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ACRONYMS

ACET  African Center for Economic Transformation
EAC  East African Community
EIC  Ethiopian Investment Commission
EPC  Export Promotion Council (Kenya)
EPZ  Export Processing Zone
EPZA  Export Processing Zone Authority (Kenya)
EU  European Union
FDI  Foreign Direct Investment
GDP  Gross Domestic Product
GVC  Global Value Chain
ICT  Information and Communication Technology
IT  Information Technology
JEC  Joint Economic Council (Mauritius)
KAM  Kenyan Association of Manufacturers
MINEACOM  Ministry of Trade, Industry and East African Community Affairs (Rwanda)
MITI  Ministry of Industry, Trade and Investment (Tanzania)
ODI  Overseas Development Institute
R&D  Research and Development
RDB  Rwanda Development Board
REC  Regional Economic Community
SET  Supporting Economic Transformation Programme
SEZ  Special Economic Zone
SEZAR  SEZ Authority of Rwanda
SMEs  Small and Medium-Sized Enterprises
SSA  Sub-Saharan Africa
STEM  Science, Technology, Engineering and Mathematics
TIB  Tanzania Investment Bank
TIC  Tanzania Investment Centre
TMEA  TradeMark East Africa
TVET  Technical and Vocational Education and Training
UIA  Uganda Investment Authority
UN  United Nations
UNCTAD  UN Conference on Trade and Development
US  United States
WDI  World Development Indicators
EXECUTIVE SUMMARY

Despite major challenges, African manufacturing has also recorded notable successes, ranging from automobile production in South Africa and garments in Mauritius and East Africa to other specific examples in footwear, agro-processing, food and beverages and consumer goods. A review of these experiences suggests a number of general enabling factors and specific policy functions have been critical to promoting manufacturing activities. This paper discusses three issues: i) manufacturing performance in Africa; ii) general enabling factors; and iii) specific industrial policy functions.

**Despite major challenges, African manufacturing has recorded notable successes**

Manufacturing production is increasing across Africa (Sub-Saharan Africa, including South Africa), but with varying experiences across countries. While the share of manufacturing in gross domestic product declined from 18% in 1975 to 11% in 2015, manufacturing production has nearly doubled since 2000, from $85 billion in 2000 to more than $160 billion in 2015 (in constant 2010 prices). African manufacturing has grown at 3.5% annually in real terms over the past decade, more than in developed countries. Not all African countries have done well in recent years: Nigeria and South Africa have recently faced declining growth.

Annual average growth in manufacturing exports between 2005 and 2014 was highest in Asia (8.3%), followed by Africa (7.4%), and much lower in Europe (4.3%), the Americas (3.9%) and Oceania (2.7%). Africa’s manufacturing share increased marginally, from 0.8% to 0.9%. Manufacturing foreign direct investment (FDI) rose in nine selected (see below) African countries between 2003–2006 and 2010–2014, apart from Nigeria. Greenfield FDI in African textiles, clothing and leather increased from $1bn in 2016 to $4bn in 2017.

Food and beverages is the dominant manufacturing sector, followed by textiles and clothing. Successful examples of manufacturing production include automobile assembly and production in South Africa, garments in Mauritius and East Africa and consumer goods across the continent.

**General enabling factors have been important behind manufacturing activities**

In order to provide a more comprehensive measure of promising countries for attracting FDI we have developed a *Manufacturing FDI Potential Index*, which calculates a total score for nine countries (Ethiopia, Ghana, Kenya, Mozambique, Nigeria, Rwanda, Tanzania, Uganda and Zambia) based on their rankings on a number of core factors behind attracting FDI:

- Past manufacturing FDI stock as a percentage of GDP;
- Recent performance in manufacturing exports;
- Domestic value added in manufacturing;
- Manufacturing value added per capita;
- Economic complexity;
- Labour productivity in manufacturing;
- Population;
- Quality of the business climate; and
- Infrastructure, education and cost and reliability of electricity.

Our analysis based on these measures suggests the five countries out of nine African countries that are well positioned to attract FDI into export-based manufacturing are Ethiopia, Kenya, Mozambique, Nigeria and Zambia.

Some countries perform well on certain measures and fare less favourably on others. Kenya is clearly doing relatively well on the quality of infrastructure and its product complexity (although trends are not that promising), but it scores relatively poorly on education, electricity provision and recent manufacturing performance. Ethiopia boasts a large domestic market (as does Nigeria), comparatively low manufacturing wages that provide an important competitive advantage in labour-intensive manufacturing and low electricity costs for manufacturing more generally, but labour productivity in manufacturing is low. Unit labour costs are comparatively low in Tanzania, even
relative to China (although Ethiopia is more competitive than Tanzania in terms of actual manufacturing wage levels), but manufacturers in Tanzania must contend with a challenging business environment. In contrast, the favourable business climate in Rwanda, along with relatively high-quality infrastructure and trade logistics services, suggests it too has a promising base for export-oriented manufacturing.

**A deeper examination of specific industrial policy functions clarifies how governments can foster industrialisation**

Important factors behind industrialisation and job creation include political commitment to promote investment in employment-intensive manufacturing and quality of the industrial policy regime. A good quality industrial policy regime includes:

- Pursuing a high-quality industrial policy process: Mauritius has shown success in leadership and nation-building around industrialisation and economic transformation, creating consensus around the strategic direction of the economy and facilitating collaboration between the public and private sectors for key interventions.
- Putting in place conducive trade rules and trade facilitation measures (including corridors): Trade facilitation that lowers trade costs enables industrialisation and value chain development, including by reducing the cost of inputs and improving their availability, raising competition in domestic markets, thereby enhancing efficiency, and making exports more competitive. There are successful examples of trade facilitation in Southern and East Africa.
- Provision and regulation of special economic zones (SEZs), industrial clusters or hubs (including the required infrastructure and skills): SEZs have played an important role in driving growth and attracting employment in Ethiopia, Kenya and elsewhere; this requires coordination across government.
- Effective investment facilitation including aftercare: South Africa has been able to attract foreign companies to the automobile sector, which has supported skills development and technology transfer, thereby helping build local capabilities in the sector.
- Local capability-building (for local content or acquisition of key capabilities by national firms or public agencies): Through effective institutional support, focused on training and investment in technology, Mauritius has helped upgrade and increase productivity in the garment sector in the face of major challenges.
- Supportive infrastructure planning: The adoption of performance contracts has been useful in stimulating infrastructure development in Kenya.
- Learning with the private sector to address initial and emerging constraints: Effective state–business relations through the Joint Economic Council (which has facilitated formal and informal collaboration between the public and private sectors) has been important in Mauritius.
- Selective, conditional support to building firm capabilities (including finance): Experimentation and adaptability are important in industrial policy processes, particularly to enable the discovery of approaches that work for industrialisation in particular country and sector contexts.

**African countries need to prepare for a digital future as the options for labour-intensive manufacturing are closing down**

It is crucial to prepare and to put in place policies to adapt to the digital future, and the challenges it may bring, and to create jobs elsewhere, including in a more digitally oriented manufacturing sector. If African countries do not take appropriate actions to prepare, and the digital divide persists in the context of growing global digitalisation levels, then there will be an increased threat of re-shoring of manufacturing tasks from Africa. African countries need to act fast to capitalise on opportunities in labour-intensive manufacturing. There is a window of opportunity for these countries to develop less automated sectors such as food and beverages, basic metals, wood and wood products and paper and paper products; to build industrial capabilities; and then to move into higher-value added activities. African countries can therefore continue to focus on boosting traditional manufacturing for some time to come, and on addressing the associated challenges – poor infrastructure, lack of reliable power supply and poor customs procedures.
1. INTRODUCTION

Moving labour out of low-productivity agriculture and into higher-productivity manufacturing is crucial for structural change in Africa (McMillan et al., 2017). Expanding manufacturing production and exports, and increasing their sophistication, can drive industrialisation and create much-needed jobs. Indeed, export-led manufacturing is the only proven model to drive economic transformation and boost employment (Balchin et al., 2017). This is evident in the experiences of many Asian countries, which show that export-intensive manufacturing can generate significant numbers of jobs. Countries such as Bangladesh, China, Malaysia and Viet Nam have developed light manufacturing – by building textiles and garment industries – to kick-start industrialisation.

Many African countries have a desire to industrialise, as witnessed in national and regional policy statements. Significant progress is being made in selected countries (e.g. real manufacturing value added grew at around or more than 7% annually over 2005–2015 in Ethiopia, Rwanda and Tanzania). However, without a greater practical focus on implementing a consistent strategy to promote manufacturing, many African countries will miss the significant opportunities presented by their comparative and natural advantages, rising wages in Asia and growing regional markets (Balchin et al., 2016a). This paper discusses key characteristics of a good industrial policy regime and factors behind effective implementation. It also uncovers a range of successes. Using country examples, we recognise that, while there are broad commonalities, the specifics will always vary across different contexts.

This report is structured as follows. Section 2 discusses recent trends in African manufacturing and asks which African countries and sectors are performing well. Section 3 examines which countries are best placed to attract manufacturing investment based on a range of comparative indicators in nine African countries. Section 4 discusses what we normally consider to be a quality industrial policy regime, identifying core ingredients and examining how these are covered in a range of African countries. Section 5 concludes.
2. MANUFACTURING PERFORMANCE – WHICH AFRICAN COUNTRIES AND SECTORS DO WELL?

Manufacturing production and employment trends in Africa presents a mixed picture

Africa’s experience with manufacturing has been mixed – and there are two ways to look at recent trends in the sector on the continent. On the one hand, formal manufacturing activity in Africa remains low compared with in other regions in the world (Ansu et al., 2016b). Moreover, the share of manufacturing value added in total gross domestic product (GDP) (at factor prices, using World Development Indicators (WDI) data) in Sub-Saharan Africa (SSA) (including South Africa) has been falling for nearly four decades (Figure 1) – declining from 18% in 1975 and 15% in 1981 to 10.6% in 2016 (albeit with variation in experiences across African countries). At the same time, however, Africa’s manufacturing production has nearly doubled (Figure 1), rising from nearly $85 billion in 2000 to approximately $158 billion in 2016 (in constant 2010 prices). Manufacturing production in SSA expanded by 3.5% per annum in real terms between 2005 and 2014, more than double the rate of growth of world manufacturing and five times the rate in the European Union (EU). Some African countries, including Ethiopia, Rwanda and Tanzania, have registered growth rates in manufacturing of above or close to 10%, albeit from low bases.

Similarly, the picture for employment in manufacturing in Africa is varied. While the share of manufacturing in total employment in Africa fell from 10% in 1991 to 8.5% in 2013, the absolute number of manufacturing employees in SSA has increased steadily, from 11 million to 17.7 million.

Figure 1: Africa’s share of manufacturing in GDP is falling, real production is increasing

Source: WDI

Africa’s manufacturing exports are growing and intra-African trade in manufactures has expanded significantly, but Africa is still only a peripheral player in global exports of manufactures

Some African countries have registered strong growth in manufacturing exports over the past decade (Figure 2), although mostly this is off a comparatively small base. Average annual growth in manufacturing exports was especially fast for Ethiopia, Rwanda and Uganda between 2005 and 2016; Mozambique, Tanzania and Zambia also have expanded the value of their manufacturing exports significantly. Average growth in manufacturing exports in these countries has been well above the equivalent growth for SSA and Africa as a whole.
Nevertheless, Africa as a whole remains a small player in global exports of manufactures. The continent’s (all Africa, not just SSA) share of world manufacturing exports is less than 1%, and has declined marginally since 2010 (Balchin et al., 2016a). There are, however, some manufacturing sub-sectors in which Africa holds a larger share of global exports (e.g. more than 5% of global exports of fertilisers and inorganic chemicals; more than 4% of world exports of leather and manufactured leather products; and close to 2% of global exports of articles of apparel and clothing accessories). There are also encouraging signs of growth in African manufacturing exports in many product groups. Exports from Africa grew at an annual rate of 6% or higher between 2005 and 2016 in nearly half (16 out of 34) of the core manufacturing product groups (Figure 3). Particularly rapid growth has been seen in exports of plastics in non-primary forms, fertilisers, medicinal and pharmaceutical products, professional and scientific instruments, road vehicles, and telecommunication and sound recording apparatus.

Note: Manufactures includes SITC 5-8 (less 667 and 68).

Source: Own calculations using UNCTADstat data
Figure 3: Average annual growth in value of African manufactures exports by sector, 2005–2016 (%)

Note: Manufactures includes SITC 5-8 (less 667 and 68).
Source: Own calculations using UNCTADstat data

Intra-African trade in manufactures is also expanding. Intra-regional manufacturing exports accounted for 34% of the total value of African manufacturing exports in 2014, an increase of nearly 15 percentage points since 2005 (Balchin et al., 2016a). Exports of road vehicles, iron and steel, essential oils for perfume materials and cleaning preparations, non-metallic mineral manufactures, and manufactures of metal are especially prominent in intra-African manufacturing trade (ibid.). But Europe remains the most important market for African manufacturing exports – although exports to Asia have also increased significantly in the past decade.

There has also been gradual technological deepening in African manufacturing exports over the past decade. There has, for instance, been some growth in the relative share of exports of medium-technology (automotive, process and engineering) and high-technology manufactures (electronic and electrical and other) in Africa’s manufacturing export bundle since 2005 (Balchin et al., 2016a).

Some African countries have achieved success in manufacturing
Figure 4 shows different experiences in manufacturing value addition in a range of SSA countries, based on World Bank data. The largest manufacturing bases in absolute terms can be found in Nigeria and South Africa, followed by Kenya, Democratic Republic of Congo, Côte d’Ivoire, Ethiopia and Tanzania. In terms of growth, the data clearly show strong growth in Ethiopian manufacturing.
Below we discuss a number of individual successes in sectors or products; in terms of country experience, two stand out.

**Mauritius** is perhaps the most widely cited success case in African manufacturing. Through a well-managed transition away from plantation agriculture (centred on sugar), the country managed to develop an export-oriented manufacturing sector – focused mostly around textile and garment production – soon after independence. This was achieved through an unorthodox two-track strategy in which the government pursued both import substitution and export promotion policies simultaneously (Ansu et al., 2016b). The government reduced protection for the domestic garment
industry (including through tariff reductions) while also creating a well-managed export processing zone (EPZ) and harnessing the advantage of preferential market access into the EU, to attract foreign direct investment (FDI) into the sector and generate employment. This approach was supported by a well-designed combination of enabling and targeted policies (McMillan et al., 2017). The latter included growth-enhancing macroeconomic policies (e.g. investment in education, prudent exchange rate management) and the active reallocation of finance away from agriculture to manufacturing and services. Through progressive diversification of the economy, the government was able to effectively manage external shocks affecting the manufacturing sector and facilitate diversification into services (focusing on tourism, information and communications technology (ICT), and financial services).

There are other recent examples of African countries that have achieved success in the development of manufacturing capabilities. Ethiopia, for instance, has looked to establish a manufacturing sector to complement and follow the growth of the dominant agriculture sector by focusing on labour-intensive and relatively low-tech manufacturing activities with strong backward linkages to agriculture (e.g. textiles, leather and leather products, and agro-processing) (Ansu et al., 2016b). In a similar manner to the implementation of industrial policy in successful Asian industrialisers, senior policy-makers in Ethiopia have led the implementation of these development plans. At a practical level, interventions to support manufacturing have involved pro-active targeting of foreign investors through a range of incentives (e.g. favourable land lease rates, access to commercial credit, free imports of inputs, generous tax breaks) (Brautigam, 2016), together with substantial investments to improve infrastructure and human capital. These policies have contributed to enormous growth (off a small base) in Ethiopia's manufacturing exports over the past decade. They have also helped provide a significant boost to manufacturing employment since 2003 (Figure 5, cited in Ansu et al., 2016a).

Figure 4: Employment in formal manufacturing in Ethiopia, 1995–2014

Source: Abebe et al. (2016), in Ansu et al. (2016a)

The garments and footwear, horticulture, agro-processing, automobile, and fast-moving consumer goods sub-sectors offer promising opportunities for African manufacturing

A range of positive underlying factors, including rising wages in Asia, the rebalancing underway in China, regional growth in Africa and improving policies and institutions (e.g. more investor-friendly government policies, improvements in infrastructure that have reduced transport costs) suggest there is a window of opportunity for African countries to become hubs for labour-intensive
manufacturing. Balchin et al. (2016a) highlight the following promising sectors for light manufacturing in Africa:

- **Garments and footwear**: This sector can provide formal employment opportunities for thousands of workers (especially female workers) and boost exports. In East Africa, for example, garment exports have more than doubled since 2009 (see Figure 6). Several African countries – including Kenya, Lesotho and Madagascar – have developed garment and footwear industries employing relatively large numbers of people to participate in global value chains (GVCs) led by US and European retailers and branded clothing or footwear companies. In many African countries, product assembly in the garment and footwear industries is done by firms owned by foreign (often Chinese) entrepreneurs (e.g. Huajian Shoes in Ethiopia, C&H Garments in Rwanda, A-Z in Tanzania and Hela Clothing in Kenya), rather than domestically owned firms. Producing competitively in these value chains relies on the presence of low-skill, low-wage labour and a stable supply of intermediate inputs (fabric for clothing, leather or plastic for shoes), together with well-functioning transport and logistics infrastructure and effective trade facilitation institutions.

**Figure 5: East African garment exports to the world, 2009–2016 ($ ’000s)**

Source: Own elaboration using UNCTADstat data

- **Horticulture**: Several African countries, including Ethiopia, Ghana, Kenya, Tanzania and Uganda, have developed sizable export-oriented (mostly serving European markets) fresh fruit, vegetable or cut flower processing industries over the past two decades. These sectors have become significant employers, particularly in crop-growing activities. In Kenya, for example, the horticulture sector employs an estimated 200,000 people and contributes around $1 billion in exports annually. But Kenya is only a small player in the EU market for fresh fruit and vegetable imports, and the scope of activities carried out by local firms in Africa remains limited (and mostly concentrated in packaging and refrigeration along with export logistics and distribution services). This suggests there is considerable potential to grow output and employment in the sector in African countries. Capitalising on these opportunities will, however, hinge critically on the presence of high-quality transport (roads and air) and trade facilitation infrastructure.

- **Agro-processing**: This sector offers a big step up in generating employment, income and foreign exchange. ACET’s African Transformation Report (2014) includes a number of successful agro-processing examples from Ghana, Kenya and Zambia. Blue Skies, a fresh
fruit-packaging and juice factory set up in 1997 in Accra, Ghana, is a business with $110 million in annual sales, most of it exports, and 4,000 employees, supplying supermarkets in more than 10 countries, including Waitrose in the UK. Dormans is Kenya’s oldest coffee roaster, selling domestically as well as to major multinationals including Starbucks and Nestlé. It is a key player in East Africa, exporting 15,000 tons of green coffee and roasting 900 tons for distribution locally and to the Middle East. Most of Dormans’ beans are destined for export, with the industry bringing in about $200 million a year (see Manson, 2015). Zambia is a midsize soybean producer and processor. Zambeef sells cake to Novatek and exports cake to Zimbabwe. Unified Chemicals refines domestic and imported oils.

• **Automobiles**: There is considerable potential for rapid expansion of the auto industry in certain African countries. In Nigeria, for example, a number of European and Asian assemblers – Ford, Nissan, Hyundai, Kia, Honda and Tata – have announced plans to establish assembly operations, and the government awarded licences to 12 prospective assemblers in late 2015. Assembly operations are also being expanded in Ethiopia, Rwanda and Kenya, with new investment from a range of multinationals (including Lifan and Geely in Ethiopia and Hyundai, Tata and Foton in Kenya). Kenya has attracted major auto assemblers over the past half year: Volkswagen, Peugeot and Volvo have all announced investments in vehicle assembly operations. But promoting investment by auto assemblers in African economies has to be directed carefully, and attention should also be paid to attracting investment in component production in order to boost the potential for backward linkages.

• **Consumer goods**: Rising per capita incomes in African countries, together with rapid urbanisation, have created major opportunities to manufacture and supply consumer goods to African markets. Many consumer goods can be produced using relatively simple production processes and at low per unit costs, meaning barriers to entry into the sector can be relatively low. At the same time, expanding production of consumer goods will raise overall manufacturing productivity and contribute positively to transformative growth. Moreover, FDI in the sector can provide a range of opportunities for backward linkages. This is because lead firms, which typically design the products and own the brand, tend to make extensive use of local input suppliers and even producers of finished products, since many of the goods need to be manufactured close to their point of sale. From a policy perspective, expanding production and investment in the consumer goods sector depends on both the quality of the regulatory environment governing product standards (which should be harmonised and not overly complex) and efficient logistics and transport infrastructure to move products to market.

*However, the window of opportunity for manufacturing is under threat unless action is taken*

However, the window of opportunity for African countries in these – and other – manufacturing sub-sectors may be narrowing. African manufacturers already face strong competition from a new wave of Asian producers (especially Bangladesh, Cambodia and Viet Nam), which mostly benefit from similar or lower wages, higher productivity, better infrastructure, access to a more skilled labour force and greater integration into GVCs (Balchin et al., 2016a; Jenkins, 2016). At the same time, the future of labour-intensive manufacturing is under threat globally amid increasing mechanisation and automation.

The onset of the fourth industrial revolution, or the digital revolution, has brought with it rapid deployment of advanced technologies – such as 3D printing and robotics – with immense potential to change the landscape of manufacturing. Banga and te Velde (2018) highlight that, in this digital era, African countries are facing a two-pronged problem. First, there is a significant digital divide between SSA countries and the rest of the world, across a range of technologies – from something as sophisticated as robotics and artificial intelligence to something as basic as having access to internet. Internet penetration in SSA in the year 2016 was roughly 10 percentage points lower than that in South Asia; in terms of robots, the share of Africa in the number of robots sold in the year 2015 was more than 15 times lower than its share in the global GDP of that year.
Second, even if African economies manage to get the same access to internet and digital technologies as other parts of the world, they will still not be able to derive similar productivity gains from the internet. According to new empirical evidence in Banga and te Velde (2018), a doubling of internet penetration boosts manufacturing labour productivity in middle-income economies by roughly 11%, but the impact on low-income countries is only around 3%. This digital divide in terms of ‘use of internet’ can, to some extent, be reduced through skills development: an increase in the average skill level of a country increases the impact of internet penetration on manufacturing labour productivity by up to 9%. The authors call for increased access to internet and digital technologies in Africa, which can be achieved through effective and country-specific policies on improving skills, particularly those focused around science, technology, engineering and mathematics (STEM) and technical and vocational education and training (TVET); investment climate; public–private partnerships; firm capabilities; national innovation systems; ICT infrastructure; direct financing opportunities; and participation in GVCs.

Box 1: Developing digital capabilities in Kenya

Kenya’s success in the digital economy compared with other African countries can be traced back to important developments, including the introduction of M-Pesa by Safaricom (2007), the incorporation of ICT as a key pillar in the government’s 2030 vision, the deployment of undersea fibre-optic cables and introduction of high-speed internet (2010), and the launch of important government strategies and programmes, including the Kenya Open Data Initiative (2011), the National Broadband Strategy (2013), the National Cyber-Security Strategy (2014) and the National ICT Masterplan (2017).

A combination of strategic public–private partnerships has enabled Kenya to become more digitally ready, with higher connectivity and improved network capacity compared with other African countries. The Kenyan private sector is establishing technological and innovations hubs — such as the iHub and Gearbox — which is sparking innovation and collaboration. This is accompanied by government efforts to develop infrastructure, make subsidised internet access available to these hubs and set up small credit providing facilities to help. There have also been improvements in customs and logistics and in the provision of electricity and telecommunications in the past few years in the country.

As a result, digitalisation has steadily increased in Kenya, as evidenced by increasing ICT trade and internet penetration. A number of digital technology start-ups have also emerged: there is now Proteq Automation, offering the latest in industrial automation technology and machine manufacturing; Homgenius, developing an automated bricklaying machine that can make more than 2,000 interlocking building blocks per day; AB3D, acting as a one-stop shop for 3D printing in Nairobi, offering low-cost access to 3D printers; and several cloud-based business management start-ups.

It is important to note that in 2016 almost 90% of Kenyan manufacturing firms had computers and internet, but only 50% have a web presence, only 40% have an IT policy and only 27% use the internet to sell online. This points to the presence of a digital divide in use of the internet, even in the most digitalised country on the continent.


If African countries do not take appropriate actions to prepare for the digital future, and the digital divide persists in the context of growing global digitalisation levels, then there will be an increased threat of re-shoring of manufacturing tasks from Africa. The cost of capital is declining rapidly in developed countries — the cost of 3D printers and robots has declined by 5% annually on average — while wages in developing countries are rising (Banga and te Velde, 2018). This indicates that, at some point in the future, firms in developed economies may find it much more efficient to re-shore production from developing countries (which are major offshoring hubs) back to the technologically advanced factories in developed parts of the world. This further suggests job losses in the future in African manufacturing; already 250,000 jobs have been re-shored from developing countries to the US since 2010, with 126 jobs at risk in Africa from every single US company that
re-shores production (ibid.). It is therefore crucial for Africa to prepare and to put in place policies to adapt to the digital future, and the challenges it may bring, and to create jobs elsewhere, including in a more digitally oriented manufacturing sector. Important lessons here can be learnt from Kenya, a champion country for digitalisation (Box 1).

In the meantime, African countries need to act fast to capitalise on opportunities in labour-intensive manufacturing. There is a window of opportunity for these countries to develop less automated sectors such as food and beverages, basic metals, wood and wood products, and paper and paper products; to build industrial capabilities; and then to move into higher-value added activities. In the case of furniture manufacturing, Banga and te Velde (2018) find that, while operating robots in the US may become cheaper than US labour in the year 2023, it becomes cheaper than Kenyan labour only a decade later, in 2034, indicating a longer window of opportunity, of roughly 15 years. African countries can therefore continue to focus on boosting traditional manufacturing for some time to come, and on addressing the associated challenges – poor infrastructure, lack of reliable power supply and poor customs procedures.

3. ATTRACTING MANUFACTURING INVESTMENT – WHICH AFRICAN COUNTRIES HAVE THE MOST POTENTIAL?

There is renewed interest in the role industrial policy can play in promoting structural change and higher-value economic activity, including in manufacturing (Rodrik, 2007; Chang, 2015). On one level, there is growing consensus that market imperfections, particularly in low-income countries, impede economic efficiency and hinder structural transformation, constraining, for instance, the movement of resources from low-productivity agriculture to higher-value added manufacturing (Rodrik, 2008; Stiglitz, 2016). Such market imperfections can be a product of either too much or too little government intervention.

In some cases, market-oriented policy interventions – such as supporting an export push, promoting clustering around industrial zones or attracting FDI – could make significant contributions to ensuring Africa is a more attractive location for manufacturing (Ansu et al., 2016b). These types of industrial policy interventions can also help support firms and other economic actors to access new technologies and adopt new and innovative ways of doing business (Noman and Stiglitz, 2012; te Velde, 2013; Altenburg and Lütkenhorst, 2015); thereby facilitating learning, for example, in manufacturing. In many instances, innovations and technological advances can be supported through inward investment.

We can compare the preparedness of African countries to attract investment in manufacturing by looking at their performance in relation to specific factors that are fundamental to manufacturing success. Balchin et al. (2016a) develop a Manufacturing FDI Potential Index (see Table 1), which calculates a total score for nine African countries based on their rankings on a number of core factors behind attracting FDI. These include past manufacturing FDI stock as a percentage of GDP, recent performance in manufacturing exports, domestic value added in manufacturing, manufacturing value added per capita, economic complexity, labour productivity in manufacturing,

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1 These countries are Ethiopia, Ghana, Kenya, Mozambique, Nigeria, Rwanda, Tanzania, Uganda and Zambia.

2 It is important to note that the index scores and ranking are a relatively crude measure of the nine countries’ preparedness to attract FDI into export-based manufacturing – the 14 indicators are not weighted in terms of their relative importance, several are based on perceptions, the scoring system does not take into account issues related to policy preparedness, governance and the ability to support FDI, and it does not reflect the views of the business sector. Nevertheless, the index is based on a number of core FDI determinants and, in this sense, does provide preliminary insight into which countries are likely to be best positioned to attract FDI into export-based manufacturing.
population, quality of the business climate and infrastructure, education, and cost and reliability of electrici

The analysis suggests that, among the nine countries considered, the five most promising, currently best positioned to attract FDI into export-based manufacturing, are Ethiopia, Kenya, Mozambique, Nigeria and Zambia. It is revealing to examine the individual components. Some countries perform well on certain measures and fare less favourably on others. Kenya is clearly doing relatively well on the quality of infrastructure and its product complexity (although trends are not that promising), but it scores relatively poorly on education, electricity provision and recent manufacturing performance. It does not reach top rank for any of the sub-indicators. Ethiopia boasts a large domestic market (as does Nigeria), comparatively low manufacturing wages that provide an important competitive advantage in labour-intensive manufacturing and low electricity costs for manufacturing more generally, but labour productivity in Ethiopian manufacturing is low. Unit labour costs are comparatively low in Tanzania, even relative to China (although Ethiopia is more competitive than Tanzania in terms of actual manufacturing wage levels) (Ceglowski et al., 2015), but manufacturers in Tanzania must contend with a challenging business environment. In contrast, the favourable business climate in Rwanda, along with relatively high-quality infrastructure and trade logistics services, suggests it too has a promising base for export-oriented manufacturing.

While some African countries are better positioned than others, all of them will need to improve in several areas – particularly related to education and skills development and the quality of the business climate, infrastructure and trade logistics – if they are to attract high levels of investment into export-based manufacturing sectors.

Table 1: Total scores and rankings on the Manufacturing FDI Potential Index

<table>
<thead>
<tr>
<th>Sub-indicators</th>
<th>Zam</th>
<th>Nga</th>
<th>Ken</th>
<th>Eth</th>
<th>Moz</th>
<th>Rw</th>
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<td>2</td>
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<tr>
<td>Overall score</td>
<td>56</td>
<td>65</td>
<td>66</td>
<td>71</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>75</td>
<td>78</td>
</tr>
<tr>
<td>Ave. annual growth in manufacturing exports to the world (2005–2014)</td>
<td>7</td>
<td>2</td>
<td>9</td>
<td>4</td>
<td>5</td>
<td>1</td>
<td>8</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Labour productivity in manufacturing (constant value added per person employed) (2013)</td>
<td>4</td>
<td>2</td>
<td>3</td>
<td>9</td>
<td>1</td>
<td>8</td>
<td>6</td>
<td>5</td>
<td>7</td>
</tr>
<tr>
<td>Domestic value-added content of gross exports as a share of total exported value added (%) (2011)</td>
<td>4</td>
<td>3</td>
<td>7</td>
<td>9</td>
<td>1</td>
<td>6</td>
<td>2</td>
<td>8</td>
<td>5</td>
</tr>
<tr>
<td>Average annualised growth in labour productivity in manufacturing (%) (2010–2013)</td>
<td>6</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>5</td>
<td>8</td>
<td>4</td>
<td>7</td>
<td>9</td>
</tr>
<tr>
<td>Estimated population size (2015)</td>
<td>8</td>
<td>1</td>
<td>4</td>
<td>2</td>
<td>6</td>
<td>9</td>
<td>7</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Ease of doing business rank (2016)</td>
<td>2</td>
<td>9</td>
<td>3</td>
<td>8</td>
<td>6</td>
<td>1</td>
<td>4</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>Quality of overall infrastructure rank (2015–2016)</td>
<td>3</td>
<td>9</td>
<td>2</td>
<td>5</td>
<td>8</td>
<td>1</td>
<td>7</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>Secondary education enrolment rate (%)</td>
<td>1</td>
<td>4</td>
<td>3</td>
<td>7</td>
<td>9</td>
<td>6</td>
<td>2</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>Tertiary education enrolment rate (%)</td>
<td>9</td>
<td>2</td>
<td>7</td>
<td>4</td>
<td>5</td>
<td>3</td>
<td>1</td>
<td>8</td>
<td>6</td>
</tr>
<tr>
<td>Price of electricity (US cents per kWh) (2016)</td>
<td>2</td>
<td>8</td>
<td>7</td>
<td>1</td>
<td>3</td>
<td>5</td>
<td>9</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>Number of electricity outages in a typical month (2013)</td>
<td>3</td>
<td>9</td>
<td>5</td>
<td>4</td>
<td>1</td>
<td>2</td>
<td>7</td>
<td>8</td>
<td>6</td>
</tr>
<tr>
<td>Manufacturing value added per capita (2013)</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>9</td>
<td>7</td>
<td>8</td>
<td>4</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>Country ranking on Economic Complexity Index (2014)</td>
<td>1</td>
<td>8</td>
<td>2</td>
<td>6</td>
<td>5</td>
<td>9</td>
<td>7</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Manufacturing share of FDI stock (% of GDP) (most recent year available)</td>
<td>4</td>
<td>5</td>
<td>8</td>
<td>2</td>
<td>9</td>
<td>6</td>
<td>7</td>
<td>1</td>
<td>3</td>
</tr>
</tbody>
</table>

Note: Scores are based on numerical values.
Source: Balchin et al. (2016a)
4. INDUSTRIAL POLICY – WHICH AFRICAN COUNTRIES PERFORM WELL?

A conducive policy environment complements core economic fundamentals in attracting manufacturing investment. McMillan et al. (2017) and Altenburg and Lütkenhorst (2015) show that industrialisation success calls for an appropriate balance between improving the general investment climate and targeted interventions to develop promising sectors or firms. Hallward-Driemeier and Pritchett (2015) support the need for targeted initiatives (or bilateral ‘deals’), suggesting that different firms experience and address the same rules differently. Improving doing business indicators is good, but this needs to be complemented by specific support for those firms and sectors that are technically assessed as promising in the perspective of economic transformation, in a time-limited way and conditional upon performance standards in both the public and the private sector.

Market and coordination failures (in relation to technological development, skills-building and financial market development) are pervasive in industrial development (te Velde and Morrissey, 2005), but an effective industrialisation and economic transformation strategy involves knowing not only what to focus on (e.g. addressing market failures in promising sectors and factors, as summarised in Sections 2 and 3) but also how to do this. A natural inclination is to look for common observable characteristics in the institutions behind successful experiences, what organisations were put in place, how finance and planning relate to each other, etc. However, Ansu et al. (2016a) argue that, in practice, the form of the arrangements of control and collaboration between the political authorities and private economic actors in success cases followed no single pattern. The Asian and African countries that have implemented economic transformation strategies successfully have focused on four characteristics (see Ansu et al., 2016a, for detailed text):

1. Establish industrialisation and economic transformation as a nation-building project;
2. Leadership and coordination within government;
3. Effective mechanisms for public–private sector collaboration;
4. Explicit experimentation, feedback and correction.

Ansu et al. (2016a) discuss these aspects in the context of economic transformation. The lessons are applied and explored further in the context of Tanzania (Balchin et al., 2016b), Kenya (te Velde, 2017) and Rwanda (Booth et al., 2017).

What functions characterise a good quality industrial policy regime?

We translate these aspects into eight crucial functions behind a good-quality industrial policy regime (Ansu et al., 2016b; SET, 2017):

- **Quality of the industrial policy process**: Box 2 in Appendix I discusses the success in leadership and nation-building around industrialisation and economic transformation in Mauritius. It emphasises the importance of building a consensus view across the public and private sectors around the strategic direction of the economy; ensuring effective government support for the desired transformation model, driven by capable public sector bodies; and facilitating formal and informal collaboration between the public and private sectors (based on well-established trust) around key interventions necessary for economic transformation.

- **Conduciveness of trade rules and trade facilitation (including corridors) and resisting ill-thought-out protectionism**: Trade rules to support industrialisation should be geared towards exporting and openness, which confer major benefits (see, for example, Leipziger, 2015; te Velde et al., 2016). More protectionist models for manufacturing are in operation in some African countries, based on a desire to protect the economy and build up manufacturing under protection. But this is unlikely to work in any sustained way. Where protection is afforded to manufacturing industries, it should be time-bound (short in term and phased out as industries become more competitive) and aimed at supporting industries
that already have some productive capacities (Balchin et al., 2017). Moreover, Box 3 in Appendix I on trade and industrialisation suggests that lowering trade costs facilitates industrialisation and value chain development by reducing the cost of inputs and improving their availability, raising competition in domestic markets, making exports more competitive and facilitating integration into regional and global value chains. National and regional approaches to trade facilitation, including one-stop border posts, national and regional single windows and automated and harmonised customs procedures have helped reduce transit times and facilitate trade flows in Southern and East Africa, particularly along key transit routes and corridors.

- **Provision and regulation of special economic zones (SEZs), industrial clusters or hubs** (including the required infrastructure and skills): Boxes 4 and 5 in Appendix I discuss the role of SEZs and industrial parks in driving growth in Ethiopia, Kenya and elsewhere. In countries such as Ghana, Kenya, Lesotho, Madagascar and Mauritius, clusters or zones have attracted significant employment.

- **Effective investment facilitation including aftercare**: Box 6 in Appendix I discusses how foreign automobile companies transformed the automobile sector in South Africa, including through interactions between foreign firms and education systems.

- **Local capability-building where it makes sense** (for local content or acquisition of key capabilities by national firms or public agencies): Box 7 in Appendix I discusses how Mauritius has helped upgrade and increase productivity in the garment sector in the face of major challenges. This has been achieved through institutional support – involving both training and investment in technology – for garment firms. Local content regulations (and protectionism) are least effective when good quality domestic capabilities do not exist.

- **Supportive infrastructure planning**: Box 8 in Appendix I describes efforts to build infrastructure in Kenya and suggests the use of performance contracts is effective in infrastructure development.

- **Learning with the private sector to address initial and emerging constraints**: Box 2 in Appendix I discusses the importance of building effective state–business relations in Mauritius through the Joint Economic Council (JEC), which has been instrumental in facilitating formal and informal collaboration between the public and private sectors.

- **Selective, conditional support to building firm capabilities** (including finance): Box 9 in Appendix I discusses the role of experimentation and adaptability in industrial policy processes. This is important to enable the discovery of approaches that work for industrialisation in particular country and sector contexts.

### Comparing industrial policy functions across East African countries

Table 2 summarises Table 3 in Appendix II, which evaluates the core dimensions of the industrial policy process in the case of five East African countries (Ethiopia, Kenya, Rwanda, Tanzania and Uganda), contrasting what we understand to be good performance in a specific area with what is witnessed in each of the countries.

There is generally a high level of political commitment to industrialisation, or at least an interest in promoting industrialisation in each of the five countries, and industrialisation objectives are embedded in the countries’ recent industrial policies and strategies. Ethiopia has pursued pro-active industrial policy, grounded within a wider state-led development model. Kenya has placed more significant emphasis on infrastructure and less on industrialisation, and political support for manufacturing has been less of a priority in the past. Instead, much emphasis has been on large-scale, high-profile projects. But the recent emphasis on manufacturing as part of the Big Four agenda in Kenya (owned by the Presidency) points to a shift in focus towards a more centralised approach. There is strong political commitment to developing export-oriented manufacturing in Ethiopia and Rwanda, and Tanzania has prepared an array of strategies to support specific manufacturing sectors (e.g. leather and cotton to textiles), though implementation is lagging.

All five countries have plans to expand their networks of existing industrial parks and to establish new SEZs, but there are currently few operational examples (although EPZs are more widespread
in Kenya and there is an array of new industrial parks in Ethiopia). Challenges related to the operationalisation of SEZs are evident in the East African Community (EAC) countries, ranging from the slow pace of amendments to relevant legislation at the EAC level to shortages of funds for various aspects of SEZ development (e.g. to acquire land for SEZs and finance their development and operationalisation in Tanzania or to construct infrastructure for industrial parks in Uganda). Among the EAC countries, only Kenya and Tanzania have SEZ legislation and/or regulations in place. The Rwandan SEZ near Kigali has achieved good results.

Table 2: Industrial policy functions – performance expectations and summary scores in five East African countries

<table>
<thead>
<tr>
<th>Functional area</th>
<th>Performance expectations</th>
<th>Ethiopia</th>
<th>Kenya</th>
<th>Rwanda</th>
<th>Tanzania</th>
<th>Uganda</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality industrial policy process</td>
<td>• Effective lead agency • Robust, inclusive process of formulating and implementing industrial strategies • Monitoring of implementation</td>
<td>5</td>
<td>2</td>
<td>4</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Conducive trade rules and trade facilitation</td>
<td>• Sound tariff regime • Active support for exporters • Developing trade standards • Efficient port procedures</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Provision and regulation of SEZs, industrial parks or clusters</td>
<td>• Efficient legislation • Coordinated and speedy action around zones</td>
<td>4</td>
<td>3</td>
<td>4</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Effective investment facilitation, including aftercare</td>
<td>• Clarity on roles, responsibilities and mandates of EPZAs, government ministries and investment promotion agencies • Identification of suitable investors • Active engagement with firms • Supporting firms in-country</td>
<td>4</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Local capability-building (for local content or national capability acquisition)</td>
<td>• Capacity-building programmes (skills and technology development in tandem with private sector) • Local content unit with clear negotiation strategies</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Supportive infrastructure planning</td>
<td>• Prioritisation of infrastructure needs of manufacturers • Efficient port/airport handling</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>
MANUFACTURING IN AFRICA | FACTORS FOR SUCCESS

<table>
<thead>
<tr>
<th>Functional area</th>
<th>Performance expectations</th>
<th>Ethiopia</th>
<th>Kenya</th>
<th>Rwanda</th>
<th>Tanzania</th>
<th>Uganda</th>
</tr>
</thead>
</table>
| Learning with the private sector to address initial and emerging constraints | • Trust-based relationships, feedback mechanisms  
• Mechanisms that hold government to commitment | ② | ② | ⑤ | ① | ② |
| Selective, conditional support to building firm capabilities (including finance) | • Banking system that supports industrial priorities  
• Mechanisms that hold firms to commitment | ② | ② | ② | ① | ① |

Note: Scoring is indicative based on the authors’ interpretation of short country-based analyses; the results should be treated with extreme caution and cannot be seen in isolation from the text in Table 3 and underlying analysis.

Source: Table 3 in Appendix II, which is based on SET (2017) (Jobs Africa Country Scoping Studies for Kenya, Rwanda, Tanzania and Uganda) and other ODI/SET work covering Ethiopia.

There is less clarity on the power of central agencies in Kenya in driving the industrialisation process, which can lead to less coordination compared with in countries such as Ethiopia and Rwanda. Kenya, Tanzania and Uganda lack a clear champion or lead agency to drive industrialisation effectively and coordinate industrial policy processes around an agreed industrial development agenda. Conversely, the Rwanda Development Board (RDB) appears well placed to perform such a role and the Ministry of Industry is a focal point for manufacturing in Ethiopia.

Improvements to trade facilitation – some of which have been facilitated by TradeMark East Africa (TMEA) – have reduced transit times and alleviated certain issues at border posts and in relation to transport links and access to seaports, especially for landlocked Rwanda. But trade facilitation challenges still persist in the region, especially around border posts and transportation links. Non-tariff barriers also affect regional trade, and the varying degrees of emphasis on import substitution in the trade policies of the five countries are a constraint to intra-regional trade in manufactures.

There is variation in the quality and effectiveness of investment promotion and facilitation mechanisms and institutions across the five countries. While there is a clear mandate for investment promotion under one agency (KenInvest) in Kenya, and investment promotion has been elevated to the centre of government (and the highest levels) in Ethiopia, there is confusion about the respective roles, responsibilities and mandates of the Export Processing Zone Authority (EPZA) and the Tanzania Investment Centre (TIC) in relation to promoting and facilitating investment in Tanzania. Similarly, the investor aftercare provided in Kenya (provided by KenInvest), Rwanda, Tanzania (through TIC) and Uganda is limited. There are also clear capacity limitations in TIC and the Uganda Investment Authority (UIA).

In the face of considerable skills shortages, all five countries have some capacity-building/training programmes in place to enhance local capabilities (including programmes to develop manufacturing capabilities and skills), but these are often limited in scale. Kenya and Tanzania have specific regulations to promote local content, including through government procurement; however, there is variation in the extent to which these are effective (e.g. the 40% requirement for local content in public procurement in Kenya is not always adhered to). A lack of funds (Kenya) or limited capacity (Tanzania) constrains research and development (R&D) and efforts to develop local technology or facilitate technology transfers.

Infrastructure deficits pose constraints to industrialisation in all five countries, but there is variation in the effectiveness of approaches to address these through supportive infrastructure planning. Clear and ambitious infrastructure development planning in Kenya and Rwanda (and, to some
extent, in Ethiopia) contrasts with limited capacity to plan, prioritise and coordinate infrastructure development in Tanzania.

Firms in each of the five countries face significant financing constraints, which affects the development of the manufacturing sector and further industrialisation. The Rwandan government has sought to provide targeted support to employment-intensive manufacturing firms. Similarly, the Development Bank of Ethiopia provides long-term loans to priority sectors — including manufacturing — at subsidised rates. But financial support to commercially viable investments in Tanzania and Uganda is limited as a result of the underfunding of national development banks.

Finally, there is a clear need in each of the five East African countries for more dialogue between the government and the private sector around industrialisation, and more effective mechanisms to facilitate this. There is variation in the ability of private sector representative organisations to influence government policies and priorities and the implementation thereof. In Uganda, organisations such as the Uganda Manufacturers Association and the Private Sector Foundation Uganda play important advocacy roles, and the latter is well embedded in most policy and consultative mechanisms. Similarly, in Kenya, the Kenyan Association of Manufacturers (KAM) is effective in leading advocacy for the manufacturing private sector. Similar private sector representative organisations appear to be less influential in Tanzania, especially when it comes to following through on implementation.
5. CONCLUSIONS

Despite major challenges, African manufacturing has recorded notable successes, ranging from automobile production in South Africa, to garments, first in Mauritius and now in East Africa, and shoes, to food and beverages and consumer goods, including in conflict-affected states. A detailed review of these experiences suggests a number of general enabling factors and specific policy functions have been critical to promoting manufacturing activities.

The quality of infrastructure, education and electricity provision are all important factors supporting manufacturing competitiveness, while low manufacturing wages and electricity costs can also provide important competitive advantages. Many of these general enabling factors fall under the wider umbrella of a supportive business environment and are important in providing the necessary base for growth in export-oriented manufacturing.

Some African countries perform well in these areas and fare less favourably on others. Kenya is clearly doing relatively well on the quality of infrastructure and its product complexity (trends are not that promising but there are early signs of improvement), but it scores relatively poorly on education, electricity provision and recent manufacturing performance. Ethiopia boasts a large domestic market (as does Nigeria), comparatively low manufacturing wages that provide an important competitive advantage in labour-intensive manufacturing and low electricity costs for manufacturing more generally, but labour productivity in manufacturing is low. Unit labour costs are comparatively low in Tanzania, even relative to China (although Ethiopia is more competitive than Tanzania in terms of actual manufacturing wage levels), but manufacturers in Tanzania must contend with a challenging business environment. In contrast, the favourable business climate in Rwanda, along with relatively high-quality infrastructure and trade logistics services, suggests it too has a promising base for export-oriented manufacturing.

In addition to these general enabling factors, specific policy functions also play a central role in driving manufacturing success. These include political commitment to promote investment in employment-intensive manufacturing and quality of the industrial policy regime. We show in this paper, by highlighting specific examples from across the African continent, that the latter hinges critically on the quality of industrial policy processes, conducive trade rules and trade facilitation, the promotion and regulation of SEZs and industrial clusters, effective investment facilitation and aftercare, local capability-building, supportive infrastructure planning, learning with the private sector to address initial and emerging constraints, and selective, conditional support to build firm capabilities.
REFERENCES


APPENDIX I: EXAMPLES OF GOOD-QUALITY INDUSTRIAL POLICY PRACTICES IN AFRICA

Box 2: Economic transformation as a nation-building project in Mauritius

From the 1970s onward, the public and private sectors in Mauritius built a consensus view around the strategic direction of the economy based on structural transformation away from sugar and towards garments, tourism, financial services and, finally, an integrated services platform. This government-supported model led to major gains for the productivity and wages of the majority of workers, while also involving adjustment costs for some, which were addressed through, for example, training. Rents from the sugar sector were reinvested to stimulate other sectors. Protection at home was reduced gradually, while EPZs boosted garment exports. Preferential trade access for sugar and garments was eventually lost, which required productivity enhancement in surviving firms and retraining and redeployment of labour from exiting firms and sectors into other sectors.

This process was driven by public sector bodies such as the Export Processing Zones Development Authority and the Export Development and Investment Authority (bodies that were later reorganised into the Board of Investment and Enterprise Mauritius), the Industrial and Vocational Training Board, the National Productivity and Competitiveness Council and the Ministry of Finance. The finance ministry worked in tandem with private sector associations such as the Joint Economic Council (JEC). The formal and informal collaboration of public and private sector was based on well-established trust (the head of the JEC was a former politician, and the private sector was represented on the board of directors of the parastatals). This facilitated key initiatives for economic transformation, such as the setting-up of an EPZ, the building of the first hotels, renegotiation of the sugar protocol, the creation of a national airline and the establishment of a stock exchange. It is clear that budget proposals by the JEC are frequently taken over by the government.

Source: Rojid et al. (2010); Treebhoohun and Jutliah (2014)

Box 3: Trade facilitation, openness and industrialisation in eastern and southern Africa

Trade facilitation (involving the simplification, harmonisation, standardisation and modernisation of trade procedures to reduce trade costs) and greater openness to trade (including through reductions in tariff and non-tariff barriers) can stimulate industrialisation. Both openness and trade facilitation will lower the cost of inputs and improve their availability, raise competition in domestic markets and make exports more competitive. This can support export diversification, facilitate the reallocation of resources to more productive activities, enable access to cheaper and better-quality imported inputs and facilitate integration into regional and global value chains. All of these factors play an important role in enabling domestic manufacturing firms to raise their productivity and improve their competitiveness. Trade facilitation and openness is especially important for boosting intra-regional trade, which in turn can have dynamic effects in expanding output and facilitating diversification in a manner that promotes industrialisation in Africa.

Regional approaches to trade facilitation are increasingly prevalent in Africa and there are examples where such approaches are working well. For instance, the creation of one-stop border posts at Chirundu on the Zambia–Zimbabwe border and at the Busia border crossing between Kenya and Uganda has reduced the time and costs involved in moving goods across these borders by streamlining customs procedures and reducing processing times. At Chirundu, the time taken for freight to cross the border has been reduced from several days to just a few hours with the introduction of the one-stop border post. This has helped lower the costs involved in clearing goods at the border and, hence, has improved competitiveness.

Other trade facilitation measures, such as the introduction of national and regional single windows and the automation and harmonisation of customs procedures (e.g. by using electronic platforms), have also reduced border clearance times and promoted trade flows along important transit routes in Africa, including along the Trans-Kalahari and Maputo Development Corridors in Southern Africa and the Northern Corridor connecting East and Central African states to the port of Mombasa. The EAC countries have introduced a Customs Union to eliminate internal tariffs and non-tariff barriers that constrain regional trade, and are in
the process of implementing a Single Customs Territory, intended to facilitate the free circulation of goods within the region.

But the implementation of trade facilitation agreements remains challenging in Africa. Differences in implementation requirements and instruments across regional economic communities (RECs) (some African countries have multiple memberships in different RECs); variation in the quality of infrastructure and in levels of modernisation and automation of customs systems; capacity constraints and a lack of technical expertise; and poor or out-dated infrastructure continue to constraint effective implementation. Greater harmonisation of customs and other trade facilitation instruments across RECs; improvements to hard and soft infrastructure; more coherent regional policies for border posts and other trade facilitation instruments; and improved coordination of countries would help stimulate trade and industrialisation on the continent.

Source: Amoako-Tuffour et al. (2016)

Box 4: Making SEZs work for Africa’s transformation and job creation

Kingombe and te Velde (2015) discuss how SEZs could play a role in addressing Africa’s twin challenge of structural transformation and employment creation. Effective SEZs are those that i) respond to the latest global developments (e.g. increased demand for natural resource-rich products, off-shored services, rising wages in China, etc.); ii) are regarded as tools in a wider growth strategy that incorporates good-quality policies and support for institutions; and iii) follow a set of best practices, such as emphasising the clustering properties of SEZs (and not just the trade provisions of EPZs). All of this requires significant state capacity with a consistent and coherent approach (involving, for instance, bringing together regulation, energy and water provision, transport infrastructure and export and investment promotion), which should be coordinated by one strong public agency (possibly sub-contracting the private sector).

The evidence on SEZ development suggests that some zones (especially in Asia) have worked whereas many others (especially in Africa) have failed. Nonetheless, some zones in SSA have attracted significant employment (e.g. in Ghana, Kenya, Lesotho, Madagascar and Mauritius), although the transformational aspects have been largely absent (with exceptions such as Mauritius). SEZs that have emphasised clustering tend to be more successful.

Significant and sustained employment generation occurs only when there is a strategy for the zone to contribute to innovation and structural transformation, because zones without such a strategy will not succeed in the long run and are vulnerable. A sustainable SEZ strategy needs to ensure zones are not established and managed as enclaves, but involve significant linkages between zone firms and local firms, and use economic and social standards that are similar to those in the rest of the economy.

Source: McMillan et al. (2017)

Box 5: Hawassa industrial park in Ethiopia

Hawassa Industrial Park is the flagship SEZ of the Ethiopian Industrial Parks Development Corporation. The park has over 400,000 m² of factory floor space, is expected to generate 60,000 jobs and $1bn in exports by the end of 2018 and is widely seen as an example of a successful African SEZ.

There are 52 factory sheds in Hawassa, fully utilised by 18 companies, including from Bangladesh, China, Hong Kong, India, Indonesia, Spain and the US. The park began with 37 sheds and built 15 new ones in response to high demand. The Ethiopian Investment Commission (EIC) selects prospective new investors. The park has four main elements, which are carefully planned and integrated with 50 km of underground piping: factories, housing units for expats, a water treatment plant and a textile mill (currently the largest in Ethiopia), which will eventually supply 100% of the textile needs of the incumbent companies. The latter is a key aspect of the government’s plans for vertical integration and will benefit the country’s textile industry overall. The demonstration effect is strong in Hawassa – the presence of US luxury apparel company PVH signals to other investors that this park is capable of supporting high-quality light manufacturing. The park was up and running in just nine months.
International investors are attracted to Ethiopia by its cheap labour costs and modern technological resources, needed to produce low-cost, high-quality garments and textiles competitively for export. More importantly, they are attracted by strong institutions in the country, as well as financial incentives. These include simpler processes for setting up operations and a one-stop institutional service, with the EIC supporting new companies with banking, visa and immigration facilities, import/export licences, work permits and customs clearance, all of which helps speed up decision-making and can reduce set-up costs.

Challenges do exist, and include reliable energy, which is common across African SEZs, and, specifically to Hawassa, issues with quality of labour (high absenteeism is reported, and factory owners have little say in who they employ), with sourcing supplies locally and with the cost of transport to the nearest port, in Djibouti. Despite these, Hawassa offers important lessons on how to set up successful SEZs – namely, that financial incentives alone are not enough to attract investors. Coordination of various aspects on both a practical and an institutional level, by a government committed to a broader vision of industrialisation and manufacturing growth, is key. The case of Hawassa demonstrates that coordination and the presence of a long-term vision are important ingredients for building high-quality SEZs quickly. These, in turn, can create high numbers of transformational jobs, while also generating crucial positive spillover effects to benefit the local economy.

Source: Hoque (2017)

Box 6: FDI and FDI policy to promote industrialisation and South Africa’s automobile sector

South Africa’s automobile sector is a prime example of an industry that has sought to move from a strategy located within the context of import substitution to one designed to take advantage of liberalisation and globalisation. In doing so, it has moved from a position in which quality and costs were not comparable with international benchmarks to one in which some South African-produced vehicles can be viewed as ‘world class’.

The automotive industry was able to enter South Africa in the 1920s in part because of the existing state of skills in the country, which had resulted from responses to earlier processes of industrial development. The skills base combined with the presence of good infrastructure and a relatively large domestic market to encourage initial investment in the sector. However, although skills were in abundance, by the late 1970s it was evident that they were in need of upgrading. Here, the industry was to play a catalytic role in bringing about a national response to education and training weaknesses. This ensured skills development was broadly sufficient for the industry’s needs. For instance, it is a major provider of skills development, both within its own workshops and through its partnerships with public providers. The industry has been at the forefront of business linkages with public further and higher education and training providers. Such programmes have brought staffing, additional resources and increased enrolment for institutions and so have strengthened their infrastructure.

Automotive manufacturers have also been important supporters of the new skills development system introduced by the Department of Labour. They are increasingly encouraging the spread of such practices to their supplier and dealer networks. Given the newness and, hence, potential fragility of the new skills system, the strong participation of the automotive manufacturers in the new system has probably helped promote the overall success of the system.

Other policies have been effective in attracting FDI into the industry, which has in turn brought benefits in terms of technology upgrading and better access to international markets. As the industry opened up and the inward-looking orientation gave way to a focus on export promotion, generous support was provided for exporting both components and fully built-up vehicles. This included the introduction of an export–import complementation scheme enabling firms to offset duties on imported vehicles and components by exporting. This was effective in incentivising rapid growth in exports. The subsidised support for exports also helped boost production volumes and enabled firms to achieve economies of scale (albeit at a high cost). The signing of the automotive section of the EU–South Africa free trade agreement (known as the Trade Development and Cooperation Agreement) also helped attract FDI through better market access and improved access to European component inputs, which in turn facilitated technology transfer opportunities through cooperation with foreign firms.
The automotive industry is now South Africa’s largest manufacturing sub-sector and contributes around 12% of the country’s total manufacturing exports. Firms operate at all stages of the value chain, and multinational firms look to source components and related supplies (e.g. steel, paint, textiles, plastic) from South African suppliers or to locate vehicle assembly operations in the country. The local automotive industry also has clear linkages to other manufacturing sub-sectors, particularly in the production of catalytic convertors and leather seats for motor vehicles.

Source: McGrath (2005); Balchin and Mendez-Parra (2016)

**Box 7: Local capability-building in Mauritius**

The Mauritian garment industry was initially built around advantages of low-cost labour and access to major markets through preferential trade agreements, which favoured basic assembly operations and highly labour-intensive garment production. Changes in both internal (rising labour costs) and external (receding advantages from preferential trade agreements and emerging competition from low-cost competitors) conditions necessitated a fundamental restructuring of the garment industry in the late 1980s and early 1990s to remain competitive.

In the face of these challenges, the government sought to facilitate a shift to higher-value added and more fashionable items, produced using greater design input and capable of responding to shorter lead times. This was achieved through both policy changes and institutional support to build the local capabilities necessary for such production. A central focus of government support was to encourage modernisation of the sector and investment in more technology-intensive processes (e.g. computer-assisted design and computerised cutting).

Emphasis was placed on providing institutional support to raise productivity through both training and investment in technology. A number of publically funded institutions were established in the 1980s and early 1990s to support firms and facilitate the necessary restructuring. These included the Mauritius Export Development and Industrial Authority to attract investment and establish industrial estates; the Industrial and Vocational Training Board to drive skills development; and the Export Processing Zones Development Authority to support productivity and quality improvements in export-oriented firms. Garment firms were supported to adopt new technology through schemes such as the Technology Diffusion Scheme (supported by the World Bank), allowing co-sharing of costs for technology upgrades.

These policy changes and institutional support for innovation and productivity improvements were instrumental in facilitating the substantial transformation of the Mauritian garment sector.

Source: Treebhoohun (2014)

**Box 8: Building infrastructure in Kenya**

Kenya used performance contracts to drive through infrastructure projects. During the period 1978–2002, Kenya’s key infrastructural facilities, including energy, roads, railways and ports and airports, were largely neglected. This had negative consequences for the competitiveness of Kenyan products in global markets and hampered investment, given the inadequate and disruptive power supply and other related shortcomings. This situation changed in 2003, with infrastructural development emerging as a leading budgetary item, often second only to education. Former-President Mwai Kibaki, Kenya’s third president, is credited with leading the country’s focus towards infrastructure as the gateway to its transformation. Another innovation Mwai Kibaki brought about was the introduction of performance contracting in the country’s public sector. Since 2005, Kenya’s public-sector officials at all levels have been expected to sign a negotiated contract indicating targets to be achieved in each government institution and by senior officials. These contracts are evaluated and announced in public each year.

Source: Ikiara (2017)
Box 9: Experimentation and adjustment in industrialisation

Effective economic transformation is the result of experimental learning and responding to feedback. Altenburg and Lütkenhorst (2015) argue that industrial policy for transformation should be designed as ‘a systematic process of experimental learning’. It involves enabling discovery of approaches that work in the particular country and sector by means of explicit experimentation, good feedback and adaptability to ensure timely correction. Using carefully selected demonstration projects can help build momentum around targeted priorities and demonstrated successes can be used as a springboard to attract investment, highlight effective ways of working and scale up. Rwandan President Kagame highlighted this point at the 2016 African Transformation Forum: ‘We have to stay adaptable and flexible. Plans and frameworks should not become a barrier to action or to course corrections. Mistakes will be made along the way and money wasted. But that should not be the end of the road.’

Source: Ansu et al. (2016a); Hoque (2016)
**APPENDIX II: ACTUAL PERFORMANCE IN EAST AFRICAN COUNTRIES IN DIFFERENT INDUSTRIAL POLICY FUNCTIONS**

Table 3 compares industrial policy processes across five East African countries (Ethiopia, Kenya, Rwanda, Tanzania and Uganda), focusing on eight core functional areas of industrial policy, and contrasting what we understand to be good performance in each specific area with what is witnessed in each of the countries.

**Table 3: Industrial policy functions – performance expectations and actual performance in East African countries**

<table>
<thead>
<tr>
<th>Functional area</th>
<th>Performance expectations</th>
<th>Ethiopia</th>
<th>Kenya</th>
<th>Rwanda</th>
<th>Tanzania</th>
<th>Uganda</th>
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<tbody>
<tr>
<td>Quality industrial policy process</td>
<td>Robust, inclusive process of formulating and implementing industrial strategies</td>
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<td></td>
<td>Effective lead agency</td>
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<td>Monitoring of implementation</td>
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<td></td>
<td>State-led development model with pro-active industrial policy, centre of government-led and concentrated in a succession of large-scale development plans.</td>
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<td></td>
<td>Shift in focus to a labour-intensive, export-led industrialisation model, prioritising structural change and industries with linkages to agriculture sector. Reflected in latest iteration of Growth and Transformation Plan.</td>
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<td></td>
<td>Ministry of Industry is focal point/lead agency for manufacturing, but limited mandate and lack of influence over</td>
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<td></td>
<td>Kenya’s Industrial Transformation Programme is recognised as the plan for industrialisation for the country, but was developed without much consultation; there are strong leads for selected sectors but no implementation plan.</td>
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<td></td>
<td>Ministry of Trade, Industry and East African Community Affairs (MINEACOM) is responsible for developing policies for employment-intensive, export-oriented manufacturing and RDB is tasked with implementation, but division of tasks is more flexible in practice.</td>
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<td></td>
<td>Several strategies are in place to promote manufacturing and the Ministry of Industry, Trade and Investment (MITI) leads industrial policy-making. Agencies are tasked with implementation, but MITI struggles to coordinate ministries, departments and agencies around an industrialisation agenda and there is a lack of accountability. Decision-making systems are slow and lack private sector input.</td>
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<td>Ministry of Trade, Industry and Cooperatives is in charge of industrial policy-making, but lacks budget and capacity for implementation.</td>
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<td>Ministry of Finance, Planning and Economic Development is better resourced to lead policy but lacks mandate and technical knowledge. Lack of coordination in efforts to promote industrialisation.</td>
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<td>Functional area</td>
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<tr>
<td>Actual conduct and performance</td>
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<tr>
<td>Conducive trade rules and trade facilitation</td>
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<td>• Sound tariff regime</td>
<td>• Ethiopia faces major logistical constraints to trade owing to its geographical position.</td>
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<td>• Active support for exporters</td>
<td>• Government has taken some steps to reduce trade and logistics costs. State-owned logistics companies (Ethiopian Airlines, Ethiopian Shipping Line, Dry Port Services) provide services at competitive rates. But poor trade logistics remain a binding constraint to competitiveness.</td>
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<td>• Developing trade standards</td>
<td>• Export Promotion Council (EPC) has a good understanding of the export environment in Kenya, but there are doubts as to its effectiveness as a result of understaffing; its services are considered expensive.</td>
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<td>• Efficient port procedures</td>
<td>• Achieved success in alleviating trade facilitation issues at border posts and in relation to transport links and access to Mombasa port, including because of TradeMark East Africa-supported initiatives.</td>
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<td>Well-established institutional framework for trade policy and trade facilitation, but policies tend to be overly defensive; and there is lack of institutional coordination and capacity to address trade facilitation issues (e.g. poor customs administration).</td>
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<td>• TanTrade could be more effective in supporting trade.</td>
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<td>Provision and regulation of SEZs, industrial hubs or clusters</td>
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<td>• Efficient legislation</td>
<td>• Kenya Industrial Estate has had limited success.</td>
<td>• Large number of prospective SEZs identified in the second Five-Year Development Plan but no clear prioritisation; and EPZA lacks funds for up-front investment to develop zones and has struggled to attract investors.</td>
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<td></td>
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<td>• Coordinated and speedy action around zones</td>
<td>• EPZA is seen as effective, delivers needed services to EPZ firms and has diverse revenue streams, but the SEZ Act may affect its relevance.</td>
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<td>• Ambitious industrial park programme led by government.</td>
<td>• There are plans to set up several SEZs (fully serviced sites) led by MINEACOM and managed by SEZAR (the SEZ authority), but currently only one</td>
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<td>• Two-pronged approach involving both government-led industrial parks and private foreign-led SEZs ensures zones are available to meet demand of FDI firms.</td>
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<td>• Industrial parks regarded as gateway to FDI, backed by</td>
<td>• There are problems in coordination</td>
<td>• Lack of funding has affected the industrial park in Namanye, which is only part occupied.</td>
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<td>• There are ambitious plans to develop free zones offering fiscal and non-fiscal incentives to producers but a lack of progress so far.</td>
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<td>Functional area</td>
<td>Performance expectations</td>
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| Actual conduct and performance | legislation and incentives encouraging investment in labour-intensive, export-oriented manufacturing.  
- Good, and often speedy (e.g. Hawassa industrial park, completed in less than a year), progress in constructing zones (eight industrial parks constructed so far). | between different parts needed to implement SEZ policies. | is operational (in Kigali). Phase 1 of the Kigali SEZ reportedly attracted 62 factories, although many were relocations from the old industrial zone in Kigali.  
- Government is planning to establish a further eight industrial parks in other parts of the country. | Accessing land is an obstacle to zone development.  
- Transition from EPZ to SEZ regulations is a major challenge. | |
| Effective investment facilitation, including aftercare | • Clarity on roles, responsibilities and mandates of EPZAs, ministries and investment promotion agencies  
- Identification of suitable investors  
- Active engagement with firms  
- Supporting firms in-country | • Attracting inward investment is at the core of Ethiopia’s industrialisation strategy.  
- Key investment-related institutions have been reformed or created (e.g. Ethiopian Investment Board (EIB), Ethiopian Investment Commission).  
- Investment promotion has been elevated to centre of government and led at highest levels of government | • Doubts expressed on the effectiveness of KenInvest/EPZA, but plans are underway to develop a ‘one-stop shop’ window.  
- The single window needs implementation and improvement.  
- KenInvest may not enjoy as much coordinating authority as in some other countries. | • Investment facilitation is a core function of RDB, which is expected to play a key role in attracting anchor firms into new zones.  
- Investor aftercare needs improvement, and regulations can be stifling.  
- Confusion in the roles of different bodies makes it challenging for | • Tanzania Investment Centre (TIC) provides little investor aftercare and does little tracking/monitoring of existing investments.  
- Confusion about the roles of TIC and EPZA in investment promotion.  
- Lack of success in identifying suitable investments. | • Uganda Investment Authority (UIA) tasked with investment promotion but has little capacity to deal with investors or provide aftercare support.  
- UIA is also responsible for Namanye industrial park and creating one-stop shops, but these initiatives have experienced delays and coordination issues. |
## MANUFACTURING IN AFRICA

### FACTORS FOR SUCCESS

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<tr>
<th>Functional area</th>
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| **Local capability-building (for local content or national capability acquisition)** | | • Capacity-building programmes (skills and technology development in tandem with private sector)  
  • Local content unit with clear negotiation strategies | • Some pro-active interventions have been made to build skills base in specific sectors.  
  • For example, Ethiopian Textile Industry Development Institute was established in 2010 to support firm-level competitiveness. The government has also sponsored textile and garment firms to facilitate access to knowledge and experience of internationally renowned firms.  
  • But manufacturing competitiveness is still undermined by low technical skills and low worker productivity. | • National Industrial Training Authority offers training courses but there are discussions on the relevance of the curriculum.  
  • Kenyan Association of Manufacturers (KAM) engages in capacity-building, but fees discourage uptake.  
  • Export-related training for manufacturers also provided by EPC, but financial constraints prevent expansion and access is limited. | • National Industrial Research and Development Agency expected to play a key role encouraging local firms to emulate anchor-company FDI. | • Skills shortages constrain investment and laws and regulations restrict employment of foreign workers to fill skills gaps.  
  • But major reforms to the education system are underway and demand-driven training programmes could be scaled up.  
  • National Economic Empowerment Council has established regulations to promote local content, but capacity to develop local technology is limited.  
  • Need to develop and leverage the R&D value chain and university–industry linkages; the Small Industries Development Organisation could be a transformative actor in supporting technology development/transfer, but its focus is confined to SMEs. | • Cumbersome business registration process, but efforts are underway to improve it.  
  • Most workers are trained directly in the workplace and there is a range of public and private vocational schools; the Skilling Uganda Programme aims to improve vocational education and training.  
  • Uganda Industrial Research Institute plays an important role in skills development. |

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| **Supportive infrastructure planning**  | Prioritisation of infrastructure needs of manufacturers  
Efficient port/airport handling | Government has undertaken or planned major investments in transport and logistics infrastructure to mitigate geographical constraints to getting goods to market (e.g. construction of direct rail link between the Port of Djibouti, Addis Ababa and Modjo; commitment to construct a freight depot in Modjo).  
Public investments have also been made in power generation. | Infrastructure spending and investment is a priority for government but there are questions on the costing of projects.  
There is tension between national and county governments regarding who is responsible for roads development in counties. | There is visionary and purposeful infrastructure planning by government but insufficient public funding to proceed at the desired pace, and existing mechanisms for harnessing domestic capital investment or concessional international funds need to be more effective. | There is much variation in the capacity of government agencies to undertake infrastructure planning and provision; and uncertainty on where to prioritise.  
There is also a lack of coordination among institutions involved in infrastructure planning and provision. | Recent upgrades to hard and soft infrastructure have resulted in improvements, but infrastructure remains a key constraint.  
Plans to develop a standard gauge railway network will improve transportation, but Uganda is dependent on Kenya’s implementation schedule. |
| **Learning with the private sector to address initial and emerging constraints** | Trust-based relationships, feedback mechanisms  
Mechanisms that hold government to commitment | Mostly government-led, but some evidence of working with the private sector (including foreign private firms) to solve problems (e.g. working with PVH in Hawassa Industrial Park). | KAM leads advocacy for private sector and has a manufacturing academy.  
Kamukunji Jua Kali Association for 4,000 micro-firms involved in informal | There is increasing government engagement with private sector, including through high-level consultation meetings. | Most public–private dialogue through formal structures involves the main private sector umbrella organisations.  
The Tanzanian National Business Council, a formal platform for dialogue between the government and the private sector, may | Private Sector Foundation Uganda is mandated to advocate with government on behalf of private sector and is well embedded in most policy and |
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| Selective, conditional support to building firm capabilities (including finance) | • Banking system that supports industrial priorities  
• Mechanisms that hold firms to commitment  
• Performance-based incentives are offered to encourage backward linkages to domestic firms (e.g. access to working capital, foreign currency, cost-sharing for training).  
• Development banks are increasingly used to finance industrialisation. Development Bank of Ethiopia provides long-term loans to priority sectors at subsidised rates. Commercial | manufacturing is mandated to push their agenda under its umbrella, (artisans in metal works, welding and fabrication, sheet metal works, tinsmiths).  
• Dynamic and rapidly changing government structures make it difficult for private sector to maintain momentum in discussions with government. | • Commercial banks, microfinance institutions, private equity funds, development finance institutions.  
• Restrictive access to finance negatively informs sector; high interest rates.  
• Interest rate cap may constrain financing to SMES; presence of private equity firms but poor awareness of them in | • Government provides support for selected firms with strong employment potential.  
• Would benefit from assistance to develop criteria for selective support to firms and calibrating the conditions under which it is provided. | • Cost of finance is still prohibitive, and uncompetitive to be relied on to support a large-scale manufacturing sector, but re-establishment of Tanzania Investment Bank (TIB) as a development bank should boost financing opportunities.  
• Reinvigoration of TIB could be complementary to further capital market development. | • Consultative mechanisms.  
• Uganda National Chamber of Commerce and Industry has access to high-level figures in government but has limited capacity.  
• Uganda Manufacturers Association plays an active advocacy role with government and is influential. |
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<td>Bank of Ethiopia gradually placing greater emphasis on financing exports and manufacturing (e.g. financing for working capital, low-interest loans for upgrading technology).</td>
<td>manufacturing sector, which has a resistance to equity; development finance institutions mainly financing enabling environment.</td>
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Source: SET (2017) (Jobs Africa Country Scoping Studies for Kenya, Rwanda, Tanzania and Uganda) and other ODI/SET work covering Ethiopia