Public Comments of the U.S. Textile Industry Regarding Docket DOC 2018-0005, Proposed Determination of Action Pursuant to Section 301: China's Acts, Policies, and Practices Related to Technology Transfer, Intellectual Property, and Innovation

May 11, 2018

These comments are provided on behalf of the various trade associations and their respective memberships, which represent the entirety of the U.S. textile production chain, in response to the Federal Register request for public comments found at 83 FR 14906 and dated April 6, 2018 (USTR Docket Number: 2018-0005).

The United States textile industry has been severely impacted in recent decades by China's predatory international trade practices. As such, our industry is highly interested in President Trump's recent efforts to rebalance our current trade relationship with China by addressing longstanding and severely damaging government-sanctioned initiatives that have allowed Chinese textile and apparel exporters to unfairly dominate global markets in our sector. Prior to detailing our specific positioning, however, we are providing basic background information on our respective trade associations and the U.S. textile industry at large.

The **National Council of Textile Organizations (NCTO)** is a not-for-profit trade association established to represent the entire spectrum of the United States textile sector, from fibers to yarns to fabrics to finished products, as well as suppliers of numerous support services such as trucking, banking, chemicals, and other such sectors that have a stake in the prosperity and survival of the U.S. textile sector. U.S. textile and apparel manufacturers produced $77.9 billion in output in 2017, and our sector's supply chain employs 550,000 workers from fiber to finished sewn products. NCTO's headquarters are in Washington, DC. www.ncto.org

The **Narrow Fabrics Institute (NFI)** is a division of the Industrial Fabrics Association International (IFAI) whose mission is to work on common interests and issues in the narrow fabrics industry. Narrow fabrics are defined as textiles that are no more than 12 inches (300mm) in width and are made by weaving, knitting, or braiding fibers or yarns with an edge to prevent unraveling. The primary product areas of NFI's 57-member companies include automotive, military, safety, transportation, medical, and others such as aerospace, industrial, pet, recreational, and electronics. The North America market for narrow fabrics is estimated at over $335 million in annual sales. http://narrowfabrics.ifai.com/

The **United States Industrial Fabrics Institute (USIFI)** is a division of the Industrial Fabrics Association International (IFAI). Member companies manufacture highly-specialized textile products, advanced materials, and components used to support a variety of high-value-added and sophisticated industries. These include the aerospace, automotive, construction, marine, medical,

military, and safety/protective gear sectors among others. USIFI currently has over 65 member companies, and its headquarters are in Roseville, MN. http://usindustrialfabrics.ifai.com/

Overview of the U.S. Textile Industry and Key Statistics

The U.S. textile industry production chain is comprised of the following: suppliers in the cotton, wool, and man-made fiber sectors; yarn and fabric manufacturers; textile home furnishings producers; dyers, printers, and finishers; service suppliers such as information technology and textile chemical industries; and our customers in the U.S. apparel, automotive, aerospace and other end-use industries.

The U.S. textile industry, suppliers, and our customers are an important component of the U.S. economy and are found in every region of the country. The industry provides much-needed jobs in rural areas and has functioned as a springboard for workers out of poverty into good-paying jobs for generations.

The industry is also a key contributor to our national defense, suppling over 8,000 different textile-based products to the Department of Defense and our men and women in uniform. Finally, the industry is a driving force in high-tech innovation. Textile products are now major components in everything from heart valves and stents to aircraft bodies and advanced body armor.

U.S. Textile Industry Key Facts

- The U.S. textile industry supply chain - from fibers to apparel and other sewn products - employed 550,000 workers in 2017. One textile job supports three other jobs in the United States.
- The U.S. is the fourth largest exporter of textile-related products in the world. Fiber, textile, and apparel exports combined were $28.6 billion in 2017.[1]
- The U.S. textile industry exported to more than 200 countries, with 26 countries importing $100 million or more.
- Domestically, the U.S. textile industry invested $20 billion in new plants and equipment from 2006 to 2016.
- U.S. textile mills have increased productivity by 52% since 2000.
- The United States is the world leader in textile research and development, producing advanced materials with technical, medical, military, aerospace, athletic, and myriad other applications.

Textile and Apparel Trade Deficits

U.S. textile manufacturers accomplish all the above on one of the most unbalanced economic playing fields of any industrial manufacturing segment. The United States is the largest single-

[1] This figure includes raw fibers such as cotton and wool in addition to manufactured textile products.

country importer of textile and apparel products in the world. In 2017, the U.S. imported over $118 billion worth of textile and apparel products and ran a trade deficit of nearly $100 billion. The U.S. trade deficit in textiles and apparel is the third largest of any sector, only behind (1) computers and electronic products and (2) transportation equipment. The table below is taken from the most recent United States International Trade Commission's "Shifts in U.S. Merchandize Trade 2016" publication and lists the trade balance for major sectors of the U.S. economy.

U.S. Merchandise Trade balance by Major Industry/ Commodity Sectors (Billion $) (2016)	
Electronic products	-$189.60
Transportation equipment	-$99.00
Textiles and apparel	-$98.70
Miscellaneous manufactures	-$77.30
Energy-related products	-$58.60
Minerals and metals	-$55.00
Machinery	-$51.60
Special provisions	-$44.80
Chemicals and related products	-$41.80
Footwear	-$24.30
Forest products	-$5.20
Agricultural products	$9.30
Total	-$735.5

Source: Shifts in U.S. Merchandise Trade, 2016, Investigation No. 332-345, USITC Publication 4723 (September 2017) https://www.usitc.gov/research_and_analysis/trade_shifts_2016/us.htm

As has been the case for years, China is the single largest contributor to the U.S. trade deficit in textile and apparel products. Last year, the United States imported $45.1 billion worth of textiles and apparel from China while exporting only $961 million, to run a $44.1 billion trade deficit with China in these products.[2] China's exports to the United States represented 36.4 percent of all textile and apparel imports to the U.S. last year.[3] As evidenced by the following table, at 46 percent, China by far accounts for the largest contribution to the total U.S. trade deficit in textiles and apparel.

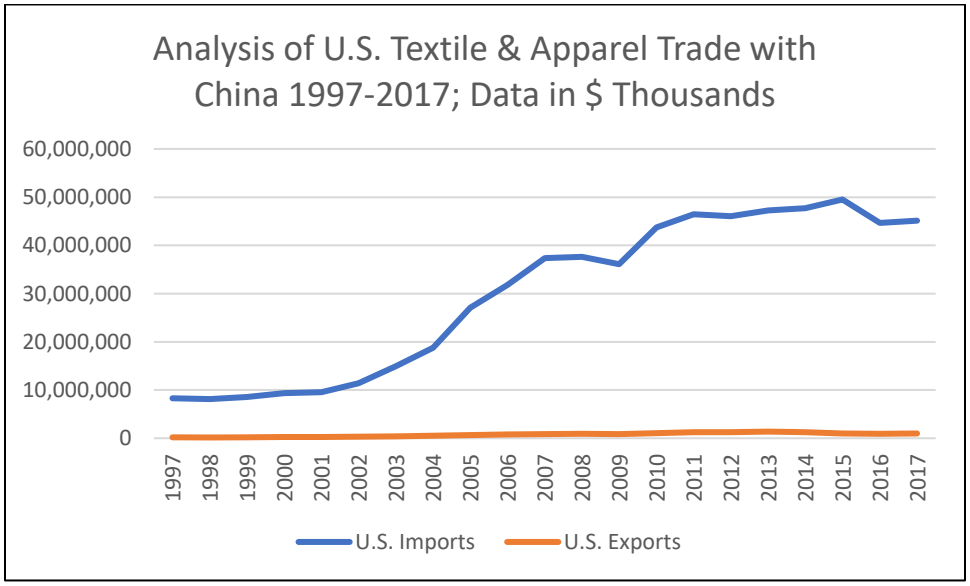
[2] U.S. Department of Commerce, Office of Textiles and Apparel (OTEXA), Textile and Apparel Trade Balance Report
[3] Id.

Top 5 Contributors to U.S. Trade Deficit in Textile & Apparel (Billion $) (2017)		
Country	Trade Balance	% of Total
China	-$44.1	46.1%
Vietnam	-$12.3	12.9%
India	-$7.9	8.3%
Bangladesh	-$5.3	5.5%
Indonesia	-$4.7	4.9%

Source: U.S. Dept. of Commerce, Office of Textiles and Apparel (OTEXA), Interactive Trade Balance Report

Further, China's exports of textiles and apparel alone accounted for 11.75 percent of the total U.S. trade deficit with China in 2017.

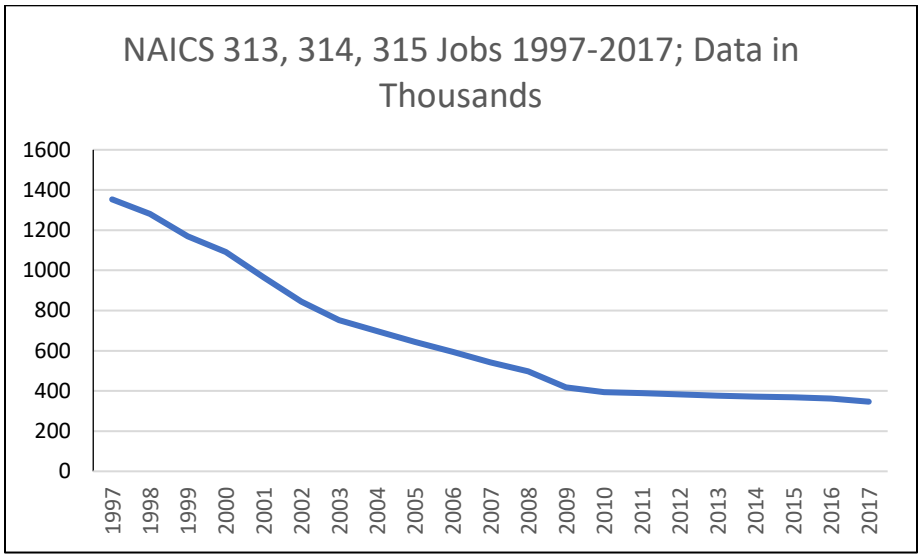
The following graph shows China's meteoric rise into the U.S textile and apparel market with U.S. imports climbing from $8.3 billion in 1997 to $45.1 billion in 2017. In contrast, U.S. exports to China went from just $180.2 million in 1997 to $960.5 million in 2017.[4]



China's penetration into the U.S. textile and apparel market has come at the direct expense of hundreds of thousands of domestic textile and apparel jobs and the numerous communities dependent on the sector's investment and production. As China's exports surged, domestic textile

[4] OTEXA

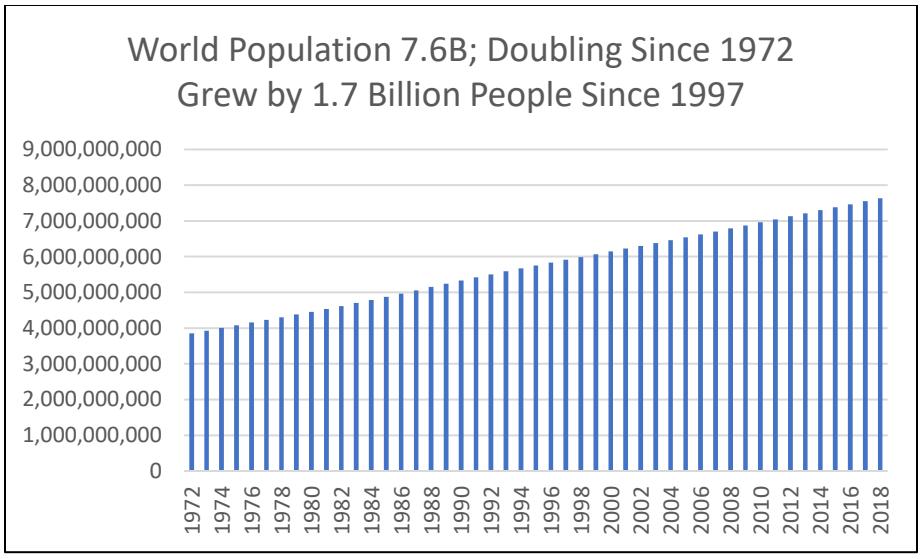
and apparel employment in NAICS 313 (Textile Mills), 314 (Textile Product Mills), and 315 (Apparel) plunged from 1,353,400 in 1997 to 346,700 in 2017, a loss 1,006,700 jobs.[5]



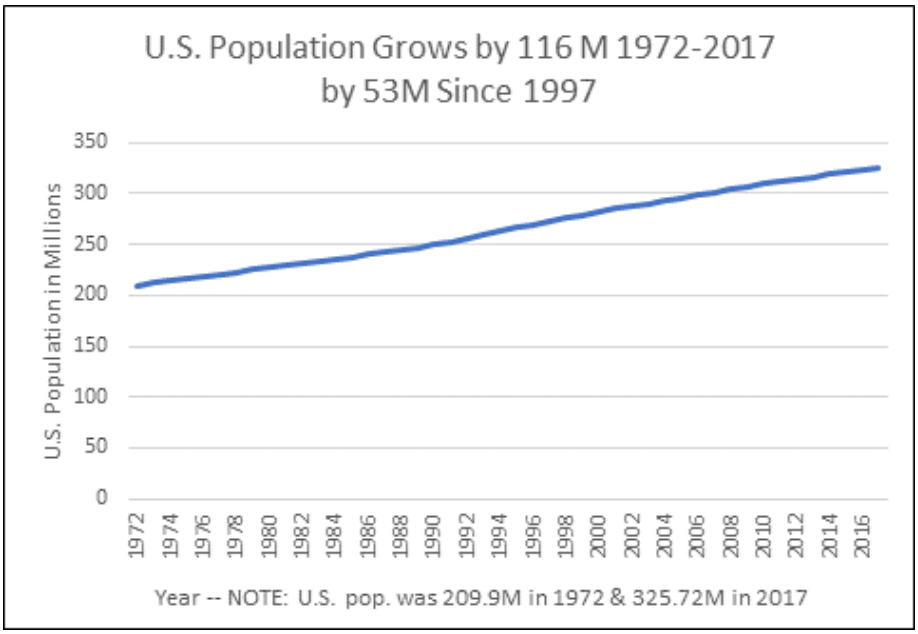
Long-Term Trends in the Textile and Apparel Industry

China's aggressive expansion into the U.S. textile and apparel market with its concomitant loss of U.S. output and jobs is even more concerning when looking at trends in the global textile market. First, the number of textile consumers has doubled since 1972, with the world's population doubling from 3.8 billion to 7.6 billion. In the twenty years between 1997 and 2017, the world's population grew by 1.7 billion alone.

[5] U.S. Department of Labor. This data excludes jobs in NAICS 32522, Artificial and Synthetic Filaments and Fibers, as well as cotton and wool growing-related employment.



The United States has also seen a substantial increase of textile consumers. America's population has grown by 55 percent since 1972, climbing from 210 million to 326 million, including a growth of 53 million people in the last twenty years.

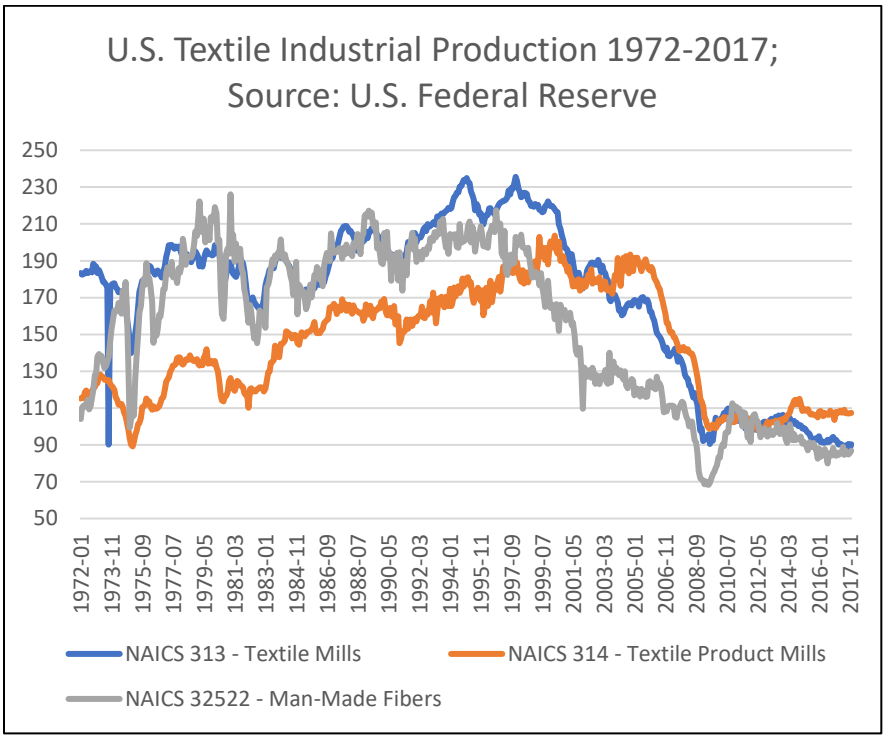


Yet, despite the spike in consumers in the global and U.S. textile markets, U.S. textile and apparel output has dropped dramatically in the last two decades.

Even in the face of an increase in textile and apparel imports, U.S. Textile Mill (NAICS 313) output, the production of yarns and fabrics, grew 23 percent between 1972 and 1997. Since that time, however, U.S. output has fallen by 60 percent.[6]

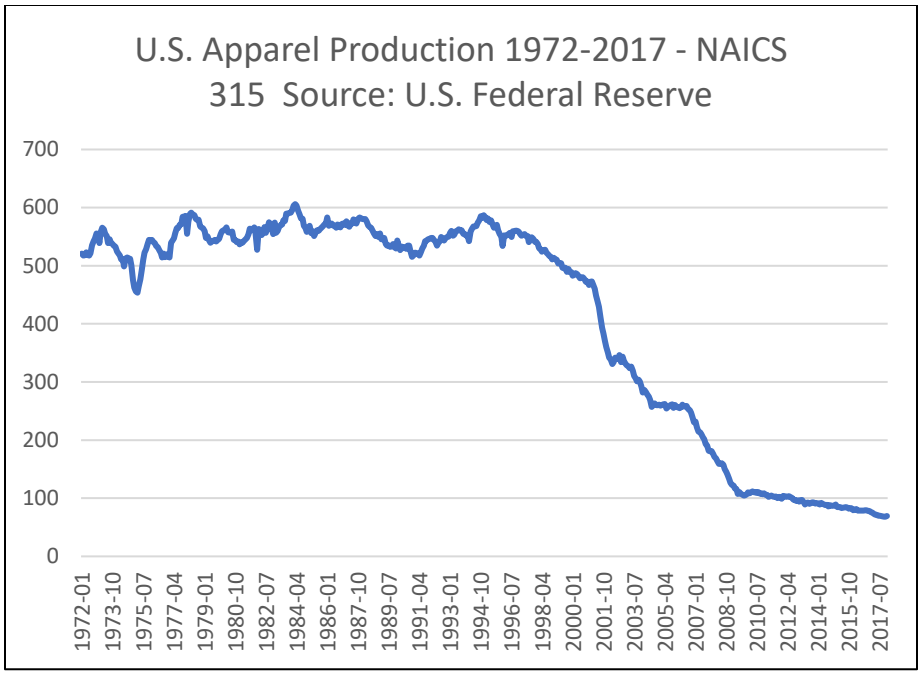
Output of U.S. Textile Mill Products (NAICS 314), home furnishings, carpet and other non-apparel sewn products grew by 56 percent between 1972 and 1997. Since 1997, however, U.S. output in this sector has fallen by 42 percent.[7]

The production of Artificial and Synthetic Filaments and Fibers (NAICS 32522), man-made fiber such as polyester, nylon and other fibers, climbed 69 percent between 1972 and 1997. Since 1997, however, U.S. output of these fibers has fallen by 56 percent.[8]

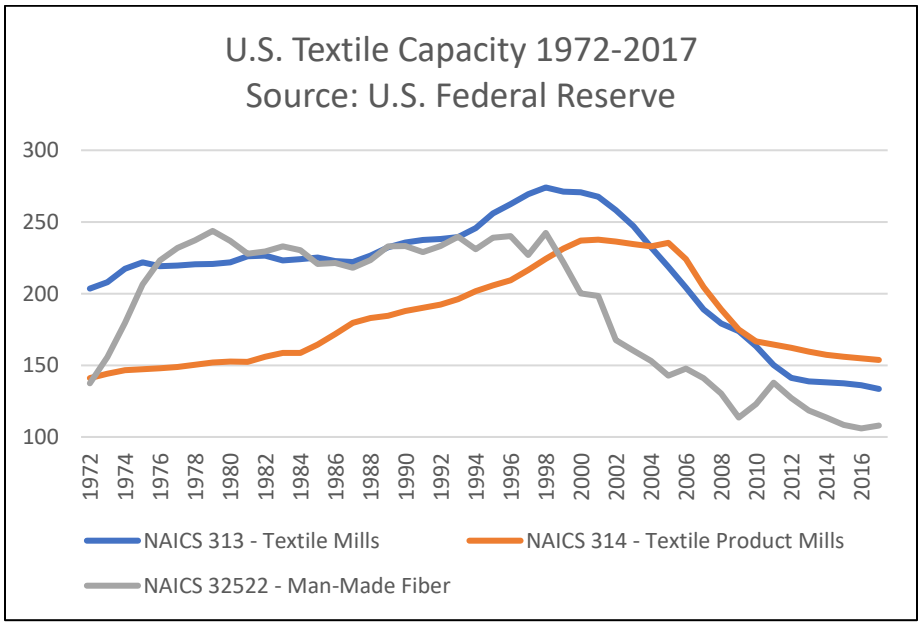


While the U.S. output drop in textile inputs, home furnishings, carpet and non-apparel sewn products has been steep, U.S. apparel output has fallen off a cliff, plunging by 87 percent since 1997 in contrast to 3 percent growth between 1972 and 1997.[9]

[6] U.S. Federal Reserve
[7] Id.
[8] Id.
[9] U.S. Federal Reserve

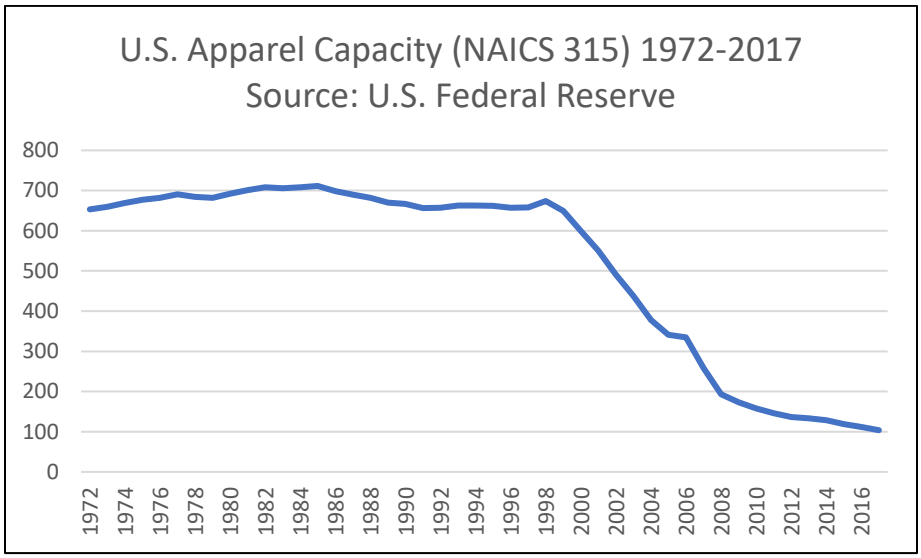


Accompanying the decline in textile and apparel output was an unprecedented shedding of U.S. industrial capacity in these sectors. Since 1997, Textile Mill (NAICS 313) capacity is down 50 percent, Textile Product Mill (NAICS 314) is down 29 percent, and Artificial Synthetic Filament and Fiber (NAICS 32522) capacity is down 52 percent.[10]



[10] U.S. Federal Reserve

The decline is U.S. apparel capacity is even more severe, falling 84 percent since 1997.[11]

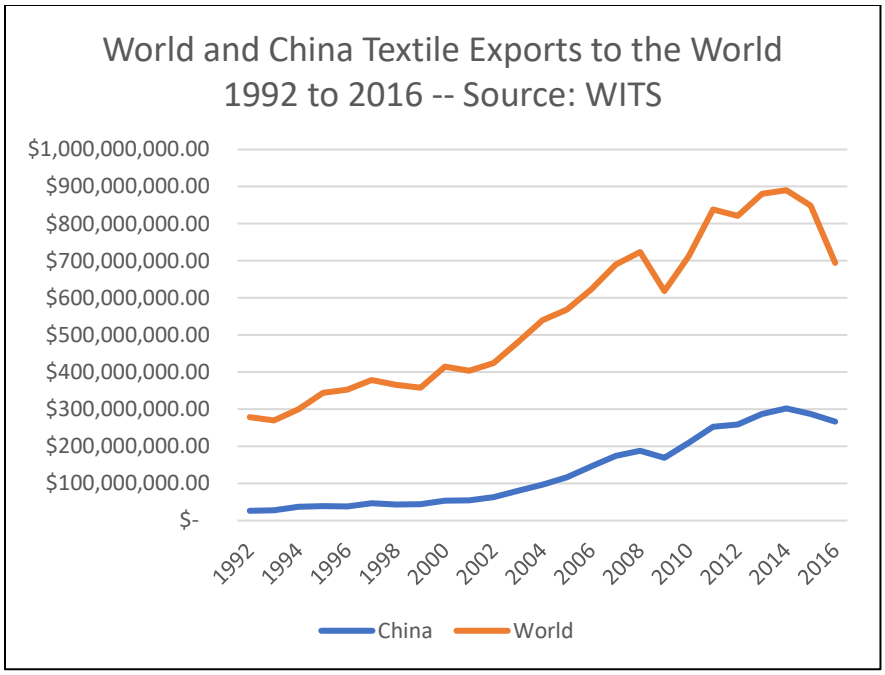


What the above charts demonstrate is that until the mid-1990's there were fairly normal ebbs and flows within global textile and apparel markets. Until that point, manufacturers prospered, survived, or failed based on reasonable market forces. The rules of the game, however, changed dramatically in the mid-1990's with the advent of China as a large scale predatory force benefiting from virtually limitless government programs intended to ensure that China's textile industry dominated world markets and displaced foreign competitors and workers.

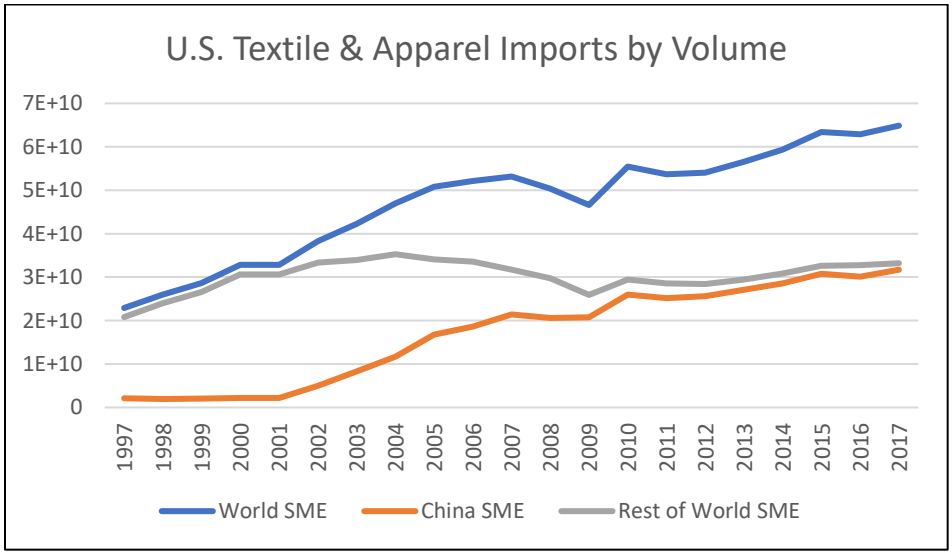
Between 1992 and 2016 world textile and apparel trade grew from $279 billion to $695 billion, an increase of almost 150 percent.[12] Despite this unprecedented growth in global textile and apparel consumption over the past 24 years, the U.S. textile/apparel industry experienced a historic contraction during this period. The overriding factor behind this counterintuitive development was the emergence of China as a virtually unrestrained, predatory competitor.

Thanks to massive state-sponsored subsidies and rampant intellectual property theft, Chinese textile and apparel exports have exploded, making China the dominant player in the global market. Chinese textile and apparel exports grew by a staggering 910 percent between 1992 and 2016, skyrocketing from $26.4 billion to $266.3 billion.[13] In fact, China's share of the world's textile and apparel trade has quadrupled, growing from 9.5 percent in 1992 to 38.3 percent in 2016.

[11] Id.
[12] World Integrated Trade Solution (WITS)
[13] WITS

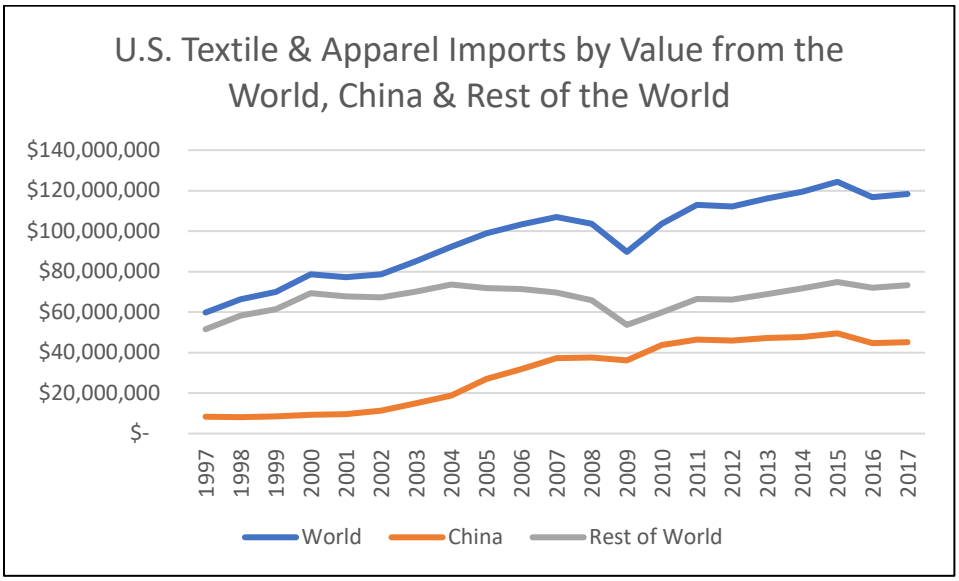


With respect to the U.S. market since 1997, textile and apparel imports are up 183 percent by volume, with China alone accounting for 70.5 percent of the increase.[14] China seized this market share by increasing its exports to the United States by a stunning 1,413 percent, growing from 2.1 billion square meters equivalent (SME) to almost 32 billion SME, now accounting for 49 percent of all U.S. textile and apparel imports.[15]



[14] OTEXA
[15] Id.

With respect to value, total U.S. textile and apparel imports rose 98 percent between 1997 and 2017, climbing from $59.8 billion to $118.4 billion, with surging imports from China accounting for 63 percent of the $58.6 billion increase.[16]



Impact of China's Unfair Foreign Trade Practices on U.S. Trade Deficit in Textiles and Apparel

Clearly the United States has offered China incredibly generous access to its textile and apparel market, while failing to secure reciprocal export opportunities for U.S. manufacturers and exporters. This huge imbalance is not the result organic trade flows, instead China's activities in the textile and apparel sector have been guided by thirty years of aggressive planning on the part of their government to make China the dominant global supplier of these products.[17] Five-year plan after five-year plan has emphasized China's intention to expand its domestic production of textiles and apparel despite existing global overcapacity in textiles. Obviously, the logic behind production expansion in a saturated market is to couple that expansion with a hostile plan to remove other players from the global marketplace.

Included below is a table listing key factors from a summary published by Textile Today Research[18] of China's 13th Five-Year Plan, adopted by the National Assembly in March 2016, as it relates to the textile and apparel industry's recent performance metrics and goals for the 2016-2020 time period.

[16] Id.
[17] For a history of some of these earlier programs, see: https://www.uscc.gov/Research/china's-support-programs-selected-industries-textiles-
[18] See: https://www.textiletoday.com.bd/china-building-tech-intensive-textile-industry-leaving-low-value-business/

China's 13th Five-Year Plan (2016-2020) for Apparel and Textile Industry		
Indicators	**Actual Performance 2011-2015**	**Goals for 2016-2020 (13th five-year plan)**
Annual growth rate for industry value added	+8.5%	+6-7%
Output of text fiber	Reached 53 million tons in 2015, 4.5% annually	No mention
Fiber end-use ratio	46.6% apparel, 28.1% home textiles and 25.3% by the end of 2015	40% apparel, 27% home textiles and 33% industrial textiles by the end of 2020
Labor productivity growth	+10% annually	+8% annually
Exports	Increased by 6.6% annually, value of exports reached $291.2 billion in 2015; world market share increased by points from 2011 to 2015	Maintain a stable market share in the world export market
R&D spending as % of revenue	0.67%	1%
Number of patents granted		15% annually
Enterprises with RMB10 billion (around $1.5 billion USD) annual sales revenue	Around 20 enterprises	Around 50 enterprises by 2020
Newly mentioned areas		3D printing, cloud platform, big data, internet plus, impact of newly reached trade agreements such as TPP, AGOA

As indicated in the first line of this table, China's textile and apparel industry grew 8.5 percent from 2011 to 2015, and they have no intention of slowing down such rapid and abnormal production expansion in targeting an additional 6-7 percent in growth during 2016-2020. These massive expansion goals come despite the fact that China's textile and apparel productions capacity is already unparalleled.[19]

In 2014, China produced in excess of 50 million tons of textile fibers, accounting for 54 percent of global production. Apparel production was reported at 30 billion units in 2014, representing an increase of over 10 percent from the prior year, and fabric production was 90 billion meters.[20] In terms of exports, China shipped $267 billion of textile and apparel products capturing nearly 40 percent of global markets in 2016, which was over nine times the value of U.S. exports.

Unfair Trading Practices

China's remarkable ascension to become the dominant global supplier of textiles and apparel was aided by a multifaceted system of emphasis and support on the part of the Chinese government. Further fueling China's dominant global position in the textile and apparel sector is the fact that

[19] See: http://www.oecd.org/investment/cntac-oecd-partner-to-strengthen-cooperation-textile-apparel-supply-chains.htm

[20] https://shenglufashion.com/2016/01/17/state-of-chinas-textile-and-apparel-ta-industry-updated-in-january-2016/ and https://www.statista.com/statistics/236397/value-of-the-leading-global-textile-exporters-by-country

many key competitors in China are state-owned enterprises, including companies owned by the People's Liberation Army.

Moreover, China holds the dubious distinction of being the world's leading purveyor of illegal trade practices that are designed to unfairly bolster a blatantly export-oriented economy. These predatory practices take many forms, from macroeconomic policies that grant across the board advantages to their manufacturers, to industry specific programs intended to dominate global markets in targeted areas. The U.S. textile industry has been a longstanding victim of China's predatory export practices.

For example, in 2015, the United States initiated a World Trade Organization (WTO) dispute over China's Demonstration Bases-Common Service Platform program. Textiles and apparel were one of seven product sectors listed by USTR as a key beneficiary of this subsidy system. In an April 2016 press release, USTR made the following statement:

> *China maintained and operated this extensive program through over 150 central government and sub-central government measures throughout China. These measures provided subsidies to the Demonstration Bases in the form of cash grants and free or discounted services for these Demonstration Base enterprises. Export-contingent subsidies, such as those provided by China under this program, created an unfair advantage for a vast array of Chinese exporters and are expressly prohibited under WTO rules.*

There are also a number of anti-dumping (AD) and countervailing duty (CVD) orders currently in place covering textile products from China, further demonstrating the level of government intervention in this sector. The following table summarizes current AD and CVD orders. Notably, several of these orders have remained in place through multiple 5-year sunset reviews. An affirmative decision in a sunset review means that the U.S. International Trade Commission determined that revocation of the AD or CVD order would likely lead to the continuation or recurrence of material injury to the U.S. industry. These longstanding orders highlight persistent dumping and illegal subsidization endemic to the Chinese textile sector.

Product	**Order Originally Published**
Artist Canvas	06/01/06 – AD
Polyester Staple Fiber	06/01/07 – AD
Laminated Woven Sacks	08/07/08 – AD & CVD
Narrow Woven Ribbons With Woven Selvedge	9/1/10 – AD & CVD
Polyethylene Terephthalate Resin	05/06/16 – AD & CVD
Amorphous Silica Fabric	3/17/17 AD & CVD
Fine Denier Polyester Staple Fiber	3/16/18 CVD (AD case pending)

These petitions include example after example of China's industrial polices and myriad subsidies provided at all levels of government. Some of the incentives outlined are specifically offered to companies that qualify as high- or new-technology enterprises ("HNTEs"). As noted in the recent fine denier polyester staple fiber CVD petition, enterprises that qualify for HNTE designation are eligible for a reduced tax rate of 15 percent instead of 25 percent. Chinese fine denier staple fiber producers are believed to benefit from this tax incentive given that producers of similar product have been documented.

Further exacerbating China's unfair advancement into the U.S. market is that, in many instances, trade remedies intended to offset these practices are beyond the reach of the U.S. textile sector. The overwhelming majority of China's disruptive impact on the U.S. market has been in the form of finished apparel and home furnishings. Domestic producers of upstream components for these finished goods, such as manufacturers of fiber, yarn, and fabric, do not have legal standing to bring cases against the type of product normally being imported from China. The remaining vestiges of the U.S. apparel industry would have to initiate such cases, but they are often held hostage to a customer base that is sourcing a significant portion of its inventory from China and/or other offshore entities.

It is for this reason that the table above, listing AD and CVD orders, is devoid of finished apparel items, although apparel makes up the overwhelming majority of China's exports to the United States in the textile and apparel sector. As such, U.S. textile manufacturers have been forced to witness China's massive disruption of the U.S. clothing and home furnishing markets with virtually no access to key remedies such as dumping and countervailing duty actions.

Lax Environmental and Labor Standards

China's abusive environmental and labor record is not unique to the textile sector. However, the apparel industry, which is highly labor intensive, is especially susceptible to workplace abuses, including repugnant practices associated with forced labor and child labor.

In the Chinese garment sector, there is no freedom of association to form trade unions, and non-governmental labor organizations are closely monitored by the Chinese government, which carries out regular crackdowns. Multinational corporations and national factory owners often take advantage of the anti-union climate, a lack of awareness on the part of workers as to their own rights, and the Chinese government's unwillingness to address the abuse of workers' rights.

An article from the *South China Morning Post*, dated November 22, 2016, entitled "Under 16 and Working 16 Hours a Day," paints a grim picture of labor conditions in the Chinese apparel industry. The article details how Chinese clothing factories secure cheap child labor from across China. These children are often forced to work extended hours, with virtually no days off, with the article indicating that they normally work 28 days a month. The article also states that children in

these garment factories are often beaten when they misbehave or when they exhibit poor work performance.

China's abuses in this area are not alien to the U.S. government. The U.S. Department of Labor's *List of Goods Produced by Child Labor or Forced Labor* released in September 2016 cited textiles from Bangladesh, Cambodia, **China**, Ethiopia, India, Nepal, North Korea, and Vietnam.[21]

In addition to labor abuses, textile and apparel producers in China routinely pollute the air and water with impunity. For example, in Xintang, China, where one in three pairs of jeans sold globally is made, the dust in the streets is blue, the water in the rivers is indigo, and the workers' lungs are embedded with fine silica according to reports.[22]

In addition, the level of occupational disease and injuries is alarmingly high. In 2009 alone, approximately one million workers in the textile and apparel sector were injured at work and about 20,000 suffered from diseases due to their occupation. One of the biggest risks to the health of textile workers is sandblasting, a technique used to treat denim so that the fabric has a worn look. Sandblasting exposes workers to silica dust particles which severely damage their respiratory passages causing silicosis, a serious disease which, if left untreated, eventually leads to death.

It is no coincidence that these rapacious and highly unethical cost reduction practices occur in a country that during the past twenty years has overtaken every other competitor in the global textile and apparel sector.

IPR Theft

Because intellectual property theft is the basis for the pending 301 case, this issue is covered in greater detail in the following section of our submission.

Section 301 Case

NCTO applauds the Trump administration's initiation of a Section 301 case to address China's persistent and highly damaging actions in the area of intellectual property theft. Illegal activity on the part of the government of China has gone on for far too long at the direct expense of U.S. manufacturers and the loss of millions of U.S. manufacturing jobs.

Previous administrations threatened action in this area, but few, if any, took substantive steps to reign in China's elaborate system of stealing American intellectual property, innovation, and technology development.

[21] See: https://www.dol.gov/ilab/reports/child-labor/list-of-goods/

[22] See: https://www.linkedin.com/pulse/true-denim-capital-world-disgrace-industry-we-should-act-ayompe?trk=v-feed

With that said, the U.S. textile industry is deeply disappointed that the retaliation list published by USTR on April 3 does not contain a single textile or apparel product. While the list covers an estimated $50 billion worth of goods and roughly 1,300 tariff lines, products in the textile and apparel sector were completely omitted. This glaring omission occurred despite the fact, as has been detailed earlier in this submission, that China has targeted the U.S. textile and apparel market for decades.

While not privy to the internal deliberations within the U.S. government that led to the April 3 retaliation list, we can assume that a determination was made that the textile and apparel sector was not highly exposed in terms of China's intellectual property theft. We strongly contest any such finding as inaccurate.

We would cite the government's own efforts to counter IPR theft in our sector as the strongest argument that we are an industry under direct attack in this area. A review of data published by the Department of Homeland Security (DHS), and the various offices at DHS, such as the National Intellectual Property Rights Coordination Center and the Office of the U.S. Intellectual Property Enforcement Coordinator, substantiates this argument. Recent DHS data demonstrate the following:

- In FY 2017, wearing apparel & accessories accounted for the single largest segment of IPR seizures by DHS of any sector. Seizures in our sector accounted for 15% of all U.S. government IPR seizures in FY 17.
- Seizures of wearing apparel and accessories totaled $74.9 million in FY 17.
- Again, in FY 2016, wearing apparel & accessories accounted for the single largest segment of IPR seizures by DHS of any sector. Seizures in our sector accounted for 20% of all U.S. government IPR seizures in FY 16.
- Seizures of wearing apparel and accessories totaled $110.8 million in FY 16.

In terms of the volume of fraudulent shipments from an IPR standpoint, no manufacturers are more highly exposed than those in the textile and apparel sector.

The reasons that the U.S. textile and apparel industry is so vulnerable in this area are manifold. Not the least of which is that the United States textile industry is the global leader in research and development to create the next generation of fibers, yarns, and fabrics with cutting-edge characteristics and end-uses that the 21st century marketplace demands. Our industry is constantly seeking product advancements that allow textile materials to be lighter and stronger, while being more flexible, durable, and comfortable. It takes an enormous amount of research, testing, and development to produce materials that have enhanced qualities allowing fabrics to be stain resistant, wrinkle resistant, water repelling, and/or flame retardant.

Beyond advancements in material characteristics, the U.S. textile industry is continually developing new product applications. Research in our sector has led to high-performance fibers and yarns that serve as substitutes for steel and aluminum in the automotive and aerospace sectors. Textiles are

now used in sophisticated medical applications along with fabrics that are replacing traditional construction materials. Recycling breakthroughs have allowed for the recovery and reuse of textile materials, providing substantial environmental gains.

The military is often a research driver in the textile sector, leading to defense applications that ensure that the American warfighter is outfitted with the best and most effective textile products in the world. This includes breakthroughs that have produced high-ballistic textile body armor, radar dispersion fabrics, non-repeating camouflage designs, severe weather insulation fabrics, and protective chem-bio apparel.

A current example of defense-spurred innovation is the formation of the Advanced Functional Fabrics of America (AFFOA) institute in 2016.[23] Seeded with $320 million in public and private funding, including a $75 million federal funding commitment from the U.S. Department of Defense, AFFOA is focused on commercializing the next generation of smart textiles. AFFOA's mission enables a manufacturing-based revolution—the transformation of traditional fibers, yarns, and textiles into highly sophisticated integrated and networked devices and systems. Backpacks that communicate and washable, stretchable clothes that can power electronic devices and monitor your health are two early product developments of this initiative.

Proprietary technologies in the textile sector are a core factor in the U.S. textile industry remaining profitable in an extremely competitive global marketplace. These technologies are expensive to develop yet often vulnerable to reverse engineering. Like virtually every other U.S. manufacturing sector, the domestic textile industry has been targeted and damaged by China's brazen intellectual property theft. Below are some specific examples of how China's illegal IPR activities have damaged the U.S. textile industry.

> **High Performance Fibers, Yarns, and Fabrics:** Consumers of athletic and activewear apparel demand products with an ever-increasing level of performance. This includes products with high elasticity, extreme wear and abrasion resistance, and enhanced breathability and moisture-wicking capabilities. Such athletic and activewear apparel draw their unique capabilities directly from the fibers, yarns, and fabrics from which they are constructed.
>
> A specific example of Chinese IP violations in this area involves an NCTO member company and holder of various patents on fabrics that are continuously under assault. These fabrics are of a highly specialized and complex construction that are designed to impart specific performance characteristics in activewear apparel. Moreover, the performance capabilities of these patented fabrics have resulted in their selection for use in the U.S. military's Generation III Extended Cold Weather Clothing System (GEN III ECWCS). The fabrics provide a multi-layered insulating system that allows U.S. warfighters to adapt to varying mission requirements and environmental conditions. The unique construction of

[23] See: www.affoa.org

these textile materials offers a significant range of breathability and environmental protection, providing greater versatility in meeting the needs of our soldiers.

One of the patents covers a composite fabric that is designed to rapidly remove moisture from the skin. The item includes an outer layer fabric made of highly absorbent materials, formed from yarns comprised of a plurality of fibers. The composite has a second, inner layer fabric formed with both vertical and horizontal channels, also constructed from yarns with a plurality of fibers. The outer layer and inner layer fabrics are knitted concurrently so that the layers are separate and distinct yet integrated one with the other.

The level of detail provided in relation to this specific fabric is intended to give insight into the highly sophisticated and proprietary nature of the modern, U.S. textile industry. This complex fabric is the result of extensive research, testing, and development on the part of a well-respected U.S. textile manufacturer known for innovation in the performance fabric sector. Despite being solely responsible for its invention and a legal patent holder of the product, the U.S. textile manufacturer finds itself competing against its own fabric in markets both at home and abroad. In fact, the patent holder has identified garments imported by numerous major U.S. brands that are believed to violate their patent. Just last month they began legal steps to address this patent infringement, including notifying the brands of their possible liability. In each of these instances, the infringing fabric was made and sourced from China.

Home Furnishings: As the name implies, textile home furnishings are the very products we use each day in our homes – carpets and rugs; towels, sheets, pillowcases and comforters; drapery and other window coverings; and upholstered furniture. This area is especially susceptible to intellectual property theft as China often copies popular product designs and patterns with impunity. This problem is rampant in China where U.S. copyrights and designs are an easily circumvented barrier within the Chinese market. A virtually inaccessible Chinese judicial system that denies reasonable judgements against intellectual property pirates has aided and incentivized the illegal behavior of our competitors in the Chinese textile home furnishings sector.

China's surge into the U.S. textile market in the 2000's came with devastating effect to U.S. upholstery fabric makers, forcing the closure of virtually every large domestic upholstery mill, including Quaker, Joan/Mastercraft, Burlington, and Hoffman, as well as a number of smaller operations. Certain U.S. companies attempted to partner with Chinese mills in a last-ditch effort to survive, only to find that these partnerships were an elaborate means to further steal weaving technology and design expertise. One such company learned that their Chinese partner was actually a company owned by the People's Liberation Army, who dissolved the relationship after it had successfully drained the U.S. company of its proprietary information.

U.S. textile home furnishings companies report that it is normally less than six months between the display of a new or popular design before they experience the copying of that same proprietary textile design by Chinese manufacturers. These companies note that when copyright infringement cases are successfully adjudicated in China, penalty judgements are routinely well below the actual level of damages sustained. Even then the ability to enforce rulings and collect penalties is frustratingly slow and, in some cases, nonexistent as guilty parties often change identity and reorganize as a new company that was not a defendant in the original infringement case. In addition to upholstery fabrics, makers of carpeting have been especially damaged. The ability to penetrate very lucrative institutional customer markets in China, such as hospitals and hotels, has been severely hampered by Chinese competitors who simply offer identical patterns and designs for these products at lower prices.

Advanced Textiles: Notably, one of the ten R&D priority technology domains designated in the Made in China 2025 national plan is "new materials," of which textiles is listed as a specific example of an "advanced basic material" within this grouping.[24,25] Among China's targeted goals for these materials are to "reach effective control over the entire scale of the basic material industry" by 2020 and to have an upgraded production structure that should exceed "over 90% of the domestic market" by 2025.[26]

Advanced textile materials are of critical importance to the future of the U.S. textile sector. They represent a potential growth area in terms of domestic investment, output, and employment as textile innovators drive new and sophisticated applications for highly specialized yarns and fabrics. These innovations have resulted in the introduction of textile products in widely diverse markets such as medical, telecommunications, aerospace, construction, environmental remediation, and automotive.

The U.S. government has been a strong supporter of the U.S. industry's groundbreaking efforts in this area. On April 24, the U.S. Department of Commerce and IFAI co-hosted the 2018 Smart Fabrics Summit in Washington, DC.[27] The conference provided a forum for public and private sector leaders in technology, apparel, and textiles to highlight recent developments in the smart fabrics industry, identify opportunities for public/private collaboration, and discuss key industry challenges. Noting the highly valuable and proprietary nature of advanced products, the summit included a panel specifically dedicated

[24] U.S.-China Business Council, "Unofficial USCBC Chart of Localization Targets by Sector Set in the MIIT Made in China 2025 Key Technology Roadmap," February 2, 2016. https://www.uschina.org/sites/default/files/2-2-16%20Sector%20and%20Localization%20Targets%20for%20Made%20in%20China%202025.pdf

[25] OECD (2017), "The Next Production Revolution: Implications for Governments and Business," OECD Publishing, Paris. https://read.oecd-ilibrary.org/science-and-technology/the-next-production-revolution_9789264271036-en#page334

[26] See: https://www.uschamber.com/sites/default/files/final_made_in_china_2025_report_full.pdf

[27] See: https://smartfabricssummit.com/

to IP concerns. The Summit's keynote speaker was Wilbur Ross, Secretary of the U.S. Department of Commerce.

As a specific example of IP issues in the advanced textiles space, a current NCTO member company produces a sewn textile structure product for the telecommunications sector that they manufacture in China for sale in the Asian market. The company makes the same product in the United States for sale in the U.S. market and other countries. While the product required significant effort to develop and optimize, it is relatively simple to manufacture. The U.S. company obtained numerous patents including invention patents and utility models in China. Despite these patents, and due to the fact that this product was easy to reverse engineer, numerous Chinese companies knocked off this product in multiple provinces.

The U.S. company successfully sued several of these manufacturers for patent infringement as well as successfully defended multiple attempts to have one of the primary patents invalidated. Engaging in these suits has resulted in business disruption in Asia and has been a significant expense to the U.S. company. The extended legal fight to defend this technology has resulted in price erosion for the products both inside and outside of China. Damage awards from these lawsuits have tended to be low, collection of the damages has proven to be difficult, and at least one infringer simply opened another infringing company after the first was enjoined from infringing on the patent.

Consumer Impact Analysis

Beyond the direct question of intellectual property violations, another key metric in the construction of the 301retaliation list was a ranking of products "according to the likely impact on U.S. consumers." Again, we believe that the administration erred in assuming that products in the textile and apparel sector were not good candidates for the list based on consumer concerns.

The application of a penalty tariff would only impair U.S. consumers if there were no viable alternatives serving as a reliable source of supply for the same goods. In fact, the textile and apparel industry is unique among industrial sectors in this regard. Virtually every region and country in the world has an indigenous textile and apparel industry.

In terms of the U.S market, products in this sector, especially finished apparel and home furnishings, are globally and abundantly sourced. The U.S. Department of Commerce lists ninety-eight different countries in their monthly textile and apparel Major Shippers Report. Last year, the United States imported over $73 billion in textile and apparel goods from sources other than China. Many of these imports came duty-free from our free-trade partners who generally produce finished apparel and home furnishings that compete directly in the U.S. market with Chinese-made product.

Beyond our free trade partners, there are numerous sourcing options in Asia that have also seen their access to the U.S. market stunted by China's relentless drive to dominate the U.S. and other

important world markets. Sixteen different countries, other than China, shipped at least $1 billion worth of textile and apparel product to the United States in 2017.

To argue that the American consumer would be deprived of choice or forced to pay significantly more for their goods in this sector ignores the reality of the numerous and varied global suppliers in this sector. Exaggerated claims of consumer disruption have blocked previous administrations from taking responsible actions to correct China's abusive and illegal trade practices.

The Trump administration has a generational opportunity to help redirect global sourcing in this sector in a manner that rewards countries that have not engaged in predatory practices, such as the outright theft of U.S. intellectual property. Apparel suppliers in the Western Hemisphere would be well positioned to accommodate sourcing shifts away from China. Many countries in the Western Hemisphere have well-established apparel sectors that benefit from U.S. duty-free treatment under our free trade and preference program structure. Further, these countries utilize U.S.-made textile inputs to a far greater degree than China. By placing apparel and home furnishings items on the retaliation list, the administration would not only address China's illegal domination of the U.S. market for these products, it would boost U.S. production and exports of textile goods.

Further it is a tactical mistake to exempt strategically important industries in China from the retaliation list. The textile and apparel sector in China is a critical aspect of their entire national economy due to the extraordinary number of workers employed in this industry. According to reports, the textile and apparel sector is the largest single provider of industrial employment in China, with approximately 24,000 enterprises[28] responsible for over 10 million direct jobs.[29] It is also clear that there are tens of millions of workers employed in China in sectors that support textile and apparel production, such as chemicals, transportation and shipping, machinery suppliers, and packaging.

If the United States truly wants to resolve China's rampant IPR abuse, sectors that are a pillar of their economy will need to be included on any 301retaliation list. Threatening China's illegal stranglehold on hundreds of billions of dollars of exports in the textile sector will translate into legitimate concerns as to China's ability to maintain the vast number of jobs currently held in the textile sector. In contrast, leaving sectors off the list that are highly sensitive within China's economy will weaken U.S. leverage necessary to achieve a long overdue remedy to this problem.

Lagging R&D Expenditures in China

Finally, we would note the extremely low level of resources that China applies to research and development in the textile and apparel sector. According to China's most recently completed five-year plan, as summarized in the chart on page 11, R&D spending as a percentage of revenue was only 0.67 percent in the 2011-2015 timeframe. This ratio pales in comparison to R&D efforts in

[28] "Textile Industry" https://china.lbl.gov/research-projects/textile-industry
[29] See: www.mdpi.com/2071-1050/9/8/1344/pdf

the U.S. textile sector, which normally runs at 1.5-3 percent of revenue. China's paltry R&D spending levels belie their status as the global leader in the textile sector.

On its face, this minimal level of R&D activity, especially during a period of unprecedented expansion into the U.S. and global markets, is a severe indictment of China's rampant abuse of intellectual property rights in our sector. If China were the legitimate global leader in textiles, their massive acquisition of market share would be a direct function of sizable R&D budgets that outpace their global competitors. Yet, their R&D activity considerably lags that of the U.S. and European textile sectors. The only logical conclusion is that China is content to allow the U.S. and Europe to conduct expensive R&D activities, noting that they can engage in sophisticated technology theft with impunity due to central government policies that condone this illegal behavior.

Further, Chinese R&D needs to be accurately defined. Much of what they do spend on "R&D" is tied to intellectual property theft in the form of reverse engineering advanced fibers, yarns, and fabrics to mimic performance breakthroughs made by U.S. textile researchers. While much of China's R&D is dedicated to industrial espionage and product innovation theft, the U.S. textile industry spends billions of dollars on legitimate R&D. It is a devastating and unacceptable advantage for China to simply copy these product innovations and proprietary designs and then force U.S. companies to further exhaust resources through a legal defense of their patents and copyrights.

Textile Machinery

In addition to our views on textile and apparel products, we are greatly concerned over the inclusion of textile machinery on the retaliation list. We note that virtually every HTS line covering textile machinery was included on the list, accounting for $63 million in U.S. imports from China in 2017.

The inclusion of these products is detrimental because almost no textile machinery is manufactured in the United States. Consequently, U.S. textile companies are almost entirely dependent on imports to equip their factories. As such, NCTO strongly recommends the removal of all textile machinery-related items on the current retaliation list.

As documented earlier in this submission, China's explosive growth into the U.S. textile and apparel market twenty years ago resulted in a severe contraction of domestic manufacturing and employment. Associated with that contraction was the loss of hundreds of thousands of U.S. jobs in support industries that serviced the textile sector. U.S. textile machinery manufacturers were devasted and, in fact, serve as a clear example of what happens to suppliers to U.S. manufacturers when predatory competitors such as China are allowed to violate U.S. trade laws. Textile machinery is now mainly produced in the European Union and Asia. European and Asian textile machinery makers generally operate on the following model in the U.S. market:

- Import new or used textile machinery
- Installation of imported machinery

- Operator training
- Maintenance and refurbishment contracts

The failure to remove textile machinery from the list will result in a set of predictable and negative ramifications for U.S. textile manufacturers, including:

- An increase of production costs for U.S. textile manufacturers, thereby exacerbating the already significant and often illegally-attained price advantages that China holds in the textile sector
- Increased equipment and production costs will threaten the over 500,000 U.S. jobs directly employed in the domestic textile production chain
- Increased costs for domestic textile producers will make U.S. exports of textile goods costlier and damage our free trade partners in the Western Hemisphere who are competing directly with China on finished items in the U.S. market
- Finally, because there are almost no U.S. manufacturers of textile machinery, domestic machinery manufacturers will not see any increased sales or market share from the inclusion of these products

For these reasons, we strongly urge the Trump administration to remove all textile machinery items from any final retaliation list comprised in this case.

Conclusion & Recommendation

In summary, the U.S. textile industry has been the victim of an aggressive set of predatory trade practices on the part of China for decades. Beyond direct competition from state-owned enterprises, a pervasive system of subsidies, dumping, and lax production standards, the Chinese have targeted the U.S. textile and apparel sector with rampant intellectual property theft. China's illegal actions have contributed to the direct loss of over one million jobs in our sector and countless others throughout the various support industries that service the domestic textile sector.

Moreover, we believe that the United States would greatly enhance its negotiating leverage in this process through the inclusion of products in a sector that is of immense importance to the Chinese economy. Noting the extraordinary level of employment in China's textile and apparel sector and its dependence on key global markets, such as the United States, China cannot afford a disruption that threatens its textile and apparel export capability. It is only logical that China will more sincerely seek a solution in the current 301 IPR case if the critical industries that support its overall economy pay a price for China's illegal intellectual property theft.

Finally, the U.S. textile and apparel sector has been highly victimized by Chinese IPR abuse. U.S. government data clearly show the textile and apparel sector as the unfortunate leader in DHS IPR product seizures. Further, U.S. textile manufacturers are forced to defend their patents and proprietary designs in the Chinese, United States, and other markets to address the theft of intellectual property produced through expensive and strenuous research and development.

For all the reasons listed in this submission, the United States textile industry strongly encourages the U.S. Trade Representative and President Trump to adopt the following recommendations as part of any finalized retaliation list associated with the pending China 301 IPR case:

- Add the products identified below from the traditional chapters of the Harmonized Tariff System (HTS chapters 50-63)

    - Finished apparel items that track closely with product being sourced from U.S. free trade agreement partners in the Western Hemisphere
    - Textile-based home furnishings
    - Advanced textiles -- defined as textile inputs or finished products designed to meet rigorous safety and/or unique, or other high-performance criteria

- Apply the maximum retaliatory tariff rate of 25% to any textile and apparel products that are added to the list
- Remove all textile machinery items currently included on the list

By adopting these recommendations, the Trump administration would be providing a level of much overdue relief to an industry that has been directly targeted and heavily damaged by China's industrial policy. Like other sectors, we have seen our intellectual property stolen through this targeting as China uses every means imaginable to unfairly gain market share in the United States and other key global markets. As documented in this submission, we believe the justification for inclusion of products in our sector is overwhelming due to China's persistent and unfair practices in this area. On the other hand, failure to include textile and apparel products on the pending 301 retaliation list would in fact condone China's predatory and often illegal activity in this important sector.

Thank you for the opportunity to provide these comments.