

**An Analysis of the US Bottom Weights Market:
Production, Consumption, and Denim**

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ABSTRACT

Growing denim fashion trends coupled with developments in the global market have caused changes in the US apparel marketplace in terms of production and consumption. Therefore, this research explored the current condition of the US market to determine if the United States was a premiere marketplace for production and consumption of bottom weights and denim, in particular. In order to reach a conclusion, market research and statistical analysis was completed in the following areas: production, consumption, imports, exports, global supply chains, and retail channels. This analysis concludes that the US is not the premier production market for bottom weights and denim. However, there is a production opportunity for the United States in terms of niche bottom weights such as premium denim. Although the US is not a premier production market for bottom weights, it is a premier consumption market for bottom weights and denim. Results also identified major trading partners with the United States, such as Mexico and Central American countries. With the increasing imports of bottoms, retailers have placed increased importance on full package sourcing.

Keywords: Denim, bottom weights, production, consumption, textile industry, apparel industry, trade, import, export, cotton, retail channels, global supply chains

From white jeans in Spring 2005 to the newest fall styles, denim has become a most popular fashion trend. In fact, the denim apparel market grew 5.0% and 6.8% in unit sales and dollar sales respectively in 2004 (Denim, 2005). This statistic is not surprising, given the proliferation of denim when looking at runways, fashion magazines, and celebrity style. In addition, jeans are becoming more and more popular in business settings and are no longer considered a casual look. By accounting for nearly 75% of the market, jeans drove the growth of the denim apparel market. In 2004, jeans increased 10.8% in dollars as well as 8.8% in units. Jeans also accounted for the largest growth in the men's denim

market and the only market to grow in women's denim apparel (Denim, 2005). Therefore, it is fitting to further analyze denim jeans and the denim market as a subset of the larger bottom weights market in the US marketplace.

In order to understand the importance of the US bottom weights market in the global textile and apparel industry, research and statistical analysis have been completed in the following areas: production, consumption, imports, exports, global supply chains, and retail channels. In addition, due to the scope and nature of the research, as mentioned above, specific data on denim fabric and denim jeans are provided where appropriate.

Production and Consumption of Textiles and Apparel by US Market

The global textile and apparel industry continues to change as new trade agreements regulate production and consumption through tariffs, quotas, and duties. In addition, the elimination of quotas has a large impact on the production and consumption of fabrics and apparel made in the US and the global marketplace.

Production of Apparel, Fabric, and Yarn

Quantity of production and value of shipments for US apparel are shown in Table 1. Due to available data, quantity and value of apparel produced in the United States are also broken down into two categories: men’s and boys’ jeans, and women’s and girls’ jeans. In 2004, the United States produced 2,551,456 thousands of units with a shipment value of \$19,515.6 million. As shown, quantity and value of total apparel produced and men’s and boys’ jeans have decreased since 2003. However, women’s and girls’ jeans have increased slightly, a value of \$78.7 million dollars.

Table 1: Summary of Quantity of Production and Value of Shipments for Apparel: 1999 to 2004

[Quantity in thousands of units. Value in millions of dollars]

Year	Total		Men’s and Boys' Jeans		Women’s and Girls' Jeans	
	Quantity	Value	Quantity	Value	Quantity	Value
2004	2,551,456	19,515.6	144,681	1,803.1	79,301	1,117.5
2003	3,085,215	22,613.5	158,312	2,080.0	78,442	1,038.8

Source: (<http://www.census.gov/cir/www/315/mq315a.html>, 2005)

Production of denim jeans can also be analyzed by fabric with which it is made. As can be expected, the majority of both men’s and women’s jeans are made from cotton, shown in Table 2. In 2004, 132,259

of the 144,681 thousands of units of men’s jeans were made from cotton (91.4%), and 71,927 of the 79,301 thousands of units of women’s jeans were made from cotton (90.7%).

Table 2: Quantity of Production of Apparel by Type of Fabrics: 2004-2003

[Quantity in thousands of units]

Product description	Total	Cotton or chiefly cotton	Manmade or chiefly manmade	Wool or chiefly wool	Other and not specified by kind (n.s.k.)
2004					
Men's and Boys' Jean	144,681	132,259	(D)	(NA)	(D)
Women's and Girls' Jeans	79,301	71,927	(D)	-	(D)
2003					
Men's and Boys' Jean	158,312	155,043	1	(NA)	3,268
Women’s and Girls' Jeans	78,442	70,793	(D)	-	(D)

Source: (<http://www.census.gov/cir/www/315/mq315a.html>, 2005)

Finally, spun yarn production can also be seen in Figure 1. Over the past eight years, from 1997 to 2004, US production of spun yarn has decreased by 3,125 million

pounds. Since 2003, spun yarn production has decreased 215 million pounds to 4,986 million pounds.

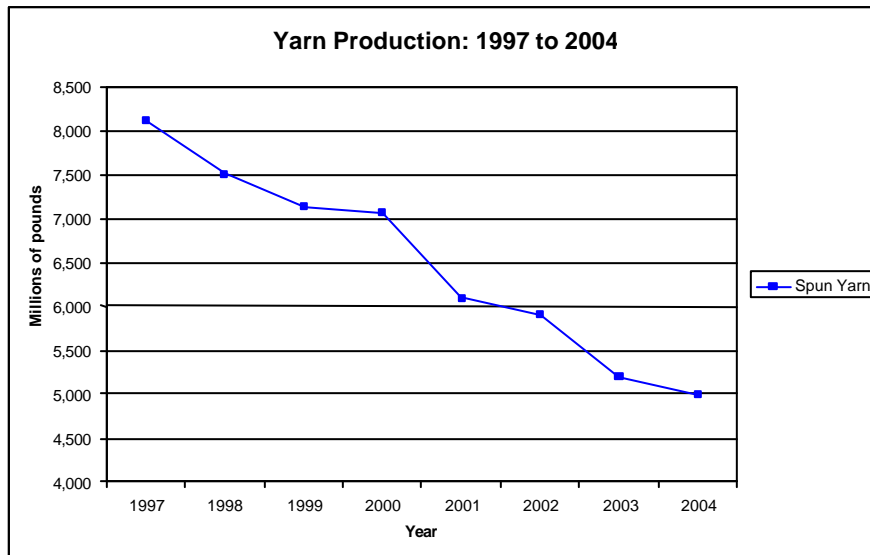


Figure 1: Spun Yarn Production: 1997 - 2004

Source: (<http://www.census.gov/cir/www/313/ma313f.html>, 2005)

As can be seen in Figure 2, US production of bottom weights has been decreasing, from 1.1 billion units in 1997 to nearly 6.4 million units in 2003. This represents a 43% decrease over a 7 year

period. On the other hand, imports have risen 109%, from 1.3 billion units in 1997 to a final import penetration of 2.7 billion units in 2003 (Current Industrial Report, 2005).

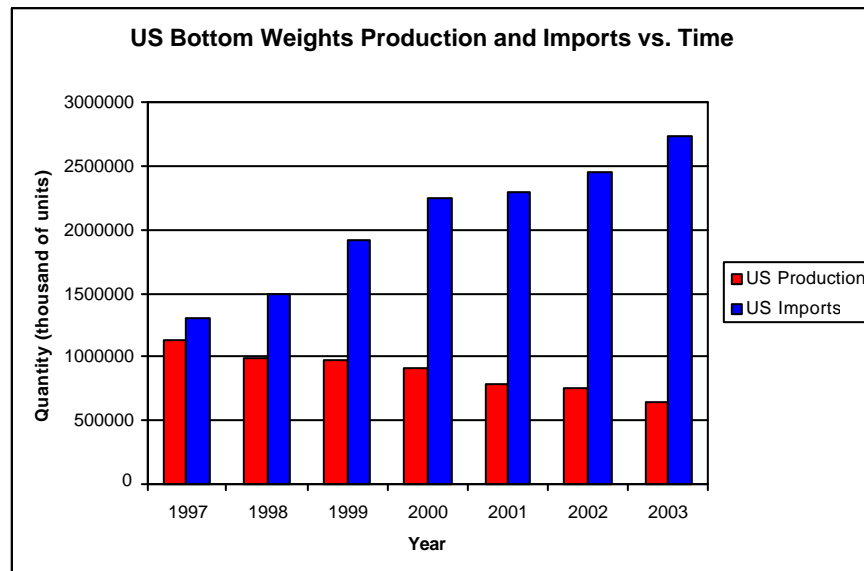


Figure 2: US Bottom Weights Imports and Production

Source: (www.census.gov/cir/www/315/mq315a.html, 2005)

Consumption of Bottoms Weights and Cotton

Apparent consumption, compared to exports and imports, for bottoms was found in the Current Industry Reports from the US Census Bureau. Statistical data for apparent

consumption of men's and boys' bottoms are not given due to risk of disclosure of proprietary data for individual companies. However, data are given for women's and girls' bottoms. Apparent consumption has not drastically changed from 2003 to 2004;

during this time, apparent consumption was 1,714,517 thousands of units. Similarly, the percent of imports to apparent consumption only increased approximately 2% from 2003 to 2004 (Current Industry Report, 2005).

Cotton, which is the predominate fiber in denim jeans, has seen a decline in consumption from 2003 to 2004. In 2003, 6,567,443 cotton bales were consumed; however, only 6,008,536 cotton bales were consumed in 2004 (Current Industry Report, 2005).

Imports and Exports of Textiles and Apparel

Imports and exports of bottoms were found from the Office of Textiles and Apparel (OTEXA). Imports of bottoms were reported separately for cotton and man-made fibers. The top ten importers of cotton bottoms were responsible for importing just over 74 million dozen pairs of pants in calendar year 2004 (The Major, n.d.). Figures 3 and 4 show the countries with the highest amount of shipments into the US of cotton and synthetic bottoms, respectively. One can see from Figures 3 and 4 that the largest exporter to the US of both cotton and man-made fiber bottoms is Mexico. Latin America represents a significant number of countries exporting to the US, especially in cotton bottoms. Other significant imports came from Asia, especially MMF bottoms.

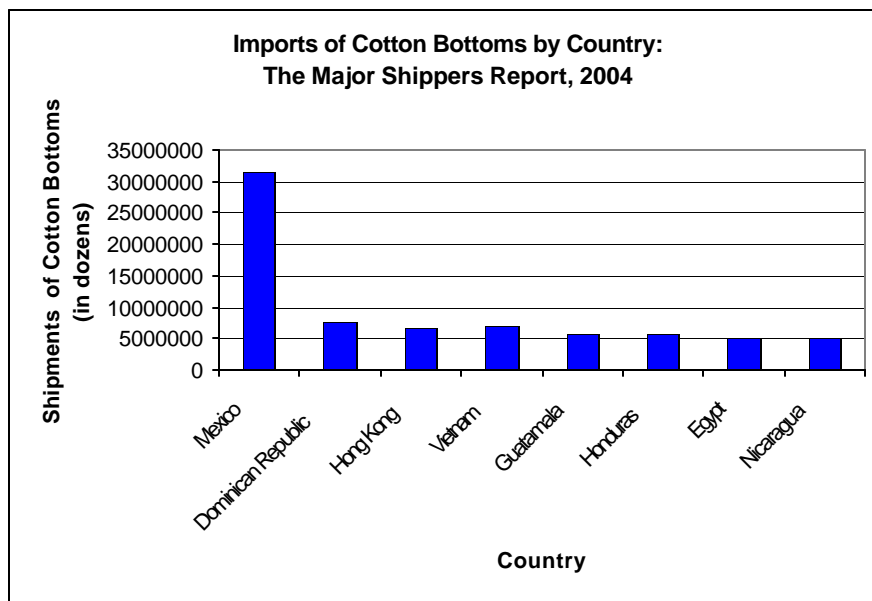


Figure 3: Imports of Cotton Bottoms by Country
 Source: (<http://www.otexa.ita.doc.gov/catss.htm>, n.d.)

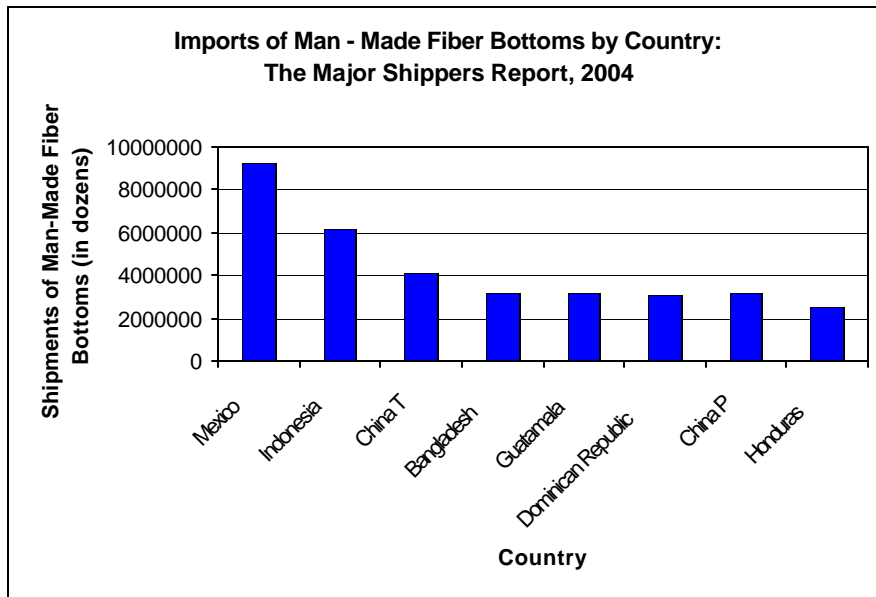


Figure 4: Imports of Man – Made Fiber Bottoms by Country
 Source: (<http://www.otexa.ita.doc.gov/catss.htm>, n.d.)

Due to the nature of available data, import data for US denim are reported in million square meter equivalents, or SME. Shown in Figure 5, Mexico, Italy, Japan, and Hong Kong were the top four countries from which the US imported denim fabric

(Denim, 2005). Imports of denim apparel are also shown in Figure 6. The majority of denim apparel imports come from Mexico, with other imports coming from Asian and Central American countries (Denim, 2005).

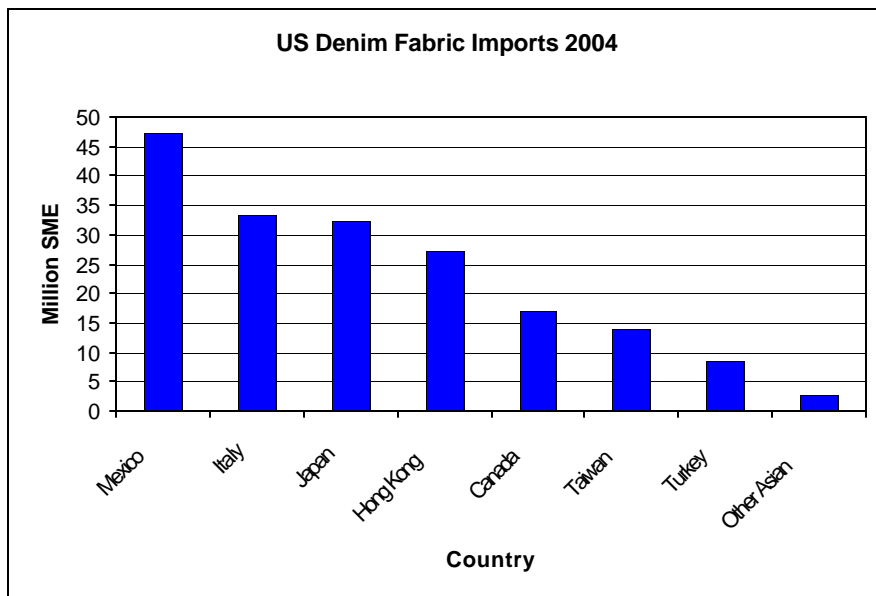


Figure 5: US Denim Fabric Imports
 Source: (Denim, 2005)

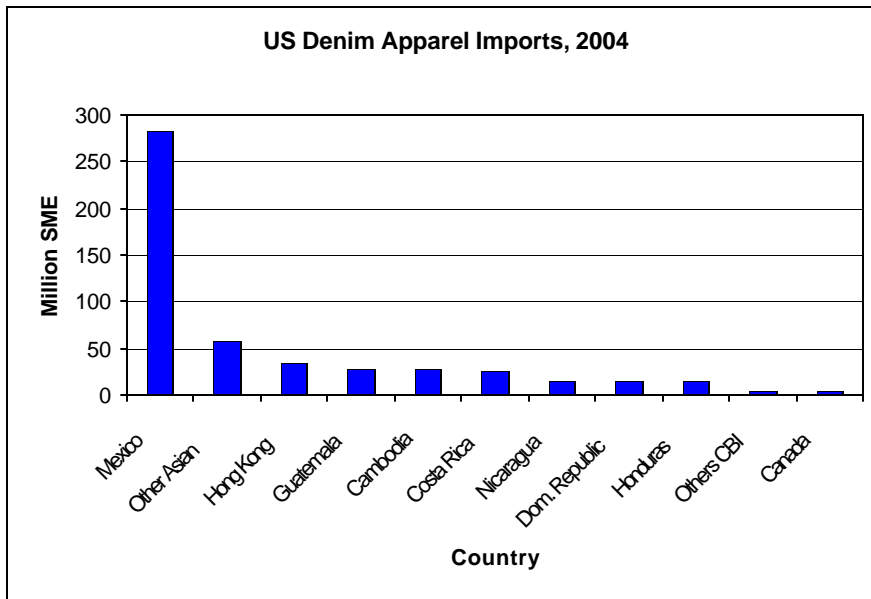


Figure 6: US Denim Apparel Imports
Source: (Denim, 2005)

In terms of exports, Mexico and Canada lead the list of countries to which the US exports bottoms, shown in Figure 7. Export data were not reported separately for cotton and man-made fiber bottoms, and export data were reported in terms of the

value of the shipments. Exports of bottoms to Mexico and Canada totaled nearly \$373 million (The Export, n.d.). Exports to the top ten countries totaled nearly \$672 million.

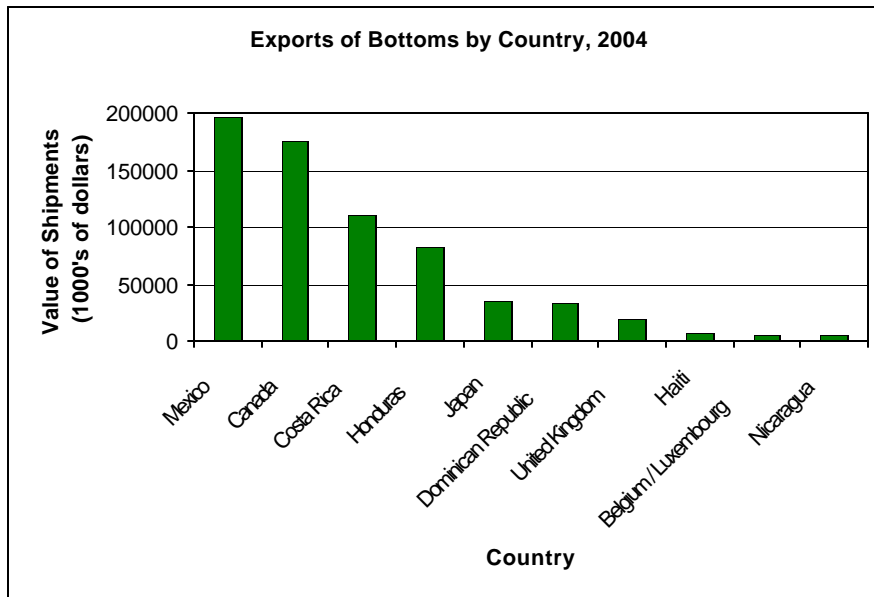


Figure 7: Exports of Bottoms by Country
Source: (<http://www.otexa.ita.doc.gov/explist.htm>, n.d.)

Exports of denim are reported by Cotton Incorporated in free-alongside-ship (FAS) dollar values. Exports of denim apparel are shown in Figure 8. Denim apparel exports to Canada were nearly \$100 million FAS, and represented the largest

export market for US denim apparel at 33.5% market share (Denim, 2005). The top two major export markets for US denim fabric were Mexico and Guatemala, as shown in Figure 9.

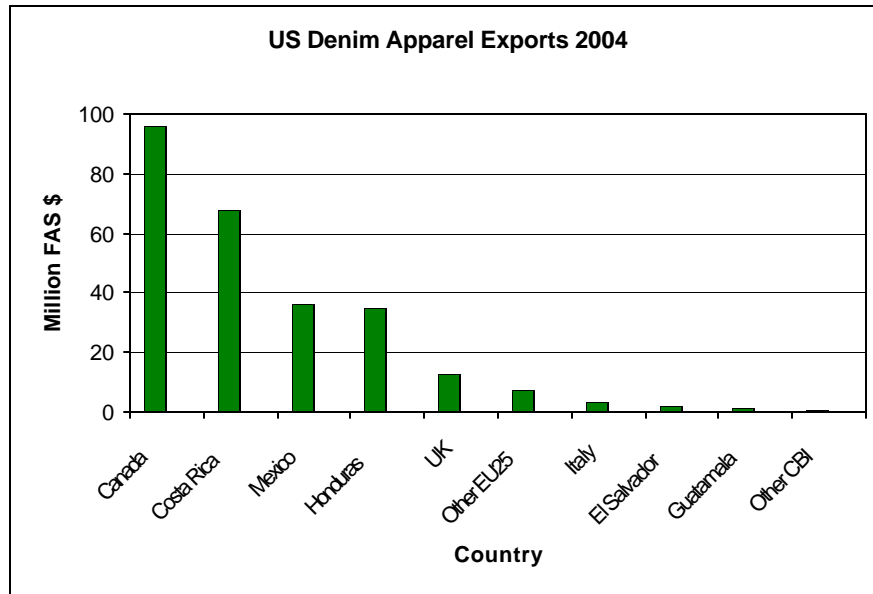


Figure 8: Exports of US Denim Apparel
Source: (Denim, 2005)

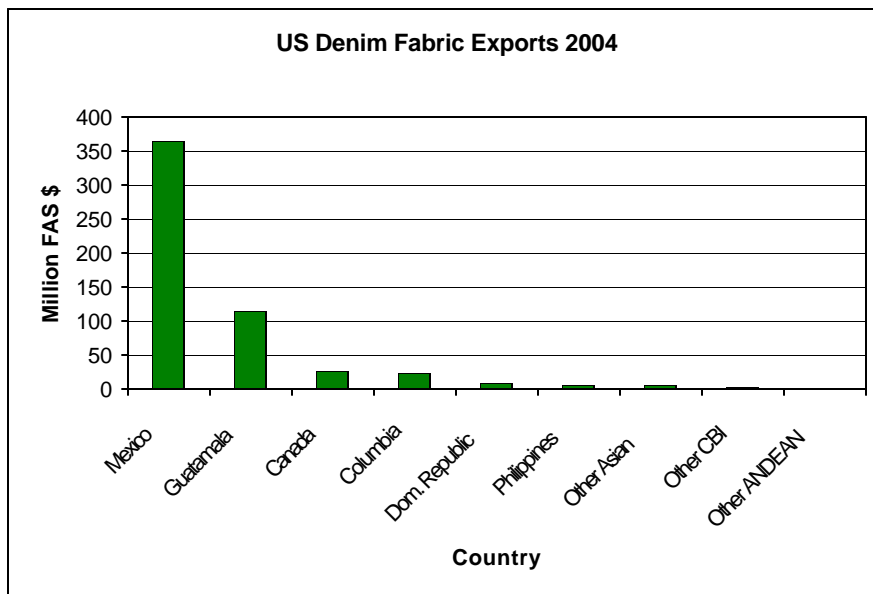


Figure 9: Exports of US Denim Fabric
Source: (Denim, 2005)

Important Trading Partners

The most important trading partner for the US bottom weights market is Mexico.

Mexico leads imports and exports of bottoms; however, Canada represents the largest export market for denim apparel.

Other important trading partners are the Dominican Republic, Guatemala, Honduras, Costa Rica, Italy, Taiwan, Hong Kong, and Indonesia.

Global Supply Chains

Due to the elimination of quotas brought about by the WTO, China and East Asian countries, including India and Pakistan, have the most to potentially gain (Kilduff, 2005). Although these countries have a disadvantage due to proximity to the US market, improving communications and decreasing shipping costs have lessened this disadvantage. Also, American textile companies have focused on mass markets, while European and Asian producers have focused on niche products, allowing for increased competitive advantage in the area of expertise – fashion (Kilduff, 2005). Apparel companies are increasingly moving to brand management companies, such as Sara Lee and Nike. This presents a challenge for US retailers as an increased number of competitors build on the strength of their brands. US retailers will have to continue to seek efficiencies in the supply chain and focus marketing efforts on the target customer.

The growth of clothing trade between 2005 and 2010 is predicted to be as much as 8-10% per year, compared to a predicted growth in textile trade of less than 1% per year (Singhal, Agarwal, and Singh, 2004). Another trend predicted by Singhal, Agarwal, and Singh is an increase in the number of vertical or “virtual” vertical sources. This is because the major consideration prior to quota elimination was the availability of quota in a particular country, but has now become the availability of raw materials. This will lead to companies procuring raw materials and converting them (vertical sources), or forming partnerships with raw material converters (“virtual” vertical sources).

Another trend in global supply chains for the future is sourcing from the most competitive countries, in terms of cost, quality, and productivity (Singhal, Agarwal,

and Singh, 2004). According to Singhal, Agarwal, and Singh, proximity to market, coupled with capacity will also be an important feature of global textile and apparel supply chains. Companies want to manage fewer suppliers and want shorter lead times; in order for this to happen, suppliers will need the ability to produce larger volumes closer to the US market.

The trend toward full package sourcing is also discussed by Singhal, Agarwal, and Singh. One manufacturing company that has successfully implemented full-package sourcing is TAL Apparel. With the increased importance on full package sourcing, US retailers will begin to accept nothing less than full-package.

Combining trends in supply chains with import/export data, US retailers should look for a full-package source with high-volume production capabilities that are close to market.

Retail Channels in the US Marketplace

As the global marketplace continues to change with the elimination of quotas, new trade agreements, and new consumers, the US retail marketplace is also affected. Changes in fashion trends, the economy, discretionary income and other factors lead to the fluctuation in success among different retail channels in the United States. There are several different retail channels that exist in the marketplace: department stores, specialty stores, national chains, mass-merchants, off-price, and others including non-store retailers or direct marketing. Characteristics such as price, depth and breadth of product offerings, locations, product labels, branding, and other logistics differentiate these retail channels from each other. As of 2004, total US retail sales had grown 8% to \$4.056 trillion, including food service, gasoline, and automobiles (Retail, n.d.). More specifically, US apparel sales totaled \$173 billion, an increase of 4% from 2003 (Current Environment, 2005).

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One of the most noticeable trends in the marketplace is the prominence of the largest retailer in the world, Wal-Mart. The mass merchant gorilla has driven up competition and driven down prices throughout the US and the global marketplace (Retail, n.d.). According to Retail Merchandiser in 2004, the mass channel sales totaled \$274.5 billion, with 27.65% and 23.04% attributed to sales of home/hardlines and apparel, respectively (Home 2004). Other research considers big box retailers, such as Wal-Mart, Target, and Kmart to be part of the discount channel, which represented about 40% of the total apparel market or about \$70 billion (Apparel, n.d.). In addition, many mass-merchants are stealing market share from other channels by introducing designer lines at a low price (Apparel, n.d.). For example, Target introduced Isaac Mizrahi and Wal-Mart has acquired George, along with offering a lower priced line of Levi's jeans.

Many consumers are becoming cross-shoppers. In other words, consumers who shop at Wal-Mart and Costco are also shopping for luxury items in other channels such as Abercrombie & Fitch in the specialty channel (Current 2005). In addition to the mass channel, specialty retail channels are steadily improving. Due to changing fashions and stock market rebounds, sales in the specialty channel improved 3.9% in 2003 (Huff, 2004). Specialty retailers are changing their strategies by adapting to the changing consumer, in terms of refocusing positioning with core customers through new product lines, sizes, and styles (Huff, 2004). A recent example of the new strategy of specialty stores is Gap Inc.'s recent opening of Forth & Towne, a store that will target the more mature woman, who The Gap was not reaching. Plus-size retailers, such as Lane Bryant, have also found success in their growing niche market.

Specialty retailers have stolen market share from department stores, whose 2003 sales decreased 2.7% (Department, 2004) totaling \$63.2 million in sales for 2003 (Home 2004). Department stores have

lost share for several reasons. Specialty stores offer "narrower but more focused, easier-to-shop, lifestyle-relevant assortments." To combat the inconvenience of department stores, many are introducing private brands, updated store designs, non-mall locations, and new advertising campaigns. (Department, 2004) Some department stores have incorporated restaurants, spas, and other luxuries. Nordstrom, for example, succeeds in the market with an 8.6% increase in 2004 sales (Retail, n.d.). They focus on luxury merchandise and personal service, which holds a great deal of value with consumers. Similarly, chain stores have incorporated private brands into their clothing assortments, such as Daisy Fuentes for Kohl's.

The less traditional retail channels, the direct marketers, are finding great success in the US marketplace. Direct marketing includes cataloging, Internet sales, television selling, and door-to-door selling. Online retail sales totaled \$71 billion, in 2004 an increase of 27%, a trend that is expected to continue (Retail, n.d.). While many consumers use the Internet to shop, most consumers still prefer to try on the clothing and purchase in the retail store. As the marketplace changes, other non-traditional channels are emerging including "Category-Killers", such as Linen's n' Things, and showcase/super-merchandisers such as Cabela's and Bass Pro Shops, which offer on-site testing and try-out of products prior to purchasing. (Retail, n.d.)

Denim in Retail Channels

More specifically, denim jeans are becoming more popular among US consumers in all retail channels. All channels show an increase in unit sales change, especially national chains with a 22.8% increase at an average of \$23.89 a pair, as shown in Table 3. However, mass merchants led unit sales in men's denim jeans, compared to the specialty channel which led unit sales change for women's denim jeans. Average prices and unit sales for denim jeans in all channels, specific to gender, can be found in Table 4.

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Table 3: Share, Sales Growth, and Price of Denim Jeans by Retail Channel (2003-2004)

	Share		Unit Sales Change (%)	Average Price	
	% of Unit Sales	Point Change		(\$)	% Change
Department	9.8	0.1	9.4	31.73	0.5
Specialty	24.5	-0.4	7.2	28.91	5.5
Chain	20.1	2.3	22.8	23.89	-0.3
Mass	25.4	-0.8	5.6	16.67	0.0
Other	20.2	-1.1	3.1	23.21	-0.3

Source: (STS Market Research, as cited in Denim, 2005)

Table 4: Price Points and Outlet Distribution of Denim Jeans by Gender

	Average Price (\$)		Unit Sales (%)		Dollar Sales (%)	
	Men	Women	Men	Women	Men	Women
Department stores	33.84	29.87	9.50	10.00	13.00	12.80
Specialty stores	29.78	28.33	20.30	28.30	24.50	34.60
National chains	25.28	22.35	21.90	18.40	22.40	17.70
Mass-merchants	17.19	16.15	26.30	24.60	18.30	17.10
Off-Price	24.23	18.92	4.50	7.00	4.40	5.70
Other	24.85	23.52	17.30	11.80	17.40	12.00
Total	24.76	23.16	100.00	100.00	100.00	100.00

Source: (STS Market Research, as cited in Denim, 2005)

Important Facts About the US Marketplace

- US production of bottoms is decreasing, while imports of bottoms are increasing.
- Mexico and Central America represent the largest number of major trading partners for bottoms and denim, due to proximity to the US market.
- Specialty stores represent the second largest retail channel.
- Retailers have placed increased importance on full-package sourcing.

Looking Forward

This analysis has found that the US is not the premier production market for bottom weights and denim, specifically. However, it is important to note that the US does have the opportunity for niche bottom weight production, including premium denim – the center of premium denim production in the US is Los Angeles.

Although the US is not a premier production market for bottom weights, it is a premier consumption market for bottom weights and denim.

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