

# Zimbabwe: Possibilities for Manufactured Exports

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## Contents

<b>Zimbabwe: Possibilities for Manufactured Exports</b> .....	1
Introduction .....	1
1    Snapshot of exports and imports.....	1
2    Case for diversification in Manufacturing.....	2
3    Identifying Potential Exports.....	3
A.    Data and Methodology .....	3
B.    Manufacturing Possibilities in Traditional Export Sectors .....	4
C.    New Manufactured Export Possibilities in Emerging and Disappearing exports.....	7
D.    New Manufactured Export Possibilities in Import-Competing industries .....	10
4    Constraints to Growth in Zimbabwe’s Manufacturing Sector .....	12
4.1    Practices of the Informal Sector .....	14
Access to Finance .....	16
Political Instability .....	17
5    A Policy Framework to Facilitate Export Diversification .....	17
6    Future directions.....	19
7    References .....	20

## Zimbabwe: Possibilities for Manufactured Exports

### Introduction

The objective of this short Note is to provide a first cut at identifying the potential for manufacturing as an input to DFID's ongoing Country Diagnostic work for Zimbabwe. The Note also identifies the general constraints to manufacturing as identified during a survey by local and foreign firms. While these are useful in informing the policymakers priorities, this Note also underscores that typically, as in most developing countries, there are also several critical subsector-specific constraints to manufacturing. While the Note points to the general principles of a smart strategy that has proven useful in enabling policymakers to jumpstart a nascent manufacturing sector in an economy like Zimbabwe, it does not pinpoint sector-specific constraints or their solutions. The latter requires comprehensive fieldwork and analysis, both of which are beyond the scope of this Note.

In the first section of this Note, we present a snapshot of Zimbabwe's exports and import basket today. In the second section, we present the methodology used to analyse its manufactured exports and delineate the traditional exports to gauge its diversity and potential. Using a variety of methods, we also explore Zimbabwe's manufacturing potential in the context of its natural resource base and large, relatively low-skilled labour force. We identify a list of manufacturing subsectors, many of which are relatively low-hanging fruit. The third section examines the constraints to manufacturing as reported and perceived by firms. Section four concludes with a summary of the general principles that can enable policymakers to jumpstart light manufacturing when the constraints are numerous, economy-wide and seemingly difficult to resolve in a reasonable period. It is evidence-based.

### 1 Snapshot of exports and imports

A snapshot at Zimbabwe's current export basket illustrates that more than 80 percent of its contents are comprised of metals, minerals and tobacco (Figure 1). The remaining contain a large number of agricultural products. The share of manufactures is relatively small at less than 20 percent. Zimbabwe's imports cover a large variety of subsectors including agricultural cereals like maize, rice and other food crops, electricity, and manufactures such as car, other transport equipment, chemicals, electronics, equipment and other consumer goods.



Development Indicators, 2016). Today, only Haiti and 17 Sub-Saharan African countries are poorer than Zimbabwe.

Agriculture's potential to absorb large numbers of poor is well known. In the absence of other viable sources of good jobs, the informal services sectors such as trading also employ large numbers of unemployed, especially in urban areas. Yet, neither agriculture nor informal trading creates better-paying and productive jobs. In contrast, light manufacturing has a track record to create large numbers of low-skilled, better-paying jobs in even the poorest countries. Asian countries leveraged it to create good jobs, accelerate exports and growth and catch-up with more developed countries. Current examples of success in Sub-Saharan Africa include Ethiopia's leather footwear export industry that evolved in 2012, pockets of light manufacturing in the Great Lakes countries, and Lesotho's garment industry. The garment industry transformed a small country of less than 2.5 million into one of Africa's largest garment exporters to the U.S. at a time when wages in Mauritius, the largest Africa's garment exporter, were eroding its competitive edge.

Fortunately, Zimbabwe's economy has diverse natural endowments that range from a large variety of agricultural crops, livestock, and minerals and metals. These provide rich raw materials for manufacturing. Its light and heavy-industries already produce small amounts of manufactured exports which, despite fragility and conflict, have declined, but not disappeared. In a nutshell, compared to most other Sub-Saharan countries, Zimbabwe is endowed with the basic building blocks of a diverse industrial economy. Its policymakers need to give its manufacturing sector a chance to propel inclusive growth by scaling up its existing industries and tapping into potential industries.

### 3 Identifying Potential Exports

#### A. Data and Methodology

We focus exclusively on diversification opportunities in manufacturing subsectors by drawing on trade data (UN COMTRADE SITC2 4-digit). Ideally, this analysis should be conducted with production data but due to its unavailability, we study only the set of tradable subsectors, i.e. exports and imports. Unlike the previous section where Figure 1 presents the full set of Zimbabwe's exports, we limit our focus in this section to manufactured export subsectors as per the formal definition (World Development Indicators) which refers to SITC codes 5 – 8 excluding 68, as well as by subsectors that use available raw materials such as alloys or processed metals and minerals, or agricultural commodities to manufacture simple products for consumers and producers. In the broader search for potential exports, we also consider nascent manufacturing subsectors which include subsectors in which Zimbabwe had a comparative advantage in the past.

Our approach to identifying potential exports also focuses on import-competing subsectors. The data for this exercise is also drawn from UN COMTRADE at the SITC2 4-digit level. Given its small share in the economy, it would be unrealistic to expect that Zimbabwe can leap immediately from newly developed manufacturing subsectors into a global exporter. Most countries have followed the learning-by-doing route to exporting. Hence, the subsectors we identify are intended to support both export sectors as

well as the larger domestic market where many products also compete with imports. It is hoped that by producing for the domestic market, Zimbabwean firms will learn to compete and eventually export globally.

### *Revealed Comparative Advantage*

How might policy makers determine whether the products of their country reflect a comparative advantage? If a country's products are being successfully exported to global markets or are beating out imports in domestic markets with no government help, the country is sure to have a comparative advantage in these products. Similarly, if, without heavy government subsidies, an industry producing exports is attracting a growing amount of foreign direct investment (FDI), the country has a comparative advantage in those goods as well. Foreign direct investors have a keen sense of what countries produce that is competitive on international markets. For existing products, the concept of revealed comparative advantage (RCA) can be used to pinpoint industries in which increased production could accelerate overall industrialization. This is a traditional method based on a country's trade data. The RCA based on trade data can be determined either quantitatively using the Balassa index, after Balassa (1965),<sup>2</sup> or qualitatively through the inspection of detailed import data.

## **B. Manufacturing Possibilities in Traditional Export Sectors**

Instead of diversification in manufactures, the stronghold of Zimbabwe's traditional export subsectors, defined in this Note as sectors in which it had a consistent comparative advantage ( $RCA = 1$  implies an  $RCA \geq 1$ ) since 1990, has increased. In 1990, export subsectors with an  $RCA = 1$  accounted for about 70 percent of total exports (Table 1). By 2016, their share had increased to 79 percent driven mostly by an increase in the share of agricultural exports from 40 to 53 percent in total exports. The only subsector that had a secular increase was tobacco which exported unprocessed or partly processed tobacco.

Between 1990 and 2016, the overall share of metals and minerals was stable at about 25 – 27 percent of total exports. There was a distinct declining in the traditional manufacturing sector whose exports fell from about 3 percent in the 1990s when Zimbabwe had a higher income level than about 29 other countries in Sub-Saharan Africa to less than 1 percent in 2016 when only 17 were poorer. There was also a decline in the agro-processing industries. While exports of raw cotton and raw sugar dropped consistently, they were no corresponding increases in exports of light manufactures such as processed cotton or sugar products.

### ***Recommendation: our main recommendation for manufacturing in the traditional export subsectors:***

- i. foster growth and exports of processed foods such as sugar preparations, and fresh and dried fruits and vegetables; since Zimbabwe is endowed with a rich and diversified

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<sup>2</sup> Comparative advantage is calculated from Revealed Comparative Advantage (RCA) defined as the share of an exported product in total exports relative to the share of the same product in total world exports. An RCA greater than 1 indicates that the exporter has a comparative advantage in exporting a particular product; and RCA of 1 implies that the exporter has no particular advantage relative to the world in exporting the products, whereas an RCA of less than 1 indicates that the exporter is not competitive relative to the world in exporting that product.

- agricultural sector, food processing industries will accelerate growth and create better-paying jobs, especially in rural areas;
- ii. foster expansion of locally manufactured intermediate inputs such as leather; cotton fabrics; metals products (angles, shapes, sections etc.; and cement) especially if they use local raw materials. This will facilitate:
    - light manufacturing of footwear and garments which are labour-intensive and generate millions of better-paying jobs compared to agriculture and informal services
    - the emergence of valuable backward and forward linkages with other sectors when domestic raw materials are used. As an example, metal products and cement are important inputs for the domestic construction sector. Increased production will spur local construction and create additional demand for more construction products.
    - import-competition and substitution since there is a large demand for these products (see next section);
  - iii. continue to foster exports of processed metals and minerals alloys – unlike most Sub-Saharan African countries which export unprocessed ores and concentrates, Zimbabwe processes a variety of minerals (iron, copper, nickel and other metals) into alloys and their products. Although these are capital-intensive, heavy industries with a low jobs-potential, their continued expansion is essential for nurturing a credible domestic metals products subsector. Most industrial economies have their own metals' processing sectors.
  - iv. Zimbabwe's traditional exports in Table 1 indicate the foundations of a diversified manufacturing base. Evidently, fragility has eroded it for a long time but if the policymakers aspire to jumpstart manufacturing, they need to give it a chance to grow.

Table 1: Traditional exports in which Zimbabwe had a consistent comparative advantage since 1990

Subsector name	Tech-code	Comparative Advantage (RCA ≥ 1)					Share in total exports					Export values (millions of US dollars)					
		1990-'00	2010	2012	2014	2015	1990	2010	2014	2015	2016	1990	2010	2012	2014	2015	2016
Other fresh or chilled vegetables	PP	x	x	x	x	x	0.4%	0.6%	1.0%	1.1%	0.8%	\$6	\$8	\$15	\$25	\$25	\$16
Fruits- citrus& other- fresh or dried	PP	x	x	x	x	x	1.1%	2.0%	1.8%	1.7%	0.8%	\$14	\$29	\$34	\$47	\$40	\$16
Sugars, beet and cane, raw, solid	RB1	x	x	x	x	x	5.0%	4.0%	5.9%	4.5%	1.8%	\$62	\$58	\$140	\$153	\$103	\$36
Sugar confectionery and preparations	RB1	x	x	x	x	x	0.1%	0.1%	0.1%	0.1%	0.0%	\$1	\$2	\$2	\$2	\$2	\$1
Tea	PP	x	x	x	x	x	1.1%	1.0%	0.8%	1.1%	0.9%	\$13	\$14	\$20	\$22	\$25	\$17
Tobacco (not or partly stripped; refuse)	PP	x	x	x	x	x	24.0%	22.5%	37.6%	41.1%	46.0%	\$300	\$324	\$669	\$984	\$949	\$899
Raw cotton, excl linters, not carded/combed	PP	x	x	x	x	x	6.6%	8.9%	2.4%	1.5%	0.9%	\$83	\$127	\$235	\$64	\$35	\$18
Cotton linters	PP	x	x	x			0.1%	0.0%			0.1%	\$1	\$0	\$2	\$0	\$0	\$1
Cut flowers, foliage & seeds/spores for plantin	PP	x	x	x	x	x	1.1%	1.8%	0.7%	0.7%	0.2%	\$14	\$26	\$18	\$17	\$15	\$4
Hides&skins: waste/used leather/bones/ivory	PP	x	x	x	x	x	0.3%	1.1%	1.3%	1.6%	1.4%	\$4	\$16	\$18	\$33	\$38	\$27
<b>Total Agricultural exports</b>							<b>39.8%</b>	<b>42.1%</b>	<b>51.4%</b>	<b>53.3%</b>	<b>52.9%</b>	<b>\$498</b>	<b>\$605</b>	<b>\$1,153</b>	<b>\$1,346</b>	<b>\$1,231</b>	<b>\$1,034</b>
Building and monumental (dimension) stone	PP	x	x	x	x	x	1.1%	1.5%	1.0%	0.8%	0.9%	\$14	\$21	\$21	\$25	\$19	\$17
Gypsum, plasters, limestone																	
flux,calcareous,mica, felspar and other stones	PP	x	x	x	x	x	0.6%	0.6%	0.6%	1.0%	1.2%	\$7.5	\$8.2	\$14.3	\$14.7	\$23.7	\$23.4
Minerals, crude, nes	PP	x	x	x	x	x	0.3%	0.7%	0.8%	1.1%	1.6%	\$4	\$10	\$13	\$22	\$26	\$31
Nickel, base metals and & Other nonferrous base metals - ores/concentrates/scrap/waste	RB2	x	x	x	x	x	1.0%	4.7%	4.6%	8.6%	16.4%	\$13	\$67	\$147	\$120	\$199	\$321
Nickel, Copper&Ferro-alloys - refined or not, unwrought	PP	x	x	x	x		24.9%	23.3%	10.7%	9.2%	5.7%	\$312	\$335	\$303	\$280	\$214	\$111
<b>Total Minerals - crude and processed</b>							<b>27.9%</b>	<b>30.8%</b>	<b>17.6%</b>	<b>20.8%</b>	<b>25.8%</b>	<b>\$349</b>	<b>\$442</b>	<b>\$497</b>	<b>\$461</b>	<b>\$481</b>	<b>\$503</b>
Leather of bovine cattle & equine leather	LT1	x	x		x	x	0.7%	0.1%	0.2%	0.3%	0.1%	\$8	\$2	\$2	\$4	\$6	\$2
Cotton yarn	LT1	x	x	x	x	x	1.0%	0.5%	0.4%	0.2%	0.3%	\$13	\$8	\$12	\$11	\$5	\$6
Cotton fabrics, woven, unbleached	LT1	x	x	x	x	x	0.4%	0.3%	0.1%	0.1%	0.03%	\$5	\$4	\$3	\$1	\$2	\$1
Construction mater. of asbestos, cement etc	RB2	x	x	x	x		0.1%	0.03%	0.04%	0.01%	0.00%	\$1	\$0	\$1	\$1	\$0	\$0
<b>Total light manufactures</b>							<b>2.2%</b>	<b>1.0%</b>	<b>0.7%</b>	<b>0.6%</b>	<b>0.4%</b>	<b>\$27</b>	<b>\$14</b>	<b>\$18</b>	<b>\$17</b>	<b>\$13</b>	<b>\$8</b>
Angles/shapes/sections/sheet piling of iron/steel	LT2	x	x	x	x		0.3%	0.3%	0.1%	0.04%	0.00%	\$3	\$4	\$3	\$3	\$1	\$0
Dyeing, tanning extracts, tannins & derivatives	RB2	x	x	x	x	x	0.4%	0.3%	0.1%	0.2%	0.1%	\$5	\$4	\$3	\$3	\$4	\$2
<b>Total Manufactured exports</b>							<b>2.9%</b>	<b>1.6%</b>	<b>0.9%</b>	<b>0.8%</b>	<b>0.5%</b>	<b>\$36.1</b>	<b>\$22.7</b>	<b>\$24.5</b>	<b>\$23.7</b>	<b>\$17.7</b>	<b>\$9.9</b>
<b>Total</b>							<b>70.6%</b>	<b>74.5%</b>	<b>69.9%</b>	<b>74.9%</b>	<b>79.2%</b>	<b>\$883</b>	<b>\$1,070</b>	<b>\$1,675</b>	<b>\$1,831</b>	<b>\$1,730</b>	<b>\$1,547</b>

Source: COMPTRADE, SITC2 – 4-digit, Authors' calculations.

### C. New Manufactured Export Possibilities in Emerging and Disappearing exports

The main message of the previous section was that Zimbabwe traditional exports reveal a diverse basket of raw and processed agricultural, metals and minerals and manufactured products with the share of manufactures and processed goods having declined sharply over time. A policy priority should be to reverse the decline by accelerating exports of locally processed intermediate goods/ inputs, and manufacturing of final goods in which Zimbabwe has traditionally had a comparative advantage. There could not be an easier way to jumpstart manufacturing of traditional exports.

In this section, we adopt two creative approaches to expand the list of manufacturing possibilities for Zimbabwe beyond the traditional exports. A straightforward application of comparative advantage is not suitable for identifying potential exports as a product cannot have a comparative advantage if it does not exist. Therefore, we look for proxies of comparative advantage to maintain analytical rigour. Our priority is to explore manufacturing subsectors which are relatively low-tech to absorb Zimbabwe's low-skilled workers on a large-scale. These two approaches lead to the list of subsectors in Tables 2 and 4.

- 1) **The first approach is to identify Zimbabwe's Emerging or latent exports.** These are defined as exports in which it did *not* have a traditional comparative advantage, i.e., RCA was not  $\geq 1$  persistently in the 1990s or 2000s, but in which it has developed a comparative advantage in recent years (since 2010, Table 2). The Emerging subsectors reflect new dynamism in the economy – the market forces have identified these winners. Examples in Table 2 include raw materials like sugar preparations or wood products such as pitprops. Note, a smart strategy would be to foster wood products as opposed to raw materials “wood.” Leather, and twine, or packing cases are other products that add value to locally available inputs. Concurrently, exports of final goods that use imported inputs, such as men's and women's garments, should not be penalized as the global demand for them is high, they comprise the simplest low-tech products and can employ large numbers of workers as well as emerge as large export sectors.
- 2) The Emerging exports approach is also validated by the Lin-Monga growth identification and facilitation framework (2009, 2011) which argues that developing-country governments should foster latent exports by paying close attention to successful discoveries by private firms and support their expansion by removing the constraints that impede their growth.
- 3) Zimbabwe's current exports also contain products from subsectors which had a comparative advantage in the past but have been declining and almost disappeared in recent times. These **Disappearing exports** are defined as products whose RCA  $\geq 1$  in 1990s – 2000s but began falling gradually. Since 2010, the RCA in these industries has not been persistently greater than 1 (Table 2). Should disappearing exports be fostered? This is an empirical question worthy of investigation. If the disappearance was an outcome of global competition, it is efficient, and the subsectors should indeed disappear. If, however, the disappearance is an outcome of bad policies, some quick fixes would award them a chance to start growing again. The causes underlying the disappearance of Garments, the leading disappearing sector with the largest jobs-potential, deserves an examination. For a fragile/conflict-affected state like Zimbabwe, this subsector should also not be ignored as it embodies valuable labour skills and experience which can be strategic for scaling up the sector.

- 4) **Are other countries at Zimbabwe’s level of development able to export Zimbabwe’s Emerging exports?** We validated our list of potential subsectors in the last column of Table 2 with exports of neighbouring countries that are at a slightly higher level of income as Zimbabwe (Table 3). These are Kenya (per capita income is 73% higher), Tanzania (per capita income is 50% percent higher) and Uganda (per capita income is 4% percent higher). We also look at other comparators listed in Table 3. The rationale is to confirm the feasibility of capabilities required to launch the recommended manufacturing subsectors. We find that our list is modest and reasonable in terms of the complexity of the products recommended.

### **Recommendation**

The list based on Emerging exports shows evidence of the potential for (i) food processing, (ii) wood and furniture, (iii) construction materials, especially cement, (iv) paper products including packing cases; (v) leather; (vi) simple metal products.

Zimbabwe’s disappearing exports indicate latent potential for garments but the cause underlying their disappearance merits investigation. Collectively, the current exports of these products are small but not negligible for a fragile state that is also overly dependent on natural-resources. Building on this base by growing it in the domestic market as well as the export markets – both existing and new- has the potential to foster the emergence of a manufacturing sector in Zimbabwe.

Table 2 Potential manufactured exports linked to Emerging and Disappearing export subsectors

Tech Product	Description	Export Share %		Total Exports millions USD		
		2010-14	2015	2010-14	2015	
<i>Emerging exports in Zimbabwe (Persistent RCA&gt;1 from 2010 to 2014; and non-persistent RCA&gt;1 between 1990 to 1994)</i>						
RB1	611 Sugar, beet, cane - raw.solid	4.63	4.48	\$552.2	\$103.5	
RB1	615 Molasses	0.05	0.02	\$6.5	\$0.4	Zambia, Honduras, Nicaragua
RB1	620 Sugar confectionary/preparations	0.08	0.07	\$10.0	\$1.6	Zambia, Honduras
RB1	2482 Wood - sawn/planed	0.46	0.49	\$55.0	\$11.2	
RB1	2479 Pitprops,poles, posts - roughed	0.29	0.66	\$34.9	\$15.2	Uganda, Honduras
RB1	6252 Tires pneumatic for trucks	0.26	0.04	\$30.5	\$0.8	
RB2	6612 Cement	0.87	0.28	\$103.4	\$6.4	Kenya, Tanzania, Uganda
RB2	6618 Construction mat. - cement, fiber cement	0.05	0.01	\$5.4	\$0.2	Honduras
LT1	6116 Leather of hides&skins	0.35	0.39	\$41.9	\$9.1	Kenya, Tanzania, Uganda
LT1	6575 Twine, ropes, cables, cordages	0.06	0.07	\$7.2	\$1.7	Kenya, Tanzania, Uganda
LT2	6421 Paper packing containers- boxes/files	0.40	0.42	\$47.6	\$9.6	Kenya, Uganda, Honduras
LT2	6935 Fabric gauze, cloth, netting, cloth	0.05	0.05	\$6.5	\$1.1	
LT2	6932 Barbed iron or steel fencing fire	0.01	0.01	\$1.8	\$0.2	Honduras
MT2	5911 Insecticides for retail/inputs	0.07	0.08	\$8.8	\$2.0	Kenya
<i>Disappearing exports in ZWE (RCA&gt;1 persistent during 1990-94; RCA&gt;1 but non-persistent during 2010-14)</i>						
LT1	8423 Mens,boys outwear of fabric/not knitted	0.12	0.10	\$13.8	\$2.2	Kenya, Cambodia, Myanmar, Honduras
LT1	8439 Womens outwear of fabric/not knitted	0.01	0.00	\$1.0	\$0.1	Kenya, Myanmar, Honduras, Nicaragua
LT1	6114 Leather of other bovine cattle/equine	0.10	0.26	\$11.6	\$6.0	Kenya, Uganda, Nicaragua
	<b>Total</b>	<b>7.86</b>	<b>7.42</b>	<b>\$938.1</b>	<b>\$171.4</b>	

Source: COMPTRADE, SITC2 – 4-digit, Authors' calculations.

Table 3 Comparators for Zimbabwe – countries with 100 – 200 % higher income levels

Comparators for Zimbabwe	Per capita income	Percent change from Zimbabwe
Zimbabwe	1677	
Uganda	1738	4%
Tanzania	2510	50%
Kenya	2901	73%
Zambia	\$3,602	115%
Honduras	\$4,785	185%
Nicaragua	\$4,884	191%
Myanmar	\$4,931	194%

Source: World Development Indicators 2016

## D. New Manufactured Export Possibilities in Import-Competing industries

**Our second approach examines import-competing possibilities to foster potential manufacturing sectors in Zimbabwe.** A common concern regarding promotion of import competing production for the domestic market is whether there is adequate domestic demand. In the absence of domestic production data, import data is used as a proxy for domestic demand. Cognizant of Zimbabwe's present level of low-skills, it would be aspirational to pick subsectors that either employ sophisticated production technologies to produce goods or themselves produce complex machinery and goods. For practical reasons, we first isolate a set of 158 products that comprise all of Zimbabwe's low-tech exports. The tech characteristic of a subsector is defined as per UNIDO's technology definition.<sup>3</sup> Zimbabwe imported about US \$540 – \$571 million worth of low-tech products in 2014 -2015. Their share in total imports was about 9 - 12 percent respectively in these years. The share of technologically complex manufactures (medium-tech and high-tech) was much higher at US \$2.6 -2.3 billion respectively in the same period.

A closer look at the low-tech imports reveals a wide range of import substitution possibilities, especially in the food-processing subsector. The set of potential manufacturing possibilities is also quite large *within* other low-tech manufacturing categories (Table 4 below). We present examples of about 43 low-tech imports organized in simple, easily identifiable categories of products for final use or as intermediate inputs in production in the home, office, construction industry and other sectors of the economy. Without a thorough investigation of their feasibility, prioritization is not possible. However, a rough guideline could help. Import-substitution has a better chance of becoming import-competitive if the subsectors can use locally available intermediate inputs or raw materials.

**Recommendation.** The list of products from Zimbabwe's import basket in Table 4 is only illustrative but it expands significantly earlier lists of potential manufactures using Traditional (Table 1) and Emerging and Disappearing Exports (Table 2). The import-competing products can be organized into the following categories (i) Simple Consumer goods; (ii) Construction goods and equipment; (iii) Garments; (iv) Textiles and Fabrics; and (v) Metal products. They share the following common characteristics: they employ the simplest of skills (only low-tech).

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<sup>3</sup> As per the definition, traded goods can be organized into the following mutually exclusive categories: Low-tech (LT1 and LT2), Medium-tech (MT1, MT2, and MT3) and High Tech (HT1 and HT2), Primary (PP) and Resource-based (RB) products.

Table 4 Examples of Low-Tech Manufactured imports which potential for import-competing domestic production in 2014-2015

SITC code	Product name	Tech	Imports 2014 millions USD	Imports 2015 millions USD
6953	Other hand tools	LT2	\$7.4	\$9.39
7852	Cycles, not motorized	MT1	\$3.6	\$3.01
8959	Other office and stationary supplies	LT2	\$3.8	\$4.01
8951	Office and stationary supplies, of base metal	LT2	\$0.4	\$0.54
6664	Porcelain or china house ware	LT2	\$1.1	\$1.02
8952	Pens, pencils and, fountain pens	LT2	\$1.9	\$1.63
6665	Articles of domestic or toilet purposes, of other kind of pottery	LT2	\$0.8	\$1.18
6652	Glassware (other than heading 66582), for indoor decoration	LT2	\$1.7	\$1.98
6993	Pins, needles, etc, of iron, steel; metal fittings for clothing	LT2	\$0.8	\$0.73
6421	Packing containers, box files, etc, of paper, used in offices	LT2	\$24.9	\$16.62
8931	Plastic packing containers, lids, stoppers and other closures	LT2	\$45.8	\$39.78
8994	Umbrellas, canes and similar articles and parts thereof	LT2	\$0.6	\$0.57
6576	Hat shapes, hat-forms, hat bodies and hoods	LT1	\$0.0	\$0.02
6974	Base metal domestic articles, nes, and parts thereof, nes	LT2	\$2.7	\$2.43
8998		LT2		
	Small-wares and toilet articles, nes; sieves; tailors' dummies, etc		\$1.4	\$0.75
6960	Cutlery	LT2	\$2.0	\$2.82
6597	Plaits, plaited products for all uses; straw envelopes for bottles	LT1	\$0.1	\$0.03
8933	Personal adornments and ornaments articles of plastic	LT2	\$0.2	\$0.11
8941	Baby carriages and parts thereof, nes	LT2	\$0.1	\$0.06
6978	Household appliances, decorative article, etc, of base metal, nes	LT2	\$0.2	\$0.13
6666		LT2		
	Ornaments, personal articles of porcelain, china, or ceramic, nes		\$0.0	\$0.03
	<b>Total Low tech consumer goods</b>		<b>\$99.2</b>	<b>\$86.84</b>
6921	Iron, steel, aluminium reservoirs, tanks, etc, capacity 300 lt plus	LT2	\$5.63	\$4.10
6428	Articles of paper pulp, paper, paperboard or cellulose wadding,	LT2	\$23.99	\$25.25
6582	Tarpaulins, sails, tents, camping goods, etc, of textile fabrics	LT1	\$2.47	\$2.00
6924	Cask, drums, etc, of iron, steel, aluminium, for packing goods	LT2	\$8.73	\$7.78
8932	Plastic sanitary and toilet articles	LT2	\$2.12	\$1.77
6996	Miscellaneous articles of base metal	LT2	\$7.06	\$8.39
6732	Bars, rods (not wire rod), from iron or steel; hollow mining drill	LT2	\$17.93	\$20.52
6911	Structures and parts of, of iron, steel; plates, rods, and the like	LT2	\$16.54	\$28.40
6973	Domestic, non-electric, heating, cooking apparatus, and parts,	LT2	\$4.68	\$4.55
8212	Furniture for medical, surgical, dental or veterinary practice	LT2	\$5.50	\$3.26
6912	Structures and parts of, of aluminium; plates, rods, and the like	LT2	\$2.37	\$3.47
6422	Correspondence stationary	LT2	\$0.25	\$0.24
8219	Other furniture and parts thereof, nes	LT2	\$14.27	\$10.57
6997	Articles of iron or steel, nes	LT2	\$5.72	\$5.11
8211	Chairs and other seats; and parts thereof, nes	LT2	\$5.46	\$6.26
	<b>Total Low-Tech Construction products</b>		<b>\$122.73</b>	<b>\$131.68</b>
	<b>Total Garments - outwerwear, undergarments, head dresses etc</b>		<b>\$84.00</b>	<b>\$65</b>
6518	Yarns of various types	LT1	\$9.80	\$9.60
6532	Fabrics various types	MT2	\$30.90	\$21.40
6583	Travelling rugs, blankets (non electric), not knitted or crocheted	LT1	\$3.91	\$4.06
6592	Carpets, carpeting and rugs, knotted	LT1	\$0.11	\$0.04
6593	Kelem, Schumacks and Karamanie rugs and the like	LT1	\$0.01	\$0.02
	<b>Low Tech Textiles and Fabrics</b>		<b>\$44.73</b>	<b>\$35.12</b>
6733	Angles, shapes, sections and sheet piling, of iron or steel	LT2	\$16.45	\$15.60
6749	Other sheet and plates, of iron or steel, worked	LT2	\$67.50	\$64.25
	<b>Low Tech Metal Products</b>		<b>\$83.95</b>	<b>\$79.85</b>

Source: COMTRADE, SITC2 – 4 digit

## Final recommendations

Combining the different approaches applied to export and import data helps to validate that there is sufficient domestic demand (import approach), simple skills requirements (tech-definition in each table), comparative advantage (actual exports), and feasibility (other low-income neighbours and comparators are also exporting the same products with equally weak skills) to propose the following broad list of potential manufacturing subsectors for Zimbabwe:

- 1) Agro-processing – sugar preparations, fresh and dried fruits and vegetables;
- 2) Leather and leather products – various types of leather and footwear;
- 3) Products of wood – pitprops, furniture and products for the construction industry;
- 4) Wood transformed into paper, paperboard and paper products.
- 5) Construction materials – cement
- 6) Simple metal products/metal consumer goods – angles, shapes, cables, sheets and their products for the home, office and other sectors
- 7) Garments – women’s, children’s and men’s outerwear and undergarments;
- 8) Textiles and fabrics made from domestic cotton and yarn.

Details of each subsector are enlisted in Tables 1, 2 and 4.

## 4 Constraints to Growth in Zimbabwe’s Manufacturing Sector

While the subsector specific constraints can only be diagnosed through comprehensive fieldwork, the general constraints to manufacturing can be gleaned from the findings of the World Bank’s Zimbabwe 2016 Enterprise Survey. It covered about 600 registered firms with five or more employees. They were interviewed between July 2016 and February 2017 by the Enterprise Survey Team.<sup>4</sup> None of the firms were 100 percent state-owned enterprises. 58 percent of firms surveyed were considered small (consisting of 5-19 employees).

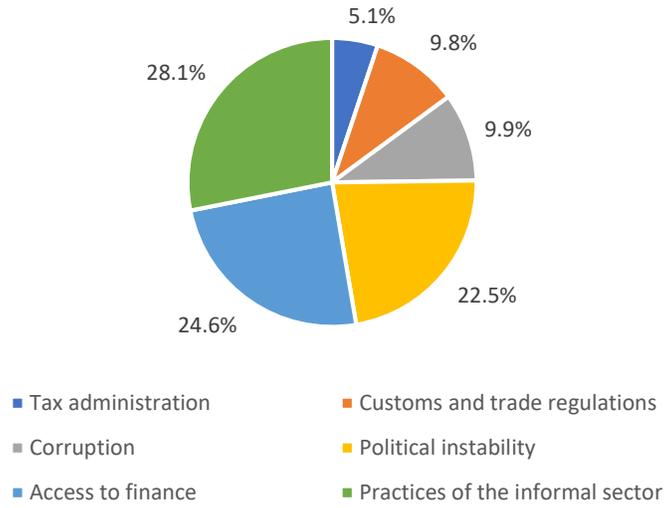
15 different obstacles were cited when respondents were asked what their biggest obstacle was in the business environment of Zimbabwe. Because a policy approach that would attempt to resolve all 15 obstacles would probably spread resources too thin, policymakers should prioritize the most frequently cited obstacles. The top three obstacles that were most frequently cited were Practices of the informal sector (23.6%), Access to finance (20.6%), and Political instability (18.9%).<sup>5</sup>

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<sup>4</sup> “Zimbabwe 2016” Enterprise Surveys, The World Bank Group [www.enterprisesurveys.org](http://www.enterprisesurveys.org) .

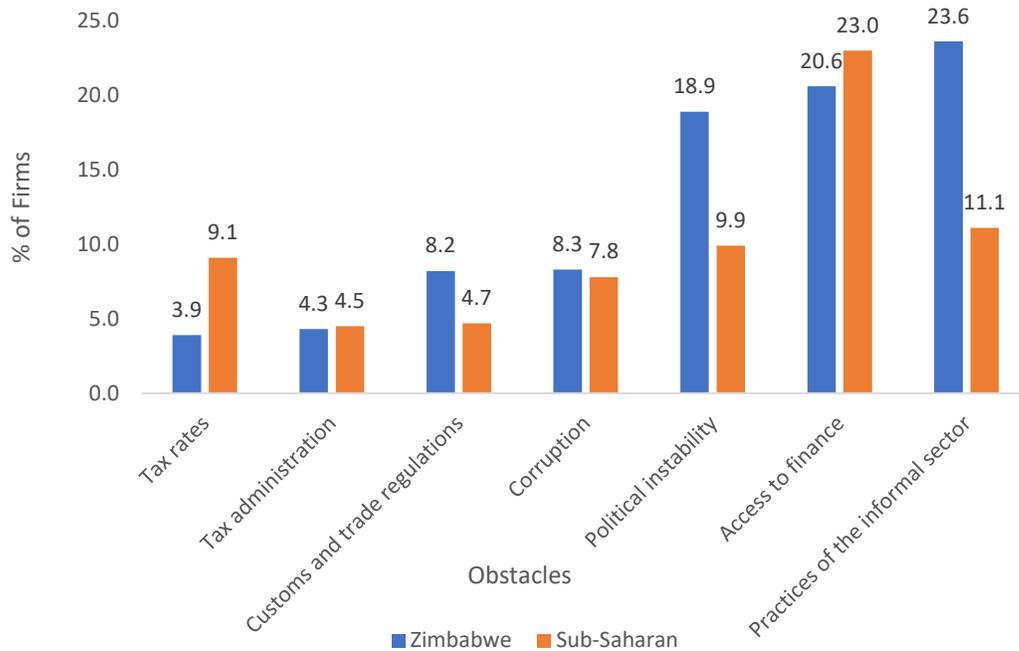
<sup>5</sup> Ibid.

Zimbabwe's "Biggest Obstacles" as a Percentage of Total Responses



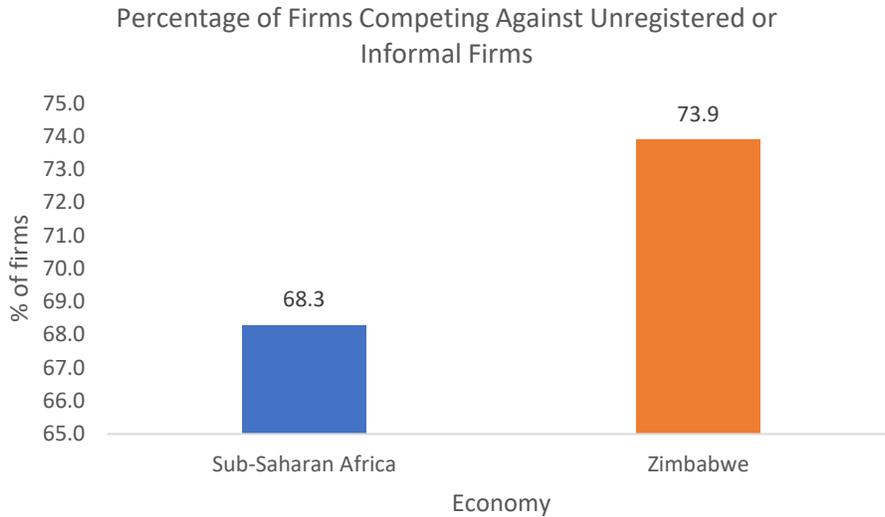
When compared to Zimbabwe, Sub-Saharan African firms cited practices of the informal sector (11.1 vs. 23.6% of Zimbabwe respondents), political instability (9.9% vs. 18.9% of Zimbabwe’s respondents), customs and trade regulations (4.7% vs. 8.2% of Zimbabwe’s respondents), and corruption (7.8% vs. 8.3% of Zimbabwe’s respondents) less frequently than their counterparts. Both, informal sector practices, as well as political instability, are major obstacles with large differences in citations between Zimbabwe firms and Sub-Saharan African firms. Therefore, a policymaker should take note that these two obstacles demand attention.

Comparison of Zimbabwe and Sub-Saharan Africa's "Biggest Obstacles" in the Firm Environment



#### 4.1 Practices of the Informal Sector

Zimbabwe’s respondents do cite that they compete against informal firms at a higher rate than Sub-Saharan African firms (73.9% vs 68.3%).<sup>6</sup> However, this is only a slightly higher rate and therefore does not fully explain why Zimbabwe’s firms would cite the practices of the informal sector at the highest frequency for the “biggest obstacle.”

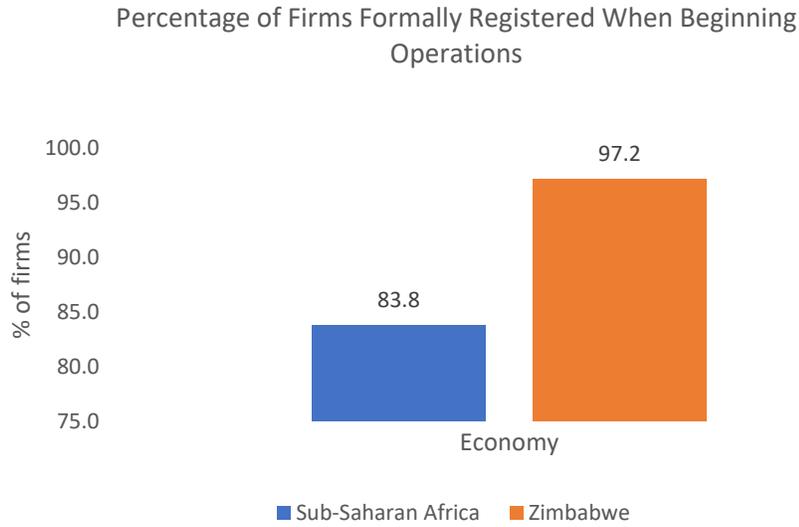


Additional information from the Enterprise Survey also does not support why practices of the informal sector were so commonly cited. Almost 100% of firms in Zimbabwe are formally registered once operations began.<sup>7</sup> This rate is higher than the Sub-Saharan Africa rate (97.2% vs. 83.8%).

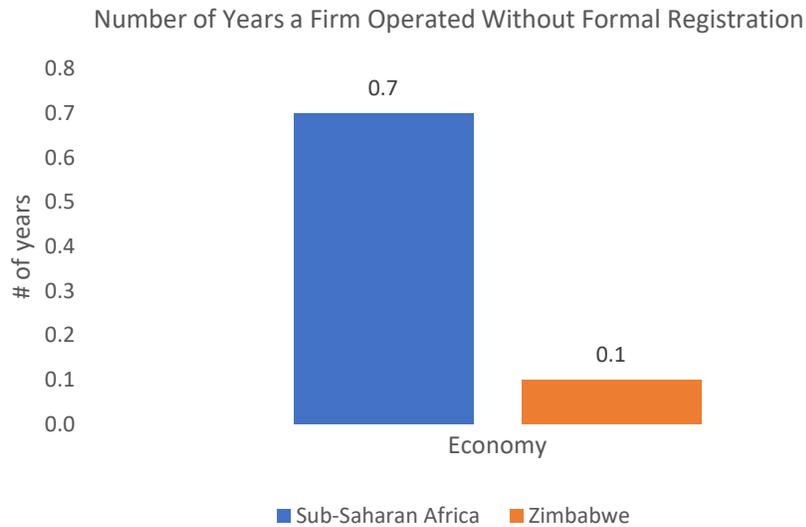
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<sup>6</sup> *ibid.* .

<sup>7</sup> *ibid.*



Even the number of years a firm operates without formal registration for Zimbabwe firms is lower than the rate for Sub-Saharan Africa firms (.1 vs .7 of a year).<sup>8</sup>



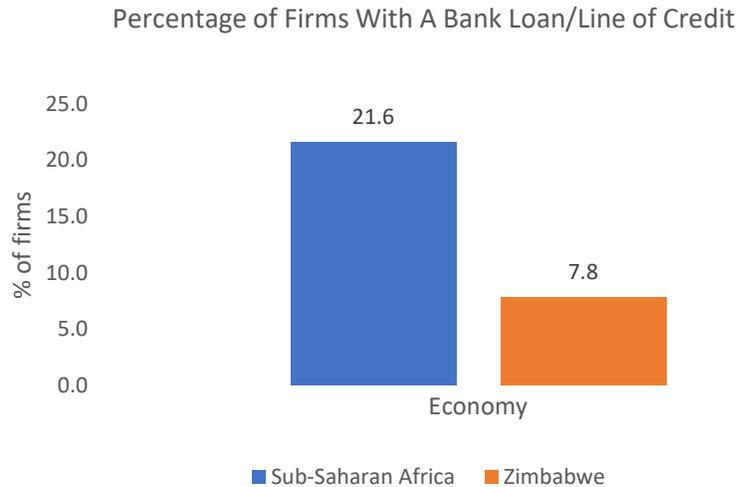
Although respondents to the Enterprise Survey most frequently cited informal practices as the “biggest obstacle,” supporting data that was collected by the Enterprise Survey does not support the obstacle as highly problematic, especially when compared to Sub-Saharan African firms as a benchmark. Therefore, this obstacle is not evidently the most wanting.

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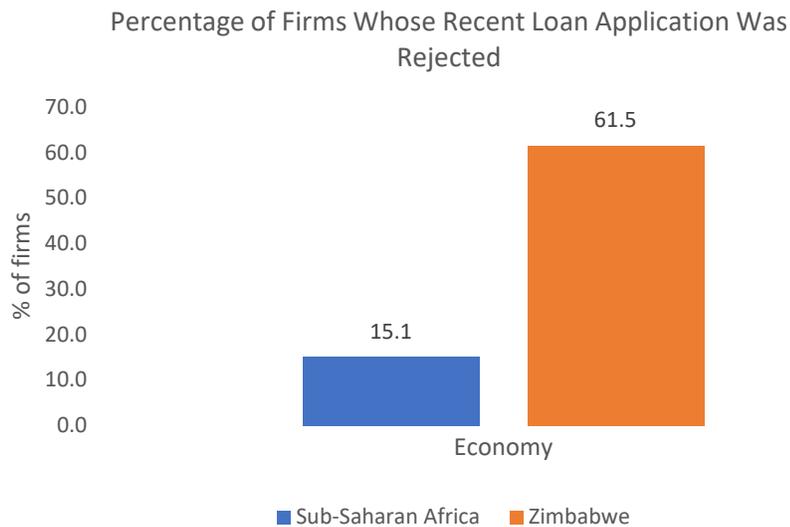
<sup>8</sup> Ibid.

## Access to Finance

Zimbabwe firms have almost a third of the amount of either a bank loan or a line of credit than Sub-Saharan African firms have (21.6% vs 7.8% of firms).<sup>9</sup> This lack of bank loans supports why access to finance was frequently cited as a major obstacle.



The lower level of bank loans can be explained by a much higher rate of loan application rejections. Zimbabwe applications for loans were rejected at a rate of 61.5%, while only 15.1% of applications were rejected for Sub-Saharan African firms.<sup>10</sup>



Policymakers should take action to examine why loan applications are being rejected at such a high rate, and to attempt to achieve the benchmark rate that Sub-Saharan firms experience.

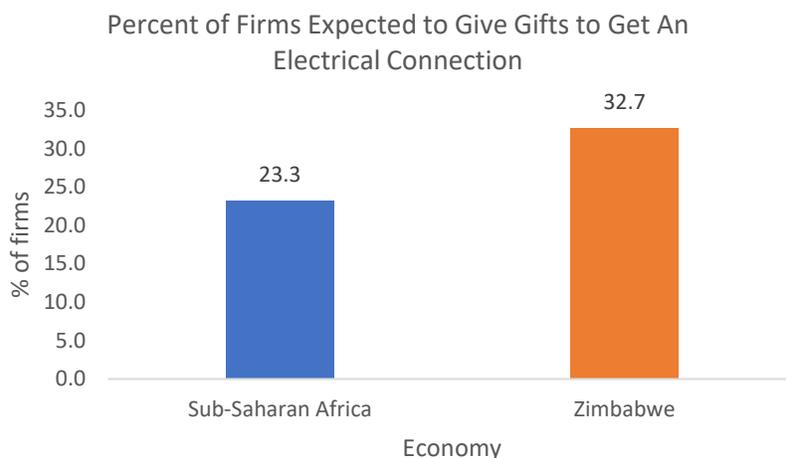
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<sup>9</sup> *ibid.*

<sup>10</sup> *ibid.*

## Political Instability

The effects of political instability are hard to measure, especially because the Enterprise Survey does not define political instability when posing the question to respondents. Corruption is likely the best measure of political instability given that corruption is the next most frequently cited “biggest obstacle.”



Firms in Zimbabwe are expected to give gifts to officials to receive an electrical connection at a higher rate than their Sub-Saharan counterparts.<sup>11</sup> Political instability would also imply that there are frequent regime changes, which would mean that firms would be expected to give more gifts than otherwise because new officials would expect gifts. Firms in Zimbabwe may have cited political instability because of the number of gifts they are expected to provide.

## 5 A Policy Framework to Facilitate Export Diversification

As almost all of Zimbabwe’s exports are concentrated in either minerals or metals, or agricultural commodities, the strategy for its diversification should focus on other sectors that are not subject to the same terms of trade fluctuations as minerals and metals, are more labour-intensive, productive and can grow fast and create better-paying jobs. Most of the current jobs outside of government and mining, are largely informal and concentrated in agriculture or the services sectors. To this end, Zimbabwe needs a combination of appropriate macroeconomic policy including a more export-oriented growth strategy and a stable business environment.

**Economy-wide policies:** As is well known, in addition to maintaining peace and stability, Zimbabwe would benefit greatly from policy measures to maintain macroeconomic stability, build good institutions, and infrastructure (including resolving trade logistics issues), and develop human resources. Building roads, boosting electricity generation, and enhancing trade logistics are a top priority for manufacturing in Zimbabwe, yet addressing infrastructure needs in Zimbabwe is a time-intensive challenge and cannot be achieved rapidly. Hence, while infrastructure investment and reforms should start without delay, priority has to be placed on providing infrastructure to specific areas where clusters

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<sup>11</sup> Ibid.

and industrial parks are located before solving the infrastructure problems in other areas. Additional measures in this group include the simplification of regulatory policy and foreign labour management. Similarly, as the Enterprise Survey 2016 notes,<sup>12</sup> the investment climate is fraught with complex regulations and distortionary measures yet fixing them all is a longer-term agenda.

**Sectoral policies** include helping existing products grow. There is a fair amount of consensus on what is needed to accelerate growth in mining and agriculture but the agenda for sectoral policies to help break into **new manufacturing products** has to be defined. The list of agenda items varies from tariff policies, to duty drawbacks, to trade logistics, to all aspects of the investment climate. Lessons from some successful countries in Asia will be useful for Zimbabwe but the bottom-line is that in addition to economy-wide policies, Zimbabwe also needs to resolve sector-specific constraints. What will work for a successful garment industry which will need firms to organize production of simple garments from imported raw and intermediate inputs will not suffice for the leather industry which needs better integration between the livestock, meat producing, skins, leather and leather products producing subsectors.

**Sector-Specific Issues:** Industrial clusters are the best way to deal with a plethora of binding constraints in Zimbabwe. For each subsector, governments should first find out where enterprises are already clustered and should then ease the most binding constraints (identified in the report) within the clusters. Similarly, successful industrial parks provide enterprises with security, basic infrastructure, streamlined government regulations, and affordable industrial land. Policy makers in Zimbabwe need to open up and attract foreign direct investment on a mass scale, particularly in labour-intensive activities such as those identified in the report. They should also harmonize and improve customs procedures and facilitate access to inputs for light manufacturing. A close public-private cooperation will be needed to implement the proposed policy reforms.

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<sup>12</sup> Enterprise Survey undertaken by the World Bank.

## 6 Future directions

Beyond its capacity to stimulate job creation, the strong connection between light manufacturing and trade also supports the development choice to focus on light manufacturing in Zimbabwe. The case for export-led growth is well established among developing countries (Chenery 1980; Commission on Growth and Development 2008; Harrison and Rodríguez-Clare 2010). Harrison and Rodríguez-Clare (2010) find that export-oriented countries have grown more rapidly, though establishing causality is difficult. Trade also enables developing countries to take advantage of the important learning that is derived from exposure to global competition and then to import the skills and technology necessary to move up the value chain.

Zimbabwe, together with many other low-income countries, has the necessary inputs for a competitive light manufacturing sector: a comparative advantage in low-wage labour (at the proper exchange rate), abundant natural resources sufficient to offset the lower labour productivity compared with their Asian competitors, privileged access to high-income markets for exports, and a sufficiently large local or regional market to allow emerging producers to develop capabilities in quick-response.

These countries can follow the course pioneered by a succession of Asian countries by accelerating the realization of latent comparative advantage in segments of light manufacturing in which specific, feasible, sharply focused, low-cost policy interventions can deliver a quick boost to output, productivity, and perhaps exports, opening the door to expanded entry and growth.

Table 1, 2 and 4 illustrate that a large potential for jumpstarting or scaling up light manufacturing industries for exports or for the import-competing domestic market. Which of these is best placed to grow and succeed requires a more in-depth investigation on the ground. An example of some of the factors that should be taken into consideration in making such an assessment is the Ethiopia Light Manufacturing Study that was done to inform the launch of the leather footwear exports sector in 2012 (Dinh et al, 2012).

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