



cutting through complexity

Sector Report

Manufacturing in Africa

kpmg.com/africa



The series has the following reports:

- Banking in Africa
- Private Equity in Africa
- Insurance in Africa
- Power in Africa
- Healthcare in Africa
- Oil and Gas in Africa
- Construction in Africa
- Fast-Moving Consumer Goods in Africa
- Luxury Goods in Africa
- The African Consumer and Retail
- White Goods in Africa
- Agriculture in Africa
- Life Sciences in Africa



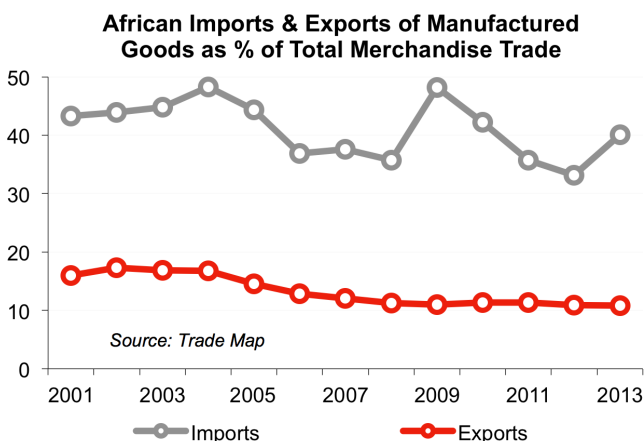
Table of Contents

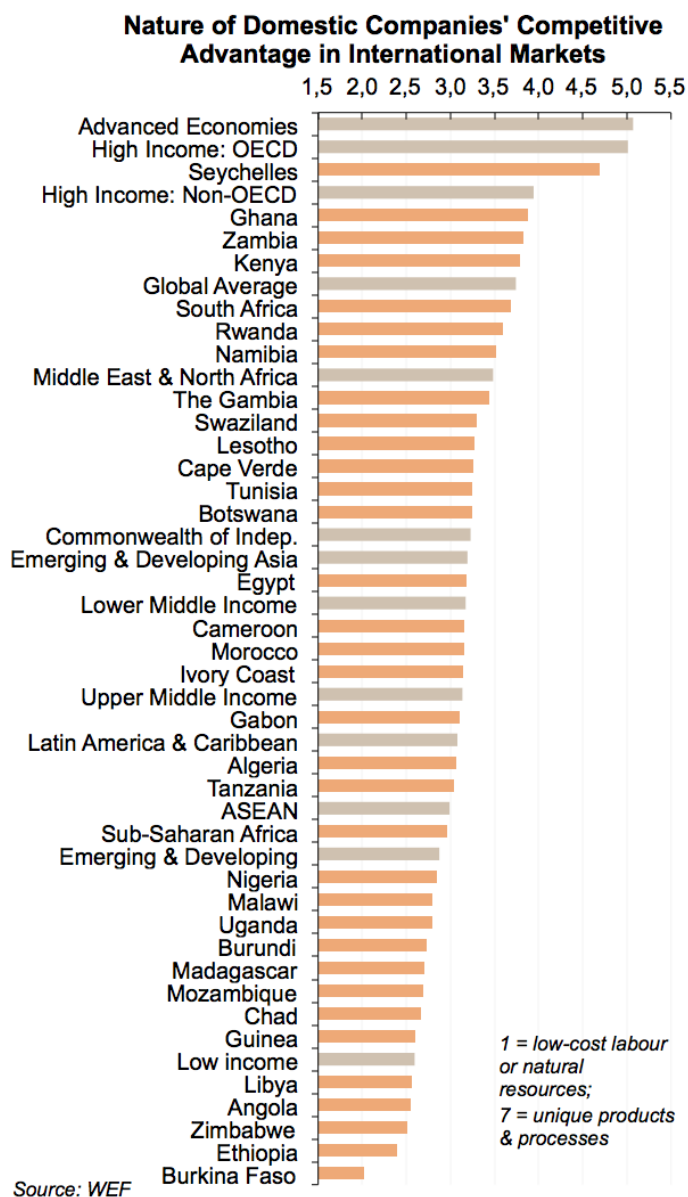
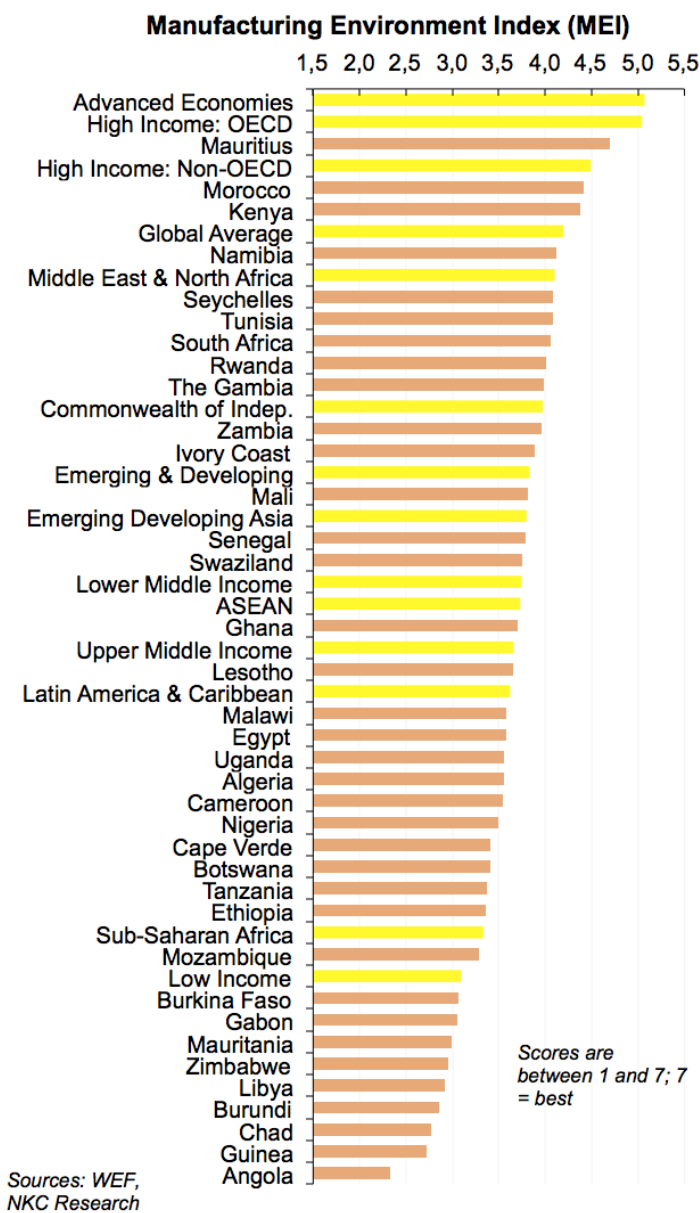
Overview	1
Trade in Manufactured Goods	4
Africa's Major Manufacturing Economies	6
Nigeria	7
Egypt	8
South Africa	9
Morocco	10
Angola	11
Kenya	12
DRC	13
Ivory Coast	14
Ghana	15
Zambia	16
Manufacturing Production Indices (19 Countries)	17
Final Thoughts	18
Key Manufacturing Indicators	19
Sources of Information	20
Contact Details	21

Overview

Factory activity accounted for 10% of Africa's GDP over the past decade. The manufacturing sector is widely considered to be the ideal industry to drive Africa's development due to the labour-intensive, export-focused nature of the business. Indeed, as pointed out by The Economist during 2014, few countries have been able to escape poverty without employing a significant amount of their people in manufacturing activity. The Africa Progress Panel also sees some degree of manufacturing development as a prerequisite for sustained high economic growth on the continent. According to World Bank Economist Hinh Dinh: "It is the responsibility of African governments to bring foreign direct investment (FDI) to manufacturing to create jobs. The history of economic development is such that any country would need to start producing basic household goods. Over time they moved to higher value goods. No country in the world has developed without producing light manufacturing. And no country can skip it." From a different perspective, alleviating poverty on the continent is directly linked to improved nutritional levels, as healthier workers are more productive. Increased agro-processing in the continent would reduce food insecurity and demand for imported foodstuffs. For this reason, stimulating manufacturing production via industrial policies is an important political variable. Already, in many African countries, investment flows from politically friendly states in Asia come with conditions requiring politicians to make room for manufacturing in their policy decisions.

Admittedly, Africa offers a unique combination of factors that make it difficult to operate in the secondary sector. These issues include, on a country-by-country basis, challenges to reliable power supply, a shortage of domestic suppliers, high costs of importing and exporting goods, and deficient physical infrastructure, amongst others. To gain more insight into which countries offer an accommodating environment for manufacturing activity, the accompanied graph illustrates a Manufacturing Environment Index (MEI) constructed using data from the World Economic Forum's (WEF) Global Competitiveness Index (GCI) 2014-15. Only three African states (Mauritius, Morocco and Kenya) are above the global average, and the sub-Saharan Africa (SSA) average is significantly lower compared to Latin America, the Caribbean, and Emerging Developing Asia. Similarly, a WEF measurement for the competitiveness of countries' products on the international market does not rate African states well. Only four countries (Seychelles, Ghana, Zambia and Kenya) are scored above the global average, with the SSA mean again lagging most other regions. While the accompanied graphs might not appear flattering to Africa as a whole, they do underscore the fact that Africa has dozens of different countries with diverse business environments. The illustrations show that some countries offer manufacturing enterprises a business climate that is on par with the global mean and better than some traditionally factory-oriented regions.





The Manufacturing Environment Index (MEI) is constructed by NKC African Economics and takes into account the quality of overall infrastructure (e.g. transport and telephony), the quality of electricity supply (interruptions and fluctuations), workers' pay versus productivity, local supplier quantity and quality, the state of cluster development (i.e. geographic concentration of suppliers and producers), and value chain breadth.

Many countries with poor MEI assessments (e.g. Angola, Mozambique and Zimbabwe) have endowments such as natural resources and low-cost labour that are important to manufacturing activity. Almost four out of 10 respondents to a 2014 survey by the African Economic Outlook (AEO) identified these attractive endowments as strengths for African countries towards participating in global value chains. However, a tough operating environment makes it difficult even for well-endowed states from qualifying for FDI into the manufacturing sector. In fact, the majority of African manufacturing enterprises are focused on final product assembly, according to the AEO, rather than primary processing or intermediate input production. This implies that factories are not significantly oriented towards employing the continent's abundant low-skilled workers and natural resources and instead need more skilled employees. Africa needs to leverage its abundant resources and labour to build long-term competitive advantages in the factory sector, argues the African Centre for Economic Transformation (ACET). However, the low cost of employment is only a temporary advantage, as is evident in many Asian states, and also requires a long-term focus on increased productivity and technological capabilities.

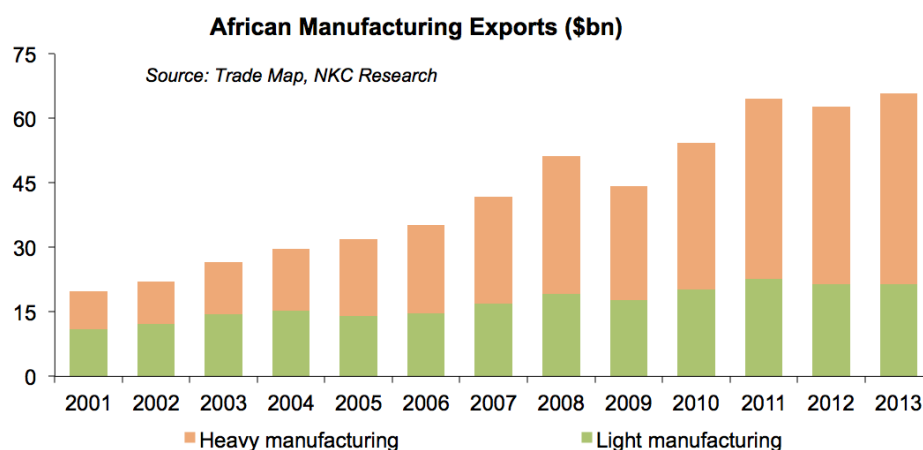
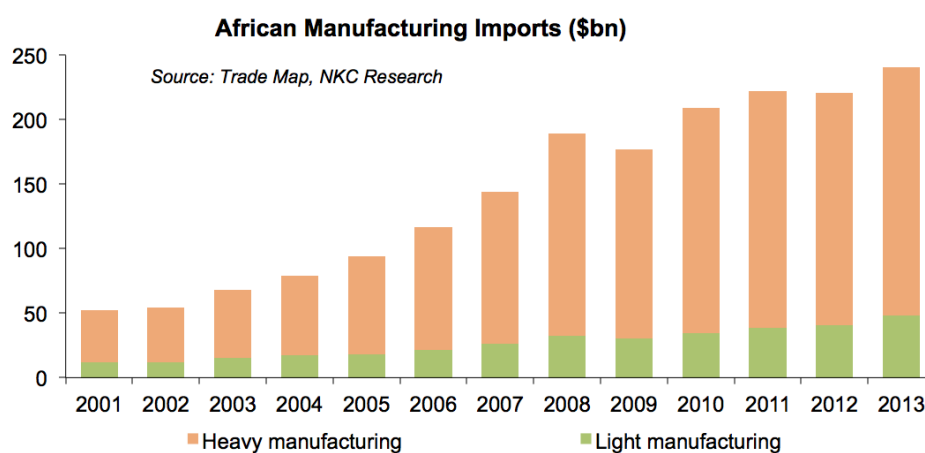
But how should African governments approach the challenge of making it easier for their manufacturing sectors to perform better and grow? A 2012 publication by the World Bank, entitled 'Light Manufacturing In Africa: Targeted Policies to Enhance Private Investment and Create Jobs', the multilateral organisation pulled inspiration from China's industrial parks for both small and large enterprises. The country has more than 1,000 such government-administered parks with many more managed by regional governments and city authorities. This has enabled many small (often family controlled) businesses to develop into medium-sized operations with a focus on both domestic and international markets. According to the World Bank, these industrial parks offer tenants security, quality basic infrastructure, streamlined government regulations, affordable land, technical training, and standardised factory shells. By supporting these small enterprises to grow into medium-sized companies, China has been able to avoid the 'missing bubble' of medium-sized manufacturing operations largely absent in Africa. On a positive note, industrial parks, Special Economic Zones (SEZs) and other similar structures have already found a home in some African countries – e.g. South Africa, Morocco, Kenya, Ivory Coast and Zambia, as discussed further on in this document.



Trade in Manufactured Goods

During 2013, Africa imported US\$240bn worth of manufactured goods compared to almost US\$66bn worth of manufactured exports. The continent recorded a compound annual growth rate (CAGR) of 9.5% in manufactured exports over the past decade and a 13.4% rise in manufactured imports, according to Trade Map data. Of note is the fact that light manufacturing exports grew by a CAGR of only 4% over the past 10 years and that shipments of heavy manufactures expanded by almost 14%. And the increase in heavy exports was broad-based, including land transport vehicles, ships and other offshore floating devices, white goods (appliances), industrial (capital) equipment, and electronic equipment. The only areas that lagged behind were, not surprisingly, aircraft and railway stock. The strong rise in heavy manufactured

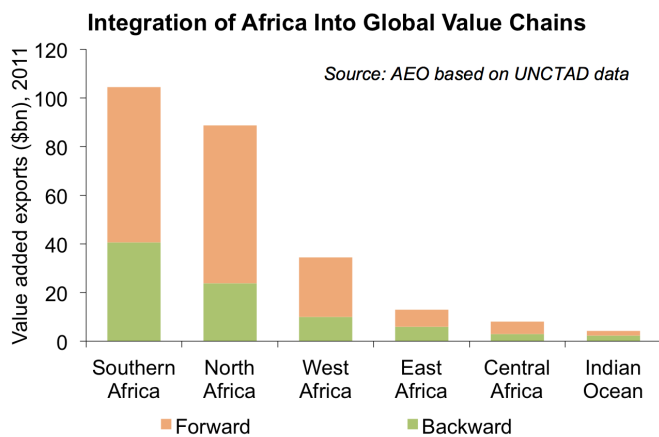
goods exports is testament to the progress being made by the continent's manufacturers in moving towards more technologically intensive and more specialised factory goods, despite WEF information on product competitiveness indicating there is still a long way to go. In terms of imports, the boom in Africa's economy over the past decade has included a significant rise in its total import bill – the continent imported US\$18.7trn worth of merchandise goods during 2013 compared to just US\$6trn at the turn of the century. Imports of light manufactured goods increased by a CAGR of 12.2% over the past decade while heavy manufactured goods – required to support the continent's resource boom – expanded by a healthier 13.8%.



Light manufacturing includes the following goods classified by their Harmonised System (HS) codes: silk (50); wool, animal hair, horsehair yarn and fabric thereof (51); cotton yarn & fabric (52); vegetable textile & fibres, paper yarn, woven fabric (53); manmade filaments (54); manmade staple fibres (55); wadding, felt, nonwovens, yarns, twine, cordage (56); carpets and other textile floor coverings (57); special woven or tufted fabric, lace, tapestry (58); impregnated, coated or laminated textile fabric (59); knitted or crocheted fabric (50); articles of apparel, accessories, knit or crochet (61); articles of apparel, accessories, not knit or crochet (62); other made textile articles, sets, worn clothing (63); footwear, gaiters and the like, parts thereof (64); headgear and parts thereof (65); umbrellas, walking-sticks, seat-sticks, whips (66); bird skin, feathers, artificial flowers, human hair (67); optical, photo, technical, medical, etc. apparatus (90); clocks and watches and parts thereof (91); musical instruments, parts and accessories (92); arms and ammunition, parts and accessories thereof (93); furniture, lighting, signs, prefabricated buildings (94); toys, games, sports requisites (95); miscellaneous manufactured articles (96); works of art, collectors pieces and antiques (97). **Heavy manufacturing** includes machinery, nuclear reactors, boilers, etc. (84); electrical, electronic equipment (85); railway, tramway locomotives, rolling stock, equipment (86); vehicles other than railway, tramway (87); aircraft, spacecraft, and parts thereof (88); ships, boats and other floating structures (89).

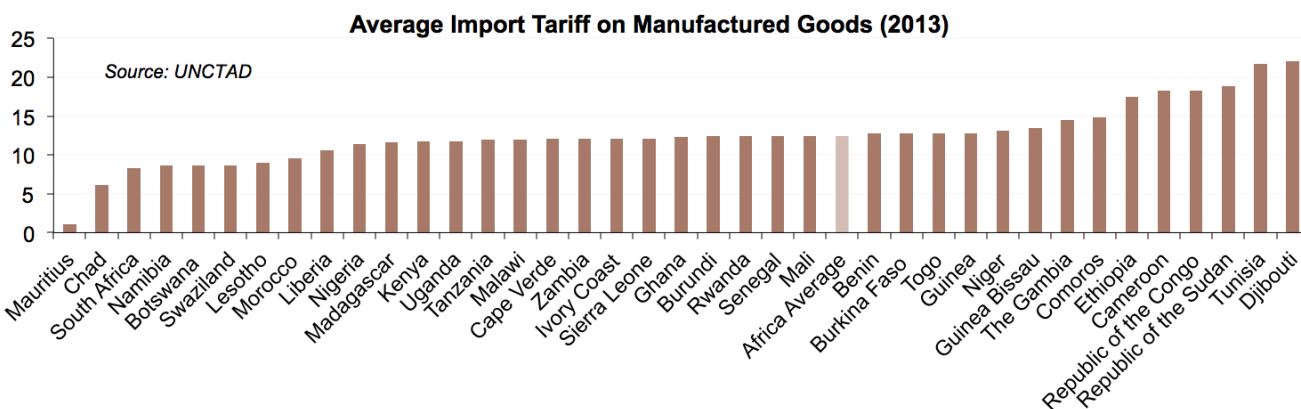
Trading Across Borders: Standard 20-Foot Shipping Container Regional Averages							
	OECD	East Asia & Pacific	Europe & Central Asia	Latin America & Caribbean	South Asia	Middle East & North Africa	Sub-Saharan Africa
Documents to export (number)	4	9	7	6	8	6	8
Time to export (days)	10.5	20.2	23.6	16.8	33.4	19.4	30.5
Cost to export (\$ per container)	1,080.3	846.0	2,154.5	1,299.1	1,922.9	1,166.3	2,200.7
Documents to import (number)	4	7	8	7	9	8	9
Time to import (days)	9.6	21.6	25.9	18.7	34.4	23.8	37.6
Cost to import (\$ per container)	1,100.4	895.6	2,435.9	1,691.1	2,117.8	1,307	2,930.9

Source: World Bank



Of course, the continent’s challenges with international trade are well known. According to the World Bank’s Doing Business, sub-Saharan Africa (SSA) has the highest average time and costs involved in importing and exporting a standard shipping container. While different sub-regions on the continent have varying levels of integration into the global value chain, the bottom line is that African countries – and in particular landlocked states – face continued challenges due to physical and human infrastructure deficiencies. It is also telling that the majority of Africa’s integration into global value chains is on the export side of the trade equation due to the commodities it supplies to industrialised nations. This underscores the fact that Africa is a commodities supplier rather than a manufacturing hub.

Backward integration is measured by the share of foreign value added embedded in a country’s exports. Forward integration is measured by the share of a country’s exported value added that is further exported by the importing country.

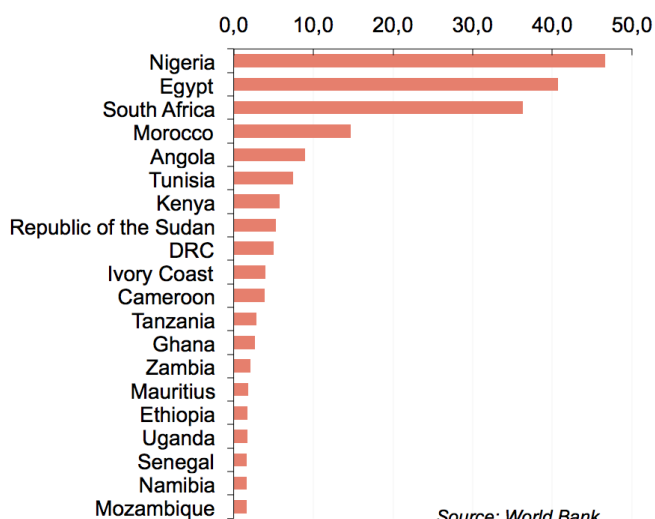


Africa's Major Manufacturing Economies

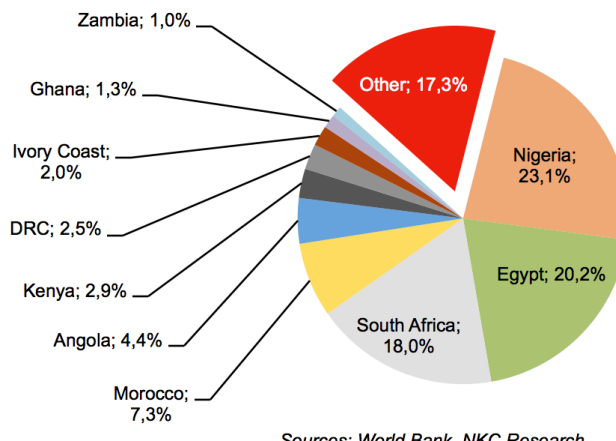
Africa's factories are concentrated in a handful of its largest economies: manufacturing activity in Nigeria, Egypt, South Africa and Morocco account for two-thirds of the continent's factory activity in nominal US dollar terms. When adding Morocco, Angola, Tunisia and Kenya, the share rises to almost 80% of manufacturing. This document will look at 10 out of Africa's 15 largest manufacturing sectors, in order of the size of their nominal US dollar value during 2013: Nigeria, Egypt, South Africa, Morocco, Angola, Kenya, the Democratic Republic of the Congo (DRC), Ivory Coast, Ghana and Zambia. This grouping accounts for 82.7% of the continent's manufacturing and includes Nigeria and Angola which posted the fastest average

manufacturing sector growth over the past decade at 11.8% p.a. and 18.3% p.a. respectively. Factory activity represents around 11.3% of these 10 countries' combined GDP. Many of these countries are not known for their manufacturing activity and instead are known as commodity exporters, e.g. Nigeria, Angola, the DRC and Zambia. However, many commodity-dependent economies actually have significant volumes of factory production directly aimed at supplying goods and inputs to domestic extractive sectors. More diverse manufacturing sectors (and with a larger focus on exports) is found in countries such as South Africa and Morocco whose economies are less dependent on a small number of commodities.

Africa's Largest Factory Sectors (\$bn), 2013



Selected Manufacturing Sectors (% of African Total), 2013



Nigeria

Nigeria's manufacturing sector is now one of the major driving forces behind the country's economic growth. In light of the plunge in global oil prices during H2 of 2014, this is even more significant for Nigeria. The West African country is now the largest economy on the continent following the release of much-anticipated rebased GDP statistics during 2014. The rebasing exercise revealed that the Nigerian economy is much better diversified than was previously thought. Better coverage (including of the informal sector), the inclusion of new industries, and methodological improvements led to significant increases in the estimated contribution of the services sector, manufacturing, and telecommunications. The manufacturing sector accounted for 9% of GDP during 2013 compared to a previously thought 2.5% prior to rebasing. Growth in the sector has been rapid at a pace of almost 18% p.a. during 2011-13, although it is hampered by supply bottlenecks, including disruptions to the electricity supply. The food, beverages and tobacco sub-sector is the most important, accounting for more than half of nominal factory output. The textiles sector is also significant, accounting for about a fifth of production. Automotive manufacturing is becoming

a more prominent sub-sector with Nissan delivering its first made-in-Nigeria cars during early 2015. Local company Innoson Vehicle Manufacturing also produced its first passenger vehicles – said to conform to international standards – late in 2014. Elsewhere, pharmaceutical production has received a boost from the World Health Organisation (WHO) with the certification of three local companies in accordance with good manufacturing practice standards, with four companies now able to produce medicines for malaria, HIV/AIDS and tuberculosis for the international market. Generally, industrialisation is low outside of the oil and gas sector due to a lack in competitiveness of manufactured goods compared to imported items. The cost of production, packaging options and quality of products are some of the challenges facing Nigerian factories. As a result, manufacturing capacity utilisation has been below 60% over the past five years compared to +80% readings in countries like Ghana and South Africa. Nonetheless, the sector still has a greater potential for job creation than extractive sectors due to the labour-intensive nature of local production. The country's large population – the biggest in Africa – keeps employment costs low.

Nigeria Manufacturing: Raw & Intermediate Materials Usage (\$bn)

	Raw Materials: Domestic Supply			Raw Materials: Imported			Intermediate Goods		
	2010	2011	2012	2010	2011	2012	2010	2011	2012
Food, beverages & tobacco	1.7	2.7	3.8	4.5	5.9	5.9	19.8	19.7	22.0
Textiles, apparel & footwear	8.5	8.5	8.7	3.1	3.8	4.3	3.2	4.3	5.4
Wood & wood products	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.7	0.7
Pulp, paper & paper products	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.3
Chemical & pharmaceutical products	33.2	18.6	12.9	8.5	9.2	9.9	0.3	0.3	0.5
Other non-metallic products	1.5	2.7	2.8	0.5	1.0	1.1	0.9	0.9	1.1
Plastic & rubber products	0.2	0.3	0.4	0.2	0.3	0.5	0.5	0.6	0.9
Base metal, iron & steel	1.4	1.1	1.3	1.1	0.7	1.1	0.5	0.7	0.7
Motor vehicles & assembly	1.3	1.7	2.3	1.0	5.2	1.2	0.0	0.0	0.0
Other manufactures	0.6	3.2	3.3	0.2	1.9	1.6	0.7	1.0	1.3
Total	48.6	39.1	35.7	19.2	28.2	25.6	26.9	28.6	33.0

Source: Nigeria's National Bureau of Statistics (NBS)
Latest available data, published October 2014

Egypt

The Egyptian economy is well diversified, covering sub-sectors as diverse as hydrocarbons, manufacturing, tourism, financial services and construction. In addition, the Suez Canal and remittances are important sources of foreign exchange earnings. The manufacturing sector recorded real growth of around 4% p.a. over the past decade. However, this included an expansion of 5.7% p.a. during 2005-10 and stagnation over the past four years due to the adverse impact of the country's politics on economic and investment dynamics as well as weak demand from the euro zone. A challenging business environment, a lack of appropriate skills and a restrictive labour market also constrain progress. However, the country's manufacturing sector remains the second-largest on the continent for now, as it continued to receive investments during the troubled political years. The Central Bank of Egypt (CBE) recorded almost US\$10bn worth of implemented investment in oil

refining and other manufacturing activity during the 2012/13 and 2013/14 fiscal years, equal to 13% of implemented investment across the desert economy. Minister of Investment Ashraf Salman commented in December 2014 that investment into the local automotive industry has reached US\$2bn and that companies are achieving growth rates of 20% - 40% p.a. Egypt is the third-largest automotive manufacturer on the continent (after South Africa and Morocco) and counts international brands such as Germany's BMW, France's PSA Peugeot Citroen, and the US's General Motors as investors. Regarding pharmaceuticals and cosmetics, top global manufacturers Novartis, GlaxoSmithKline (GSK) and Sanofi-Aventis have manufacturing facilities in Egypt, with Pfizer, Bristol-Myers Squibb and Eli Lilly also active in the country. These enterprises supply the majority of local demand for pharmaceuticals and cosmetics.

Foreign Affiliated Companies in Egypt's Secondary Sector

Sector	Number of affiliated companies	Employment*	Number of parent companies	Home country with the largest number of affiliates
Chemicals and chemical products	51	14,834	39	US
Food, beverages and tobacco	31	48,892	21	US
Electrical and electronic equipment	27	74,611	21	Germany
Metal and metal products	24	3,400	21	US
Non-metallic mineral products	23	9,798	14	France
Machinery and equipment	22	11,643	21	US
Motor vehicles and other transport equipment	20	727	20	Germany
Rubber and plastic products	16	905	16	US
Coke, petroleum products and nuclear fuel	14	662	10	US
Other manufacturing	14	716	13	US
Textiles, clothing and leather	14	1,274	13	US
Wood and wood products	10	1,110	9	France

Source: Investment Map

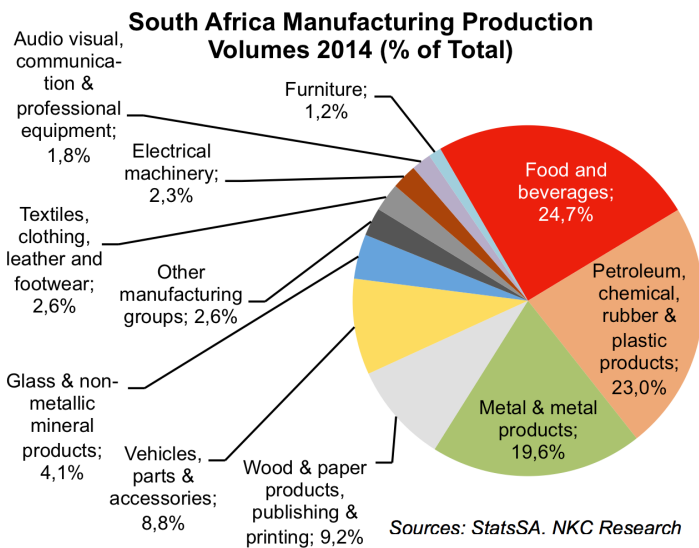
*Not all companies report employment information to local authorities. The estimates provided here must be seen as a minimum for the year 2013.



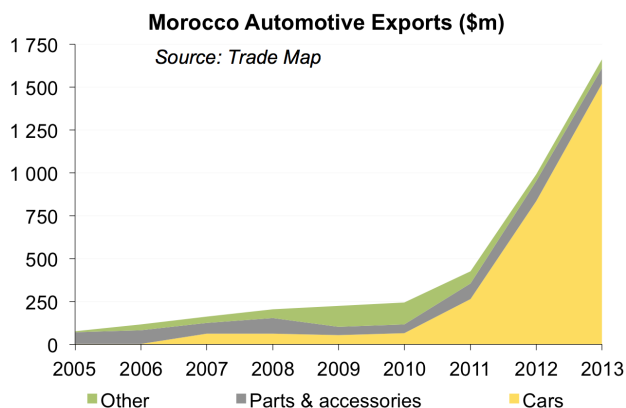
South Africa

Africa's most advanced economy has the continent's third-largest manufacturing industry. A slow pace in expansion of the factory sector over the past decade translated into the country falling behind Nigeria and Egypt despite South Africa having a better MEI and international product competitiveness assessments. (In fact, production volumes during 2014 were below the levels seen prior to the global financial crisis.) Nonetheless, the sheer size, diversity of products and foreign investment focus, as well as the technological development of South Africa's manufacturing industry make it an important player on the continent. From a domestic perspective, the Zuma administration is keenly focused on factories and heavy industry as an employment creator despite operational and profitability challenges in the secondary sector. This is based on the observed horizontal and vertical impacts of these industries on growth and employment in other sectors.

Top growth and employment multipliers in South Africa include the manufacturing of footwear, textiles and leather products; automotive, machinery and related equipment; as well as food and furniture production, according to the Department of Trade and Industry (DTI). The SEZ Act of 2014 and incentives contained in the Income Tax Act of 2013 and Employment Tax Incentive Act of 2013 encourages investment in 10 SEZs currently under development. The Saldanha Industrial Development Zone (IDZ) currently attracts investment into the steel-making economy – South Africa's steel industry is the largest on the continent. Automotive production is focused in Gauteng and the coastal Eastern Cape and produces complete vehicles, components and parts for local, regional and international clients. The chemicals sub-sector has a developed upstream component and underdeveloped downstream component, with gas-to-oil processing the dominant activity.

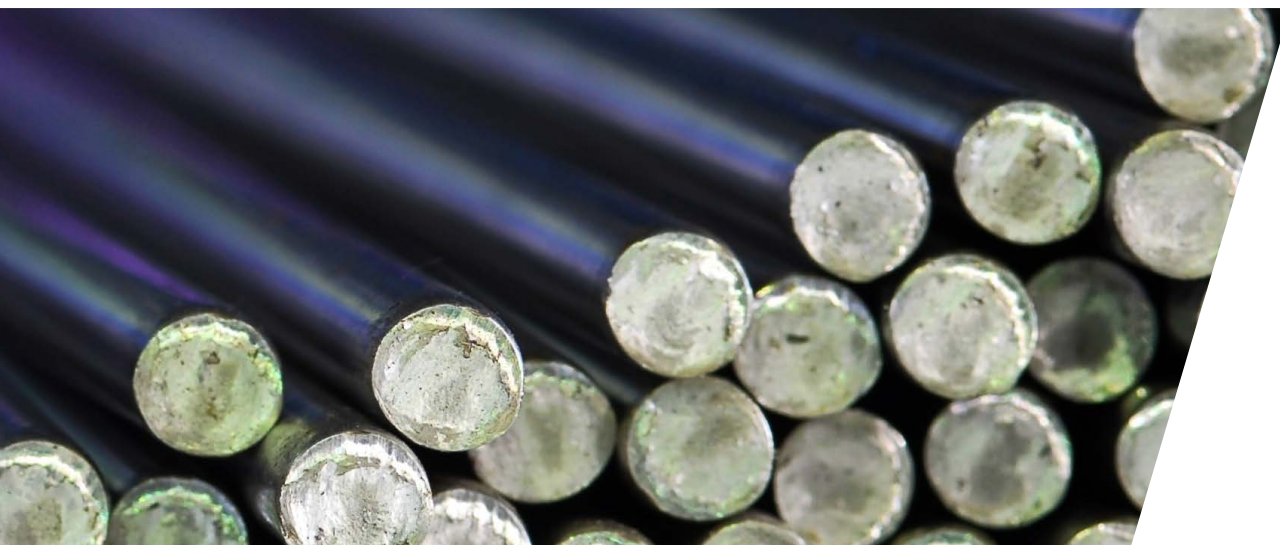


Morocco



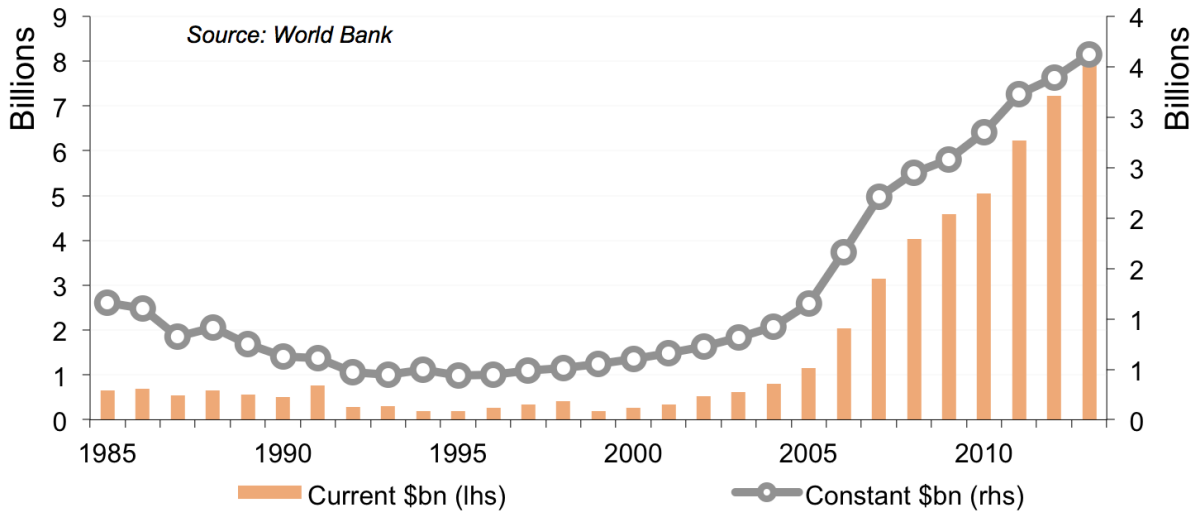
Manufacturing represents 15.4% of Morocco’s GDP which is high in an African context. However, this is not surprising considering the country’s strong performance in this report’s MEI – ranked second on the continent after Mauritius. Although the sector has posted real growth of only 2.4% p.a. over the past decade, the country’s growth in production volumes has outpaced its North African neighbours, and factories now provide one in 10 formal employment opportunities. Textiles represent the most important sub-sector and accounts for about a third of manufacturing activity. However, traditional manufacturing industries, such as clothing, food processing, fertiliser and steel production have struggled in recent years due to

weak demand in the euro zone as well as strong foreign competition. Newly emerging sub-sectors include export-oriented aeronautics, automobile manufacturing and electronics making, with foreign companies entering the market to take advantage of Morocco’s low wage costs. According to How We Made It In Africa, the Moroccan aeronautics sector expanded by an average of 15% - 20% p.a. during 2008-13, with currently 100 companies operating in the sector. Many of these operations are located in the country’s free trade zones. The Greater Tanger-Med Industrial Platform comprises six industrial and free trade zones within an 80 km radius of Tanger’s port. According to the Agence Marocaine de Developpement des Investissements (AMDII), the country’s port infrastructure and strategic geographic location are of great importance for foreign investors. The Tanger-Med port, for example, is located 15 km from Spain (across the Strait of Gibraltar) and is already one of the busiest ports in Africa, with expansion projects underway. The facility will have a capacity of eight million containers per annum by 2017. The port is connected by road and rail to free trade zones and industrial parks. One of the most renowned global companies to establish a base of operations in these zones has been the French car manufacturer Renault, which opened a US\$1.5bn car factory in Tanger Automotive City.



Angola

Angola Manufacturing GDP



Despite having amongst the weakest MEI and international product competitiveness ratings on the continent, Angola's manufacturing sector recorded the fastest growth pace in Africa during 2005-13, expanding by an average pace of 18.3% p.a. As a result, the country's factory sector is now the fifth-largest on the continent ahead of Tunisia and Kenya. Manufacturing represented 7.2% of GDP during 2013 from just 4% during the mid-2000s, and Minister of Industry Bernarda Gonçalves said during November 2014 that the government wants the factory sector to play an even larger role within the oil-dependent economy. Foreign investment in the manufacturing sector is dominated by Portuguese companies. Angola's Plano Nacional de Desenvolvimento (PND) 2013-17 aims towards economic diversification and the IMF sees minimising risks associated with international commodity price volatility as a key policy priority. This, the multilateral organisation argues, can be addressed by supporting productivity in the agricultural and manufacturing sectors. There

is definitely room for production growth towards import substitution. With factories generally focused on processing foods, almost 40% of Angola's import bill is classified as heavy manufactures. Machinery, electrical equipment, road transportation and drilling equipment are the country's top four imports by value. Progress has already been made to accommodate some of the country's demand for cement from domestic production. Following the end of the civil war, the value of cement and related imports increased by an average of almost 60% p.a. during 2002-09, but then declined by an average of 7% p.a. in the following four years to total US\$165m during 2013, according to Trade Map data. The government has gone so far as to ban cement imports from the start of 2015, arguing that there is sufficient local supplies available. Minister of Construction Waldemar Alexandre Pires indicated that the country has installed cement production capacity of eight million tonnes per year compared to demand of around 6.5 million tonnes.

Kenya

The industrial sector accounts for almost 20% of Kenya's economic activity and is dominated by manufacturing and energy production. Food and consumer goods processing have emerged as salient sub-sectors within manufacturing, and the country is expected to remain one of the top exporters of manufactured goods in the SSA region over the medium to long term. This is not surprising considering the WEF appraisal for the competitiveness of its products on the international market: Kenya is ranked third (after Mauritius and Morocco) by this report's MEI and fourth on the continent (behind the Seychelles, Ghana and Zambia) in terms of its products' competitive advantage in international markets. Real growth in the manufacturing industry averaged almost 4% p.a. over the past decade and one in eight formal jobs in the country is in this sector. Total employment is estimated at 280,000 workers during 2013 with almost 20% of these jobs located in Export Processing Zones (EPZs). The manufacturing sector contributed an estimated 11.7% to GDP during 2013, according to the World Bank, and is dominated by food and consumer goods processing. Some notable sub-sectors include meat and fruit canning, wheat flour and maize meal milling, and

sugar refining. The country also manufactures chemicals, textiles, shoes, soft drinks, cigarettes, soap, metal products, batteries, plastics, cement, aluminium, steel, glass, rubber, wood, furniture, and leather goods. Index data from the Kenya National Bureau of Statistics (KNBS) shows the sub-sectors that posted the largest cumulative growth during 2010-13 were dairy products, chemical products and fabricated metal products, with production indices for these categories rising by more than 50% during the period. Other strong performing areas include leather products, motor vehicles and food products. There is scope for further strong expansion in Kenya's manufacturing sector though this would require reforms to the business environment in order to encourage more foreign companies to operate in the country. A government initiative that intends to attract foreign investment into the manufacturing sector is the creation of SEZs; these are areas where the State provides an accommodative business climate without having to make wholesale reforms to the country's overall business environment. Electricity outages and downtime in Kenyan SEZs are much less frequent than for companies outside these zones.

Manufacturing Output & Employee Compensation (KSh'bn)

Year	Value of Output	Intermediate Consumption	Value Added	Compensation of Employees
2009	770.370	535.815	234.555	74.988
2010	842.506	590.384	252.122	83.472
2011	1,015.542	723.141	292.010	95.780
2012	1,049.345	727.623	321.722	112.155
2013	1,097.082	758.704	338.378	128.837

Source: Kenya National Bureau of Statistics (KNBS)

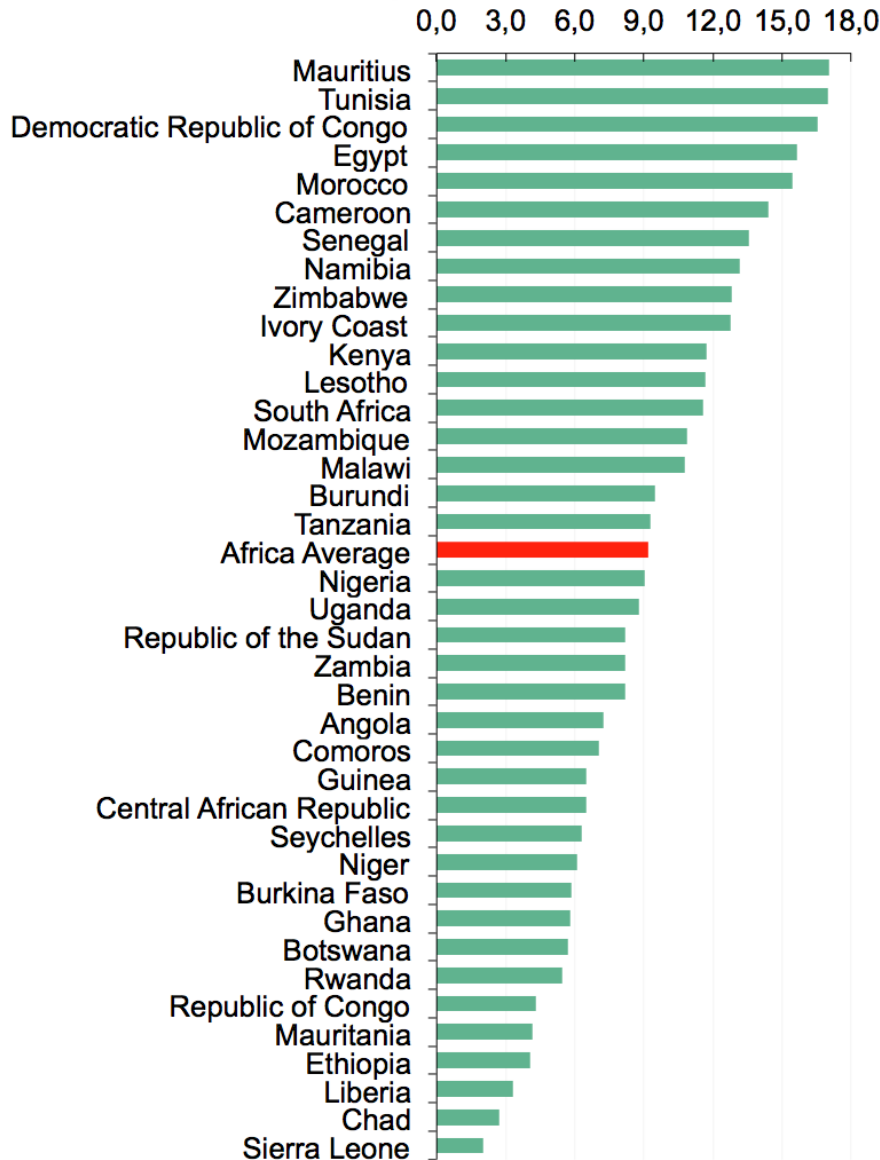


DRC

Investment Map estimates the value of FDI stock in the local manufacturing sector at US\$3bn during 2012, equal to 13.5% of the country's total foreign investment stock. Manufacturing accounts for more than 16% of the DRC's GDP which is amongst the highest reading for this ratio on the continent. Still, copper, cobalt, tin and oil account for more than 85% of the country's exports, underscoring the dominance of the mining industry. Considering the input needs of the large industrial sector, it is not surprising that heavy manufactures are a big factor in the country's import bill: the country's top three imports by value are mine machinery, trucks and electric equipment. In contrast, light and heavy manufactured goods account for only 3% of export revenues, indicating that domestic factory output is overwhelmingly aimed at servicing the needs of

the local market. According to the Organisation for Economic Cooperation and Development (OECD), manufacturing activity has contributed little to overall economic growth due to the burden of poor power supply, outdated capital equipment affecting the quality of produce, and strong competition from imported goods. Breweries, cement makers, palm oil refiners, and flour mills have however delivered some success. According to mining and commodities consultancy African Resources, the largest international investors in the DRC are Chevron Oil (oil), Citibank (banking), Telecel (telecommunications), Mobil (oil), Bralima (brewery), UNIBRA (brewery), The Rothman Corporation (cigarette manufacturing), Hasson Group (wholesale trader), BAT Congo (cigarette manufacturing), PLC (palm oil refining) and Zabou Holdings (textile manufacturing).

Manufacturing as % of GDP (2013)



Source: World Bank

Ivory Coast

Manufacturing accounted for about an eighth of the Ivorian economy over the past decade and the West African country has the tenth-largest factory sector on the continent. The country's Plan National de Développement (PND) 2012-15 and the follow-up version for 2016-20 aims to develop Ivory Coast into an emerging country by 2020. Adopted some three years ago, the IMF believes that the national development plan will support secondary sector growth via construction and public works activities as well as the development of manufacturing and agro-processing. One of the strategies towards stimulating the factory sector – and in particular small- and medium-sized enterprises (SMEs) – is the creation of new industrial zones. This, in turn, is part of the state's industrial policy aimed at increasing the contribution of industrial activity from 22% of GDP in 2012 to 40% of GDP by 2020.

According to the Fund, the rehabilitation of existing and the creation of new industrial zones will cost CFAfr75bn. Recent international investment in the manufacturing sector includes Turkey's Limak Cimento announcing during 2014 that it will team up with local company Akfirbat to build a cement grinding and packaging plant in Abidjan to the value of US\$50m. From an international trade perspective, goods classified as heavy manufacturing dominate Ivory Coast's imports. Based on HS codes, heavy manufactures represented four out of the country's six largest import categories (by value) during 2013 with heavy manufactures representing 37% of the import bill during the year. Heavy manufactures exports include offshore drilling equipment, armoured vehicles, and parts for boring and sinking machinery, according to Trade Map.



Ghana

Multinational companies that have set up manufacturing facilities in Ghana include consumer goods producer Unilever, health care product manufacturer PZ Cussons, Denmark-based dairy and fruit juice maker Fan Milk, and Indian vehicle manufacturer Mahindra. The country's manufacturing output jumped by a cumulative 25% during 2010-11 and maintained this higher level during 2012-13, based on data from the United Nations, translating into the manufacturing sector growing by 7.6% in 2010 and 17% in 2011. The country's domestic use (i.e. processing) of cocoa jumped by nearly 60% during the 2010/11 agricultural season to 212,000 tonnes. Offering further support to manufactured output was Volta Aluminium Company (VALCO) restarting its smelters during 2011 after a four-year hiatus. A challenge for Ghana over the coming years will be to further increase the proportion of cocoa that is processed, as well as to move into higher-value added products such as chocolate and beverages, rather than predominantly manufacturing cocoa butter and paste. (Ghana is the second largest

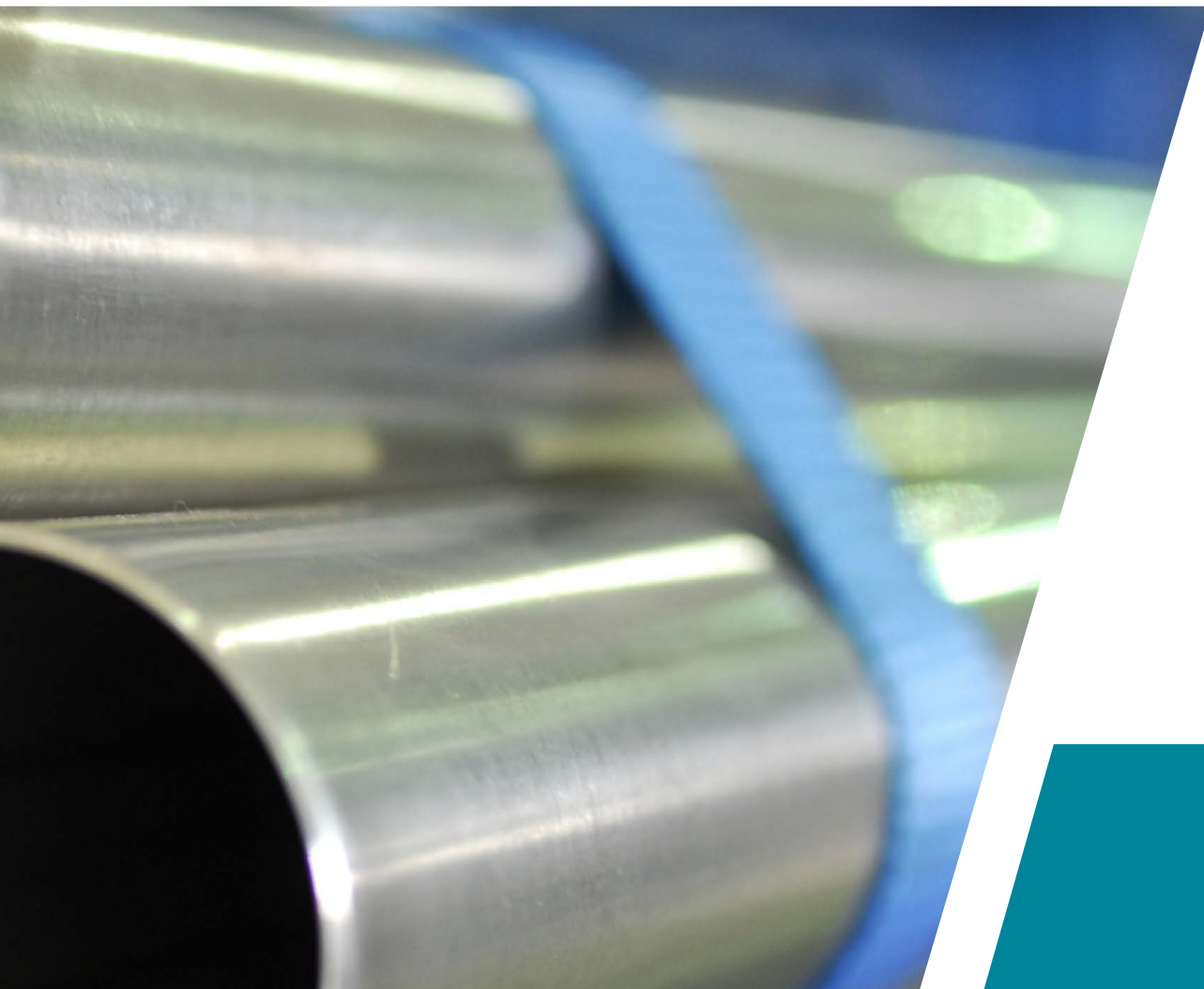
producer of cocoa in the world after neighbouring Ivory Coast.) Data from the Ghana Statistical Service (GSS) indicates that food and beverages represent a quarter of manufacturing output and that petroleum and chemical products represent a third of production. The country's factory products are already deemed quite advanced in an African context. It is placed second (after the Seychelles) and is above the global average in terms of moving away from goods that utilise low-cost labour and natural resources towards the production of more unique products and processes. Indeed, the GSS measures local producer price indicators on products such as special purpose machinery, insulated wire and cable, and motor vehicle bodies, items that are not that common elsewhere in Africa's manufacturing sphere. However, challenges to the sector's expansion are numerous: a sustained negative trend in the exchange rate inflating the cost of imported inputs; the country's electricity supply deficit; and the cost of and access to credit.



Zambia

The landlocked Zambian economy has a MEI score within the top 10 of African countries and is third on the continent (after the Seychelles and Ghana) in terms of the WEF's ranking of product competitiveness in international markets. It is therefore not surprising that, while copper remains firmly in place as leading recipient of FDI pledges, the domestic manufacturing sector registered an uptick in foreign interest in recent years, and accounted for a quarter of foreign investment during 2013. According to data from the United Nations, the country's manufacturing production increased by more than 30% between 2009 and 2013. A strong government focus on the diversification of income streams and low saturation within the manufacturing, agricultural and power generation sectors hold significant upside potential. To this end, the government aims to diversify the economic base via tax incentives for infrastructural development in priority sectors, notably manufacturing, energy, tourism and agriculture. A Multi-Facility Economic Zone (MFEZ) programme was initiated by the state

during 2005 and created special areas with turnkey infrastructure for industries focused both on the domestic and international market. The Ministry of Commerce, Trade and Industry has to date declared six economic zones and/or industrial parks: the Lusaka East, Lusaka South and Chambishi MEFZs and the Roma Industrial Park (all located around the capital) are in varying stages of operation. Incentives associated with MFEZs include deferred or discounted corporate taxes and no VAT charges on inputs. Factory production is currently focused on supplying the domestic industrial sector with inputs for further manufacturing as well as goods for the local consumer market. According to the Zambia Development Agency (ZDA), agro-processing and the production of food and beverages account for almost two-thirds of the industry. Development of agro-processing is currently constrained by an inadequate domestic supply of raw materials, insufficient access to appropriate technology and capital goods, local production costs unable to compete with some cheaper imports, and limited access to credit.



Manufacturing Production Indices (2010 = 100)							
	2007	2008	2009	2010	2011	2012	2013
North Africa							
Algeria	102.1	104.0	105.7	100.0	98.7	98.8	100.5
Egypt	93.5	96.6	96.2	100.0	99.5	100.3	99.8
Morocco	95.8	97.8	98.1	100.0	103.4	104.5	104.8
Tunisia	94.3	97.8	91.9	100.0	98.9	100.6	102.9
Central & West Africa							
Ghana	90.8	94.2	92.9	100.0	117.0	119.3	119.9
Mauritania	108.7	102.9	99.4	100.0	105.6	126.9	133.5
Niger	46.4	53.0	94.1	100.0	133.5	115.4	<i>n/a</i>
Nigeria	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	100.0	117.8	133.7	162.8
Franc Zone							
Burkina Faso	76.0	93.9	79.9	100.0	88.3	91.6	<i>n/a</i>
Senegal	102.9	90.4	97.9	100.0	107.1	105.5	101.6
Togo	103.4	101.6	107.3	100.0	115.6	117.4	112.8
East Africa							
Burundi	79.6	85.4	81.7	100.0	107.4	114.9	113.6
Cameroon	103.0	106.0	101.6	100.0	102.1	104.7	119.9
Central African Republic (CAR)	160.9	176.5	121.6	100.0	106.9	111.1	77.3
Uganda	79.5	82.6	96.7	100.0	103.9	107.6	110.8
Southern Africa							
Angola	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	100.0	99.5	103.2	112.7
Mauritius	93.0	96.0	98.6	100.0	101.4	103.3	107.7
South Africa	111.3	110.9	95.5	100.0	102.8	105.2	106.7
Zambia	90.7	92.3	93.7	100.0	110.6	117.3	123.1

Sources: United Nations, NKC Research



Final Thoughts

For now, Africa produces only 1.5% of the world's manufacturing output. However, the continent has seen a significant increase in manufactured exports and import-substituting production over the past decade and is poised to continue this strong performance. The resource and services industries on the continent are providing local entrepreneurs and extra-African investors with the opportunity to produce light and heavy manufactured goods for use on the continent, in many cases focusing on import substituting manufacturing. As a result, 'Made in China' is increasingly being replaced by 'Made in Africa'. It is also important to remember that many traditional low-cost production areas in Asia have seen their labour costs rise in recent years as these economies (including China and India) move higher up the value chain in order to meet higher quality standards. In fact, the rise of production costs in China has resulted in the Asian giant investing into Africa, and Beijing has

been instrumental in initialising SEZs in countries such as Algeria, Botswana, Egypt, Ethiopia, Nigeria, Mauritius and Zambia as a strategy to cope with increasing costs. These zones have produced many success stories due to the special treatment given to enterprises in these areas. African entrepreneurs face more regulatory and administrative obstacles than their peers in Asia and Latin America and need greater intervention on the part of the state to grow their manufacturing businesses. Admittedly, World Bank-advocated special zones and industrial parks are not always successful, and could suffer from factors such as poor choice of location due to political reasons or insufficient investment in infrastructure. However the many manufacturing success stories so far are testament to Africa's potential for stimulating its factory sector as part of the generally accepted trend towards reaching developed economy status.



Key Manufacturing Indicators

Key Manufacturing Indicators						
	Average Real Growth in Manufacturing GDP (% p.a.), 2005-13	Manufacturing as % of GDP (at factor cost), 2013	Nominal Size of the Manufacturing Sector (\$bn), 2013	Average Import Tariff (%) on Manufactured Goods, 2013	Manufacturing Environment Index (1 to 7; 7 = best)	Manufacturing Production Index, 2013 (2010 = 100)
Algeria	-1.1				3.6	100.5
Angola	18.3	7.2	9.0		2.3	112.7
Benin	2.6	8.2	0.6	12.6		
Botswana	7.9	5.7	0.8	8.6	3.4	
Burkina Faso	0.1	5.9	0.6	12.6	3.1	
Burundi	0.7	9.5	0.2	12.3	2.9	113.6
Cameroon	2.0	14.4	3.9	18.1	3.5	119.9
Cape Verde				12.0	3.4	
CAR	7.0	6.5	0.1			77.3
Chad		2.7	0.4	6.0	2.8	
Comoros	4.7	7.0	0.0	14.7		
Djibouti				22.1		
DRC		16.6	5.0			
Egypt	4.0	15.6	40.7		3.6	99.8
Ethiopia	10.9	4.0	1.8	17.3	3.4	
Gabon	3.3				3.0	
Ghana	4.0	5.8	2.7	12.2	3.7	119.9
Guinea		6.5	0.4	12.7	2.7	
Guinea-Bissau	1.8		5.8	13.5		
Ivory Coast		12.7	4.0	12.1	3.9	
Kenya	3.8	11.7		11.7	4.4	
Lesotho	-0.9	11.7	0.2	9.0	3.7	
Liberia	7.1	3.3	0.1	10.5		
Libya					2.9	
Madagascar				11.5		
Malawi	6.2	10.7	0.4	11.9	3.6	
Mali				12.4	3.8	
Mauritania	2.4	4.1	0.2		3.0	133.5
Mauritius	1.8	17.0	1.8	1.1	4.7	107.7
Morocco	2.4		14.7	9.4		104.8
Mozambique	4.3	10.9	1.6		3.3	
Namibia	3.0	13.2	1.6	8.5	4.1	
Niger		6.1	0.5	13.0		
Nigeria	11.8	9.0	46.6	11.4	3.5	162.8
Republic of the Congo	7.7	4.3	0.6	18.1		
Rwanda	6.0	5.5	0.4	12.3	4.0	
Senegal	1.5	13.6	1.6	12.3	3.8	101.6
Seychelles	1.5	6.3	0.1		4.1	
Sierra Leone	5.1	2.0	0.1	12.1		
South Africa	2.4	11.6	36.3	8.2	4.1	106.7
Republic of the Sudan		8.2	5.3	18.7		
Swaziland				8.6	3.8	
Tanzania	8.5	9.3	2.8	11.8	3.4	
The Gambia	2.6		0.0	14.5	4.0	
Togo				12.6		112.8
Tunisia	3.8	17.0	7.5	21.7	4.1	102.9
Uganda	6.6	8.8	1.7	11.7	3.6	110.8
Zambia	5.2	8.2	2.1	12.0	4.0	123.1
Zimbabwe	0.8	12.8	1.5		3.0	

Sources: World Bank, UNCTAD, WEF, United Nations, NKC Research
Data in this table has been included where available.

Sources of Information

African Resources
 Amwal Al Ghad
 Bloomberg
 Angola Press
 Central Bank of Egypt (CBE)
 Association of Ghana Industries (AGI)
 Egypt's General Authority for Investment and Free
 Zones (GAFI) International Business Times
 Forbes
 Manufacturing Circle Moroccan Investment
 Development Agency
 Ghana Statistical Service (GSS)
 Global Cement
 Investment Map
 IT News Africa
 Jean AbiNader International Advisory Services
 Kenya National Bureau of Statistics (KNBS)
 Nigeria's National Bureau of Statistics (NBS)
 NKC African Economics
 Organisation for Economic Cooperation and
 Development (OECD)
 Oxford Business Group
 Renaissance Capital
 Renault
 Reuters
 Southern and Eastern Africa Consortium for
 Monitoring Educational
 Statistics South Africa (StatsSA)
 The Africa Report
 The Economist
 Trade Map
 Tunisian Foreign Investment Promotion Agency
 United Nations Conference on Trade and
 Development
 United Nations Industrial Development Organisation
 World Bank
 World Economic Forum (WEF)
 Zambia Daily Mail
 Zambia Development Agency (ZDA)



Contact details

KPMG Africa

Seyi Bickersteth

Chairman KPMG Africa

T: +23412805984

E: seyi.bickersteth@ng.kpmg.com

Bryan Leith

COO KPMG Africa

T: +27116476245

E: bryan.leith@kpmg.co.za

Benson Mwesigwa

Africa High Growth Markets

KPMG Africa

T: +2760962136

E: benson.mwesigwa@kpmg.co.za

Molabowale Adeyemo

Africa High Growth Markets

KPMG Africa

T: +27714417378

E: molabowale.adeyemo@kpmg.co.za

Gavin Maile

Partner, Industrial, Automotive & Pharmaceuticals

Southern Africa

T: +27116477165

E: Gavin.Maile@kpmg.co.za

Fred Von Eckardstein

Partner, Industrial, Automotive & Pharmaceuticals

Southern Africa

T: +27832978921

E: fred.voneckardstein@kpmg.co.za

Wole Obayomi

Partner, Consumer markets

West Africa

T: +23412718932

E: wole.Obayomi@ng.kpmg.com

Jacob Gathecha

Partner, Consumer markets

East Africa

T: +254202806000

E: jgathecha@kpmg.co.ke

Fernando Mascarenhas

Partner, Consumer markets

Angola

T: +244227280102

E: femascarenhas@kpmg.com

[kpmg.com/social media](http://kpmg.com/social-media)



kpmg.com/app



© 2015 KPMG Africa Limited, a Cayman Islands company and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity. All rights reserved. The KPMG name, logo and "cutting through complexity" are registered trademarks or trademarks of KPMG International. MC13745.