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Latent advantage, complex challenges: Industrial policy and Chinese linkages in Ethiopia's leather sector

Deborah Brautigam^{a,*}, Toni Weis^b, Xiaoyang Tang^c

^a Johns Hopkins University School of Advanced International Studies, United States

^b Center for International Private Enterprise, United States

^c Tsinghua University, China

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ABSTRACT

Industrial policy is back on the African policy agenda, with a number of countries following new strategies for rapid industrialization. None have done so more eagerly than Ethiopia. The present paper draws on Justin Yifu Lin's framework of New Structural Economics to assess Ethiopia's industrial policies and engagement in the leather industry. Making use of two rounds of semi-structured interviews (2012 and 2015) with all of the foreign firms and more than a dozen local firms in the leather sector, as well as other key stakeholders, it examines seven steps the government took to build the industrial policy: Create a high-level focus on the sector; make strategic use of international development partners; attract a "lead goose" (Chinese) in the footwear sector; build government capacity to support the sector; strengthen business associations; "shock-to-shape" upgrading; improve input supply. Ultimately, while government interventions have led to improvements across several steps of the value chain, the paper identifies a number of factors that have prevented the country from fully realizing a latent comparative advantage in the leather sector.

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1. Introduction

Industrial policy is back on the African policy agenda, with a number of countries following new strategies for rapid industrialization. None have done so more eagerly than Ethiopia, which under the government of the Ethiopian Peoples' Revolutionary Democratic Front (EPRDF) has modeled itself explicitly on the so-called East Asian development states. Embedded within a broader vision of radical political and economic transformation, its activist approach to industrial development seeks to turn the country into a regional manufacturing hub by fostering the growth of a select group of light industries.

Ethiopia's accelerated rates of growth since the introduction of an industrial policy framework in the mid-2000s are widely seen as evidence that it has been successful in this regard. However, despite a slew of recent writing on the subject (Arkebe, 2015; Girum & Schaefer, 2015; Mulu, 2013), the actual effects of policies adopted to develop the manufacturing sector remain underexplored and are inferred from overall economic performance rather than determined empirically. This paper offers a more thorough examination of the Ethiopian industrial policy experience, focusing on a key target sector: the leather industry.

Leather footwear, gloves and other products are a low-entry light industry with considerable potential for employment, while the more capital-intensive leather processing would seem to allow scope for value-addition to Ethiopia's very large livestock herds. The sector was selected for special attention in Ethiopia's 2002 Industrial Development Strategy, a focus which was reaffirmed in subsequent

* Corresponding author.

E-mail address: dbrautigam@jhu.edu (D. Brautigam).

policy documents. By some measures, the sector is already successful, celebrated for the presence of a thriving footwear cluster that has withstood competition from Chinese imports and begun to move into exporting. Yet the scale was still relatively small and earnings modest. In spite of international interest and considerable government attention and effort, Ethiopia's leather sector has not yet lived up to its full potential.

The present paper approaches this problem through the lens of Lin's (2012) framework of New Structural Economics. It argues that, in line with Lin's propositions, Ethiopia's policy of agricultural development-led industrialization seeks to leverage the country's existing endowment structure and prioritize labor-intensive light industries with significant linkages to the rural economy, such as the leather sector. However, while government interventions have led to improvements across several steps of the value chain, a number of factors have prevented the country from fully seizing this latent comparative advantage. The paper draws on the considerable published and unpublished literature on this topic as background, and makes use of two rounds of semi-structured interviews (2012 and 2015) with all of the foreign firms and more than a dozen local firms in the leather sector, as well as other key stakeholders.

2. New structural economics and the industrial policy debate

The argument that fundamental economic transformation requires more than governmental laissez-faire has regained considerable currency in academic and policy circles alike. Full consensus on the matter is a far way off, and debates remain within the literature on industrial policy itself (Hausmann & Rodrik, 2003, 2006; Lin & Chang, 2009; Stiglitz, Lin, & Monga, 2013). However, today's discussions focus less on the question whether or not government intervention in markets is necessary for industrial development, and more on the ways and circumstances in which these measures can be beneficial.

Justin Lin's framework of New Structural Economics, which seeks to chart a middle path between neoclassical orthodoxy and state dirigisme, makes two important suggestions in this regard (Lin, 2012: 15–25). First, Lin argues that any successful industrial strategy must be “sector-targeted,” i.e. focus on the promotion of a small number of strategic industries (Lin, 2014: 3). Functional interventions, which are aimed at improving the overall environment within which companies and industries operate, are relatively uncontroversial among economists.

However, Lin and other advocates of selective policies hold that unlocking structural transformation requires more than general measures to lower the cost of doing business. Strategies to promote industrial development must address the specific obstacles – technology gaps, patchy supply chains, insufficient scale – that prevent a particular sector from taking off, especially where the private sector's capacity for coordination remains weak (Chang, 2009; Lin, 2012: 29–38; Whitfield, Therkildsen, Buur, & Kjær, 2015).

Ideally, selective interventions are not based on a blueprint, but on a learning process that responds to a changing sector. For example, first movers on the frontier of a targeted sector might receive special subsidies such as concessional loans. Later, specific taxes and subsidies might be used to nudge producers to upgrade or diversify. Governments can also reduce learning and transaction costs by forming apex coordination forums, requiring regular information exchanges with firms in the target sector, exposing firms to global product standards, or assisting with “matchmaking” between foreign firms with desired technology and local firms. While support for such an activist stance on industrial development is growing, it is far from unanimous. Critics continue to question whether government officials are better equipped to identify growth prospects than the companies themselves, and caution that the allocation of economic opportunities by bureaucrats has led to a waste of resources on failing projects and industries in the past (Economist, 2011).

Second, Lin argues that a successful industrial strategy must reflect the country's factor endowment at a given moment. The selection of priority industries should follow the identification of the economy's latent comparative advantages: sectors in which production costs are low by international standards, but where higher transaction and information costs prevent firms from gaining a competitive edge. In practice, this means that developing countries should study the experience of slightly more advanced countries with similar factor endowments, learn from their histories of moving up the value chain, and ready themselves to attract companies that might be moving offshore as wages and relative prices shift. Attempts to leapfrog this gradual process by investing in capital- and knowledge-intensive industries at an early stage are likely to lead to expensive dead ends.

To Lin, basing a country's industrial strategy on its comparative advantages (and revising it as the latter evolve over time) ensures that government interventions remain market-conforming. Critics such as Chang (2009), on the other hand, contend that structural change only becomes feasible where industrial policies challenge a country's current resource endowment. Chang argues that developing countries that focus exclusively on industries with relatively low added value are unlikely to catch up with more advanced economies, and instead risk entrenching the gap between them. Governments should therefore focus on rapid technological upgrading, facilitating access to markets that may seem beyond the capacity of domestic capitalists. This requires a more distortionary set of measures, such as the protection of infant industries and the manipulation of relative factor prices (Lin & Chang, 2009).

Both debates on which the New Structural Economics touches – whether industrial policies should be functional or sector-based, and whether they should follow or defy comparative advantage – are relevant for an evaluation of the Ethiopian experience. The rationale behind the identification of target industries, such as the leather sector, followed the country's perceived comparative advantage in labor-intensive industries with close links to agriculture, such as the leather sector. However, Ethiopia also saw considerable state investment in import-substituting industries such as cement, sugar, and fertilizer, moves that showed a willingness to explore areas outside the country's core comparative advantage. Similarly, while those policies that could be termed functional – the construction of roads and hydroelectric plants, the expansion of vocational and higher education – have been widely praised, the

logic behind selective interventions has at times been seen more unfavourably. Rodrik, who visited Ethiopia on a World Bank mission in 2008, for example, criticised that beneficiaries had been selected by administrative fiat, not based on their potential for innovation.¹

3. Industrial policy in Ethiopia

Ethiopia is arguably the poorest country ever to have devised a strategy of national economic transformation based explicitly on industrial policy. When the first national framework document was adopted in 2002, the country's GDP per capita (in current US\$) stood at just over US\$ 100, and its industrial output per capita was among the world's lowest (World Bank, 2015).

Economic development is a fundamental concern for the government of the Ethiopian Peoples' Revolutionary Democratic Front (EPRDF). The ruling-party coalition has dominated Ethiopian politics since 1991, when it overthrew the socialist military regime of the Derg – which had, in turn, deposed Emperor Haile Selassie in 1974. During the 1990s, the government's main focus lay on navigating the transition from socialism to a market economy, acceding to the demands of structural adjustment (privatisation, financial liberalization, macroeconomic stabilisation) but determined to avoid its excesses. Only after the consolidation of the leadership of both state and party under Prime Minister Meles Zenawi in 2001 did a more proactive approach to industrial transformation along East Asian lines emerge as the favoured model.²

The main driver behind Ethiopia's industrial policy is the prime minister's office (PMO), consisting of the prime minister, and a number of senior policy advisers with the rank of minister, who take lead roles in designing the country's development plans. Similarly, the implementation of industrial policy is coordinated from within the PMO, both through cabinet and through an increasing number of standing committees on different issues – export promotion, business diplomacy, infrastructure – that meet monthly under the chairmanship of the prime minister.³ Other institutions involved in the policy planning process have been strengthened and expanded. Although Ethiopia has not followed the East Asian model of entrusting overall policy coordination to a central pilot agency, a semi-autonomous National Planning Commission was created within the Ministry of Finance and Economic Development (MoFED) in 2012.

A first national industrial policy was introduced, to little fanfare, in 2002, and was further operationalized in three subsequent development plans.⁴ More recently, it has been supplemented by an Ethiopian Industrial Development Roadmap (2013–2025). At the centre of the successive policy documents is the idea of *agricultural development-led industrialisation* (ADLI). In line with Lin's propositions, the main idea behind ADLI is that the development of Ethiopia's manufacturing sector should complement and follow the growth of the country's dominant agricultural economy. Support is thus targeted at sectors that are labor-intensive, relatively low-tech, and characterized by strong backward linkages to agriculture: primarily textiles, leather and leather products, and agro-processing. Investors in these areas are afforded a number of incentives including favourable land lease rates, access to commercial credit, free imports of inputs, and generous tax breaks (Altenburg, 2010: 18).

Parallel to these sectoral interventions, however, the Ethiopian government has invested heavily in more functional types of policies, trying to establish a broader base for industrial transformation. A massive campaign of infrastructure investment is at the core of these efforts. National transport (highway and railroad) networks are being expanded dramatically, although the country's dependence on the port of Djibouti will remain a costly bottleneck for the foreseeable future. At the same time, the output of Ethiopia's hydroelectric plants rose from 750 MW in 2005 to 2000 MW in 2011 and is projected to reach 10,000 MW once the Grand Renaissance Dam comes online. At only \$0.04 per kW hour compared with Bangladesh (\$0.05), Cambodia (\$0.16 to 0.21) and China (\$0.11), Ethiopia has one of the lowest costs of electricity among potential competitors (Teshome, 2014). In cooperation with other partners such as investors from China and the World Bank, the government has constructed a series of new industrial parks. The country is also trying to upgrade the skill base of its citizens, both in and outside of the public sector. More than 20 new university campuses have been built across the country since 2000, and institutions of higher education have been obliged to privilege science and engineering subjects over the humanities under a 70:30 formula. Vocational and technical education has also been expanded.⁵

Like the East Asian countries, the Ethiopian government has placed high value on the technical expertise of its civil service, at least at the federal level. Starting in 2001, it embarked on an ambitious campaign of civil service reform, coordinated from the prime minister's office and overseen by a dedicated (“super-”) ministry of capacity building. With support from the World Bank and several European agencies, the program streamlined bureaucratic processes, introduced modern management methods and increased the use of digital technology, while also anchoring the civil service firmly in the EPRDF's political vision of an Ethiopian development state (Vaughan & Gebremichael, 2011: 630). Over the past decade, recruitment standards in the public

¹ Rodrik's findings were informally published online; see Rodrik (2008). The main aspects of his evaluation remain valid in 2015.

² These texts include articles published in his name as well as internal party documents whose authorship is widely attributed to Meles. For an introduction, see de Waal (2013).

³ Project planning and budgetary oversight are primarily done within the Ministry of Finance and Economic Development (MoFED). However, although MoFED's staff and technical capability have been considerably expanded over the past decade, the ministry's capacity and manpower are still considered insufficient to shoulder the full responsibility of managing the country's path to industrial transformation.

⁴ “Federal Democratic Republic of Ethiopia,” 2003 (unofficial translation of August 2002 original); The Sustainable Development and Poverty Reduction Program (SDPRP, 2002/3–2004/5), the Plan of Action for Sustainable Development and the Eradication of Poverty (PASDEP, 2005/6–2009/10), and the Growth and Transformation Plan (GTP, 2010/11–2014/15). A new national development plan for the years 2015/6–2019/20 is currently under review.

⁵ The number of students enrolled in technical and vocational training programmes (TVET) rose from 100,000 in 2005 to over 350,000 in 2010 (Ministry of Education, 2013: 54).

sector have risen significantly as a consequence of the expansion of higher education, and competition for a coveted position in a federal ministry or agency is intense.

Ethiopia's industrial development policy was built with the expectation that it would help the country enter global markets and earn foreign exchange. In 2003, the Ethiopian government thus established a National Export Coordination Committee (NECC) that sets targets for exports and is modeled on the Korean experience (Mulu, 2013: 28).⁶ The NECC was tasked with not only promoting exports, but “improving coordination among government institutions” (Arkebe, 2015: 99). It meets monthly, is chaired by the prime minister, and has involved over two dozen government ministries and departments. However, while Korea's monthly National Export Steering Meeting included major firms, industrial associations, banks, and research institutions, Ethiopia's has been entirely an internal government affair (Arkebe, 2015: 100–101). In 2010, the government belatedly established a Public-Private Consultative Forum (EPPCF), jointly chaired by the Ministry of Trade and the Ethiopian Chamber of Commerce (Mulu, 2013: 26). While this initiative has made some progress on improving the historically antagonistic relationship between government and private sector, it has yet to develop into a fully-fledged platform for policy coordination.

The functional approach to industrial policy also emphasizes broad measures to remove discrimination against exporters and to provide general support for goals like increasing exports. Ethiopia has established a foreign exchange retention scheme to promote exports. It has also set up voucher and duty-drawback systems, as well as bonded warehouses to facilitate the importing of inputs needed for the production of export products. These general promotional schemes have received mixed reviews. A survey by Arkebe Oqubay found that 85% of respondents rated the voucher system as ineffective, although the foreign exchange retention scheme was generally considered satisfactory (Arkebe, 2015: 229). The government has also sought to keep its exchange rate from becoming overvalued, acting to devalue the currency in 2010–11 by 25% (Arkebe, 2015: 229). A profit tax holiday of 2 to 6 years, zero import tax on machinery and equipment, and duty free import of inputs needed for the manufacture of exports, allowed new investors breathing space.⁷ The Development Bank of Ethiopia has provided loans of up to 70% of initial investment capital for industry, although not working capital.

The Ethiopian economy has grown substantially since the first industrial policy was formulated, with annual GDP growth averaging more than 9% between 2002 and 2013, according to World Bank data.⁸ However, the manufacturing sector only accounts for a small part of this success story. It is true that in absolute terms, both industry in general, and the manufacturing sector in particular, have made significant advances, each tripling in size over the past decade. However, relative to the other economic sectors, manufacturing has declined somewhat, from 6% to 4%, and the absolute industrial value-added per capita, about US\$ 60 in 2013, remains one of the world's lowest. By way of comparison, this figure corresponds to about 25% of China's industrial value-added per capita in 1990, or 30% of Vietnam's in 2000.⁹

4. The leather sector

The development of the Ethiopian leather industry has followed a similar pattern to this overall picture. By directing support to the sector, the Ethiopian government has deliberately engaged in an industrial policy of “picking winners.” There is no doubt that it has chosen an industry with considerable potential: discussions of Ethiopia's leather sector usually begin by noting that the country has the largest livestock herd in Africa, estimated at over 100 million cattle, sheep, and goats. While the country's Zebu cattle hides have no particular distinction, the skins of Ethiopia's highland sheep are prized for their combination of softness and strength.

The leather value chain begins with the meat industry, which is still largely a backyard affair in rural Ethiopia, although some formal abattoirs exist. Traders collect hides and skins from homes and rural butchers, store and sell them to tanneries, which move them through the processing stages: from pickle to wet blue, crust, and finally coated or finished leather. Each stage involves progressively greater skill and higher technology, including advanced chemical inputs. The high degree of informality of much of the meat industry, as well as the large number of animals suffering from skin defects, have long created challenges for tanneries to secure adequate supplies of high quality hides and skins.

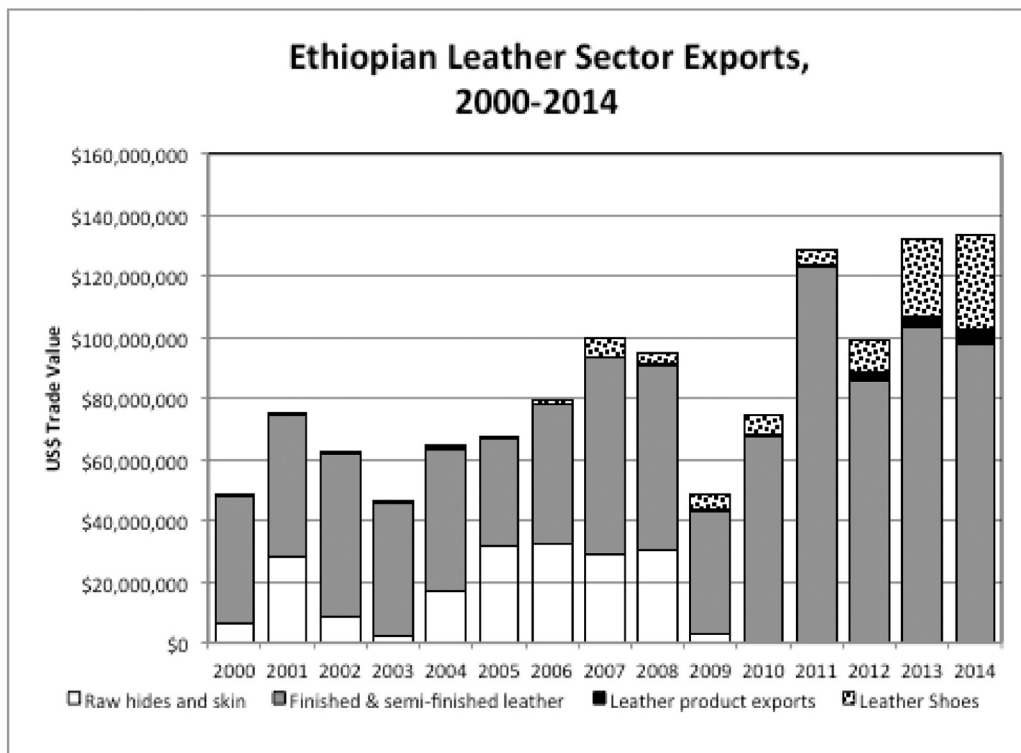
The production of leather and leather goods has a long tradition in Ethiopia. The first formal sector tannery, Addis Ababa Tannery, was established in 1925 by two Armenian entrepreneurs and is still in operation. Other tanneries followed in the 1920s and 1930s, and in 1949, the Addis Ababa Tannery set up the Tikur Abay Shoe Company. Under the Emperor Haile Selassie (1930–1974), Ethiopia's leather sector expanded. The government established a Livestock and Meat Marketing Board in 1964 “to improve the collection, preservation and trading of hides and skins” and began to regulate the sector (Girum & Schaefer, 2015, 10). A large, vibrant cluster of artisanal shoe and leather products workshops grew near Addis Ababa's Merkato area, one of the largest markets in Africa. When the Derg took power in 1974, it expelled foreign entrepreneurs and nationalized their assets, establishing the National Leather and Shoe Corporation to oversee eight formal sector tanneries and six large shoe factories (Girum & Schaefer, 2015, 11). When the Derg regime itself was toppled in 1991, the National Leather and Shoe Corporation was broken up again and sold to private investors.

⁶ This committee is translated variously as National Export Development Committee, National Export Promotion Council (both in Mulu, 2013) and National Export Coordination Committee (Arkebe, 2015).

⁷ When Ethiopia liberalized trade in the early 2000s, the country retained import tariff protections up to 35% on local shoes and components, and leather at various stages. Exporting firms reported to us that all shoe components had earlier been allowed in duty free but that the government had later instituted a complicated duty drawback scheme and a voucher scheme for exporters. In theory exporting firms could reclaim the duty for all imported inputs used for export, but this was neither rapid nor easy.

⁸ All data in this paragraph is taken from the World Bank's World Development Indicators; see World Bank (2015).

⁹ Based on WB Development Indicators: Industry value-added as share of GDP * GDP per capita, adjusted for inflation. China's industrial value-added as share of GDP in 1990 was 40.9%, Vietnam's in 2000 was 34.2%.



Source: UN Comtrade, compiled by authors.

Fig. 1. Ethiopian Leather Sector Exports, 2000–2014. Source: UN Comtrade, compiled by authors.

By 2000, Ethiopia had more than a thousand local shoe manufacturers (Sonobe, Akoten, & Otsuka, 2009: 721). Most were small-scale craftsmen, but the sector exhibited a classic dualism, with a sizeable informal, artisan sector alongside a small number of fairly large firms with long histories, most newly privatized. As part of this transition, Ethiopia also liberalized its import markets, reducing the tariff on imported shoes to 35%. In 2001, local producers were hit with a flood of shoes from China. Over two years, the country's then largest shoe manufacturer, Kangaroo, lost 50% of its sales revenue, while small firms struggled to compete with shoes perceived as "superior in design, price, and quality" (Tegegne, 2007: 747). However, a survey in 2005 found that after several years of adjustment, local firms producing men's shoes had upgraded their equipment, machinery and skills and were competing well against Chinese imports, although the Chinese products still dominated the women's shoe segment (Tegegne, op cit).

Despite the large footwear cluster in Addis Ababa, most of Ethiopia's leather was traditionally exported semi-processed, mainly to high-end Italian and, later, Chinese tanneries that finished the leather. Yet the government was aware that finished leather can be worth up to ten times the value of "wet blue" hides. In 2002, Ethiopia's Industrial Development Strategy highlighted the potential of meat, leather, and leather products as one of the centrepieces of the agriculture-led development strategy.

In the years since the formulation of the Industrial Development Strategy, the leather sector has evolved. Ethiopia earned \$27.8 million from semi-finished leather exports in 1998/99 and only \$3.4 million from leather products. Fifteen years later, in 2013/14, the country was exporting approximately \$131.5 million in finished leather and leather products (Fig. 1). Exports of raw and semi-finished leather had ceased entirely.¹⁰ While the rate of increase on a low base was remarkable, the sector still only accounted for 4% of Ethiopia's exports, and was not close to meeting the export target of \$500 million formulated in the 2009/10–2014/15 Growth and Transformation Plan. However, Ethiopia had become a small but visible presence in the global leather product arena.

The export of leather shoes began on a very small basis in 2003/2004; a year later, five local firms had exported at least small quantities (sometimes only samples) of shoes or shoe components such as leather uppers (Sonobe et al., 2009: 726). The shoe sector expanded substantially with the arrival of four large foreign firms that had moved some of their operations from China between 2009 and 2014. By that time, at least 14 companies in Ethiopia had at least some experience in making shoes for export, while two major foreign firms and one local firm had invested in the production of leather gloves for export. Ethiopian shoes and gloves were being exported to 29 countries on five continents. Yet the sector was still characterized by a striking schism between small-scale and large-scale producers. Over a thousand small artisan workshops serving the domestic market clustered around the Merkato, while about 65 medium and large firms produced tanned leather, shoes, and leather products in the vicinity of Addis and nearby towns, such as Modjo.

¹⁰ It was not possible to break the Comtrade data down further than raw hide versus other leather (finished and semi-finished). Given the very high tax on semi-finished leather, it is reasonable to assume that very little is exported, at least openly.

Aside from the supply of leather from large tanneries to small artisans, the two clusters were completely separate. Although some tanneries sold their semi-processed leather to finishing tanneries with higher technical capacity, subcontracting in the shoe industry was non-existent. Many of the larger leather product firms were vertically integrated, to the extent of owning their own tanneries. By contrast, in Vietnam 70% of firms in the footwear sector relied on subcontracting (Arkebe, 2015: 208). Finally, even though some Ethiopian-owned firms did have modest experience of exporting, none had been able to sustain a prolonged and profitable supplier relationship with a foreign buyer. The promise of profits seemed to be stronger for the small number of large foreign firms producing in Ethiopia. Foreign firms also dominant the sector in Vietnam, which has become a significant player in footwear exports. In 2015, nearly 79% of footwear export value was produced by foreign (primarily Korean and Taiwanese) firms, while domestic firms retained half of the domestic market (Duong Le from LEFASO live on World Footwear, 2016). On the other hand, the famous Sinos Valley footwear export cluster in Brazil appears to have been entirely domestic firms, although many were successfully linked to foreign buyers.

5. Industrial policy for leather

As so many African producers of raw materials have found, having a commodity in abundance does not necessarily make it easy to plot an industrial strategy by simply adding value. Still, South Africa aside, Ethiopia has gone further than any other sub-Saharan African country to move up the international value chain for finished leather and leather products. Below, we discuss the steps taken by the Ethiopian government and their outcomes.

5.1. Create a high level focus on the sector

The first step in crafting a leather sector industrial policy was a locally-owned decision to diagnose the sector's challenges and create a strong vision for the future. Ethiopia's Industrial Development Strategy was produced in 2002, just after Ethiopia's leather shoe producers had been hit by the "China shock" from trade liberalization. Written in the country's official language, Amharic, and largely authored by then Prime Minister Meles Zenawi and advisers close to him, it was a remarkable document. First, simply having a clear, interventionist industrial policy went against the era's dominant thinking about African development, which was highly sceptical about industrial policy. Second, the strategy was home grown: not produced by consultants on behalf of a donor organization, and largely ignored by the foreign community at the time of its publication. There is still no official English translation of the document, which again signals that it was produced by Ethiopians for Ethiopians.

The strategy provided a brief but careful diagnosis of the interlinked challenges of the meat, leather, and leather products industry: poor quality and insufficient quantity of skins and hides; weak institutions and poor coordination; inefficient marketing and weaknesses in technical skills. The broad outlines of government intervention were contained in a carefully thought-through sequence that took into account Ethiopia's situation of capital shortages, low levels of technology, and labor abundance. The strategy noted that some parts of the sector (for example, labor-intensive leather products) required less capital and had greater potential to expand quickly, while also stimulating demand through backward and forward linkages. With this in mind, the strategy identified the livestock and leather products subsectors as having high potential for rapid growth through exports. It recommended that they come first in priority as they could expand without being limited by shortages in other subsectors such as modern abattoirs and finished leather (Federal Democratic Republic of Ethiopia, 2003: 119). International markets could absorb the expanded and upgraded livestock supply through live animal exports until the local meat industry was further developed. Likewise, the document argued, in the short term,

...by importing finished leather (including canvas) we can expand production of footwear for export. As this sub-sector expands, it creates wide market opportunities for the Leather Tanning industries. They can move, stage-by-stage, to a higher level of producing finished leather (Federal Democratic Republic of Ethiopia, 2003: 120).

The strategy contained considerable insight into the workings of global value chains, and outlined a strategy for how a poor country might use foreign firms to pull itself onto the ladder of industrial development (Federal Democratic Republic of Ethiopia, 2003: 121). As the chief architect of the country's industrial development strategy, former Prime Minister Meles Zenawi also invested the prestige of his office in a focused effort to attract foreign investment into the leather sector. We elaborate on this in the next two sections.

5.2. Make strategic use of international development partners

Ethiopia's drive for industrialization was supported by several key development partners, including the United Nations, and the governments of Italy, Germany, the United States, and China. These partners provided financial assistance and expertise for capacity building, but perhaps more importantly, they were also instrumental in providing some of the key international contacts that allowed Ethiopia to get a foothold in the global leather products market. However, the overall strategy remained "owned" by the Ethiopian government at all times, and key donor support activities followed specific requests by government officials.

Beginning in 2004, the Italian aid program provided financing to the United Nations Industrial Development Organization (UNIDO) in a multi-year effort to expand the Ethiopian government's capacity to offer technical assistance and services to the leather industry (discussed below). The original UNIDO project had planned to promote subcontracting between large firms and the artisan

sector, but the project's steering committee, chaired by the State Minister of Industry, decided to shift the focus towards strengthening Ethiopian firms that were already in the modern sector (UNIDO, 2012: 31). Under the UNIDO program, Addis-based Peacock Shoes developed a supplier relationship with two international buyers: the Italian firm GEOX and a Spanish company, MAGOCOR. UNIDO considered this to be “a model case for the positive spill-over that trustful buyer-subcontractor relationships can deliver” (UNIDO, 2012: 48).

Ethiopia's first foreign investor in the shoe sector, ARA Shoes, and the country's first foreign investor in leather gloves, Otto Kessler, were introduced to Ethiopia as part of the Engineering Capacity Building Program (ECBP) of technical support and matchmaking assistance launched in 2005 and financed by the German Federal Ministry for Economic Cooperation and Development (ECBP). One of the goals of the project was specifically to facilitate connections between Ethiopian firms and international companies. The ECBP also financed 35 Ethiopians from the Leather Industry Development Institute (LIDI) to study for postgraduate and doctoral degrees in India, in sectors relevant for leather. In 2012, the United Nations' Commodity Development Fund joined with the OPEC Fund for International Development (OFID) to provide loan finance for the Ethiopian-owned Davimpex tannery to build a glove factory. This factory has since exported to Italy, Japan and Sweden (Schneidman, 2015).

Support from the Chinese government was more indirect, but also followed the signals from the Ethiopian government that the country was serious about building its manufacturing sector. The Chinese government funded part of the capital costs of the Eastern Industrial Zone built outside of Addis Ababa, where one of China's largest shoe companies, Huajian, set up operations early in 2012. The China Development Bank also provided early investment capital through the China-Africa Development Fund (CAD-Fund) for a Chinese tannery in Ethiopia.

The US Agency for International Development (USAID)'s Agribusiness and Trade Expansion Program (ATEP), helped introduce three US buyers, including Harbor Footwear and Brown Shoes, to seven Ethiopian shoe factories (Eden, 2011). USAID also assisted in improving the quality of raw hides and skins through veterinary services and warehouse construction, and operated an investment guarantee offer to help reduce the risks faced by Ethiopian commercial banks in offering investment finance. USAID's East Africa Trade Hub facilitated the participation of Ethiopian footwear firms in the “Origin Africa” booth at the MAGIC fashion and accessories trade fair in Las Vegas.

Not all of these efforts bore fruit. For example, USAID, UNIDO, and other donors also supported a campaign to develop a brand—“Taytu”—for leather handbags made by a cooperative of Ethiopian women, and marketed them as high-end luxury goods in Paris, Tokyo and New York. This enjoyed a very small flurry of success, but has not appeared to be sustainable without support from a team of outside consultants. The five-year ATEP program's efforts to link Ethiopian firms to US buyers showed promise but ended in 2011 before it was able to foster lasting linkages.¹¹ Yet as we will see, Brown Shoes, a \$2.6 billion footwear company briefly introduced to Ethiopia through the short-lived ATEP project, would return to Ethiopia three years later, and play a major role in bringing Chinese investment to the country.

5.3. Attract a “lead goose” in the footwear sector

The “flying geese” model of industrial development is based on a stylized fact: as costs rise, production moves over time to lower-cost areas (Akamatsu, 1962; Lin, 2012). Firms within countries often begin by producing the easiest parts of a value chain (garments, for example) and move over time to producing the higher value (spinning and weaving of textiles, fabrication of sewing machines, and ultimately fashion design and marketing). Like wild geese flying in formation, leading producers of a commodity cede their place within a value chain as they shift on to higher-value activities. This creates openings for the geese (countries) directly behind them to move up the chain and replace the more advanced economies as principal producers of the good.

Ethiopia's 2002 *Industrial Development Strategy* understood very well that Ethiopia needed to attract a “lead goose”—i.e. a more technologically advanced firm from a slightly higher-cost country. The strategy analysed how Ethiopia could break into global value chains by creating relationships with the companies that produced for the large-scale, global distributors that control international markets, or create relationships with those big distributors directly. While Ethiopia was working to raise the quality and standards in its leather products industry, the government should try to.

...attract into our country companies with some experience to produce on contract basis for big companies. By studying companies experienced in this sort of work, identifying those with some interest to invest in Ethiopia, and discussing with them what they would like to see in place to do so, we have to be able to attract these investors (Federal Democratic Republic of Ethiopia, 2003: 125).

Ethiopia would also need to set in place opportunities for foreign companies to transfer skills to domestic firms. This would allow Ethiopian firms to “emulate” their foreign counterparts, and develop their own capacity to break into international markets.

The first “foreign geese” to arrive in Ethiopia were from the country's traditional raw leather markets in Italy and Germany. For example, in 2004, a medium-sized Italian shoe company, La Nuova Adelchi, began a relationship with two large, vertically-integrated local firms, Peacock and Ramsay. Adelchi provided small orders, and technical assistance to meet Adelchi's standards (Sonobe et al., 2009: 726; Siegel, 2008). German shoe giant ARA briefly formed a buyer relationship with two other large local companies, Ras Dashen and Kangaroo, supplying technical assistants from Romania and Germany and Italian-made machinery to the local companies at zero

¹¹ Telephone interview, Richard Siegel, (a shoe industry consultant who worked with a United States Agency for International Development project, Fintrak, which aimed to increase African footwear exports to the United States.) September 11, 2015.

cost, to upgrade their technology.¹² While Adelchi never invested directly in Ethiopia, ARA later established its own shoe factory around 2009, although it sold the factory to a Hong Kong-Italian firm in 2013 and exited Ethiopia.

Neither the Italian nor the German linkages proved lasting. The Italian connection was particularly problematic: Peacock eventually sued Adelchi for non-payment (Mikias, 2010). The general manager of Ramsay Shoe Factory told a reporter: “Our company used to produce some of these major shoe brands and it was not a good experience for us” (Andualem, 2014). Yet Prime Minister Meles’ more successful effort to attract Huajian and other major shoe companies from China’s Pearl River Delta must be seen as further steps in this strategy.

In 2004, Ethiopian leader Meles Zenawi visited China and met with Chinese industrialists to promote investment in his country’s leather sector. This trip eventually led to the first Chinese investment in a tannery in Ethiopia (China-Africa Overseas Leather Products) by a company that had been importing semi-finished leather from Ethiopia since 1995.¹³ In 2011, Meles made a business promotion trip to China’s largest light-industrial region: the Pearl River Delta. Within weeks, a delegation of six Chinese companies had arrived in Ethiopia, including two shoe firms: the Huajian Group (which was producing 16 million pairs of leather shoes annually), and the Pearl River Delta office of Brown Shoes (the US-based company that served as a major buyer of shoes from Huajian and other Chinese factory groups). Brown Shoes was already primed to regard Ethiopia as a possible production location for its supplies, and this familiarity was likely key for Huajian, which needed Brown to approve any shift of location.

In November, Huajian’s general manager returned to Ethiopia to rent space in the Chinese-run Eastern Industrial Zone, hire 50 Ethiopian graduates, and send them off to its Chinese factories for training. The Huajian factory in Ethiopia was up and running within months. In 2014, another major shoe company arrived: George Shoes, a Taiwanese-owned firm that produces higher-end ladies footwear. The trip by Ethiopia’s president to China’s Pearl River Delta was a key factor in sparking interest by Chinese producers. Yet although some have speculated that Huajian may have been pushed to invest for foreign policy rather than profit, the arrival of George Shoes supports the interpretation that pressure from Brown Shoes and other buyers to reduce costs was a primary reason for the move to Ethiopia. Indeed, an American consultant who introduced Brown Shoes to Ethiopia in 2009 told one of the authors: “I got the Chinese to go in there by Brown pressuring them. U.S. customers need to push and pull them...Brown doesn’t want to be making shoes in Dongguan.”¹⁴

5.4. Build government capacity to support the sector

Already in 1998, the Ethiopian government established the Ethiopia Leather and Leather Products Technology Institute to provide technical support to the sector. Initially under the supervision of the former Ministry of Trade and Industry, the institute was charged with training, conducting research and development, and providing consultancy services to leather and leather products producers. The institute was reorganized as the Leather Industry Development Institute (LIDI) in 2010, with an expanded mandate to be the lead agency in the sector.

Firms in a 2012 survey identified “lack of skilled personnel” as LIDI’s most significant limitation, even though LIDI had a technical staff of over 130 specialists (Arkebe, 2015: 236). The Ethiopian government addressed the skill shortages in two ways. First, they launched a cost-sharing program to lower firms’ costs for salaries of foreign management and technical experts by exempting their salaries from income tax (ELIA). UNIDO also sponsored a benchmarking exercise, sending foreign experts to work with seven tanneries and seven shoe factories. Second, the government built LIDI’s capacity through a twinning arrangement with two Indian government institutions: Central Leather Research Institute, and the Footwear Design and Development Institute. LIDI also organized free and subsidized training for managers and technicians from sector factories, and sponsored short-term training in India. Other measures came from the private sector; for example, in 2014, Brown Shoes provided seven scholarships for LIDI experts.¹⁵

The efforts to build LIDI’s technical capacity have had some impact. Ethiopian leather sector firms have made use of its state-of-the-art computer-aided design (CAD) facilities and other industry supports (Arkebe, 2015: 236). Yet gaps in LIDI’s mandate made it unable to coordinate other key actors in ways required for solving many firms’ problems. For example, LIDI is unable to act as a “one stop shop” for firms, which still have to apply to various government departments and ministries for expatriate work permits, permission to send samples overseas, and solutions to logistical problems, particularly problems with customs and trade facilitation (Ibid).

At the same time, the Industrial Development Strategy’s vision of an improved livestock sector as the foundation of the leather industry languished. No equivalent high-level institutional focus on improving livestock quality has emerged. This is discussed further below.

5.5. Strengthen business associations

The successful industrial policies of Korea and Taiwan were devised and implemented in part through close, “embedded” relations between a well-organized private sector and a strong but autonomous government (Evans, 1995). Ethiopia’s 2002 Industrial Development Strategy envisioned the formation of a joint forum across the meat, leather and leather products sectors to identify

¹² Interview, senior official, ARA Shoes, Addis Ababa, July 13, 2012.

¹³ Interview, senior official, China Africa Overseas Leather Products, Ethiopia, June 29, 2012.

¹⁴ Telephone interview, Richard Siegel, September 11, 2015.

¹⁵ “Brown Shoe, a US Based Footwear Producer, Comes to Ethiopia,” *Ethiopian Opinion*, July 11, 2014.

bottlenecks and plan for their resolution. As of early 2016, this forum had not been established, and the lack of coordination within the sector remained a challenge.

Some parts of the sector were particularly well-organized to promote their own interests although even here the government had a role. For example, the Ethiopian Tanners Association was formed, largely by state action, soon after the end of the Derg period when the sector comprised six state-owned and two private tanneries (Girum & Schaefer, 2015: 12). Tanneries have also formed a joint company to purchase salt and other inputs in bulk. Although the association expanded over time to include footwear and leather product producers, becoming the Ethiopian Leather Industry Association (ELIA), the tanneries continued to dominate.

In the African context, ELIA stands out for its capacity and vision. It has worked particularly closely with Ethiopia's Ministry of Industry and with some foreign donors in marketing the country's leather products. Since 2008, ELIA has coordinated the annual All Africa Leather Fair (AALF) in Addis Ababa, a fair that some contend was originally the vision of Prime Minister Meles (Yonas, 2014). Some of this energy comes from its members. Ethiopian tanneries have been exhibiting at the Hong Kong Leather Trade Fair for more than twenty years.¹⁶ In 2012, for example, ELIA organized a pavilion for the eight Ethiopian tanneries attending the All China Leather Exhibition in Shanghai.¹⁷ Ethiopia was the only African country to have a pavilion, although a small number of firms from other African countries rented booths.

The members of ELIA engage regularly with the Ministry of Industry (MOI) on policy issues. "Our members are very happy with the MOI," an ELIA official noted. "Contact is on a daily basis, they follow up continuously."¹⁸ ELIA members are invited together to quarterly meetings with MOI to discuss constraints affecting production and export performance.¹⁹ In 2012, ELIA was able to persuade the government to enact a temporary ban on new foreign investment in the tannery sector (Arkebe, 2015: 215).

In contrast, while the tanneries that processed Ethiopia's skins and hides are fairly well organized, this is not the case for the farmers who own the livestock, nor for the traders that collect and supply the skins and hides. The Ethiopian Raw Hides and Skins Suppliers Association was formed in late 2012, when input suppliers came together in part to try to shape the debate over new regulations intended to increase efficiencies in the marketing of skins and hides (discussed below). As of mid-2015, this new interest group was still not a member of ELIA.

5.6. "Shock-and-shape" upgrading

The Ethiopian government adjusted specific policies through export bans and new export taxes in order to force tanneries to upgrade. In 1983, the Derg regime banned the export of raw hides and skins, although this was not done as an upgrading move but to ensure local input supplies, particularly for military boots (Arkebe, 2015: 214). Nearly twenty years later, in 2005, the NECC decided to pull Ethiopia's most promising tanneries into the finished leather sector (Arkebe, 2015: 222–223).

At first, the government supported upgrading by providing incentives such as new assistance for training and skill transfer, as well as low-cost finance for investments in upgrading. However, in 2006, Prime Minister Meles announced that the government planned to push tanneries to move up the value chain (Eden, 2011). To do this, the government "shocked" the system twice by introducing export taxes designed to force firms to upgrade. In 2008, pickled and wet-blue semi-processed leather faced a new export tax of 150%. Three years later, in April 2012, the 150% tax was also applied to "crust" leather, the last stage before finishing. The government also implemented a minimum price for exports of finished leather hides and skins to stop companies from trying to cheat by passing off cheaper semi-processed leather as the more costly finished leather, and to reduce problems of under-invoicing by foreign tanneries exporting to their own downstream operations.

These prohibitive taxes had a decisive impact. In 2011, only six of the country's 26 tanneries were equipped to produce finished leather (Eden, 2011). Five of the 11 Ethiopian tanneries in the region of Mojo and Addis Ababa stopped exporting completely, and began selling semi-processed leather to other tanneries for processing. But over the medium term, most Ethiopian tanneries moved to import new equipment, expertise, and chemicals that enabled them to regain their export markets. By 2015, twenty Ethiopian tanneries were producing finished leather for export. Furthermore, the new taxes had another effect: they provided an incentive for new foreign investment.

Since 2008, at least seven foreign firms have built large tanneries, while two foreign investors—the British glove firm Pittards and a Chinese group—purchased existing tanneries and upgraded them. Many of the investors were firms that had been importing Ethiopian semi-processed leather and were familiar with the country. Pittards, for example, had been importing sheepskin from Ethiopia for over 80 years.²⁰ A number of the new tanneries have indicated plans to move over time into leather product processing, primarily gloves and shoes.²¹ However, some tanneries noted that another effect of the export tax was an increase in levels of corruption in the Ethiopian customs, as these officials had the power "to declare whether leather is finished or unfinished."²²

As demand for raw materials increased, however, the price rose. Over several years, high quality sheepskins soared in price from 20 birr to over 150 birr. As noted above, local tanneries were successful in pressing the government to enact some limits on new foreign investment in tanneries. Already in 2006, the Development Bank of Ethiopia had stopped providing loans for

¹⁶ Interview, official, ELIA, June 25, 2012.

¹⁷ Interviews, China All Leather Expo and Footwear Trade Fair, Shanghai, China, September 4–5, 2012.

¹⁸ Interview, official, ELIA, Addis Ababa, June 25, 2012.

¹⁹ Interview, manager, Batu Tannery January 21, 2015; Interview, Ministry of Industry official, Addis Ababa, January 23, 2015.

²⁰ Interview, manager, Pittards, Addis Ababa, June 26, 2012.

²¹ Interview, manager, Indian-owned tannery, Addis Ababa, July 12, 2012.

²² Interview, manager, Chinese-owned tannery, Ethiopia, July 12, 2012.

new tannery investments (Arkebe, 2015: 234).²³ In a similar move, new licenses for foreign sheepskin tanneries were suspended in May 2011 (China-Leather, 2011).²⁴

Paradoxically, although foreign donors supported the sector in some significant ways, Ethiopia's efforts to move up the value chain also met resistance from some international stakeholders. Italy has over two thousand tanneries producing the fine leathers that go into the world's highest value leather products. When Ethiopia put its export taxes in place to push its tanneries up the value chain, the Italian embassy lodged a protest due to the impact this would have on Italy's finishing tanneries.²⁵ For their part, Italian tanneries responded by boycotting the All-Africa Leather Fair in Addis and are alleged to have tried to stop Ethiopian finished leather producers from exhibiting at the world's most important leather trade fair, in Italy (European Commission).²⁶

5.7. Improve input supply

Despite the country's large animal herds, the poor quality and inadequate supply of the critical raw materials remain perhaps the greatest weaknesses of Ethiopia's leather industry. A 2013 value chain analysis funded by USAID found that livestock was

...not managed for high off-take, or to maximize their value for meat production. Hides and skins are not adequately preserved for fine leather production or international competitiveness, nor are they effectively collected to reach the tanneries and eventual leather products manufacturing (AGP Livestock Marketing and Development Project, 2013).

The death rate for animals was twice the average for Africa (ibid). Studies have found that Ethiopian animals suffer from high degrees of nodular skin defects ("ekeke"), caused by ectoparasites. As free ranging animals, their skins are scratched and scarred from thorns and so on. Many of these defects are not visible on the hides and skins until the pickle stage, which makes it difficult to create a price system based on quality. Requirements for compulsory dipping of animals in an insecticide solution had been implemented in the 1980s and 1990s, but ended after the Derg period. In 2013, the incidence of ectoparasite damage in the country's valuable highland sheepskins was close to 80% (AGP Livestock Marketing and Development Project, 2013). Although grades were in place for different qualities of hides and skins, there was no formal price premium. Even in the country's capital, Addis Ababa, a fifth of all cattle were slaughtered in the owner's backyard, and only 20% of the raw hides and skins came into the market from formal sector abattoirs and slaughterhouses (Girum & Schaefer, 2015: 26). As the leather product sector continued to expand, the average quality of its raw materials deteriorated (Arkebe, 2015: 197; 219). Some foreign tanneries were able to use new technologies to make use of skins that formerly would have been discarded as waste, but this was not yet widespread.

Ethiopia's Industrial Development Strategy had identified improving the quality of livestock as "fundamental to all other sub-sectors" (Federal Democratic Republic of Ethiopia, 2003, 119, emphasis added). The strategy had recommended that Ethiopia encourage raw leather and semi-processed leather imports into the leather products industry to make up for supply shortages and to stimulate local production through competition. However, this encouragement did not happen until 2011, when the government allowed zero-tariff imports of finished leather.²⁷ While a small number of tanneries did import hides and skins from other parts of Africa for further processing, the complexities of logistics and customs and opposition from well-organized Ethiopian tanneries did not make this easy. At least one foreign tannery was planning to establish a modern abattoir in order to have better access to a range of skins and hides.²⁸

The Ethiopian government's pattern of response to the supply problem reflected a deep-seated belief among the political class that suppliers of hides and skins were "rent-seeking" middlemen, manipulating markets by stockpiling and causing artificial shortages. One study noted that traders were accused by tanners of operating "as a monopoly with predatory pricing practices" (Siegel, 2008: 12). In 2011, for example, the Ministry of Industry stepped in to temporarily cap prices of hides and skins. This led to supply shortages as traders refused to supply their goods at the capped prices; the policy was rescinded. Some foreign tanneries believed that local tanneries had easier access to higher quality skins and hides, and they noted that some suppliers raised the price when tanneries purchased a large quantity rather than offering a discount.²⁹ Traders complained of liquidity problems caused by very slow payments for supplies they had delivered to tanneries (Girum & Schaefer, 2015: 18).

As policy changes in hides and skins marketing were being debated, a number of Ethiopian tanneries voiced support for a government-run company to "cut out the middle man".³⁰ Case studies of China's successful potato cluster and garment clusters identified a key role for local governments in establishing marketplaces where producers could purchase inputs from traders and sell their products (Sonobe, Hu, & Otsuka, 2002; Zhang & Hu, 2014). Between 2012 and 2014, the Ethiopian government consulted with stakeholders in the industry in order to revise the existing regulations for the local raw hides and skins market.

²³ Given that by 2012, loans to the leather and leather products sector came to only 4.3% of DBE's industrial finance, this may not have had much impact (Arkebe, 2015, 232).

²⁴ Interview, Leather Industry Development Institute (LIDI), Addis Ababa, January 20, 2015. This ban did not apply to tanneries working with cowhides. George Shoes, a company from Taiwan that arrived (from China) in 2014, planned to build its own tannery in Modjo.

²⁵ Interview, Addis Ababa, January 2015; See also Girum and Schaefer (2015): 31.

²⁶ On the Italian fair: interview, Ministry of Industry official, Addis Ababa, January 23, 2015.

²⁷ Interview, official, ELIA, June 25, 2012.

²⁸ Interviews, Chinese tannery, June 29, 2012 and January 30, 2015.

²⁹ Interview, Chinese tannery, Modjo, January 26, 2015; interview, Indian tannery, Modjo, January 26, 2015.

³⁰ Interviews with Ethiopian tanneries, Addis Ababa, January–February 2015.

A newly established Ministry of Fisheries and Livestock was put in charge of quality improvement in hides and skins and empowered to regulate this subsector. The Ministry established a new, high-level office to target livestock breeding and veterinary issues. New market centers were to be established to allow greater transparency and efficiency, and these were expected to reduce transaction costs in the long market chain for skins and hides. Eventually, the slaughter of animals at home would be banned (Muluken, 2013). It is too early to know whether the new marketing regulations will have the expected impact on the quality, efficiency, and economies of scale in input supply.

6. Conclusions

As the evidence from the leather sector illustrates, Ethiopia's industrial policy exhibits many of the best practices put forward under the framework of New Structural Economics. The country has focused its efforts on a small group of sectors from which it reasonably expects a combination of growth, job creation, and export earnings. It has made sure that these strategic sectors reflect Ethiopia's comparative advantage in labor-intensive, light industries that draw on local agricultural inputs. It seeks to improve the competitiveness of these industries through interventions along the entire value chain, from upgrading input supplies to building the capacity of domestic manufacturers. And it is following the “lead goose” paradigm, seeking to attract manufacturing jobs from countries one step up the technological ladder (China), partly as a result of a failed attempt to create direct linkages with technological leaders (Germany, Italy).

In some ways, the results have been encouraging. The number of investment licenses awarded to companies in the leather sector has grown substantially since the adoption of the country's 2002 industrial strategy (Arkebe, 2015: 231), and footwear “Made in Ethiopia” is slowly gaining traction in Western consumer markets. If the Ethiopian leather industry has still failed to take off, it is because the country has yet to translate the “latent” comparative advantage it enjoys in this sector into a real one (Lin, 2012: 75). Government intervention has contributed to lowering transaction costs in the leather sector, but not yet below a critical point. In this regard, four insights stand out from the above discussion of the empirical material:

First, while Ethiopia's ADLI policy explicitly identifies agro-industrial linkages as crucial to activating the country's industrial potential, these linkages remain underdeveloped in reality, at least in the case of the leather industry. At present, local traders represent the main conduit between farmers and tanneries, yet policies towards them have remained overwhelmingly negative: concerned with discouraging “rent-seeking” practices, controlling prices, and prohibiting exports of semi-finished goods. This stands in marked contrast to the area of crop production, where the establishment of an Ethiopian Commodity Exchange has created a central marketplace connecting large-scale exporters with millions of smallholder peasants (Brinkerhoff, 2015). Recent initiatives to improve marketing structures for skins and hides indicate a potential change of mind in this regard, but have yet to translate into concrete outcomes.

Second, evidence from the Ethiopian leather industry illustrates that government coordination in a “traditional” economic sector—i.e. one with a long history and a multitude of domestic producers—can face additional challenges. As detailed above, Ethiopian smallholder practices of raising and slaughtering livestock are not conducive to the large-scale harvesting of high-quality hides and skins. The existence of a multitude of relatively small actors above and below the tanning stage makes government support for capacity-building a more difficult and costly endeavour. It also hinders collective action among private firms; outside the tannery sector, which is dominated by a relatively small number of larger companies, progress at building business coalitions and advocating their interests has been slow. The explosive growth of Ethiopia's flower industry, on the other hand, illustrates how a small number of well-organized and technologically sophisticated investors, in cooperation with a supportive government, can overcome a lack of previous experience by following in the footsteps of pioneering foreign firms, building domestic capabilities within a very short time (Altenburg, 2010: 22–29).

Third, while the leather sector exhibits some characteristics of a cluster with a number of linkages among firms at all levels of the value chain, the cluster is still at an early stage. Some large foreign shoe and leather product firms have been able to source their leather from local firms in Ethiopia, but others have chosen vertical integration, taking care of the upstream and the downstream at the same time. Despite the quality of the country's sheepskins, a local firm noted that tight supplies of high quality skins meant that Ethiopia would be unlikely to host more than five glove factories, which would not allow enough economies of scale to attract a factory to produce glove linings.³¹ On the other hand, the artisan sector received a boost from the presence of large firms like Huajian which had begun a side-business providing buckles, zippers, and shoe lasts (foot-shaped mechanical forms) to the local market. The majority of the foreign firms we interviewed remained optimistic about the medium to long-term future in Ethiopia, pointing to rising costs in China. They either planned to add to their capacity, or had already done so.

Finally, Ethiopia's low level of overall economic development means that reducing transaction costs requires not just government coordination and targeted interventions in strategic sectors, but sustained investment in the country's physical infrastructure. Despite considerable progress in recent years, transport costs remain high, import–export logistics are tardy and unreliable, and access to finance (particularly working capital) is often restricted. Although some firms noted progress with power supplies, others complained that their supply was not stable. Sectoral policies alone cannot clear these bottlenecks, and the leather industry is one among several which have fallen well short of expectations despite registering substantial growth.

Ethiopia has seen impressive progress through an industrial policy based on sober analysis, local policy ownership and a selective approach to foreign assistance, despite starting from an exceptionally—perhaps uniquely—low base. Nevertheless, even greater

³¹ Interview, Chinese expert, Addis Ababa, January 29, 2015.

efforts will be needed to effect actual structural change. The mixed success of Ethiopia's leather industry illustrates that identifying sectors with particular potential for growth is only a first step towards transformation. How exactly a latent comparative advantage can be turned into a globally competitive industry is a question that will remain on the agenda of Ethiopian policymakers – and, hopefully, on the minds of the New Structural Economists as well.

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