



# Manufacturing Annexure

Kouassi Yeboua

Last updated 25 April 2024 using IFs 7.84

## Annexure

This theme used IFs version 7.84. All interventions start in 2024, interpolate to 2033 and then are maintained at that level unless indicated otherwise.

Interventions and parameters	Adjustment in IFs	Benchmark/Justification/Notes
<p>Improve government business regulation</p> <p>(govbusregindm)</p>	<p>Interpolate from 1 to 0.85 and maintain for Africa</p>	<p>To improve the business environment to stimulate private investment in the manufacturing sector.</p> <p>Between 2009 and 2019, the average score for South Asia on the Governance Regulatory Quality Index) increased by about 10%.</p>
<p>Increase government revenue</p> <p>(govrevm)</p>	<p>Interpolate from 1 to 1.04 by 2033 and hold for countries with government revenue to GDP ratio equal to or above 30% (South Africa, Botswana, Namibia, Morocco, Tunisia, Seychelles, Algeria, Congo and Lesotho)</p> <p>No intervention for Libya (Current Path forecast already aggressive)</p> <p>Interpolate from 1 to 1.05 by 2033 and hold for countries with government revenue to GDP ratio equal or above 20% but below 30% (Equatorial Guinea, Eswatini, Mauritius, Egypt, Cabo Verde, Gabon, Djibouti and Somalia)</p> <p>Interpolate from 1 to 1.1 by 2033 and hold for countries with government revenue to GDP ratio equals to or above 10% but below 20% (Senegal, Togo, Angola, Kenya, Ghana, Mauritania, Côte d'Ivoire, Mozambique, Zambia, Tanzania, Benin and Cameroon)</p>	<p>To increase the government's ability to support industrialisation and provide social grants to mitigate the initial increase in inequality associated with rapid structural transformation (Kuznet tension/developer's dilemma).</p> <p>In the scenario, government revenue for Africa as per cent of GDP is above South Asia but below South America.</p>

	<p>Interpolate from 1 to 1.2 by 2033 and hold for countries with very low government revenue to GDP ratio (below 10%) (Liberia, Uganda, Sierra Leone, Malawi, Madagascar, Burkina Faso, Comoros, Rwanda, Mali, Ethiopia, São Tomé and Príncipe, Guinea, Sudan, Central African Republic, Chad, Niger, Gambia, DR Congo, Nigeria, Guinea Bissau, Burundi and South Sudan)</p>	
<p>Increase government-to-household welfare transfers (govhtrnwelm) (unskilled)</p>	<p>Interpolate from 1 to 1.5 and maintain for low-income Africa and Equatorial Guinea given its low-income characteristics</p> <p>Interpolate from 1 to 1.3 by 2033 and hold for Africa low-middle-income</p> <p>Interpolate from 1 to 1.4 by 2033 and hold for Namibia and Botswana (high-inequality countries)</p> <p>Interpolate from 1 to 1.05 by 2033 and hold for South Africa, Mauritius, Seychelles and Libya</p> <p>Interpolate from 1 to 1.5 by 2033 and hold for Equatorial Guinea</p>	<p>Welfare spending to cushion vulnerable people. The initial stage of the manufacturing-led structural transformation is often associated with poverty and inequality (developers' dilemma).</p> <p>No historical data. On average, government-to-household welfare transfers in Africa are higher in upper-middle-income and lower-middle-income countries than in low-income countries.</p> <p>This intervention puts Africa's average government transfers to households (per cent GDP) on par with the average for South Asia and South America.</p>
<p>Increase R&amp;D expenditure (public and private) (randdexpm)</p>	<p>Interpolate from 1 to 1.5 by 2033 and hold for Africa low-income countries</p> <p>Interpolate from 1 to 1.2 by 2033 and hold for lower-middle-income Africa</p> <p>Interpolate from 1 to 1.1 by 2033 and hold for upper-middle-income</p>	<p>Building technological capability through R&amp;D is crucial for a robust manufacturing sector. It stimulates innovation, increases productivity and improves the quality of products.</p> <p>No historical data. R&amp;D spending is very low in Africa, especially in low-income countries. They can improve rapidly from a very low base.</p>

	countries including Seychelles (the only high-income country in Africa)	These interventions put R&D spending in Africa on par with South America by 2043 but below South Asia.
Increase investment in the manufacturing sector (idsm)	<p>Interpolate from 1 to 1.1 by 2033 and hold for the leading manufacturing (top) countries in Africa (South Africa, Morocco, Egypt, Tunisia and Mauritius)</p> <p>Interpolate from 1 to 1.05 by 2033 and hold for the upper-middle quintile (Nigeria, Eswatini, Senegal, Kenya, Namibia, Algeria, Gabon, Côte d'Ivoire, Ghana, Equatorial Guinea, Botswana, Benin, Zambia, Uganda and Tanzania)</p> <p>Interpolate from 1 to 1.04 by 2033 and hold for the middle quintile (Lesotho, Congo, Cameroon, Ethiopia, Togo, Seychelles, Madagascar, Libya, Mozambique and Cabo verde)</p> <p>Interpolate from 1 to 1.03 by 2033 and hold for the low-middle quintile (Zimbabwe, Djibouti, Angola, Rwanda, Burkina Faso, Mauritania, Mali, Niger and Guinea)</p> <p>Interpolate from 1 to 1.02 by 2033 and hold for the bottom quintile (Liberia, Malawi, São Tomé and Príncipe, Chad, Comoros, Eritrea, Central African Republic, Sierra Leone, Guinea-Bissau, Burundi and Gambia)</p>	<p>Interventions are based on the African Industrialisation Index produced by the African Development Bank. Countries are divided into five quintiles by rank (top, upper-middle, middle, low-middle and bottom).</p> <p>In this scenario, manufacturing's share in Africa's GDP increases by 3.5 percentage points above the Current Path forecast in the same year. It is also above South America (19% of GDP) and below South Asia (31% of GDP).</p>
Increase labour participation rate (total) (labparm)	Interpolate from 1 to 1.01 by 2033 and hold for low-income countries	Manufacturing growth should lead to direct and indirect employment in the

	<p>Interpolate from 1 to 1.03 by 2033 and hold for low-middle-income countries</p> <p>Interpolate from 1 to 1.04 by 2033 and hold for upper-middle-income countries, including Seychelles (the only high-income country in Africa)</p>	<p>sector.</p> <p>On average, the labour participation rate in low-income countries is higher than in lower- and upper-middle-income countries. Between 2000 and 2009, the labour participation rate in upper-middle-income Africa increased by 5%.</p>
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Kouassi Yeboua (2024) Manufacturing. Published online at [futures.issafrica.org](https://futures.issafrica.org). Retrieved from <https://futures.issafrica.org/thematic/07-manufacturing/> [Online Resource] Updated 25 April 2024.

## About the authors

Dr Kouassi Yeboua is a senior researcher in African Futures and Innovation programme in Pretoria. He recently served as lead author on ISS studies on the long-term development prospects of the DR Congo, the Horn of Africa, Nigeria and Malawi. Kouassi has published on various issues relating to foreign direct investment in Africa and is interested in development economics, macroeconomics, international economics, and economic modelling. He has a PhD in Economics.

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