Recent progress towards industrialisation in Tanzania[1]

KEY MESSAGES

- Industry, broadly defined, accounts for around a quarter of Tanzania's gross domestic product (GDP) but just 6.3% of total employment. In general, the employment share of industry in total employment has grown over the past 10 years or so. Within industry, manufacturing leads in terms of employment, with a share of 3.1%.
- In 2017, Tanzania's manufacturing sector grew at 7.1%, but its real GDP contribution (at 5.5%) is still very low. The performance of industry, and manufacturing in particular, is weak compared with its potential growth and contributions to GDP, exports and employment creation.
- Manufacturing dominates industrial activity in Tanzania when measured by the number of industrial establishments and employment. Food processing and beverage production are the most significant contributors to manufacturing value added (MVA), with food processing accounting for 36.9% of total manufacturing employment. Textile production is also an important source of manufacturing employment (20.9%). Employment in manufacturing is, overall, dominated by males, particularly in managerial and professional positions, suggesting gender-sensitive interventions are required to promote inclusiveness.
- Manufacturing exports are the largest contributor to Tanzania's non-traditional exports, although this share has declined since 2015 (from 33.1% to 25.5% in 2016 and 24.2% in 2017). Growth in exports of manufactures has also declined over the past decade, from a rate of 25.4% in 2006 to 10.1% in 2015, negative growth (-20%) in 2016 and 16.6% in 2017.
- Tanzania has achieved marginal gains in industrial competitiveness, as measured by the Competitive Industrial Performance (CIP) index. This is evident in improvements in MVA and manufacturing exports per capita, and marginal improvements in Tanzania's share of world trade in manufactures. Tanzania fares reasonably well in regional comparisons of manufacturing competitiveness, when measured by the CIP index, but still ranks below Kenya.
- Tanzania needs to promote manufacturing of medium- and high-tech products. The shares of medium- and high-tech MVA in total manufacturing, and medium- and high-tech manufactured exports in total manufactured exports, have deteriorated when measured by the CIP index.
- Low capacity utilisation rates and a lack of competitiveness constrain the operations of firms engaged in manufacturing in Tanzania. This is a product of a shortage of qualified labour, competition from imports and a high-cost operating environment, among other challenges.
- Effective implementation of Tanzania's National Five-Year Development Plan (FYDP II) 2016/17–2020/21 can help revive domestic manufacturing firms through rehabilitation and support for strategic industries.

1. INTRODUCTION

This briefing provides an update on recent industrialisation progress in Tanzania, with a particular focus on the status of the manufacturing sector. It draws on recent statistics for relevant industrialisation indicators, using both national and international data.

[1] This briefing was prepared by Professor Amon Mbelle and Hafidh Kabanda (Economic and Social Research Foundation) with input from Neil Balchin and Dirk Willem te Velde (Overseas Development Institute), in July 2018. The views presented do not necessarily represent the views of the UK Department for International Development or the Overseas Development Institute.

The current drive towards industrialisation in Tanzania can be traced back to independence in 1961, when an import substitution industrialisation strategy was launched. A series of policies, plans and strategies followed. What we observe as the current status and progress of industrialisation in general, and manufacturing in particular, has evolved out of these policy experimentations. The current industrialisation drive, embedded in the country's National Five-Year Development Plan (FYDP II) 2016/17–2020/21, themed 'Nurturing Industrialization for Economic Transformation and Human Development', is intended to achieve the desired growth and transformation agenda – as articulated in the Tanzania Development Vision (TDV) 2025 – and to drive technological advancement.

The FYDP II thus intends to build a base for transforming Tanzania into a semi-industrialised nation by 2025. Industry has been assigned specific targets for growth, contribution to gross domestic product (GDP) and employment creation, among other objectives. Projecting current performance forward, some of the targets may not be realised within the specified timelines (see Table 2).

The performance of industry, and manufacturing in particular, is still perceived as weak compared with its potential growth and contributions to GDP, exports and employment creation. One of the causes of this is the closure of firms for a variety of reasons, including low capacity utilisation rates and a lack of competitiveness. For example, a report by the Textile Development Unit in the Ministry of Industry, Trade and Investment (2017) revealed that, in 2016, there were 18 textile and garment factories in the country, but only 11 were operational (about 61%). The three key challenges identified were a shortage of skilled labour; unfair competition from improperly taxed imports; and a high-cost operating environment (power supply, customs procedures and employment costs, especially related to work permits).

The situation is expected to improve, given the drive in the recently published Action Plan forming part of the FYDP II Implementation Strategy to enhance Tanzania's production and trading capabilities by fostering value chains and their competitiveness. Implementation of the plan will cover a number of flagship projects, with a strong focus on infrastructure, skills development, special economic zones and industrial parks, and support for strategic industries. Targeted interventions for growth and industrialisation cover manufacturing (including cotton to textiles, leather to leather products, pharmaceuticals, automotive assembly, micro, small and medium enterprises, industrial research and development institutions, and specific projects to support soda ash, edible oil and sugar production), mining and metals, agriculture, trade and investment, natural resources and tourism, the environment, and science, technology and innovation. Other relevant plans include interventions to improve the enabling environment for industrial development, particularly in relation to power and transportation infrastructure.

It should be noted here that the FYDP II can serve only as a springboard for further industrialisation, since completion of the abovementioned projects will be realised beyond its life span.

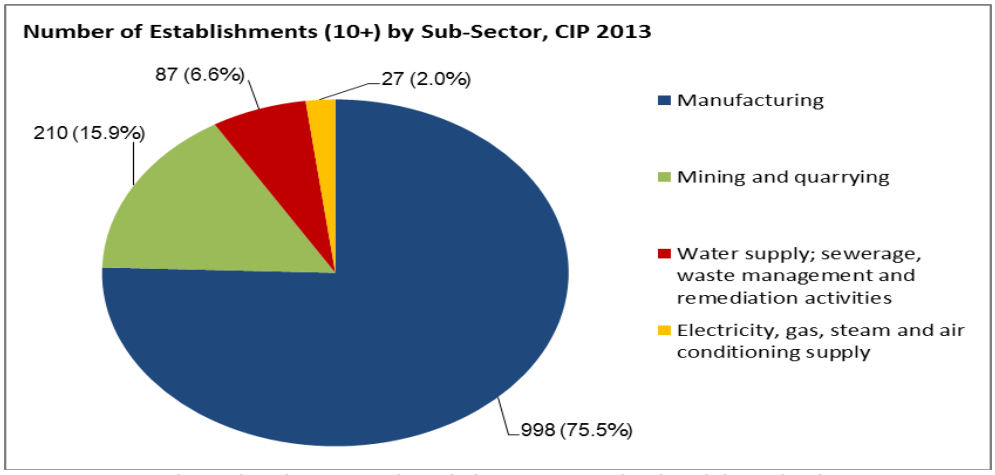
2. TANZANIA'S INDUSTRIAL SECTOR: STRUCTURE, IMPORTANCE AND PERFORMANCE

Tanzania's drive towards industrialisation is motivated by the role industry plays in achieving sustainable growth and development and expanding employment, particularly in the long run by boosting productivity. Manufacturing is prioritised for its role in fostering innovation and productivity growth. This section discusses some of the key aspects of the industrial sector.

Structure of Tanzania's industrial sector

The latest comprehensive Census of Industrial Production indicates that the manufacturing sector dominates industrial activity in Tanzania, constituting about 75.5% of all industrial establishments employing 10 or more workers (Figure 1). A notable feature of the Census is the absence of information on construction; this is, however, contained in the annual Economic Survey.

Figure 1. Structure of Tanzania's industry, 2013



Source: Tanzania National Bureau of Statistics, Census of Industrial Production

Contribution of industry to Tanzania's GDP

According to the latest data provided by Tanzania's annual Economic Survey (2017), industry makes up 26.4% of GDP, second behind the services sector, which contributes 43.5%. Agriculture accounts for 30.1% of GDP.

Growth and GDP contribution of industrial sub-sectors

Among the industrial sub-sectors in Tanzania, mining recorded the highest growth rate, of 17.5%, in 2017, followed by water (16.7%), construction (14.1%), manufacturing (7.1%) and electricity (2.1%) (Economic Survey 2017). With regard to GDP contribution, construction ranked first among the subsectors, at 15%, followed by manufacturing (5.5%), electricity and water (both at 5% each), and mining and quarrying (4.8%).

Contribution of industry to total employment in Tanzania

The latest Integrated Labour Force Survey (ILFS) results, for 2014, show that industry, including manufacturing, accounts for 6.3% of total employment in the economy (9.3% males and 3.1% females). This marks an improvement over previous ILFS results, in which industry accounted for 4.2% (see Table 1). Note that the ILFS is conducted at long intervals of over five years.

Table 1. Employment share by sector and gender (%), 2006 and 2014

	Male		Female		All	
Sector	**2006**	**2014**	**2006**	**2014**	**2006**	**2014**
Industry					4.2	6.3
Mining and quarrying	0.9	1.7	0.1	0.4	0.5	1.1
Manufacturing	3.4	3.6	1.9	2.6	2.6	3.1
Construction	2.1	4.0	0.1	0.1	1.1	2.1
Other sectors						
Agriculture, forestry and fishing	72.7	64.0	80.0	69.9	76.5	66.9
Wholesale and retail trade	9.3	12.4	6.1	12.8	7.6	12.7
Transportation and storage	2.9	5.0	0.2	0.2	1.5	2.6
Accommodation and food service	1.1	1.4	2.8	6.5	2.0	3.9
Administrative and support service	1.9	1.0	0.3	0.3	1.1	0.6
Education	1.6	2.1	1.2	2.1	1.4	2.1
Health and social work activities	0.5	0.7	0.7	1.0	0.6	0.8
Other	3.6	4.1	6.7	4.1	5.2	4.1
Total	**100**	**100**	**100**	**100**	**100.1**	**100**

Note: 'Other' includes electricity, gas and water; financial intermediation; real estate/renting and business activities; other community/social and personal service activities; and employed persons in private households.
Sources: 2006 and 2014 ILFS Analytical Reports.

Baseline sector contributions and key targets: industry in comparative perspective

Table 2 summarises Tanzania's baseline performance (in 2015) in terms of broad sector contributions to GDP, real growth, total employment and total exports, as well as key targets for 2020 and 2025.

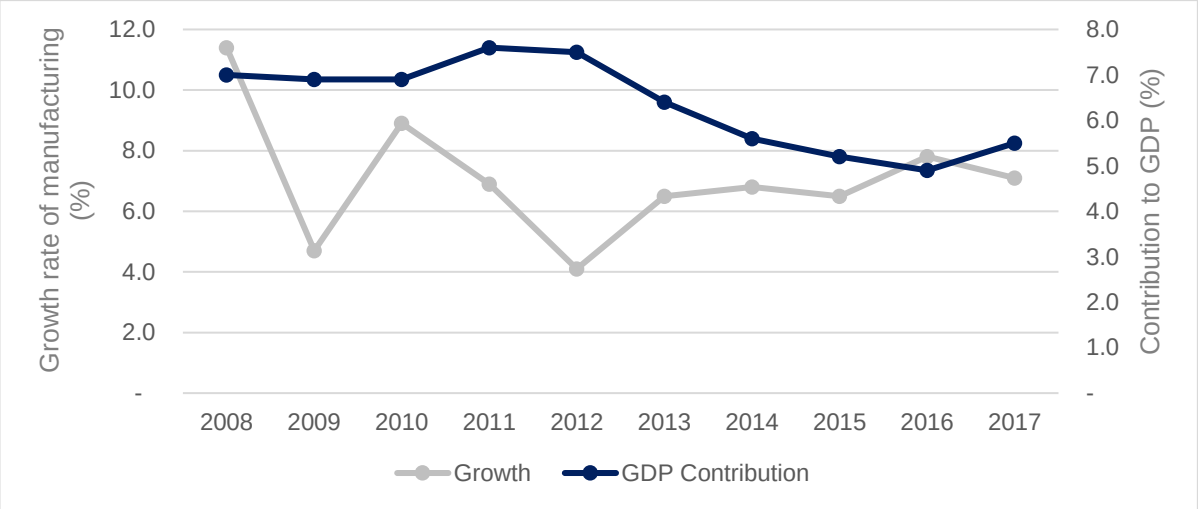
Table 2. Baseline and key targets for selected sectors, Mainland Tanzania, 2015, 2020 and 2025

Sector	Share of GDP (%)			Real growth (%)			Share of total employment (%)		
	2015	2020	2025	2015	2020	2025	2015	2020	2025
Mining	3.4	3.2	4.6	6.9	5.3	4.5	1.1	1.9	4.5
Manufacturing	5.2	12.5	18.0	6.5	10.5	12.2	3.1	5.4	12.8
Construction	10.4	11.8	11.8	13.3	9.6	9.6	2,1	3.7	8.7

Note: The targets for the water and electricity subsectors are expressed in terms of access and, consequently, are not included here.
Source: FYDP II.

Figure 2 shows trends in manufacturing growth and contribution to GDP since 2008 (the policy variable of interest is growth, since contribution to GDP is relative). The highest growth rate was recorded in 2008 (11.4%) and the lowest in 2012 (4.1%), with a general recovery experienced from 2013, driven mainly by the presence of a supportive operating environment and especially the availability of power.

Figure 2. Growth rate and GDP contribution of manufacturing, Mainland Tanzania, 2008–2017



Source: Economic Survey 2017.

3. FOCUSING ON TANZANIA'S MANUFACTURING SECTOR: STRUCTURE, IMPORTANCE AND PERFORMANCE

As Section 2 has pointed out, manufacturing is expected to lead innovation and productivity growth in Tanzania. The FYDP II prioritises manufacturing to champion industrialisation and facilitate economic transformation. This section discusses the salient features of the sector.

Structure of Tanzania's manufacturing sector

Manufacturing activity in Tanzania is dominated by food processing (see Table 3), which accounts for 38.9% of manufacturing value added (MVA) (followed by beverages at 20.8%) and 36.9% of total manufacturing employment. Textile manufacturing is also an important source of employment, contributing 20.9% to total employment in manufacturing.

The final column of Table 3 compares MVA per capita. The beverages industry contributes the most in terms of value added per capita (TZS 133.4 million), followed by tobacco and cigarettes (TZS 73.5 million) and rubber and plastic products (TZS 39.4 million). The lowest value added per capita is provided through textile manufacturing (TZS 4.4 million per capita).

Table 3. Structure of Tanzania's manufacturing sector, 2017

ISIC (Rev 3)	Description	Value added		Employment		Value added per capita (TZS million)
		TZS million	% of total	Number	% of total	
151–4	Food processing	2,124,824	38.9	103,718	36.9	20.5
155	Beverages	1,135,960	20.8	8,513	3.0	133.4
160	Tobacco and cigarettes	456,400	8.4	6,210	2.2	73.5
171–2, 181	Textile manufacturing, weaving/tailoring apparel	257,982	4.7	58,651	20.9	4.4
191	Skins and skin products	17,150	0.3	2,097	0.7	8.2
201–202	Timber and timber products	96,607	1.8	11,448	4.1	8.4
210-221–222	Manufacture of paper products, printing	99,510	1.9	6,797	2.4	14.6
241–2	Manufacture of chemicals and pharmaceuticals	214,218	3.9	9,038	3.2	23.7
251, 252	Rubber and plastic products	207,786	3.8	5,278	1.9	39.4
261–9	Manufacture of non-metallic products	369,760	6.7	11,407	4.0	32.4
271–369	Others	484,057	8.8	57,741	20.7	8.4
	Total manufacturing	**5,464,250**		**280,899**		**Unweighted average: 19.5**

Source: Economic Survey 2017; percentages computed.

Structure of employment in Tanzania's manufacturing sector

Within the manufacturing sector, employment is male-dominated, suggesting gender-sensitive interventions are required to promote inclusiveness. With respect to managerial and professional staff, males take up 81.5% of roles and females a paltry 18.5%. Among those involved in operating machinery, information and communication technology, quality control or other operational roles, skilled males make up 89.7% against 10.3% for females. Women, however, constitute the majority in terms of working proprietors and partners, at 53.6% against 46.4% for males.

Contribution of manufacturing to total exports and non-traditional exports

The value of manufactured exports was $819.6 million in 2017, down from $1,002 million recorded in 2016. Since 2010, the highest value recorded for exports of manufactures has been $1,364.5 million in 2015. Manufactures have declined as a share of total exports in recent years, accounting for 25.3% in 2015, 21.1% in 2016 and 16.6% in 2017. The overall picture is that the export performance of the manufacturing sector has been declining in both absolute and relative terms.

Exports of manufactures constitute the largest share of non-traditional exports (defined as exports of commodities other than the seven traditional crops – namely, coffee, cotton, sisal, tea, tobacco, cashews and cloves). According to the latest available statistics from the Economic Survey 2017, exports of manufactures accounted for 24.2% of non-traditional exports in 2017, down from 25.5% recorded in 2016 and 33.1% in 2015. The decline in export performance is partly explained by the challenges faced by the manufacturing sector (see Section 1).

The international competitiveness of Tanzanian manufacturing

Growth of manufactured exports

Growth in exports of manufactures has slowed over the past 10 years or so, from an annual growth rate of 25.4% recorded in 2006 to negative growth (-20%) in 2016 and 16.6% in 2017 (Economic Survey 2017).

Benchmarking Tanzania's performance globally and regionally using the Competitive Industrial Performance index

Tables 4 and 5 depict Tanzania's performance as measured by the Competitive Industrial Performance (CIP) index. The results show gains in international competitiveness, albeit marginal. Improvements are seen in MVA per capita and manufacturing exports per capita. Very marginal improvements have also been registered in world shares.

Table 4. Trends on Tanzania's Competitive Industrial Performance indicators, 2003, 2008 and 2016

		Value		
S/No.	**Indicator description**	**2003**	**2008**	**2016**
1	MVA per capita (constant US$ 2010)	34.4	43.0	55
2	Manufacturing exports per capita (current US$)	31.3	33.0	47
3	Medium- and high-tech MVA share in total manufacturing (%, current US$)	11.2	8.6	6.83
4	Share of MVA in GDP (%, constant 2010 US$)	8.0	8.6	6.78
5	Medium and high-tech manufactured exports share in total manufactured exports (% current US$)	22.9	22.4	20.22
6	Manufactured exports share in total exports (current US$)	42.5	36.8	43.18
7	Impact on world MVA (%, current US$)	0.00	0.02	0.02
8	Impact on world manufactures trade (%, current US$)	0.00	0.01	0.02

Note: These data are compiled by UNIDO and 2016 is the latest reported year.
Source: UNIDO annual reports (various).

The indicators showing a declining trend in performance are the shares of medium- and high-tech MVA in total manufacturing, the share of MVA in GDP and the percentage shares of medium- and high-tech manufactured exports in total manufactured exports. Tanzania thus needs to promote manufacturing activities in medium- and high-tech products.

Table 5 shows some marginal improvements in Tanzania's rank (from position 121 to 120 between 2013 and 2015) and score (index moving from 0.007 to 0.008) on the CIP index over time, although the country still performs poorly on both dimensions. Tanzania fares better in regional comparisons, ranking second to Kenya on the CIP index in both 2013 and 2015.

Table 5. Trend in Competitive Industrial Performance index ranking, Tanzania and selected countries, 2013 and 2015

Country	**Value, 2013**	**2013 Rank/141**	**Value, 2015**	**2015 Rank/148**
Germany	0.576	1	0.541	1
Republic of South Africa	0.088	41	0.072	47
Kenya	0.010	113	0.011	102
Tanzania	**0.007**	**121**	**0.008**	**120**
Uganda	0.004	129	0.005	126
Rwanda	0.003	136	0.002	139
Burundi	0.001	140	0.001	144

Note: These data are compiled by UNIDO and 2016 is the latest reported year.
Source: Abridged from UNIDO annual reports, 2013 and 2018.

4. CONCLUDING REMARKS

The signs of recovery in Tanzania's manufacturing sector after 2013 are likely to be sustained, as a result of progress made in resolving long-standing power constraints through successive investments in the energy sector and the use of natural gas. In this regard, recent progress has been good and is likely to continue in the medium to long term. Nevertheless, the performance of industry, and manufacturing in particular, is still weak compared with its potential growth and contributions to GDP, exports and employment creation. The share of manufacturing in Tanzania's GDP remains low, and has been declining in the recent past – from a peak of 7.6% in 2011 to 4.9% in 2016, although this share was up to 5.5% in 2017. The export performance of the manufacturing sector has been declining in both absolute and relative terms. More attention needs to be paid to supporting growth and competitiveness in Tanzanian manufacturing to drive progress towards industrialisation.

Tanzania has set an ambitious industrialisation agenda in pursuit of the goals articulated in the TDV 2025. The observed status and performance of industry is partly a consequence of past policies, plans and strategies. The FYDP II and its accompanying Implementation Strategy have revitalised the industrialisation agenda by articulating concrete interventions. If implemented effectively, these are likely to improve performance in the medium to long term. Effective and sustained monitoring of the implementation of interventions to support industrialisation, and progress towards industrialisation, is required to gauge performance against established targets.