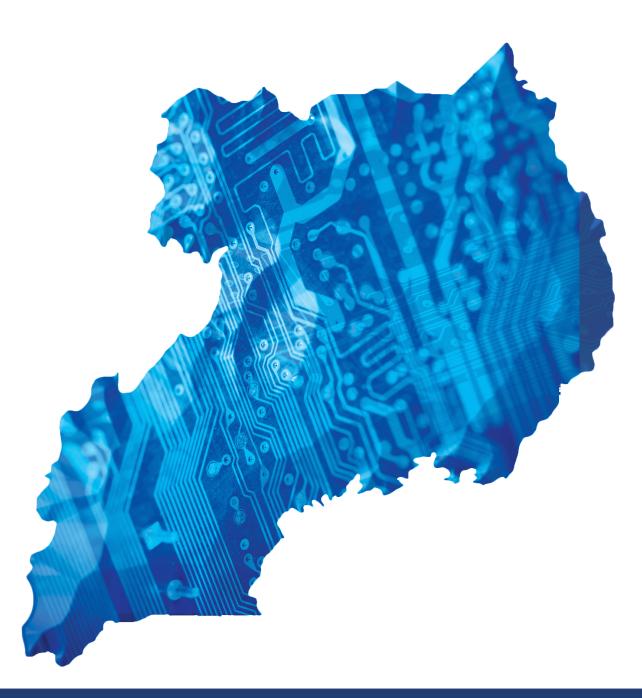




An ABC of Industrialisation in Uganda

Achievements, Bottlenecks and Challenges



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The report was written by a team led by Andrew Mold, Acting Director of the Sub-Regional Office of the United Nations Economic Commission for Africa, and Yemesrach Workie, Economics Advisor UNDP Uganda. The writing team comprised of Priscilla Lecomte, Rodgers Mukwaya, Pedro Martins, Yohannes Hailu, and Anna Twum. The study received helpful advice and feedback from Tony Muhumuza, National Economist, and Simon Peter Nsereko, Economic Analyst, both with UNDP Uganda. Eunice Ajambo and Paul Mpuga, UNECA Economic Affairs Officers in Addis Ababa, also provided very useful comments on an earlier draft. Finally, we would like to thank Josiane Dusabe for help with the formatting and layout of the final document.

Executive Summary

The development of the Ugandan economy is at a crossroads. While the country's growth record over the last 30 years has been impressive, there is a pervasive feeling that the current paradigm is running out of steam. In 2016, Uganda registered the lowest rate of economic growth in the last 30 years. Income inequality has risen, and job creation has been lackluster. As a consequence, growth has not been sufficiently inclusive. This study argues that one of the main reasons for this situation is that the economy has been driven by the services sector, but at the expense of the industrial and manufacturing sectors. One of the consequences of the weak growth of the manufacturing sector is that it has made the economy more vulnerable and less resilient.

Industrial sector development is undoubtedly a key priority for the Ugandan government and occupies an integral part of its social and economic development plan, "Vision 2040". President Museveni declared 2017 the "year of mass industrialisation". But while government officials are keenly aware of the importance of industrial policy, the effective implementation of policy has been a major challenge.

Against this backdrop, this study provides an overview of the state of manufacturing in Uganda, and its contribution to the structural transformation of the economy towards higher value-added activities. Some of the key key empirical findings include:

- The manufacturing sector has played no role in accelerating structural transformation of the Ugandan economy, due to its declining share in total employment, from 6.5 percent in 2002 to 5.7 percent in 2013.
- Manufacturing value-added as a share of GDP has stagnated at around 8-10 percent of GDP.
- The sector is dominated by small and medium enterprises, which make up some 93.5 percent of firms operating in the sector. In *Jeune Afrique*'s 2017 ranking of Africa's top 500 firms, Uganda has only three companies represented- two telecom companies and one utility company- and no manufacturing firms.
- In common with other EAC countries, the manufacturing sector is dominated by the food and beverages sector, which accounts for approximately two thirds of all manufacturing value-added. Outside of these sectors, manufacturing has a surprisingly slim sectoral spread.
- Foreign investment has been heavily skewed towards the mining sector, and arguably has done little to further the goals of structural transformation. Only 8.9 percent of the FDI stock has gone to manufacturing.
- Of the 22 industrial parks that the Ugandan Investment Authority was tasked to establish in 2007, only 3 have become operational. The Office of the Auditor General's Report (2015) remarked on the poor performance of the industrial parks in terms of job creation.

Despite these weaknesses, there have also been some encouraging trends:

- Uganda has been one of the best performers in the East Africa Community with regards to taking advantage of regional markets to boost its exports. In 2007, the EAC markets accounted for just 21 percent of the country's exports. By 2016, the equivalent figure was 36 percent.
- Regional trade has been particularly important for manufactured exports, representing 51 percent of total manufactured exports in 2015.
- There is also some evidence of an incipient diversification of exports.

The policy implications are multiple. The supply-side constraints on the manufacturing sector are well-known and include a lack of access to credit, skills shortages, inadequate infrastructure, and weak innovative capacities. In addition, competition in the manufacturing sector has become extremely intense, particularly from emerging markets. Imports from India and China now constitute nearly 40 percent of all imports, up from just 16 percent in 2008.

All this implies that a stronger manufacturing sector is unlikely to emerge 'spontaneously'. To address the aforementioned constraints, the paper concludes by suggesting that Uganda adopts a more purposeful 'industrial policy'. This would require more effective interventions in a host of areas to support the manufacturing sector better: among them, catalyzing the development of the industrial parks; cajoling the banking sector into lending more to the sector, as well as using the development bank more effectively; elaborating partnerships with other EAC member states to develop regional value-chains and industries, in sectors like automobiles, pharmaceuticals, and textiles; and revising trade policy and the Common External Tariff so that they support regional industrialisation efforts better. The study also recommends vigilance with regard to entering into new trade agreements with other regional blocks that could compromise efforts to industrialise the region.

Finally, there is much that could be learned from the recent experience of Ethiopia. Albeit from a very low base, Ethiopia now has one of the fastest growing manufacturing sectors in the world. To be sure, the Ethiopian example is not perfect and has suffered its own setbacks. But the institutional resolve and concerted efforts to realise their ambitious objectives have been impressive. Lessons in the implementation of industrial policy could be usefully learned from that experience. Peer learning, it is argued, is one of the most powerful ways of energizing industrial and manufacturing development.

1. Introduction: Why Uganda needs a strong manufacturing sector

Over the last two decades, Uganda has registered a strong growth performance, accompanied by a rapid reduction in poverty rates. Between 1992 and 2013, Uganda reduced, by over half, the proportion of people living in poverty¹, surpassing the first of the Millennium Development Goals (MDGs), and representing the second fastest rate of reduction in poverty in Sub-Saharan Africa. Because of these achievements, the World Bank considers Uganda a "poster child" for economic reforms (Whitworth, 2010, p. 20). However, the consensus opinion is that growth has not been sufficiently inclusive. Income inequality has increased and the economy has largely failed to generate enough job opportunities for Uganda's young and rapidly growing population (Jellema, 2016).² Unemployment is currently estimated to impact three out of four Ugandan youth (NPA, 2015).

One of the main reasons for Uganda's non-inclusive growth is that its economy has been driven by the service sector (which has high shares of informality) at the expense of industry and manufacturing sectors. Around 59 percent of Uganda's workforce operates in the informal economy (ILO, 2015). The continued dominance of the service sector over other sectors does not auger well for job creation with the majority of the population still employed in low productivity agriculture.

Ugandan policymakers are keenly aware of the urgent need to address these challenges. But in order to be effective and promote more inclusive growth, employment and industrial policies will have to be part and parcel of wider efforts to incentivise the structural transformation of the economy. Industrial sector development is a key priority of the Ugandan government, and occupies a central position in the government's Vision 2040, the country's social and economic development plan. This document outlines the government's aims to build a modern, competitive, and dynamic industrial sector that is fully integrated into the domestic, regional, and global economy (Shepherd, 2016:1).

Historically, most cases of sustained economic growth have been linked to industrialisation, particularly the dynamic growth in manufacturing production.

Historically, most cases of sustained economic growth have been linked to industrialisation, particularly the dynamic growth in manufacturing production. Manufacturing is a key engine of growth in low-income economies because there are usually very strong linkages and spill-over effects associated with manufacturing activities (Rodrik, 2007, Szirmai, 2016). As stressed in various recent publications by the UNECA (UNECA, 2014, 2015, 2016) and others (Page, 2015, Rodrik and MacMillan, 2011), the pace of industrialisation must be accelerated.

Surveys and recent World Bank Poverty Assessment report show poverty declined from 56 percent in 1992 to 19.7 percent in 2013.

² Uganda has one of the highest fertility rates in the world, standing at 6.2 in 2015. This implies that approximately 500,000 are currently entering the job market every year (World Bank, 2015).

At the national level, the Ugandan authorities already have a set of policy frameworks in place to achieve a higher degree of industrialisation. The second *National Development Plan* (2015/2016 - 2019/2020) aims at strengthening Uganda's competitiveness for "sustainable wealth creation, employment and inclusive growth" (Republic of Uganda, 2015) by focusing on increasing productivity and value added within value chains. Likewise, the *National Industrial Policy* (Ministry of Tourism, Trade and Industry, 2008) aims to boost the share of industry value added to about 30 percent of GDP by 2018. In 2011, the government published the *National Employment Policy for Uganda*, a policy document that highlighted youth employment as a priority action area.³ In 2013, the Ugandan parliament passed the *Public Procurement and Disposal of Public Assets (PPDA)* regulation, allowing the government to take affirmative action to encourage the procurement of goods, works or services from local small-to-medium size industries. In a similar vein, the *Buy Uganda Build Uganda* policy of 2014, by the Ministry of Trade Industry and Cooperatives, aims to support the production, purchase, supply, and consumption of local goods and services.⁴

Enhanced regional integration efforts can also contribute to these objectives. As a member of the East African Community (EAC), Uganda has already committed to adopt the EAC Industrialisation Strategy (2012). However, as pointed out by Mold (2017), the EAC currently lacks the financial and technical capacity to implement this programme, and must therefore rely on member states to align their national policies to these objectives. In the context of all these policy frameworks and objectives, arguably the key challenge to industrialisation has been implementation. Policy documents alone will not produce the desired results; they have to be actionable and backed up with the necessary financial resources.

Against this backdrop, the study is structured as follows. Section 2 provides a brief overview of the state of the Ugandan economy, focusing on some of the key macroeconomic challenges. Section 3 provides an overview of the salient features of the manufacturing sector and its export structure.

Policy documents alone will not produce the desired results they have to be implementable and backed up with the necessary financial resources

Section 4 discusses the changing geographic trading patterns of Uganda and how it may impinge on industrial development. Special attention is dedicated to analsing the implications of the Economic Parntership Agreements (EPAs) with the European Union and the African Growth and Opportunity Act (AGOA) with the United States. Section 5 reviews both Ugandan and EAC industrial policy, stressing

the need for a greater alignment between the two. Section 6 looks at the specific bottlenecks and constraints which have been hindering industrial development and how to address these challenges. Section 7 discusses the importance of peer-learning in industrial policy, and shares some lessons from Ethiopia's industrial policy experience as well as some broad prescriptions from the burgeoning industrial policy literature. Section 8 concludes.

³ A program named "Skilling Uganda" attempts to streamline skills development efforts by bringing stakeholders together, e.g. trade unions, FUE, private sector organizations, etc. However, the implementation of the employment policy has moved slowly. (Danish Trade Union Council for International Development Cooperation, 2014).

The policy has the following objectives; 1) To encourage the consumption of locally produced goods and services; 2) To promote conformity to standards and ensure the provision of quality goods 3) To provide training and capacity building programmes for local producers of goods and services.

2. An Overview of the State of the Ugandan Economy

2.1 An economy with growing challenges

Uganda has a strong record of economic growth and poverty reduction. Over a period of approximately 20 years, from the 1990s until around 2010, the average annual rate of economic growth stood at around 7 percent, one of best performances in Eastern Africa. However, in recent years, the rate of expansion has slowed down. The average growth rate of 4.3 percent over the past four years is below the regional average (Figure 1), the high growth rates recorded by neighboring

Kenya, Tanzania and Rwanda and also below the target of 7.2 percent for the entire period of the concluded *National Development Plan* (NDPI). In addition, demographic trends are not favourable to Uganda. At 3.1 percent annually, the country has one of the highest population growth rates in the world reducing per capita income growth significantly, to just about 1-2 percent per year. Global headwinds, drought conditions, the crisis in South Sudan, reduction in access to credit and slowdown in the implementation of public investment projects are some of the major reasons for the sluggish growth recorded in 2016 and early 2017.

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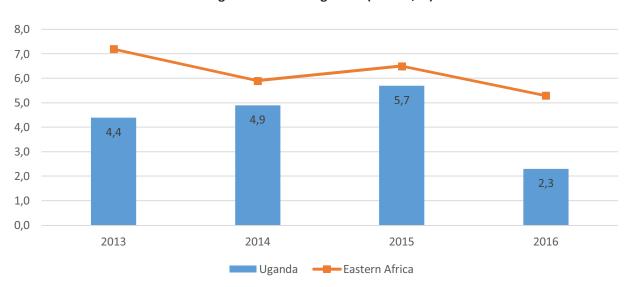


Figure 1: Real GDP growth (annual, %)

Source: Uganda Bureau of Statistics (2016) and UNECA calculations.

Currently, there are four longer term macroeconomic problems negatively impacting upon the performance of the economy, namely; a rising trade deficit, a deteriorating fiscal deficit, rising debt and price/currency instability. We need to discuss these, because they provide the backdrop to discussions about the need for an 'industrialisation push', and why it could result in a more resilient economy. In the following sections, we will briefly discuss each of these constraints in turn.

2.1.1 Rising trade deficit

One important characteristic of the Ugandan economy has been the rising current account deficit, which increased from -5.8 percent of GDP in 2000 to -9.7 percent of GDP in 2014 (Bank of Uganda, 2015). The situation seems to have improved somewhat in the financial years 2015/2016 and 2016/2017, reflecting a combination of low global crude oil prices and weak domestic demand. Yet, the deficit is expected to widen again in the coming years on account of subdued exports and growing imports by public and private investors (Bank of Uganda, 2016a and 2016b). The recurrent deficit is a result of a sustained trade gap with the domestic demand for goods and services exceeding domestic production, the resultant deficit being financed with a net inflow of foreign exchange from the rest of the world. Consequently, Uganda is running up against what Thirlwall (2011) coined a "balance of payments constraint", whereby an economy cannot grow faster without engendering an un-financeable and unsustainable widening of the current account deficit. In the following sections we will argue that the weakness of the tradeable goods sector is essentially due to the lack of manufacturing capacity.

2.1.2 Deteriorating fiscal deficit

There has been a similar deterioration in the fiscal balance in recent years. Between 2000 and 2010, the average deficit was a modest -1.9 percent of GDP. Following increased government spending on infrastructure, the deficit has deteriorated to -6.3 percent of GDP in 2015/16. At present, the deficit is largely funded by external loans, with the majority of the loans on concessional terms (IMF, 2016). Concerns have been raised about domestic public debt increasingly crowding out the private sector. While domestic resource mobilization capacity has steadily increased over the past years (gaining 3.5 percentage points since 2013), revenues remain low. Tax income stands at 13.3 percent of GDP, one of the lowest rates in sub-Saharan Africa, and below both the NDPII target of 16 percent and the 20 percent suggested target for Least Developed Countries (LDCs).⁶ At the same time, public expenditures have increased at a faster pace, rising from 16.6 percent of GDP in 2013/14 to 22.5 percent in the 2016/17 approved budget (World Bank, 2017). The pressure to stimulate long term growth through increased spending on basic infrastructure, while maintaining

⁵ There is an expectation that over the long term the trade deficit may improve due to future oil production. However, this is contingent on both oil production coming on tap as anticipated and improvements in the price of crude, which over recent years has been at historic lows.

The first target of Sustainable Development Goal 17 on "Partnerships for the Goals" is to "strengthen domestic resource mobilization, including through international support to developing countries, to improve domestic capacity for tax and other revenue collection". UNDP (2010:26) suggests a tax revenue of at least 20 percent as of GDP for LDCs to meet the former Millenimum Development Goal targets.

social spending in health and education, makes fiscal stability a challenge. This challenge is all the greater against the backdrop of a rapidly expanding population.⁷

This matters because the evidence supports that fiscal policy contributes to achieving social goals. Based on data for the fiscal year 2012/13, the *Ugandan Commitment to Equity (CEQ)* Assessment indicated that revenues collected via taxes, together with social expenditures and subsidy spending, had contributed to reducing inequality. The conclusion was that fiscal policy broadly supports Uganda's development goals. However, the report also stressed that its impact is muted and overall revenue and spending levels are still too low (Jellama et. al., 2016).

2.1.3 Rising debt

As a consequence of the sustained and growing public sector deficit, Uganda's public debt has risen, reaching 38.6 percent of GDP in 2016/17 (up from 25.9 percent in 2012/13). The Bank of Uganda (2016b, page 22) is expecting public debt to reach 45 percent of GDP by 2020. One consequence of this is that by 2016/17 interest rate payments were ranked fourth in terms of sector expenditures (Ministry of Finance, Planning and Economic Development, 2016). Deteriorating debt affordability is reflected in the fact that interest obligations are expected to consume almost

16 percent of revenues by 2018. Private sector bodies such as the Bankers Association as well as PricewaterhouseCoopers (PWC) are linking the high cost of credit in Uganda to the government's continued appetite for borrowing from the domestic market. This has recently been mitigated to some extent by the Bank of Uganda, through a reduction of the Central Bank Rate, which has been conducive to a modest decline in interest rates.⁸ But the high cost of credit has continued to constrain private sector activity over recent years and the manufacturing sector in particular has suffered the consequences (see Section 6.1.2.).

Uganda is running up against...a "balance of payments constraint", whereby the economy cannot grow faster without engendering an un-financeable and unsustainable widening of the current account deficit

Given the weak revenue generation capacity, the debt burden has risen faster than the government's resources, resulting in a debt-to-revenue ratio of 236 percent, one of the highest amongst B-rated sovereigns. According to the Bank of Uganda (2016b), Uganda's debt sustainability is likely to face moderately high risk, amidst perceptions that Uganda may not be able to service its rising debt levels. Worries about debt levels and deficits were also voiced during the recent visit to the country by IMF Managing Director Christine Lagarde. While commending Uganda for its poverty

⁷ As noted earlier, the population growth rate, estimated in excess of 3 percent per year, is the highest within the region, and one of the highest in the world.

In February 2017, amongst concerns of weakening economic activity, the Central Bank Rate was reduced to 11.5 percent.

reduction achievements and prudent approach to fiscal and monetary policy, Ms. Lagarde herself called for better public investment management (IMF, 2017b).

Given the weak revenue generation capacity, the debt burden has risen faster than the government's resources, resulting in a debt-to-revenue ratio of 236 percent, one of the highest amongst B-rated sovereigns

From a macroeconomic perspective, the size of the fiscal deficit may have other important implications for structural transformation. Shepherd (2016) stresses the link between trade policy, the current account and 'public sector dissaving' (i.e. the fiscal balance) and suggests that it is not the failure of trade policy, per se, that is generating persistent current account deficits in Uganda, but rather the fiscal imbalance. While from a national accounts perspective, it is true that fiscal imbal-

ances will impact the current account, macroeconomists are unclear about the direction of causality between these different macro-aggregates. To simply assume that fiscal performance is the driving force behind the current account imbalance may thus be unwarranted. In recent years, there have undoubtedly been some achievements in terms of an improved export performance, but Uganda still suffers from a lack of diversification and industrialisation, which has negative impacts on the country's current account balance and long-term growth performance.

2.1.4 Price and Currency instability

Another related macroeconomic challenge that has negatively impacted on the industrial sector is price instability. While the annual average rate of inflation, between 2005 and 2015, was 8.5 percent, the country experienced double-digit inflation rates between 2008 to 2012, with inflation peaking at 18.7 percent in 2011. To counteract these inflationary trends, the National Bank of Uganda reacted by raising interest rates, with the Central Bank Rate (CBR) averaging 14.4 between July 2011 and the end of 2016. Relatively high inflation has also had a clear impact on the value of the Uganda shilling, which lost nearly 50 percent of its nominal value against the US dollar between 2010 and 2015. This has been accompanied by a sharp depreciation of the real exchange rate (Figure 2). In theory, a depreciation of the real exchange should boost the competitiveness of

Shepherd also claims (op. cit.; page 3) that "Uganda's current account deficit is by no means at an unmanageable level, and access to concessional financing and grants means that if government borrowing is focused on securing resources for socially useful investments, the balance of benefits and costs may well be positive." While it is true that there is no justification to adopt a 'mercantilist' view of trade and current account imbalances, and that current account deficits can result in stronger future growth if capital inflows are well invested, or are principally generated by imports of capital goods, nonetheless a current account imbalance approaching 10 percent of GDP implies a high degree of vulnerability to sudden reversals of capital inflows. Rajan et. al. (2007) show conclusively that persistent current account balances work to the detriment of growth in low income countries.

Using the standard national accounting identities, since Y=C+I+G+X-M, and Y-C-T=S, it is quite straightforward matter to show that then: S = (G-T) + (NX + I) where NX= (X-M). Rearranging, we have (S - I) + (T-G) = (NX). It is clear then that the net trade position is product of both the private and public savings balance (where (T-G) implies a budget deficit). This identity does not, however, help us with the causality. An economy is deemed to have a double deficit if it sustains simultaneously both a current account and fiscal deficit. Traditional macroeconomic theory predicts that persistent double deficits will lead to currency devaluation/depreciation that can be severe and sudden. As we shall see in the following section, this has indeed been the case of Uganda in recent years.

the traded goods sector. However, as we shall see in following sections, the response of the export sector has not been sufficiently strong. In addition, the accelerated rate of depreciation has raised the price of imported inputs, thus undermining the competitiveness of local industry.



Figure 2: Nominal and Real Effective Exchange Rates, 2000-2015*

Source: UNCTADStat and WDI, 2017

^{*}Exchange rate is in Uganda Shillings per US dollar, and the REER is an index with base 100 in 2005. An increase in the index implies a depreciation.

3. Overview of the Salient Features of the Manufacturing Sector

3.1 Small, concentrated, and regional

In a recent analysis, only 4 of 25 African economies exceeded predicted values of manufacturing value added relative to their levels of income per capita. The fastest growing African countries - including Uganda - were all negative outliers, i.e. with a lower level of manufacturing value-added than would be anticipated

As noted in the previous section, Uganda's manufacturing sector today plays a limited role in the economy. Recent growth in the economy at large has been concentrated in the service sector, with low contributions from the industrial sectors. While agriculture's share of GDP declined from about 57 percent in 1990 to 24 percent in 2015 (a positive development from the perspective of structural transformation), the share of the services sector increased from 32 percent in 1990 to 49 percent in 2015, converting it into the largest sector. In contrast, the industrial sector as a whole (which includes mining, utilities and construction as well as manufacturing) has only seen a modest increase in its share of GDP from about 11 percent in 1990 to 20 percent in 2015.

Over the period between 2000-2014, manufacturing's contribution to GDP growth has amounted to just 8 percent, compared to 30 percent related to other activities (mostly services), 18 percent by transport and communications and 17 percent by commerce (Figure 3). In short, manufacturing's contribution to overall growth has been at best modest. It should be stressed that this lack of dynamism in the Ugandan manufacturing sector is common across Africa. In a recent analysis by Page (2016), only 4 of 25 economies in Africa exceed predicted values of manufacturing value added relative to their levels of income per capita. The fastest growing African countries in Page's sample including Uganda were all negative outliers, i.e. with a lower level of manufacturing value-added than would be anticipated.

Moreover, since 2011, the trends seem to be pointing in the wrong direction, with a further contraction in the sector's participation in GDP. Manufacturing represented 8.5 percent of Ugandan GDP in 2015 (UBOS, 2016), after peaking at 10.5 percent in 2011 (Figure 4). Although this figure is still higher than that of regional neighbours like Tanzania and Ethiopia, it is lower than both the average for low-income countries (13 percent) and the global average (16 percent) (UNIDO, 2017 and Figure 5).

Other activities 30,0 Transport and communications 17,6 Commerce 16,8 Agriculture 12,3 Construction 11,5 Manufacturing Mining & utilities 3,5 0,0 5,0 10,0 15,0 20,0 25,0 30,0 35,0

Figure 3: Contribution to total GDP growth by sectors (2000-2014, %)

Source: UNECA calculations on the basis of UN data (2016)

N.B. "Other activities" is a combination of several sectors

Figure 4: Ugandan Manufacturing value-added in USD millions and as share of GDP, 2008-2015

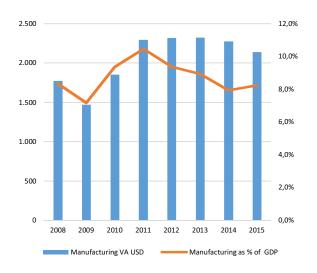
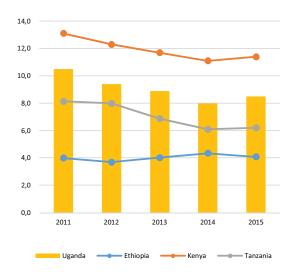


Figure 5: Regional Comparisons of Manufacturing value-added as a share of GDP



Source: EAC Facts and Figures (2016)

Source: UBOS (2016) and WDI (2016)

To understand the dynamics of the growth and development of the sector, there are several stylized characteristics of the Ugandan manufacturing sector that should be highlighted. Firstly, the sector is dominated by small and medium enterprises (SMEs), which make up some 93.5% of firms operating in the sector. This in itself represents a serious challenge. Firms are usually not able to reap the benefits of economies of scale and, given the strong correlation between firm size and export capacity, consequently have difficulties competing internationally.¹¹ Of the top 500 firms in

¹¹ The largest manufacturing companies in terms of tax payments are the alcoholic beverage companies (Nile Breweries

Africa in 2017, Uganda has only three companies on the list, and pointedly, none are in the manufacturing sector. ¹²

Of the top 500 firms in Africa in 2017, Uganda has only three companies on the list. Pointedly, none are in the manufacturing sector

A second stylized characteristic of the manufacturing sector is that it primarily engages in end-product assembly and raw materials processing, producing low value added goods such as food and beverages, wood and wood products, textiles, leather, and metallic and non-metallic fabrication. Agro-process-

ing is one of the most important activities in Uganda's manufacturing sector and mainly consists of coffee and tea processing, wheat and dairy products, cotton and tobacco processing.

Outside the food processing, drinks and beverages sector, manufacturing has a surprisingly thin sectoral spread. The food processing, drinks and beverages sub-sectors alone accounts for nearly two thirds of the total manufacturing output.

Indeed, outside these sectors, manufacturing has a surprisingly thin sectoral spread. The food processing, drinks and beverages sub-sectors alone accounts for nearly two thirds of the total manufacturing output (Figure 6). This is again a common characteristic of the manufacturing sector across the EAC, where food and beverages sectors account for approximately two thirds of total manufacturing capacity (Mold,

2017). Food and beverages tend to be the dominant sub-sectors, because they are relatively well protected by "natural protection", being typically products which are either perishable or have a low value/weight, and so are not easily transported over long distances.

Finally, despite some evidence of diversification, manufacturing value-added per capita remains low at around USD 27 compared to USD 57 for low-income countries and USD 1,277 for the global average (Figure 7). In addition, medium and high technology activities do not play a major role in manufacturing exports, constituting just 13.8 percent of total manufactured exports, lower than regional neighbours Kenya and Tanzania (Figure 8). We will say more on this point in Section 3.3.

Ltd and Uganda Breweries Limited), followed by Tororo Cements, Century Bottling Co. Ltd., Kakira Sugar Limited, Umeme Limited, Kinyara Sugar Limited.

One utility company and two telecom companies: Umeme Limited (355th), MTN Uganda (359th) and Airtel Uganda (446th). *Jeune Afrique*, 2017 Ranking of Africa's Top 500 Firms.

50,0 40,0 40,0 30,0 20,1 20,0 6,6 9,7 8,3 7,5 10,0 3,5 4,3 0,0 TEXTILES, CLOTHING AND FOOT WEAR SAWMILLING, PAPER AND PRINTING CHEMICALS, PAINT, SOAP & FOAM FOOD PROCESSING DRINKS AND TOBACCO BRICKS & CEMENT MISCELLANEOUS METAL PRODUCTS -10,0 -20,0 ■ share of manufacturing ◆ growth (%,2015)

Figure 6: The Uganda Index of Manufacturing Production (Base 2002)

Source: UBOS (2016)

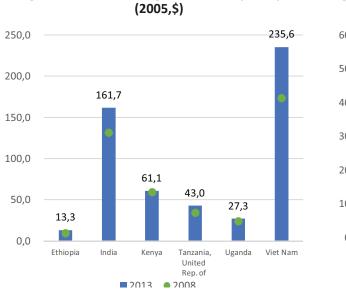
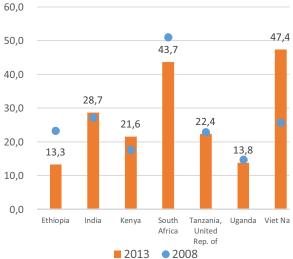


Figure 7: Manufacturing value added per capita

Figure 8: Medium and high-tech export shares in total manufacturing exports (%)



Source: UNIDO (2016)

3.2 Measuring the Contribution of the Manufacturing Sector to Uganda's Structural Transformation

To assess the pace and depth of *structural transformation*¹³ in Uganda and the role of manufacturing, this section uses a methodology to decompose gross value added (GVA) per capita growth into three key components: (i) labour productivity growth, (ii) changes in employment rates, and (iii) demographic change. We further decompose labour productivity gains into within-sector and between-sector effects to assess structural transformation. The within-sector component relates to labour productivity improvements achieved through enhanced skills, complementary capital,

Uganda had the lowest GVA per capita growth rate among the 10 top performing countries due to a combination of relatively low within-sector productivity growth, a declining employment rate, and a small demographic dividend

better management practices and/or resource relocations within a specific sector to name a few. The between-sector component relates to the labour productivity gains accrued by moving labour from low-productivity to higher-productivity sectors. This component is a proxy for structural transformation, as we expect the bulk of labour to move from agriculture usually the sector with the lowest levels of labour productivity towards industry and services.¹⁴

The table below shows the top 10 African countries in terms of the overall contribution of structural transformation. In the case of Nigeria, Ethiopia and Tanzania, between sector gains boosted gross value added per capita growth by around 2.5 percentage points. In Uganda, the absolute contribution was significantly lower at 1.4 percentage points but nonetheless ranked Uganda in the top 5 in Africa. However, it should be noted that Uganda had the lowest GVA per capita growth rate among these 10 top performing countries due to a combination of relatively low within-sector productivity growth, a declining employment rate, and a small demographic dividend.

The pace of structural transformation in Uganda has thus been relatively strong, especially when compared to its regional peers. Nevertheless, it is important to look beyond these aggregate numbers and investigate specific sectoral patterns. Table 3 illustrates the changing patterns of production and employment. The share of agriculture in total GVA nearly halved in about 20 years, declining from 43 percent in 1991 to 22 percent in 2013.

¹³ By structural transformation, UNECA means the fundamental changes in economic and social structures that drive inclusive and sustainable development. Kuznets (1971) says that "major aspects of structural change include the shift away from agriculture to non-agricultural pursuits and, recently, away from industry to services; a change in the scale of productive units, and a related shift from personal enterprise to impersonal organization of economic firms, with a corresponding change in the occupational status of labour."

¹⁴ The data used in this empirical exercise is taken from Martins (2015).

Table 1: Top-10 Structural Transformation Performers in Africa, 2002-2013

	0) (4		Contribution from (%):							
Country	GVA per capita	Gross value ac	lded per worker	- Employment	Domographic					
	growth (%)	Within-sector	Within-sector Between- sector		Demographic Structure					
Nigeria	5.1	2.5	2.6	0.1	-0.1					
Ethiopia	6.9	3.5	2.5	0.3	0.7					
Tanzania	3.6	1.2	2.4	0.1	-0.1					
Zambia	3.2	1.5	1.7	0.1	-0.1					
Uganda	2.4	1.4	1.4	-0.6	0.2					
Ghana	4.7	2.7	1.3	0.4	0.4					
Mauritania	2.5	0.2	1.3	0.6	0.4					
Chad	4.3	3.3	0.9	-0.1	0.2					
Cabo Verde	3.2	0.4	0.9	0.3	1.7					
Congo, D. R.	3.3	2.3	0.8	-0.1	0.3					

Source: Martins (2015)

The largest gains were recorded by transport (10 percentage points) and construction (5 percentage points). The weight of manufacturing in total output initially grew from 6 to 9 percent (1991-2002), but then declined to 8 percent in 2013. In terms of GVA growth, we note an overall deceleration from 7 percent in 1991-2002 to about 6 percent in 2002-2013. In fact, most sectors experienced a growth slowdown the exceptions were transport and construction. The growth of the manufacturing sector nearly halved in the latter period, while agriculture's performance also deteriorated significantly.

Table 2: GVA and employment by sector

		Gross value ess value added Employment (% total) (annual % (% total) growth)		Employment (annual % growth)						
	1991	2002	2013	1991- 02	2002- 13	1991	2002	2013	1991- 02	2002- 13
Agriculture	43.3	34.5	21.9	4.8	1.7	70.4	65.3	60.2	2.3	2.3
Mining & Utilities	3.6	4.0	4.0	8.0	6.0	0.4	0.4	0.4	3.9	2.9
Manufacturing	6.1	9.1	8.1	11.0	4.8	6.1	6.5	5.7	3.5	1.8
Construction	3.0	4.2	7.9	10.4	12.1	0.8	1.3	1.8	7.4	6.6
Commerce	11.9	13.7	14.7	8.4	6.6	13.0	15.0	11.3	4.3	0.4
Transport	4.6	6.7	15.0	10.8	14.0	1.7	2.1	2.6	5.2	5.2
Other services	27.5	27.8	28.4	7.1	6.2	7.7	9.5	18.0	4.9	9.2
TOTAL	100.0	100.0	100.0	7.0	5.9	100.0	100.0	100.0	3.0	3.1

Source: Martins (2015)

The sectoral distribution of employment plays a key role in any structural transformation narrative. The table above shows that the share of employment in agriculture declined from 70 percent

The growth of the manufacturing sector nearly halved in the period from 2002-2013, while agriculture's performance also deteriorated significantly

in 1991 to 60 percent in 2013, while other services increased by a similar magnitude – i.e. 10 percentage points. Both manufacturing and commerce observed an initial increase, followed by a decline in the latter period. The weight of construction and commerce in total employment increased by 1 percentage point over the entire period, while employment in mining and utilities stagnated in relative terms. Total employment growth remained relatively stable, at around 3 percent per year. Nonetheless, there was a marked deceleration in commerce and manufacturing, while employment growth in other services nearly doubled.

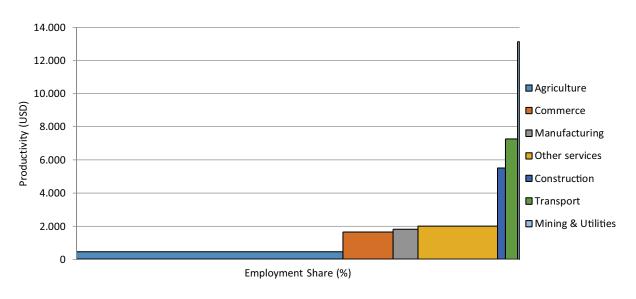


Figure 9: Employment and Labour Productivity by sector (2013)

Source: Martins (2015)

The labour productivity data corroborates the common view that agriculture is the sector with the lowest labour productivity levels. In 2013, labour productivity in commerce (the second least productive sector) was about 3.5 times higher than in agriculture, while mining and utilities, a traditionally capital-intensive sector, had labour productivity levels about 28 times higher. Over the past two decades, manufacturing has consistently been the third least productive sector. Table 3 highlights the large productivity gaps that exist across sectors, as well as their capacity to absorb workers. Construction, transport and mining and utilities have significantly higher labour productivity levels than the rest (above \$5,000 per worker), but jointly account for less than 5 percent of total employment.

When comparing 1991-2002 to 2002-2013, labour productivity growth accelerated in three sectors- construction, commerce and transport — but decelerated in the remaining four. In fact, labour productivity declined in agriculture and other services. The latter was due to a large influx

of workers that was not met by a proportional increase in output. In manufacturing, labour productivity growth slowed from about 7 percent in 1991-2002 to 3 percent in 2002-2013. As a result of these trends, aggregate labour productivity decelerated from nearly 4 percent to just less than 3 percent.

The analysis conducted so far provides insightful trends on output, employment and labour productivity by sector. We now apply the decomposition method mentioned earlier, with a view to uncovering the sectoral contributions to structural transformation. GVA per capita growth declined from 3.6 percent in 1991-2002 to 2.4 percent in 2002-2013. Decomposing this performance for the period 1991-2002 suggest that within-sector productivity improvements were the main driver of this positive economic performance - 88 percent compared with the 22 percent of between-sector effects. The employment and demography components somewhat undermined economic performance.

Table 3: Sectoral decomposition of GVA per capita growth

		199	1-2002	2002-2013					
	Share of contribution from (%): Tot				Share o	Total			
	Within	Between	Employment	(%)	Within Between Emplo		Employment	(%)	
Agriculture	27.0	5.8	-15.4	17.3	-7.2	11.0	-34.5	-30.8	
Mining & Utilities	4.2	0.9	0.1	5.2	4.9	-0.3	-0.1	4.5	
Manufacturing	14.8	0.2	0.8	15.9	10.5	-1.3	-4.6	4 ,6	
Construction	2.8	3.1	1.2	7.1	12.5	6.3	1.8	20.6	
Commerce	13.8	-0.4	4.8	18.1	36.0	-1.9	-17.3	16.8	
Transport	8.2	2.4	1.1	11.7	34.6	7.4	1.5	43.5	
Other services	16.8	9.8	4.2	30.8	-35.4	37.6	29.2	31.4	
Subtotals	87.6	21.7	-3.3	105.9	56.0	58.8	-24.1	90.7	
Demography	-	-	-	-5.9	-	-	-	9.3	
TOTAL				100.0				100.0	

Source: Martins (2015)

For 2002-2013, the relative contributions of within-sector and between-sector effects were balanced, 56 and 59 percent, respectively. Other services dampened the within-sector contribution due to the decline of labour productivity in the sector. However, the sector significantly boosted structural transformation by absorbing a large amount of labour that was previously employed in agriculture - a sector with much lower productivity levels.

Disappointingly, the manufacturing sector played no role in accelerating structural transformation, due to its declining share in total employment. The relatively large negative impact of the employment rate was driven by agriculture and commerce - both sectors shed a large number of workers, in relative terms. The demographic component turned positive in this latter period, suggesting that the relative size of the working-age population is increasing, thus reducing the eco-

nomic burden on workers. Overall, and despite the slowdown in economic performance, structural transformation is playing a larger role in boosting GVA per capita growth from 0.8 percentage points in 1991-2002 to 1.4 in 2002-2013.

Disappointingly, the manufacturing sector played no role in accelerating structural transformation, due to its declining share in total employment

Finally, we investigate the correlation between changes in the structure of employment and the relative productivity of sectors. In a classic pattern of structural transformation, we expect to find agriculture in the bottom-left quadrant with relatively low labour productivity and a declining employment share and the more dynamic sectors in the top-right quadrant with relatively high labour productivity and a rising employment share. Figure 10 provides further evidence of structural transformation in Uganda, with the employment share declining in the sector with the lowest labour productivity level (i.e. agriculture) and

increasing in (some) higher-productivity sectors. However, commerce and manufacturing have registered declines in their labour shares, while labour productivity in other services, the sector absorbing most of the labour shed by agriculture, is not significantly higher than the aggregate average. Hence, there remains considerable scope to accelerate structural transformation in Uganda.

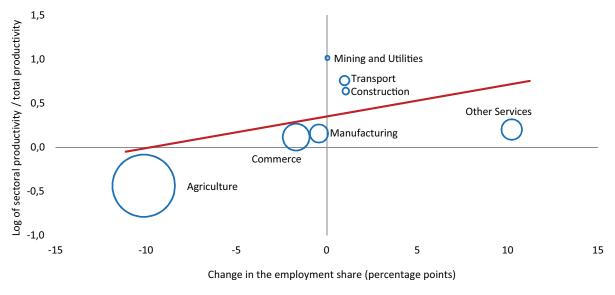


Figure 10: Correlation between sectoral productivity and change in Employment shares (1991-2013)

Note: Relative productivity (Y-axis) is measured by the logarithm of the ratio between sectoral productivity and total productivity in 2013. Martins (2015)

To conclude, while there has been significant structural transformation in Uganda, this has been mainly due to labour shifting from agriculture to other services. The sustainability of this pattern of transformation hinges on whether the latter sector will be able to generate further employment while considerably boosting its labour productivity. Meanwhile, manufacturing has played a very limited role in transforming production and employment structures. The sector remains relatively small accounting for about 8 percent of GVA and less than 6 percent of total employment and has

the third lowest labour productivity level. Unleashing the potential of the manufacturing sector would support efforts to accelerate and sustain structural transformation. As we shall argue in the following sections, this can only be achieved through a strong sectoral policy framework, effectively funded and implemented.

3.3 A profile of Uganda's manufacturing exports

Reflecting the weak manufacturing capacity described in the previous section, Uganda's exports also continue to be concentrated in agro-based commodities such as coffee, tobacco, tea and cocoa (Figure 11). Indeed, there are relatively few goods outside primary resources where the country has strong *revealed comparative advantage* (Figure 12).¹⁵ By stage of processing, the country has a strong static comparative advantage in raw materials and a moderate comparative advantage in interme-

In the Economic Complexity Index 2014
Uganda ranks as the 83rd out of 128 countries in the world.

diate goods, which might imply a potential opportunity to integrate regional value-chains. For consumer goods, however, the challenge is much more serious (Figure 13).

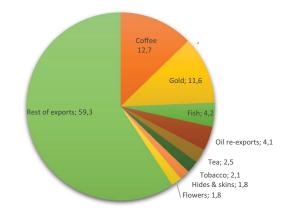


Figure 11: Sectoral composition of exports 2016

Source: COMTRADE, 2017

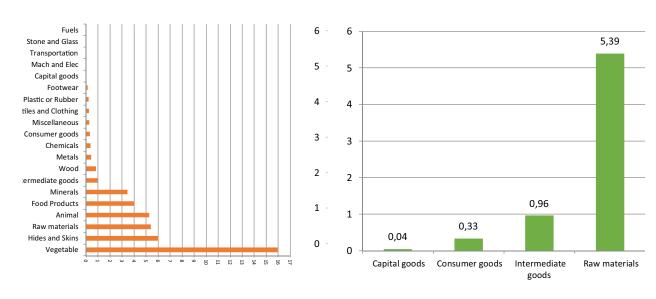
Hidalgo et al. (2007) argue that economic development involves learning how to produce (and export) more complex products. And consequently a country's development path is determined by its capacity to produce different and more sophisticated goods. They show empirically that countries moved from the products that they already created to others that were "close by" in terms of the productive knowledge that was required. Their *Economic Complexity Index* (ECI) measures the amount of productive knowledge that each country holds: countries with a high ECI are well diversified countries exporting, on average, more complex products (Hausman et

The *Revealed Comparative Advantage* (RCA) index measures the relative export 'success' of a country visa-vis global or regional averages across product lines. An index above zero indicates a comparative advantage in that sector, while a value less than zero indicates a lack of competitiveness in a sector.

al., 2014). Uganda currently ranks 83rd out of 128 countries. Not only are Uganda's exports still concentrated in a few narrow products, the products are also ubiquitous, in the sense that the ability to produce and export them does not require knowledge and skills that can be used in the production and export of other more complex products (Figure 14).

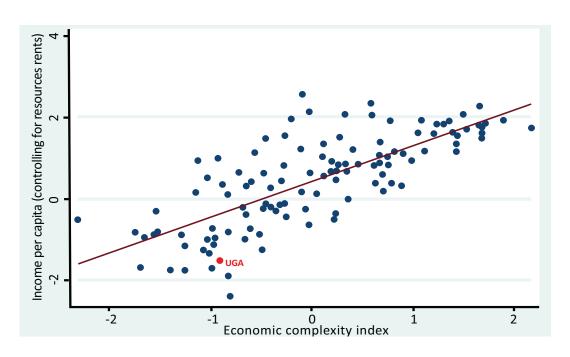
Figure 12: Revealed Comparative Advantage Uganda (2015)

Figure 13: Revealed Comparative Advantage by Stage of Processing (2015)



Source: COMTRADE (2017)

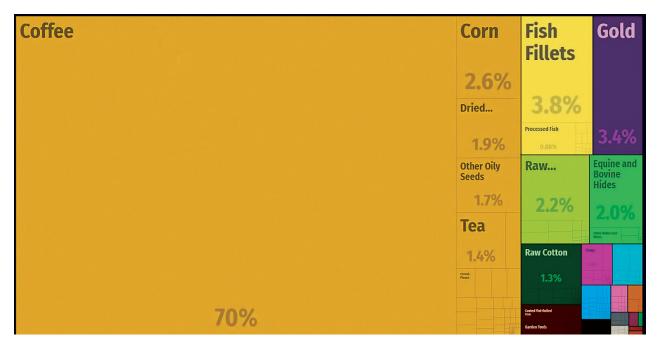
Figure 14: Economic complexity and income



Source: Hausman et al. (2014)

Figure 15: Uganda product share space, 1995 and 2014

1995 (\$750 million)



2015 (\$1.5 billion)



Source: The Observatory of Economic Complexity. Includes re-exports.

The message is not all negative, however. Despite the concentration of manufacturing production in food products, drinks and tobacco, exports diversified quite significantly between 1995 and 2014 (Figure 15). Lin and Xu (2016) note that the number of sectors where Uganda has a reveal

comparative advantage expanded from 22 in 1996 to 37 in 2013. But while exports have become more diverse over time, this has been mostly due to diversification into other primary products, such as mining and fish, rather than through the desired shift into manufacturing.

There has also been some increase in exports of light manufactured building materials including cement and steel products. According to Bhorat *et* al. (2016, pages 16 and 26), this suggests that "[Uganda] had existing productive structures that embodied a sufficient level of productive capabilities so as to allow for a transition into more complex manufactured products." There is certainly scope for greater efforts to pursue diversity. Lin and Xu (2016) take the analysis of revealed comparative advantage a step further, by using a group of benchmark countries¹⁶ to inform the selection of a list of 'what Uganda can potentially do well'. They conclude that the following sub-sectors show considerable promise: garments, footwear, trunks and cases, video and radio equipment, cotton yarn, vessels, agro-processing business, iron and steel, paper production, dyeing/colouring materials, printing industries, and glass and glassware.

¹⁶ China, India, Nigeria, Uzbekistan and Vietnam.

4. Changing Geographic Trading Patterns and Their Implications for Industrial Development

4.1 Introduction – A burgeoning regional market, but also growing competition

Part of the explanation for the incipient diversification noted in the previous section may reside in the dynamism of regional trade. In 2015, 50.8 percent of Uganda manufactured exports were traded with EAC countries (EAC, 2016), with South Sudan being one of the major clients of Ugan-

Deepening regional integration will be critical for boosting manufacturing competiveness, particularly in view of the adverse trends in world trade limiting the expansion of manufacturing globally

da's diversified exports. Companies like Roofings Group have owed their dynamism not only to the domestic but also regional markets (Box 1). Deepening regional integration will be critical for boosting manufacturing competiveness, particularly in view of adverse trends in world trade that have been limiting the expansion of manufacturing globally.¹⁷ In this sense, Uganda has in fact been the best performer in the East Africa Community with regards to taking advantage of regional markets to boost its exports. In 2007, the EAC markets accounted for just 21 percent of the country's exports. By 2016, the equivalent figure was 36 percent (Figure 16).

Geographic trading patterns outside of the EAC have also changed over the last 15 years, with major implications for the industrialisation agenda. In particular, the rise of India and China as a source of imports is quite striking, representing nearly 30 percent of all imports (Figures 17 and 18). To the extent that a proportion of these imports relate to capital goods, these trends are positive for longer term growth, as it reduces the cost of capital goods. Capital goods imports from China and India can significantly reduce the cost of investment, compared with traditional suppliers of equipment in Europe and the United States (OECD, 2011). Pointedly, while in 2000, Uganda imported 7.9 percent of its total capital goods from China and India, by 2015 that share had increased to 35.2 percent (COMTRADE, 2017).

¹⁷ 2016 was the fifth consecutive year of sluggish trade growth and the year with the weakest trade performance since the aftermath of the 2008 financial crisis (World Bank, 2017b).

Box 1: Private sector perspectives on manufacturing in Uganda: the case of Roofings Group

Uganda's privately owned Roofings Group was originally established as a "one-stop shop" for construction materials. Initially, the company focused on supplying imported iron and steel products to Uganda and the East African region. In 2004, the company took advantage of growth in the regional market by vertically integrating production processes into its business. To this end, it invested US\$125m in a new industrial complex on the outskirts of Kampala, in Namanve industrial park. According to the company, this has made it East Africa's biggest producer of iron and steel construction materials, and it employs directly over 2,000 people. However, the company has faced challenges, as noted by Mr. Lalani, the Executive Director, which include: high production costs; high dependency on imports, volatile exchange rates, insufficient infrastructure, non-tariff barriers to trade, disharmony in Common External Tariffs (CET) and instability in neighbouring countries including Congo & South Sudan (EAC,2015).

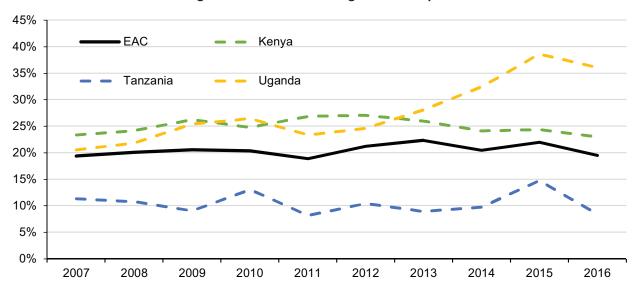


Figure 16: Share of intra-Regional EAC Exports

Source: IMF Direction of Trade Statistics (2017)

Figure 17: Share of Ugandan imports from advanced and emerging economics (%)

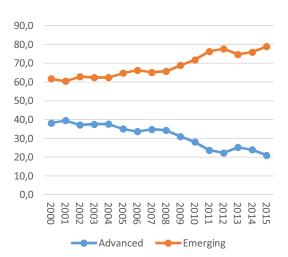


Figure 18: Share of Ugandan Imports from China and India (%)



Source: IMF Direction of Trade Statistics (2017)

On the other hand, these trends also imply a much more intensified competitive environment for Ugandan manufactures. For the EAC as a block, Chinese and Indian imports now account for 44

percent of all imports, subjecting the region to significant competitive pressures, particularly in labour-intensive manufactured goods. Econometric evidence is increasingly lending support to this hypothesis. Giovannetti and Sanfilippo (2009) found econometric support for the proposition that, with the intensification of economic relations, China has not only started flooding African markets with its low cost manufactures - often at the expense of local producers - but has also begun to crowd-out cheap African manufactures in the region's traditional foreign markets (principally in Europe).

For the EAC as a block, Chinese and Indian imports now account for 44 percent of all imports, subjecting the region to significant competitive pressures, particularly in labour-intensive manufactured goods

The fact that the analysis of Giovannetti and Sanfilippo (2009) was carried out on data that is now ten years old suggests the impact is now probably far more significant. A more recent study by Jeanneney and Hua (2015) also finds that manufactured goods imports from both China and other countries had an adverse effect on African industrialisation.¹⁸ This dimension to the challenges of industrialisation in the region clearly merits greater attention.

Finally, a more positive consequence of the intensification of economic relations with China is that it is being accompanied by a gradual relocation of some selected labour-intensive industries from

They measured the impact of Chinese competition on African (including Ugandan) manufacturing value added, by using panel data from 44 African countries over the period from 2000 to 2013. Besides the negative impact on the pace of African industrialisation, they also found that the real appreciation of the Chinese currency had a negative impact on African's manufacturing through its effect on the increased cost of imported machine and transport equipment.

China towards the sub-region. Whereas a decade ago, Chinese Foreign Direct Investment (FDI) was barely appreciable, by 2015 the East African Community was receiving in excess of USD 700 million a year. Uganda alone received more than USD 200 million in 2015 (Figure 19). While some of this FDI is clearly linked to infrastructure and natural resources, it has always been hoped that China would increasingly displace exports to Africa with local production through FDI.¹⁹ This is happening, but thus far to a limited extent. Lin and Xu (2016:27) note that in 2013, whereas nearly 60 percent of Chinese FDI to Uganda went to the services and mining sectors, manufacturing accounted for only one fifth.²⁰ The issue of the potential of FDI to boost Uganda's manufacturing sector will be discussed further in Section 6.2.

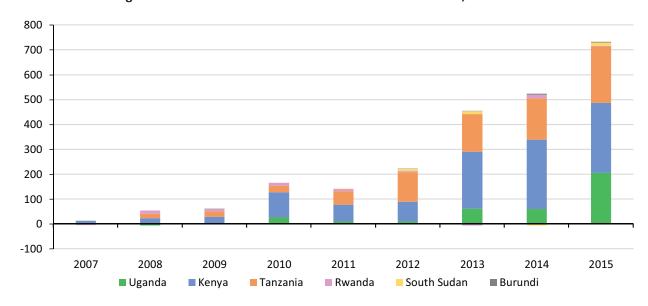


Figure 19: China's outward FDI flows to the EAC 2007-2015, USD million

Source: Ministry of Commerce of People's Republic of China (2017)

4.2 The EAC-EU Economic Partnership Agreement: A Facilitator or Impediment to Industrialisation?

Another potential challenge to Ugandan industrial policy are the proposed Economic Partnership Agreements (EPAs) between the European Union and African countries to replace its existing preferential agreements. The EU claims that the existing preferential access arrangements will no longer be tolerated within the WTO and could be legally challenged. The EPAs were premised on the grounds that they would be negotiated only on a regional level and would help consolidate regional integration processes in Africa.

There is both *cost-push* factor in this process, as Chinese firms try to maintain their competitiveness by relocating labour-intensive activities to countries with lower costs, and also a *demand-pull* factor, as Chinese companies react to new market opportunities being created in the rapidly-growing economies of Africa.

²⁰ Among manufacturing sectors, 'manufacturing of metal and metal products', 'gas', 'cotton and textiles' were the top three subsectors, while 'leather and footwear' and 'manufacturing of electronics' only accounted for "meagre share of China's total FDI flows to Uganda". The authors further note that the gas and metal subsectors are capital-intensive, creating relatively less employment opportunities.

The negotiating process between the EU and the EAC has been long and arduous. Initial negotiations between the EU and African regional groups formally started in 2003 and entered what was intended to be the final stage in 2007, with a view to agreements being implemented from 2008 (Morrissey et. al., 2007). Reflecting the difficulties in reconciling the different positions, negotiations for the EAC-EU EPA were not concluded until 16th October 2014. The EAC-EU EPA was scheduled to be signed on 18th July 2016. However, the Tanzanian government subsequently changed its position and made a decision not to sign, citing its far reaching implications for the EAC's industrial development.²¹

Historically, there is no doubting that the EU has been an important development partner for Uganda.²² However, it is also of note that the EU's relative position, in terms of trade links, has been declining over the last decade and a half, in part because of the rise of trade with emerging partners like India and China, as noted in the previous section. According to Bank of Uganda data, Uganda-EU trade now accounts for only 15.6 percent (\$460 million) of exports and 10.4 percent (\$440 million) of imports compared with 34.7 and 21.7 percent respectively in 2000 (Figures 20 and 21).

Figure 20: : Uganda Exports, % share by region, 2000-2016

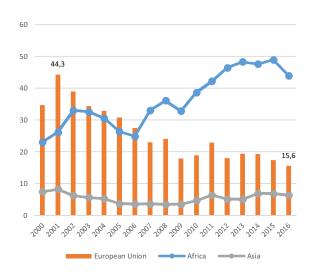
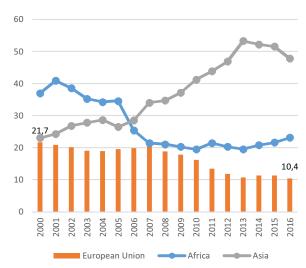


Figure 21: Uganda Imports, % share by region, 2000-2016



Source: Bank of Uganda (2017)

What would be the implications of the EAC-EU EPA for Uganda? UNECA (2017) simulated the potential impact using the *Globe Trade Analysis Project* (GTAP) 9.0 data base and model. The model describes global bilateral trade patterns, production, consumption and intermediate use

²¹ Benjamin Mkapa (2016), "The EPA with Europe is bad news for the entire region, even Kenya", The East African, 30th July.

With respect to development aid, the majority of EU development funding to Uganda is financed by the European Development Fund, but European bilateral donors such as the UK are also major partners. EU aid to Uganda was expected to receive the 11th EDF for 2014-2020 increasing to € 578 Million, compared with the €479 million received in the 2008-2013 cycle.

of commodities and services. The simulation allows us to model the static effect of the EU EPA on four out of the five existing EAC-5 member states (Kenya, Rwanda, Uganda and Tanzania).²³ The simulations use the standard GTAP closure, modified to allow for fixed wages to account for the high levels of unemployment and under-employment prevalent in Sub-Saharan countries. Tariff reductions are modeled in line with the published tariff reduction schedules.

There is no doubting that the EU has been an important development partner for Uganda...but it is also of note that its position in terms of trading links has been declining over the last decade and a half Our simulations suggest that Ugandan imports from the EU would increase significantly by 11 percent. However, this would be the result of a diversion of imports from elsewhere – mainly from Asia – since total imports actually register a small decline (-0.3 percent). In contrast, exports from Uganda to the EU only increase marginally (0.2 percent). There is also a slight deterioration of the terms of trade for all countries in the EAC. With regard to GDP, the simulation suggests that the EPA reduces GDP by 0.2 to 0.5 percent across the four EAC countries considered in the exercise, with Uganda losing -0.2 percent (Table 4). Absolute changes are shown in Table 5.

Table 4: Impact of EPA in 2042 (change from baseline, %)

	GDP	Imports	Exports	Terms of Trade	Imports(EU)	Exports(EU)
Uganda	-0.2	-0.3	0.2	-0.1	10.9	0.4
EAC	-	-0.3	0.5	-	12.7	0.7
EU	0.0	0.0	0.0	0.0	0.0	0.0

Source: UNECA (2017)

Table 5: Impact of EPA in 2042 (change from baseline, USD million)

	Welfare	Imports (Total)	Exports (Total)	Imports (EU)	Exports(EU)	Tariff Revenue
Uganda	0	-15	8	103	6	-20
EAC	-49	-99	97	815	42	-169
EU	212	441	303	-100	-96	

Source: UNECA (2017)

²³ Burundi is not currently included as a separate country in the GTAP database. The Burundian economy represents only 1.8 percent of EAC-5 GDP, and less than 1 percent of trade.

This is a consequence of the fact that the EPAs will not result in any substantially improved market access to the EU market, as Uganda already benefits from the Everything But Arms (EBA) agreement, which provides for non-reciprocal market access for all products except armaments and a few select agricultural products (sugar, rice).

It is worth noting that imports from all other regions decline—the trade diversion effect. Perhaps more importantly, intra-EAC imports decline by \$42 million — mainly in manufacturing — while tariff revenues accruing from imports would decline by \$20 million in Uganda.

These simulation results contrast with the results presented by the EU in a study published in February 2017 (EC, 2017), despite the fact that both studies use the same underlying database (GTAP 9.0). That study shows net gains for both Uganda and the other EAC members. We were unable to ascertain the precise reasons for the differences, as the EC study does not contain details such as the model closure, the elasticities utilized, etc. The reasons for the differences are probably tied up in a number of factors, including the fact that the EU study uses a baseline scenario which presupposes a return to standard *Generalised System of Preference* tariffs for Kenya (the only non-LDC in the EAC block) and uses a dynamic rather than static modelling approach.

Intra-EAC imports
decline by \$42 million –
mainly in manufacturing
– while tariff revenues
accruing from EU
imports would decline
by \$20 million in Uganda

It is notable, however, that in macroeconomic terms, both studies show relatively small effects. For instance, for Uganda UNECA estimates suggest that the welfare impacts would be negligible. This is generally the case with this kind of modelling, particularly when (as in the EPA agreement) one party (the EAC) is not gaining any significant enhanced access compared with existing arrangements. The modelling exercise does, however, alert us to the possibility that any potential gains with regards to trading relations with Europe may be at the expense of trading relations with other EAC partners and the rest of the world.

Beyond the direct impacts, questions have also been raised about the way the EPA could potentially constrain the development of Ugandan industrial policy. The agreements contain various articles relevant to EAC industrial policy objectives. Some are trade related; others impinge on the way domestic support measures may be provided. Regarding the former, these mechanisms do enable temporary emergency restrictions on imports of specific products in the case of a surge in imports

or a sharp decline in import prices. However, the trade-related safeguard provisions are limited in scope and their implementation is, arguably, cumbersome. Particularly relevant are Articles 3 (Rendezvous Clause), 12 (Standstill Clause), 14 (Export Duties and Taxes), 49 (Bilateral safeguards) and 50 (Multilateral Safeguards). For instance, Article 3 "the Rendezvous Clause" gives the negotiating parties a five-year deadline after the entry into force of the EPA to conclude negotiations on matters regarding trade in services, competition policy, investment, environment, procurement and intellectual property rights. Yet an agreement on procurement or investment might prevent

Questions have been raised about the way the EPA could potentially constrain the development of Ugandan industrial policy... adding to the potential complexity in rolling out an effective industrial policy

EAC countries from effectively implementing their "Buy East Africa, Build East Africa" strategy as well as similar national strategies (such as "Made in Rwanda" or "Buy Uganda, build Uganda") (SEATINI, 2017). Similarly, Article 12 "the Standstill Clause" may prevent the EAC from later applying a higher tariff rate on capital goods or other manufacturing products like pharmaceutical products. While many of these products are currently imported from Europe in any case, in the future EAC countries might be in a position to produce them, as industrialisation of the region moves forward, and hence member states would require a higher level of protection for their nascent industry. Other analysts have also stressed the complexity of the implementation procedures for bilateral safeguards (Article 49) arguing that the measures are limited "to the mitigation of the damage caused by import surges [in existing sector], but not for the building up of new sectors" (CUTS, 2011:4).

Concerns are not one-sided. Some member states of the European Union have also expressed their reservations on some aspects of the proposed EPAs. In a recent meeting with NGOs, German Chancellor, Angela Merkel echoed Tanzania's concerns and criticised the current state of negotiations with Africa. She called for talks on possible renegotiation to commence at the 5th EU Africa-EU Summit to be held in November 2017. Even more vocal is the German Africa Commissioner, Günter Nooke, who has publicly decried the EPAs, claiming the agreements directly contradict Europe's development policy efforts in Africa. Merkel's comments, along with increasing conversation around the EU-EAC EPA, presents perhaps an opportunity for an improved agreement that is more in harmony with both national and regional industrial policy.

4.3 AGOA -An Opportunity Missed?

Despite the big hopes initially pinned on AGOA, the reality is that Uganda has, in practical terms, benefited very little from the provisions of AGOA

Difficulties have arisen recently with regards to the trading relations with another major trading partner, the United States of America. Uganda was one of the first countries in Africa to express interest in benefiting from the provisions of the US's African Growth and Opportunity Act (AGOA), and in 2003 commissioned Rosa Whittaker,25 a former negotiator of AGOA, to help access the tariff preferences available under its provisions. Despite the big hopes initially pinned on AGOA, however, the reality is that Uganda has, in practical terms, benefited very little from the provisions of AGOA (Figure 22). In 2016, total AGOA exports to the US excluding exports under Generalized

System of Preferences (GSP), totaled just \$288,000, which is only about 0.6percent of total exports (\$50.8 million) to the US. By contrast, in that same year, AGOA exports from Kenya totaled \$390 million and made up around 70 percent of Kenya's total exports to the US. In addition, 99percent

²⁵ Rosa Whittaker was the first ever Assistant U.S. Trade Representative (USTR) for Africa in the administrations of Presidents George W. Bush and William Clinton, and took the lead in developing and implementing the African Growth and Opportunity Act (AGOA). She subsequently formed the consulting firm 'Whittaker Group', which advised countries on how to take advantage of the opportunities availed by AGOA.

of Textile and Apparel exports from Kenya were under AGOA (US Department of Commerce). This makes AGOA especially important to both the Kenyan economy as well as its manufacturing industry.

Yet Uganda is not alone in failing to export under AGOA. Illustratively, only three African countries - Nigeria, South Africa and Angola - accounted for eighty percent of total AGOA exports to the U.S. in 2013. Pointedly, South Africa was the only non-oil exporting African country among that limited group (US Department of Commerce). In Eastern Africa, only Kenya is exporting appreciable quantities of goods under AGOA. This may reflect a more general problem related not only to the limited supply-side capacities on the part of beneficiary countries, but also perhaps more fundamental problems in the form of the agreement itself – including phytosanitary standards, the time-bound nature of the concessions, and rules of origin (UNECA/AU, 2014).

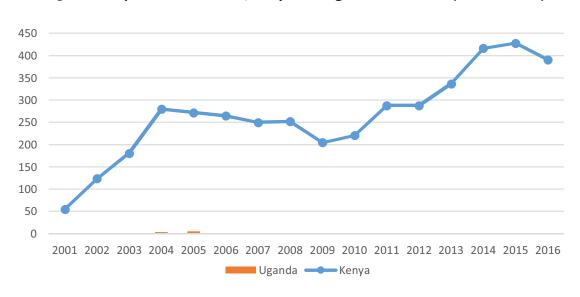


Figure 22: Exports under AGOA, Kenya and Uganda 2001-2016 (millions USD)

Source: US Department of Commerce (2017)

A particular bone of contention more recently has been over EAC plans to ban the imports of second-hand clothing. In an effort to incentivize the local production of textiles, in February 2016 the EAC unanimously decided to move forward with a phased ban of the importation of used clothes, including a gradual increase in import duties followed by an outright ban by 2019. After its announcement, the *Secondary Materials and Recycled Textiles Association (SMART)*, a US industry association representing used clothing businesses, filed a complaint against the EAC claiming that the ban was in direct violation of AGOA. The region now risks loosing its eligibility to AGOA.

In an effort to promote its textile and apparel industry, Uganda has maintained strong support for the EAC's position to restrict the import of second-hand clothing. In spite of pending review of eligibility, Uganda has doubled down on its position and increased the environmental levy imposed on used clothes from 15 to 20 percent. In their most recent show of political commitment to the ban, the Minister of Finance publicly stated that Uganda would not "bow to pressure locally or

internationally to remove the imposed taxes on used clothes."²⁶ Uganda has good reason to take an inflexible stance on this issue. In the 1960's, Uganda was the biggest producer of cotton in Sub-Saharan Africa. By the end of the 1970s, however, the cotton industry was ravaged by political and economic instability (Baffes, 2009). Currently, Uganda's textile and garment sector is largely made up of ginneries whose final product is raw cotton. However, cotton production remains well below its full potential and garment production is limited. Thus most of the demand for clothes is fulfilled by imports of used and cheap new clothing. Compared to the other 3 major EAC countries, Uganda has the highest share of used clothing imports. About 58 percent of clothing imports into Uganda, valued at around \$23 million, are classified as used clothing (COMTRADE, 2016). The rest consists of cheap clothing, mostly from China. In 2015, \$1.1 million of used clothing from the US entered the Ugandan clothing market (USITC, 2016). Uganda hopes that the used clothing ban would provide local garment manufactures an opportunity to increase their market share and continue to develop their production capacities.

Oltimately the outcome of the used clothing ban depends on whether Ugandan textile and apparel manufacturers can effectively meet demand. Their success, in turn, is at least partially dependent on the support of the Ugandan government...

In 2013, in anticipation of a possible revision of AGOA, UNECA prepared a report to measure the possible impact on AGOA eligible countries if AGOA was discontinued (UNECA, 2013:5 & 7). This work provides a useful insight into what Uganda could lose if its eligibility is revoked. Interestingly, the report's simulations showed that Uganda could expect just marginal losses to exports and real wages: less than 0.2percent decrease in total exports, assuming a return to GSP trade provisions, and a negligible decrease in real wages.²⁷ If Uganda sticks to its second hand clothing ban, it could potentially stand to take over market share of all used-clothes importers. Even with possibility of losing AGOA eligibility, the cloth-

ing ban could on balance benefit the textile and apparel industry. However, it should be noted that this cost benefit analysis does not account for the loss of tariffs due to the ban nor the potential welfare losses to the Ugandan people who strongly rely on used clothing for a decent quality of life. There are also concerns around illegal trade of used clothing.

Ultimately, the outcome of the used clothing ban depends on whether Ugandan textile and apparel manufacturers can effectively meet demand. Their success, in turn, is at least partially dependent on the support of the Ugandan government to provide the optimal conditions for manufactures to fill the supply gap. Increasing local cotton yields would be key to developing a competitive local industry. In addition to this, the government must prioritize access to financing and technology to increase production capacity and enhance value addition, as well as incentivizing FDI into the sector.

²⁶ Rwanda has taken a similar stance to Uganda, but Kenya has subsequently backed down over the plans.

²⁷ These results are mostly due to the fact the majority of goods Uganda's main exports enjoy trade benefits under the GSP not AGOA. It should be noted that the report assumed that AGOA was revoked for all countries. This is not in line with the situation at hand and therefore presents challenges to extrapolating the report's findings. However, the report's findings combined with the low volume of Uganda's AGOA exports seem to suggest that Uganda would not be adversely affected from losing access to AGOA.

5. A Review of Ugandan Economic and Industrial Planning

5.1 National Strategies to promote Industrial and Manufacturing Development: a bold vision but with implementation issues

Industrial policy in Uganda dates back to the colonial period, more specifically after the Second World War when the indebted British colonial empire needed to increase exports from its colonies (Obwona, 2012). At a time when confidence in state-guided capitalism was at a peak, the Worthington Plan (1947-1956) was the first development plan to be implemented in Uganda, aiming at developing manufacturing industries to substitute for expensive imports. Brick, furniture, cement, textile, soap and beer factories²⁸ were set up, particularly in the area of Jinja. The Uganda Development Corporation was created to support colonial investors. However, the level of manufacturing value added remained low and most factories were confined to the agro-processing sector. In the early years of independence, the Second Five-Year Development Plan (1965/66 - 1970/71) pursued a similar industrialisation strategy, with the objective of achieving structural transformation.²⁹ The plan was backed by a strategy for regional industrialisation proposed by the United Nations Economic Commission for Africa (1965).

Despite a promising start, the economic transformation of Uganda came to a halt under the political instability which characterized the governments of Milton Obote and Idi Amin. In 1969, Obote launched its "Move to the Left" followed in 1970 by the Nakivubo Pronouncement, providing for the nationalization of 80 corporations, including the banking sector, oil, manufacturing and mining industries, etc.³⁰ The pronouncement was only partially implemented, being abandoned one year later in the aftermath of Idi Amin's political coup. However, Amin went even further into the "Africanisation" strategy of the industrial sector, culminating in the expulsion of the Asian community in 1972. Together with mismanagement and poor economic planning, these policies contributed to the decline of the industrial sector.³¹

²⁸ Obwona notes that the initial investment funds were taken from cotton and coffee exports' earnings.

²⁹ The targets included a decline in the GDP share of agriculture from 37.8 percent in 1966 to 27.2 percent in 1981 and an increase of the manufacturing sector from 15.6 to 25 percent over the same period.

³⁰ According to Selwyn (1973), the nationalization strategy was not rooted in the socialist ideology, the aim rather being to "Africanize" the ownership of the major companies in Uganda which were owned by foreigners and hence gain political support from Ugandan economic elites.

According to Obwona, Uganda and Taiwan industrial sectors were comparable in the late 60's. However, under Amin rule, "When Taiwan was undergoing industrial transformation, Uganda registered declining output in both light industries and the potential growth poles for heavy industrialisation. Where Taiwan registered industrial deepening, Uganda experienced a steady death of industrial vitality" (Obwona, 2014).

After years of civil war, at the end of the 80's the Ugandan economy was "shattered by years of civil war, [...] industrial enterprises lay abandoned [...], Uganda's once impressive economic and social infrastructure lay devastated by war and lack of maintenance" (World Bank, 1991, p.2). From the

From the early 1990's, the government undertook economic reforms with a strong liberal stance. From some perspectives, this strategy proved successful and enabled the country to be one of the fastest growing economies in the world during that decade. But it was not accompanied by any significant re-industrialisation of the economy

early 1990's, the government undertook economic reforms with a strong liberal stance. From some perspectives, this strategy proved successful and enabled the country to become one of the fastest growing economies in the world during that decade. But it was not accompanied by any significant re-industrialisation of the economy. The essentially orthodox policies mostly aimed at maintaining macroeconomic stability and opening the country to trade and investment. Against this backdrop, the Uganda Industrialisation Policy and Framework (1994-1999) put emphasis on the agro-processing sector.

However, while encouraging FDI and export-oriented businesses, some analysts argued that this approach was detrimental in terms of access to credit, or specific sub-sectors competing with cheaper exports like the textile industry (Shinyekwa *et al.*, 2016). Reflecting a growing discontent with the longer-term developmental outcomes; since 2002 Uganda has embarked on a more interventionist policy approach towards job creation and poverty reduction.

Currently, the major policy paper driving economic planning is Vision 2040. The policy paper was published in 2013, and envisions the transformation of Uganda "from a peasant to a modern and

One of the main objectives of Vision 2014 is to boost the share of the industrial sector in GDP between 2010 and 2040 from 25% to 31%, as well as to increase the share of the labour force in industry from 7.6% to 26%.

prosperous country within 30 years" and puts emphasis mainly on public investment in infrastructure. The development of the industrial sector is an essential part of this strategy. One of its main objectives is to boost the share of the industrial sector in GDP between 2010 and 2040 from 25 percent to 31 percent, as well as to increase the share of the labour force in industry from 7.6 to 26 percent. Vision 2040 also specifically targets the manufacturing sector, measured by its share of total exports, which is intended to reach 50 percent by 2040 (but was only 4.2 percent in 2010).

The implementation strategy of Vision 2040 will rely on six five-year National Development Plans, the current one NDP2 (2015/6-2019/20) being the second one. NDP 2 focuses on sustainable and inclusive growth through increased competitiveness. Regarding the industrial sector, it empha-

This objective implies a sharply declining productivity in the industrial sector, because while employment is supposed to expand by 18.4 percent, value-added is planned to expand by only 6 percent.

sizes agro-processing, mineral beneficiation and light manufacturing (pharmacy, electronic products, chemicals), and plans for the development of industrial parks and innovation centers, the improvement of national standards, and support for the development of green industries and labour intensive industries.

These objectives are consistent with the National Industrial Policy which was published in 2008 and outlined the government strategy for the next decade.³³ The comprehensive policy, comprising 12 objectives, focused mainly on institutions strengthening and infrastructure development. This focus was reiterated in the five-year *National Industrial Sector Strategic Plan* (2010/11-2014/15), in which 80 percent of the US\$ 2.79 billion forecasted budget was intended for infrastructure. The recent review by Ministry of Trade, Industry and Cooperatives (MTIC)³⁴ of the NISSP indicated that the government's budget allocation to industry is currently 0.5 percent the overall national annual budget, despite the fact that industry and manufacturing presently generate 80 percent of total internal government revenue annually.³⁵

Table 6: National Industrial Policy Target indicators

Target indicator	Target	Baseline 2008	Current
Contribution of manufactured products to total GDP	25%		8.5%
Contribution of manufactured exports to total exports	30%	22% (2007)	24.6% (2015 World Bank)
Value added in Industry (as a percentage of GDP)	30%	27.3%	21.3% (World Bank 2015)
Competitiveness Index score	4.2	3.33	3.69

Source: National Industrial Policy

Agro-processing, mining, energy and ICT are also mentioned as strategic sub-sectors (unlike manufacturing). Other key measures of this industrial strategy were the revival of the Ugandan Development Cooperation, the recapitalization of the Ugandan Development Bank or the establishment of export processing zones and industrial parks. But apart from strong investment efforts made by the government with international partners in infrastructure and some specific projects, the implementation level of other key objectives of the industrial policy has remained low and target indicators far from being achieved.

This implies that the policy should be reframed in 2018.

The NIP and NISSP review has been facilitated by the climate-resilient livelihood diversification project within the framework of the Global Environmental Facility (GEF)'s Climate Change Adaptation (CCA) programme, under the LDCF and the UNIDO's Industrial Policy Support Fund.

According to the review report, the total budgetary allocation to the Ministry of Trade, Industry and Cooperatives (MTIC) over the five-year NISSP period (2010 – 2015) was around Ugandan shillings 111.74 billion (including recurrent and development spending by both the GoU and donors). However, over the same five year period, the budget for implementing the NISSP was Ugandan shillings 10.05 trillion (USD 2.793 billion). This means that, even if the entire development budget were devoted to NISSP implementation, the funding available is insufficient for full implementation. In addition, the report further indicated that less than 20 percent of what was allocated was actually released to the MTIC, compounding the lack of resources.

Among specific projects implemented since 2008, industrial parks and sector specific public investments are the most significant. The Ugandan Investment Authority was tasked in 2007 with establishing 22 industrial parks in the major urban areas of Uganda. So far, procedures have started for 10 parks, but only three have become operational.³⁶ Major industrial establishments such as Coca-Cola and Mukwano have started settling in the parks.

However, the limited results achieved since 2008 have also sparked criticisms over the government strategy and its implementation (Office of Auditor General, 2015). The Office of the Auditor General highlighted the poor performance of the industrial parks in terms of job creation, despite substantial government support. The report revealed that only one feasibility study had been undertaken (in Namanve), and land allocation was made without a proper long term strategy or standardized criteria. As a result, only 13 percent of the investors allocated land were in operation in 2015. The investments also lacked linkages with other ministries and agencies.³⁷ The Auditor's report recommended a reassessment of the industrial park strategy and the adoption a concrete plan with clear timelines. A recent analysis (UNDP, 2015) of successful examples of such interventions in Africa shows that an

The Office of the Auditor General highlighted the poor performance of the industrial parks in terms of job creation, despite substantial government support

emphasis on a few products with a comparative advantage is key to success of the industrial parks, while Ugandan industrial parks seemed to have lacked specialization and focus. More importantly, the report deemed that the Ugandan industrial parks were not managed appropriately, with over 50 percent of the infrastructure development not completed and with inadequate investment promotion activities. The comprehensive integration into national strategies and effective inter-ministerial collaboration are also key lessons learnt from the Ethiopian and Zambian experiences.

Yet despite low levels of implementation³⁸, it seems that the industrialisation strategy has gained a new momentum. President Museveni declared 2017 the "year of mass industrialisation" (State House, 2016). The Ugandan Development Corporation (UDC) was revived through a bill passed in 2016. So far, the UDC has taken interest or set up joint ventures in four projects. Among them, three are manufacturing projects: the Teso fruit factory, whose construction is under way in Soroti region, the Luweero fruit processing company³⁹, and the Kiira Motors project.⁴⁰ Those targeted

The construction of the biggest industrial park, Kampala Industrial and Business Park in Namanve was completed in 2016, after a long delay due to funding problems linked to environmental and transparency issues. It currently employs nearly 11,000 people, but is still far from its target of 200,000 jobs when the park reaches full capacity.

³⁷ For example, the report by the Auditor General reveals that there was no coordination between UIA and UMEME (the energy supplier) to guarantee adequate power supply ahead of the establishment of the parks. In some areas, this led to increased delays.

Based on the Industrial Sector Strategy Review commissioned by UNIDO and the GoU (June 2017), MTIC together with associated agencies had implemented only 72 out of 271 individual interventions specified in the NISSP over six years from 2010 to 2016.

³⁹ This project seems to still be at its planning stage. The construction of a China-Uganda Agricultural Industrial Park in Luweero was announced in 2016 by the local press.

Kiira Motors launched a solar powered bus in 2016, but since then has faced funding problems and reoriented its strategy towards producing diesel trucks. It still plans to start manufacturing vehicles in 2018, but is facing regional

investments are described as part of a "Zonal Industrialisation phase" which seems to aim at geographical specialization. 41 Other interventions have been achieved through the Uganda Development Bank (UDB), which has also been recapitalized. The UDB claims that for 2015, 42 percent of loans approvals were in the manufacturing sector. 42 In 2016, UDB participated in a 35 million USD funding plan for the Madhvani Group (Kakira sugar) in order to establish an ethanol production plant. Finally, the Ugandan government created the Uganda Free Zones Authority (UFZA) to develop export processing zones in the country. The Act was passed in 2014.

The expected outcome of the *Buy Uganda Build Uganda* policy is to save up to 684 million USD in import substitution by locally producing clothes such as school and official uniforms, exercise books or food products... One of the policy targets is to ensure 50% of shelf space in supermarkets is populated by local products. However, one has to notice that the policy lacks an operational plan, timeline and budget

However, it has since faced funding problems and the establishment of an export processing zone has still to be achieved in Uganda.⁴³ The UFZA aims at attracting investments worth US\$ 1 billion by 2020, but Ugandan free zones face the risk of not being competitive enough to integrate global value chains, argues Shepherd (2016).While the Free zones policy is aiming at boosting exports, the *Buy Uganda Build Uganda* policy objective is to reduce the trade deficit by encouraging consumption of locally produced goods and services (Ministry of Trade, Industry and Cooperatives, 2014). The expected outcome is to save up to 684 million USD in import substitution by locally producing clothes such as school and official uniforms, exercise books or food products (Ministry of Trade, Industry and Cooperatives, 2014). One of the policy targets is to ensure 50 percent of shelf space in supermarkets is populated by local products. However, one has to notice that the policy lacks an operational plan, timeline and budget.

This policy framework is complimented by a wide range of institutions that have been strengthened since the 1990s. Examples include the *Uganda Export Promotion Board* (incubating SME's for export industries), the *Uganda Industrial Research Institute* (UIRI) and the *Uganda National Bureau of Standards* (UNBS). According to AFDB (2014) the latter two lack adequate resources to fulfil their mandates. At the same time, the private sector, through business and trade associations such as the Uganda National Chamber of Commerce and Industry and the Uganda Manufacturers Association (UMA)⁴⁴, have played an important role in engaging the government on policy issues (AFDB, 2014; Whitworth et al., 2010).

competition from Kenya and Rwanda.

⁴¹ The National Sector Strategy mentions a "One Village One Product" Programme.

⁴² On its webpage, UDB promoted a 12.5 percent interest rate for manufacturing projects.

⁴³ An agreement was signed in July 2016 for the establishment of a free zone area in Nakaseke. The UFZA aims at attracting investments worth US\$ 1 billion by 2020.

With its diverse membership of small, medium, and large enterprises, the UMA promotes and protects the interests of industrialists and manufacturers; *The Uganda Small Scale Industries Association* generates policy positions for members. Additionally, the *East Africa Business Council* was formed by the private sector to create a direct approach of formerly presenting issues and proposals to policy makers. Together with partners, *Enterprise Uganda* engages in cross-cutting skills development for SMEs.

Apart from the National Industrial Policy, only three sub-sector policies⁴⁵ have been adopted, for the textile, sugar and leather sectors. Yet analysts highlight the need for sector-specific strategies beyond the current general policy targets, while at the same time developing linkages with relevant ministries (like the Ministry of Education and Sports for specific skills development), taking into account the entire scope of "software" needs for industrial development rather than focusing exclusively on infrastructure development (Muhumuza, 2016). Furthermore, no comprehensive assessment of the industrial strategic plan has been conducted so far.⁴⁶ Other sector strategies have been put in place to support the industrial policy. Among them, the Business, Technical and Vocational Education and Training Act (2008) and Strategic Plan (2011-2020) aims at "Skilling Uganda" and reorienting vocational training to the needs of the labour market. The Strategic Plan focuses on skills development to enhance productivity, especially in the agricultural and informal sector, with specific attention to the links with the private sector. Despite its bold goals, the plan has a 60 percent funding gap on its US\$ 870 million budget.

5.2 Regional Industrialisation strategies: when the whole is greater than the sum of its parts?

A sub-regional approach to industrial development is likely to result in a significantly faster rate of industrialisation than would be the case if the process is undertaken on an isolated, country-by-country basis

As regional integration within the EAC proceeds apace, it makes less sense to see Ugandan industrial policy in isolation. As noted earlier, regional industrial strategies date back to the 1960's, when Eastern African governments decided to foster regional integration. During the Lusaka Summit held under the coordination of the UNECA in 1965, industrialisation was discussed in depth: "it was noted that a sub-regional approach to industrial development was likely to result in a significantly faster rate of industrialisation than would be the case if the process was under-

taken on an isolated, country-by-country basis" (UNECA, 1965). Uganda was to be an essential part of that regional strategy, as iron and steel manufactures were supposed to be developed in the country to cater for regional needs.

The first EAC (1967-77) failed but when the EAC was reinstated in 1999, its main aim was to create an enabling environment "in order to attract investments and allow the private sector and civil society to play a leading role in the socioeconomic development activities through the development of sound macro-economic and sectoral policies and [...] the development of technological capacity for improved productivity" (EAC, 2002, Preamble). The long term goal of the EAC is to create a monetary union and political federation, and steps have already been taken towards monetary

⁴⁵ Iron & steel policy completed and submitted to cabinet according to the recent review of the strategy.

⁴⁶ It seems that the government is conducting an annual monitoring of the industrial sector policies implementation, but only the 2014/15 report was available online (Republic of Uganda, 2015b)

integration⁴⁷, which was initially scheduled for 2013. The progressive establishment of the Customs Union since 2005 and instauration of the Common Market in 2010 unlocked regional trade potential discussed in Section 3.1.

The East African Community Industrialisation Policy was adopted in November 2011 (EAC, 2012), aiming at "structural transformation of the manufacturing sector through high value addition and product diversification based on comparative and competitive advantages of the region". Its specific objectives are:

- a) Diversifying the manufacturing base and quadrupling the local value added content of resource-based exports to 40 percent by 2032;
- b) Strengthening national and regional institutional frameworks and capabilities for industrial policy design and implementation;
- c) Strengthening Research and Development (R&D), technology and innovation capabilities to facilitate structural transformation and upgrading of the manufacturing sector;
- d) Increasing the contribution of (i) intra-regional manufacturing exports relative to total manufactured imports into the region from the current 5 percent to about 25 percent by 2032 and (ii) increasing the share of manufactured exports relative to total merchandise exports to 60 percent from an average of 20 percent; and
- e) Transforming Micro Small and Medium Enterprises into viable and sustainable business entities capable of contributing up to 50 percent of manufacturing GDP by 2032 (from 20 percent in 2012) (EAC, 2012).

Studies are being undertaken for the setting-up of a regional automobile industry and the project is paralleled by competing national initiatives, while the development of a regional clothing and leather industry is also under consideration

It is still early to assess the implementation of this policy.

However, EAC member states have embarked on a series of regional infrastructure projects to create the necessary enabling environment for industrialisation. The modernisation of the East African railway system is one of them. Another area of cooperation is the projected establishment of regional technology incubation centres or centres of excellence based on institutions that are operational in the Member States.

The EAC industrial policy is generally supportive of a market-based approach rather than state interventionism and focuses on a few subsectors described as both competitive and strategic for the sub-region: agro-processing, agro-chemicals, mineral processing, pharmaceuticals, petro-chemicals and bio-fuels. Those sectors are supposed to be promoted through strategic regional investments and the development of regional value-chains (Box 2).

⁴⁷ According to the last budget speech (EAC, 2016), institutional arrangements are underway to prepare the monetary transition through the establishment of a *Regional Bureau of Statistics and a Monetary Institute*.

Box 2: The emergence of regional value-chains in the EAC- Evidence from a recent study

In an increasingly integrated world economy fueled by technological progress, cheaper transportation and communication costs, production processes have become more dispersed across the globe. This has given rise to systems of supply chains in which value is added at each stage before crossing the border to be passed on to the next stage. For countries with a limited existing manufacturing or service export basis and a large pool of labour, this development "trcan provide a golden opportunity by specializing on a specific segment of a production chain, each participating country can generate a portion of the goods or services value added while producing the whole product from scratch would never have been within reach in an increasingly competitive world" (Allard et. Al. 2016).

Using the Eora database, the authors provide an exhaustive analysis covering 189 countries, about 16,000 industries over a 23-year period of the degree of *foreign value added* – an important indicator of the extent of integration into regional or global value chains. The authors note that progress within the EAC has been particularly strong, with Kenya, Tanzania, and Uganda exhibiting solid progress with levels of foreign value added in exports of around 20, 25 and 15 percent respectively. The sectors that have benefited the most from the deepening of integration include agriculture and agro-business, but also manufacturing (particularly in Tanzania), textiles, transport, and tourism. The authors cite that this is partly a reflection of the benefits of the more general economic integration at play among these countries and their stated intention to further deepen their economic and monetary ties.

The development of industrial value chains across EAC countries is indeed one of the main objectives cited in the 2016/2017 EAC budget. Towards achieving this objective, a campaign "Buy East"

The country has not taken full advantage of its policy space to support industrialisation. Levels of applied tariffs are low compared to the historical experience of industrialised countries at comparable levels of development

African - Build East Africa" was launched in 2015 in a first EAC Manufacturing Business Summit held in Kampala. A second Business Summit convened in May 2017 focused on capacity building and called on EAC partner states to implement a mandatory industrial internship focused particularly on engineers, technologists and scientists. The summit also encouraged EAC partner states to develop a regional local content policy and strategy to facilitate local initiative and implement agree-

ments under the EAC Bureau of Standards. However, concrete projects have not yet been implemented. Studies are being undertaken for the set-up of an automotive regional industry and the project is paralleled by individual and competing national initiatives.⁴⁸ The development of a

⁴⁸ Competition is fierce between Eastern African countries in attracting investors in the automotive sectors. While Uganda has embarked on the Kiira motors project, Rwanda has announced the establishment of a VW assembly plant.

regional clothing and leather industry is also under consideration, combined with aforementioned ban on imports of second hand clothes (see Section 4.3).⁴⁹

What more could be done to incentivize manufacturing in the EAC? Given its fundamental role in providing price signals to the private sector, a review of tariff policy may be warranted. During the wave of structural adjustment policies implemented across Africa in the late 1980s and 1990s, Uganda was one of the first countries in the region to liberalize its economy. Applied tariffs in Uganda declined from 30 percent in 1988 to 12 percent in 2015 (WTO, 2016).

Arguably, however, the country has not taken full advantage of its policy space to support industrialisation. Despite relatively high nominal tariffs on EAC imports of consumer goods (at 25 percent), the levels of applied effective tariffs are low compared to the historical experience of industrialised countries at comparable levels of development (UNECA, 2016).⁵⁰

Under the East African Customs Union, average applied tariffs in the region converge to 12-14 percent range. But beyond the general stratification of the *Common External Tariff* (CET) between consumer goods (at 25 percent for consumer goods, 10 percent for intermediate products, and 0 percent for primary products), there is arguably relatively little discretionary use of tariffs to help bolster particular sectors. This is a matter which is currently under review.⁵¹ One associated problem is the way in which some intermediate products are

Beyond the general stratification of the Common External Tariff between consumer goods (at 25 percent) intermediate products (10 percent) and primary goods (0 percent), there is arguably relatively little discretionary use of tariffs to help bolster particular sectors

charged at a higher rate – thus, for instance, clinker – which is used in the manufacture of cement, is imported as a finished product, attracts a 25 percent duty, but ends up being used as an intermediate input, which should be subject to a 10 percent duty. Similarly, palm oil, which is used to manufacture soap, is imported as a finished product and subjected to a duty of 25 percent, yet the product qualifies for a zero per cent duty. Occurrences like this clearly undermine the competitiveness of regional firms. A full engagement on this issue with the EAC Secretariat and partner member states to review the CET would be a step in the right direction to fully implementing the EAC's Industrial Development Strategy.⁵²

⁴⁹ Uganda, along with Tanzania and Rwanda, risks losing access to the US market through the African Growth and Opportunity Act (AGOA) following plans to ban imports of second-hand clothes and shoes. The Office of the U.S. Trade Representative is reviewing the eligibility of Rwanda, Tanzania, and Uganda to receive benefits under the act following a petition filed by the Secondary Materials and Recycled Textiles Association (SMART). AllAfrica.com, June 22, 2017.

For example, towards the end of the 19th century when the United States was trying to catch up with Britain by way of infant industry protection, its average applied tariffs on manufactured imports were close to 50 per cent.

⁵¹ See Anyanzwa (2017).

⁵² In the context of global value chains (GVCs), it is argued that it is important for firms to have access to high quality imported intermediates at world market prices, so that they can themselves be competitive. While this may be true, the problem with this viewpoint is that, taken to its extreme, it negates the use of any tariffs to protect and nurture

To sum up, the principal problem is that the EAC, on its own, has no way of implementing the policies to achieve these objectives. Its budget and resources are tiny.⁵³ It thus depends on member to align their policies to that of the EAC. So far, there has been little formal alignment (Mold, 2017). Despite ambitious and bold national and regional policies, implementation has lagged behind, mainly due to insufficient funding. Other specific bottlenecks have hindered the growth of the manufacturing sector in Uganda. We will discuss some of those bottlenecks in the following sections.

infant industries. A balance must therefore be struck between enabling the import of necessary inputs and providing the necessary degree of protection to local industries.

The total EAC budget currently amounts to around 140 million USD a year, which is approximately 0.1 percent of regional GDP. This barely covers the running costs of the EAC Secretariat and associated institutions.

6. Boosting Manufacturing: Addressing the Challenges

6.1 Fixing structural weaknesses to boost manufacturing

The National Development Plan for 2010/11-2014/15 (NDP1, page 27) identified several challenges as "binding constraints to economic growth". It includes weak institutions, inadequate access to finance, lack of skilled workers, insufficient promotion of innovation, and poor infrastructure.

54 Albeit not in an exhaustive manner, this section of the paper will explore some of the issues related to those set of constraints.

6.1.1 Strengthening public institutions efficiency

Administrative coordination and interaction between the individual organisations implementing industrial is Whitworthtadvcrucial to the success of policy implementation. The relevant bodies

(public and private) need to have good working relationships with each other (UNECA, 2016). They also need mechanisms to coordinate their actions, (e.g. a "super-ministry", such as France's *Planning Commission* or Korea's *Economic Planning Board*). It is, therefore, important to assess whether Uganda's Ministry of Trade and Industry has the capacity to undertake such coordination. There have been efforts to improve coordination by the government like the annual presidential dialogue with the private sector. However, this does not adequately replace specific sub-sector dialogues that are critical for solving problems in the implementation of policy.

The National Development Plan identified several challenges as "binding constraints to economic growth" including weak institutions, inadequate access to finance, lack of skilled workers, insufficient promotion of innovation, and poor infrastructure

Despite the existence of a strong policy and institutional framework to support and stimulate industrial development in Uganda, a major challenge has been the capacity of these institutions to respond to the needs of their stakeholders (Republic of Uganda, 2010). For example, the lack of capacity within supporting institutions like the Uganda National Bureau of Standards to enforce quality standards is a cause for concern. There are simultaneously fears that the Ugandan market is being flooded with substandard products and counterfeits both from Asia and within, which is a

Land issues, tax rates and informal competitors are all mentioned as major constraints for firms according to WBES (World Bank, WBES, 2015). Regarding land issues, it is worth mentioning that the divergent system of land tenure and overlapping land rights are an obstacle to long-term investments in agriculture and the transformation from subsistence farming to commercial industrial production. Land owners often fail to obtain land titles and essential credit.

disincentive for investors. In addition, the duplicative mandate and lack of clarity of who does what within satellite agencies such as the Ugandan Investment Authority (UIA) and the Free Zone Authority⁵⁵ causes an additional layer of complexity. Streamlining the institutional architecture is therefore isable.

The once strong economic planning framework seems to have been weakened by the multiplication of planning entities and the dilution of leadership and governance in those institutions, starting with the split between the Ministry of Finance and of Economic Planning in 1996

These weaknesses in institutions is partly due to the liberalization policies that led to the disintegration of some supporting institutions. ⁵⁶ In the last five years, following on the recommendations of the National Development Plan, there has been an effort to rebuild some of these institutions. Hence, the Ugandan Development Cooperation (UDC) was revived in 2016 and the Uganda Development Bank (UDB) recapitalized with the aim of providing cheaper credit to the private sector. In March 2017 the

UDB secured the approval of the parliament to increase the government capital contribution from UGX 100 billion to UGX 500 billion.⁵⁷

One example suggestive of inefficiencies in public sector investment is the cost of Bujagali dam, which was budgeted at \$862 million, to produce 250 megawatts of energy while the Grand Ethiopian Renaissance Dam cost USD 6.4 billion, to produce 6,450 megawatts – in other words, four times more expensive per megawatt produced

However, despite a return to more state interventionism, the once strong economic planning framework seems to have been weakened by the multiplication of planning entities and the dilution of governance in those institutions, starting with the split between the Ministry of Finance and of Economic Planning in 1996, followed by the decentralization process and the creation of the National Planning Authority, current custodian of the Development Plan. While Whitworth et. al. (2010) argue that the successful economic plans implemented by Uganda in the 90's and early

2000's were supported by both a strong leadership and solid institutional organization within the Ministry of Finance, Planning and Economic Deveche EAC industrial lopment, the authors concede that these strong planning capacities may have been weakened by recent institutional changes.

The UIA reports to the Ministry of Finance while the management of the industrial parks reports to the Ministry of Trade and Industry.

⁵⁶ According to Obwona *et al.*, (2014), the neo-liberal economic policies (that advocated for a 'hands-off' role to the state in the national economy) adopted in the 90's led to the privatisation and closure of development institutions including the Uganda Commercial Bank and other strategic public enterprises. Consequently, Uganda lost some of the public institutions necessary for supporting the industrial and manufacturing sectors.

⁵⁷ Daily Monitor, "Ugandan Development Bank to float on its own", 03/15/2017.

Despite the adoption of good practices in e conomic planning, such as sector-wide approaches (SWA) and coordination of the Ministry of Economic Planning, government institutions are still challenged by problems such as duplication, poor capacity and political pressures at the planning phase, cost overruns, implementation delays and poor monitoring capacities.

Thus, for instance, the World Bank (2016) stresses the need to improve public investment management to yield better return from investments in infrastructures and other government's projects. One example suggestive of inefficiencies in public sector investment is the cost of Bujagali dam, which was budgeted at \$862 million, to produce 250 megawatts of energy. This is equivalent to USD 3.5 million per megawatt. This is a lot more expensive than the Grand Ethiopian Renaissance Dam that cost USD 6.4 billion, to produce 6,450 megawatts equivalent to USD 992,000 per megawatt – in other words, four times more expensive per megawatt produced.

Public perceptions tend to reinforce the need for greater public sector efficiency. Results from Afrobarometer (2015) show that while Ugandans tend to believe their government is generally managing the economy well, it performs badly in terms of job creation and improvement of living standards (Figure 23).

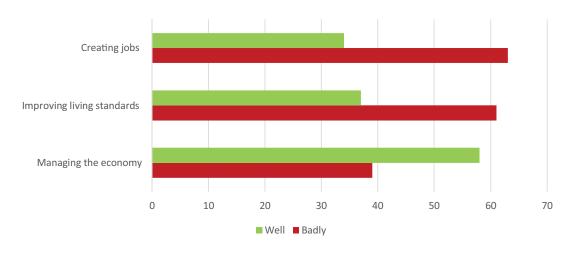


Figure 23: Citizens perceptions on Uganda Government Capacity, % of responses.

Source: Afrobarometer (2015)

Notwithstanding these challenges, recent efforts undertaken by the Uganda government to improve public management efficiency, such as the e-Government Procurement Strategy in

⁵⁸ The major bottlenecks which were singled out relate to budget execution, especially for infrastructure projects, project design and monitoring. 'The decline in the level of efficiency in the utilization of public capital is a cause of significant concern", they noted (op. cit., page 33)

2014, and the Public Financial Management Act in 2015, are signs that things are moving in the right direction.⁵⁹

6.1.2 Improving access to credit for the manufacturing sector

Access to credit is another key constraint for many firms in Uganda, partly because lending interest rates have remained prohibitively high (Republic of Uganda, 2010). The limited access to affordable finance constitutes a major constraint on Ugandan companies' ability to grow and develop new products. In terms of the allocation of credit along sectoral lines, the manufacturing subsector was the second worst performing sector in 2016, receiving only 14 perent of total credit (Figure 24). Within the manufacturing subsector, the largest share goes to *foods and beverages*, receiving 5.4 percent of total credit available (Figure 25).

• Without access to affordable credit the manufacturing subsector will continue to struggle to grow. In light of this, the government has recapitalized the Uganda Development Bank in order to provide improved access to affordable and long-term credit for the development of the manufacturing sector. Despite these efforts, most lending is largely short-term and not suitable for long-term investments needed to develop new products. Even after accounting for inflation, real interest rates remained high relative to other African countries. Through public institutions the government may want to improve access to low-interest loans for strategic local companies. Where the private sector is failing, institutions like the UDC could play a critical role in mobilising financing for local companies. Simultaneously, a more vigorous regulatory framework may be required for the banking sector, which is clearly not playing its part in providing access to finance in strategically important sectors of the economy.⁶⁰

6.1.3 Bridging the skills gap

Over 700,000 Ugandans enter the labour market each year. While government has made significant efforts towards the development of Uganda's workforce to meet the challenges of industrialisation, enterprises still suffer a shortage of critical skills (Republic of Uganda, 2010)⁶¹. The recent review of industrial strategy indicated that some progress has been made with TVET graduates reaching around 42,000 a year. But the current scope of vocational training remains limited to traditional courses like

During her recent visit to the country, IMF Managing Director Christine Lagarde noted that: "The government's focus on overcoming implementation challenges, including through strengthening public investment management, should help ensure that these investments yield the desired outcomes in terms of higher growth and job creation." (IMF, 2017b)

As recent research by Griffith-Jones and Gottschalk (2017) stresses, extremely high spreads between deposit and lending rates, together with difficult access to credit, are common problems for low income countries in Africa. The common culprits suggested by banks to explain these phenomenon include: high transaction costs, a difficult business environment, poor infrastructure services, high salary costs and high default rates. On their own, the authors suggest, none of these explanations is totally convincing. A more forceful policy towards improving banking sector performance may thesefore be required.

⁶¹ Through Universal Primary Education, school enrolment increased from about 7 million pupils in the 1999/2000 academic year to about 11 million in 2012/13 with a net primary enrolment ratio estimated at 82 percent in 2012/13. However, secondary school enrolment ratio remains much lower, at 22 percent which points to a low transition rate from primary to secondary education.

carpentry, civil work masons, and electrical foremen. Ensuring that the labour force has the appropriate skills will increase productivity. Many enterprises in Uganda lack the requisite technical expertise for industry. In addition, Ugandan firms do not compensate for the low level of education and skills by providing significant on-the-job training.⁶²

Figure 24: Share of credit to the private sector 2016 (%)

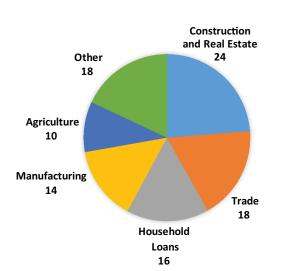
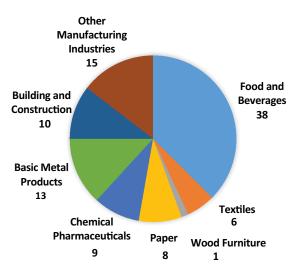


Figure 25: Share of credit to manufacturing sub-sectors, 2016 (%)



Source: Bank of Uganda (2017)

If the economy is to diversify into new and more complex products, specialised new skills will be required (Hausman et al. 2014). Skills development could be focused on nascent industries, where investors receive incentives to train. Research in science, technology, engineering and math (STEM)

based fields are critical in enhancing sectors like energy, transport, light manufacturing and the extractive industries. In Uganda, targeted initiatives are aimed at supporting skills development. For example, the *Millennium Science Initiative*, with a US\$33 million investment aimed at producing more and better-qualified science and engineering graduates, helped increase the number of Ugandan researchers from 158 to 700 between 2007 and 2012 and supported the development of Uganda Industrial Research Institute's activities, e.g. incubation services to new firms (IEG, 2016).⁶³

The Millennium Science Initiative, with a US\$33 million investment aimed at producing more and better-qualified science and engineering graduates, helped increase the number of Ugandan researchers from 158 to 700 between 2007 and 2012

[&]quot;Only one out of three Ugandan manufacturing firms provides training, compared to over 70 percent of firms in Thailand and over 60 percent in Mauritius, suggesting a low level of concern about worker skills" (World Bank, 2009, page 35).

⁶³ The initative is not necessarily a cheap one, however, with the expenditures of the Millenimum Science Initative working out at over USD 55,000 for each additional researcher.

6.1.4 Providing the necessary infrastructure to boost competitiveness

Poor infrastructure renders the industrial sector in general - and manufacturing in particular uncompetitive due to higher transaction costs and delays. Regarding energy infrastructure, Uganda has very low rates of electricity access. An estimated 15 percent of the population nationally (7 percent in rural versus 39 percent in urban areas) have access to electricity. While accessibility stands at 42 percent for the 20 percent with the highest income, it remains at a mere 3 percent for the poorest 20 percent of the population (Trimble and Kojima, 2016). The pace to reach universal access to energy by 2030 will require an average of 670,000 new connections per year, taking into consideration a 56 million forecasted population, while the current rate of new connections to electricity is below 100,000 per year (World Bank, 2016).

Access to electricity is still considered to be the largest obstacle to competitiveness by firms (Figures 26 &27), despite a marked improvement since 2006 (23 percent mentioned electricity access as an obstacle in 2013, compared to 63 percent in 2006). By global standards, Ugandan companies still suffer higher losses than other low-income countries due to power shortages, losses equivalent to 6 percent of annual sales compared to an average of 5 percent for low-income countries. This is despite

Access to electricity is still considered to be the largest obstacle to competitiveness by firms, despite a huge improvement since 2006

the improved delivery of electricity, with firms experiencing fewer and shorter power outages compared to 2006 (the number of power outages in a typical month declined from 11 in 2006 to 6 in 2013). Hausman et al. (2014) show that in 2012 Uganda was already getting the maximum output out of its current electricity consumption levels. This implies that, in order to increase output further, the government should invest in additional energy production capacity. 64

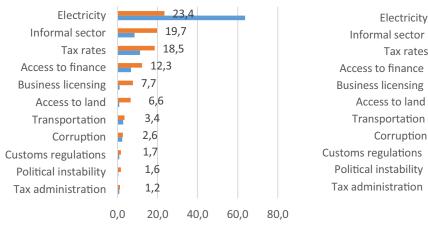
In that sense, it is worth noting that Uganda is among the sub-Saharan African countries which have taken the strongest turn towards energy access and renewable energy, notably through stand-alone home solar systems (Banerjee, 2016). In 2016, Uganda launched a 33 hectares solar power plant in the Eastern region, the biggest of the sub-region. With the completion of the Bujagali dam, energy costs are also expected to fall. The construction of the two additional hydropower plants (Karuma and Isimba dams) would further contribute to cost reductions. Regarding transport infrastructure, in 2016 Uganda was ranked 58 out of 160 countries by the *World Bank Logistics Performance Index* (LPI, 2016), which includes measures like infrastructure and other trade facilitation measures like customs (Table 7). Among the low income countries, Uganda was ranked the top performer partly because of the increased efficiency in clearance procedures at the border. These rapid improvements have been achieved through

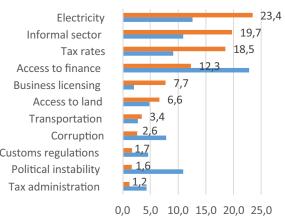
According to the background budget 2017/18, the cost of accessing energy remains comparatively high for end users. The average generation tariff in 2016, was US 11 cents. Between 2016-17, the end user tariff increased from USH 621 to 696 per kilowatt hour. The government is working to come up with solutions including waiving corporate income tax of at least USH 96 billion (USD 28 million) per year beyond June 2017 to reduce the price of electricity produced by the hydro project. This is expected to reduce price by 3.1 cents per kWh. Industries are being encouraged to consume more electricity from Bujagali.

regional efforts by countries in the northern corridor that links Burundi, Rwanda, and Uganda with the port of Mombasa in Kenya.

Figure 26: Ranking of Top Business Environment Obstacles for Ugandan Firms 2006 vs. 2013

Figure 27: Ranking of Top Business Environment Obstacles for Ugandan Firms vs. SSA average (2013)





Source: World Bank (2017)

Table 7: Logistics performance Index (2016)

	LPI Rank	LPI Score	Customs rank	Customs index	Infrastructure rank	Infrastructure index
Kenya	42	3.33	39	3.17	42	3.21
Uganda	58	3.04	51	2.97	67	2.74
Tanzania	61	2.99	60	2.78	60	2.81
Rwanda	62	2.99	52	2.93	76	2.62
Ethiopia	126	2.38	80	2.6	133	2.12

Source: World Bank (2016)

Over the past eight years, infrastructure improvement has been the priority of the government, which has invested heavily in airport infrastructure, upgrading road networks (in particular the Northern and Central Corridors), and railway lines in partnership with Kenya. Over the next five years, \$9 billion is budgeted for major infrastructure projects, including the rehabilitation of Entebbe airport, the construction of highways to Entebbe and Jinja, the SGR project, the setting up of an oil refinery and three hydropower dams (World Bank, 2016). It is however essential to improve the efficiency of those investments in order to benefit directly to the manufacturing sector.

6.1.5 Prioritizing innovation and technology

Uganda does not currently have sufficient productive capabilities to produce high and medium technology exports. The continual emergence of new technologies creates opportunities for Ugandan firms to enhance their competitiveness and improve on existing production models and techniques. Along with these opportunities come challenges. Continuous global technological

shifts require a greater priority on innovation and a more adaptive Ugandan industry. However, given the current level of technological uncertainty and the credit constraints discussed in the early sections, firms might resist or delay change- change that is necessary to compete globally. Prioritizing innovation would require greater efforts in research and development (R&D).

Over the past eight years, infrastructure improvement has been the priority of the government, which has invested heavily in airport infrastructure, upgrading road networks (in particular the Northern and Central Corridors), and railway lines in partnership with Kenya.

Under the National Development Plan (2010/11 - 2014/15), innovation has been identified as a key area for public investment. However, the government has not yet heavily funded the sector. Data on R&D expenditures and personnel show Uganda performing fairly poorly (Figure 28). It is important that innovation is geared towards strategic industries - for example light manufacturing- which could have the potential to create more productive jobs. Despite the multiple supply-side constraints, some companies have managed to overcome them and expand successfully. Useful lessons on how to scale up manufacturing activities could be learned from firms such as Cipla Quality Chemicals (Box 3), which harnessed partnerships and collaborations effectively to enhance its product development.

Researchers per million people R&D Expenditure as a share of GDP, % Madagascar 0,11 Madagascar Burundi 0,14 Ethiopia 42 Ethiopia 0,24 35 Tanzania Tanzania 0,38 Uganda Uganda 0,48 Kenya 231 Kenya 0,79 0 50 100 150 250 200 0 0,2 0,4 0,6 0,8

Figure 28: R&D Expenditure and Personnel, 2010

Source: UNESCO (2016)

Box 3: Manufacturing and Structural transformation: the case of Cipla Quality Chemicals

In 2015, CIPLA Quality Chemicals was ranked on the list of 70 largest firms in East Africa.¹ It was the only pharmaceutical company on the list, making it the biggest in the sub region and the biggest manufacturing company in Uganda. The success of Quality Chemicals makes it a relevant case study for structural transformation, particularly as it is not a natural resource-based company (the majority of large manufacturing firms in the sub-region are resource-based) but an innovation-based company. The company's success can be attributed to the following factors: success in attracting foreign direct investment; strong linkages with local universities; the ability to capitalize on government procurement policies; expansion into regional markets; and utilization of the policy space created by exemptions from the restrictions of the World Trade Organization.

Foreign direct Investment and technology transfer: Initially, Quality Chemicals was a distributor for medicinal products produced by Cipla (an Indian generic drug manufacturer). It then formed a joint venture with Cipla in 2007, and a new plant based in Kampala began production of two antiretroviral combinations and one anti-malarial drug. As a condition for the joint venture, Quality Chemicals received a significant amount of technology transfer from Cipla. Technology was transferred to support the local production of antiretroviral and anti-malarial medicines. (UNCTAD, 2011, p.8).

Creating linkages with national universities: The lack of trained chemists and pharmacists was a problem for Quality Chemicals because the company could not find enough skilled workers for its plant. It formed a partnership with the University of Makerere's medical and pharmacy schools and the chemistry department to generate more awareness among university professors regarding the type of training needed for graduates wanting to enter the pharmaceutical manufacturing industry (UNCTAD, 2011, p.285).

Regional integration: Quality Chemicals has taken advantage of regional integration to expand the market for its products. For example, in 2012 the Ugandan government signed a memorandum of understanding with the Kenyan government to export antiretroviral and anti-malarial drugs, a deal worth U\$ 60million annually (Parliament of Uganda, 2012, p.7).

Government procurement policy: The national drug policy of Uganda supports the local drug industry by encouraging the procurement of locally produced essential drugs. The policy seeks to encourage local pharmaceutical companies to produce essential drugs (UNCTAD, 2011, p.287).

Exploiting the available policy space: As a least developed country, Uganda was exempted (until 2016) from the WTO's *Agreement on Trade-Related Aspects of Intellectual Property Rights*, which created the necessary policy space for Quality Chemicals to thrive because it was able to produce generic drugs. Other developing countries including India were only exempt for 10 years (up to 2005) and this was probably one of the incentives for the Indian company Cipla to form a joint venture. Going forward, however, the expiry of the country's exemption from the Agreement on Trade-Related Aspects of Intellectual Property Rights represents a serious threat for Quality Chemicals.

6.1.6 And the Role of Foreign Investors? FDI into Manufacturing

As the aforementioned example of CIPLA Quality Chemicals shows, attracting more FDI can form part of strategy to address technological backwardness. For low-income countries, FDI is often an important part of a strategy for transferring knowledge about foreign production techniques, overseas markets, and international supply chains (Spence 2008). Over the past fifteen years, Uganda has done quite well in attracting increasing amounts of FDI, rising from USD 181 million in 2000 to USD 1.1 billion in 2015. The stock of FDI has correspondingly increased from just USD 807 million in 2000 to USD 10.8 billion in 2015 (Figure 29 and 30). However, as noted earlier with regard to Chinese FDI inflows, the sectoral spread of investment does not seem in line with the government's objectives regarding the industrialisation of the economy. According to 2014 data on the cumulative stock of FDI, the top sectors were *mining* and *finance* with contributions of 60.8 percent and 11.2 percent, respectively. Manufacturing was responsible for just 8.9 percent of the investment stock (Figure 31).

Figure 29: Uganda FDI inflows USD, billions and share of EAC

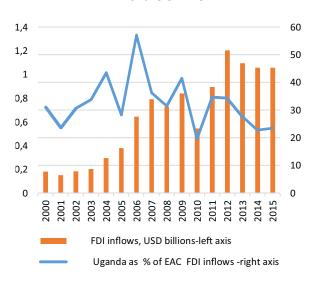
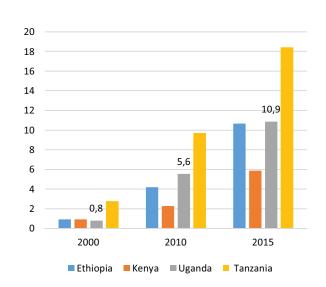


Figure 30: FDI inward stock (USD, billions)



Source: UNCTAD (2016)

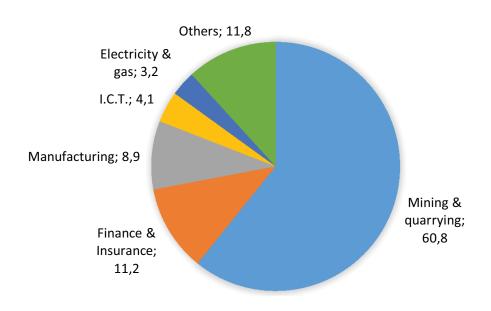


Figure 31: Sector Distribution of Foreign Direct Investment 2014 (stock, percent)

Source: Bank of Uganda (2016)

Given the low levels of manufacturing activity, attracting more FDI offers one route to boosting the sector. The pre-conditions to do this are much discussed in the literature. Multinational corporations generally select locations for investment according to variances in a 'wish list' that create an overall 'attractive' investment climate, namely: (i) political and economic stability; (ii) an 'amenable' regulatory environment; (iii) adequate infrastructure; (iv) a plentiful supply of skiiled and/or unskilled labour; (v) the availability of banking/finance services; (vi) a generally welcoming attitude on the part of government and (vii) the overall quality of life (Bartels et al., 2013). This is clearly a long 'wish-list', and few countries in the world perform well in all dimensions.

Econometric studies specifically on the determinants in the African context usually stress how market-led FDI is rare. For instance, in a couple of widely-cited studies, Asiedu (2004 and 2006) notes that the determinants of FDI inflows to Africa are inherently related to natural resource

endowments and also the quality of governance, with the implication that market-seeking investment is less relevant for Africa. However, in the time that has elapsed since Asiedu's studies, and with the strong growth of Eastern African economies over the last decade, one can assume that market-related determinants are of increasing importance to investors.

The distribution of FDI has been heavily skewed towards the mining sector, and arguably has done little to further the goals of structural transformation

Where the market conditions are ripe, FDI has indeed been highly responsive to opportunities. For instance, the East African alcoholic beverage sector is dominated by foreign investments from

European investors (SAB Miller, Heineken, etc.). Likewise, in telecommunications and finance, intra-African investments have been significant (MTN, Ecobank, Access Bank). Shifting the interest of foreign investors towards other strategic sectors within manufacturing should therefore not be seen as an impossible task. But it would require a more focused policy with regards to the types of FDI which are attracted. The sectoral structure of FDI inflows into Uganda can be improved by putting in place targeted government policy to attract more labour-intensive FDI. In particular, there is a huge potential for boosting China's FDI in manufacturing sectors such as footwear and electronics (Lin and Xu, 2016:28). The Ethiopian case which is disussed in the following section shows how this could be possible.

7. The Importance of Peer-Learning in Industrial Policy.

7.1 Some Basic Principles for Effective Industrial Policy

There is an acute awareness across the continent that good policy depends not only on the making the policies, but implemented. Clearly, successful industrial policy must be customized and supported by an effective, flexible and pragmatic government. It also requires an appetite for risk and a willingness to learn-by-doing. This section discusses both what came be gleaned from the now extensive literature on industrial policy, and also, more specifically, from what could be categorized as one of the most ambitious and, to date, successful examples of industrial policy in the sub-region – Ethiopia.

From a review of the literature⁶⁵, a number of common prescriptions emerge to developing an effective industrial policy – ones which frequently depart from the conventional wisdom:

- 1. There should be clear benchmarks/criteria for success and failure. Industrial policy is a necessarily experimental process. It is the nature of entrepreneurship that not all investments in new activities will pay off. And not all promotion efforts will be successful. But in the absence of a clear idea of what constitutes success and observable criteria for monitoring it, failures can get entrenched. Such criteria should be known by all and applied evenly, for specific time periods (Rodrik, 2007). Ideally, the criteria for success should depend on productivity improvements and not just on employment creation or output. Performance in international markets (i.e., export levels) can also be a good indicator, as it provides a good proximate way of gauging how the industry is doing relative to international competitors.
- 2. The authority for carrying out industrial policies must be vested in agencies with demonstrated competence. Bureaucratic competence varies greatly among different agencies even within the same country, and most countries have some pockets of bureaucratic competence. It is preferable to lodge promotion activities in such agencies instead of creating new agencies from

Effective industrial policy requires a certain degree of autonomy for the bureaucratic agencies implementing it. But autonomy does not and should not mean a lack of accountability.

scratch or using existing ones with poor track records. The implementing agencies must be monitored closely by a 'principal' 66 with a clear stake in the outcomes and who has po-

⁶⁵ See, inter alia, Rodrik (2007), Rodrik, Page and Soderbom (2012), Sen and de Velde (2012), Chang (2008), and Altenburg and Lutkenhorst (2015).

This refers to the 'principal-agent' problem in economics, whereby a person or an entity (the "agent") is able to make decisions on behalf of, or that impact, another person or entity (the "principal"), and the agent is motivated to act in their own best interests, contrary to those of their principals. Common examples include the differences of interest between the corporate management (agent) and shareholders (principal) of a firm, or between politicians (agents) and their voters (principals).

With the strong growth of Eastern African economies over the last decade, one can assume that market-related determinants are of increasing importance to investors. Where the market conditions are ripe, FDI has indeed been highly responsive to opportunities

litical authority at the highest level. Such monitoring guards not only against self-interested behaviour on the part of the agencies, but also helps protect the agencies from capture by private interests.

3. Activities that are subsidized must have the clear potential of providing spill overs and demonstration effects. There is no reason to provide public support to an activity unless that activity has the

potential to crowd in other complementary investments or generate informational or technological spill overs. Public support must be contingent on an analysis of this sort. Moreover, activities that are supported should be structured in such a way to maximize the spill overs to subsequent entrants and rivals.

- 4. The agencies carrying out promotion often maintain channels of communication with the private sector. Governments still tend to have a paternalistic and 'command and control' attitude towards the business sector, rather than adopting a facilitating role (Altenburg and Lutkenhorst, 2015:158). Autonomy and insulation in policy making do not mean that bureaucrats must maintain arms' length relationships with entrepreneurs and investors. Ongoing contacts and communication are important so as to allow public officials to have good information on business realities, without which sound decisionmaking would be impossible.
- 5. "For a Booming Economy, Bet on High Growth Firms, Not Small Businesses." A tendency exists among many incentive programs to subsidize small and medium sized enterprises (SMEs). But SME support policies are based on the criterion of size—not on whether the activity in question has the potential to spawn new areas of specialization. It is the latter that produces economic growth. While it is true that small firms create about half of new jobs in Africa, they also have higher failure rates (Page and Soderbom, 2012). The contem-

The contemporary emphasis by the donor community and policymakers on the importance of small firms as creators of employment opportunities may be exaggerated.

porary emphasis by the donor community and policy-makers on the importance of small firms as creators of employment opportunities may thus be exaggerated. As noted earlier, Uganda in particular suffers from the consequences of not having sufficiently large firms in the major industrial sectors. In order to create more "good quality" jobs, financial support should target the constraints to the growth of firms of all sizes, and not just those impacting on small and medium sized enterprises.

7.2 The Ethiopian Experience – Accelerated growth in manufacturing against a backdrop of multiple constraints

Economic history and experience shows a strong and inextricable link between an effective state and industrial growth. The major developing economies of the past five decades- Brazil, India and South Korea - are a testimony to this (Kohli, 2014). But for contemporary lessons on industrial policy, Uganda does not need to look far. Albeit from a low base, Ethiopia has experienced some impressive growth of its manufacturing sector. Over the period 2000-2015, the average growth rate in Ethiopia's manufacturing value-added was 9.6 percent, exceeding the performance of Vietnam (a much vaunted example of rapid developmental progress), and more than double the averages for the EAC and Sub-Saharan Africa (Figure 32).

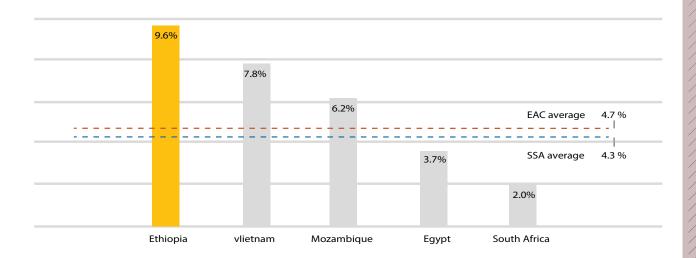


Figure 32: Manufacturing sector average annual growth rate (2000-2015)

Source: UNIDO (2017)

In some senses, it might seem strange to cite Ethiopia as a comparator for Uganda. Currently, Ethiopia's manufacturing sector still only represents 4 percent of GDP, and manufacturing value

At the core of Ethiopia's success is a strong state role in crafting an industrial policy that is deliberate and focused

added per capita is just 18 dollars, compared with 9 percent of GDP and 61 dollars, respectively, for Uganda. Major industries in Ethiopia still remain labour intensive with low value-added. However, it is the scale and rate of change which is so remarkable. Despite possessing one of the lowest per capita incomes in the world, the Ethiopian economy has performed strongly since 2004, sustaining

double-digit growth for 12 out of the last 15 years. The developmental objectives, encapsulated in its *Agricultural Development-Led Industrialisation* (ADLI) strategy, are among the most ambitious in Africa.

Since the early 2000's, ADLI and its sister *Industrial Development Strategy* (IDS) have guided policy to achieve those goals. The IDS has been operationalised through five-year development plans: the *Sustainable Development and Poverty Reduction Program* (SDPRDP, 2002-2005), the *Plan for Accelerated and Sustained Development to End Poverty* (PASDEP, 2005-2010), the *Growth and Transformation Program* (GTP, 2010-2015) and the current second round of the *Growth and Transformation Program* (GTP2, 2015/16-2019/20). While the first development plan gave greater emphasis to smallholder agriculture, in the second and third development plans there has been an increased focus on urban and industrial sector development policy (Oqubay, 2015).

IDS went against traditional thinking in a number of ways. Not only was its formulation mainly state driven but the strategy, in its final form, placed the State at the centre of the country's industrial policy. It moved away from conventional wisdom of comparative advantage and focused on creating robust linkages between its dominant agricultural sector and industry, with small enterprises, export and labour-intensive sectors at the centre. Taking advantage of abundant supplies of labour, and in the face of pressures to produce sufficient job opportunities for the 2-2.5 million new entrants into the job market each year, the Ethiopian government has made strenuous efforts to implement its vision of industrial development.

Ethiopia has simultaneously committed strongly to an 'FDI-dependent strategy' whereby foreign firms play a major role in terms of job creation and, crucially, providing technological upgrading and managerial capacity...

Government officials are at pains to stress that, even with a larger state role, the IDS has continued to recognize the role of the private sector as an engine in the industrialisation process. Although the Ethiopian state has been active in developing the industrial sector, it is mainly composed of private sector actors - both domestically and foreign-owned firms. Ownership shares vary by sector. While the banking, food and leather industries are mostly domes-

tically-owned, the floriculture⁶⁷ and beverage industries are mostly foreign-owned. The state has not relinquished its role in strategic sectors, however, and continues to control assets in capital intensive industries like sugar, cement and infrastructure, as well as the financial and utilities sectors. ⁶⁸ Indeed, direct public involvement has intensified under the GTP. The government has established two new state corporations: *Metal and Engineering Corporation* and *Sugar Corporation*. The

In 2012, the floricultural sector had sixty-nine firms, all privately owned. Foreign firms accounted for 63 percent while domestically owned firms account for the 26 percent and the remaining seven firms were jointly owned. (Oqubay, 2015).

While there have been repeated calls from IFIs for the liberalisation (and privatization) of the telecommunications sector, this is considered by the government as the 'cash-cow' with which much of the industrial policy is financed.

government has also stepped up its involvement in the textile, garment accessories, rubber tree production, coal phosphate fertilizer, cement factory, ceramics, pulp and paper.

That said, in implementing its vision of industrial development, Ethiopia has simultaneously committed strongly to an 'FDI-dependent strategy' whereby foreign firms play a major role in terms of job creation and, crucially, providing technological upgrading and managerial capacity, particularly with regard to export industries. Such a strategy has been used in other 'late industrialisers' — countries such as China and Vietnam which have used foreign investment not so much for the financial contribution the investment makes, but rather to facilitate a more rapid assimilation of foreign technologies and modern managerial practices. However, the advantages of FDI are far from automatic and depend on mediating characteristics of the domestic economy (UNIDO, 2016:99). Ethiopia is currently making strenuous efforts to reap the maximum benefit from FDI, which reached USD 3.2 billion in 2016, the largest inflow in Eastern Africa. However, in the face of low domestic productive capacities, it remains to be seen the extent to which the broader economy will benefit from the strategy.⁶⁹ It needs stressing that FDI has to be paid for, too, in terms of the repatriation of profits and fully taking into account the fiscal concessions and the cost of infrastructure provision. The long term balance of costs and benefits is thus complex.

There are a number of tangible and impressive achievements to point to from the implementation of IDS policies. Over the last decade Ethiopia has developed thriving leather, floriculture and cement industries, with plans in the pipeline to increase the number of industrial hubs. In countries with poor infrastructure and challenging business environments, it makes sense to promote spe-

cial economic zones or industrial parks which can be used to overcome barriers to firm entry, attract FDI and encourage industrial clusters (Lin and Xu, 2016). In other words, they can be used to tackle, in a geographically confined space, some of the principle bottlenecks to industrial development, rather than trying to improve the business environment for the whole country.

Industrial parks in Ethiopia are pursued with three intertwined objectives, namely, employment creation, foreign exchange generation and technology and skill transfer. In 2016 alone, the country opened no less than three industrial parks.

Industrial parks in Ethiopia are pursued with three intertwined objectives, namely, employment creation, foreign exchange generation and technology and skill transfer. In 2016 alone, the country opened no less than three industrial parks. The Hawassa Industrial Park, for instance, is a 300-hectare industrial park focused on textile and garment production. Officially inaugurated in July 2016, eighteen companies have already started operations in the industrial park and, six of them are presently exporting their products to the global market. Once operational at its full potential, the

⁶⁹ A recent analysis by Abebe et. al. (2017) suggests that total factor productivity in domestically-owned plants in Ethiopia is (a rather modest) 16 percent higher in districts that have attracted a large greenfield plant. However, even that study was carried out on relatively old data (from 2010), and would expect much larger positive impacts on the basis of more recent data.

park is expected to generate \$1 billion annually, mainly from textile and garment sector. The park is principally powered using renewable energy and is estimated to create about 60,000 jobs.⁷⁰ Two other industrial parks were recently opened in the northern part of the country with employment potential of 20, 000 each. Given the state of development of Uganda's industrial parks, there are some useful lessons to be gleaned from the Ethiopian experience.

To entice the private sector, the Ethiopian government has, in some cases, provided full exemption from duties on imports of all investment capital goods and raw materials as well as tax holidays on profit for five years. Recognizing the need for stronger human capital, the government also established the *Engineering Capacity Building Program* (ECBP) to improve workforce capacity. The ECBP targets four key areas: university reform, technical and vocational education and training (TVET) reform, quality assurance infrastructure reform, and private sector development (Gebreeyesus, 2015).

Ethiopia's experience holds lessons about harnessing linkages to boost industrial growth. Part of the challenge and the recipe for success is to know which linkages are most important for a specific industry

Ethiopia's experience holds lessons about harnessing linkages to boost industrial growth. Part of the challenge and the recipe for success is to know which linkages are most important for a specific industry. Ethiopia's floricultural sector benefited tremendously from state supported upstream linkages that strengthened cold storage facilities and air service logistics using the Ethiopian airline- a publicly owned company.

The late President, Meles Zenawi, recognised the new activity as an important contributor to export-led growth and engaged personally to remove any hurdles to the sector's development, by, for example, setting land aside for new farm projects, providing fiscal incentives, and ensuring that Ethiopian Airlines offered lower freight tariffs. With these conditions in place, the industry evolved favourably. By 2014 about 120 farms accounted for the country's USD245 million exports. Most firms are foreign investors, but about one third are Ethiopian companies that succeeded in emulating the pioneering investor's business model (Alternburg and Lutkenhorst, 2015:115).

Similarly, the cement industry⁷¹ benefitted from the boom in the construction sector, once again with the support of the government. Government industrial policy in the cement industry changed from providing incentives to investors by way of tax holidays in the early stages to facilitating access to factory land and quarries for limestone, gypsum, clay and pumice in the later stages. More importantly, the government provided indispensable support to the industry by facilitating a favourable tariff for electricity - as low as US\$ 0.043 per kilowatt hour in 2008, as compared to an average of 0.46 in sub-Saharan Africa.⁷² In addition to these measures, the government success-

Hawassa industrial park will closely collaborate with Hawassa University and will benefit from the proposed extension of the Addis-Adama highway and Addis-Modjo-Djibouti railway. Construction of a new domestic airport in Hawassa commenced in 2015.

⁷¹ In Ethiopia, domestically owned firms continue to dominate the cement industry, as opposed to other African countries case where multinationals play significant role.

Oqubay (2015). The tariff has fallen further recently, down to 0.039 per KWH. The World Bank (2016) has actually criticized these low tariffs, as it believes it disincentivises investment in the sector.

fully used financing instruments to support the industry through loans through its Development Bank, and co-financing from the government-owned Ethiopian Commercial Bank.

Box 4: Institutional Reform at the Ethiopian Investment Commission

While many countries in the region have now established 'one-stop shops' to facilitate the issuing of licenses and permits to enable foreign companies to operate in a country, the recent reforms at the Ethiopian Investment Commission are intended to move away from the permission-granting mind-set to one in which the agency's central goal is to increase the number of jobs created in the country. This implies removing all inappropriate and unnecessary obstacles that stand in the way of this achievement. Given the competitive global environment for greenfield FDI, attracting new firms is always hard. But it is equally important to ensure that existing FDI projects are not hampered in their operations. This raises the chances that they will succeed and expand, creating further jobs. Following the best practice international model, pioneered by countries like Finland, Ireland, and Singapore, the aim of the reform process at the Ethiopian Investment Commission has been to embed the concept of 'relationship building' with companies. Each company identified as a potentially significant employment creator is assigned a single contact person at the investment agency, whose job it is to remain up-to-date on the events at the company that are relevant to the agency. Each sectoral group is led by an individual who compiles weekly updating reports on companies and issues in his or her sector. The programme now covers over 400 firms, and has significantly increased the responsiveness of government authorities to the needs of investors.

Source: Sutton (2017)

The leather industry is another example of how Ethiopia's above mentioned state-led strategies have laid institutional foundations for growth- but also the extent to which the effective implementation of strategy has at times been difficult. In the leather industry, linkage effects have not been clear cut. A large livestock industry should provide Ethiopia with a comparative advantage

in leather. However, the industry still faces difficulties in procuring hide. Despite a large number of livestock, the livestock industry is not fully commercialized. With global competitiveness in mind, during the last two decades a range of fiscal incentives and supply-side measures were provided to build the necessary capabilities, including the formation of the *Leather Industry Development Institute* for research, standard-setting and consultancy. Foreign investment was initially prohibited and the export of unpro-

Getting the trade-offs right, in terms of the balance between national, foreign, public or private ownership, has been a major challenge, with frequent criticisms being raised about the close-relationship between the State and the leading national conglomerates

cessed hides banned to encourage local value addition. However, the measures met with only partial success. Actual exports fell far short of the government's target to generate US\$500 million from the export of leather products by the end of 2015, with the bulk (360 million) supposed to

be coming from leather shoes. Shoe exports remained at a marginal level of around 70 million per year, accounting for only 0.3 percent of Ethiopia's exports (Alternburg and Lutkenhorst, 2015:114).

From the above narrative it is clear that challenges facing industrial development vary from sub-sector to sub-sector; and so too did the response of the government to those challenges. However, a common factor has been sufficient institutional capacity to respond adequately to each challenge, based on the analysis of the situation, the participation of the concerned actors, and the transparency in decision-making. To be sure, like Uganda, the Ethiopian government has often received considerable criticism over some aspects of its industrial policy. Not all have been justified, however. For instance, the government's refusal to consider privatising Ethiopian Telecommunications Corporation is essentially due to the fact ETC is the cash-cow that allows the government to finance the development of its industrial parks.⁷³

Getting the trade-offs right, in terms of the balance between national, foreign, public or private ownership, has been a major challenge, with frequent criticisms being raised about the close-relationship between the State and the leading national conglomerates. Since the 1990s, four endowment conglomerates have emerged: the most important of which being the Endowment Fund for the Rehabilitation of Tigray (EFFORT). As Kelsall (2013:112) notes, "the first thing to note about these companies is that some operate in highly profitable, not terribly risky areas. For example, Guna trading house imports and exports seeds, pulses, fertiliser and other key commodities, while trans-Ethiopia operates a large truck fleet. EFFORT is able to use the profits generated in these reliable money spinners to subsidise some of the risk investments, which are also assisted through subcontracting."

Avoiding the common pitfalls in 'FDI-led industrialisation' is another major challenge for government authorities, above all in terms of not undermining tax revenues too much, or falling into a regional 'race-to-the-bottom' whereby neighbouring countries react with even more generous offers of tax relief or concessions. Certainly, some of the concessions to foreign firms have been extremely generous. But this may be justified if the scale of the spill-overs is large. The government has certainly been responsive to its foreign investors, and recently reformed the Ethiopian Investment Commission to make sure that problems are addressed efficiently and rapidly (Box 4).

To sum up, effective industrial policy is clearly a process of trial and error. How well government authorities respond to the challenges that will inevitably arise to a large extent determines whether the overall policy will be a success or a failure. Ethiopia has certainly had to contend to some major challenges in the implementation of its industrial policy. At the moment, at the forefront of those is the civil unrest which has impacted parts of the country - a *State of Emergency* was called in October 2017, and was only lifted in August 2017. This has no doubt impacted negatively on the roll out and completion of some of the industrial projects, and is an important reminder of the fact that implementing industrial policy in the context of any low income country is never an easy task. Particularly when the buy-in of foreign investors is crucial to its success, governments need to be prepared to face any contingencies and guarantee long-term peace and stability.

Personal communication with Arkebe Oqubay, April 2017

One sign of this is that Ethiopia earned just \$436.73 million from the manufacturing sector exports in the Ethiopian fiscal year 2016/17 that ended on the 8th July, meeting only 47.8 per cent target of the \$913.66 million projected earlier. http://www.newtimes.co.rw/section/read/217755/

8. Conclusions

The objective of this study has been modest, in terms of identifying the key achievements, bottlenecks and challenges to Ugandan industrial performance. It does not purport to provide a roadmap or framework for improving industrial policy implementation. Rather, we hope this study sets the scene for more in depth discussions amongst policymakers, the academic world, the private sector and other stakeholders about what needs to be done to improve the effectiveness of Uganda's industrial policy.

Our principal arguments are straightforward: Despite its low income status, the Ugandan economy has shown resilience in the face of a difficult international context. The country is also currently undergoing a rapid process of structural transformation. However, the pace of that transformation has slowed down in recent years, and has not created sufficient employment opportunities to sustain inclusive growth and build on the impressive results in poverty reduction achieved in past decades.

As both the national industrial policy and strategic plan will have to be reframed before 2018, the Ugandan government will need to focus on improving its capacity to design and implement economic policies.

One of the major reasons for these setbacks is that the manufacturing sector has not played a sufficiently protagonist role in the ongoing process of structural transformation. Moreover, persistent structural bottlenecks have resulted in a slow-down in productivity growth. Competitiveness has consequently been lagging. This study argues that the binding constraint has been in policy implementation.

All this implies that a stronger manufacturing sector is unlikely to emerge 'spontaneously'. To address the aforementioned constraints, Uganda should adopt a more purposeful 'industrial policy'. This would require more effective interventions in a host of areas to support the manufacturing sector better: among them, catalyzing the development of the industrial parks; cajoling the banking sector into lending more to the sector, as well as using the development bank more effectively; elaborating partnerships with other EAC member states to develop regional value-chains and industries, in sectors like automobiles,

A stronger manufacturing sector is unlikely to emerge 'spontaneously'. To address the aforementioned constraints, Uganda should adopt a more purposeful 'industrial policy'.

pharmaceuticals, and textiles; and revising trade policy and the Common External Tariff so that they support better regional industrialisation efforts. We also recommend vigilance with regard to entering into new trade agreements with other regional blocks that could compromise efforts to industrialise the region.

Finally, as both the national industrial policy and the strategic plan will have to be reframed before 2018, the Ugandan government will need to focus on improving its capacity in designing and implementing economic policies. It should identify targeted actions and projects to boost the manufacturing sector and facilitate its diversification into higher value-added processes. Learning the right lessons from peers – such as the experience outlined here of Ethiopia – would definitely help elaborate a more effective industrial policy.

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