Should the African lion learn from the Asian tigers? A comparative-historical study of FDI-oriented industrial policy in Ethiopia, South Korea and Taiwan

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Abstract

Ethiopia's economy has been growing at breakneck speed for well over a decade now, earning the nickname as Africa's lion. In recent years, the development literature on Ethiopia has paid particular attention to the role of industrial policy, especially the ways in which the Ethiopian experience compares to that of the Asian tigers. But through this comparative-historical perspective, little attention has been devoted to an important aspect of industrial policy in Ethiopia — foreign direct investment (FDI) in the manufacturing sector. This paper compares FDI-oriented industrial policy in Ethiopia in the current era (particularly focusing on light manufacturing) to that of South Korea and Taiwan between 1960 and 1990, arguably the two most generalizable cases among the Asian tigers. The paper argues that FDI-oriented industrial policy in Ethiopia seems to be bringing about short-term economic benefits, and is showing promise for further industrialisation. At the same time, it could benefit from taking more lessons from the long-term economic development perspective that characterised South Korea's and Taiwan's approach to FDI. Such a long-term perspective most importantly includes pro-active strategies to transfer technology from foreign firms to the domestic economy and the creation of backward linkages from foreign to domestic firms.

Keywords: Ethiopia, industrial policy, foreign direct investment, South Korea, Taiwan

This is an author version. If you want to cite the article, please refer to the version published by Third World Quarterly: https://doi.org/10.1080/01436597.2019.1629816

1. Introduction

Ethiopia's rapid economic growth over the past decade, the high degree of state intervention in the economy, and the state's focus on industrialisation are prompting comparisons between the development regimes of Ethiopia and the Asian tigers¹ — four countries in East Asia (Hong Kong, Singapore, South Korea and Taiwan) that underwent rapid industrialisation and maintained exceptionally high growth rates between roughly 1960 and 1990.

However, this comparative-historical literature that is emerging on a development and industrialisation regime in Ethiopia in the image of the Asian tigers has yet to look at one of the most important aspects of Ethiopia's industrial policy² — the attraction of foreign direct investments (FDI) into the manufacturing sector. Especially in highly prioritised manufacturing industries, such as the textile and leather industries, the Ethiopian government sees FDI inflows as a crucial way of generating export revenues, absorbing labour, stimulating demand for agricultural inputs, and transferring technology to the domestic economy. This is why the Ethiopian government has been working relentlessly to attract foreign investors into manufacturing: manufacturing FDI in Ethiopia increased from US\$570m in 2007/08 to US\$3,712m in 2016/17.³

This comparative-historical perspective is important not only because it complements the existing comparative-historical literature on development in Ethiopia, but also because it complements recent studies on manufacturing FDI in Ethiopia.⁴ These recent studies have paved the way for understanding the role of manufacturing FDI in Ethiopia's industrialisation. However, they fall short in assessing the direction of FDI-oriented industrial policy in Ethiopia, most importantly if the current set of policies has the potential of transferring technology from foreign firms to the domestic economy and creating backward linkages from foreign to domestic firms. Gauging the potential success of FDI-oriented industrial policy measures in Ethiopia is obviously challenging because Ethiopia is at a very early stage of industrialisation. But a comparative-historical perspective can help us some way in understanding which direction the policies are heading, and what is lacking in order for the policies to be potentially successful. This paper carries out such an exercise, asking if the 'African lion' should learn from the 'Asian tigers' with respect to FDI-oriented industrial policy.

Among the Asian tigers, I have chosen South Korea and Taiwan as points of comparison for a number of reasons. First, the development literature on Ethiopia suggests that they have served as more important sources of inspiration than Hong Kong and Singapore.⁵

Second, South Korea and Taiwan are more generalizable than Hong Kong and Singapore as points of reference for today's least developed countries (and in particular Ethiopia), as the latter two are considered more special cases because of their small populations and because their development process did not start from an agrarian or raw material base that is typically taken to be the starting point for industrialisation. Third, from an emulation standpoint for today's developing countries, looking in particular at South Korea and Taiwan is useful.⁶ Throughout the history of capitalism, no countries have grown as rapidly — from low to high-income — and industrialised as fast as South Korea and Taiwan did from roughly 1960 to 1990. These two countries are arguably the most successful examples of economic 'catch-up'.

The case studies of South Korea and Taiwan in this paper are a synthesis of secondhand sources (already existing literature). In Ethiopia's case, FDI-oriented industrial policy in the current era is barely covered in the literature. I therefore made four fieldwork trips to Ethiopia between April 2015 and February 2018, which together summed up to 7 months. I carried out 62 interviews with key officials in the government, private sector (focusing on firms in light manufacturing industries⁷) and private sector associations, mainly to understand the government's motivation behind the FDI-oriented development strategy, the industrial policies formulated to support the strategy, and to gauge success of the strategy. The sample size of interviews followed a satiation aim for familiarity with the topics of interest to the paper. The sample size and the choice of interview subjects also reflected a need for triangulation interviewees were chosen to represent different viewpoints in order to deal with bias due to vested interests (e.g. business owners versus government representatives).⁸ In the private sector, I targeted mostly firms in the textile and leather industries, as these are the largest and fastest-growing light manufacturing industries in Ethiopia. I interviewed managers and owners from 33 firms, including foreign and domestically owned. Interviewees in the government apparatus included representatives of the Prime Minister's Office, the Ministry of Industry, the Industrial Parks Development Corporation, the Ethiopian Investment Commission, the Central Statistics Agency, the Ethiopian Inputs Industrial Supply Enterprise, The Leather Industry Development Institute, and the Ethiopian Textile Industry Development Institute. Interviewees from private sector associations included representatives of the Ethiopian Chambers of Commerce, the Investor's Association at Hawassa Industrial Park, and one industry association that requested full anonymity.

The paper is structured as follows. Section 2 introduces the wider context in which an analysis of FDI-oriented industrial policy is important: why do developing countries attract FDI as part of an industrialisation strategy, what challenges do developing countries generally

face by embarking on such a strategy, and what characterises the successes? Section 3 analyses FDI-oriented industrial policy in Ethiopia. Section 4 carries out a similar analysis for South Korea and Taiwan. Section 5 draws together the analysis in section 3 and 4 to answer the main research question of the paper.

2. FDI-oriented industrial policy in developing countries: a conceptual framework in the comparative-historical tradition

After the Asian tigers showcased rapid industrialisation, development economists and political economists started devoting a great deal of attention to studying the factors of success for industrialisation in East Asia.

A perspective that has become influential highlights how successful industrialisation in East Asia was contingent on specific features of the state, which later has become known as features of 'developmental states'. In short, this literature attributes the following characteristics to the East Asian developmental states: 1) they were states that successfully conjoined private ownership with heavy state intervention; 2) although they were states that did not gain legitimacy through parliamentary elections (for the most part), they did so through their record in economic development; 3) they were states that gave high policy priority to economic development: economic development was to be achieved over anything else, and this was to be done through industrialisation; 4) they were states that had a professional bureaucracy that kept its distance from everyday politics and from the lure of the private sector, but at the same time was a partner with the private sector, sharing the goal of industrial transformation.⁹

With respect to the policy aspect of industrialisation, Red Cherif and Fuad Hasanov highlight three key principles behind the success of the Asian tigers: 1) the support of domestic producers in sophisticated industries, beyond the initial comparative advantage; 2) export orientation; and 3) the pursuit of fierce competition with strict accountability. Point number two and three draw on the analysis of some scholars from the developmental state perspective, who have highlighted the importance of 'carrot-and-stick' policies. For example, Robert Wade argues that successful industrial policy in East Asia was not only about specific tools per se (like tariffs and subsidies), but the intricate ways the state operated with its array of incentives designed to improve the production capacity of firms. For example, in Taiwan, export subsidies on manufactured goods were among the highest in the world in the 1960s, but exporting firms

also faced stringent local content requirements.¹¹ Similar to Wade, Alice Amsden has argued that that industrialisation in East Asia relied on well-crafted reciprocal control mechanisms (RCMs). These were methods by which the government would give special favours and assistance to firms, often in the form of direct or indirect subsidies, in exchange for meeting certain performance targets, such as exporting, local content, or product specifications. For example, in South Korea, the licence to establish a general trading company depended on meeting export criteria related to value, geographical diversity, and product complexity. ¹²

This paper focuses on the latter — that is, the carrot-and-stick of industrial policy — in relation to FDI. The focus on FDI is important because: 1) FDI is becoming an increasingly central part of developing countries' industrialisation strategies, especially in Ethiopia, and 2) among the comparative studies between Ethiopia and the Asian tigers, an analysis of FDI is missing.

FDI inflows to developing countries started becoming visible as early as the 1960s, when international companies based in the West sliced up their supply chains in search of low-cost suppliers. It started with manufacturers offshoring their activities, typified by American outsourcing to Mexico (Maquiladoras) and German outsourcing to Central and Eastern Europe, by setting up export processing zones (EPZs) for apparel assembly.¹³

Although the motivations for offshoring have largely remained the same to date (i.e. the search for cost savings, like cheap labour, land and energy), the scale of offshoring started intensifying first in the 1990s, driven by falling transport costs, advances in information and communication technology, and lower trade and investment barriers. From 1990 to 2016, FDI inflows into developing countries increased from US\$35bn to US\$646bn, which represents an increase from 17 per cent to 37 per cent of world FDI inflows.¹⁴

FDI attraction has therefore become a more central part of economic development and industrialisation strategies in developing countries. From a developing country perspective, FDI inflows from higher-income countries can yield a number of benefits. In the short term, it can boost employment, it can increase foreign exchange and tax revenues, it can assist the integration of host countries in the world economy and it can have a positive impact on infrastructure development and the business environment.¹⁵

There are also benefits to be derived from FDI attraction that are more long term in nature, contributing to the development of productive capabilities and industrialisation of the host economy. This happens especially through especially technology transfer, linkages to the host economy, competitive pressures on domestic firms and human capital development.¹⁶

However, these long term benefits are more difficult to achieve than the short term benefits. Some would argue that it boils down to the role of industrial policy, and how active the state is in utilising foreign investments for the development of domestic productive capabilities.¹⁷

The comparative-historical literature on FDI inflows into developing countries broadly distinguishes between two regions that have experienced different outcomes: East Asia and Latin America.¹⁸

East Asian countries, in particular Singapore, South Korea and Taiwan between roughly 1960 and 1990, meticulously designed industrial policies to create backward linkages from foreign investors to domestic suppler firms, increase local content, and transfer technology from foreign firms to the domestic economy. They did so largely through the mechanisms highlighted by Wade and Amsden earlier in this section, tying financial incentives to firms with economic performance and local development targets. For example, in Singapore, investment incentives designed for foreign firms were often tied to the introduction of higher value added operations, training of local staff and the dispatching of Singaporean engineers to the headquarters of transnational corporations to acquire new technical skills. ¹⁹ In South Korea, to develop a synthetic fibre industry, the government forced firms to use domestically produced fibres, which initially were more expensive and of poorer quality than imported fibres. But in return, they gave fibre-using textile firms subsides credit and subsidised their purchase of inputs. If the firms met certain export targets, these subsidies became more generous.²⁰ In Taiwan, the 'local content programme', which focused on linking foreign firms with local suppliers through subcontracting practices, became a staple of the country's FDI-oriented industrial policies in the 1970s and 1980s.²¹ Foreign firms' links with local producers were assisted by proactive industry associations. For example, the electronics industry association TEAMA (the Taiwan Electric Appliances Manufacturers' Association) aggressively recruited members from both foreign and local firms with the support of the government.²²

Latin American countries have, on average, been less successful with FDI attraction compared to the East Asian countries. The IT cluster in Guadajara, Mexico, is a prime example. In the early 1990s, global flaghships of the IT industry, like Hewlett Packard (HP) and International Business Machines (IBM), moved massive manufacturing assembly operations to Guadalajara, as wages were low and labour unions weak, there was proximity to the US market, and tariffs on high tech exports was eventually lowered to zero under the North American Free Trade Agreement (NAFTA). There were initial hopes that local firms would evolve into contract manufacturers and suppliers to the US-based transnational corporations,

but these hopes were short-lived. Companies like HP and IBM invited contract-manufacturing firms based in the US instead, such as Flextronics and Solectron, to co-locate in Guadalajara. Up until the early 2000s, when manufacturing assembly operations in the computer industry gradually started moving to China, less than 5 per cent of inputs in the Guadalajara cluster had been sourced locally. Among the employees of foreign firms in Guadalajara, only 6.9 per cent had graduated from high school.²³

Why did the promise of Mexico's Silicon Valley go unfulfilled? Kevin Gallagher and Lyuba Zarsky highlight two reasons. One is the global restructuring and increased international competition in the IT industry. The emergence of China as a key player in the global production system, with its rare combination of low wages, a huge domestic market, and impressive productive capabilities, made it more difficult for Mexico to compete internationally. The second is lack of government policies aimed at developing productive capabilities of local firms. Mexico's government failed to put in place incentives for foreign firms to use domestic inputs, there was no government-provided development financing for domestic firms, and high interest rates choked domestic investments and put upward pressure on the peso, which further biased transnational corporations away from using domestic suppliers.²⁴

The low share of local content in industrial zones primarily destined for exports – often known as export processing zones (EPZs) —, such as the IT cluster in Guadalajara, has also been the case in El Salvador and Guatemala, where between 3 and 9 per cent of inputs in EPZs were purchased locally in the mid to late 1990s. ²⁵ For an extreme example, take the Dominican Republic. 30 years after the creation of the first EPZ in the country, the average purchase of domestic inputs in all EPZs was no more than 0.0001 per cent of the value of all inputs used. ²⁶ While industry specific circumstances and global economic conditions have been factors in this outcome, scholars studying these cases have generally emphasised the lack of government incentives for foreign firms to use domestic suppliers, or the lack of government policies to develop a local supplier industry that could meet international production standards. ²⁷

It will be interesting to see which route the Ethiopian FDI-oriented industrialisation strategy will take. Is it proactive enough to avoid leaving the development of productive capabilities to the 'whims' of foreign firms? If the answer is yes, this does of course not mean that this will translate to successful industrialisation in Ethiopia. It is notoriously difficult to reduce the causal factors that lead to industrialisation success of any country to just one area of policy intervention. What about other policies, like exchange rate policy, industrial financing, and the tariff regime? Moreover, many conditions influence success of certain policy instruments: is the state apparatus 'developmental'? Are geographic conditions favourable,

such as proximity to targeted consumer markets? In which direction do processes of globalisation and the current state of geopolitics influence opportunities for development?

It is beyond the scope of this paper to address all these questions. But if Ethiopia gets the FDI-oriented industrial policies 'right', it is a step in the right direction. And there is a need for assessing the direction of these policies, given the importance FDI plays in the Ethiopian development model. The remainder of this paper will look at this issue, first through an analysis of these policies in Ethiopia, then through a comparative perspective (by drawing on the experiences of South Korea and Taiwan).

3. FDI-oriented industrial policy in Ethiopia

3.1 The policy package: mainly export and investment incentives

In Table 1, I have compiled an overview of industrial policy in Ethiopia and the government institutions created or revitalised to support industrial policy.²⁸ It shows a committed drive to industrialisation, with complimentary policies being coordinated around credit allocation, export promotion, FDI attraction and infrastructure investments.

Table 1: Industrial policy in Ethiopia and supporting government institutions (2004-present)

Expansion of 'industrial bureaucracy'	Several new government agencies have been set up to provide state support to prioritized industries more effectively. Examples of such institutions include the Ethiopian Investment Commission (established in 1992, revitalized in 2014), the Industrial Parks Development Corporation, and the Ethiopian Industrial Inputs Supply Enterprise. The Prime Minister's Office has also become central in shaping industrial policy. To support light manufacturing in a more targeted way, the Ethiopian Textile Industry Development Institute (ETIDI) and the Ethiopian Leather Industry Development Institute (LIDI) were set up specifically to support growth in the textile and leather industries.
Credit allocation: Development Bank of Ethiopia (DBE) and Commercial Bank of Ethiopia (CBE)	These are state owned banks that provide subsidized credit to prioritised industries. The DBE provides investment capital, whereas the CBE provides working capital.
Export promotion	Several incentives are in place to encourage exports in prioritized industries. These incentives target export-oriented firms, and include: reduced interest rates on loans from the DBE and the CBE, subsidized leasing of land, subsidized salaries for foreign 'experts', and tax exemptions. Currency depreciation can also be understood as an export promotion instrument.
FDI attraction	Several measures have been put in place to attract FDI in prioritized industries in order to create employment, generate export earnings, and transfer technology. Such measures include favourable access to infrastructure (e.g. industrial parks and rail transport), tax exemptions, and subsidized land leases (in some cases, free land). The Ethiopian Investment Commission is the primary government agency overseeing policies in this area.
Infrastructure investments	Infrastructure investments, especially power generation and transport, are geared towards industrial development. The construction of industrial parks, carried out by the Industrial Parks Development Corporation, is also an important category of infrastructure investments.

Source: Author's compilation from fieldwork

The FDI-oriented industrial policies cover more than just the "FDI-attraction" category in the table — they can also be found in "infrastructure investments" and "export promotion". Pushing for exports does not only mean easing the balance of payments constraint but it also means learning about international markets, striving for higher productivity, and creating more jobs than would be possible if only serving the domestic market. Therefore, almost all incentives that the government provides to firms (both domestic and foreign) in the manufacturing sector are linked to export performance.

For some foreign firms, especially big transnationals that typically produce for consumer markets in the West, these incentives might simply be interpreted as incentives to invest in Ethiopia, as not many of these firms have any intention of selling their products on the domestic market anyway. But for other foreign firms, especially early foreign investments in textiles and leather products from China and Turkey, export incentives have been important because it turned out that many of these firms found it profitable to produce for the Ethiopian consumer market.

In order to attract foreign firms, the construction of industrial parks is a very important incentive. Such parks make it easier to concentrate dedicated infrastructure in a limited area, and they also normally provide one-stop-shop services to firms — a multitude of logistics services efficiently and easily streamlined because of the co-location of many firms.

A range of financial incentives has been put in place for export-oriented firms in the state-owned parks. As mentioned, these should not simply be seen as export incentives, but also as a way of attracting foreign investors. Table 2 presents a full overview of these incentives. The list of incentives in the table are not restricted to firms in the state-owned industrial parks — in fact, all export-oriented firms in Ethiopia are handed such incentives (and in some instances, non-export firms). However, some incentives are offered on a case to case basis, while others are offered across the board to all export-oriented firms. For example, exemption on duties and taxes on imports are offered to all firms in Ethiopia if used for the purpose of export.

Table 2: Financial incentives for manufacturing firms in state-owned industrial parks

• Income tax exemption for up to 10 years

• Exemption from duties and other taxes on imports of capital equipment (machinery,

construction materials, spare parts, vehicles, etc.) and raw materials (inputs needed

in production, like cotton, yarn and/or fabric).

No taxes on exports

One-stop-shop for government services

• Subsidised land lease. 60-80 years free of charge for factories and residential

quarters.

Guaranteed remittance of capital for foreign investors

Source: EIC (2016)

Firms who sell products on the domestic market are also offered duty free access to

imports, but only on capital equipment, not raw materials, and only for a maximum of five

years if the investment is not in manufacturing or agriculture.²⁹ Additionally, the exemption of

export tax is applicable to all exporters, inside and outside of parks. The remittance of capital

also applies to all foreign investors, regardless of being in – or outside an industrial park.

Other incentives are also determined on a case-by-case basis. Subsidised land lease is

one of them. While there are some guidelines for land lease, 30 interviews conducted with

foreign investors outside industrial parks indicate that the guidelines are not strict. Some

investors pay for leasing land, while others said that they have been offered to lease large tracts

of land for free. From the government's perspective, lease rates seem to be determined based

on the desirability of the investment — investors that indicate large-scale investments and/or

expansion plans with the possibility of creating a lot of jobs seem to be offered more favourable

lease rates.

While these financial incentives are important, Ethiopia is not doing something

especially novel by offering them. Many of them, such as income tax exemption (also known

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as 'tax holidays') and tax exemption on imports, are offered in industrial parks in many other developing countries³¹ that also have or are still attracting FDI into manufacturing industries.

Another important incentive is credit allocation. The state plays an important role in capital markets in Ethiopia, as foreign banks are not allowed to operate there (yet). The understanding is that they will be allowed in only when domestic banks have developed the financial, managerial and technological capacity to compete against international banks. Consequently, two state owned banks, the Development Bank of Ethiopia (DBE) and the Commercial Bank of Ethiopia (CBE), dominate the banking sector in Ethiopia. DBE is important for long-term loans (investment capital), particularly for the manufacturing sector, while CBE is responsible for providing working capital and international banking services. Their banking services are especially important for domestic firms in both the textile and leather industries, as these firms are normally shorter on capital than foreign firms.

Policies of a more 'soft' nature are also central. The Ethiopian Prime Minister's Office and the Ethiopian Investment Commission stress that their commitment to interacting with foreign investors and attracting the 'right' type of investments are crucial for success of the FDI strategy. For example, the Prime Minster is chair of the National Export Promotion Committee, and his office engages directly with foreign investors to see to their needs and ensure them that their investments are safe.³² As for the point on attracting the right type of investments, the Ethiopian Investment Commission has an explicit strategy of attracting investors in different segments of the value chains, so that it increases the probability of learning about production activities in more than just the low-value assembly like segments of the value chains.³³ In the leather industry, FDI has successfully been attracted to both the tanning industry and the leather products industry. In the textile industry, FDI from particularly Turkey has focused on a range of activities in the value chain.

3.2 Gauging success of the strategy

If we look at success of Ethiopia's FDI-oriented industrialisation strategy purely in terms of attracting FDI, it is clearly successful — manufacturing FDI inflows in the country has increased from US\$570m in 2007/08 to US\$3,712m in 2016/17 (from 2.5 per cent to 5.1 per cent of GDP).³⁴ Many of the foreign investors, especially in the light manufacturing industries like the textile and leather industries, are coming to Ethiopia to export to consumer markets particularly in the West. Therefore, we should also look at manufactured exports as an indicator of success. In this area, the trajectory is also positive: From 2004 to 2017, manufactured exports

increased from US\$21 million to US\$389 million (led by exports in the textile and leather industries), representing more than a doubling of manufactured goods exports' share of total merchandise exports.³⁵ In the fastest-growing light manufacturing industries — the textile and leather industries — foreign firms account for approximately 80 per cent of exports.³⁶ So in terms of attracting FDI for the purpose of exporting, the strategy seems to be working.

However, as discussed, export success is not enough to ensure the development of domestic productive capabilities, and, more broadly, sustained industrialisation. In order to proclaim that that the strategy is on the right track, there needs to be some concrete evidence that policies are put in place not only to attract foreign investors in manufacturing to increase exports but also in order to transfer technology — raising the level of productivity for domestic firms by learning about new production techniques and practices, management practices, and acquiring knowledge of international markets and trade — and creating linkages (especially backward linkages) to the domestic economy.

There is some, but not much evidence that such policies have been put in place — mostly anecdotal accounts in some interviews of non-governmental facilitated technology collaborations between domestic and foreign firms and the formation of supplier relationships between domestic and foreign firms.³⁷ Perhaps this is why an official at the Prime Minister's Office expressed the belief that technology transfer would happen through demonstration effects — domestic firms being exposed to foreign firms' products, production processes and marketing strategies — and competition effects — the simple presence of foreign firms will expose greater pressure on competing domestic firms to be more productive.³⁸

The Ethiopian private sector shares the hope that technology will be transferred through this channel. When asked in interviews how they saw the entry of foreign firms, most domestic firms responded positively, while some took a neutral position. It was a rarity to find domestic firms that saw the entry of foreign firms as something 'bad.' One reason for the optimism was the chance to learn about technologies, management practices and business practices of foreign firms. The CEO of one the largest domestic vertically integrated textile firms, whose main buyer is H&M, elaborated on this point:

One of the main factors for our success is that buyers are coming to Ethiopia. The foreign investments are helping to put Ethiopia on the map. We need foreign companies, as they are coming with full technology. Technology transfer will happen through teaching the Ethiopian people. They will demonstrate for us, but their competition is also good for us. Leaders, like

myself, will be pressured by FDI...My company has the best linen in the country because we saw how foreign firms are doing it.³⁹

Moreover, there is some evidence that foreign firms are developing skills of the local workforce at higher levels than simple operator training, without the Ethiopian government explicitly calling for it. Many investors from East Asia reported that they send Ethiopian workers in technical or managerial positions to their home countries for training or train such workers through elaborate training programmes at their own facilities in Ethiopia. This is not an act of 'benevolence', as firms simply save money by having a lower dependence on expatriate workers. Such a channel of technology transfer has actually been highlighted by Mulu Gebreeyesus and Michiko Iizuka as crucial for success in Ethiopia's cut-flower sector. They argue that the entry of foreign firms was vital to knowledge diffusion and skills development of the local workforce. This happened without highly interventionist policies to 'force' foreign firms to transfer technology.

So there is certainly a chance that some technology can be transferred through simply making the investment environment conducive for foreign firms. But even with the abovementioned positive signs, foreign firms still account for the majority of manufactured exports, and the absolute value of these exports (US\$389 million) is very low from a comparative perspective.⁴⁰ The near absence of domestic firms' participation in international markets indicates that little technology transfer has taken place.

In terms of backward linkages, while there seems to be some established ties between foreign footwear producers and local tanneries⁴¹ — partly because raw material is readily available — the trend is more worrying in the textile industry. A recent study shows that Ethiopia's import dependency on textile-based products has increased considerably with the growth of the apparel industry.⁴² Linkages between foreign apparel producers and domestic fabric producing firms are the exception rather than the rule. In fact, most apparel investors coming from abroad say that they intend to import fabric in the foreseeable future.

While isolated insights into the case of Ethiopia are useful, gauging the success of national policies without a comparative perspective is difficult. The following section will therefore look at the experiences of FDI-oriented industrial policy in South Korea and Taiwan (whose justifications were explained in the introduction). In section 5, I will draw together all the experiences, considering if Ethiopia should and how Ethiopia could learn from South Korea and Taiwan.

4. Lessons from South Korea and Taiwan for FDI-oriented industrial policy in Ethiopia

4.1 South Korea: restrictive towards FDI, except for in the textile industry

It may seem surprising to provide South Korea as an example of FDI-oriented industrial policy. After all, the country is generally known to have had a restrictive stance towards foreign investors. From 1960 to 1990, FDI inflows as a share of total foreign capital inflows (except foreign aid) in the country was a mere 5 per cent, among the world's lowest.⁴³

However, while FDI inflows have been low in South Korea, the export-focused textile sector is an exception. FDI in the textile sector accounted for 20 per cent of total foreign capital in the country in 1974.⁴⁴ By the mid-1960s, South Korean firms were exporting all sorts of apparel, mostly to the Japanese and the US markets, using imported inputs from Japan.⁴⁵

The imported inputs from Japan were crucial for export success of Korean apparel. But the way that the relationships were formed, especially through joint ventures, made it easier for the Koreans not to simply become stuck with low-value export-oriented assembly tasks. Between 1962 and 1974, 52 per cent of Japanese direct investments in South Korea were with minority ownership. Joint ventures with the Japanese in which Koreans had majority stakes more easily facilitated the transfer of technological know-how (learning how to produce synthetic fibres was especially important), marketing skills and managerial techniques.

The Koreans gradually and systematically pushed for less Japanese involvement and a higher degree of national firm ownership.⁴⁷ As soon as practically possible, the Koreans invested in their own R&D facilities, and by the early 1980s, they had acquired the capability to design their own plants, and had reduced import dependence by developing domestic production capabilities in synthetic fibres, petrochemicals, spinning, weaving, dyeing and knitting. It is important to emphasise that the development of the Korean textile industry should not be understood purely as a means to serve inputs to the apparel industry. Textiles, especially synthetic fibres, was (and still is) considered more technologically advanced than apparel, and contributed significantly to export earnings in South Korea, especially in light of the high protectionist barriers that the US were starting to apply on traditional cotton textiles at the time.⁴⁸

The role of the state in promoting the development of domestic capabilities in the textile-industry in the form of mutually reinforcing import-substitution and export-orientation

policies, if you will, cannot be understated. Alice Amsden points out that the import substitution of synthetic fibres made the textile industry more productive and less vulnerable to devaluations of the exchange rate.⁴⁹ To compensate domestic fibre-using firms for 'forcing' on them domestically produced fibres, the Korean government subsidised inputs and handed out subsidised credit in return for meeting export performance targets.⁵⁰ Other important export promotion measures included preferential loans for operation and facility expansion, general tax and tariff exemptions on some imported inputs and wastage allowances.⁵¹

Another important but often neglected part of the story of South Korea's export success in textiles, apparel and footwear was the attraction of Japanese trading companies. In the early 1960s, Koreans were simply lacking experience and knowledge of foreign markets, so facilitating cooperation with these trading companies proved crucial.⁵² The trading companies were especially important for establishing ties to the US markets. In 1966, Japan accounted for 82 per cent of the textile, apparel and clothing market in the US, whereas South Korea only accounted for 8 per cent. By the early 1970s, the Koreans had made their entry, accounting for 31 per cent of the US market, whereas the Japanese share had fallen to 52 per cent.⁵³ By this time, 50 per cent of South Korea's exports went to the US.⁵⁴

In conclusion, the story of South Korea's success with FDI attraction, especially in the textile industry, is a story of transferring technological knowhow through joint ventures, pushing for increasing local content and international competitiveness through various industrial policy tools, especially tariff protection and subsidised credit, and improving access to and learning about lucrative export markets through trading companies.

4.2 Taiwan: a heavy focus on promoting local content

Just like in South Korea, the fear of foreign domination of the economy has been pervasive in Taiwan: FDI inflows only fluctuated between 4 and 8 per cent as a share of gross fixed capital formation between 1960 and 1990. However, 20-25 per cent of manufactured exports came from foreign firms in the 1970s.⁵⁵

In the early 1960s, there were plenty of attributes that made Taiwan attractive to foreign investors, very similar to those of South Korea. US and Japanese firms were beginning to search for low cost labour in nearby countries to relocate production, Taiwan offered political stability and disciplined labour, and the country was linked to Japan from the colonial era and to the US as an anti-Communist outpost. But the country did a good job in wooing foreign investors as well. Among other things, they offered 100 per cent foreign ownership, guarantees

against expropriation, and five-year tax holidays. Effort went into making foreign firms feel welcome, one common trick being to discover some personal connection between the firm and a senior in the Taiwan government.⁵⁶

However, the government has bargained strategically with foreign investors, even in the 1960s, when the Taiwanese stance toward foreign investors has been considered relatively liberal. A good example of the balancing act that Taiwan mastered between welcoming foreign investors and bargaining with them is the polyethylene plant built in the early 1960s by the National Distiller and Chemical Corporation (again, a US based firm). To attract the company, the Taiwanese government offered a five-year tax holiday, restrictions on imports of polyethylene for three years from start-up, guaranteed supplies of ethylene (an input that goes into making polyethylene) and unlimited repatriation of profits. The Taiwanese government, in return, required that National Distiller should export any surpluses over domestic needs, not establish production facilities in downstream sectors, and transfer 50 per cent of shares to Chinese nationals after 5 years, so as to make it a 50-50 joint venture. ⁵⁷ The distiller plant successfully came on line in 1968.

Beginning in the 1970s, the Taiwanese government applied a slightly stricter stance toward foreign investors. FDI in labour-intensive production came to be discouraged, it was faced with higher export requirements and local content requirements, and limits were placed on the extent to which foreign firms could capitalise on their technology – typically demanding that technology could not be valued more than 15 per cent of the firm's equity contribution in the case of joint ventures. The intention of this was to make foreign firms commit more equity to the project at hand, thereby carrying more of the risk. Foreign investors did not always comply with the tough bargaining. For example, the Japanese automotive manufacturer, Toyota, withdrew from a joint venture in 1984 after concluding that the Taiwanese government insisted on too stringent local content requirements and export requirements. Within eight years, 50 per cent of cars were to be exported and local content were to rise to 90 per cent. ⁵⁹

But generally, local content policies in Taiwan have been successful, and the strategy of linking foreign firms with local suppliers through subcontracting practices became a staple of FDI-oriented industrial policies in Taiwan in the 1970s and 1980s.⁶⁰ Foreign firms' links with local producers were assisted by proactive industry associations. For example, the electronics industry association TEAMA (the Taiwan Electric Appliances Manufacturers' Association) aggressively recruited members from both foreign and local firms and, with the support of the government, actively promoted the "local content programme." Local producers wanted to take advantage of the technology, management skills and sales networks

of transnational corporations. And foreign producers stood to benefit from the local content programme because it reduced labour costs and lead-times as long as local suppliers met quality standards. Consequently, transnational corporations started enthusiastically training local technicians, providing technical knowhow and management skills to suppliers and cooperated with technical schools on internship programmes.⁶²

Also starting in the 1970s, the government became more active in trying to attract R&D from foreign companies, especially in high-tech sectors. Incentives included tax write-offs for R&D and reductions in taxes on technology imports. Obligations to be met on the foreign firm side often involved establishing research departments to train local personnel in advanced technology.⁶³

In conclusion, the Taiwanese government has applied a range of favourable incentives to attract FDI, but has mostly bargained with foreign investors so as to ensure transfer of technology and to create backward linkages with domestic suppliers.

5. Is Ethiopia learning from South Korea and Taiwan? *Should* Ethiopia be learning from South Korea and Taiwan?

Despite many similarities between the Ethiopian development model and the East Asian development model, it does seem that in both South Korea and Taiwan, the state was more proactive in terms of pushing — not to speak of forcing — foreign investors to transfer technology to the domestic economy and to create backward linkages from foreign to domestic firms.

However, in some ways, today's global economic environment has made such proactive industrial policy more difficult. In a world where cheap labour is more easily accessible and plentiful than before, transnational corporations can largely pick and choose outsourcing locations. For a country like Ethiopia, a non-liberal stance towards foreign investors will make it more challenging to attract them. Moreover, the protectionist measures that have been important for South Korea and Taiwan are not completely straightforward to apply in today's global trade environment. For example, local content requirements are now prohibited by the World Trade Organisation (WTO) for most countries.

Therefore, Ethiopia's strategy of simply attracting foreign investors and pushing them to export does make some sense. In fact, most countries that have had a liberal stance towards foreign investors, regardless of the long-term result on the development of domestic productive

capabilities, have been successful in generating export earnings and local employment, especially those doing so through building industrial parks (which is Ethiopia's focus at the moment).

But the benefits from this type of FDI strategy are limited. The review section in this paper highlighted out how Latin American countries have struggled to sustain its industrialisation process because foreign investors operated in an enclave economy. Many other countries are currently experiencing similar challenges. Malaysia is said to be in a middle-income trap because it has not been able to use its FDI attraction for productive-capability upgrading as much as South Korea and Taiwan have done. And China is still struggling to achieve high domestic content in high-technology manufacturing (even though it is close to acquiring control over full-fledged global value chains in textiles, apparel, and consumer electronics).

The key point here is that a careful balance needs to be struck between, on the one hand, the benefits that a liberal stance towards foreign investors can bring about, and on the other hand, the need to develop domestic productive capabilities. For developing countries, this especially means pro-active policies to develop backward linkages to the domestic production of inputs needed for manufacturing activities and to transfer technology from foreign firms to the domestic economy.

This is what South Korea and Taiwan did so well during their industrialisation period. Most importantly, they had an active state that pushed local content requirements and joint venture requirements on foreign investors. This is what Ethiopia should look to learn from. But we should not forget that South Korea and Taiwan also offered financial incentives to foreign investors as a bargaining tool. Ethiopia is already doing this. South Korea and Taiwan had an intricate 'carrot and stick' strategy with respect to attracting manufacturing FDI. Ethiopia has implemented the carrot, but no stick.

Regarding the question, *should* Ethiopia learn from South Korea and Taiwan, we could also ask if conditions in Ethiopia in the country's current era of industrialisation compare to the initial conditions in South Korea and Taiwan. In fact, many studies on the East Asian development experience have stressed the 'favourable' conditions under which South Korea and Taiwan developed, such as the surging world market demand of the 1950s and the 1960s when South Korea and Taiwan started their export drive; the legacy of Japanese colonialism which left behind a good base for manufacturing to thrive; and the high level of US aid to South Korea and Taiwan due to their strategic importance in the Cold War.⁶⁴

The positive legacy of Japanese colonialism is often highlighted. For example, Tibor Scitovsky has pointed out that the Japanese built roads, railways, harbours, and whatever beginnings of industry that the two countries had.⁶⁵ Athul Kohli has emphasised that Japanese colonialism was different from European colonial projects in that it developed manufacturing industries in its main colonies, i.e. South Korea and Taiwan, which gave them headstarts in their subsequent industrialisation.⁶⁶

But a conflicting narrative to this story also exists. According Kwan Kim, while Japanese colonial rule brought some modernisation, the small infrastructural base built during Japanese rule was mostly destroyed during the Korean War of 1950-53.⁶⁷ In Taiwan, when the country was transferred to the Republic of China after World War II, the new administration plundered most of the rents, according to Kristin Nordhaug.⁶⁸

In fact, many economic indicators suggest that Taiwan and South Korea were in no better condition to develop in the 1950s and early 1960s than most low-income countries today, like Ethiopia. GDP per capita in both South Korea and Taiwan in 1960 were lower than in Ethiopia in 1960 (!), and by far lower than in Ethiopia today, even if measured in constant prices. Telephone lines in use per 1,000 inhabitants — a common measure of a country's level of infrastructure development — was lower than 10 in both South Korea and Taiwan in 1960, similar to most countries in Sub-Saharan Africa at that time. Per capita value added in manufacturing in the 1950s in South Korea and Taiwan was on par with most countries in Sub-Saharan Africa at that time, and far below that of most countries in Latin America. Nor did the state of private sector development indicate that a massive capitalist transformation would take place. In the 1950s, state-owned enterprises produced more than 50 per cent of total manufacturing output in South Korea and Taiwan, higher than Ethiopia in 2004.

What about supporting institutions for industrial development? The evidence is mixed. In a recent paper, Ha-Joon Chang and I compare Ethiopia's current state apparatus for industrialisation with that of South Korea and Taiwan during their growth experiences. We present evidence suggesting that the Ethiopian state shares many features with the original developmental states in East Asia, such as a developmental orientation committed to industrialisation, and the state's heavy governing power in the private sector. But we point out that the Ethiopian bureaucracy is weaker and less independent from everyday politics than those of the East Asian developmental states between 1960 and 1990. So even though there has been an expansion of the industrial bureaucracy in Ethiopia, such as the establishment of sectoral support institutes and linkage creation institutes (see Table 1), most of the real decision

making power lies in the hands of the ruling party, the Ethiopian People's Revolutionary Democratic Front (EPRDF).

However, our arguments could certainly be criticised on some points. For example, early in their development trajectories (in the late 1950s and the early 1960s), the bureaucracy and supporting institutions in South Korea and Taiwan were also closely tied to politics. For example, in 1963, the chief of the Economic Planning Board in South Korea (arguably the most central organ in industrial policy-making) was also Deputy Prime Minister. Robert Wade argues that the idea of an independent and powerful economic bureaucracy was more fitting of Japan than the other 'developmental' states. In Taiwan, he explains, the president and premier had much more control over the policy-making apparatus than in Japan.

The key takeaway point from this comparison about initial conditions is that we should be careful to conclude that South Korea and Taiwan were better placed to develop economically in 1960 than Ethiopia has been for the past decade (and other low-income countries too, for that matter). *Ex ante*, not many people predicted the rapid industrialisation of South Korea and Taiwan. *Ex post*, it is easy to be deterministic about various initial conditions. Too many scholars have highlighted East Asian 'exceptionalism' to explain their development experiences. If we go down to the last detail, every successful development experience is unique, but this does not mean that there is nothing to learn from these experiences.

While this article stresses that Ethiopia should look to learn more from South Korea and Taiwan, this does not mean that Ethiopia should not or cannot learn from other development experiences. Some scholars highlight China as an additional comparison that is useful for Ethiopia.⁷⁵ From the perspective of successfully attracting FDI, this is not at all surprising. From the 1990s onwards, China has become one of the world's largest recipients of manufacturing FDI, and successfully managed to create linkages between foreign firms and domestic suppliers, at least in low-tech industries.⁷⁶

China has actually played a crucial role in Ethiopia's industrialisation process, mainly through being the largest provider of external finance (through concessional loans) for infrastructure development. China has also been an important player in the rise of FDI in Ethiopia, particularly in the leather industry. The business relationship between the two countries in this industry started in 2011, when Ethiopia's Prime Minister, Meles Zenawi, sent a trade mission to China to invite potential footwear manufacturers to invest in Ethiopia (curiously on invitation from then-World Bank chief economist, Justin Lin).⁷⁷ One firm, Huijian, visited Ethiopia later that year and decided to set up a factory. The firm started production in 2012, and is now Ethiopia's largest exporter of leather footwear. The success of

this particular company partly explains why Ethiopia has been successful in attracting more Chinese companies in the leather industry, who dominate this particular industry.

In conclusion, it is not surprising to see comparisons between Ethiopia, South Korea and Taiwan. Ethiopia, like South Korea and Taiwan, is focusing heavily on industrialisation and has already implemented an impressive array of industrial policy tools (see Table 1) that are showing promise for economic development. The push for exports through a financial incentive scheme is also similar to that of South Korea and Taiwan. But with respect to FDI-oriented industrial policy, Ethiopia could benefit from taking even more lessons from the long-term economic development perspective of South Korea and Taiwan. In these countries, the state was more proactive in terms of pushing foreign investors to transfer technology to the domestic economy and to create backward linkages from foreign to domestic firms.

This does not mean that if Ethiopia gets FDI-oriented industrial policy 'right', the country will achieve the same level of economic success as South Korea and Taiwan. The set of policies in successful industrialisation experiences was highly complex, and involved many more considerations than FDI. Moreover, each country faces unique challenges. In Ethiopia, these challenges go beyond getting just the policies right. As recent ethnic-based protests and the resignation of Prime Minister Hailemariam Desalegn show, the state-led development project is somewhat fragile,⁷⁸ even with the instalment of the new Prime Minister, Abiy Ahmed, for whom expectations are high. In its industrialisation plans, the Ethiopian government should not ignore these political and socio-economic dimensions.

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Notes

¹ See for example Aglionby, "Ethiopia bids to become last development frontier"; Clapham, "The Ethiopian Developmental State"; De Waal, "The theory and practice of Meles Zenawi"; Hauge, "African industrial policy in an era of expanding global value chains: the case of Ethiopia's textile and leather industries"; Hauge and Chang, "The Concept of a 'Developmental State' in Ethiopia"; Oqubay, "Made in Africa: industrial policy in Ethiopia"; and Zenawi, "States and Markets: Neoliberal Limitation and the Case for a Developmental State."

² This paper adopts a definition of industrial policy as detailed in Chang, "Transformative Industrial Policy for Africa, 26, which is, 'A policy that deliberately favours particular industries – or even firms – over others, against market signals, usually to enhance efficiency and to promote productivity growth for the targeted industries as well as for the whole economy.' The 'whole economy' is an important part of the definition, as it implies that this paper adopts a broad understanding of industrial policy.

³ Oqubay, "The Structure and Performance of the Ethiopian Manufacturing Sector".

⁴ See for example Brautigam, Weis, and Tang, "Latent advantage, complex challenges: industrial policy and Chinese linkages in Ethiopia's leather sectors", and Staritz, Plank, and Morris, "Global Value Chains, Industrial Policy and Sustainable Development: Ethiopia's Apparel Export Sector."

⁵ See for example De Waal, "The theory and practice of Meles Zenawi"; Hauge, "African industrial policy in an era of expanding global value chains: the case of Ethiopia's textile and leather industries"; and Weis, "Vanguard Capitalism: Party, State and Market in the EPRDF's Ethiopia.".

⁶ If, in the first instance, one believes that emulation is useful. Certainly, if one goes down to the last detail, all experiences are unique, making exact emulation/replication impossible. But I would argue that this does not mean that we should never look at countries that developed under different conditions and at a different point in time.

⁷ Light manufacturing, as opposed to heavy manufacturing, is less capital-intensive and more labour-intensive. It is typically characterised by a lower technology intensity than heavy manufacturing (i.e. low-tech rather than high-tech), meaning that value added per work hour and R&D spending is lower. In Ethiopia, the fastest-growing light manufacturing industries are the textile industry and the leather industry.

⁸ For more details on the importance and relevance of interviews in the context of case-study research, Yin, "Case Study Research: Design and Methods", provides a good account.

⁹ The developmental state concept was introduced by Chalmers Johnson in his book *MITI and the Japanese Miracle: The Growth of Industrial Policy, 1925-1975*, published in 1982. In the late 1980s and early 1990s, a stream of literature followed that studied other East Asian development experiences, most notably South Korea and Taiwan, using the theoretical framework, if not necessarily the concept of the developmental state. The works in this tradition that have come to be considered most seminal in a 'developmental state' sense include Alice Amsden's *Asia's Next Giant* (1989), Robert Wade's *Governing the Market* (1990), Ha-Joon Chang's *The Political Economy of Industrial Policy* (1994) and Peter Evans' *Embedded Autonomy* (1995). Additionally, Meredith Woo-Cumings' *The Development State* (an edited book) published in 1999 is a supremely important contribution to understanding the concept of the DS, alongside many papers (too numerous to mention) that have been published in the aftermath of the introduction of the concept. I acknowledge that the finite list of seminal works that I have proposed is certainly debatable. In the context of Ethiopia, the concept of a developmental state has actually been analysed recently by Hauge and Chang, "The Concept of a Developmental State in Ethiopia."

¹⁰ Cherif and Hasanov, "The Return of the Policy That Shall Not Be Named: Principles of Industrial Policy."

¹¹ Wade, *Governing the Market*.

¹² Amsden, Asia's Next Giant.

¹³ Fröbel, Heinrichs, and Kreye, *The New International Division of Labour*.

¹⁴ UNCTAD statistics database.

¹⁵ Farole and Winkler, Making Foreign Direct Investment Work in Sub-Saharan Africa; Gallagher and Zarsky, The Enclave Economy: Foreign Investment and Sustainable Development in Mexico's Silicon Valley.

¹⁶ OECD, Foreign Direct Investment for Development: Maximising Benefits, Minimising Costs.

¹⁷ Chang, Hauge, and Irfan, *Transformative Industrial Policy for Africa*; Gallagher and Zarsky, *The Enclave Economy: Foreign Investment and Sustainable Development in Mexico's Silicon Valley*; Lall, "Selective Industrial and Trade Policies in Developing Countries: Theoretical and Empirical Issues"; Wade, *Governing the Market*.

¹⁸ There are certainly case studies of other regions of developing countries in the literature but countries in East Asia and Latin America have historically attracted more FDI.

¹⁹ Wong, "From using to creating technology; the evolution of Singapore's national innovation system and the changing role of public policy."

²⁰ Singleton, *The World Textile Industry*.

²¹ Wade, Governing the Market.

²² Aw, "Technology acquisition and development in Taiwan."

²³ Paus and Gallagher, "Missing Links: Foreign Investment and Industrial Development in Costa Rica and Mexico."

²⁴ Gallagher and Zarsky, *The Enclave Economy: Foreign Investment and Sustainable Development in Mexico's Silicon Valley*.

²⁵ Milberg and Winkler, Outsourcing Economics: Global Value Chains in Capitalist Development.

²⁶ Hauge, "African industrial policy in an era of expanding global value chains: the case of Ethiopia's textile and leather industries."

²⁷ Milberg and Winkler, *Outsourcing Economics: Global Value Chains in Capitalist Development*; Shrank, "Export Processing Zones: Free Market Islands or Bridges to Structural Transformation."

²⁸ I have presented similar versions of this table (although not identical) in Hauge and Chang, "The Concept of a 'Developmental State' in Ethiopia", and Hardy and Hauge, "Labour challenges in Ethiopia's textile and leather industries: no voice, no loyalty, no exit?" Another useful overview of Ethiopia's industrial policy instruments can be found in Oqubay, "Industrial Policy and Late Industrialization in Ethiopia."

²⁹ UNIDO, "Guide to doing business in Ethiopia."

³⁰ UNIDO, "Guide to doing business in Ethiopia."

³¹ Ranked by order of employment, most such parks/zones are in China, Mexico, Phillippines, Vietnam and Malaysia, according to Boyenge, "ILO database on export processing zones."

³² Gebreeyesus and Iizuka, "Discovery of Flower Industry in Ethiopia: Experimentation and Coordination."

³³ Notes from presentation by the CEO of the Ethiopian Investment Commission at the Agro-Industry Investment Forum in Addis Ababa, 5-7 October, 2016.

³⁴ Oqubay, "The Structure and Performance of the Ethiopian Manufacturing Sector"

³⁵ WTO trade statistics database.

³⁶ Ministry of Industry (Ethiopia), "Time series dataset on Ethiopia's top exporting firms in the textile and apparel industry."; Ministry of Industry (Ethiopia), "Time series dataset on Ethiopia's top exporting firms in the leather and leather products industry."

³⁷ For example, a foreign footwear firm stated that they source leather locally and assist the domestic tanneries with ensuring high-quality leather by sending them technicians when they need help (interview with deputy manager of foreign footwear company, Addis Ababa, November 25, 2016). While backward linkages in the textile industry are less common than in the leather industry, one foreign textile company reported how they have one stable domestic supplier of yarn, and that they assist them by sharing recipes and describing to them how they should produce the yarn they need (interview with exports and sales manager of foreign textile company, Addis Ababa, December 07, 2016).

- ³⁸ Interview with special advisor to the Prime Minister, Addis Ababa, May 13, 2017.
- ³⁹ Interview with CEO of domestically owned textile firm, Addis Ababa, November 07, 2016.
- ⁴⁰ For example, in Vietnam (a developing country of similar size although slightly higher income which is also specialising in light manufacturing production for exports), manufactured exports was US\$175 billion in 2017, according to WTO, "World Trade Organisation Statistics database." This is approximately 450 times the value of manufactured exports in Ethiopia.
- ⁴¹ Hauge, "African industrial policy in an era of expanding global value chains: the case of Ethiopia's textile and leather industries."
- ⁴² Staritz, Plank, and Morris, "Global Value Chains, Industrial Policy and Sustainable Development: Ethiopia's Apparel Export Sector."
- ⁴³ Chang, The East Asian Development Experience: The Miracle, the Crisis, and the Future.
- ⁴⁴ Chibber, "Building a Development State: The Korean Case Reconsidered."

- ⁴⁵ Castley, "Korea's Export Growth: An Alternative View."
- ⁴⁶ Castley, "Korea's Export Growth: An Alternative View."
- ⁴⁷ Singleton, *The World Textile Industry*.
- ⁴⁸ Chibber, "Building a Developmental State: The Korean Case Reconsidered."
- ⁴⁹ Amsden, Asia's Next Giant: South Korea and Late Industrialization.
- ⁵⁰ Singleton, *The World Textile Industry*.
- ⁵¹ Kim, "The Growth and Structural Change of the Textile Industry."
- ⁵² Chibber, "Building a Developmental State: The Korean Case Reconsidered."
- ⁵³ Castley, Korea's Economic Miracle: The Crucial Role of Japan.
- ⁵⁴ Castley, "Korea's Export Growth: An Alternative View."
- 55 Lee and Liang, "Taiwan."
- ⁵⁶ Wade, *Governing the Market*.
- ⁵⁷ Gold, State and Society in the Taiwan Miracle; Wade, Governing the Market.
- 58 Wade, Governing the Market
- ⁵⁹ Wade, Governing the Market
- ⁶⁰ Aw, "Technology Acquisition and development in Taiwan"; Schive, "The Next Stage of Industrialization in Taiwan and South Korea."
- ⁶¹ Aw, "Technology Acquisition and development in Taiwan", 172.

⁶² Aw, "Technology Acquisition and development in Taiwan".

- ⁶⁴ Chang, "How Important were the 'Initial Conditions' for Economic Development?: East Asia vs. Sub-Saharan Africa." Chang discusses these theories, but does not endorse them.
- ⁶⁵ Scitovsky, "Economic Development in Taiwan and South Korea: 1965-81."
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⁷⁴ Wade, *Governing the Market*.

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