

iii. **Competitiveness Drivers** There have been continual shifts in the location of the most significant apparel exporters, as well as their main end markets since the industry began to globalize (Gereffi & Frederick, 2010a; Gereffi & Memedovic, 2003; Whitfield et al., 2020). There are multiple factors that contribute to country competitiveness within different stages of this chain, from trade policy and labor availability to connectivity and government investment policy. The relative importance of these factors has shifted over time as the industry's global production model has matured and the international trade policy framework has evolved. Within the apparel production segments of the chain, competitiveness during the early stages of globalization depended primarily on a combination of trade policy and low labor costs. Today, these factors are closely linked to the capabilities buyers seek in their suppliers: cost; quality, lead time, flexibility and reliability, including access to inputs, full package services, wide range of production skills and social and environmental compliance (Lopez-Acevedo & Robertson, 2016).

- **Tariff free market access:** Trade policy has, and continues to be, a significant factor to competitiveness of countries with relatively small labor pools. Major markets continue to place tariffs on imports of both apparel and textiles, providing preferential access to select countries/groups of countries. In the US, the average import tariff on textiles and clothing products for a most favored nation (MFN) is 8.83% (2019) (WITS, 2021). It is important for apparel exporters in particular to have tariff free entry of exported apparel into key markets, but also the inflow of textiles inputs for production (Frederick, 2016; IDB, 2021a; Lopez-Acevedo & Robertson, 2016).
- **Labor costs:** Along with textiles inputs, labor costs are the largest cost factor in apparel production. The industry has steadily relocated around the world to lower cost locations, first to Mexico, then to China, followed by Vietnam and Bangladesh (Lopez-Acevedo & Robertson, 2016). Today, this has shifted to even lower labor cost locations such as Cambodia and Ethiopia. Nonetheless, many global buyers suggest that sub-Saharan Africa is the "last frontier for low cost production" (Whitfield et al., 2020, p. 1019), indicating that the search for the lowest cost labor is reaching its limits.
- **Labor skills:** While apparel production, in general, is a relatively low-skilled job that draws heavily on under-educated workers, the skills of this labor are essential for the production of quality garments (Fernandez-Stark et al., 2011b). The broader the labor capabilities available to manufacture a diverse range of products, the more competitive the location as buyers can consolidate vendor operations, allowing them to reduce transaction costs (Lopez-Acevedo & Robertson, 2016). In addition, labor productivity plays an important role in minimizing lead time. High labor productivity in Asia has given the region competitive advantage over other locations, even as labor prices rise.
- **Infrastructure and logistics:** Lead time and reliability are two key elements that global apparel buyers consider when selecting suppliers (Lopez-Acevedo & Robertson, 2016). The efficiency and reliability of transport and port infrastructure within a sourcing location have significant impact on the inflow of inputs, production process and the shipment of goods to market (Frederick & Daly, 2019; IDB, 2021a). Indeed, efficient logistics can be more important than proximity as delays in shipping due to slow or erratic customs processes can undermine the benefits of short distances. In addition, reliable and affordable energy is important; electricity accounts for approximately 10–15% of the costs of an apparel producer (Paganini & Steenbergen, 2021).
- **Presence of domestic or regional textile sector and co-location of other inputs:** Quick access to affordable, quality textile inputs that qualify under yarn-forward

agreements help manufacturers to meet demands for short-lead times and offer flexible supply chain management, and buyers to bring their products to market without facing tariffs and with limited potential for border delays (Frederick, 2016). Nonetheless, duty free imports on textiles to the production location are also important given the wide variety of fabrics required (Frederick, 2016). Asia has positioned itself as the global hub for apparel, producing all type of textiles and accessories required in the manufacture of the final product. ● Government Support: Prioritization of the industry, presence of export processing zones (EPZ), investment incentives and training programs are amongst the key initiatives undertaken by national governments to support industry development. These programs signal to investors that the government is committed to the industry's growth and help to reduce overall bureaucratic burdens. Apparel oriented industrial policies are common amongst exporting countries, and EPZs have become a basic requirement for participations in the sector (Farole, 2011; Whitfield et al., 2020; Zhu & Pickles, 2014). In addition, a large domestic market can play a key role in supporting competitiveness in the development of branding capabilities, such as occurred in China (Frederick & Gereffi, 2011; Zhu & Pickles, 2014) and Turkey (Fernandez-Stark et al., 2011b). Political stability is often also cited as important (Frederick & Daly, 2019), as potential foreign buyers may be deterred from visiting new factories due to poor safety measures. Nonetheless, there are numerous locations around the world where the industry has continued to grow despite political unrest (e.g. Cambodia, Myanmar, and Ethiopia). Within the textile production segments, competitiveness is driven by access to raw materials, economies of scale, and affordable and reliable energy sources. ● Access to raw materials: Backward linkages into raw materials provides countries with an advantage, securing inputs and reducing trade costs. The presence of cotton and silk supply has helped boost India's production of textiles, while petrochemical feedstock supports the production of man-made fibers. Pakistan has likewise benefitted from its role as a leading global cotton producer to become an important supplier of cotton apparel products (Frederick & Daly, 2019). ● Energy infrastructure and cost: Energy costs can account for a significant portion of production costs, depending on the type of materials produced (ITMF, 2019). Synthetic fabrics tend to require more energy than natural fiber-based ones (Munasinghe, Druckman, & Dissanayake, 2021). This requires affordable and stable energy supplies for the installation of operations (Mihretu & Llobet, 2017). ● Labor skills: Capital intensity in textiles plants requires skilled operators and technicians to use and maintain specialized equipment from such as fiber extruders, carders, and ring spinners (Lopez-Acevedo & Robertson, 2016; Marketline, 2021). ● Infrastructure and logistics: The efficiency and reliability of energy, transport and port infrastructure within a sourcing location have significant impact on the outflow of textiles to apparel manufacturers. ● Investment incentives & stability: As a capital-intense segment of the value chain, textile factories require significant upfront investment and are difficult to divest. This creates a notable barrier to entry, and firms seek out investment locations where their operations will be considered secure for a long period. The past decade has seen numerous countries provide incentives to overcome this barrier and encourage the development of domestic textiles industries (Marketline, 2021).