



WORLD TRADE
ORGANIZATION

Global Value Chains Sectoral Profiles

Textiles and Clothing Industry



Overview

The textiles and clothing industry¹ represented 3.7 per cent of world merchandise exports in 2022. Supply chains in the sector are labour intensive, with economies specializing in the production and transformation of raw materials into fabrics, fibre and finished products. Asia is the dominant region in this sector, with both China and India recording a high proportion of domestic content in their exports. Overall, textiles and clothing exports are characterized by high regional value-added content.

In 2005, the WTO Agreement on Textiles and Clothing, which succeeded the Multi-Fibre Arrangement, expired, bringing to an end a trade regime based on trade quotas and restrictions for exports from developing economies. This helped to integrate developing economies into textiles and clothing supply chains, with countries profiting from their comparative advantages in terms of raw materials, workforce and technical expertise.

- According to Trade in Value Added (TiVA) estimates, the textiles and clothing industry generated 36.4 per cent of the value added² in textiles and clothing exports in 2022. The remaining 63.6 per cent was provided by other sectors, such as services (34.7 per cent), agriculture (10.9 per cent) and chemicals (5.6 per cent) industries.
- Asia is the world's top producer of textiles and clothing, representing 70.6 per cent of world exports in 2022 - a share that has increased by 11.2 percentage points since 2017. Europe's share decreased slightly during the same period (by 1.8 percentage points), representing 21.1 per cent in 2022.
- The textiles and clothing industry is characterized by high regional value-added content. Due to the strong interconnectedness among Asian production networks, about 80 per cent of Asia's exports were regional in 2022. In Europe, the regional value-added content in exports was estimated at 65 per cent, the lowest rate of all regions, highlighting Europe's need for global sourcing of raw materials.
- China, the world's largest exporter of textiles and clothing products, had a large proportion of domestic content in its exports in 2022, estimated at 89.1 per cent. This was mainly due to the presence of domestic supply chains encompassing all production steps. Overall, China accounted for more than 40 per cent of the value added contained in global exports from this industry in 2022, underscoring the dominance of Chinese industries along the value chain.
- India's value-added pattern is similar to China's, with 83.2 per cent of domestic content in exports. Additionally, the two economies increased their domestic capacity by more than 9 per cent on average from 2017 to 2022.
- In contrast, several South-East Asian economies sourced a high share of their value-added exports from foreign suppliers in 2022, notably Viet Nam (64 per cent of foreign value added in its total exports of textiles and clothing), Cambodia (58 per cent), Singapore (50 per cent) and Indonesia (49 per cent).

1. The textiles and clothing industry covers the manufacture of textiles and wearing apparel, including the spinning, weaving and finishing of textiles and dressing. It corresponds to Divisions 17 and 18 in the International Standard Industrial Classification (ISIC), Revision 3.1, used in the Asian Development Bank (ADB) Multi-Regional Input-Output (MRIO) tables underlying TiVA indicators.

2. The concept of "value added" refers to the increase in value that is created at each stage of the production of a good or service. It is the difference between the cost of inputs (raw materials, labour) and the selling price of the product. For example, in order to produce a loaf of bread, a bakery purchases ingredients such as flour, yeast, salt and water for USD 1 and uses labour and overheads costing USD 2 to bake the bread. The bakery then sells it for USD 4, thereby adding USD 1 of value through its production process.

- In Europe, the combined domestic value-added content from Italy and Türkiye, the two main exporters, reached more than 30 per cent of the total value-added exports from the region. Türkiye increased significantly the domestic content in its textile and clothing exports, rising by an average of 10.9 per cent between 2017 and 2022. This reflects its extensive production capacity and skilled labour force.
- Under the United States–Mexico–Canada (USMCA) Agreement, the United States and Mexico have established strong and complementary linkages in the textiles and clothing sector. The United States has high research and development capacity to produce advanced and technical textiles, contributing to its high rate of domestic value added in exports (85.4 per cent in 2022). Mexico has specialized in spinning and weaving activities and the assembly of clothing using imported fabrics, resulting in a lower domestic value-added share of exports, at 65.8 per cent.
- South American exporters had high shares of domestic content in their textiles and clothing exports, with Brazil, the largest exporter in the region, recording 82.9 per cent in 2022. However, since 2017 the country has increasingly relied on imported intermediate goods to produce its exports.
- Viet Nam had the highest rate of foreign inputs in textiles and clothing exports in 2022, estimated at 64.2 per cent. Vietnamese producers operate labour-intensive “cut-make-trim” (CMT) manufacturing tasks, largely relying on imports of raw materials.
- Among the top exporters of textiles and clothing products, Bangladesh and India showed the largest increase of foreign value-added content from 2017 to 2022, reaching 20.7 per cent on an annual basis for Bangladesh and 23.2 per cent for India.
- In 2022, one-third of Japanese textile and clothing exports consisted of advanced textiles sent to foreign partners. Japan is a worldwide supplier of synthetic and technical textiles to various sectors, such as automotive, healthcare, construction and sports industries. These textiles are exported mostly to regional producers, such as China and Viet Nam, and also to US and EU industries.
- A large majority of exporters were more involved in upstream activities (importing inputs from GVCs) than downstream tasks (exporting inputs to GVCs) in textiles and garments supply chains in 2022. The exceptions to this were Japan (19.0 vs 33.5 per cent) and the United States (14.6 vs 22.1 per cent). The largest difference (64.2 vs 3.9 per cent) was recorded by Viet Nam’s textile industry, which is well positioned towards the end of the manufacturing cycle, depending on imports for both domestic production and exports.

See the [User Guide](#) for information on the terminology used and guidelines to interpret the graphs and indicators in this report.

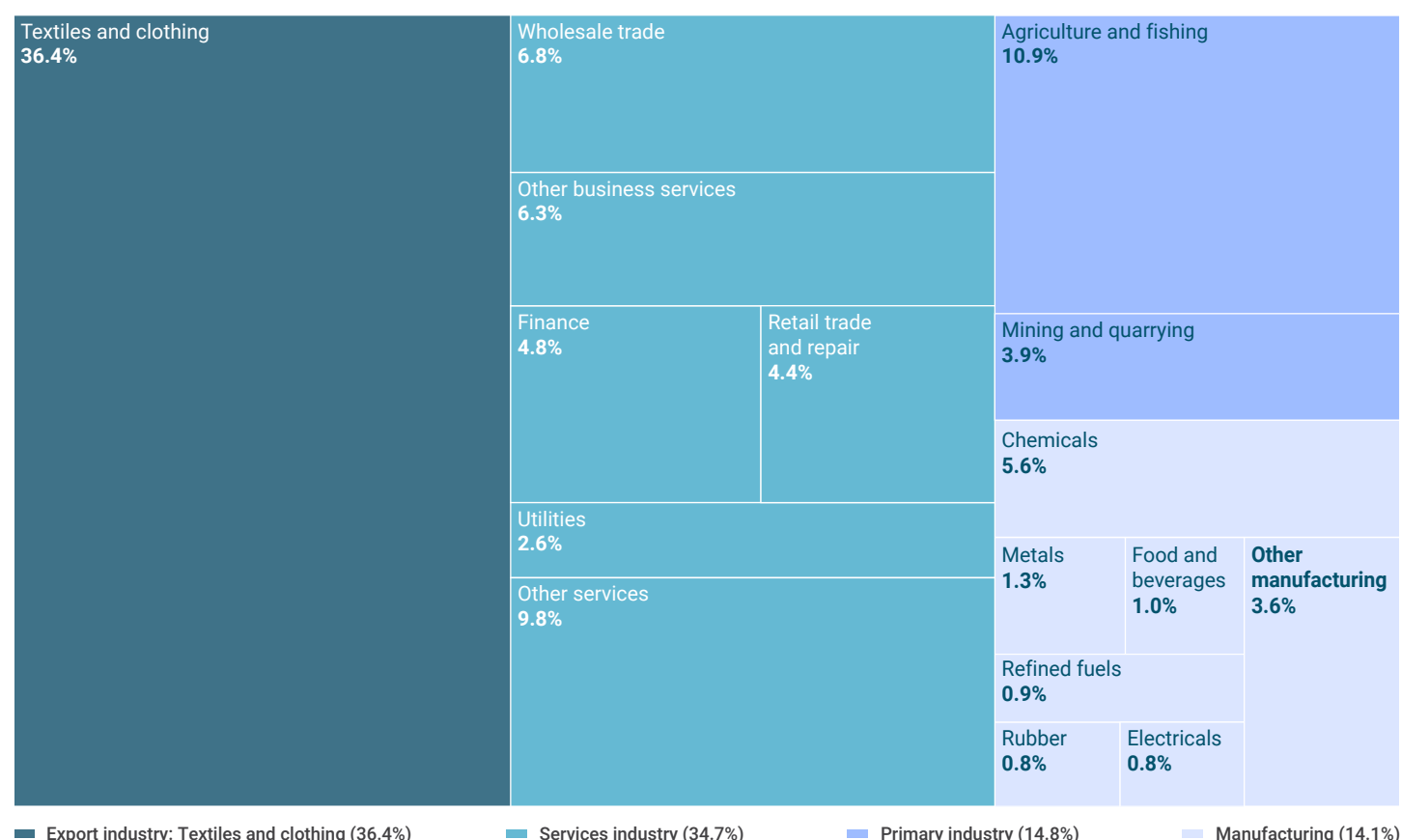
Sectoral linkages

- The value-added share of the textiles and clothing industry was estimated at 36.4 per cent of its exports in 2022, while other industries, located upstream in the production chain, contributed 63.6 per cent (see Figure 1).
- The services industry supplied 34.7 per cent of the value-added in world exports. Distribution (wholesale/ retail trade) and transport services³ in particular represented a large share (15.4 per cent) of textiles and clothing exports. Finance and other business services⁴ accounted for another 11.1 per cent, with both industries using intensive technology solutions (e.g. robotics, 3D printing, computer-aided design) to innovate and make their processing and distribution activities more efficient.
- Raw inputs from the agriculture sector (e.g. cotton and wool), used at upstream production stages, accounted for 10.9 per cent of the value-added in world exports of textiles and garments in 2022.
- The chemical industry is another core supplier to textile manufacturers, accounting for 5.6 per cent of world value-added exports in 2022. In addition to natural fabrics, the textile industry uses synthetic ones, such as acrylic, nylon or polyester produced by the chemical industry. The latter also creates technical textiles, a rising segment requiring advanced technology, for the development of innovative materials or fabrics designed for specific purposes (e.g. medical implants, geotextiles, protective and sport clothing).

Figure 1

Sectoral origin of the value-added in world exports of textiles and clothing, 2022

(Share of total global exports of textiles and clothing, in per cent)



Note: See [User Guide](#) for the list of industries available in the Asian Development Bank (ADB) Multi-regional Input–Output (MRIO) tables.

Source: WTO calculations based on ADB data (June 2023 version).

3. Transport services include air, land, water and other transport services.

4. Other business services mainly cover research and development activities as well as legal, management, consulting, renting, technical and engineering services.

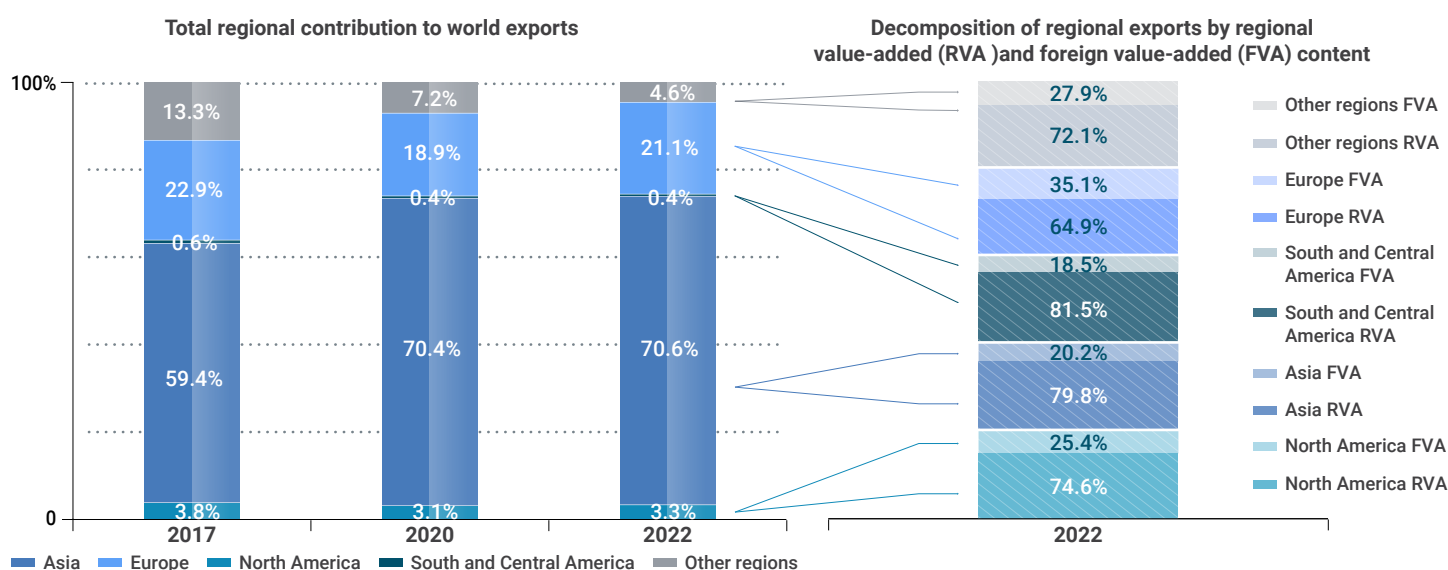
Regional patterns

- The share of Asia⁵ in world exports of textile and clothing products increased significantly from 59.4 per cent in 2017 to 70.6 per cent in 2022 (see Figure 2). Europe is the second largest regional exporter although its share in world exports dropped slightly from 22.9 per cent in 2017 to 21.1 per cent in 2022.
- Overall, textiles and clothing exports are characterized by high regional value-added content. Regional and multilateral trade agreements, such as the WTO Multi-Fibre Arrangement (MFA) followed by the WTO Agreement on Textiles and Clothing, reduced import quotas, whereby governments imposed limits on the quantity of a certain good that could be imported into a country. These agreements also allowed duty-free trade and made it easier for textile fabrics and materials to access foreign markets, all of which contributed to the regional integration of supply chains.
- In Asia, the regional content in textile and clothing exports reached almost 80 per cent in 2022, reflecting the high interconnection in Asia production networks. Economies have specialized in specific production stages and benefited from geographical proximity to reduce production costs. For instance, China and India produce cotton and synthetic fibres while Bangladesh and Viet Nam focus on garment manufacturing.
- The share of intra-regional value added in exports was estimated at 64.9 per cent in Europe, relatively stable since 2017. This is the lowest rate among all regions, reflecting the region's need to source raw materials such as cotton from the United States and India, wool from Australia and synthetic fibres from China.
- North American exports included 74.6 per cent of regional content in 2022. Cross-border production has grown significantly as a result of the United States, Mexico and Canada (USMCA) Agreement, with fabrics and raw and semi-finished materials being increasingly traded between the three economies.
- South America's textiles and clothing sector is characterized by the abundance of raw commodities in the region as well as supply chains encompassing the full range of activities, from the production of raw materials to garment manufacturing. This is reflected by the high regional content of exports, which totalled 81.5 per cent in 2022 although declining as compared to 88.0 per cent in 2017.

Figure 2

Regional value-added in world exports of textiles and clothing, 2017-2022

(Share in world and regional exports of textiles and clothing, in per cent)



Note: "RVA" stands for estimates of the regional value-added content in exports from all economies belonging to the region while "FVA" refers to the foreign value-added content supplied from outside the region.

Source: WTO calculations based on ADB data (June 2023 version).

5. **Asia** includes: Australia; Bangladesh; Bhutan; Brunei Darussalam; Cambodia; China; Fiji; Hong Kong, China; India; Indonesia; Japan; Republic of Korea; Lao People's Democratic Republic; Malaysia; Maldives; Mongolia; Nepal; New Zealand; Pakistan; Philippines; Singapore; Sri Lanka; Chinese Taipei; Thailand; and Viet Nam. **Europe** includes the 27 members of the European Union, Norway, Switzerland, Türkiye and the United Kingdom. **North America** includes Canada, Mexico and the United States. **South America** includes Argentina, Brazil, Colombia and Ecuador. **"Other regions"** comprises all economies not included in the above regional definitions.

Major contributors to value-added trade

The domestic value-added content of exports reflects the ability of domestic industries (local or foreign firms operating within the national territory) to create intermediate products used in the production of goods and services that are exported.

- In 2022, China, the world's largest exporter of textiles and clothing products, had a very large proportion of domestic content in its exports, estimated at 89.1 per cent (see Figure 3). This is due to the growth of domestic supply chains that cover every stage of the production process, from the creation of fibres to spinning fabric, weaving, dyeing and producing finished garments. China and India have similar TiVA structures, with 83.2 per cent of domestic content in exports from India. The two economies have increased the domestic content in their exports in recent years by more than 9 per cent on average from 2017 to 2022.
- Among Asia's top exporters, Indonesia increased the most the domestic value-added content in exports, by 13.3 per cent on average between 2017 and 2023. The equal share of local and foreign value-added content in exports reflects the strong integration of the economy into value chains. Apart from its strategic geographical position, the economy has gained momentum from government programmes, such as "Making Indonesia 4.0", which has promoted technical innovation to enhance productivity, quality and creativity in textile design.
- Türkiye, a leading exporter of textiles and clothing in Europe, raised the domestic value-added content of its exports by 10.9 per cent between 2017 and 2022, reflecting its enhanced production capacity and skilled labour force. Since entering into force in 1995, the EU-Türkiye Customs Union Agreement has significantly streamlined trade between the two parties, reduced trade costs and improved the competitiveness of Turkish textiles and clothing in the EU market, which has become the country's largest export destination.
- Italy, the main exporter of textiles and clothing in Europe, had 73.9 per cent of domestic content in its exports in 2022. This can be attributed to its historic and ongoing role in textile and clothing supply chains, having traditionally specialized in luxury brands and innovative design primarily made by artisanal craftsmanship.
- The United States and Mexico have established strong industrial and strategic linkages in the textiles and clothing sector. They recorded similar levels of exports in 2022 with shares of domestic value-added content being 85.4 and 65.8 per cent respectively. The United States is a leader in the research and development of next-generation textiles, which adds domestic value to its exports. On the other hand, Mexico specializes in fabric spinning and weaving activities as well as apparel assembly using imported fabrics, such as cotton, from the United States and China. Industrial upgrading resulting from investment in technology and innovation has led to an increase in the domestic value added in Mexican textiles exports by an average of 4.9 per cent between 2017 and 2022 while the share of the United States declined by 1.1 per cent.
- Brazil, the largest exporter of textiles and clothing in South America, has a high share of domestic content in its exports, estimated at 82.9 per cent in 2022, despite recent annual declines of 2 per cent. The economy imports an increasing volume of inputs to produce its exports (8.4 per cent on average per year in 2017-2022).

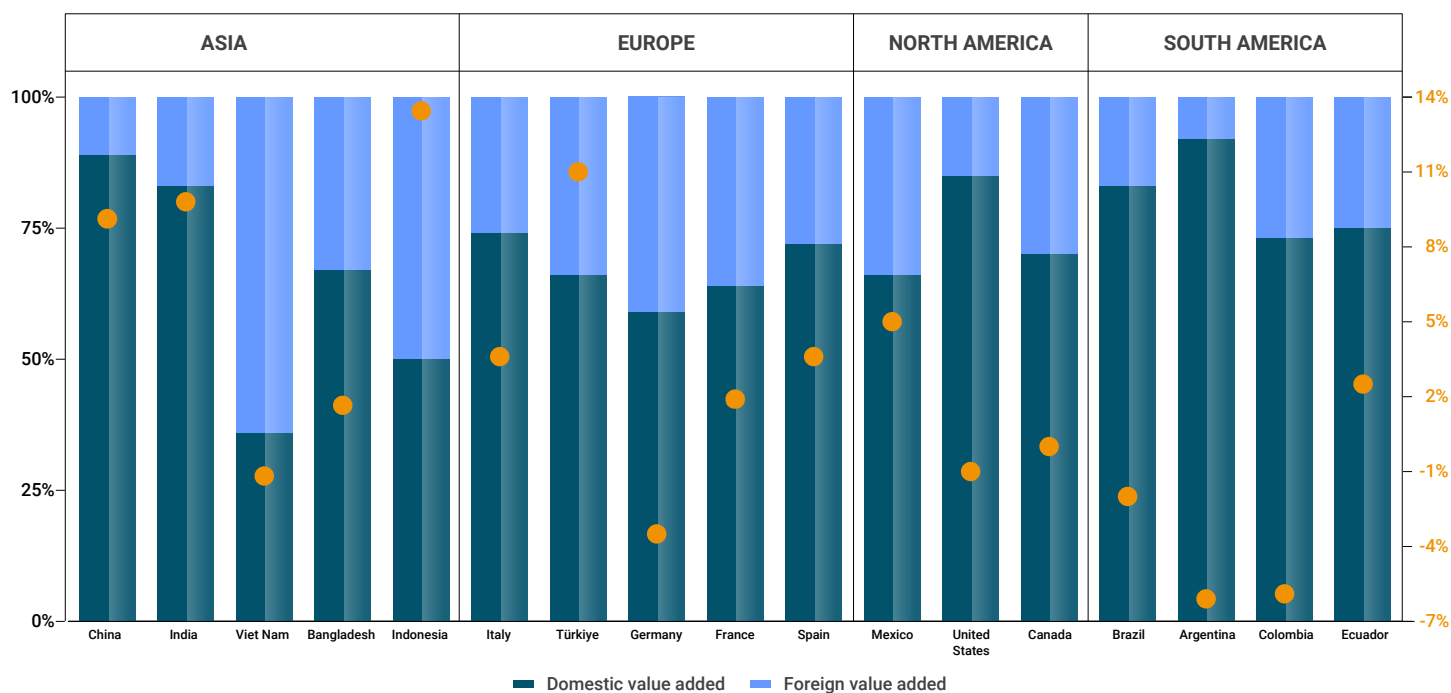
Figure 3

Domestic and foreign value-added content in exports of textiles and clothing, major exporters, 2022

(Share in the economy's exports of textiles and clothing, in per cent and annual average percentage change 2017-2022)

Share in textiles
and clothing exports

Domestic value added
annual average change (%)



Source: WTO calculations based on ADB data (June 2023 version).

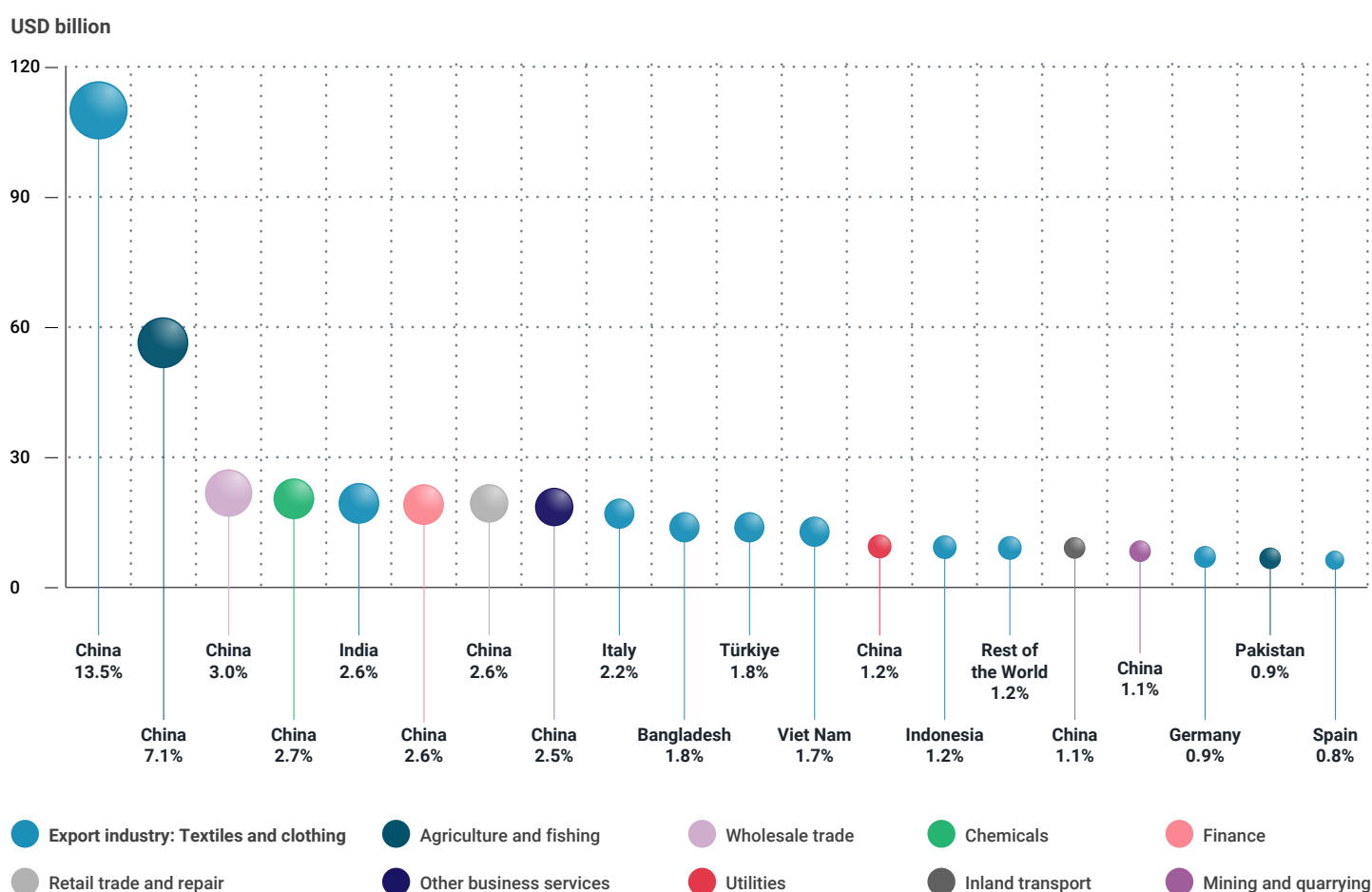
Key players in textiles and clothing global value chains

- The predominance of Chinese industries as major value-added contributors to global textiles and clothing exports underscores the economy's status as the world's largest producer and exporter in this sector. In 2022, China accounted for over 40 per cent of the total value added in world exports in this industry (see Figure 4).
- In 2022, Chinese textile and clothing companies represented on average 13.5 per cent of world exports in this sector. An additional 7.1 per cent of world exports in the sector were provided by the country's agricultural sector, reflecting China's position as the world's largest exporter of silk and cotton, including yarns and woven garments.
- The textiles and garments manufacturing value chain also makes extensive use of services. Chinese distribution and transport services, which are used at every stage of production and involve a wide range of activities (such as inventory management systems, warehousing and logistics), accounted for 7.3 per cent of global exports in this sector.
- Other Asian economies - Bangladesh, Indonesia, Viet Nam and India, as shown in Figure 4 – play a major role in Asia's textiles hub and accounted for over 10 per cent of the value added in global exports in this sector.
- In Europe, manufacturers from Italy and Türkiye represented up to 4 per cent of world value-added exports of textiles and clothing in 2022.

Figure 4

Top 20 value-added contributors to world exports of textiles and clothing, 2022

(USD billion and share in world exports of textiles and clothing, in per cent)



Notes: Rest of the world includes all economies not shown individually in the ADB-MRIO tables.

The size of the circles reflects the estimated level of value added generated by the economy-industry pairs.

Source: WTO calculations based on ADB data (June 2023 version).

Backward GVC participation

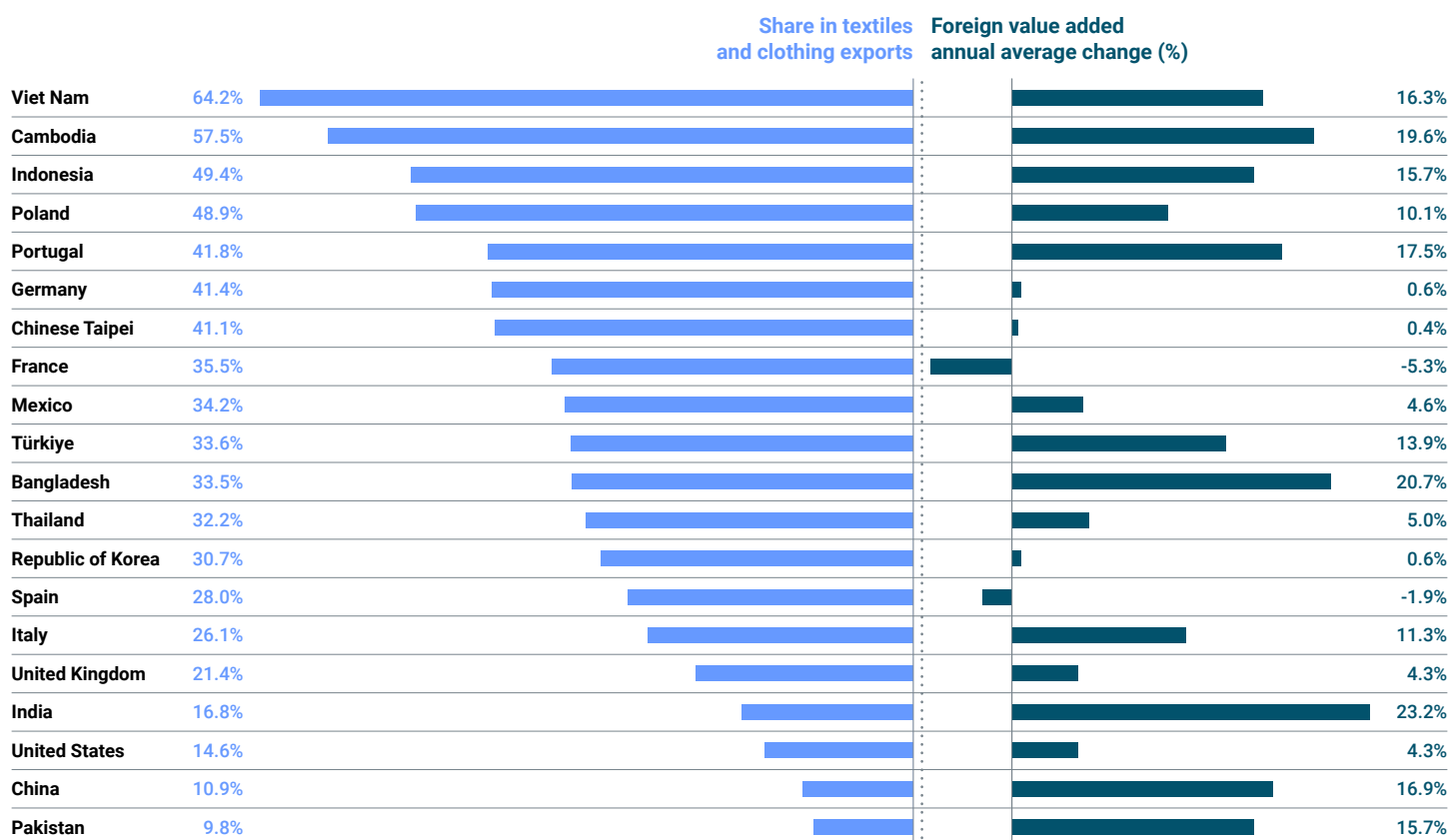
Economies and industries aim to improve their competitiveness in supply chains by importing inputs, such as food ingredients, ores, machinery, services, technologies and other intermediate goods and services from GVC partners to produce their exports. The share of foreign value-added content in exports is also referred to as backward GVC participation or vertical specialization.

- Viet Nam had the highest rate of foreign content in its textiles and clothing exports in 2022, estimated at 64.2 per cent (see Figure 5). Vietnamese manufacturers mostly operate labour-intensive “cut-make-trim” (CMT) production, which is primarily based on importing raw materials, such as cotton from the United States, India and Brazil or synthetic fibres from China and Chinese Taipei.
- China possesses a huge manufacturing capacity in this sector, including the ability to innovate and use technology to quickly adjust products to changing consumer demands, fashion trends, and environmental and sustainability issues. This is a reason for the low level of foreign content in its exports, estimated at 10.9 per cent in 2022, one of the lowest among top exporters. It means that 89.1 per cent of the value-added in the economy’s textile and apparel exports was produced by domestic supply chains.
- In recent years, major Asian manufacturers of clothing and textiles have significantly increased their imports of raw materials and semi-finished textile products to compensate for shortfalls in domestic production and to support economic growth in the sector. India had the highest increase in foreign content in exports of clothing and textiles, rising by an estimated 23.2 per cent between 2017 and 2022, followed by Bangladesh (20.7 per cent) and Cambodia (19.6 per cent). India’s clothing industry imports a variety of raw materials, such as cotton, wool and synthetic fibres (e.g. polyester, nylon, viscose) from around the world, notably the United States, Australia, China and South Korea.
- Türkiye has also boosted its imports of inputs, especially yarns, fabrics, dyes and chemicals, rising by 13.9 per cent between 2017 and 2022, in order to sustain its extensive production capabilities and to maintain its competitiveness in the global market.

Figure 5

Selected exporters’ foreign value-added content, 2022

(Share in the economy’s exports of textiles and clothing, in per cent, and annual average percentage change 2017-2022)



Source: WTO calculations based on ADB data (June 2023 version).

Forward GVC participation

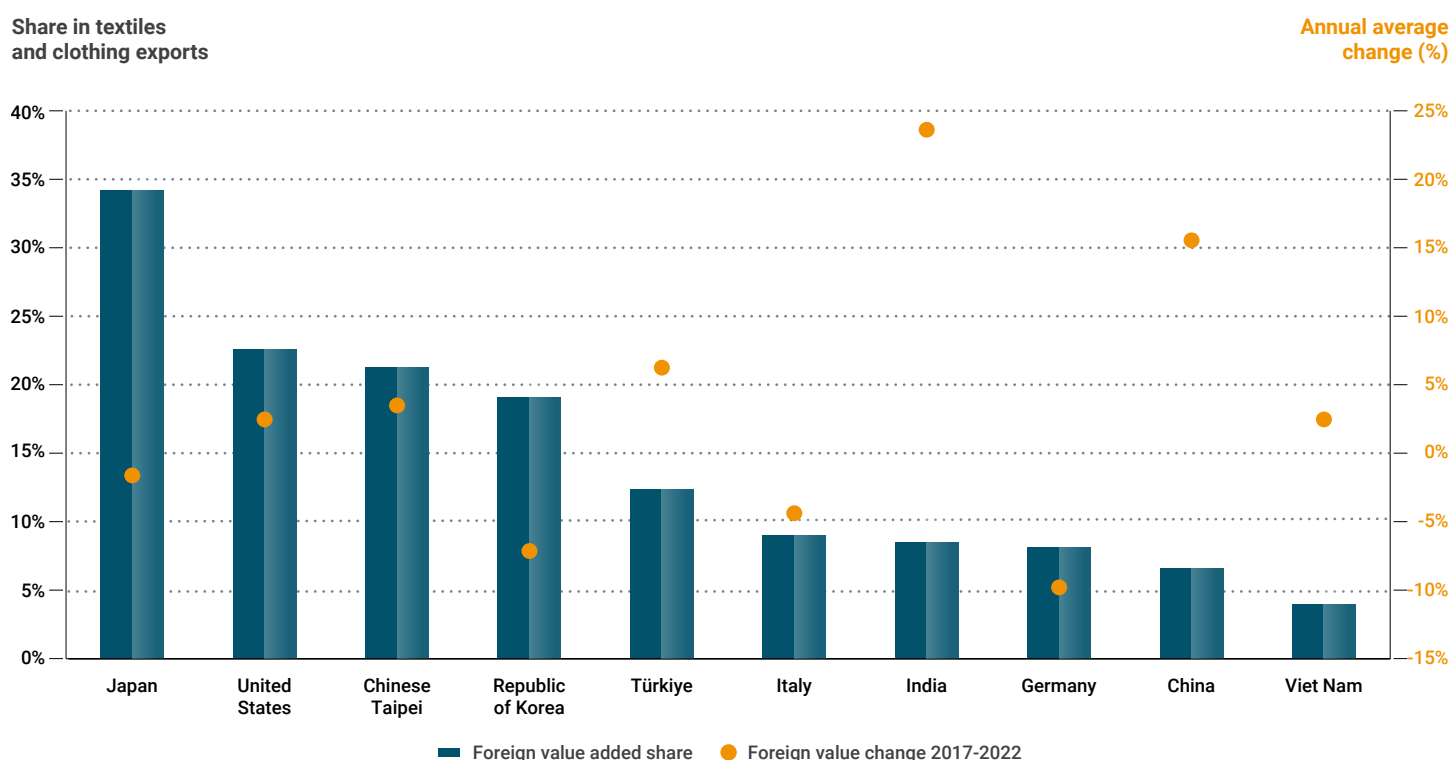
National companies send inputs to industrial partners overseas for further processing and export to third economies in supply chains or for final consumption. This is referred to as forward GVC participation.

- In 2022, a third of Japan's textile and clothing exports went to overseas manufacturers as advanced inputs (see Figure 6). Synthetic and technical textiles, for example, are supplied by Japan to a number of industries, including the automotive, healthcare, construction and sports sectors. These products are mostly sent to regional producers, such as China and Viet Nam, as well as to US and EU industries.
- A vast majority of exporters were more involved in upstream activities (importing inputs from GVCs) than downstream tasks (exporting inputs to GVCs) in textiles and clothing supply chains in 2022. The exceptions were Japan (19.0 vs 33.5 per cent) and the United States (14.6 vs 22.1 per cent). The largest difference (64.2 vs. 3.9 per cent) was recorded by Viet Nam, whose textile industry is well positioned towards the end of the manufacturing cycle, relying on imports for both domestic production and exports.
- Between 2017 and 2022, India's exports of inputs to supply chains increased by 22.8 per cent. These exports primarily consisted of cotton and yarn sent to Bangladesh and China. In addition, China increased its supply of raw, semi-finished and advanced textile materials by 14.9 per cent, notably to regional partners (e.g. Viet Nam, Bangladesh, India and Pakistan) involved in downstream manufacturing activities.
- With a focus on fabric production and a strong integration into regional networks, Chinese Taipei's textile industry exported over 20 per cent of its total exports of textiles and clothing as inputs mainly destined for China and South-East Asia.

Figure 6

Selected exporters' textiles and clothing inputs sent to GVCs, 2022

(Share in the economy's exports of textiles and clothing, in per cent, and annual average per cent change 2017-2022)



Note: Figure 6 refers to the value-added in domestic inputs sent to various industries in a partner economy for further processing and export to third economies in supply chains or for final consumption. See [User Guide](#) for more details.

Source: WTO calculations based on ADB data (June 2023 version).