How Changing Industry Trends Can Rebuild the U.S. Apparel Industry

By Eric Pardee, MBA

- Until the 1960’s, U.S. clothing and footwear industries mass-produced standardized styles mostly within their borders.
- In the 1990’s, retailers began expanding their product ranges and sought to develop more fashionable designs for less.
- This increasingly moved production toward large low-cost labor markets such as China.
- A slough of free-trade agreements, such as NAFTA, and most recently the ending of the Multi-fiber Arrangement (MFA), intensified the shift toward globalization.

1960’s

Source: PBS, Bureau of Labor Statistics

Today

Source: American Apparel and Footwear Assoc., Bureau of Labor Statistics

Source: http://ww2.kqed.org/lowdown/2013/05/24/madeinamerica/
What this meant for U.S. TCLF employment

- In 1971, the U.S. employed approximately 1.2 million Americans in the Apparel Manufacturing and Component Industries
- Today, that number continues to fall, but has stabilized close to 130,000

This number represents the U.S. Cut and Sew industry only
Source: Bureau of Labor Statistics
Source: United States Department of Labor
Where production occurs now (est. 2012)

**World Top 10 Textile Exporters**

1. China
2. India
3. Germany
4. United States
5. Italy
6. Korea
7. Turkey
8. Taiwan
9. Pakistan
10. Japan

**Worlds Top 10 Apparel Exporters**

1. China
2. Italy
3. Bangladesh
4. Germany
5. Turkey
6. Vietnam
7. India
8. France
9. Spain
10. Indonesia

Source: International Labor Organization
Source: McKinsey Apparel CPO Survey
Beginning of trend back to U.S. production

However, changing industry trends are beginning to make U.S. production look more attractive....

- The United States Fashion Industry surveyed executives at leading U.S. fashion companies about top business challenges facing their industry
- Scores are measured on a weighted scale, with a higher number of points awarded to the answer respondents find the most significant

United States respondents MOST LIKELY area for core business expansion in the next two years

Source: 2014 United States Fashion Industry Association
 Beginning of trend back to U.S. production (cont.)

When asked what respondents most pressing business challenge in the upcoming year will be...

Largest business challenge is increasing production or sourcing costs

Second largest business challenge for U.S. Fashion Industry is managing supply chain risks

Source: 2014 United States Fashion Industry Association
Business will be expanding in the United States

74% of retailers say they are somewhat or very likely to expand retail business in the United States.

82% of importers/wholesalers say they are somewhat or very likely to expand business in the United States.
Why the interest in U.S. sourcing and manufacturing

• A short, efficient supply chain can mean the difference between profitability and failure
• The rise and success of “fast-fashion” requires much more flexibility, with a business strategy providing up-to-the-minute styles and trends to consumers at relatively low prices
• This can only be achieved with short lead-times, which are not possible when contracting overseas

Why the interest in U.S. sourcing and manufacturing
A strategic approach

- More suppliers adopting a “Dual Sourcing” strategy
- Increasing sourcing diversity mitigates risk, increases options
- More regional strategy appearing, where production in China is for the Chinese, U.S. production (or close to U.S.) is for Americans

Source: United States Fashion Industry Association
Current U.S. Apparel Market

- The U.S. apparel market is the second largest in the world, comprising about 28% of the global total, with a market value of close to $331 billion.
- Apparel worth $81.8 billion was imported into the US in 2014, up 2.5% from 2013.
- In 2014, imports from China, which accounted for 36.4% of US apparel imports, increased 0.04% from 2013.

Source: S&P Capital IQ, BLS

U.S. apparel imports and exports

2010 average U.S. yearly apparel expenditure by demographic;
- Children under 2: $91
- Boys 2-15: $78
- Girls 2-15: $101
- Men 16 & over: $304
- Women 16 & over: $562
- Footwear: $303
- Other: $261
Current U.S. Apparel and Textile exports

- 89% of industry CEO’s are optimistic to somewhat optimistic about the next 5 years in the U.S. apparel industry

Apparel exports had been declining until 2009, now see positive trend

Textile exports have seen consistent growth (with exception of 2009)

Source: S&P Capital IQ
Source: United States Fashion Industry Association
Current U.S. apparel industry wages and total U.S. employment

- In 2010, there were 7,855 private business establishments in the apparel manufacturing industry, employing 157,587 workers.

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Employment</th>
<th>Mean annual wages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sewing machine operators</td>
<td>142,860</td>
<td>$23,080</td>
</tr>
<tr>
<td>Pressers, textile, garment, and related materials</td>
<td>52,790</td>
<td>$20,530</td>
</tr>
<tr>
<td>Textile winding, twisting, and drawing out machine setters, operators, and tenders</td>
<td>27,400</td>
<td>$26,460</td>
</tr>
<tr>
<td>Tailors, dressmakers, and custom sewers</td>
<td>25,530</td>
<td>$28,800</td>
</tr>
<tr>
<td>Textile knitting and weaving machine setters, operators, and tenders</td>
<td>21,160</td>
<td>$26,760</td>
</tr>
<tr>
<td>Fashion designers</td>
<td>16,010</td>
<td>$73,930</td>
</tr>
<tr>
<td>Textile, apparel, and furnishings workers, all other</td>
<td>13,980</td>
<td>$28,850</td>
</tr>
<tr>
<td>Textile bleaching and dyeing machine operators and tenders</td>
<td>11,870</td>
<td>$24,980</td>
</tr>
<tr>
<td>Fabric and apparel patternmakers</td>
<td>6,410</td>
<td>$44,650</td>
</tr>
<tr>
<td>Sewers, hand</td>
<td>5,460</td>
<td>$25,590</td>
</tr>
<tr>
<td>Shoe and leather workers and repairers</td>
<td>5,360</td>
<td>$25,680</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Percentile</th>
<th>10%</th>
<th>25%</th>
<th>50%</th>
<th>75%</th>
<th>90%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hourly Wage</td>
<td>$8.33</td>
<td>$8.95</td>
<td>$10.54</td>
<td>$13.45</td>
<td>$16.77</td>
</tr>
<tr>
<td>Annual Wage</td>
<td>$17,330</td>
<td>$18,610</td>
<td>$21,920</td>
<td>$27,970</td>
<td>$34,880</td>
</tr>
</tbody>
</table>

Note: Employment # and wages are from 2014
Source: U.S. Department of Labor
Concentration of Employment

- In 2010 only two U.S. counties have more than 500 business establishments—Los Angeles county, California (2,509) and New York county, New York (803).

Source: U.S. Department of Labor
Labor availability by state

Employment of sewing machine operators, by state, May 2014

Blank areas indicate data not available.

Source: U.S. Department of Labor
Granular breakdown of labor by state

<table>
<thead>
<tr>
<th>State</th>
<th>Employment (1)</th>
<th>Employment per thou</th>
<th>Location quo</th>
<th>Hourly mean</th>
<th>Annual mean wage (2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>California</td>
<td>32,510</td>
<td>2.15</td>
<td>2.05</td>
<td>$10.39</td>
<td>$21,600</td>
</tr>
<tr>
<td>New York</td>
<td>12,430</td>
<td>1.41</td>
<td>1.34</td>
<td>$11.72</td>
<td>$24,380</td>
</tr>
<tr>
<td>North Carolina</td>
<td>8,650</td>
<td>2.15</td>
<td>2.04</td>
<td>$11.84</td>
<td>$24,620</td>
</tr>
<tr>
<td>Texas</td>
<td>8,180</td>
<td>0.73</td>
<td>0.69</td>
<td>$11.08</td>
<td>$23,040</td>
</tr>
<tr>
<td>Florida</td>
<td>5,880</td>
<td>0.77</td>
<td>0.73</td>
<td>$11.50</td>
<td>$23,930</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Metropolitan area</th>
<th>Employment</th>
<th>Employment per thou</th>
<th>Location quo</th>
<th>Hourly mean</th>
<th>Annual mean wage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Los Angeles-Long Beach-Glendale, CA Metropolita</td>
<td>24,670</td>
<td>6.08</td>
<td>5.78</td>
<td>$10.00</td>
<td>$20,800</td>
</tr>
<tr>
<td>New York-White Plains-Wayne, NY-NJ Metropolita</td>
<td>10,620</td>
<td>1.97</td>
<td>1.87</td>
<td>$11.47</td>
<td>$23,850</td>
</tr>
<tr>
<td>Chicago-Joliet-Naperville, IL Metropolitan Division</td>
<td>3,000</td>
<td>0.80</td>
<td>0.76</td>
<td>$11.72</td>
<td>$24,380</td>
</tr>
<tr>
<td>Santa Ana-Anaheim-Irvine, CA Metropolitan Division</td>
<td>2,660</td>
<td>1.79</td>
<td>1.71</td>
<td>$11.01</td>
<td>$22,900</td>
</tr>
<tr>
<td>Atlanta-Sandy Springs-Marietta, GA</td>
<td>2,500</td>
<td>1.04</td>
<td>0.99</td>
<td>$11.76</td>
<td>$24,450</td>
</tr>
<tr>
<td>Dallas-Plano-Irving, TX Metropolitan Division</td>
<td>2,460</td>
<td>1.10</td>
<td>1.04</td>
<td>$11.00</td>
<td>$22,880</td>
</tr>
<tr>
<td>Seattle-Bellevue-Everett, WA Metropolitan Divi</td>
<td>2,420</td>
<td>1.62</td>
<td>1.54</td>
<td>$14.18</td>
<td>$29,490</td>
</tr>
<tr>
<td>Greensboro-High Point, NC</td>
<td>2,170</td>
<td>6.21</td>
<td>5.9</td>
<td>$11.69</td>
<td>$24,310</td>
</tr>
<tr>
<td>Hickory-Lenoir-Morganton, NC</td>
<td>1,980</td>
<td>13.74</td>
<td>13.07</td>
<td>$14.85</td>
<td>$30,900</td>
</tr>
<tr>
<td>Miami-Miami Beach-Kendall, FL Metropolitan Division</td>
<td>1,730</td>
<td>1.65</td>
<td>1.57</td>
<td>$10.41</td>
<td>$21,650</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Nonmetropolitan area</th>
<th>Employment</th>
<th>Employment per thou</th>
<th>Location quo</th>
<th>Hourly mean</th>
<th>Annual mean wage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northeast Mississippi nonmetropolitan area</td>
<td>2,790</td>
<td>12.96</td>
<td>12.32</td>
<td>$12.30</td>
<td>$25,570</td>
</tr>
<tr>
<td>South Central Kentucky nonmetropolitan area</td>
<td>1,200</td>
<td>7.05</td>
<td>6.71</td>
<td>$9.37</td>
<td>$19,490</td>
</tr>
<tr>
<td>Northeast Alabama nonmetropolitan area</td>
<td>890</td>
<td>6.42</td>
<td>6.1</td>
<td>$10.10</td>
<td>$21,000</td>
</tr>
<tr>
<td>North Central Tennessee nonmetropolitan area</td>
<td>880</td>
<td>7.77</td>
<td>7.39</td>
<td>$16.17</td>
<td>$33,630</td>
</tr>
<tr>
<td>Other North Carolina nonmetropolitan area</td>
<td>790</td>
<td>2.66</td>
<td>2.53</td>
<td>$10.36</td>
<td>$21,540</td>
</tr>
</tbody>
</table>

Source: U.S. Department of Labor
Avg. mean wage of sewing operator by state

Annual mean wage of sewing machine operators, by state, May 2014

Annual mean wage

- $17,060 - $22,810
- $22,990 - $24,760
- $24,780 - $26,120
- $26,150 - $38,480

Blank areas indicate data not available.
Annual mean wage of sewing machine operators, by area, May 2014

Annual mean wage

- $16,870 - $21,640
- $21,650 - $24,310
- $24,320 - $26,660
- $26,680 - $43,270

Blank areas indicate data not available.
Benefits of U.S. manufacturing and sourcing

- Greatly reduced lead time
- Improved quality
- Increased innovation
- Made in USA image
- Falling energy prices
- Favorable economic conditions
- Proximity to the world's largest apparel market
- Automation has made textile production less expensive than abroad
- Lower Inventory Levels
- Greater Ability to Respond to Consumer Trends
- Less need to predict future demand
- Increase in Asset Turnover ratio
- Proximity to inexpensive labor force
- Free Trade Agreements
Cost and Benefits of Overseas Production

Costs
- Greatly increased lead times
- Loss of supply chain control
- Greater possibility of supply chain interruption
- Often lower quality product
- Currency fluctuation risk
- Rising labor rates
- Rising shipping rates
- Difficulty ensuring safety and regulatory measures
- Potential negative PR episode
- Cross-cultural differences

Benefits
- Lower labor cost
- Access to foreign market
- Large available labor market

Source: U.S. Bureau of Labor Statistics
Apparel companies that have, or plan on Reshoring

School House
- Began routinely receiving shipments from Sri Lanka factory 1-3 months late
  - Since school house placed small orders they were being given second priority to the larger companies orders
- In 2011, Rachel Weeks, School House CEO, moved all production back to U.S. contractors
  - Eliminated late fee’s
  - Saves $5,000 per month on staff to oversee Sri Lankan production
  - Was able to catch in vogue neon shirt fashion trend
  - Profit margins have risen to 35-40% from 22% when work was offshore

Karen Kane
- Began seeing more frequent flaws in clothing shipments from China
- Demand was hard to predict, leading to sharp markdowns and lack of inventory
- Moved 90% of production to U.S., saw a 15% sales bump in clothing promoted with Made in USA label

American Giant
- Like School House, couldn’t afford to hire permanent staff to oversee Indian production

Brooks Brothers

Todd Shelton
American Giant
(Parkdale Mills)

- American clothing company based out of San Francisco, CA
  - Manufactures in North Carolina and California
- Previously bought fabric from India
  - Bayard Winthrop, CEO, says it is now cheaper to shop in the USA
- Advantages of US production according to Bayard Winthrop
  1. Transportation costs are a fraction of what they were
  2. Turnaround time is quicker
  3. Higher quality items
  4. Monitoring worker safety was a challenge when offshoring
  5. Sales boost from Made in USA quality image
  6. Labor costs AREN’T much higher due to automation
A replicable business model for the U.S.

- Zara is world’s most successful “fast fashion” retailer, $13.6 billion in revenue in 2012
- Speed and responsiveness more important than cost
- Achieves growth through diversification and vertical integration
  - Keeps a significant amount of production “in-house”
- Manufactures about 60% of its products in Spain, Morocco, Turkey, and Portugal
  - The items produced at these locations are the trendier lines, often riffs on the latest fashion trends
  - These areas are considered relatively high-wage areas of the world
  - Zara offsets higher labor costs through greater flexibility, no extra inventory, and faster turnaround speed
  - The rest of Zara’s inventory, the more predictable items such as T-shirts, sweaters, etc. are scheduled about 6 months in advance and produced in traditional low cost factories in Asia
- Zara utilizes a highly responsive supply chain (impossible with far away outsourced manufacturing),
- Centralized logistics and distribution
  - “Just-in-Time” manufacturing
- Highly automated factories
Key advantages to Zara’s production model

- Can take product from concept to retail in 14 days, industry standard is 6-months
- Industry averages 30-40% of items sold at discount, Zara averages 10-15%
- Industry average of unsold stock is 17-20%, Zara’s is <10%
- Zara only commits 15-25% of its product line 6 months in advance
  - Locks in only 50-60% of its product line at the start of the season
  - Leaves up to 50% of its clothes to be designed in the middle of the season
  - Business model suited to catch trends while still peaking
- Production facilities located closer to home allow for more numerous, smaller shipments
  - Also allows for much more efficient coordination
U.S. firms replicating Zara strategy

- U.S. textile factories have kept pace with automation and productivity
  - Raw material costs equal to low-cost labor countries
- Availability of near, low-cost labor
  - Mexico and Caribbean / Portugal, Morocco, Turkey
- Comparable monthly wages to Spain
  - $24.19/hr.. US to $20.05/hr. Spain in the Textiles and Wearing Apparel Industry in 2012
- Comparable labor force
  - Total U.S. Textile Workforce
  - 138,000*
- Low competition in fast-fashion sector
  - Zara and H&M’s manufacturing hubs located in Europe
  - Other large brands (Gap, Nike, Under Armor) still currently outsourcing and using traditional retail model of distant demand prediction
Implications on operating income

- Using Zara’s average % markdown on inventory sold vs. industry average markdown, with American Giant’s cost of goods sold (COGS)

Indian Production
- Unit Cost: $31.52
  
  Retail Price: $80
  Gross Profit per Item: $48.48
  Profit Margin: 60.59%

US Production
- Unit Cost: $38.10
  
  Retail Price: $80
  Gross Profit per Item: $41.90
  Profit Margin: 52.38%

17.26% Price reduction with Indian manufacturing

Until markdown is applied...

Gross Profit and Margin at 20% Markdown

<table>
<thead>
<tr>
<th></th>
<th>Industry Average Revenue</th>
<th>Fast Fashion Average</th>
<th>COGS</th>
<th>Gross</th>
<th>Gross Profit %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Sales (10,000 Baseline) at 100% Retail</td>
<td>$800,000</td>
<td>$800,000</td>
<td>$381,000</td>
<td>$395,000</td>
<td>50.90%</td>
</tr>
<tr>
<td>15% of Items sold at 20% discount</td>
<td>$776,000</td>
<td>$381,000</td>
<td>$375,000</td>
<td>$389,000</td>
<td>50.00%</td>
</tr>
<tr>
<td>20% of Items sold at 20% discount</td>
<td>$768,000</td>
<td>$381,000</td>
<td>$373,000</td>
<td>$387,000</td>
<td>50.39%</td>
</tr>
<tr>
<td>30% of Items sold at 20% discount</td>
<td>$752,000</td>
<td>$315,248</td>
<td>$436,752</td>
<td>58.08%</td>
<td></td>
</tr>
<tr>
<td>35% of Items sold at 20% discount</td>
<td>$744,000</td>
<td>$315,248</td>
<td>$428,752</td>
<td>57.63%</td>
<td></td>
</tr>
<tr>
<td>40% of Items sold at 20% discount</td>
<td>$736,000</td>
<td>$315,248</td>
<td>$420,752</td>
<td>57.17%</td>
<td></td>
</tr>
</tbody>
</table>

Difference in Gross Profit only $25,752-$49,752, or a margin of 6.27%-7.96%
This drops to $5,752 - $41,752 at 30% markdown!