Abstract

Ethiopia has emerged as one of the fastest-growing economies in Africa in the early twenty-first century. Despite this rapid growth, however, structural transformation of the economy remains the country’s central challenge. This paper reviews the origins of Ethiopia’s industrialization and industrial policymaking process in the 20th century. The Ethiopian government has pursued developmentalism and practiced an active industrial policy since the early 2000s. However, a review of industrial policies in various priority sectors shows that the outcome has been uneven across sectors, indicating the importance of the strong interaction between industrial structure, linkage dynamics, and politics/political economy for the evolution and effectiveness of an industrial policy. After examining the fundamental weakness in Ethiopia’s economic structure, this paper will illustrate why and how industrial policy must focus on manufacturing and exports to generate structural transformation and accelerate catch-up. The Ethiopian experience shows that an activist industrial policy goes hand in hand with an activist state.

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Industrial Policy and Late Industrialization in Ethiopia

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Keywords: Ethiopia, structural transformation, industrialization, industrial policy, policy learning, activist state, linkage effects, industrial parks

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1. Industrial Policy in Ethiopia: An Introduction

More than fifteen years into a period of sustained and rapid economic growth, Ethiopia has continued to attract international attention for its achievements and for pursuing a home-grown development strategy, with an active industrial policy at its center. Some have been sceptical about Ethiopia’s development model. While a 2017 BBC documentary asked: “Can Ethiopia be Africa’s leading manufacturing hub?,” the Financial Times was dismissive, arguing in an article entitled "Ethiopia’s mythical manufacturing boom” that the Ethiopian government had waged a successful PR campaign by selling “a story that does not really exist.”

The Ethiopian People’s Revolutionary Democratic Front (EPRDF) had initially targeted agriculture as the key driver of post-war economic take-off (1995–2015) but increasingly pursued the development of the manufacturing sector as the prime driver of sustained economic growth and structural transformation post 2010. Nonetheless by 2018, per capita income remained very low and it was services that had come to dominate the economy rather than manufacturing. Despite being able to feed its growing population, Ethiopia—Africa’s second and the world’s twelfth most populous country—faced intense structural constraints.

Industrial policy and structural transformation

An industrial policy can be a vehicle for catch-up and structural transformation, and increasingly such a policy must focus on how an economy is integrated into global trade and production networks. Industrial policy may be defined as “a strategy that includes a range of implicit or explicit policy instruments selectively focused on specific industrial sectors for the purpose of structural change in line with a broader national vision and strategy” (Oqubay 2015: 18). Structural transformation involves the shift (of an irreversible and permanent nature) of people and economic activities between sectors, and from less to more productive activities. It involves diversification (both vertical and horizontal) into new more dynamic activities, fostering domestic linkages and building technological capabilities, and developing the stock

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2 This chapter provides an account of industrial policy in Ethiopia from the inside; the author has been closely involved in the design of this policy.

3 An annual average GDP growth rate of 10 percent and an increase in the average life expectancy from 45 years in 1991 to 66 in 2016, twice Africa’s average.


5 See Growth and Transformation Plan I and II (MOFED 2010; NPC 2016). See also Chapter 9.

of technical knowledge that constitutes wealth (Pasinetti 1981, 1993; Ocampo, Rada, and Taylor 2009).

There continues to be convincing evidence that manufacturing is the engine of structural change and sustained growth. This is because of the greater scope in manufacturing (broadly defined to include high-productivity agricultural production) for economies of scale, learning by doing, technological development, and productivity gains, together with the strong links between manufacturing and other sectors. Manufacturing also has powerful direct and, perhaps even more important, indirect employment effects (Kaldor 1967; Thirlwall 2013).

Another central—and often neglected—component in structural transformation is the strategic role of exports. First, exports drive international learning, and hence catching up (Pasinetti 1981: 271). Second, exports expand demand and increase productivity gains. Third, exports relax the balance of payments constraint, while enhancing the viability of import substitution (Thirlwall 2013). For a late latecomer such as Ethiopia, the key challenge is to be able to catch up by learning from forerunners, and to mobilize abundant, scattered, and underutilized forces for the purpose of development (Hirschman 1958; Gerschenkron 1962; Ohno and Oqubay 2019a).

Against this background, this paper examines the Ethiopian experience of industrialization and industrial policy in the early twenty-first century and is structured as follows. The next section illustrates the historical evolution and reviews the key features of the Ethiopian manufacturing sector, throughout the Imperial and Derg eras, and into the post-1991 EPRDF period. The third section introduces the policy context, the framework of policy instruments, and relevant institutions. The emphasis is on those policies most clearly expressing the dominant theme of the post-1991 period, i.e., the pursuit of developmental goals through activist industrial policies (some ‘facilitative’ and some ‘getting prices wrong’). The fourth section assesses the outcomes of industrial policies with a focus on specific archetypical sectors and discusses why and how policy outcomes have been uneven across sectors, despite a single development strategy. The next section examines the politics and political economy of industrial policies, and the final section highlights the implications of the analysis and finds it is imperative that policy focuses on manufacturing and exports to generate structural transformation and accelerate catch-up (Cramer, Oqubay, and Sender 2019).

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7 Thirlwall (2013); UNCTAD-UNIDO (2011); UNECA (2016a); Szirmai, Naudé, and Alcorta (2013).
8 See also Lin and Monga (2019).
2. Industrialization in 20th century Ethiopia

Despite recent rapid growth, structural transformation of the economy remains Ethiopia’s central challenge. The Ethiopian government’s efforts to industrialize are not the first and they have evolved after a series of earlier, rather less effective policy campaigns that nonetheless provided a modicum of the manufacturing experience that Amsden (2001) identified as important to the success of industrial policy. Ethiopia’s manufacturing in the twentieth century was mainly focused on the consumer market and was guided by an import-substitution industrialization (ISI) strategy (see Appendix 2). Despite recent policies that have arguably produced more results, manufacturing continues to play a marginal role in employment creation, output, exports, and in building technological capability, and it is still far from being an engine for growth and economic transformation.

Industrialization in the Imperial era (1930–74)

Industrialization in Ethiopia is largely a post-Second World War phenomenon and underwent evolution throughout the Imperial era, the Derg military regime (1975–1991), and the post-1991 period. This does not mean that there were no major events facilitating industrialization prior to the 1950s. For instance, the construction of the Ethio-Djibouti Railway (1897–1917) influenced the pattern of Ethiopia’s international trade, the agglomeration of industries, and the growth of new urban centers along the rail corridor. Mussolini’s invasion of Ethiopia (1936–41), the Second World War, and post-war recovery had significant implications for Ethiopia’s later economic development (Pankhurst 1968; Zewdu 1991). To support its war and its occupying forces, Italy built a 6,000-kilometre road network and dozens of factories aimed at the consumer goods market. After the defeat of Italy in 1941, the British Army dismantled many of these manufacturing facilities, shipping them out to other colonies on the grounds that Ethiopia was ‘over-capitalized’.

An ISI strategy and supporting policies were put in place during the Imperial era (1950–1974). These industries were oriented toward the consumer market, dominated by foreign investors, and concentrated in the three cities of Addis Ababa, Asmara, and Dire Dawa. In 1951, the infant manufacturing sector accounted for less than 1 percent of Ethiopia’s GDP, and comprised 63 firms, all foreign owned, employing 5,765 persons. Food and beverages and

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9 See Pankhurst (1996:43) “… [the British] concluded that the country had been highly, and artificially, industrialized”.
textile industries dominated the sector (World Bank 1967).\textsuperscript{11} Between 1953 and 1961, the sector showed modest growth, with total output reaching 81.8 million birr.

Successive medium-term plans were the most important policy instruments for expanding the industrial sector, although the forecasts remained unrealistic and were not strictly adhered to. Investment codes were used to attract foreign capital, but the government lacked a clear policy in the 1950s and the first investment notice in 1950 was ineffective. The 1962 investment decree was the first serious attempt, offering an exemption from profit tax for five years, guaranteed remittances, duty-free machine imports, and equity participation in local firms (World Bank 1967: 13).\textsuperscript{12} This decree was not applicable to Ethiopians. The third instrument was related to long-term industrial financing. The government sought to compensate for the weak capacity of the Development Bank of Ethiopia (DBE) by feeding equity into larger industrial firms through the state-owned Ethiopian Investment Corporation (World Bank 1967). As was the order of the day worldwide, protective tariffs were widely used. In view of the weak state of domestic entrepreneurship, the government invested directly in large projects, such as utilities, services, factories, and commercial farms. Savings and gross investment never attained the required levels and external financing filled the gaps.\textsuperscript{13}

Manufacturing accounted for 2.6 percent and 4.4 percent of GDP in 1964–1965 and 1973–1974 respectively. In the textile sector, ISI brought benefits in employment creation and foreign exchange savings. Between 1962 and 1969, cotton’s share in employment and output reached 40 percent and 33 percent respectively, with numbers employed doubling from 10,100 to 21,610.\textsuperscript{14} Textile production stimulated backward linkages to cotton production, but its effects on forward linkages (such as stimulating the apparel industry) were weak. In the Awash valley, about 27,000 permanent workers and 60,000 seasonal workers were deployed in cotton plantations (Chole 1973: 142).

The principal weakness of this strategy was structural, in that it was limited to the domestic consumer market, with “no export horizons for manufactured goods” that could have increased demand and enhanced productivity (Chole 2004: 39). A more fundamental structural problem was the complete neglect of agriculture (the mainstay of 90 percent of the population, accounting for two-thirds of GDP, and representing the entire source of export earnings), and

\textsuperscript{11} The 1951 census of Ministry of Commerce and Industry, MCI. Currency equivalents (US$1: birr 2.50) in 1967.
\textsuperscript{12} The State Bank of Ethiopia (founded in 1942 and issuer of the first currency) was restructured into the National Bank of Ethiopia (NBE) and Commercial Bank of Ethiopia (CBE) in 1963 (Deguefė 2006: 247).
\textsuperscript{13} Savings and investment were about 10–11 percent of GDP in the 1960s (World Bank 1967, 1973).
the lack of land reform, badly needed for the wider transformation of the agriculture sector.\textsuperscript{15} The stagnation of agriculture resulted in endemic food shortages and balance of payments issues, and had dramatic political consequences.

**Ethiopia’s lost decades: The stagnant Derg era (1975–91)**

What followed under the Derg regime was a cocktail of misguided economic policies, the militaristic resolution of national issues, the Eritrean war of independence, and totalitarian political rule that banned any democratic practices. The consequence was economic stagnation and two decades were lost until the early 1990s (see Appendix 1) The Derg’s industrialization policies cannot be separated from the government’s agricultural and war-economy policies (Deguefē 2006; Tiruneh 1990).

**War economy and socialist industrialization**

The military campaigns and the mobilization of the war economy caused devastating damage. Priority was given to the defense industry and capital investment was geared towards defense needs, which were mostly met by the Soviet Union and its allies (Ottaway 1990). With mass conscription, the human losses on both sides reached hundreds of thousands, if not close to a million. Farms were left without farmers to support their families (Andargachew 1990); there was virtually no investment in physical infrastructure; and both social and economic infrastructure were destroyed during the war (Clapham 1988). Loans for imported armaments exacerbated the constraints on the balance of payments (Balema 2014; Tekeste 2014).\textsuperscript{16} Many professionals and young students left the country to escape compulsory conscription as well as the Derg’s ‘Red Terror,’ creating a brain drain. However, some manufacturing capability was stimulated: for example, demand for soldiers’ boots kept the leather goods sector going.\textsuperscript{17}

Central planning, social ownership, self-reliance, and import substitution were the key principles behind the Derg’s industrial policy. All firms were nationalized in 1975 and public enterprises were established that operated under a centrally planned quota system independent of the rules of the market economy.\textsuperscript{18} Sectors such as food and beverages, textiles, leather, cement, and the chemical industry continued as priorities. The food and beverages sectors were

\begin{itemize}
\item \textsuperscript{15} The annual rate of growth in agriculture between 1961 and 1965 was only 2–2.5 percent, and “modernization of agriculture will be limited without introducing changes in the system of land ownership and tenure” (World Bank 1967: vii).
\item \textsuperscript{17} See Oqubay (2015).
\item \textsuperscript{18} In 1984, the Derg endorsed the government’s Ten-Year Perspective Plan (1984/85–1993/94).
\end{itemize}
relatively competitive, while chemical plants and the defense industry were supported by outdated technology sourced from foreign suppliers (Balema 2014).

Most new firms were larger than those of the Imperial period. The state had a monopoly over imports and exports, and four state-owned banks were the sole players in the financial sector. The key policy objectives were developing the public sector (private sector participation was not allowed); high protective tariffs; and a continuing anti-export bias that was reinforced by an unchanging and overvalued currency throughout the era. In urban areas, all residential property was nationalized, leading to sluggish growth in the construction and electricity sectors. Home ownership was frozen until after 1991.

Toward the end of the Derg regime, a new mixed-economy policy reform was a last remedy but was never implemented (Tekeste 2014; Deguefeé 2006). According to Cheru (1992), this decision was prompted by several factors: “the government made a partial retreat from socialism in 1987 had to do with the drought of 1986 which came at a time when it was putting up an extravagant 12th anniversary celebration of the Revolution. This was a major embarrassment. In addition, events in Eastern Europe were moving in a different direction. Mikhail Gorbachev’s much publicized economic liberalization had caught on in Eastern Europe like a brush fire. For Mengistu and his Workers’ Party of Ethiopia, it was time to make a strategic move and embrace perestroika in the hope of unfreezing much needed financial assistance from the World Bank and other donors.”

Stagnating agriculture

To preempt popular demands, in March 1977 the Derg proclaimed a radical land reform, which abolished tenant–landlord ties and broke the power of the landed aristocracy (Rahmato 1984). But this initiative, which simply made the peasants tenants of the regime, failed to transform agriculture. Chole (2004: 2; World Bank 1985) has observed that “…the state replaced the landlord and implemented policies that led to the virtual ruin of the peasantry.” Farmers were reorganized into compulsory peasant associations (Proclamation 1977), a move that led in turn to forced reorganization into producer cooperatives and collectivization; the villagization and forced resettlement of millions of citizens (estimated at about eight million); and a forced

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procurement and sales system based upon quotas and sales to the Agricultural Marketing Corporation at fixed prices (Pausewang et al 1990).

According to Cheru (1992:1): "The Ethiopian economy has been constrained by a number of factors since the 1974 revolution. While the civil war and successive droughts are partly to blame, the institution of centralized planning, the nationalization of land, the over emphasis on state farms to the neglect of small farmers, forced villagization and resettlement programmes, and excessive taxation of peasants contributed to a decade of economic stagnation.” Under this policy regime, agriculture could neither underpin economic take-off nor support industrialization. This was a major disaster both for the general economy and for the development of the industrial sector—and it also had profound political consequences.

3. Developmentalism and industrial policy in Ethiopia from the 1990s

When the EPRDF first came to power in 1991, addressing the crisis in agriculture was a fundamental concern, with agricultural recovery also seen as a spark for renewed commitment to industrialization. In 1994, the government adopted the Agricultural Development-Led Industrialization (ADLI) strategy, to which it adhered for more than two decades. The industrial development strategy (IDS) adopted in 2003 emphasised export-led industrialization, and focused on labor-intensive industries, the development of infrastructure to support rapid economic growth, and the development of small enterprises for massive job creation and poverty reduction (FDRE 2002). The Ethiopian government focused on the transition to a market economy and recovery in the 1990s, followed by execution of the industrial development strategies in the 2000s. In the 2010s, the government’s five-year plans concentrated on both growth and structural transformation.


The first phase was associated with recovery and the transition from a war to a peacetime economy, and from a centrally planned command economy to a market-led economy. As the World Bank (2002: 5) noted, the government had “inherited an economy devastated by years of civil war and… a GDP per capita lower than in the 1960s.” Rehabilitation focused primarily

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21 The growth of agriculture between 1974 and 1991 was 0.7 percent (Chole 2004: 99). GDP per capita declined by 1.3 percent while industry and manufacturing grew 1 percent respectively (Clapham 1988; Chole 2004:12). See also Cheru (1992:1): “On the whole, the economy has been characterized by low agricultural productivity, a small industrial base, shortages of skilled manpower and weak infrastructure.”
on rebuilding war-torn infrastructure, revitalizing manufacturing enterprises by injecting working capital, and facilitating the imports of parts to increase operating capacity (Cheru and Pausewang 1992). There was also economic liberalization of certain sectors. Politically, there was a transition from a centralized unitary system to a federal system that encouraged ‘unity with diversity,’ and from a totalitarian military regime to a parliamentary multi-party democracy. A transitional government was instituted in 1991 and comprised a coalition of political forces that backed the economic reforms and the drafting of a new constitution. This came into effect in 1995, and was followed by the first elections at national, regional, and local levels (TGE 1991). The provisions of the new constitution and a referendum in Eritrea ended decades of war there.

Economic liberalization, under the rubric of ‘structural adjustment,’ drew assistance from the IDA, IMF, and other donors (World Bank 2002; ADF 1997). Nonetheless, reforms were not entirely in line with the conventional prescriptions of the Washington Consensus. For instance, the government’s approach to privatization was ‘gradualist’ (in contrast to Eastern European or Mozambican privatization) (Tekeste 2014; Oqubay 2015: 96–99). Nonetheless, the government did privatize more than 300 firms, most of which were acquired by the domestic private sector. Some large firms (such as breweries) were sold to foreign firms to ensure expansion and a foreign currency income. Unlike other sub-Saharan African economies, the government did not privatize utility and other strategic establishments, opting instead to expand and reorganize public enterprises in strategic areas (banking, utilities, air travel, chemicals, and sugar industries). Government also introduced major reforms to improve the corporate governance of state-owned enterprises, and in some cases this initiative has proven effective (Tekeste 2014).

During this period of privatization, government opened the banking sector to domestic investors, while foreign banks were banned. Stiglitz (2002: 32) highlights the disagreements with the IMF: “Meles was engaged in a heated dispute with the IMF, and the Fund had suspended its lending program… Ethiopia resisted the IMF’s demand that it ‘open’ its banking system, for good reason… The IMF was unhappy, simply because it believed interest rates should be freely determined.”

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23 Emergency Recovery and Reconstruction Program (ERRP) supported by the donor community (Balema 2014).
25 By 1997, the government had privatized the first round of 121 retail stores, 22 hotels and restaurants, 25 manufacturing plants, and ten agro-industries and state farms (ADF 1997).
26 In 2017 (NBE), there were seventeen private banks which dominated about 50 percent of the industry.
Similar deviations were observed in other areas. Contrary to the Washington prescriptions for full liberalization of the exchange rate, the government adopted a managed floating system that narrowed the gap between the official and parallel markets. Liberalized market prices were applied, but critical commodities (such as petroleum products and fertilizer) continued to be regulated. A new investment proclamation (Number 15, 1992) was introduced and an investment promotion agency was established (TGE 1992). This was an important step in fostering investment in different sectors. But not all sectors were open to foreign investment: retail businesses, domestic freight services, and banking were reserved for Ethiopians. Power generation was open to foreign capital, while transmission and distribution remained restricted.

**Industrial policies and the pursuit of development goals**

Economic growth accelerated and was sustained after 2004. One outcome of the exclusive pursuit of development goals was that in the post-1991 period, especially after the ruling party’s ‘renewal movement’ of 2001–2002, Ethiopia’s economic performance significantly improved. This has been attributed to the government’s comprehensive economic development strategies and the cohesive development perspectives of the ruling party that had evolved during the earlier seventeen-year liberation struggle. A clear focus on agriculture and commitment to rural development were central to Ethiopia’s development path. And a deep-rooted belief in and reliance on long-term investment in public infrastructure (such as energy, transport, etc.), the development of human capital, and the transformation of vocational, technical, and higher education is evidence of the government’s distinctive strategic perspective. About half of the federal government’s budget for consecutive five-year programmes was earmarked for pro-poor and high-growth sectors.

Evidence suggests that the government has been keen to both draw inspiration and gain practical experience from mainly East Asian economies. Industrial policy dialogue supported by the Japanese government and scholars has been in place since July 2008. Later developments include the institutionalization of the Japanese Kaizen approach, the transformation of technical and vocational education training (TVET) and university system along German lines, the establishment of sectoral institutes, and science and technology

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27 The EPRDF faced a major internal crisis in 2000 that culminated with a victory for the political group that advocated a renewal movement and articulation of development strategies in different sectors.


29 On the developmental state, see Evans (1997) and—on Africa specifically—Zenawi (2012).
universities in line with the South Korean model, and learning from China’s policymaking and
dustrialization (Lin and Oqubay 2019).30

Industrial policy instruments

Ethiopia has pursued an active industrial policy since the early 2000s with a large set of
carefully designed policy instruments. These include the promotion of exports and productive
vestment, industrial financing, and the use of state-owned enterprises (SOEs) to shape
strategic sectors. The focus has been on sectors such as leather and leather goods, apparel and
textiles, meat processing, food processing and beverages, cement and steel, and horticulture.
There has also been recognition of reciprocity and the political economy constraints that hinder
productive investment in export-oriented manufacturing, with evidence of learning from the
East Asian experience (such as target setting in exports, export coordination councils, sectoral
institutes, industrial financing, and the active role of SOEs). Tables 1 and 2 provide a brief
summary of instruments and policy organizations.

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30 Ohno (2013: 268–9) who highlights strong policy ownership, an activist state, and an internationalisation of
skills and technology as key priorities, and policy learning as key features of the Ethiopian government.
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<th>Policy instruments</th>
<th>‘Facilitative’</th>
<th>Getting prices ‘wrong’³¹</th>
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<tr>
<td><strong>Five-year plans</strong></td>
<td>Plan for Accelerated and Sustained Development to End Poverty, 2005/06-2009/10 (PASDEP); Growth and Transformation Plan I, 2010/11-2014/15 (GTP I); Growth and Transformation Plan II, 20014/15–2019/20 GTP II)³²</td>
<td>Critical support in developing priority productive sectors)</td>
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<td><strong>Industrial financing</strong></td>
<td>Getting prices ‘wrong’ involves being more selective by favoring some sectors or investors over others and possibly defying comparative advantage (see Amsden 1989, 2001; Lin and Chang 2009). ‘Facilitative’ involves ‘levelling the playing field for all actors’ and providing conditions for investment, and not defying comparative advantage.</td>
<td>CBE: Relaxed terms to exporters and manufacturers</td>
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<td>Investment financing: Development Bank of Ethiopia (DBE) and Commercial Bank of Ethiopia (CBE) as co-financier</td>
<td>Essential support for export promotion</td>
<td>Exercised on few priority sectors</td>
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<td>Trade financing (CBE, private banks)</td>
<td>Aim to support exporters and productive sectors</td>
<td>Targeted at specific sectors, selective allocation, long-term and subsidized loans</td>
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<td>Managed floating system</td>
<td>Applied to priority sectors in manufacturing</td>
<td>Applied to manufacturing exporters</td>
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<td>Forex allocation (triggered by scarcity in 2010)</td>
<td>Facilitative for FDI and manufacturers</td>
<td>Targeted at priority export-oriented manufacturing sub-sectors, subsidized facilities (land, sheds, bank services), one-stop government services, skills development</td>
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<td><strong>Investment promotion</strong></td>
<td>Essential support to support productive investment</td>
<td>More generous incentives to productive sectors (especially manufacturing)</td>
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<td>Incentive structure</td>
<td>Targeted support to nurture priority industries</td>
<td>Protect the cement industry</td>
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<td>One-stop service (OSS)</td>
<td>Targeted: energy, quarry, forex, import ban</td>
<td>To promote value addition in leather sector</td>
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<td><strong>Industrial parks (specialized)</strong></td>
<td>Essential in protecting domestic manufacturers</td>
<td>Gradual process, priority to local firms, selective, to support targeted industries</td>
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<td><strong>Trade protection</strong></td>
<td>Important policy to develop strategic sectors</td>
<td>Strategic and targeted to support of development goals</td>
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<td>Import tariffs</td>
<td>Protection of the cement industry</td>
<td>Targeted to priority sectors (such as the Textile Industry Development Institute (TIDI), Leather Industry Development Institute-(LIDI) Ethiopian Horticulture Development Agency-EHDA)</td>
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<td>Export ban (crust and semi-finished)</td>
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<tr>
<td><strong>Sector-targeted instruments and institutional supports</strong></td>
<td>Expansion of public housing and infrastructure</td>
<td></td>
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<tr>
<td>Cement industry</td>
<td></td>
<td>Targeted: energy, quarry, forex, import ban</td>
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<tr>
<td>Horticulture industry</td>
<td></td>
<td>Targeted: cement industry</td>
</tr>
<tr>
<td>Sectoral institutes</td>
<td></td>
<td>To promote value addition in leather sector</td>
</tr>
<tr>
<td><strong>Export promotion</strong></td>
<td></td>
<td>Gradual process, priority to local firms, selective, to support targeted industries</td>
</tr>
<tr>
<td>Managed floating system</td>
<td></td>
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<tr>
<td>Forex allocation (triggered by scarcity in 2010)</td>
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<tr>
<td><strong>Incentive structure</strong></td>
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<td></td>
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<tr>
<td>One-stop service (OSS)</td>
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<tr>
<td><strong>Industrial parks (specialized)</strong></td>
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</tbody>
</table>

³¹ ‘Getting prices wrong’ involves being more selective by favoring some sectors or investors over others and possibly defying comparative advantage (see Amsden 1989, 2001; Lin and Chang 2009). ‘Facilitative’ involves ‘levelling the playing field for all actors’ and providing conditions for investment, and not defying comparative advantage.

Many policy instruments, however, have not been entirely effective. First, most of the export-promotion schemes required effective coordination, automation of the customs system, and qualified professional staff, but these were often lacking. Second, sectoral institutes set up to support priority sectors were unable to attract staff with the professional skills, qualifications, and experience required to support firms. Moreover, the institutes had to assist with administrative requirements, as not all government channels have been streamlined to support exports and industrialization. Some efforts have been made to strengthen the institutes by twinning them with Indian institutes (TIDI and LIDI).
Table 2 Industrial policy organization, 2005–15

<table>
<thead>
<tr>
<th>Institutions</th>
<th>Mandate</th>
<th>Observations</th>
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</thead>
<tbody>
<tr>
<td><strong>Regulatory and coordination organs</strong></td>
<td></td>
<td></td>
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<tr>
<td>Coordination organizations: National Export Coordinating Council (NECC)</td>
<td>Chaired by prime minister; focused on export coordination</td>
<td>Enhanced focus on exports but with partial outcomes</td>
</tr>
<tr>
<td>Ethiopian Investment Board (EIB)</td>
<td></td>
<td></td>
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<tr>
<td>Key regulatory and policy institutions: Ministry of Finance and Economic Development (MOFED), National Bank of Ethiopia (NBE), Ministry of Industry (MOI), Ministry of Public Enterprises (MPE)</td>
<td>A new approach since 2014; chaired by prime minister; directs investment and industrial policies</td>
<td>Playing critical role in guiding industrial policy</td>
</tr>
<tr>
<td>Coordination organizations: National Export Coordinating Council (NECC)</td>
<td>Regulating finance and economic development, revenue and customs, central bank, leading industry, and leading SOEs respectively.</td>
<td>Impact gradually improving</td>
</tr>
<tr>
<td>Ethiopian Investment Board (EIB)</td>
<td></td>
<td></td>
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<tr>
<td><strong>Lead and sectoral organs</strong></td>
<td>EIC: Single window for attraction of new investment; supporting investors; proposing and administering incentives</td>
<td>EIC and IPDC as critical organs in fostering targeted productive investment and agglomeration by industrial parks (2014–)33</td>
</tr>
<tr>
<td>Sectoral institutes and agencies (TIDI, LIDI, EHDA, and other institutes for metal, meat and dairy etc.)</td>
<td>IPDC: Development and operation of industrial parks; support for private developers; custodian of land</td>
<td>Essential; uneven impact due to lower sectoral impact; new institutes being established in pharmaceutical and chemical industries.</td>
</tr>
<tr>
<td><strong>Policy banks and SOEs</strong></td>
<td>Sectoral focal agencies to lead specific priority sectors (textiles, leather, metals, meat and dairy, horticulture, etc.)</td>
<td>Outcome improved after reforms to CBE/DBE; lack of sectoral knowledge; lagging international banking service</td>
</tr>
<tr>
<td>Policy banks: DBE; CBE</td>
<td>Key policy approach to develop SOEs in strategic sectors</td>
<td></td>
</tr>
<tr>
<td>SOEs (in energy, transport services, production)</td>
<td>DBE: Focused on subsidized industrial financing of manufacturing and agriculture (private sector); CBE: Trade finance and working capital co-finances DBE; finances public housing and infrastructure</td>
<td></td>
</tr>
<tr>
<td><strong>Intermediary institutions</strong></td>
<td>Horticuture, leather, and textile sectors</td>
<td>Effective productive partnership in horticulture; lesser impact in others</td>
</tr>
<tr>
<td>Industrial associations: Ethiopian Horticulture Producers and Exporters Association (EHPEA), Ethiopian Leather Industry Association (ELIA), Ethiopian Textile and Garment Association (ETGA) etc.</td>
<td>Chamber of Commerce and specific industries</td>
<td></td>
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<tr>
<td>Dialogue platforms</td>
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Source: Author’s matrix.

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33 See Chapter 48.
Third, lack of sectoral knowledge and sectoral focus has been a major hindrance. The policy instruments were not entirely based on research and full understanding of the specific industrial structure of each sector. For instance, the development bank lacked experience in financing specific industries such as horticulture. The studies required to monitor and continuously amend policies were not available. Fourth, industry associations have not been equally active in influencing policies, and channels for dialogue between government and private sector were unsatisfactory. Efforts to establish links between universities and vocational centers and industry have been ineffective.

Fifth, the lack of effective vertical and horizontal coordination among and across government agencies (federal, regional, and local) has been a major constraint and has hampered the competitiveness of firms. According to one survey, firm owners and managers find that dealing with government red tape takes up 15–25 percent of their management time. Sixth, export performance has been sluggish as a result of ineffective policy instruments.

However, despite the rudimentary nature of industrial policies, and their limitations, there has been some learning from the application of the relevant instruments (see Table 1). The introduction in 2005 of the National Export Coordinating Council, chaired by the prime minister and inspired by Korean experience, has played a critical role in addressing coordination problems as well as sectoral operational constraints on exports, and in adjusting policy instruments when required. Developing the freight capacity of Ethiopian Airlines, the decision to apply subsidies during the 2008 fuel price increases to support the floriculture sector, and industrial financing for the cement and floriculture industries are examples of successful coordination.

In summary, Ethiopian policy in this period combined ‘facilitative’ policies with those that got prices ‘wrong’. It is unlikely that Ethiopia could have built dynamic floriculture or cement industries without active industrial policies. Furthermore, learning by doing and learning from others has increased policy capability and the effectiveness of policy instruments.

4. Variations in industrial policy outcomes in Ethiopia

Despite Ethiopia’s unified industrial development strategy, the outcomes of policy have been uneven across sectors, and understanding the key determinants for this is essential (Oqubay 2015, 2019a). This section argues that the unique economic and technological characteristics of specific sectors may lend themselves to (or frustrate) industrial policies, the outcomes of

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34 See Oqubay (2015).
which are shaped by the relative dynamism of linkage effects. The key insight is that policymakers need to acknowledge not only that linkages may be more prevalent in some sectors than others, but that the unfolding of linkage effects is neither automatic nor static and uniform. It also shows how and why linkage dynamisms have in many instances been frustrated or blocked. Finally, the evidence from specific sectors suggests that policymakers need a better understanding of the interaction and dynamism of industrial structure, linkage effects, and political economy, since policies are designed, monitored, and enforced within a conflictual, interest-ridden context that profoundly affects their outcomes.\(^5\)

The leather and leather products industry and floriculture have been central in the government’s efforts to promote export-oriented industries.\(^6\) Leather is a century-old sector, while floriculture is a nascent industry.\(^7\) The leather sector’s export, employment creation, labor productivity, output, and value-added performance have been dismal, despite a huge livestock population, the labor intensity of the sector, sustained government attention, and multiple international consultancy studies. For instance, leather’s contribution to total merchandise exports fell by half from 8 to 4 percent between 2004 and 2016 (Oqubay 2019a). The leather products sub-industry’s relative share in employment and exports has increased to 62 (from 50) percent and 36 (from 1) percent respectively in this period, large foreign firms having entered the industry (CSA 1975–2017). But policies have failed to stimulate backward linkages to the livestock sector, once again showing that linkages are not automatic and that comparative advantage does not necessarily produce successful linkage effects. The industry’s structure provides for a wide ‘latitude’ for performance, which increases the sector’s vulnerability. Export logistics have remained a binding constraint, with heavy reliance on inland road transport. Narrow group interests among tanneries and their dominance of the sector, and fragmentation among the industry’s players have hindered the transformation of the sector. Local firms, averse to competition, have resisted the participation of foreign firms.

The floriculture and horticulture sector, meanwhile, has attracted major European investors. Exports reached US$225 million in 2015/16, and the sector’s contribution to overall merchandise exports rose from 1 percent in 2003/4 to 10 percent in 2015/16. Floriculture employed more than 50,000 people and non-flower horticulture more than 130,000. Linkages to packaging (modest), air freight (strong), and new sub-sectors and corridors have been created

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\(^5\) See Hall (1986) and Hirschman (1968) on the political economy of industrialization.

\(^6\) Industrial policy is not restricted to manufacturing and may apply to high-productivity agriculture, which exhibits many of the features of manufacturing. See also Cramer, Sender and Di John (2019).

\(^7\) The first leather factory was established in the 1920s. Ethiopia has the largest livestock population in Africa.
Productivity levels have increased to approach those of Kenya, phytosanitary and cold-chain practices have improved, there are more Ethiopian professionals holding production management positions, and domestic firms have entered the industry. Ethiopia has emerged as one of the world’s top five producers and exporters of roses. Subsidized industrial financing for both foreign and local firms was arranged through the DBE, investment incentives provided, suitable affordable land made available, and air terminals with reliable freight-capable new planes established.  

A number of technological and economic factors have led to a reciprocal monitoring system (reciprocity principle): these are an exclusively export market; a perishable product; highly intensive management; and the narrow margin for failure. The NECC, chaired by the late prime minister, focused heavily on the sector and a productive dialogue between government and industry was maintained. Firms in the sector organised a cohesive association, and a constructive tripartite relationship between the government, the industry, and Dutch institutions contributed to the industry’s rapid growth. Despite this progress, growth has been hampered by the government’s failure to enact new policies to boost participation of domestic firms, and to upgrade domestic technological capability (Oqubay 2015, 2019a).

Another key sector is the cement industry, which has played a strategic role in the catch-up of developing countries. Ethiopia had a single state-owned enterprise in the industry in 1991, with an annual installed capacity of 600,000 tons (Oqubay 2015). There was accelerated growth after 2003, mainly due to the remarkable expansion of politically significant government-sponsored housing developments and infrastructure programs. Both loans and foreign exchange were channelled by government into the industrial financing of large-scale cement projects, and budget and foreign exchange resources were allocated to cement imports. Attractive concessions further encouraged investors to build factories with increased capacity and economies of scale. Mining resources were made available to investors at affordable costs. To improve energy efficiency and support cement producers, the government imported bulk coal. The industry was also given priority allocation during power cuts. On the other hand, the failure margin was narrow not only because of the capital intensity and amount of resources allocated and the technological features of the cement industry (Chandler 2004), but also because of political fragility: the disputed 2005 election, for instance, triggered an “internal threat” (Doner, Ritchie, and Slater 2005) to the ruling party, especially in urban centers.

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38 Development banks serving as ‘conduits’ are central to a developmental state (Amsden 2001).
39 Such as large economy of scale, product perishability, and continuous process production.
In 2017, the seventeen firms in the industry had an installed capacity of more than 16.7 million tons, putting Ethiopia among the top three cement-producing countries in Africa. Four large firms (each with more than 2 million tons annual capacity) account for two-thirds of total installed capacity (Derba, Mugher, Dangote, and Messebo cement factories) in 2017. In contrast to other African countries, where the ‘big five’ multinational companies dominate, it is domestic cement firms that are dominant in Ethiopia, with 55 percent of installed capacity, while foreign firms and joint ventures account for 35 and 10 percent respectively (CSA 2016). The cement industry has stimulated linkages to transport, building materials, and packaging, and is itself stimulated by the linkage from the construction industry.

The performance of these three sectors and the outcomes of industrial policy across them provide several insights. Sectoral performance was strikingly uneven: sluggish and inconsistent performance in leather and leather goods, and robust growth in both the floriculture and cement industries.\(^4^0\) Performance was stronger after 2003 than between 1991 and 2002, which may be attributed to the design and implementation of industrial policies (Oqubay 2015: 243). More importantly, research has shown the importance for the evolution and effectiveness of industrial policy of the interaction between industrial structure (such as the latitude for performance failure), linkage dynamics, and politics/political economy.\(^4^1\) The dynamics of and interrelationships among these variables have “significant implications for policy design and implementation… for the type of selective intervention chosen to promote industrialization… for how to guide design of reciprocal control mechanisms and assess their viability.” all of which are critical in industrial policy (Oqubay 2015: 277; Chang 1994; Amsden 1989).

5. Politics and the political economy of industrial policy

As highlighted above, politics and political economy have shaped policy outcomes in Ethiopia (Oqubay 2015). Given the country’s long history of political fragility, its ethnic diversity and widespread poverty, a commitment to equitable growth and federalism was essential. Moreover, the ruling party’s cohesive political and economic thinking arose not only from its disposition to learn from the rapid industrialization in East Asia, but also from its history as a wartime coalition fighting against the Derg’s military totalitarianism (1975–91) (De Waal

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\(^4^0\) Unevenness is a more general feature of other priority sectors: there was slow growth in apparel and textiles and pharmaceutical industries (until 2015), but brewing was among the fastest growing industries, driven by a strong domestic market.

\(^4^1\) Hirschman (1968, 1958) describes linkages as how one thing leads (or fails to lead) to another, thereby serving as a tool for understanding the process of industrial development.
Its claim to legitimacy has been based on its support in rural Ethiopia, a legacy of the liberation struggle, and its commitment to rapid economic growth and more inclusive rural transformation. However, this solidarity has been increasingly challenged by various social groups, and EPRDF’s internal cohesiveness has not been sustained in recent years. Two major instances of these challenges were after the contentious 2005 national election, and as recently as 2015–17, where there was continued political discontent in urban, as well as certain rural areas.

Federalism, ethnic diversity, and a commitment to equitable regional growth make concentration of rents and industrial clustering and agglomeration more challenging in Ethiopia (Oqubay 2019b). By contrast, the South Korean political economy allowed for a concentration of “intermediate assets” among national champions, and agglomeration has been highly concentrated (Amsden 1989). Moreover, the formation of the capitalist class and workforce, which evolved during the Japanese occupation, had significant implications for South Korea’s industrialization (Kohli 2004).

Government–industry relations in Ethiopia also differ within industries and have influenced policy outcomes unevenly. In floriculture, the relationship between government and industry was a good fit (picking each other, as it were) and based on building trust and collective learning. Although there were still some tensions observed in the floriculture sector, partly due to the largest firm’s logistical privileges, the conflicts were resolved. Experience in the leather sector was different. Path dependency (low value addition and a fixed mindset) and internal fragmentation undermined collective learning in the leather and leather products industry (Oqubay 2015). Domestic floriculture firms viewed FDI firms as sources of technology and market capability, while mutual distrust permeated the leather sector.

Whether a sector is dominated by larger firms or cohesive associations of industrialists, or by dispersed smallholders, has a substantial impact on the kind and intensity of political pressure that can be brought to bear on government and policymaking. Political pressure by social groups depends on their visible presence, strength, and cohesiveness (Hall 1987; Hirschman 1968). The existing political economy in Ethiopia has favoured speculative

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42 There is also clearly a local political economy whereby, for example, large floriculture firms can do deals with local officials to ensure smooth operations. There have also been conflicts of interest over, for example, levels of compensation and the accuracy of compensation targeting, so that despite the many “winners” (investors, the balance of payments, indirect beneficiaries such as service suppliers, and employees) there are also losers, including people who may have lost access to land or water, or who may not get cheap credit for other purposes because it is directed to floriculture, etc.

43 For instance, as observed in East Asian and Latin American contrasts, and in early eighteenth-century US reforms.
activities rather than productive investments in export-oriented manufacturing (Oqubay 2015). The government–business dialogue has not been strong and productive, and an opportunity for collective learning was lost. This was primarily because of the problem of ‘mutual suspicion’ on the part of the government and the private sector, and a lack of strong commitment and an inconsistent approach by government. This was exacerbated by the lack of dynamism of industrial associations and a pervasive culture of ‘short-termism’ and quick gains by the private sector. Ethiopia could learn from experiences in Mauritius, where a dynamic state–industry developmental coalition was forged and sustained (Brautigam 2009). Moreover, the increased importance of political and economic inclusiveness, young people’s rising expectations, and tensions within ethnic-based federalism remain significant challenges for the government.44

6. Conclusion: Late development and learning to catch up

Critics have suggested that there is no such thing as Ethiopian industrialization. This paper has acknowledged the profound shortcomings of the industrial policy and its outcomes thus far. But it has also shown that there have been clearly designed policy interventions, which have had non-negligible effects. Industrial policy in Ethiopia is not a mirage. It draws on a longer-term historical experience of policy experiments and manufacturing activity since the time of the Italian occupation in the 1930s. It has since the 1990s and especially after 2003 achieved more than was achieved in the past. Policymakers have engaged with the shifting pressures of the global economy to produce some remarkable results, though overall the strategy remains a work in progress and the jury is still out on outcomes.

The paper also presents an alternative to the dominant perspective in mainstream development economics, which often denies sectoral considerations and suggests that industrial ambitions are beyond the reach of African countries. Instead, mainstream development economists argue that African countries should limit themselves to existing ‘latent comparative advantages’, and that the state should be ‘facilitative’ and confine itself to periodically addressing ‘market failures,’ rather than playing an active developmental role to create and shape markets.45

Finally, much of the literature on industrial policy fails to link it with the learning that is central to late industrialization.46 The evidence in this paper shows how policy learning has

44 The expansion and transformation of university education and technical schools has given rise to the challenge of creating hundreds of thousands of professional and technical jobs for graduates.

45 See Lin and Chang (2009) for debates on comparative advantage and the role of the state.

46 Amsden (1989) highlights that “all late industrializers have in common industrialization on the basis of learning.”
evolved in Ethiopia, reinforced not only by policy independence, but also by learning by doing and emulation (Oqubay 2015, 2018; Ohno and Oqubay 2019).

Appendix 1 Economic growth and sectoral composition (1975–91)

Source: CSA (1975–92)

Appendix 2 Industrial composition: Firms and employment

Source: CSA (1975–92)
References


