightly higher than the Current Path forecast of 1.92 but about 5% below the projected Current Path average of 2.02 for upper middle-income countries in Africa. The increased demographic dividend in Namibia follows on from the projected decline in population growth as a result of a reduction in fertility rates over the past couple of decades.

The infant mortality rate is the number of infant deaths per 1 000 live births and is an important marker of the overall quality of the health system in a country.

The infant mortality rate in Namibia in 2019 was 28 deaths per 1 000 live births, 2.4 deaths below the average upper middle-income countries in Africa. In the Demographic scenario, infant mortality in Namibia will fall to 13.4 deaths per 1 000 live births by 2043. This represents nearly 2 deaths fewer than the Current Path forecast at 15.3 deaths.

In the Demographic scenario, GDP per capita for Namibia is projected to reach US\$15 336, which is US\$45 (0.3%) above the projected US\$15 293 on the Current Path in the same year. The additional gains in GDP per capita are low in the Demographic scenario — a result of the country already experiencing low fertility rates, a reduction in population growth and an increase in the ratio of working-age people to dependants. However, the projected GDP per capita in the Demographic scenario will still be 15.6% less than the Current Path average for lower middle-income countries in Africa.

In the Demographic scenario, the number of poor people in Namibia by 2043 is projected to decline to 1.78 million people, equivalent to 46.9% of the population. This means that the Demographic scenario will reduce extreme poverty in Namibia by 10 000 people by 2043, equivalent to 0.1 percentage points below the Current Path forecast and 7.2 percentage points

above the Current Path average for upper middle-income countries in Africa in 2043. The decline in extreme poverty in the Demographic scenario stems from the expected reduction in fertility rates and Namibia's smaller population compared to the Current Path forecast. However, since fertility rates are already low, the impact is minimal.	

Health/WaSH scenario

This section presents reasonable but ambitious improvements in the Health/WaSH scenario, which include reductions in the mortality rate associated with both communicable diseases (e.g. AIDS, diarrhoea, malaria and respiratory infections) and non-communicable diseases (NCDs) (e.g. diabetes), as well as improvements in access to safe water and better sanitation. The acronym WaSH stands for water, sanitation and hygiene.

The intervention is explained here in the thematic part of the website.

The Namibian health system is comprised of four components: intermediate and referral hospitals, clinics, health centres and district hospitals. Despite being an upper middle-income country, it has a high rate of HIV/AIDS, ranking the sixth highest in the world, sharing the burden with many of its Southern African neighbours. For instance, in 2014, the country spent US\$200 million on the prevention and treatment of HIV/AIDS cases, and about 210 000 Namibians were living with HIV/AIDS in 2019.[1] The doctor to patient ratio is very low; it is estimated that there are about 0.33 doctors for every 1 000 people in the country. While the public healthcare system serves 82% of the population, the private sector which is more lucrative has about 72% of the doctors in the country serving just 18% of the Namibian population.# To address the shortage of doctors in the country, the government is providing scholarships to medical students who will eventually join the public sector.

The average life expectancy at birth in Namibia in 2019 was 66.3 years, which was above the average of 64.7 for upper middle-income countries in Africa. This relatively higher life expectancy in Namibia can be explained by Namibia's success in reducing deaths emanating from communicable diseases. Between 2005 and 2019, deaths from communicable diseases declined significantly from 16 600 to 8 200. Non-communicable diseases such as HIV/AIDS, cardiovascular diseases, lower respiratory infections, tuberculosis, diarrhoea and cerebrovascular diseases, among others, are the leading causes of death in the country.

On average, females have a higher life expectancy at birth (70.6 years) compared to males (61.7 years). Half of all deaths in males are as a result of injuries with a significant prevalence of self-harm among young men.[2] In the Health/WaSH scenario, life expectancy will increase to 74.6 years by 2043, which will be 0.8 years above the Current Path forecast of 73.8 and about 5 years higher than the Current Path average of 70 years for upper middle-income African countries. In both the Current Path forecast and the Health/WaSH scenario, females will continue to enjoy a longer life expectancy compared to males. By 2043, average female life expectancy will be 10.2 years longer than that of males in both the Current Path forecast and the Demographic scenario.

The infant mortality rate per 1 000 live births in 2019 in Namibia was 28, which was lower than the average of 30.4 for upper middle-income countries in Africa. By 2043, infant mortality per 1 000 live births in the country will be 14.3 in the Health/WaSH scenario and 15.3 in the Current Path forecast. Also, the projections for infant mortality in the Health/WaSH scenario are 10.9 deaths fewer compared to the Current Path average of 25.2 for upper middle-income countries in Africa. However, the Demographic scenario leads to a much quicker reduction in infant mortality compared to the Health/WaSH scenario.

Agriculture scenario

The Agriculture scenario represents reasonable but ambitious increases in yields per hectare (reflecting better management and seed and fertiliser technology), increased land under irrigation and reduced loss and waste. Where appropriate, it includes an increase in calorie consumption, reflecting the prioritisation of food self-sufficiency above food exports as a desirable policy objective.

The intervention is explained here in the thematic part of the website.

The data on yield per hectare (in metric tons) is for crops but does not distinguish between different categories of crops.

The average yield per hectare for crops in Namibia was 1.6 metric tons in 2019, which was just a third of the average of 4.7 metric tons per hectare for upper middle-income countries in Africa. This is not surprising given that the country is subjected to regular droughts with a climate that is not suitable for agriculture. In the Current Path forecast, yields per hectare will increase by 25% to 2 metric tons by 2043. In the Agriculture scenario, yield per hectare will increase quicker such as that by 2043, it will reach almost 3 metric tons, 0.95 metric tons (or 47%) above the projections in the Current Path. As a result, annual crop production in Namibia will increase from about 1.2 million metric tons in 2019 to 2.1 million metric tons in the Agriculture scenario in 2043, which will be 50% above the Current Path forecast of 1.4 million metric tons for that year.

Agricultural exports in the form of animal products, live animals and crops account for about 10.7% of Namibians export.[3] The country exports meat to Europe and South Africa. In 2016, Namibia became the only country in Africa that was qualified to export beef to the United States.[4] However, the country also imports large volumes of fruits and vegetables due to the unfavourable climate. Namibia's net agricultural import for 2019 was 1.8% of agricultural demand, 1 percentage point below the average for upper middle-income countries in Africa. In an effort to improve agricultural productivity and ensure food security, the government initiated the Green Scheme to boost the development of irrigation and increase crop production. As a result, the AgriBusDev company was set up to oversee the implementation of the Green Scheme programme which has so far supervised at least 11 Green Scheme irrigation projects. Also, the government established the Agro-Marketing and Trade Agency (AMTA) to coordinate and manage the marketing and trading of agricultural products in the country through the national strategic food reserves facilities and the fresh produce business hubs for food security.

Based on the Current Path forecast, net agricultural imports will increase to 34.4% of total demand by 2043, signalling a growth in the importation of agricultural goods, also due to changes in dietary preferences. In the Agriculture scenario, this phenomenon is mitigated such that by 2043, import dependency is projected to reach 16.3%. Although this is quite high, it will be below the projected Current Path average of 20.7% for upper middle-income countries in Africa on the Current Path.

By 2043, GDP per capita in the Agriculture scenario will increase from US\$10 419 in 2019 to US\$16 023, constituting about 5% (US\$730) growth above the Current Path forecast. This will be 10.6% lower than the Current Path average of US\$17 734

for upper middle-income countries in Africa. The agriculture sector plays an integral role in job creation especially for the rural population in Namibia, therefore, improvements in agriculture in terms of improved methods of farming and higher yielding seeds will improve local economic development and impact the economy as a whole.

In the Agriculture scenario, it is forecasted that the number of people that will be living in extreme poverty in Namibia will be 1.73 million (45.5% of the population) by 2043. This represents a 1.5 percentage point decline from the Current Path forecast of 47% in the same year. The extreme poverty rate in this scenario will however be 5.8 percentage points above the Current Path average for upper middle-income countries in Africa. With agriculture serving as a source of livelihood directly or indirectly to over 70% of the population, the Agriculture scenario has the potential to reduce extreme poverty by 60 000 people, underlining the need to prioritise agriculture and embark on an agricultural revolution.

Education scenario

The Education scenario represents reasonable but ambitious improved intake, transition and graduation rates from primary to tertiary levels and better quality of education. It also models substantive progress towards gender parity at all levels, additional vocational training at secondary school level and increases in the share of science and engineering graduates.

The intervention is explained here in the thematic part of the website.

The constitution of the new government guaranteed the right to education for all of the citizens of Namibia. In 2001, the Education Act extended the free tuition to secondary school up to Grade 12. As a result, education is free and compulsory from age 6 to 16. However, learners are required to pay for learning materials such as stationery, books, uniforms and hostel. As a result, the country has made great strides in improving educational outcomes. Primary enrolment increased from 60% in 1990 to 95% in the early 2000s[5], and it is estimated that the literacy rate for people 15 years and older in the country is about 91.5%.[6] The government has increased its expenditure on education, constituting about 20% of GDP in 2016 — far higher than most advanced countries.[7] Despite this progress, the educational system is still plagued with challenges relating to the quality of education in the country, such as inadequate schools, lack of qualified teachers, high repetition and dropout rates as well as inequality in educational standards across schools. There are also problems relating to skills development of learners.

In 2019, the mean years of adult education in Namibia was estimated to be 7 years, which was 40% lower than the average of 9.8 for upper middle-income countries on the continent. In terms of gender disparity, the mean years of education for females was 7.3, which was 0.5 years higher than for males making Namibia one of the few countries in Africa whose gender disparity in educational attainment is in favour of females. However, this gap in favour of females for mean years of education in Namibia is higher than the average of 0.2 years for upper middle-income countries in Africa, meaning that Namibia has performed relatively poorly at closing the gender gap in access to education.

In the Education scenario, the mean years of adult education will rise to 9.1 years by 2043, which will be 1.3 years below the average for upper middle-income countries in Africa, but 0.1 years above the Current Path forecast. Also, the gender gap regarding mean years of education will be 0.5 years in favour of females in 2043 in the Current Path forecast and 0.4 years in the Education scenario.

In 2019, primary education quality in Namibia was below the average for upper middle-income Africa and set to strongly improve in the Education scenario. Secondary education quality, currently above the average for its peer group, is set to improve rapidly in the Education scenario.

The average test score for primary learners in Namibia in 2019 was 32.5%, lower than the average of 37.1% for upper middle-income countries in Africa. The Education scenario will increase average test scores for primary learners so that by 2043, the average test score for primary learners in Namibia of 43.4% will be 16.4% above the Current Path forecast. Also, the quality of primary education in the Education scenario will be 15.7% higher than the Current Path average of 37.5% for upper middle-income African countries.

By 2043, the average test scores for secondary learners in the Education scenario will improve from 43% to 54.1%. This will

be about 20% above the Current Path forecast and be 31.3% higher than the Current Path average for upper middle-income countries in Africa.

By 2043, GDP per capita as a result of the Education scenario will increase to US\$15 849, representing an increase of US\$556 above the Current Path forecast in the same year, translating into an improvement of 3.6%. The contribution of education to economic growth stems from its contribution to the human capital formation of the economy, which is a significant factor for economic growth. However, this impact takes time to materialise. The projected GDP per capita in the Education scenario will be 11.9% below the Current Path average of US\$17 734 for upper middle-income countries in Africa.

By 2043, in the Education scenario, the number of extremely poor people will be 1.71 million, equivalent to 45% of Namibia's population, meaning that the Education scenario will reduce extreme poverty for about 80 000 people in 2043 relative to the Current Path forecast. This is comparable to a 2 percentage point decline in extreme poverty in the same period. Education equips people with the requisite skills to either start a business or acquire jobs that help to improve their income, thereby improving their standard of living. The proportion of poor people based on the Education scenario in Namibia will be 5.3 percentage points above the average for upper middle-income countries in Africa on Current Path in 2043.

Manufacturing scenario

The Manufacturing/Transfers scenario represents reasonable but ambitious manufacturing growth through greater investment in the economy, investments in research and development, and promotion of the export of manufactured goods. It is accompanied by an increase in welfare transfers (social grants) to moderate the initial increases in inequality that are typically associated with a manufacturing transition. To this end, the scenario improves tax administration and increases government revenues.

The intervention is explained here in the thematic part of the website.

Chart 30 should be read with Chart 8 that presents a stacked area graph on the contribution to GDP and size, in billion US\$, of the Current Path economy for each of the sectors.

The three sectors that made the largest contributors to GDP in Namibia in 2019 were services (60%), manufacturing (19.4%) and agriculture (8.6%). In the Current Path forecast, the service sector increases its contribution to 60.3%, manufacturing increases to 20.7% and agriculture declines to 4.2%. In the Manufacturing/Transfers scenario the service sector is projected to contribute US\$1.3 billion more to GDP, equivalent to 3.9 percentage points above the Current Path, by 2043. The ICT sector is also projected to contribute an additional US\$80 million to GDP by 2043, although its rate of contribution will correspond to 0.4 percentage points above the Current Path. The energy sector will make an absolute contribution of an additional US\$20 million, equivalent to a rate of contribution of 1 percentage points above the Current Path by 2043. The agriculture, manufacturing and materials sectors' contribution will decline to 0.49, 0.38 and 0.48 percentage points, respectively, below the Current Path forecast in 2043.

The total welfare transfers to households in Namibia in 2019 amounted to US\$1.3 billion. In the Manufacturing/Transfers scenario, this amount will more than quadruple to US\$5.3 billion by 2043, constituting an increase of about 308.4% from 2019 to 2043. This exceeds the projected US\$3.2 billion in the Current Path, meaning that the Manufacturing/Transfers scenario leads to an increase in government welfare transfers of 65.6%, equivalent to an additional US\$2.1 billion relative to the Current Path in 2043.

GDP per capita in the Manufacturing/Transfers scenario will reach US\$16 644 in 2043. This forecast represents an 8.8% improvement (equivalent to US\$1 351) above the Current Path forecast for that year. The manufacturing sector is historically the largest provider of jobs and allows for the structural transformation of economies towards higher productivity and knowledge with spillover effects on other sectors. It is therefore not surprising that the Manufacturing/Transfers scenario leads to such a sizable improvement in GDP per capita. However, the GDP per capita for Namibia by 2043 in the Manufacturing/Transfers scenario will still be US\$6.5% (US\$1 090) below the average of US\$17 734 for upper middle-income countries in Africa on the Current Path.

The total number of the extremely poor population in the Manufacturing/Transfers scenario by 2043 is 1.56 million, representing 41.2% of Namibia's population. This is 230 000 people fewer than the 2043 Current Path forecast of

1.79 million, translating into a 5.8% decline in extreme poverty rate compared to the Current Path forecast for 2043. It means that Namibia can reduce poverty by aggressively pursuing a low-end manufacturing growth path including the associated investments in research and development and by promoting trade; but such a growth path needs to be accompanied by increases in welfare transfers to buffer the transition. The extreme poverty rate in Namibia in this scenario will just be 2 percentage points higher than the Current Path average among its income peers in Africa.

Leapfrogging scenario

The Leapfrogging scenario represents a reasonable but ambitious adoption of and investment in renewable energy technologies, resulting in better access to electricity in urban and rural areas. The scenario includes accelerated access to mobile and fixed broadband and the adoption of modern technology that improves government efficiency and allows for the more rapid formalisation of the informal sector.

The intervention is explained here in the thematic part of the website.

Fixed broadband includes cable modem Internet connections, DSL Internet connections of at least 256 KB/s, fibre and other fixed broadband technology connections (such as satellite broadband Internet, ethernet local area networks, fixed-wireless access, wireless local area networks, WiMAX, etc.).

In 2019, the total number of fixed broadband subscriptions in Namibia was estimated to be about 3.5 per 100 people, which was 26% lower than the average of 4.4 for upper middle-income countries in Africa on the Current Path. In the Current Path forecast, fixed broadband subscriptions will rise to 27.6 per 100 people. However, the Leapfrogging scenario will lead to a much larger increase in fixed broadband subscriptions so that by 2043, total fixed broadband subscriptions will be 49.9 subscriptions per 100 people — 80.8% more than in the Current Path forecast in 2043. The fixed broadband subscription rate in the Leapfrogging scenario for 2043 will be 66.6% greater than the Current Path average of 29.6 subscriptions per 100 people for upper middle-income African countries.

Mobile broadband refers to wireless Internet access delivered through cellular towers to computers and other digital devices.

In 2019, Namibia had a mobile broadband subscription rate of 75.2 per 100 people, about 15% lower than the average of 49.1 for upper middle-income countries on the continent. Because mobile broadband subscriptions are already high in Namibia and the Current Path forecast is very aggressive, both the Current Path forecast and the Leapfrogging scenario reach a saturation level of 153 subscriptions per 100 people in 2043, almost equal to the average for Africa's upper middle-income countries. However upper middle-income Africa reaches saturation by as early as 2025 in the Leapfrogging scenario.

Electricity generation in Namibia is sourced from hydropower, coal, diesel and thermal. Rising domestic consumption, which is projected to reach 1 348 MW in 2030, together with peak power challenges, transmission challenges and the fall in surplus capacity from SADC has resulted in the country resorting to independent power producers. This is worsened by the unreliable Ruacana Hydroelectric Power Station, which is the biggest local energy source; however, it fluctuates due to unreliable rainfall.[8] The number of people who had access to electricity in 2019 was 1.3 million, constituting 50.1% of the Namibian population. This was far lower than the average of 81.6% for upper middle-income countries in Africa suggesting Namibia is lagging behind its peers in terms of electricity access.

The proportion of urban residents who had access to electricity in 2019 was 66.2%. compared to the 34.3% for rural dwellers, indicating disparity in favour of urban dwellers in access to electricity. By 2043, in the Leapfrogging scenario,

about 3.4 million people in Namibia (88.1% of the population) will have access to electricity compared to 3 million (78.1% of the population) in the Current Path forecast. The per cent of people with access to electricity in the Leapfrogging scenario in 2043 will be almost equal to the average of 87.7% for upper middle-income countries in Africa on the Current Path. By 2043, the proportion of urban residents who will have access to electricity will be 90.7% and 82.5% in the Leapfrogging scenario and the Current Path forecast, respectively. The portion of people in rural areas who will have access to electricity is estimated to be 83.2% and 69.7% in the Leapfrogging scenario and the Current Path forecast, respectively. This suggests that the disparity in favour of urban residents will be lower in the Leapfrogging scenario compared to the Current Path forecast by 2043.

Access to broadband has the potential to increase GDP through its effect on reducing transaction costs for businesses. It can also open up new connectivity to a greater clientele and can help firms adopt efficient technology that can improve productivity which will ultimately lead to growth. Namibia's GDP per capita is estimated to increase to US\$16 012 in 2043 based on the Leapfrogging scenario. This constitutes an increase of US\$719 (4.7%) compared to the Current Path forecast of US\$15 293 in 2043. However, this will be 10.8% below the Current Path average of US\$17 734 for upper middle-income countries in Africa

Based on the Leapfrogging scenario, the number of people that will be living in extreme poverty by 2043 is 1.72 million, representing 45.4% of the population. This projection is 70 000 people below the estimation of 1.79 million in the Current Path forecast in the same year. The proportion of people living in extreme poverty projected in the Leapfrogging scenario will also be 1.6 percentage points lower than the Current Path forecast and 5.7 percentage points above the Current Path average for upper middle-income African countries in 2043. Extension of electricity access, especially to rural areas, and the adoption of modern technology, including mobile telephony, can help in poverty reduction by increasing productivity and improving the output of micro and small businesses, especially in the informal sector.

Free Trade scenario

The Free Trade scenario represents the impact of the full implementation of the African Continental Free Trade Area (AfCFTA) by 2034 through increases in exports, improved productivity and increased trade and economic freedom.

The intervention is explained here in the thematic part of the website.

The trade balance is the difference between the value of a country's exports and its imports. A country that imports more goods and services than it exports in terms of value has a trade deficit, while a country that exports more goods and services than it imports has a trade surplus.

Namibia boasts large deposits of mineral resources which constitute a significant proportion of its revenue. Just like many other African countries, these minerals are usually exported in their raw form without value addition. The country exports diamonds, gold, copper, uranium ore and concentrates, radioactive chemicals, and frozen fish fillets to China, South Africa, Botswana, Belgium and Spain. However, Namibia also imports large quantities of refined petroleum products, electricity, refined copper ores, diamonds and foodstuffs from South Africa, Zambia, China, Bulgaria and the Democratic Republic of the Congo. The total export value amounted to about US\$6.3 billion in 2019 while the imports stood at US\$8.1 billion.

In 2019, Namibia's trade deficit represented 5.2% of GDP which was below the average of 0.61% of GDP for upper middle-income African countries on the Current Path. In the short term, Namibia's trade balance improves, reaching a peak of a surplus of 9.8% in the Free Trade scenario and 9.1% on the Current Path in 2025. Afterwards, the trade balance worsens and bottoms at a deficit of 10.6% on the Current Path and 9.1% in this scenario. Beginning 2041, the trend is reversed such that by 2043, the Current Path forecast leads to a slightly lower deficit of 8.4% compared to the deficit of 10.3% in the Free Trade scenario. These figures suggest that trade liberalisation will improve the trade balance of Namibia in the short term; however, in the long term, it will worsen its trade balance, underlining the importance of additional measures to improve competitiveness, particularly in growing Namibia's manufacturing sector.

The GDP per capita for Namibia will reach US\$16 361 by 2043 in the Free Trade scenario, which represents a sizable increase of 7% (US\$1 068) gain compared to the projections on the Current Path in 2043. This means that Namibia has a huge potential to increase GDP if it takes advantage of the full implementation of the AfCFTA to trade more with other African countries. Intra-country trade among African countries has the benefit of increasing Namibia's exports since it provides access to a much larger market and ultimately improves the nation's manufacturing sector. This will lead to more rapid economic growth and increased employment in key sectors. The average GDP per capita for Namibia in the Free Trade scenario will be 8.4% lower than the projected US\$17 734 Current Path average for upper middle-income African countries.

The impact of the Free Trade scenario is a small initial increase in extreme poverty, from 2031 to 2037, followed by a rapid reduction in poverty compared to the Current Path forecast. This may be attributed to the redistribution and displacement effect of trade in the short term in which some sectors initially could be made worse off as a result of the increased trade. By 2043, the number of people living in extreme poverty in the Free Trade scenario will be 1.68 million people,

representing 44.3% of the population. This is a 2.7 percentage point reduction compared to the Current Path forecast, equivalent to 11 000 fewer poor people. The proportion of poor people projected in the Free Trade scenario is higher than the average of 39.7% for upper middle-income countries in Africa on the Current Path.

Financial Flows scenario

The Financial Flows scenario represents a reasonable but ambitious increase in worker remittances and aid flows to poor countries, and an increase in the stock of foreign direct investment (FDI) and additional portfolio investment inflows to middle-income countries. We also reduced outward financial flows to emulate a reduction in illicit financial outflows.

The intervention is explained here in the thematic part of the website.

Namibia received US\$313 million (2.1% of GDP) of foreign aid in 2019. This was significantly higher than the average of 0.6% for upper middle-income countries in Africa. A significant proportion of the aid is channelled into the health sector for the treatment and prevention of HIV/AIDS and tuberculosis that is still disproportionately high in the country. Other humanitarian aid also goes to assisting the development of basic education, promotion of good governance and training on natural resources management. The decline in aid in recent years due to the country attaining upper middle-income status has had a deteriorating effect on these sectors, especially health service delivery. The absolute value of foreign aid is projected to increase to US\$29.1 million and US\$31.7 billion in the Financial Flows scenario and Current Path forecast, respectively, by 2043. This will correspond to 0.07% of GDP in the Financial Flows scenario which will be slightly below the Current Path forecast of 0.08% of GDP. It will also be below the projected 0.12% for average upper middle-income countries in Africa on the Current Path.

Namibia attracts FDI into its natural resources explorations as the country has large deposits of uranium, diamond, zinc, copper and oil, as well as a big tourism sector. As such, the majority of the FDI is in the mining sector from countries such as South Africa, the UK, the US and Germany. However, the investment climate in the country has worsened significantly over the last decade dropping from 54th out of 190 countries in the World Bank 2008 Ease of Doing report to 104th position in the 2020 Doing Business report. The deterioration in the investment climate in the country emanates partly from the stringent measures introduced by the government to strengthen its economy. Investment opportunities to foreigners have been restricted especially in mineral exploration due to increased state control.[9]Also, although property rights are guaranteed by the constitution, parliament can make laws to expropriate and regulate such rights for foreigners. Despite these factors inhibiting the flow of FDI, the country boasts stable democracy, peace and flexible labour regulations that could attract FDI.

The total amount of FDI received by Namibia in 2019 was equivalent to 4.9% of GDP, which was higher than the average of 2.3% for upper middle-income African countries. It means that on average, Namibia attracts relatively more foreign aid than its income peers on the continent. By 2043, FDI in the Financial Flow scenario will increase to 8.5% of GDP. This will be above the 6.8% of GDP in the Current Path for that year and the Current Path average of 3.2% for upper middle-income countries on the continent.

Namibia is a net sender of remittances. In 2019, the country sent US\$100 million in remittances, which constituted 0.3% of GDP. This was lower than the average of 0.47% for upper middle-income African countries. By 2043, total remittances sent in the Financial Flows scenario will increase to US\$200 million, constituting 0.5% of GDP. This will slightly be higher than 0.49% of GDP in the Current Path forecast. The projections in both the Current Path forecast and the Financial Flows scenario are lower than the average of 0.66% of GDP for upper middle-income countries on the Current Path.

The GDP per capita in Namibia is estimated to rise to US\$15 849 by 2043 in the Financial Flows scenario — an increase of US\$556 (or 3.6%) above the Current Path forecast. This estimate is 11.9% below the average for upper middle-income countries in Africa, which is projected to be US\$17 734 by 2043. Remittances, aid and FDI inflow stimulate economic growth through the multiplier effect on businesses and household expenditure.

Trade openness will reduce poverty in the long term after initially increasing it due to the redistributive effects of trade. Most African countries export primary commodities and low-tech

manufacturing products, and therefore a continental free trade agreement (AfCFTA) that reduces tariffs and non-tariff barriers across Africa will increase competition among countries in primary commodities and low-tech manufacturing exports. Countries with inefficient, high-cost manufacturing sectors might be displaced as the AfCFTA is implemented, thereby pushing up poverty rates. In the long term, as the economy adjusts and produces and exports its comparatively advantaged (lower relative cost) goods and services, poverty rates will decline.

In the Financial Flows scenario, the total number of extremely poor people in Namibia by 2043 will be 1.74 million, equivalent to 45.8% of the total population. This projection constitutes a decline of 50 000 people, representing a 1.2 percentage point reduction from the Current Path forecast in the same year. It will also be 6.1 percentage points above the projected Current Path average for upper middle-income countries in Africa in 2043.

Infrastructure scenario

The Infrastructure scenario represents a reasonable but ambitious increase in infrastructure spending across Africa, focusing on basic infrastructure (roads, water, sanitation, electricity access and ICT) in low-income countries and increasing emphasis on advanced infrastructure (such as ports, airports, railway and electricity generation) in higher-income countries.

Note that health and sanitation infrastructure is included as part of the Health/WaSH scenario and that ICT infrastructure and more rapid uptake of renewables are part of the Leapfrogging scenario. The interventions there push directly on outcomes, whereas those modelled in this scenario increase infrastructure spending, indirectly boosting other forms of infrastructure, including those supporting health, sanitation and ICT.

The intervention is explained here in the thematic part of the website.

The total number of people with access to electricity in Namibia in 2019 was 1.3 million, constituting 50.1% of the population. This is projected to increase to 3 million in the Infrastructure scenario, constituting 78.9% of the population in 2043. This will exceed the Current Path forecast of 2.97 million, representing 78.1% of the population. However, it will be lower compared to the average forecast of 87.7% for upper middle-income countries in Africa.

By 2043, electricity access for urban residents in the Infrastructure scenario will be available for 83.4% of the urban population compared to 70.4% of rural dwellers. In the Current Path, electricity access for urban residents will constitute 82.5% of the population compared to 69.7% access for the rural population. Electricity access is additionally hampered by the dispersed nature of the population.

Indicator 9.1.1 in the Sustainable Development Goals refers to the proportion of the rural population who live within 2 km of an all-season road and is captured in the Rural Access Index.

Accessibility to rural areas is essential for improving the integration and interaction between rural and urban economies, which is important for spurring local economic development. The impact of the Infrastructure scenario on rural road access is, however, quite limited. The portion of Namibians who lived within 2 km from all-weather roads in 2019 was 64% — about 20 percentage points lower than the average for upper middle-income Africa. In the Infrastructure scenario, the portion of the rural population with all-season road access will rise to 65.9% by 2043, which is marginally higher than the projected 65.7% in the Current Path forecast but below the average of 84.5% for upper middle-income countries in Africa in that year. This is the result of the low population density and dispersed nature of the rural population.

The impact of the Infrastructure scenario on GDP per capita is small since most of the additional funds are allocated to improved water access and better sanitation with limited impact on increasing average incomes. Namibia's GDP per capita is projected to rise to US\$15 369 by 2043 in the Infrastructure scenario; this is US\$76 (or 0.5%) more than the projection in the Current Path forecast in the same year. Also, the estimated GDP per capita in this scenario will be 15.3% less than the Current Path average for its income peers on the continent.

The number of Namibians who live in extreme poverty in the Infrastructure scenario in 2043 will be 1.78 million (46.7% of the population). This constitutes a reduction of 10 000 people (a 0.3 percentage point decline) from the Current Path forecast of 1.79 million (47% of the population). Compared to other scenarios such as Agriculture, Free Trade and Education, the Infrastructure scenario has minimal impact on poverty reduction in Namibia. The poverty rate in the Infrastructure scenario in 2043 will also be higher than the Current Path average of 39.7% for upper middle-income countries in Africa.

Governance scenario

The Governance scenario represents a reasonable but ambitious improvement in accountability and reduces corruption, and hence improves the quality of service delivery by government.

The intervention is explained here in the thematic part of the website.

As defined by the World Bank, 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'.

Chart 51 presents the impact of the interventions in the Governance scenario on government effectiveness.

Namibia does well on the World Bank government effectiveness index. In 2019, Namibia's score for government effectiveness was 2.73 out of a possible score of 5, which was fifth highest in Africa. Government effectiveness will improve in both the Current Path forecast and Governance scenario. By 2043, Namibia's score in government effectiveness is projected to reach 3.11, which will be a mere 0.02 points above the Current Path forecast. It will, however, be 11.5% higher than the average for upper middle-income countries in Africa.

In the Governance scenario, Namibia's GDP per capita is projected to increase to US\$15 598 in 2043, constituting an increase of US\$303, about 2% above the Current Path forecast in the same year. However, this figure is 12% below the average of US\$17 734 for upper middle-income countries on the continent in the same year. Good governance in the form of adherence to the rule of law, reduced corruption, improved transparency and enhanced accountability would lead to more rapid economic growth in Namibia.

The proportion of people living below the poverty line of US\$5.50 is expected to decline to 46.2%, constituting 1.76 million people, in 2043 in the Governance scenario. It corresponds to about 30 000 fewer extremely poor people compared to the Current Path forecast for 2043. This is higher than the 39.7% average for upper middle-income African countries on the Current Path.

Impact of scenarios on carbon emissions

This section presents projections for carbon emissions in the Current Path for Namibia and the 11 scenarios. Note that IFs uses carbon equivalents rather than CO2 equivalents.

The intervention that will lead to the highest emission of carbon is the Manufacturing/Transfers scenario, with projected emissions of 3.5 million tons in 2043. It is not surprising given that the scenario also results in the largest growth in the size of the economy and GDP per capita. This will be followed by the Free Trade and Agriculture scenarios with estimated emissions of 3.4 million tons each. Conversely, the Infrastructure and Demographic scenarios are the interventions that lead to the least carbon emissions in 2043 due to their limited impacts on economic growth in the forecast horizon.

Endnotes

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- 2. The current situation of healthcare in Namibia.
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