'Made in the USA' textiles and apparel – Key production and export trends

By Kendall Keough and Dr Sheng Lu | 29 April 2020

'Made in the USA' textiles and apparel have attracted growing attention in recent years amid the escalating US-China trade war, the rising cost of imports, and consumers' increasing demand for speed to market. But where are these mills based, what are their production and supply chain strategies, and the key export trends? Kendall Keough and Dr Sheng Lu from the University of Delaware take a look at the data.

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Statistics show the value of US textile and apparel production totalled US$28.1bn in 2018 – which was a record high since 2010. Meanwhile, more and more US-made textiles and apparel are sold overseas than in the past. According to the the US Department of Commerce's Office of Textiles and Apparel (OTEXA), the value of US exports reached US$22.9bn in 2019, up nearly 20% from ten years ago.

However, despite this strong production and export performance, US manufacturers do not seem to be "visible" enough. For example, according to the 2019 US Fashion Industry Benchmarking Study released by the US Fashion Industry Association (USFIA) last July, many of the fashion brands and retailers surveyed said the lack of sufficient information about US-based textile and apparel mills was a bottleneck to expanding 'Made in the USA' sourcing.

Given this information gap, we analysed the demographics, production and supply chain strategies, as well as the export behaviour, of the 122 US textile and apparel manufacturers included in the OTEXA 'Made in the USA' database. Information in the database is self-reported by the companies and then verified by OTEXA. Five findings are worth noting:

#1: US textile and apparel manufacturers are concentrated in a small number of locations. The 122 US mills included in the OTEXA database come from 26 different states, about half of the country in total. As shown in Table 1, for all the major categories – from yarns, fabrics, home textiles, technical textiles to finished garments – more than 50% of mills are located in the top five states that make these products. Notably, as much as 61% of self-reported yarn manufacturers are from North Carolina (NC); followed by South Carolina (SC), which accounts for another 11%. The concentration of yarn manufacturing in the south, in particular, can be attributed to the abundant cotton supply in that region. Meanwhile, California (CA) has one of the most complete textile and apparel supply chains in the country, with the presence of manufacturers across all sub-sectors. This result is highly consistent with a 2017 national survey by the US Department of Commerce, which also showed California was a leading hub for both textile mills and apparel manufacturers.

Table 1: Geographic location of surveyed US textile and apparel manufacturers

Top States/Products	Yarns	Fabrics	Home textiles	Technical textiles	Apparel
#1	NC (61%)	CA (16%)	CA (12%)	CA (14%)	CA (24%)
#2	SC (11%)	MA (11%)	NC (12%)	MA (11%)	NY (12%)
#3	CA (5.5%)	NC (9%)	NJ (12%)	NJ (11%)	MA (8%)
#4	GA (5.5%)	NY (9%)	FL (8%)	NC (9%)	TX (8%)
#5	NY (5.5%)	SC (9%)	GA (8%)	NY (9%)	VA (8%)
Top 5 States total	89%	54%	52%	54%	60%
Others	11%	46%	48%	46%	40%

Data: Calculated based on the OTEXA 'Made in the USA' database (2020); Figures in the table refer to the percentage of the total.

#2: Large-scale textile mills are gradually emerging in the US, whereas apparel manufacturers are predominantly small and medium-sized. As shown in Table 2, US textile mills have a high concentration of factories with over 100 employees, particularly those engaged in producing yarns (53%), fabrics (37%), and technical textiles (38%). In the past decade, many relatively small-sized US textile mills merged to take advantage of economies of scale and reduce production costs. Larger mills are more likely to be able to afford the expensive machinery and automation technologies increasingly required for textile manufacturing. Industry sources show US textile mills spend around US$1.7bn each year to update their production facilities and acquire state-of-the-art technologies.

In comparison, over half of apparel mills in the OTEXA database report having fewer than 50 employees. In fact, according to the US Census Bureau, as of 2016 (the latest data available) about 70.6% of US apparel makers had fewer than ten employees. Because of the significant disadvantage in labour cost, US apparel manufacturers are not trying to replace imports, but instead focus on niche markets. For example, designer-based micro-

factories are popular in US fashion centres such as New York City and California. These factories typically provide customised services, ranging from prototyping to sample production.

Table 2: Size of US textile and apparel mills by product type

Size (number of employees)	Yarn	Fabric	Apparel	Home textiles	Technical textiles
1-49	0%	39%	54%	33%	29%
50-99	18%	10%	4%	8%	24%
100-499	41%	31%	16%	21%	35%
500 and more	12%	6%	6%	4%	3%
Unknown	29%	14%	20%	33%	9%

Data: Calculated based on the OTEXA 'Made in the USA' database (2020). "Unknown" refers to those mills that did not report their employee numbers.

#3: "Fabric + apparel" and "fabric + technical textiles" are the two most popular types of vertical integration among US textile and apparel mills. Vertical integration refers to the phenomenon that a mill makes multiple types of products alongside the supply chain. The vertical integration strategy could help textile and apparel companies better control the supply chain and improve their speed to market. However, as the machinery, techniques, and raw material required for making yarns, fabrics, and apparel are quite different, vertical integration in practice can be too expensive, especially for small and medium-sized companies. As shown in Table 3, a relatively small proportion have adopted vertical integration. Fabric mills seem to be most actively engaged in this – around one-third reported also making apparel, technical textiles or home textiles.

Additionally, 20% of technical textile manufacturers in the OTEXA database have incorporated an apparel component into their product portfolio. This is a significant trend to watch as more and more sportswear brands are developing technology-driven functional apparel. However, few US textile and apparel mills have a vertical integration model that covers three or more different products.

Table 3: Vertical integration of US textile and apparel mills

Type of vertical integration	% of the total
Yarn + fabric	2.5%
Yarn + fabric + apparel	0.8%
Fabric + apparel	15.6%
Yarn + technical textiles	0.8%
Fabric + technical textiles	16.4%
Apparel + technical textiles	5.7%
Yarn + home textiles	0.8%
Fabric + home textiles	10.7%
Apparel + home textiles	0.8%
Technical textiles + home textiles	4.1%

Data: Calculated based on the OTEXA 'Made in the USA' database (2020).

#4: US textile and apparel mills have shifted from only making products to also offering various value-added services. The majority of companies in the database reported having in-house design capability, including apparel mills (86%), fabric mills (80%), yarn manufacturers (61%), home textiles manufacturers (71%) as well as those making technical textiles (91%). They also commonly describe themselves as "innovators" and "solutions providers" on their websites to highlight that the nature of their core business is to *serve* customers' needs rather than just "*making*" physical products.

#5: Exporting has become an important economic activity for US textile and apparel manufacturers. As many as 70.5% of the 122 manufacturers in the OTEXA database reported being engaged in export, a trend that echoes the rising value of US textile and apparel exports in recent years. Regarding their export behaviour, several patterns are interesting to note:

- **US textile mills (76%) are more actively engaged in export than those that only make apparel products (37%)**. This phenomenon could be the result of a mix of factors ranging from the capital-intensive nature of textile production versus labour-intensive apparel production, as well as special provisions such as the yarn-forward rules of origin in US free trade agreements.
- **Larger US textile and apparel mills are more engaged in export than smaller ones**. As many as 90% of US textile and apparel mills with over 150 employees said they were engaged in exports, compared with only 69.7% of those manufacturers with less than 150 employees. Exploring international markets requires substantial legal, financial and human resources, so could be beyond the budget of many small and medium-sized companies.
- **The western hemisphere is the dominant export market for US yarn, fabric and home textile mills – whereas apparel mills and technical textile producers are more diverse** (see Table 4). This result is far from surprising since the western hemisphere supply chain supported by major free trade agreements (such as NAFTA and DR-CAFTA) has played a unique role in helping US yarn and fabric producers export to countries in North, South and Central America. In comparison, Asia and Europe are key export markets for US technical textile manufacturers (together

around 60%). US producers are among very few suppliers in the world for some highly specialised technical textile products, which gives these companies a global marketplace to explore.

Table 4: Export markets of US textile and apparel mills

Export market by product	Yarn	Fabric	Apparel	Home textiles	Technical textiles
Western hemisphere	53%	52%	42%	54%	39%
Asia	27%	22%	31%	22%	30%
Europe	15%	24%	24%	24%	30%
Africa	5%	2%	2%	0%	2%

Data: Calculated based on the OTEXA 'Made in the USA' database (2020).
Note: The figures in the table indicate the percentage of each export market utilised by US textile and apparel mills.

- **An export diversification strategy is commonly adopted by US textile and apparel mills – unlike apparel producers**. As shown in Table 5, as many as 77% of yarn manufacturers included in the OTEXA database reported exporting to three or more different markets in the world. Likewise, around 40% of fabric, home textiles and technical textiles mills did the same. In comparison, the majority of apparel producers (80%) only exported to two or fewer markets, which could be attributed to their relatively small size (see Table 2).

Table 5: Diversity of export markets of US textile and apparel mills

Number of export markets	Yarn	Fabric	Apparel	Home textiles	Technical textiles
1	23%	26%	37%	25%	9%
2	0%	32%	42%	31%	43%
3	39%	34%	17%	31%	39%
4 or more	38%	8%	4%	13%	9%

Data: Calculated based on the OTEXA 'Made in the USA' database (2020).
Note: The table above only considers those US textile and apparel mills that export.

- **Free trade agreements support US textile and apparel exports.** As shown in Table 6, a high percentage of US textile and apparel mills exporting to the western hemisphere said they took advantage of NAFTA and DR-CAFTA, two primary US free trade deals with the region. The utilisation of NAFTA and DR-CAFTA is particularly high among US yarn producers (83.3%), as their yarn-forward rules of origin incentivise garment producers to use US-made yarns. However, nearly half of the US mills that export fabrics, apparel, home textiles and technical textiles to the western hemisphere reported using neither NAFTA nor DR-CAFTA. More could be done to help these companies better understand the benefits of using free trade agreements for export promotion purposes.

Table 6: Utilisation of NAFTA and DR-CAFTA for exports to the western hemisphere

FTAs/Sectors	Yarn	Fabric	Apparel	Home textiles	Technical textiles
% of mills using NAFTA	75.0%	53.1%	46.7%	50.0%	46.7%
% of mills using DR-CAFTA	58.3%	34.4%	13.3%	35.7%	33.3%
% of mills using neither	16.7%	43.8%	46.7%	50.0%	46.7%

Data: Calculated based on the OTEXA 'Made in the USA' database (2020).
Note: Figures in this table only include US textile and apparel mills that reported exporting to the western hemisphere.

In conclusion, textile and apparel mills have a decent presence in the United States, and export is a critical growth engine supporting the development and expansion of 'Made in the USA' globally.

The analysis also highlights the need for more help to support manufacturers' export efforts, especially those that are small and medium-sized. US trade policymakers could consider reaching more free trade agreements, especially with Asian and European countries, to level the playing field and help open new export markets for US mills. This is critical as countries in the EU and Asia are working towards new regional trade agreements and enhancing regional economic integration – which could put US textile and apparel products at a further disadvantage when competing with locally made products in these markets.

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