Roles of the Business Environment in Global Value Chains

Business Environment Working Group

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Executive summary

The business environment lays out the policies, rules, and regulations for participating in economic activities and should enable businesses to enter new industries and upgrade their activities. This report examines how the business environment can support positive integration and upgrading of formal firms in global value chains (GVCs). It addresses the role of the business environment and reform regarding attracting lead firms and supporting positive effects from investment, increasing the quality and supply of domestic firms, facilitating linkages between foreign and domestic firms, and supporting integration into new chains via regional trade agreements. These are discussed in this report as they relate to factors affecting competitiveness in GVCs, including collaboration and institutionalization, trade and investment, productive capacity and human capital development, and infrastructure and business climate.

Business environment reform should be based on clear, realistic objectives. This should begin with a complete understanding of a country’s economic structure, and how it participates in different chains. Such an understanding should consider industry differences along the chain and by sector. This lays the foundation to determine where reform is needed for participation in chains for global buyers (via foreign investors in top tiers, or domestic firms in lower tiers), or emerging markets.

Coordination and collaboration among stakeholders and policies are key elements across chains and countries. Common to case studies of successful value chain upgrading is a multistakeholder organization that includes industry, government, and academic participation and development guided by a well-developed strategy for entry and upgrading.

Investment policy reform is needed in terms of promotion and retention, particularly regarding incentives. Countries tend to heavily pursue entry strategies but cease to fully engage beyond initial steps. Proactive, informed investment promotion should be accompanied by ongoing, support and engagement with foreign investors. Investment incentive criteria should consider enforceable social and environmental improvements rather than just investment dollars, exports, and jobs (quality in addition to quantity). Reform regarding investment and skill development are important to achieve positive effects from foreign investment. This includes developing education and skill development programs in collaboration with foreign investors and employment-related obligations on expatriate workers in skilled positions when needed.

A business environment specific to domestic firm development is needed to support competitive firms in lower tiers of GVCs for global brands, and to build domestic firms for emerging market chains. This includes changing size requirements to receive incentives, including local partners and financial sustainability in domestic firm development programs, facilitating market access, and institutional capacity building. Once competitive domestic firms exist, facilitating linkages with foreign firms
should identify legal barriers to engagement and assist via well-organized employers’ associations and awareness raising efforts.

Regional trade agreements (RTAs) can help promote production for non-global lead firms that may offer more opportunity for entry and upgrading. Tariff reduction, standardization and institutionalization are key areas. Variations by industry and investor are discussed in the context of Africa. RTAs may also be the most pertinent path for environmental improvements.
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List of acronyms

AfCFTA African Continental Free Trade Area
FDI Foreign Direct Investment
GVC Global Value Chain
IPA Investment Promotion Agency
LMICs Low- and middle-income countries
MNE Multinational Enterprise
RTA Regional Trade Agreement
SME Small and Medium Enterprises
SEZ Special Economic Zone
VAT Value-added Tax
1. Introduction

The business environment lays out the policies, rules, and regulations for participating in economic activities and should enable businesses to enter new industries and upgrade their activities. This report examines how the business environment can support positive integration and upgrading of formal firms in global value chains (GVCs).

Section two begins with a discussion of the overarching need to understand the industrial organization and firm dynamics of different chains by end market buyers and along chain stages (industries). Section 2.1 distinguishes characteristics of chains for global lead firms and brands, with chains for non-global lead firms. Section 2.2 provides further insight regarding differences by sector and industries. Section 2.3 discusses the benefits of collaboration and coordination among actors and policies regardless of the chain or industry.

Section three addresses the role of the business environment and reform in five areas:
1. Attracting lead firms and supporting positive effects of foreign investment
2. Skill and knowledge transfer policies and programs
3. Increasing the quality and supply of domestic firms
4. Facilitating linkages between foreign and domestic firms
5. Regional trade agreements to support integration into GVCs.

These are discussed in relationship to factors affecting competitiveness in GVCs. Studies use different terms to describe similar concepts that can be grouped into four main areas: trade and investment, productive capacity and human capital, infrastructure and business climate, and institutionalization and collaboration. As described in section two, the importance of each varies by sector, industry, objective, and end market/buyer.

Sections 3.1 and 3.2 address investment policy reform, including greater emphasis on post-investment engagement and incentives that support productive capacity and human capital building. Section 3.3 focuses on building an ecosystem to support domestic firms, which involves reforms across areas. Section 3.4 identifies investment, business climate, institutionalization, and coordination reforms to facilitate domestic and foreign firm linkages. Section 3.5 looks at regional trade agreements, and opportunities for integration into chains for emerging markets.

Reports on manufacturing and agricultural industries across countries were reviewed to generate recommendations including country examples to illustrate. Examples are largely drawn from the work of researchers involved in the Global Value Chains Initiative, particularly ones that involved fieldwork or analysis of firm-level data.
2. Cross-cutting: evaluate reform based on value chain dynamics

GVC mapping is the process of identifying what the value chain looks like and how different countries and firms participate, based on quantitative and qualitative analysis. It helps identify prospects for entering and upgrading, and policies to help achieve realistic goals that consider the limitations of participating in different segments of chains, for different types of buyers (Frederick, 2019). Mapping the structure of potential value chains and understanding a country’s footprint should be the starting point to guide reforms. Specific aspects of chain mapping and the benefits of collaboration and collaboration in developing and implementing policies and reform are addressed in the following sections.

2.1 Global value chains for global brands vs. domestic and regional buyers

It is important to be aware that the proliferation of global value chain research across disciplines over the last decade has muddled what is meant by key terms and can lead to conflicting and confusing information regarding opportunities for development, and the role of the business environment. Appendix 1 provides definitions of key terms used in this report.

A value chain represents all the activities required to create a final product or service, and a global value chain implies that at least two of those activities take place in different countries. Recent work by economists defines GVC participation at the country level based on backward and forward linkages, measured by trade and value-added content. The GVC research approach developed by academics includes analysis of the firms, power, and relationships along the chain. Both are global value chains but are based on a different lens for analysis.¹

Most trade is not a simplistic sequence of market transactions, but a calculated and coordinated network of complex relationships among firms and countries producing goods and services. Production and services are performed with some degree of coordination for a specific buyer. In GVC literature, this is referred to as a lead firm, and manufacturing GVCs are often described in terms of tiers (Figure 1).

¹ See Frederick (2014) for a more in-depth review of the evolution of the term global value chain by research and development practitioner communities, and economists.
In practice, a global lead firm represents the owner of a brand that is recognized across continents. Global lead firms are all headquartered in high-income countries and carry out the most important (service) functions in these places. Global production and sourcing networks for global brands are well-established and concentrated at the firm (lead firm, tier 1 and 2) and country levels (Box 1). Opportunities for new domestic firms to integrate into these chains is limited to manufacturing services and non-core inputs.

**Box 1. Concentrated, well-established country and firm networks for global brands**

Global trade is concentrated in a few importing-exporting firms. These firms, many of which are MNEs, constitute 15 percent of all traders (World Bank, 2020) and about 80 percent of total trade in the early 2010s (UNCTAD 2013). Based on a different dataset, MNEs accounted for about two-thirds of global exports in 2016, and in highly tradable sectors, over 70 percent of trade value. Most countries have maintained their dominant GVC archetype (that is, position or activities performed in the value chain) over the past three decades. This implies minimal upgrading or changes in the structure of global production networks.

*Source: (Qiang et al., 2021)*
Global trade and foreign investment increased significantly in the 1990s and 2000s until the global financial crisis (2008) and have stabilized over the last decade. This stabilization has been accompanied by supply chain rationalization, and formalization of relationships between lead firms, first tier multinational suppliers, and key second tier suppliers. Lead firms across manufacturing GVCs built supply chain networks for products that bear their brand names as part of their global sourcing strategies to ensure consistency across production sites and to minimize costs. In the 1990s and early 2000s, lead firms had many suppliers across countries as they built up their networks. By the time of the financial crisis, lead firms were already reducing the number of suppliers (i.e., rationalization) while forming strategic relationships with capable first tier suppliers (Cattaneo et al., 2010). Global brands are no longer actively seeking new first and second tier suppliers.

Across manufacturing GVCs, fewer than 20 global lead firms headquartered in a handful of high-income countries dominate global sales. They have remained the same over the last three decades; no new country has entered this top tier at the global level. Following this development came global tier 1 suppliers that produce or coordinate assembly of the final product or key subassemblies on behalf of global buyers and consolidation is also now pervasive at this level. Tier 1 is driven by large MNEs from the same high-income countries and one upper-middle income country, China. At tier 2, which includes components for subassemblies and final products, a similar pattern emerges for key inputs. These trends are evident across highly traded industries including consumer electronics, transportation industries, patented pharmaceuticals, and to a lesser extent in apparel (Frederick, 2018a, 2022; Gereffi et al., 2021; Sturgeon, 2022).

Countries that are not already participating in these chains for global brands are unlikely to enter unless there is a significant increase in market demand for branded products in the region. New domestic firms have limited opportunities in the main tiers of chains for global brands due to established chain relationships, economies of scale, and differences in factors of production.

Low- and middle-income countries (LMIC) countries participate in tiers 1 and 2, but via foreign owned firms (Figure 2). LMIC domestic firms also engage, but in lower tiers for non-core inputs, packaging, and services. Services include manufacturing assembly services/contractors (machining, moulding, subassembly, finishing), technical and quality testing, and local services that cross-cut industries such as transportation (of goods and people), security, food suppliers, and even accommodations. As such, reforms to increase linkages between foreign and domestic firms should focus on these lower tiers of the chain.

Growing awareness and interest in GVCs increased usage of this term, but often fails to recognize there are different needs for participating for global brands and building capable domestic firms to fulfil emerging regional demand. Production for non-global lead firms meets the cross-border

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2 This primarily applies to South America, Africa, and to a lesser extent South Asia.
3 UNCTAD (2019) uses similar reasons to explain why some MNEs are enclaves.
definition of a global value chain, but production is organized differently and opportunities for new firms and countries is more open in higher tiers of the chain (Figure 3). These networks are referred to as regional value chains or production networks, or South-South trade relationships.

Ongoing global events and trends, including the Covid-19 pandemic, technological advancements in manufacturing and digitalization, and the need to reduce environmental impacts, are unlikely to change the firm networks of existing chains for global lead firms. They may lead to more regional production based on end market demand, but the pace of these changes will vary by industry. The rise of disposable income in emerging economies, and whether consumers gravitate towards existing global brands or new ones, is quite relevant. Emerging end markets offer opportunities for LMIC domestic firms if they form their own networks. Otherwise, existing global brands will continue to grow global market share.
2.2 Chain characteristics by industry and sector

This section briefly touches on two areas that lead to confusion when discussing interventions; chains represent multiple industries with different requirements, and where in the chain and how countries have entered GVCs differs by sector.

Value chain, supply chain, and industry are often used synonymously, but they have different meanings. Chains are composed of a series of activities that span multiple industries and economic sectors. For example, the apparel chain spans agriculture, extractive industries, manufacturing, and services. Inputs come from agriculture (natural fibres such as cotton and wool) or extractive industries for synthetic fibres. Components are part of the textile manufacturing industry (yarn and fabric). Assembly is part of the apparel manufacturing industry, which only includes cutting and sewing fabric (assembly) into final products and finishing, including related secondary steps such as packaging, labelling, and attaching sundries/accessories (i.e., buttons, zippers). Distribution, design, and branding are services carried out by wholesalers, retailers, and a myriad of other service sectors. The apparel supply chain starts with fibres, that are made into yarn and fabric, that is finished and cut/sewn into a final garment. The apparel value chain also includes services; buyers of garments (brand owners and retailers) as well as wholesalers and designers.

Final product manufacturing is labour-intensive, and intermediate production is capital and scale intensive. Top apparel exporting countries have an abundant workforce with little formal work experience. Textile production requires affordable and reliable energy, machine and quality control technicians, and economies of scale. Furthermore, there are many styles of clothing for different occasions which all require different textile inputs. For most countries, it is neither practical or necessary to produce textiles and apparel in the same country unless establishing a textile base is part of a practical, long-term strategy for the country. Careful consideration is needed to determine if backward linkages are necessary, or if it would be more advantageous to move horizontally into related industries with similar workforce requirements (i.e., food manufacturing, furniture, plastic/metal working, electronics assembly). Similarly, opportunities to engage in functional upgrading to branding and creative design for the global apparel value chain for global brands is not a realistic pathway but pursuing these activities could be the focus of domestic firm development for regional brands.

Understanding these distinctions facilitates thinking of how participation in one chain can be used to transition into others, referred to as chain or intersectoral upgrading. Research in the Philippines across multiple manufacturing GVCs shed light on synergies in terms of human capital, products, firms and opportunities to carve out a niche in electronics and transportation industries intermediate products (Bamber et al., 2019). Similarly, countries with manufacturing capabilities in yarn and fabric, apparel assembly, automotive components, and/or medical devices may find opportunities in industrial automotive fabrics or medical textiles (Bamber & Frederick, 2018).
It is also important to be aware of how countries typically enter GVCs in different sectors. This section covers only agriculture and manufacturing (extractive industries and all types of services exhibit different patterns). Countries have entered manufacturing by attracting foreign-owned firms to invest in downstream, labour-intensive assembly. These tend to be large factories that employ thousands of workers owned by MNE first tier suppliers. Domestic firms and SMEs play a limited role in manufacturing for global brands. When they participate, they perform a limited range of activities as subcontractors. They are often located in or near industrial zones and are direct producers for the domestic or regional market (Frederick & Charbonneau, 2021b). Studies using micro-level data support this (Box 2).

**Box 2. Limited participation of domestic or small firms in manufacturing for global brands**

In Vietnam (2015), foreign firms accounted for 62 percent of apparel exports and private domestic firms one-third. Foreign firms have more employees than private domestic firms (942 compared to 105). Similar evidence is found in manufacturing industries in the Philippines. In the electronics and electrical (E&E) industry (2013-14), approximately 50 foreign firms account for most of the country’s E&E exports. In automotive, 15 firms account for 80 percent of export revenue. In shipbuilding, two foreign-owned exporters accounted for 97 percent of exports and revenue and 75 percent of the country’s shipbuilding workers. Like the other cases, domestic firms account for the largest share (95 percent) of shipyards, but they repair boats for national shipping and transportation.

India, Turkey, and more recently Pakistan are a few exceptions in which domestic manufacturers rather than foreign firms entered international markets via traders or direct relationships with global apparel buyers. These countries, however, had a long domestic history of producing and exporting textile inputs (cotton, yarn, and fabric) and textile-based final products (home furnishings) prior to entering apparel. Even in these countries top exporters are large firms. In Pakistan (2016/17), 10 percent of apparel exporting establishments accounted for 90 percent of the country’s apparel exports, and eight accounted for over 30 percent.

*Sources: (Frederick & Brun, 2017; Frederick & Daly, 2019; Frederick & Gereffi, 2016; Frederick & Thuy, 2017; Sturgeon et al., 2016).*

Entry in agricultural chains is upstream in farming. Farms are a mix of large plantations and smallholders whose output is collected by traders or cooperatives to obtain larger volumes, that are then sold to global traders or directly to lead firms. While there are exceptions, commoditized, volume agricultural products tend to be produced on plantations whereas specialty products often involve smaller farms. For example, in Madagascar and Myanmar, lychees and ginger are farmed exclusively by smallholders. For coffee, smallholders account for 70 to 90 percent of production in

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4 In automotive, there are also labor-intensive component stages, and countries have entered by attracting tier 2 foreign investors at this stage rather than final assembly (i.e., Poland in the mid-1990s (Markiewicz, 2020)).
Laos, Colombia, and Mexico, while in Indonesia palm oil is split between smallholders and plantations (Frederick & Charbonneau, 2021a).

GVC entry in agriculture focuses on domestic smallholder development and benefits from horizontal collaboration and access to markets via traders (Fernandez-Stark & Bamber, 2012). Product and process upgrading requires these elements, in addition to training, vertical collaboration/access to buyers, and access to finance, and industry-specific infrastructure and inputs. Like manufacturing, entry is more difficult for agriculture newcomers today because of consolidation and rigorous standards (Heher & Steenbergen, 2021). A different set of MNEs is involved in agrifood processing. Food processing is part of the manufacturing sector and has similar characteristics to component manufacturing described above (capital- and scale-intensive with the need for affordable and reliable energy) and may provide limited benefits to the country.

### 2.3 Institutional coordination to ensure a coherent business environment

Essentially every publication related to GVC development mentions a facet of improving the business environment itself. This means including stakeholders across multiple institutions, establishing institutional arrangements for coordination, developing an accurate, shared understanding of the industry’s chain and opportunities, and aligning policies with objectives.

Recent industrial policy puts greater emphasis on instruments to improve systems, and interventions aimed at building networks, improving coordination, and securing strategic alignment (Warwick, 2013). Criscuolo et al. (2022b) stresses the need for complementarities between policy instruments, acknowledges the role of targeted industrial strategies, and calls for stronger evaluation and the regular reassessment of such strategies.

Effective policies require a multi-scalar appreciation of GVC dynamics, working with multiple and sometimes competing stakeholders to achieve developmental objectives (De Marchi & Alford, 2022). Multistakeholder collaboration leads to better policies (Findlay & Hoekman, 2021), and is especially important for social and environmental upgrading (Bamber et al., 2014).

A common feature of China, Korea, and Singapore is a well-structured institutional environment from the top down, across horizontal areas, and within and among different industries. They have national development plans accompanied by horizontal and industry-specific plans that fit into an overarching framework (Frederick et al., 2017). Countries that do not have a well-defined national structure must work within their existing frameworks, while developing a model that can be replicated in other industries or scaled to the national level. National coordination is also important to ensure business environment actors from different organizations or geographic regions do not compete or send mixed signals to investors. For example, Mexico’s aerospace strategy included developing a focus
area for different states in the country to avoid subnational competition and to encourage clustering (Bamber et al., 2016).

Including multiple stakeholders is important, however it is equally important to have an overarching strategy and institution, to avoid reforms that only benefit one segment or compromise the competitiveness of other stages along the chain. For example, Pakistan has at least eight prominent industry associations along the textile supply chain from cotton to apparel; each stage has its own siloed entity. The country has a dedicated Ministry of Textiles, but it does not provide a holistic direction. Rather, it provides resources to each stage. This results in significant lobbying for policies that best suit each stage of the chain which results in conflicting voices, without a body to provide unified direction for the entire chain (Frederick & Daly, 2019).

Coordination is important across industries from high-tech to agriculture. The following examples illustrate different aspects of the importance of structure, strategy, and collaboration.

Korea emphasized a select number of key industries and envisioned a long-term upgrading trajectory for the overall economy that built on those industries selected. Resources were directed towards these key industries and building a few, strong domestic firms. For example, Korea’s Electronics Industry Support Act (1969) provided an early legal basis for support and an eight-year plan for the promotion of the electronics industry was formulated with a variety of supportive policy measures. Korea quickly developed a strong institutional environment composed of government ministries, industry associations, and public R&D institutes, including the Electronics and Telecommunications Research Institute (ETRI), established in 1976, and the Korea Electronics Technology Institute (KETI), established in 1991 (Frederick & Lee, 2017).

Malaysia’s Industry-Government Group for High Technology unifies development efforts of high-tech industries in the country, including by coordinating among public and private stakeholders and establishing industry-specific councils. For example, in the aerospace industry, they created the National Aerospace Industry Blueprint in 1997, followed by the Malaysian Aerospace Council in 2001, a national steering body of six government ministries and aerospace industry representatives that charter policy priorities and implement strategies for upgrading.

In Thailand, the Foundation for Industrial Development within the Ministry of Industry overseas a network of industry-specific institutes. The Thailand Automotive Institute (TAI), established in 1998, is an independent organization that facilitates links between the government and private sector. Its board includes government agencies, academia, and industry associations for vehicles and auto parts. It represents the collective voice of the automotive industry in the country and is mandated to provide policy and strategic direction related to technology, human capital, and market development. It also provides services including product testing and analysis, conformity assessments and certifications in certified testing labs, consulting, training, and research.
Coordination and alignment are equally important for agriculture. For example, common elements of successful tea exporters include a national strategy, and an all-encompassing institution covering the entire value chain (Mohan, 2018). Countries with a strong, well-resourced central body for tea, such as an independent tea board, have had a better track record of implementing a national policy and building a tea value chain that promotes sustainable development. Horizontal collaboration via a national cocoa program was also important in developing Ecuador’s cocoa industry (Ahmed & Hamrick, 2015). In Costa Rica, collaboration among stakeholders along the entire coffee chain (farmers, processors, roasters, and exporters) is institutionalized within one organization (ICAFE), which facilitated product and functional upgrading in the country (Daly et al., 2018). Vietnam’s approach in the coffee industry also covered the entire chain but was driven by a government agency. The Coffee Master Plan (2015) was coordinated by the Ministry of Agriculture, even though it included processing, which allowed the country to roll out resources more strategically and faster (Bamber et al., 2017). On the other hand, a review of 13 cases across African countries engaged in smallholder agriculture found the absence of supportive policies, organization and market linkages to be common constraints (Abdulsamad et al., 2013). Lessons learned from 135 public-private partnerships in agriculture reinforced the need to develop industry-level platforms to bring together multiple stakeholders (Abdulsamad & Manson, 2019).

3. Roles of the business environment, institutions, and investment policies

This section addresses the role of the business environment and reform in five areas:

1. Attracting lead firms and supporting positive effects of foreign investment
2. Skill and knowledge transfer policies and programs
3. Increasing the quality and supply of domestic firms
4. Facilitating linkages between foreign and domestic firms
5. Regional trade agreements to support integration into GVCs.

These are discussed in relationship to factors affecting competitiveness in GVCs. Studies use different terms to describe similar concepts that can be grouped into four main areas: trade and investment, productive capacity and human capital, infrastructure and business climate, and institutionalization and collaboration (Bamber & Fernandez-Stark, 2019; Bamber et al., 2014; Frederick, 2019; Stolzenburg et al., 2019).

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Footnote 5: Workforce development, education, skills, training, and the physical structures and educational providers needed to provide relevant services.
3.1 Impact linked investment incentives

The fact that most countries have not improved their positions (i.e., upgraded) in GVCs is unsurprising. Foreign investment policies have rarely prioritized or even included provisions to support positive spill overs in the host country.

Investor surveys find that political and macroeconomic stability, an enabling, transparent legal and regulatory environment, and local talent and skills are the top considerations in foreign investors’ decision-making processes. Investment incentives are second-order considerations in determining location and mostly impact the final choice between similar options (Freund & Moran, 2017; Qiang et al., 2021; UNCTAD, 2022b; World Bank Group, 2018). This is also evident in evaluations of investment promotion agencies (IPAs). Countries with similar budgets but low investment climate rankings have lower FDI inflows (Morisset, 2003).

Despite this finding, generous investment incentives have been the hallmark of manufacturing industry entry strategies over the last three decades with quantity objectives, such as job creation and increasing exports. Incentives are granted with few economic requirements are often for long time periods. They are rarely tied to upgrading objectives, or quality of investment, with virtually no social or environmental requirements (Box 3). Even economic gains have not been automatic, as 58 countries have remained as low or lower middle-income over the last 35 years (World Bank, 1987-2021).

Box 3. Need to revaluate foreign investment and development approaches

Government revenue impacts the funding a country has available to invest in economic, social, and environmental programs to improve its welfare. Corporate income tax (CIT) is an important source of revenue, particularly for developing countries and compared to individual income tax. Investment incentives reduce government tax revenues (fiscal incentives) or increase government expenditures (financial incentives). Kronfol and Steenbergen (2020) find a strong, negative relationship between the generosity of countries’ CIT incentives and CIT revenue as a share of GDP. Investment incentives reduce government income with the hope of reaping a greater return from the investment.

UNCTAD’s analysis of tax and investment incentives globally over the last decade reveals that incentive schemes often do not have an objective, largely consist of CIT reductions, are not time-bound, and put few, if any, ongoing requirements on the investor to receive the benefit. Furthermore, developing countries also have higher statutory rates than developed countries. This is concerning because it is primarily domestic companies paying full CIT rates. This leaves developing countries with limited government income to spend on social and environmental programs, and high tax rates for domestic investors.
Investors seek offshore production locations to lower production costs, mitigate risk, and enhance market power (Qiang et al., 2021). Sourcing from domestic firms or building domestic firm capacity only occurs if it is part of a wider attempt to strengthen or improve the interests of the chain’s lead firm. For example, a review of literature by Navas-Alemán et al. (2016) found no evidence of procurement practices with the principal aim of supporting the development of domestic firms. Those that supported domestic firm development were due to local requirements fulfilled as a minimum obligation to operate in the host country. Many examples from the literature are from countries that entered GVCs several decades ago when few countries or firms had sufficient capabilities to meet the production standards of global lead firms, and when local content requirements were widely used, particularly in the automotive industry.

Generous economic incentives and minimal social and environmental requirements were originally necessary to be competitive contenders. Investor surveys and empirical evidence from country

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6 Two supporting statistics: Of the 103 industrial policies implemented between 2011-22 and reviewed by UNCTAD, 20% mentioned tax incentives with no policy objective other than promoting investment by reducing the cost of doing business; 40% of the tax-related measures more favourable to investment introduced over the last decade were not associated with the pursuit of a policy objective.

7 CIT incentives accounted for 49% of new investment incentives offered (2011-22).

8 48% of all tax incentives for investment introduced worldwide (2011-22) were time-bound.

9 94% of new investment incentives reduced or removed the need to pay taxes. Only 25% of CIT-based incentives were expenditure based (i.e., CIT-tax holiday or reduction dependent on meeting a threshold for a particular expense, such as R&D or training).

10 CIT investment incentives lower or reduce the tax rate, so foreign investors pay a low effective tax rate.

11 The paper reviewed 64 publications involving global value chains or networks and policy to understand which policy initiatives, relating to the four state roles (facilitator, regulator, producer, buyer), support (or constrain) economic, social, and environmental upgrading and the contexts those initiatives are likely to be implemented.
participation in GVCs suggest the need for reform. Focus should be greater emphasis on the business climate, human capital development, and coordination, accompanied by a purpose-driven investment approach.

Incentives should be based on objective, clear and transparent criteria (UNCTAD, 2022b). Governments need to evaluate and reassess current policies (Criscuolo et al., 2022b), and periodically review incentives to ensure continued effectiveness in achieving the desired objectives. This also means changing the metrics used to evaluate investment promotion. There is a considerable gap between IPAs stated prioritization efforts and evaluation indicators. IPAs have stated prioritization of wages, green investment, capacity of domestic firms, and sustainability, but less than half use evaluation indicators to measure these. Common outcome indicators used by IPAs in OECD countries are the number of jobs created and total FDI, and common output indicators evaluate the number of investment projects or dollars (OECD, 2018).

The business environment must play a more active, informed role in setting the tone and expectations of investors. Proactive investment promotion leads to higher-quality investors (Kummritz et al., 2017; Qiang et al., 2021; Stolzenburg et al., 2019). Aftercare should be a core function to ensure the country continues to benefit and upgrade in industries driven by foreign investors. In particular post-establishment services focused on retaining investment, encouraging follow-on investment, and achieving greater local economic impact (UNCTAD, 2007).

A targeted approach is often perceived as identifying specific industries and firms and pursuing investment solely from selected firms. An approach can be proactive without handpicking investors or dedicating significant resources to their recruitment. A proactive, educated approach means directing resources to understand the global to local dynamics of a select number of industries (as discussed in section 2), and the motivations and historical track record of potential investors. Regarding the latter, investors have different business models and interests, which has implications for upgrading and embeddedness. Embeddedness refers to the strength of investors’ ties (economic, cultural, societal) with the host economy, thereby shaping the potential for building local capacity (Morris & Staritz, 2019). Firm origin is not the crucial element, but there are often commonalities between firm origin, global buyers, and embeddedness. Box 4 provides two brief illustrations from the apparel industry. The first illustrates the benefit of understanding foreign investors’ motives and limits to upgrading without requirements or aftercare programs, and the latter suggests foreign exposure may be needed to change embedded domestic social and cultural norms.

12 Strategies discussed in this paper are presented from the point of view of entering and upgrading, but the steps to re-enter are similar. For example, the equivalent of active investment promotion might be a reshoring initiative where a country is actively encouraging domestic firms to set up manufacturing in the country again, such as the one described in this study on the UK (Pegoraro et al., 2022).
3.2 Skill and knowledge transfer policies and programs

Human capital provides a country with the manpower to enter global, regional, or domestic chains. Skill and knowledge transfer policies and programs are needed to enhance the effectiveness of investment (Criscuolo et al., 2022a). Foreign investors are an important source of tacit knowledge for local workers related to production, management, and organizational practices. Business environment reform should ensure local workers have the skills required to fulfil all positions within foreign-invested firms, and ensure foreign investors employ local workers in skilled positions.

Former employees of foreign MNEs in the country are a primary source of domestic firm creation. In China, many of the domestic electronics firms in the Dongguan area were established by former employees of Taiwanese-owned factories; in Malaysia, former MNE employees created most of the

Sources: (Frederick et al., 2015; Frederick et al., 2022; Morris & Staritz, 2014; Staritz & Frederick, 2014; Staritz & Morris, 2013a, 2013b)
local firms (Athukorala, 2014; Murphree & Breznitz, 2020). A similar situation emerged in South Korea where US and Japanese electronics invested in the country in the 1970s and 1980s. This, combined with policy emphasis on education at all levels, particularly supporting science, technology, engineering, and mathematics, contributed to the establishment of two of the world’s largest consumer electronics brands 1980s (Frederick & Lee, 2017). If local workers are not employed in knowledge-intensive occupations in foreign MNEs, the potential for domestic spill overs diminishes. The business environment must work with investors to understand the barriers to employing nationals and invest in providing solutions.

Countries must establish enforceable, appropriate requirements on expatriate workers in skilled positions. Currently, many countries do not have such requirements, or they are easy to circumnavigate (e.g., advertising to locals in a medium that is not used) or are too vague to be enforced. For example, in Ethiopia, an industrial park enterprise is obliged to replace expatriate personnel with nationals by transferring the required knowledge and skills through specialized trainings (UNCTAD, 2019). This lacks key information to be enforceable, such as a time frame to implement or the range of occupations it applies to. Expatriate thresholds must also be appropriate and should vary based on industry and firm characteristics. For example, in Cambodia, foreign managers, technicians, or experts may be employed, provided it does not exceed 10 percent of total personnel (UNCTAD, 2019). In apparel manufacturing, a top export industry in Cambodia, less than 10% of the workforce is in those positions, which means companies can employ expatriates across all skilled positions (Frederick et al., 2022). On the other hand, if the country wanted to upgrade into apparel design services, a computer-aided design firm may only employ 10 workers. Applying the 10 percent threshold means it could only employ one foreign worker. Given nearly every position in the form is skilled, it may be impossible for the firm to employ local staff in the beginning and a policy such as this will deter investments in higher-tech segments of the value chain.

Availability of human capital is a top initial consideration of foreign investors, and it impacts reinvestment decisions. Strengthening the national education and innovation system is complementary to upgrading (UNIDO & UIBE, 2018). For example, the talent pool that developed in Malaysia over time encouraged electronics MNEs to relocate more of their upper-end activities and headquarter functions to the country. By 2014, most MNE affiliates had indigenized their entire managerial staff. Costa Rica’s participation in the medical device, electronics, and related service industries are also driven by foreign owned firms, however the workforce is localized. Like Malaysia, strong human capital encouraged foreign firms to transfer more knowledge-intensive operations to Costa Rica over time (Gereffi et al., 2019). Industry-specific education programs ranging from tertiary degrees to diplomas and short-courses were important education gaps that needed to be filled to continue upgrading Costa Rica, Ireland, and Singapore’s positions in the health and medical industries (Frederick, 2018b). In all three cases these were developed in cooperation with foreign investors.

If local workers with the necessary skills are not readily available, incentives may be necessary to encourage investors to build workforce capabilities in the beginning. For example, by providing
financial support for half of the salary of new workers while undergoing training or costs associated with attending or developing specialized training programs. Such programs are often created to encourage high-tech investments\(^\text{13}\), but are equally applicable to any type of industry. If possible, incentives should be provided in a way that builds an education and training program that goes beyond the initial needs of one firm.

Whereas investors are not particularly interested in firm-level supplier development, they are willing to assist in human capital development. Foreign investors often play supporting roles in public and private educational programs, particularly in their strategic supply bases. Firms often donate equipment, support student scholarships, and sponsor internships. Staff can provide guest lectures, serve as adjunct faculty, and participate on advisory boards to guide curriculum development.

In Mexico the government financed a specialized university for the aerospace sector, while companies provided curriculum, equipment, and staff to initially teach at the university (Bamber et al., 2016). In Thailand, a master program in automotive engineering was established through collaboration between automotive OEMs and the Thai-German Graduate School of Engineering in 2004. Large Japanese firms also created a ‘train-the-trainer’ program involving cross-firm agreement on skill-specific certification standards and curricula for automotive technicians. Lead firms also set up private education programs to build specific capabilities required. For example, Bombardier built a school in Mexico, Intel developed a program in Costa Rica, Toyota set up its own automotive technical college in Thailand, and apparel MNEs created programs in Sri Lanka.

Establishing a college or department, and degree programs provides a source of formal education for skilled positions and the infrastructure needed to move into more advanced segments of value chains. For example, the Department of Automotive Engineering at Clemson University was established in 2010 along with the International Center for Automotive Research. This was the first US university to offer advanced degrees in automotive engineering and was setup in a growing cluster of automotive firms in the southern part of the United States. The College of Textiles at North Carolina State University established its first textile program in 1899 and has continued to evolve with new degrees and research centres as the needs of industry change. It has also been important to the development of the textile industry in foreign countries. For example, the owner of the first knitting operation in Hong Kong earned a Master of Science degree at the college. The College also worked with Sri Lanka to develop a university in the country and is currently collaborating with Honduras to develop educational programs.

\(^{13}\) For example, the InvestChile program established in 2000 (Fernandez-Stark et al., 2010).
3.3 Creating an ecosystem to support domestic firm development

An important factor that hinders internationalization from a policy perspective, is simply the lack of investment promotion and facilitation measures targeted to domestic firms (UNCTAD, 2022b). As such, improving the quality and supply of domestic firms may benefit from reforms across several areas. Reforms should respond to a clear market failure, include concrete objectives, and results should be monitored and assessed to determine effectiveness. This should begin by identifying where opportunities exist for domestic firms and providing resources specific to those needs. For example, smallholder farmers, tier 3-4 suppliers, and service providers may need assistance to meet international process and production standards, whereas business management and sourcing skills are needed for entering emerging regional markets.

**Investment policy:** While most investment incentives are not limited to foreign investors, they are the primary recipients. Domestic firms are often SMEs and cannot meet the investment dollar or job target requirements. This also means domestic firms pay higher CIT rates in comparison to foreign firms (see Box 2). Providing multiple thresholds for incentive requirements based on employment, sales, or capital-based definitions will enable smaller domestic and foreign firms to participate (Galli, 2017). This can help attract investors engaged in higher-value service activities or ancillary, lower-tier activities. An environment that encourages domestic firm entry and competition also contributes to firm competitiveness in the long run. Simplifying the legal and regulatory regime and improving policy coordination are also important aspects of programs designed to assist domestic firms (White, 2018-19).

**Productive capacity:** Domestic firms often have limited financial resources to invest in improving their productive capacity. Grants or CIT deductions for costs associated with obtaining product or process certifications, training, machinery upgrades, or environmentally friendly production methods can reduce financial burdens. For example, India has an incentive scheme for reimbursement of expenses of acquiring international certifications such as quality management and environmental responsibility, while Malaysian companies can claim a deduction for such expenses as well as product-specific certifications such as halal (Galli, 2017). Malaysia also has a strategic fund to build domestic capabilities by providing funds for technology acquisition and R&D expenses (Bamber et al., 2016). In some cases, the barrier to certifications may simply be the lack of certification bodies in the country. These entities often fall outside the purview of investment promotion efforts. This can be remedied by extending investment incentives to certification bodies or covering expenses for an international auditor to accredit a national certification body that can certify local firms.

Programs to develop domestic firms can be costly, but this can be mitigated with thoughtful planning and coordination. Qiang et al. (2021) find common elements of successful programs include well-funded mandates based on widely communicated policy agendas, high-level political buy-in, national

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14 Czech Republic, Ireland, Malaysia, Singapore, and Thailand.
focal points, and coordination by one entity such as a ministry of industry to guide the policy agenda and interventions across thematic areas. Programs should involve a mixture of theoretical and practical learning and experience. For example, classroom learning, factory-level workshops, and opportunities to visit model, foreign-owned factories, or international trade shows.

A lack of financial support, local institutions and staff to administer programs to build domestic firm capacity are often significant challenges. Assistance needs to come from government agencies and international development partners rather than foreign investors. A model for financial sustainability should be built into initial planning to ensure the program outlasts the duration of donor funding and a local industry partner included from the onset that can administer the program in the long-term. Box 5 provides examples from the automotive and agriculture.

**Box 5. Include local capacity development and financial sustainability into planning**

UNIDO, in partnership with the Indian government and the Indian Automotive Component Manufacturers Association (ACMA), among others, established a program for Indian component suppliers in 1999. Financial support for the program was provided by a lead automotive firm, UNIDO, and the Ministry of Industry for the first few years. However, it eventually shifted into a two-year educational program administered by ACMA and supported by modest tuition and fees paid by participants.

Such programs can be created with limited resources by incorporating requirements to build local capacity and financial support into program development. For example, a cascading training model was used to initially provide apiculture educational programs in Honduras and Nicaragua. Foreign experts were hired to develop and teach a 7-month diploma program to 35 industry participants at a local university. Local professors observed the course and were incorporated into the teaching staff with the foreign experts the second time the program was offered, with the objective of transferring the program entirely to local professors. Future students paid to participate in the program, but many were financed by other development programs. The initial industry participants were required to offer a shorter program to develop capabilities of peer trainers, who would then provide technical assistance and training for a fee to local producers. This led to education and training at multiple levels that included varying levels of theoretical and practical content. In this example, donor funding was only necessary to finance the development of the program and to pay foreign experts to teach the initial two offerings of the diploma program.

 SOURCES: (Bamber & Fernandez-Stark, 2012a; Tewari, 2018).

Specialized research, testing, and training centres and labs are important to building productive capacity. They can provide resources on technical issues, specialized machinery, training in quality control or safety management, and certification services. Such institutes often exist in developing countries, but are underfunded and do not provide the right mix of services needed by the industry (UNIDO & UIBE, 2018). Machinery suppliers, lead firms, and donor institutions from Asian and
European investors home countries can be sources of financial and technical support for establishing these centres. For example, JICA (Japan) and KOICA (Korea) are often active in setting up training centres with sewing machines, given that MNEs from these countries are leading sewing machine and tier 1 apparel manufacturers (e.g., in Pakistan and Guatemala).

**Market access:** Domestic firms also need assistance to enter new markets or access buyers in different countries. In Central America, a coordinator identified and worked with coffee farmers and buyers to raise capability levels to meet lead firm standards (Bamber & Fernandez-Stark, 2012b). In other cases, firms may need help developing branding initiatives to differentiate their products from competitions. Examples from the coffee industry include Colombia (Juan Valdez) and Jamaica (Blue Mountain), as well as more general efforts to market high-quality coffee from Costa Rica, Guatemala, Ethiopia, and Kenya (Bamber et al., 2017; Daly et al., 2018). In Sri Lanka, the Garments without Guilt initiative for the apparel industry launched in 2006 via public-private partnership to promote the country as an ethical and environmental sourcing destination (Goger, 2013b). Other types of marketing assistance include hiring marketing specialists from target end markets to work with domestic firms, developing professional marketing materials, attending international trade events, hosting such events locally to increase exposure, and business skills development.

**Institutionalization:** A supportive environment for domestic firms will require assistance to build the capacity of government agencies and private institutions. LMICs often lack capacity in terms of manpower, knowledge, or financial resources to design, implement, or enforce policies and programs. This can be particularly difficult in agriculture in which there are often thousands of smallholder farms in rural parts of a country with limited resources. Specific examples include labour inspectors in South Africa’s fruit industry (Alford & Phillips, 2018) and limited capacity to monitor or provide occupational safety and health-related programs across multiple agricultural and apparel products and countries (Frederick & Charbonneau, 2021a, 2021b). Civil society organizations with ties to international donors can help countries meet these requirements. The Better Work program for the apparel industry is an example that helps monitors and helps improve working conditions in factories and seeks to improve local institutions. Similar programs could be developed to support other industries across a broader range of areas including environmental initiatives.

### 3.4 Facilitate domestic and foreign firm linkages

After an ecosystem to support domestic firm development is in place, the next step is to identify legal barriers and to build bridges between domestic and foreign firms.

**Institutionalization:** The evolution of programs in Singapore illustrates the trajectory of developing domestic firm capacity and then linking foreign and domestic firms. First, Singapore’s strategy is led by the Economic Development Board, which coordinates initiatives to support foreign and domestic firms. Among the first programs developed was the Small Industry Technical Assistance Scheme
DONOR COMMITTEE FOR ENTERPRISE DEVELOPMENT

(1982), which provided grants to defray costs of engaging short-term consultants and employee training to build capacity of domestic firms. The Small Enterprise Bureau (1986) was set up next to improve and modernize plants and technology, product design, management skills, and marketing capabilities. This was followed by a private equity fund (1991) to attract venture capital, and in 1996, an agency under the Ministry of Trade and Industry was created (SPRING) to support the growth of local firms and linkages with FDI in the country.

**Investment/business climate:** Special economic zones (SEZ) policies and incentives create direct and indirect barriers to engaging with non-SEZ, domestic firms. Restrictions on the flow of goods and labour between firms in SEZs and outside such zones directly inhibit their integration with the local economy (Stolzenburg et al., 2019). These may be established to improve security or to offer expediting procedures for SEZ firms. Countries must weigh the pros and cons of restricting movement versus local economic integration. A common incentive across SEZ programs is duty-free imports of inputs used in exported goods (UNCTAD, 2019, 2022a), which indirectly discourages integration with non-SEZ firms in two ways. First, imported inputs without duties may be less expensive than purchasing the same product from a firm outside the SEZ that includes sales/value-added tax (VAT). It also limits subcontracting assembly because non-SEZ firms must pay VAT on imported inputs shipped directly to them whereas the SEZ firm does not. Some countries, such as Malaysia, addressed this by providing non-SEZ firms with a special status such as a licensed manufacturing or bonded warehouse (Athukorala, 2014).

**Collaboration:** Well-structured employers’ organizations are conducive to facilitating interactions between domestic and foreign firms. Often there is one association of large exporters that tends to be the largest, wealthiest, and most influential. Domestic firms may be members, but only participate in a limited way. Alternatively domestic firms form their own association that is small, understaffed, and underfunded. Ideally there is one organization, or an overarching institutional framework, that includes large exporters and smaller domestic firms with subgroups to address the needs of specific types of firms. This supports domestic firms without the resources to build their own association, and without relying entirely on public financial support.

Facilitating linkages may simply be a matter of raising awareness and maintaining accurate national business information. Databases containing production and financial information about domestic firms reduces the information constraints and search costs faced by MNEs when searching for local suppliers (Qiang et al., 2021). Up-to-date and complete business registries can facilitate this. Such guides should be published online and distributed to potential buyers and industry organizations and include information for each firm, including a brief overview, a list of key capabilities and certifications, a major equipment list and contact information. This can also be effective for re-entering a GVC. A company in the UK reorganized its supply chain by taking advantage of the information on domestic suppliers available on a platform established by the domestic industrial

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15 No reports or papers reviewed supported trade restrictions with non-SEZ firms. Any mention of SEZ trade restrictions suggests they should be eliminated (Farole, 2011; Frederick & Gereffi, 2016).
Another example is organizing events for potential suppliers to present their products or services to decision makers and procurement managers of MNEs. Domestic suppliers may have a difficult time arranging such meetings on their own, and MNEs benefit from the convenience of meeting several potential suppliers at the same time (Meier zu Köcker & McManus, 2022).

3.5 Regional trade agreements and development

Global value chains for global brands have a well-established division of labour and production networks that offer little room for new LMIC domestic firms to enter or advance even under ideal conditions. Regional trade agreements (RTAs) have the potential to facilitate development of new production networks to meet demand in emerging markets less saturated by global brands. This section focuses on the latter, using the African Continental Free Trade Area (AfCFTA) as an example. Opportunities are divided into three areas: chains of African firms to fulfil African demand, chains for African demand by foreign firms, and chains for foreign demand by foreign firms.

Chains for regional (African) demand by African firms. Industries with higher regional demand and lower barriers to entry offer immediate opportunities for LMICs including in agriculture/food and hospitality/tourism. Regional markets offer opportunities in agrifood due to greater demand (volume), food security, stronger regional preferences, and product characteristics (spoilage). Goger et al. (2014) find opportunities for horticulture upgrading via regional value chains due to the growth of African retailers in South Africa and Kenya. Regional agrifood chains also tie into tourism development where visitors often want a local food experience.

Chains for regional (African) demand by foreign firms. Consumer demand within Africa is still too low to warrant foreign investors interest in localized manufacturing in many industries. However, there are opportunities related to infrastructure and construction materials. Foreign investors may view the RTA as an opportunity to set up manufacturing facilities for construction materials needed across the continent. The RTA is appealing to such investors because it would enable them to set up one production location in the continent that can sell across countries.

Chains for foreign demand by foreign (upper-middle income country) firms. A study on the impact of RTAs on GVC participation suggest RTAs increase exports from the region to the rest of the world (de Soyres et al., 2021). Increased exports from the region that are directly related to the RTA will depend on future agreements between Africa and final product importing countries, such as China. Thus far there has been limited evolution of chains driven by new lead firms from middle-income countries. China is the most advanced, with apparel, automotive, and electronics brands. These brands are still primarily sold in China, but soon these firms will seek to gain market share in other countries and will likely offshore production to fulfil demand. Africa may be a consideration for these investments. Africa’s appeal as a manufacturing hub will depend on the ability to develop favourable
characteristics in component manufacturing, which tends to rely on affordable and reliable energy. Currently Africa’s strengths fall at the upstream and downstream portions of the chain.

In the cases driven by foreign ownership, lessons discussed in earlier sections regarding foreign investment policy and positive spill overs applies. Countries should prepare by structuring incentives and relationships with new investors to ensure positive spill overs to host economies for workers and the environment.

Given tariffs between developing countries are often still high, South–South agreements increase GVC participation through traditional trade liberalization (Echandi et al., 2022). These benefits can be undermined by complex rules of origin and complicated documentation that creates administrative burdens that deter its use. A regional forum of RTA members can help identify and remove redundant requirements and barriers to trade, however members must be genuinely committed to liberalization for efforts to be effective. Such organizations may help identify and address direct and indirect barriers to investment, but there may still be barriers to foreign investment and complex, opaque, or weak domestic regulations and institutions that may dampen positive impact of RTAs.

Benefits of deeper integration: Common standards and mutual recognition of standards facilitates supply responses and the operation of cross-border production arrangements (Findlay & Hoekman, 2021). LMICs may not have product, process, or labour standards, and similarly, RTAs among LMICs also lack such requirements. For example, apparel industry research in Africa points out that RTAs do not include labour standard requirements and national labour bodies and legislation in general tend to be weak, suggesting that potential standards may not be enforced if put in place (Pasquali et al., 2021; Whitfield et al., 2020). AfCFTA could improve the business environment across the continent by motivating the establishment of standards, establishing the same standards across countries, and developing regional agencies to enforce them.

Lower standards are a reason why entering non-global buyer chains is easier for domestic firms, but it will not raise the quality of products or work conditions in these countries. Establishing simpler standards that align with international standards and illustrating how to meet these standards can help local firms and markets develop (Cusolito et al., 2016). Countries such as Chile and Kenya did this by developing national agricultural standards to align with global standards to facilitate entering global markets (Bamber & Fernandez-Stark, 2019; Fernandez-Stark et al., 2011) and Indonesia developed a national standard for palm oil producers.

An RTA can provide a framework for regional chain development and identifying synergies across a region. Abdulsamad (2016) provides an example using the case of the regional value chain for coconuts in Caribbean countries. Regional collaboration is particularly beneficial to small countries without the economies of scale to warrant investments in industry-specific resources such as quality control and testing (infrastructure and institutions) for product, process, or health standards, certification bodies, or education and training programs (particularly at the university level). These
can be time consuming and costly to build, and it can be difficult to find qualified personnel with the industry and language skills necessary to work or teach the programs. In many cases only one is needed to serve the needs of multiple countries. For example, only a few workers per firm may be needed in specific skilled positions, particularly in the beginning.

Regional collaboration may be the best pathway to achieve environmental improvements: Constraints to environmental upgrading across reports stem from the inability to reap economic returns from environmental investments due to consumer and brand unwillingness to pay more, the cost of new equipment and infrastructure, and lack of commitment across countries and firms. Other challenges stem from weak requirements of existing sustainable certifications, differences in what is considered an improvement, and limited data and research to scientifically evaluate lifecycle trade-offs.

Research on environmental upgrading outcomes suggests that global buyers encourage suppliers to invest in environmental improvements, but do not provide price premiums for these products, guarantee long-term orders, or financially support necessary investments. This is evidenced in apparel case studies from Sri Lanka and Pakistan (Goger, 2013a; Khan et al., 2020) and agricultural exports from Kenya and Nicaragua (Krishnan et al., 2022). Apparel factories benefit from long-term reductions in energy and water consumption, but it may take over five years to recoup construction costs. In the South African wine industry, grape and wine producers have emphasized sustainable certifications rather than global marketers and retailers, however, like the other cases, investments have not led to positive economic outcomes for domestic producers and environmental outcomes have been limited (Ponte, 2021). Stakeholders along the chain benefit from some degree of marketing and reputation enhancements, but neither brands nor suppliers receive price premiums. Consumers’ unwillingness to pay more for these items is an important underlying barrier that is not addressed. Business environment reform is needed to shift and shape consumers’ perspectives and purchasing practices to achieve truly sustainable production. African stakeholders can set the environmental tone of emerging consumers in the continent.

One avenue for lowering costs is improving and providing infrastructure in development zones and parks. Free zones have started to compete based on social and environmental benefits in recent years (Mösle, 2019; UNCTAD, 2019). Eco-industrial parks became a term in 2017 (Meier zu Köcker & McManus, 2022), and international organizations developed a ‘Framework for Sustainable Economic Zones’ that includes key elements and policy options for creating and promoting sustainable zones (UNIDO, 2017; World Bank et al., 2017). Africa’s lack of infrastructure can be viewed as an asset in terms of environmental improvements because it can build facilities using the most efficient technologies from the onset rather than retrofitting old infrastructure or delaying new investments until the end of the useful life of existing machinery.

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16 Sri Lankan apparel factories cost between $5-7 million each to build, which is estimated to be 15-30% higher than a non-eco-friendly factory (Goger, 2013a).
The need to unify standards and reduce regulatory fragmentation across borders will require international collaboration among national regulators beyond the control of individual business environments (Leitheiser et al., 2022). Harmonizing regional standards, however, is a manageable starting point. A first step is to set minimum standards accompanied by reporting requirements (i.e., emissions or energy usage) to accumulate data for better evaluations and timelines for raising standards.

4. Conclusion

Economic development strategies over the last three decades have focused on entering and upgrading in GVCs for global lead firms. FDI-driven development strategies have sought to create jobs and exports, with underlying hope that the investments would also lead to local firm development, quality working conditions, and knowledge-intensive jobs. While many countries have benefited from formal job creation and increased exports, movement into more advanced segments of chains and other societal benefits have been limited. The structure of manufacturing GVCs for global brands has solidified at the top tiers. New country entrants are limited to attracting foreign firms within the production network and opportunities for domestic firms are in non-essential inputs, manufacturing services, and local services. Chains to fill new demand in emerging markets may offer more opportunities for developing country firms if they can form viable production networks.

Determining the roles of the business environment and where reform is needed should begin with a full understanding of industry and firm dynamics. This report illustrates the importance of first understanding value chain dynamics along the chain, by sector, and by end market. It also highlights the importance of institutional collaboration and coordination to achieve desired objectives. Beyond these cross-cutting factors, potential policy interventions are provided across five business environment areas (Table 1).

<table>
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<tr>
<th>Area</th>
<th>Potential policy interventions/programs</th>
<th>Country examples</th>
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<tr>
<td>Impact linked investment incentives</td>
<td>Shorter time frames for incentives</td>
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<td>Increased requirements for incentives</td>
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<td>Aftercare/post-investment engagement</td>
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<td>Skill and knowledge transfer policies and programs</td>
<td>Localization of skilled positions</td>
<td>China, South Korea</td>
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<td></td>
<td>Industry-specific education</td>
<td>Malaysia, Costa Rica</td>
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<td></td>
<td>Effectively engaging lead firms</td>
<td>Thailand, Mexico</td>
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<td></td>
<td>Industry-specific productive capacity programs</td>
<td>US</td>
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</tbody>
</table>
| Ecosystem for domestic firm development | Tiered incentives  
Targeted productive capacity assistance  
Financial sustainability into planning  
Market access/marketing assistance  
Institutional capacity building | Malaysia, India  
India, Honduras, Nicaragua  
Latin America/Africa |
| Foreign and domestic firm linkages | Institutionalization  
SEZ policies  
Well-structured industry associations  
Raising awareness | Singapore  
Malaysia  
UK |
| Regional trade agreements and regional development | RTAs to support emerging market chains  
Aligning national with international standards  
Environmental sustainability (regional standards, infrastructure, buy-in from buyers/consumers) | Africa  
Chile, Kenya, Indonesia |

Greater emphasis on impact-linked incentives can help local economies benefit beyond job creation and export increases. Investors may not advocate for changes in national policies such as increasing minimum wages or new environmental standards, but if changes are predictable and communicated in advance, they are willing to comply and contribute. Educational programs are needed within the host country to provide investors with a baseline labour pool, which may need to be accompanied by employment-related obligations to ensure firms employ qualified local workers. Experience working at foreign-owned firms provides skills and knowledge to produce to global standards and helps create a local workforce capable of establishing competitive domestic firms.

More focused attention should be placed on building an enabling environment that supports domestic firm development in general and skills specific to end markets and buyers. Programs to improve the quality and supply of domestic firms can benefit from better coordination, strategic direction, and building long-term financial and capacity into initial planning. Facilitating linkages between domestic and foreign firms should first consider whether competitive domestic firms exist. If so, efforts to reduce legal barriers to doing business, improving coordination though industry associations and networking can help build linkages.

Lastly, RTAs have the potential to facilitate development of new regional production networks and should be evaluated based on the ownership of firm investors and end market demand. Regions may also be the most formidable path to move forward with environmental improvements. Africa’s comparatively clean slate offers an opportunity to build an economy and consumer perception aligned with best environmental practice.
### Appendix. Key terms

**A supply chain** focuses on physical transformation and logistics and is composed of the following stages: (1) raw materials/inputs, (2) components/intermediates, (3) final products, and (4) distribution/sales. Backward and forward linkages refer to stages in the supply chain. There can be multiple steps within each stage, and each stage represents a separate industry.

A **value chain** includes all activities required to bring a product or service from conception to end-use and beyond. It includes the supply chain, as well as services that add value, such as research and development, design, marketing, branding, retail, and after-sales services.

A **global value chain** includes all activities along the entire chain and requires that activities (products or services) take place in more than one country.

An **industry** is composed of similar production processes/tasks that are performed to make similar products or services.

Chain activities are supported by **supporting business environment stakeholders** (or business environment), which includes governments, international organizations, industry associations, infrastructure providers, educational institutions, financial institutions, and other groups that regulate and support the activities of the actors along the chain.

**Low-and middle-income countries (LMICs)** have per capita income as defined using the World Bank classification system (according to Gross National Income (GNI) per capita as low-income, lower-middle-income, and upper-middle-income).

Activities are performed by different types of firms:

- **A domestic firm** is a business owned by a person or entity based in the host country. In the context of development, authors often use the terms domestic firm and SME to refer to the same group of entities, particularly in manufacturing.

- **A small and medium-sized enterprise (SME)** is considered an establishment with fewer than 250 employees. Definitions of SMEs vary by country and are usually based on the number of employees, annual turnover, or the value of assets of enterprises. Typically, micro-enterprises are defined as enterprises with up to ten employees, small enterprises as those that have ten to 100 employees, and medium-sized enterprises as those with 100 to 250 employees.

- **A multinational enterprise (MNE)** is a firm that engages and owns businesses in more than one country.

- **Lead firms** are the original brand owners (OBMs) of the final product or service in the production network.

- **Global lead firms** are the owners of globally recognized brands. They are also referred to as global brand owners or global buyers.

- **Non-global lead firms or emerging market buyers** are used in this report to describe regional and domestic brands and buyers without global footprints.
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