Rethinking “Made in America” in the 21st Century

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by

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About this Report

The global supply chain utilized by U.S. retailers not only provides opportunities for U.S. consumers to benefit from a wide variety of products, but also an increasing number of employment opportunities throughout the supply chain. Moving jobs back to the United States – dubbed by some as "reshoring" – has become a focus of many consumers and the news media. As it becomes increasingly topical, some consumers are looking more carefully for a "Made in America" label. In response, some major U.S. retailers have launched "Made in America" buying commitments. The Obama administration and other policymakers celebrate these moves in speeches taking credit for policies that promote the return of manufacturing and jobs to the United States.

But in a world of global supply chains, does "Made in America" really mean what people think? Can retailers ever hope to fill their shelves or showrooms with such products when very few manufactured goods are (or can be) manufactured completely in the United States? And unbeknownst to consumers, imported goods with foreign labels often include significant-but-unrevealed amounts of U.S. content. In other words, the assembly might happen overseas, but the design, logistics, production of some of the parts and other key components are done in the United States by American workers.

Today's economy is very different from that which gave rise to the notion of "Made in America," so we need to think differently about what that term means. This new thinking matters because many policy prescriptions designed to promote "Made in America" – both on Capitol Hill and by U.S. officials negotiating trade agreements – are misplaced. They reflect an outdated notion of how goods are produced in today's global economy. Understanding 21st Century global supply chains has implications for the public policies that are required to truly support growth of "good jobs" in the United States. It is necessary to think not just in terms of the global "supply" chain but also the global "value" chain to see the value of all the contributions made along the way as ideas are transformed into finished products.

In short, when thinking about how to grow U.S. jobs with "Made in America," policymakers need to embrace trade policies that recognize that manufacturers and service providers – including retailers – use global value chains to design and manufacture products for use or sale in the United States and abroad. This includes recognition that significant U.S. content is included in imported products. This study details the new reality of global production today and suggests policies that make sense in such an environment.

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Rethinking "Made in America" in the 21st Century

Executive Summary

Recently, renewed interest has grown in seeking out goods that are "Made in America" as a vehicle for bringing jobs back to the United States. Retail stands at the front lines of efforts to bring these goods to American consumers. It also faces new challenges in finding goods that meet customers' expectations about what "Made in America" really means, particularly when very few products today are made entirely in the United States.

- If any American industry knows what it means to be part of a global supply chain, it is retail. Millions of retail workers and their partners in other U.S. industries and around the world work hard to ensure that American consumers have access to the goods they seek to feed their families, educate their children, participate in the workforce, and enjoy leisure activities. Today more than ever before, that task is global in nature.

- Can retailers support the initiative to grow American jobs by selling more "Made in America" goods? Yes, if "Made in America" is defined through 21st Century lenses that recognize the scope of today's supply chains. The official definition of "Made in America" for most goods was appropriate for the days when U.S. manufacturing loomed large but it does not work for today's more-diffuse supply chains that support many good American jobs.

- Three products illustrate the changes. Apparel products on average contain more than 70 percent U.S. value, even though most are officially labeled as made in a foreign country. Some foreign-brand cars contain more American content than other so-called "American" cars. Apple's iPod and iPhone contain more U.S. content than foreign content, despite their "Made in China" labels. In short, it is possible to support good American jobs by buying a range of products that do not bear the official "Made in America" label.

- Policymakers can help. They can grow 21st Century "Made in America" jobs by negotiating trade agreements that make the transfer of goods and services across borders more efficient at reduced transaction costs. Options include eliminating foreign and U.S. tariff and non-tariff barriers to trade, implementing trade facilitation measures, and negotiating trade agreements that recognize 21st Century supply chains.

21st Century supply chains demand a rethinking of what it means to be "Made in America." From the jobs perspective, many products of particular interest to consumers are "made" in America, by employees across a range of professions, even if technically they are not eligible for the official label.

Rethinking "Made in America" in the 21st Century

I. Introduction

The desire of American consumers to "Buy American" has deep roots. Some historians trace the origins of the movement all the way back to the 1700s when colonists eschewed buying imports from Britain and insisted on wearing only American-made clothes.[1] Their motives were different from later drives to buy American – protesting British control over the affairs of the colonies. The movement really took off in the 1930s in response to the Great Depression, resulting eventually in the enactment of the Buy American Act of 1933, which was created to build up U.S. employment. It was followed by the Wool Products Labeling Act of 1939, the Fur Products Labeling Act in 1952, the Textile Fiber Products Identification Act in 1960, and the American Automobile Labeling Act in 1992, all of which sought the same employment aim.

As sellers of consumer goods, American retailers today remain on the front lines of the "Made in America" debate. Because they are the gateway to consumers, this report begins with a brief overview of the role retail plays in the American economy. It then looks more carefully at the latest rise in enthusiasm from consumers for more "Made in America" products. But what does the label really mean? The report details the official "rules" for labeling a consumer good as "American." Yes, the rules can be confusing and far from straightforward. The report then offers in-depth examples of the production processes for three key types of consumer goods: apparel, automobiles, and electronics created by Apple. It's apparent that the production of these products has changed considerably since the time the rules were first written. What is labeled "Made in America" today is not likely as "American" as most consumers think, but what is labeled "Made in Country X" is likely far more American than they realize. The report then explores new ways in which policymakers can promote more "Made in America" content in the goods retailers sell in ways that reflect today's 21st century economy.

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[1] Dana Frank, *Buy American: The Untold Story of Economic Nationalism* (Boston, Massachusetts: Beacon Press, 1999), p. 6.

II. Retail Drives the U.S. Economy

Retailing is a largest private sector employer in the United States, supporting one in four jobs – 42 million working Americans. The industry contributes $2.5 trillion to the annual Gross Domestic Product. Indeed, as the "last stop" on the way to the American consumer, it is the sector upon which most industries depend to sell their products. A healthy, vibrant retail sector ensures that American consumers, who account for more than two-thirds of U.S. spending, can have access to the goods and services they need to feed their families, educate their children, participate in the workforce and enjoy leisure activities.

Retailers work hard to do all this. It's one of the most competitive industries in the U.S. economy, if not the most competitive. Consumers demand high quality, good prices, and products at-the-ready, and they want them fast. So retailers partner with suppliers in every industry sector in the United States and around the globe to deliver what consumers want. They work with farmers, manufacturers, transportation providers, wholesalers, bankers, lawyers, accountants, information technology experts, and government officials, to name a few. To meet the demands of American consumers, retailers must shop the globe. They must also stay ahead of the curve by constantly innovating: developing new ways for consumers to shop, ways that deliver quicker access to products, and better customer experiences.

The "Retail Team" is huge. It is much larger than the 3.6 million retail establishments that employ 28 million retail employees. It includes farmers, manufacturers, transportation workers, wholesalers, warehouse workers, lawyers, bankers, insurers, leasing agents, advertising personnel and many more. In fact, another 16.5 million workers are employed in other sectors of the U.S. economy that are part of the Retail Team, for a total of 41.6 million jobs spread across the United States – one in four in the United States. These workers earn $1.5 billion and contribute $2.5 billion to U.S. GDP, 18 percent of the total.

The Retail Team also includes countless suppliers and workers in countries that span the globe. This is nothing new; retailing has always been a global industry. What's new is that the production of goods sold by retailers is today, more than ever, part of a specialized global supply chain driven by speed (thanks to the Internet) and quality. Consequently, the supply chain is in a state of constant flux.

The Bottom Line: The Retail Team must stay flexible, adapting quickly to changes in consumer demand.

III. Consumers and Policymakers Have a Renewed Interest in "Made in America"

One development is a renewed interest in "Made in America." News stories abound on companies moving production or sourcing back to the United States because energy, transportation and labor costs abroad are all rising or because U.S. producers offer faster supply time options even if they might cost more. Some consumers say they are even willing to pay more for "Made in America" labels. For example, in January 2013 Wal-Mart announced it would buy an additional $50 billion in U.S. products over 10 years, in addition to those it already buys.[2] Brooks Brothers is now making most of its suits at a U.S. plant it owns, and purchasing shirts and ties from U.S.-based producers.[3] Apple recently announced it would be "reshoring" some of the assembly process for its Mac Pro computers at various locations in the United States.[4]

U.S. policymakers cheer these initiatives and promise to enact policies to entice more companies – U.S. and foreign – to move jobs to the United States.[5] In October 2013, the Commerce Department announced the formation of "SelectUSA," a program under which U.S. government officials would promote the United States as a location for new job-creating foreign investment.[6]

The bottom line: The Retail Team is ready to offer American consumers more goods that are "Made in America." But some question whether it can be done. Are there enough "Made in America" consumer products for companies to make good on that pledge?[7] It is possible, but only if one views the question through 21st Century glasses, rather than spectacles reflecting outdated supply chains of the 1960s, '70s, and '80s.

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[2] Wal-Mart, "U.S. Manufacturing," http://corporate.walmart.com/global-responsibility/us-manufacturing, accessed February 3, 2014.

[3] Brooks Brothers, http://www.brooksbrothers.com/Magazine-Article/article,default,pg.html?bpid=507.

[4] Tim Culpan and Adam Satariano, "Apple Adds Macs Assembled in Texas by Flextronics," Bloomberg Technology, February 13, 2014, http://www.bloomberg.com/news/2014-02-13/apple-adds-macs-assembled-in-texas-by-flextronics-in-u-s-push.html.

[5] See for example, President Barack Obama, "Remarks by the President on Insourcing American Jobs," The White House, Office of the Press Secretary, January 11, 2012, http://www.whitehouse.gov/the-press-office/2012/01/11/remarks-president-insourcing-american-jobs, accessed February 3, 2014.

[6] See http://selectusa.commerce.gov/.

[7] See for example Walter Loeb, "Wal-Mart's Manufacturing Dream Is Just a Dream," *Forbes.com*, January 31, 2014, http://www.forbes.com/sites/walterloeb/2014/01/21/suddenly-bloomingdales-chairman-mike-gould-is-gone/, accessed February 5, 2014.

IV. What's In a Label, Anyway?

The question hinges on the label itself. What exactly does a product need to be to win the coveted "Made in America" label? The current definition mandates two key criteria. First: that American *manufacturing* workers made the product (its final assembly or processing must take place in the United States). Second: goods can only be labeled "Made in America" or "Made in USA" if "all or virtually all" of the value of significant parts and processing that go into the products were made in the United States.[8] The products should contain no, or only negligible, foreign content. The determination looks only at the cost of manufacturing materials, direct manufacturing labor, and manufacturing overhead. Non-manufacturing costs, including labor costs such as research and development, product design, marketing, and other services related to the creation and sale of the product are not considered even if all those activities took place in the United States by U.S. workers.[9]

In addition to the rules for labeling a product "Made in America," there are rules for labeling foreign products sold in the United States. For most imported products, the country of origin – which must be identified somewhere on the product -- is the last country in which a "substantial transformation" took place. "Substantial transformation" is defined as a manufacturing process that results in a new and different product with a new name, character, and use that is different from that which existed before the change.[10]

Two product categories receive special treatment for labeling, which is mandated by law. Textile products and wool and fur products face a long list of special labeling rules and requirements, from both the Federal Trade Commission, which oversees the "Made in America" label, and Customs and Border Protection, which is responsible for enforcing correct foreign country of origin markings.[11] Most clothing or other textile or wool household products can be labeled "Made in America" only if the product is manufactured in the United States of fabric that is manufactured in the United States (even if the materials used to make the fabric – the yarn and fiber -- came from another country).[12] For

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[8] See http://business.ftc.gov/documents/bus03-complying-made-usa-standard.

[9] If a product cannot meet the standard to be labeled "Made in America," other options include "Made in the U.S. from Imported Parts, "or "Assembled in the USA," for example. A product can be labeled "Assembled in the USA" when it's principal assembly takes place in the United States and the assembly is substantial – the last "substantial transformation" should have occurred in the United States.

[10] Paradoxically, a product that is assembled in the United States from foreign parts, and thus undergoes its last "substantial transformation" in the United States, need not be labeled as a product of a foreign country. It may not qualify either for a "Made in America" label (see preceding footnote).

[11] See http://www.business.ftc.gov/documents/bus21-threading-your-way-through-labeling-requirements-under-textile-and-wool-acts#origin.

[12] Federal Trade Commission, "Complying with Made in USA Standard," http://www.business.ftc.gov/documents/bus03-complying-made-usa-standard.

purposes of country of origin marking for apparel that is imported, the country of origin is that in which the apparel was wholly made, or assembled from pieces. However, knit apparel has a different rule: the country of origin is that in which the product parts were knit to the final shape needed before they were assembled.[13]

The second product group with special rules is automobiles. Cars for sale in the United States must have labels that disclose where the car was assembled, the percentage of parts that are "domestic" (from the United States and/or Canada), and the country of origin of the engine and transmission.[14]

But in general the ability to label a product as "American" depends on where it was manufactured, as defined by its use of U.S. raw materials, direct labor and related overhead. The word "Made" is synonymous with "manufactured." In the 1960s, '70s and even '80s, such a narrow focus on the manufacturing activity would not have been noteworthy. Manufacturing made up large shares of the U.S. economy: 29 percent of output in the 1960s and 27 percent of employment, and finding such products was not difficult.

Not so today. Since 2000, manufacturing has accounted for just 12 percent of total U.S. output and 10 percent of total U.S. employment.[15] The services sector has picked up the slack. Today, services industries are driving the U.S. economy, creating output and employment that gets reflected heavily in the final price of goods sold by retailers. And notably, services occupations are increasingly driving manufacturing. Manufacturing firms are hiring more services workers (both as direct hires and as outsourced suppliers) to conduct research and development and provide them with computer services, for example. In addition, some manufacturing firms are offering specialized services to customers who purchase their manufactured products, such as OnStar customer support systems in new General Motors vehicles. The U.S. International Trade Commission has calculated that two-thirds of the occupations in the computer and electronic products sector in 2012 were services occupations; the share for apparel and leather products was lower, but still significant at 29 percent.[16]

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[13] There are still more rules applicable to still more subsets of apparel products. See U.S. Department of Homeland Security, "What Every Member of the Trade Community Should Know About: Textile & Apparel Rules of Origin," Revised April 2004, http://www.cbp.gov/linkhandler/cgov/trade/legal/informed_compliance_pubs/icp006r3.ctt/icp006r3.pdf.

[14] Federal Trade Commission, "Complying with Made in USA Standard," http://www.business.ftc.gov/documents/bus03-complying-made-usa-standard.

[15] Indeed, in the early 1990s the American Automobile Labeling Act started to recognize the blurring of the lines between U.S. and foreign origin when it included Canada in its definition of "domestic."

[16] U.S. International Trade Commission, *The Economic Effects of Significant U.S. Import Restraints, Eighth Update 2013*, Inv. No. 332-325, Pub. No. 4440, December 2013, Table 3.4, p. 3-19.

In short, today “made” means a lot more than manufactured by production workers. If “Made in America” campaigns are meant to promote growth of “good” American jobs, the focus of those campaigns needs to widen. A product is “made” by designers who conceive it and the workers who arrange for its production. Workers who get the product from the manufacturing plant to the retail shelves or to consumers’ homes also matter: without them, there would be no need to make the product in the first place.

It is time to rethink what it means to be “Made in America.”

V. Three Snapshots: How "American" Are Your Clothes, Your Car, Your Cellphone?

Thanks in large part to the Internet, U.S. product supply chains have become geographically larger, faster and more sophisticated. Today, very few companies within one country "do it all." Rather, a large number of companies, each specializing in one aspect, are typically involved in making a product and getting it to consumers. Many of those companies are located around the globe. And many are still located in the United States.

A common consumer and media complaint is that it is hard to find products for sale that are labeled "Made in America," and they are right. A good part of the reason is that the label can only be used for goods whose final assembly takes place in the United States of parts and components that are "all or virtually all" of U.S. origin or, in the case of apparel, assembled in the United States from U.S. fabric.

But if one takes a 21st Century view of what "Made in America" *ought* to mean – one that considers *all* of the U.S. jobs associated with the "production" of an item offered for sale by American retailers – many more products could be viewed as "Made in America" even if they could not be officially labeled as such. Economists have begun to measure the value of the range of activities involved in producing goods along a global supply chain, sometimes also referred to as a "global value chain" to reflect the value added at various steps along the chain. This includes the value, for example, of U.S. goods and services (U.S. "value added") embedded in imports from other countries, and the value of foreign goods and services (foreign "value added") included in U.S. exports. The most recent estimates available (from the OECD/WTO for 2009) show that U.S. content accounted for one quarter of the value of U.S. imports.[17] This means, for example, that of the total value of U.S. imports of $1.85 billion in 2009 – all of which is officially considered "foreign," $464 million was in fact American value. They further estimate that 11.2 percent of U.S. private sector employment – 10 million jobs – was "sustained" by global supply chains in 2008.[18]

Three product examples help to illustrate how inter-connected the world has become, and how misleading labels that reflect old ways of producing goods can be today.

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[17] Derived from "Organization for Economic Cooperation and Development/World Trade Organization Statistics on Trade in Value Added," Foreign Value Added embodied in Gross Imports, 2009, http://stats.oecd.org/BrandedView.aspx?oecd_bv_id=data-00648-en&doi=data-00648-en.

[18] Organization for Economic Cooperation and Development, *OECD Science, Technology and Industry Scoreboard 2013*, Chapter 7, Figure 7.8.1, http://www.keepeek.com/Digital-Asset-Management/oecd/science-and-technology/oecd-science-technology-and-industry-scoreboard-2013_sti_scoreboard-2013-en#page256.

Apparel

Many decades ago, a large number and variety of apparel products were fully manufactured in the United States. That is not the case today. Estimates vary, but some have suggested that nearly 98 percent of the clothing purchased in the United States is made internationally.[19] That does not mean there is no U.S. content in the manufacturing value of the apparel product that is officially marked "Made in Country X." The United States exports cotton, manmade fibers, yarns and fabrics to the range of leading foreign apparel producers, inputs that undoubtedly are incorporated into finished apparel products that are imported into the United States and labeled with the country of origin wherein they were assembled or knit to shape. But the fact that those apparel products contain U.S. inputs is not revealed to American consumers, and 100 percent of their value shows up as wholly foreign in U.S. import statistics.

While it varies with the product, in general the retail price of an apparel product reflects considerable U.S. value. A hypothetical example that typifies the supply chain of many apparel products is shown in Figure 1.[20] As Figure 1 shows, that product contains a lot of U.S. input beyond the raw materials used to "manufacture" it abroad. This typically includes:

- The services of a U.S.-based design team, perhaps at the headquarters of the retailer who eventually sells the apparel product. This team pulls together the design of the product and selects the fabrics and other materials to be used to make the product.
- A team of retail buyers works with the foreign manufacturer to review samples, place orders and monitor production for quality and compliance with the retailer's corporate social responsibility program.
- Merchandise planners determine how much of a particular product to buy, and make sure the store stocks the right amount and keeps it replenished.

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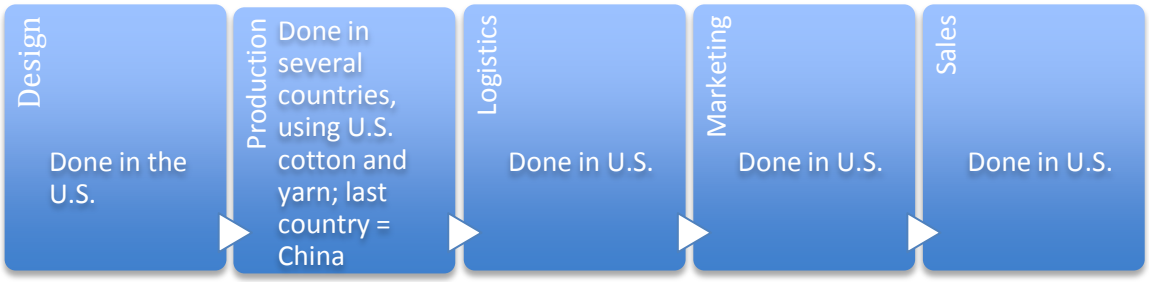
[19] American Apparel and Footwear Association, *ApparelStats 2013*, https://www.wewear.org/aafa-releases-apparelstats-2013-and-shoestats-2013-reports/.

[20] Other options, described in a recent U.S. International Commission report, include a clothing product designed by a U.S. firm, which is then outsourced to a contractor who purchases fabric (perhaps from the United States, or perhaps from a global source) and makes the apparel product for the U.S. buyer, which is subsequently imported by the U.S. firm which then handles all of the activities from its arrival at a U.S. port to its delivery to the retail sales floor. A third option is a foreign company that designs the apparel product, chooses and purchases all inputs, makes the product, packages and distributes it, and gets it to the U.S. buyer. The U.S. firm then handles all sales. In these instances, the U.S. content of the apparel product would be lower. See U.S. International Trade Commission, *The Economic Effects of Significant U.S. Import Restraints*, Seventh Update 2011, USITC Pub. 4253, August 2011, Figure 3.6, http://www.usitc.gov/publications/332/pub4253.pdf.

Hypothetical Clothing Product Supply Chain



- A logistics team, sometimes in-house at the retailer, arranges for delivery of the finished apparel products to the United States, processes them through Customs, receives them into warehouses, and arranges shipping to the retail store or direct to consumer.
- A marketing team develops sales campaigns for the product (in-store, online or through catalogs), including commercials, print ads, promotional e-mails, coupons or social media engagement.
- And, of course, the sales staff of the retailer associated with each of these ways of selling the apparel product to the customer, or the e-commerce staff responsible for building and maintaining the company's website so that shopping is easy, mobilizes to ensure that customers can find the right size and purchase the apparel product.

None of these other participants in the process of bringing an apparel product to the American consumer is trivial, either in number or value. One recent study focusing on a sample of individual imported apparel products found that the U.S. value can be quite high, representing more than 70 percent of the retail price of those products.[21]

What is included in that U.S. value? A huge component is the salaries of the American jobs associated with the hypothetical apparel product. These are impressive jobs with good salaries, jobs that are valuable to the American workers and their families that hold them as the manufacturing jobs the "Made in America" label is designed to promote. Table 1 reports some of these salaries for one class of retailer, "clothing stores," according to the U.S. Bureau of Labor Statistics, in 2012.

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[21] Moongate Associates, "Analyzing the Value Chain for Apparel Designed in the United States and Manufactured Overseas" (undated; press release dated February 13, 2013), http://tppapparelcoalition.org/uploads/021313_Moongate_Assoc_Global_Value_Chain_Report.pdf.

Table 1
Average Annual Wage of Key Employees,* U.S. Clothing Stores, 2012

Marketing managers	$134,020
Purchasing managers	115,240
Software developers and programmers	67,100
Logisticians	59,440
Buyers and purchasing agents	58,530
Artists and related workers	46,460
Sales supervisors	41,140
Media and communications workers	40,410
Art and design workers	30,940
Sales and related workers	23,780

* Wages are biased downward for all categories because they include part-time as well as full-time workers. Part-time workers do not work a full year so their "annual" wage is necessarily lower than that of a full-time worker. Occupations with large numbers of part-time workers (e.g., sales staff) will therefore show annual wages that are much lower than those for occupations with a larger number of full-time employees (e.g., marketing managers).
Source: Bureau of Labor Statistics, "May 2012 National Industry-Specific Occupational Employment and Wage Estimates: NAICS 448100 – Clothing Stores," Occupational Employment Statistics, http://www.bls.gov/oes/current/naics4_448100.htm.

So, if 70 percent of the retail value of the average apparel product is American, even when imported, aren't consumers "buying American" and supporting "good" jobs located in the United States, even if the product is labeled "Made in China"? Most certainly they are.

Automobiles

Not surprisingly, the U.S. auto market differs considerably from that for apparel. While consumers view very few, if any, apparel products as uniquely "American," the picture is different for many car makes and models. The Chevy Corvette and the Ford Mustang, to name just two, are typically thought of as classic American models. In fact, the share of the market held by imported passenger cars (cars actually imported, not sales of import brands) was estimated to be just 45 percent in 2013. So relatively speaking, it seems to be a lot easier to "buy American" when shopping for a car than when shopping for a T-shirt.

In fact, U.S. car production is on the rise again, jumping 46 percent from just under 3 million cars in 2011 to over 4.3 million in 2013.[22] Motor vehicle and parts employment is also on the rise, up by 102,000 jobs over that period, according to the Bureau of Labor Statistics. And yet, the number of car models

[22] Ward's Automotive Reports, Detroit, Mich., as published by the Bureau of Economic Analysis, U.S. Department of Commerce, "Auto and Truck Seasonal Adjustment," February 5, 2014.

sold with high North American parts content[23] is falling. According to the National Highway Traffic Safety Administration, no 2013 car or truck model was 100 percent made in the United States/Canada. Just 17 models that year had domestic parts content above 75 percent, compared with 28 models in 2012 (with one model, the Toyota Matrix, coming in at 95 percent U.S/Canadian parts) and 39 in 2011.[24] Why? Regional and global supply chains, long important to the sector, keep deepening.

Automobile production – often including research and design -- generally tends to be done within regions – e.g., North America, Europe, and Asia. Consumer tastes and income levels, government standards and regulations, and regional trade agreements (like the North American Free Trade Agreement) combine to encourage car manufacturers to focus production within a given region. Even barriers to trade (or threats of barriers) can push automakers into a regional strategy.[25] Thus, firms like General Motors or Toyota are international in scope, producing cars around the world, but as part of regional platforms concentrated on regional markets.

U.S. car production took its first serious turn toward North American regional production with the implementation in the 1960s of the Automotive Products Trade Agreement with Canada, which eliminated tariffs on U.S.-Canada car and parts trade. By the time NAFTA went into effect in 1994, bringing Mexico into the fold, the U.S.-Canadian car and truck production platform was so well integrated that it would have been difficult to disentangle the location of U.S. parts from Canadian parts. So when policymakers devised new automobile labeling rules, they defined the origin of the car based on the origin of its parts (where "domestic" parts were defined as parts from U.S. and/or Canadian manufacturers), its engine and transmission, and the location of its final assembly.

As the North American motor vehicle regional supply chain developed and deepened – and Japanese, Korean and European brands opened production facilities largely in the South – it became newsworthy that some foreign-branded cars were more "American" than some so-called classic American brands. For example, based on their labels, the NHTSA reports that the Chevy Camaro is built in Canada, and the 2013 Ford Mustang has just 70 percent U.S./Canadian

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[23] Remember that, as noted above, policymakers attempted to help consumers understand where cars for sale in the United States were "made" by requiring labels that reported where the car was assembled, the percentage of parts that are "domestic" (from the United States **and/or** Canada), and the country of origin of the engine and transmission.

[24] National Highway Transportation Safety Administration, "Part 583 American Automobile Labeling Act Reports," http://www.nhtsa.gov/Laws+&+Regulations/Part+583+American+Automobile+Labeling+Act+(AALA)+Reports.

[25] High oil prices and a consequent flood of U.S. imports from Japan of small cars led to threats from Congress to impose quotas on Japanese cars. The Japanese government, in an effort to forestall Congressional action, instituted in 1981 "voluntary export restraints". Japanese auto producers later began to produce cars in the United States to get around those restraints and to protect their U.S. sales from future import limits should the restraints expire.

parts content and sometimes a Canadian engine or a Mexican transmission.[26] The 2013 Corvette contains 70 percent U.S./Canadian parts content, a U.S. engine and transmission, and is assembled in the United States. In contrast, the 2013 Honda Odyssey contains 75 percent U.S./Canadian parts, and was assembled in the United States with a U.S.-made engine and transmission. The Toyota Avalon contains 80 percent U.S./Canadian parts and was assembled in the United States with a U.S. engine and transmission. By the standard labeling criteria, the Toyota Avalon and the Honda Odyssey are "more American" than the Corvette, Camaro or Mustang, although none could be officially so labeled because they could not meet the "all or virtually all" standard.

But like apparel, the process of making and selling a car is multi-step, involving, in addition to production (assembly), research and development, design, logistics, marketing and sales. The non-production components of this chain contribute significantly more to the final cost of the car than the value of its parts or the labor associated with its assembly. One study, for example, estimated that such indirect costs (product development, transportation, sales and marketing, warranty costs, overhead, dealer costs, and profit, for example) add between 43 and 49 percent to the final cost of the average vehicle produced by a motor vehicle company. [27] But the origin of these other steps in the production process is not publicly reported or included in the official estimates of the "origin" of the finished car.

Some critics of the standard definition of origin argue that the only correct index must go beyond where the car was assembled and include consideration of where the manufacturer is headquartered – where the profits go.[28] In that vein, a professor at American University's Kogod School of Business is now publishing a new index of "American" cars. The "Kogod Made in America Auto Index" considers not only the American Automobile Labeling Act "domestic content" score, but also the automaker's headquarters location (profit margin); R&D; labor costs (U.S. versus foreign); location of inventory, capital and other expenses; location of production of the engine and transmission, and location of production of the body, interior, chassis, electrical and other components.[29] Thanks to the U.S. location of its headquarters, R&D and design, according to the Kogod Index, the "most American" cars are General Motor's Acadia, the Buick Enclave and the Chevy Traverse, each of which sored 88.5.[30] Just below, at 87.5, are Chrysler's

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[26] NHTSA, op. cit.

[27] Alex Rogozhin, Michael Gallaher, Walter McManus, "Automobile Industry Retail Price Equivalent and Indirect Cost Multipliers," Report prepared for the U.S. Environmental Protection Agency by RTI International, February 2009.

[28] See for example Roger Simmermaker, "Buy American: Finally, Real Details on Which Cars Made in U.S.," July 30, 2013, http://www.wnd.com/2013/07/finally-real-details-on-which-cars-made-in -u-s.

[29] Kogod School of Business, "New Auto Index Redefines 'American Made' Cars," Kogod Now, Spring 2013 Issue, http://kogodnow.com/autoindex.

[30] Note that these are indices; they do not mean that 88.5 percent of the value of the car is of U.S. origin. They are useful only for relative ranking purposes.

Dodge Avenger, and the Ford F-Series Pickup. The first foreign brand car to appear on the list is the Toyota Avalon (number 10), with a score of 81. The Honda Odyssey comes in at 78.5. [The Corvette and Mustang come in at 85; the Chevy Camaro at 68.5.] The rankings also reveal different conclusions depending on the type of car a consumer is seeking. A minivan shopper who wants to "buy American" would find that Honda or Toyota makes the highest-ranking models.

While an improvement over the AALA, the Kogod Index still lacks consideration of the location of the value of logistics, marketing and sales, which as noted above can add significant value to the retail price of a car. Moreover, one could even argue that imported parts and even imported finished vehicles, while technically considered of foreign origin, also likely contain U.S. content. The U.S. International Trade Commission examined broad sector data and found that more than 19 percent of the value of imported motor vehicles and parts was American – i.e., parts that were exported and then incorporated in finished products (parts or vehicles) that were then shipped back to the United States.[31] U.S. sources supplied 57.3 percent of the value of motor vehicles and parts purchased in 2004; 42.7 percent was foreign, and of that 14.7 percent came from the NAFTA supply chain partners.[32]

So where are we? When it comes to cars, "Made in America" is in the eye of the beholder. So-called American brands like General Motors contain significant imported value; "foreign" brands contain significant U.S. value. The supply chain within North America is so deep that even the U.S. government considers Canadian parts content "domestic" because it is impossible to separate that value out from the value of U.S. parts.

Consumer Electronics

Apple products are noteworthy for, among many things, their country of origin markings. The typical Apple product comes in a slick box stamped "Designed by Apple in California, Assembled in China." The point is clear: there is a lot of "Made in America" in these consumer electronics, even though U.S. regulations require an official stamp of foreign origin. Apple designs its products and related software in the United States, buys parts from U.S. and Asian firms, has the products assembled in China, imports them back into the United States and sells them through other retailers as well as its own stores.

The fascination with the supply chain used to produce Apple's products has led researchers to go to a good deal of effort to dissect the origin of all of the parts in a variety of Apple products to estimate the degree to which they are

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[31] U.S. International Trade Commission, *The Economic Effects of Significant U.S. Import Restraints*, Seventh Update 2011, USITC Pub. 4253, August 2011, Table 3.4, http://www.usitc.gov/publications/332/pub4253.pdf.

[32] *Ibid*., Table 3.3.

American or foreign. The first effort involved Apple's iPod. The story is ubiquitous, but the Apple supply chain is so illustrative of the role global "value" chains play in the production of consumer electronics that it is worth one more retelling. As Table 2 shows, even though the iPod bears an Assembled in China label, as required by U.S. country-of-origin requirements (China is the last country in which the parts making up the iPod are "substantially transformed" into the finished product), in reality the iPod contains considerably more American value ($162 compared to just $4 from China). The U.S. value exceeds the total of all foreign value of parts and components sourced from other Asian countries, in addition to China. Ironically, when an iPod is imported, *all* of its foreign value ($4 plus $133, or $137) shows up in U.S. import statistics as an import from China.

The iPod example has been expanded with similar assessments of other iconic Apple products. The same researchers also looked at the value contributed along the supply chain of each of the participants in the production of an iPhone and an iPad. They found similar results for the iPhone; the iPad contains more foreign value than U.S. value. But in each of these cases, the product must be stamped as a product of China, even though the Chinese value contained in the iPhone and the iPad is minimal, and all of the foreign value shows up in U.S. import statistics for China.

The same researchers that dissected the various Apple products to ascertain their U.S. and foreign content also examined the jobs associated with making the iPod in 2006.[33] They found that the iPod was the source of employment for 13,920 U.S. workers: 9,085 within Apple (including Apple Stores). Outside Apple, 110 workers produced processors, 400 were involved in freight and distribution, and 4,325 were involved in sales through non-Apple retail stores or third-party websites.

Table 2
Breakdown of Value Contributed by Participants in Apple Product Supply Chains

				Formal Country of Origin (China)			
	Retail	U.S.[a]				Other Foreign[c]	
Product	Price	Value	Share	Value	Share	Value	Share
iPod	$299	$162	54.2%	$4*	1.1%	$133	44.5%
iPhone 4	549**	334	60.8	10*	1.8	205	37.3
iPad	499	162	32.5	8*	1.6	329	65.9

a R&D, intellectual property, design, software, some parts, marketing, distribution, sales, customer services
b Assembly
c Parts

[33] Greg Linden, Jason Dedrick, and Kenneth L. Kraemer, "Innovation and Job Creation in a Global Economy: The Case of Apple's iPod," *Journal of International Commerce and Economics*, 2011, (3):1, 223-240, http://pcic.merage.uci.edu/papers/2011/InnovationJobCreationiPod.pdf.

** Net of the typical telecommunications carrier subsidy, the retail price would be $199. Sources: Kenneth L. Kraemer, "Value Capture in Global Innovation Networks: Apple's iPod, iPhone, iPad," undated presentation; Jason Dedrick, Kenneth L. Kraemer, Greg Linden, "Capturing Value in a Global Innovation Network: Comparison of Radical and Incremental Innovation," Personal Computing Industry Center, September 2007, http://pcic.merage.uci.edu/papers/2007/CapturingValue.pdf.; Kenneth L. Kraemer, Greg Linden, "Capturing Value in a Global Networks: Apple's iPad and iPhone," Personal Computing Industry Center, July 2011, http://pcic.merage.uci.edu/papers/2011/Value_iPad_iPhone.pdf.

In response to recent changes in international transportation costs, wage and other labor concerns in some of the Asian producing countries, some of Apple's leading parts suppliers have announced their intention to open parts production facilities in the United States, and Apple has announced its intention to begin to "produce" some of its computers in the United States as well. Apple CEO Tim Cook made headlines when he let it slip at the end of 2012 that Apple was planning to invest in production facilities in Texas to make Mac computers, following curiosity piqued by the appearance on the market of iMacs labeled "Designed by Apple in California, Assembled in USA."[34] As noted earlier, Foxconn, one of Apple's largest parts suppliers in Asia, is exploring the opening of new production facilities in the United States. Thus, the U.S. content of Apple products can be expected to grow even further, but whether it reaches the level that current federal marking rules will permit a "Made in America" label remains unclear.

So what is the bottom line from these product examples? Official labels tell us very little about the real origin of products. The U.S. content is typically much higher than the official label would lead us to believe. It is possible to support good American jobs by buying a range of products that do not bear the official "Made in America" label.

[34] Ronnie Polidoro, "Apple CEO Tim Cook announces Plans to Manufacture Mac Computer in USA," Rock Center with Brian Williams, NBC News, December 6, 2012, http://rockcenter.nbcnews.com/_news/2012/12/06/15708290-apple-ceo-tim-cook-announces-plans-to-manufacture-mac-computers-in-usa?lite.

VI. Promoting "Made in America" in the 21st Century: What's a Policymaker to Do?

This report demonstrates several facts about 21st Century production of products frequently purchased by consumers. First, just because a product is labeled as made in another country does not mean that it does not represent significant U.S. content, value and associated U.S. jobs. More often than not, a foreign label hides the fact that many well-paid American workers were involved in creating that product and bringing it to the consumer. For some products, if account could be taken of the *full* U.S. value, the product would be shown to reflect significant U.S. content even if it could not bear the official "Made in America" label.

Second, even when a "Made in America" label can be used, it rarely means the product was 100 percent made in America anymore. Imported parts, materials and components are important. Supply chains for many products are so intertwined across borders today that in some cases even Canadian inputs count as "domestic."

Third, much of the U.S. value embedded in consumer products sold today – whether they are labeled "Made in America" or "Made in China" – comes from services sectors that offer U.S. workers high-paying good jobs, jobs that can be held by workers with a range of educational qualifications. For example, the transportation and warehousing sector employs more workers with just a high school education than the manufacturing sector, and pays them an average hourly wage that exceeds that paid to manufacturing workers.[35]

So how can policymakers grow "Made in America"-related jobs? At the outset, policymakers need to remember that those jobs are linked to global or regional supply chains that require the efficient transfer of parts and other inputs – design, for example – across borders, both into (imports) and out of (exports) the country. And not just U.S. borders, but also borders between other countries. The United States and trading partner governments generally can play a significant role in making the transfer of goods and services across borders faster and more efficient (i.e., cheaper).

A range of trade policies would help to achieve this supply chain efficiency and boost the American content of products sold to consumers in the United States. Given the global nature of today's supply chains, the recommendations are not as counter-intuitive as they might otherwise seem at first blush.

- **Eliminate foreign *and U.S.* tariffs**.

To increase U.S. export-related jobs, policymakers are heavily focused on eliminating foreign barriers to U.S. exports of goods. This is important and needs no amplification. But eliminating U.S. tariff barriers to imports of goods can also

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[35] Trade Partnership Worldwide, LLC, *Imports Work for America*, prepared for the Consumer Electronics Association, National Retail Federation, U.S. Chamber of Commerce, and American Apparel and Footwear Association, May 2013, p. 24. http://www.tradepartnership.com/pdf_files/Imports%20Study%20May%202013.pdf.

support U.S. jobs. As noted above, the U.S. content of apparel can be as high as 70 percent of the retail price, and yet U.S. tariffs on imported apparel can exceed 30 percent. Eliminating the tariff costs assessed on U.S. imports increases demand for those imports and, consequently, the value – and associated jobs – of the U.S. content contained in those imports. More imports of finished goods leads to more U.S. production of raw materials, components and parts, and more of the U.S. jobs – both production-related and non-production related – needed to make them. Policymakers should support the elimination of U.S. tariff barriers. Opportunities to do so can be found in pending negotiations for regional trade agreements (the Trans-Pacific Partnership agreement and the Trans-Atlantic Trade and Investment Partnership agreement with the European Union) as well as multilateral agreements such as an update to the Information Technology Agreement.

Indeed, because the production of most goods is global, and takes place in multiple foreign countries (remember the Apple products examples), even tariff barriers maintained by other countries increase the cost of goods sold to American consumers. U.S. exports of parts go to Country A, where they face a tariff. Country A turns them into another part, and exports them to Country B, where they face another tariff. Country C performs final assembly and exports the finished product to the United States, where it faces a third tariff. The tariff costs imposed by Countries A and B are now embedded in the cost of the assembled product imported into the United States. Global supply chains are fundamental to the 21st Century economy, so tariff costs within those chains matter more than ever to American workers and consumers. Thus, policymakers should support U.S. and international initiatives that aim to reduce or eliminate tariff barriers between foreign countries. Again, the TPP, TTIP and ITA provide opportunities. In each instance, the U.S. negotiating position should be as expansive as possible with respect to tariff reductions and elimination – including the reduction and elimination of remaining U.S. tariffs.[36]

How will this promote “Made in America”? As the cost of U.S. inputs comes down, foreign producers will use more in their production and assembly operations. An increase in the U.S. content of products made abroad, even if the finished products are subsequently sent back to the United States, will reflect more U.S. manufacturing output and jobs, and more related services output and jobs.

- **Eliminate foreign *and U.S.* non-tariff barriers**.

A range of non-tariff measures also raise the costs of U.S. goods and services moving through global supply chains. They include, for example, differing safety or fuel regulations affecting the way automobiles are built for different markets, restrictions on the transfer of data across borders, and barriers

[36] U.S. tariffs remain quite high for a number of products. See for example Trade Partnership Worldwide, LLC, *Imports Work for America*, prepared for the Consumer Electronics Association, National Retail Federation, U.S. Chamber of Commerce, and American Apparel and Footwear Association, May 2013, Table 14, p. 42. http://www.tradepartnership.com/pdf_files/Imports%20Study%20May%202013.pdf.

to services trade. These barriers can be quite costly. For example, one study found that regulatory requirements for automobile production in the European Union were equivalent to a 25.5 percent tariff imposed on U.S. automobile exporters to the EU.[37]

And as noted above, because manufacturing and services are now quite intertwined, liberalizing trade in services benefits manufacturing competitiveness as well. Several opportunities to pursue such liberalization are now available to policymakers: negotiation at the World Trade Organization of a Trade in International Services Agreement and, again, the TPP and TTIP negotiations.

Eliminating barriers to services exports and reducing the costs associated with differing regulatory regimes works still more "sand" out of the global supply chain gearbox. It makes it easier and more cost effective to include U.S. services – and related manufacturing – in the production of goods, both in the United States and abroad, boosting still further the U.S. content of goods sold to foreign as well as American consumers.

- **Implement trade facilitation measures**.

Still more sand in the global supply chain gears can be found in a range of costly practices associated with moving goods around the world. Lowering process and transaction costs is important to the smooth functioning of global supply chains and, consequently, to increasing both exports and imports and all of the jobs associated with them. The ability to move goods through ports in a timely, efficient way is important. So-called "trade facilitation" measures are efforts to ensure that barriers to the smooth functioning of the process of moving goods to and through ports are as low as possible. These include reforms to customs clearance practices, upgrading the quality of trade- and transport-related infrastructure (ports, railroads, roads, information technology), and ensuring that traders can track and trace consignments as examples.

While the United States certainly has a highly developed logistics infrastructure, it is not as good as it could be. The most recent survey by the World Bank of 155 countries' logistics performance found that in 2012 the United States ranked ninth, behind Singapore, Hong Kong, Finland, Germany, the Netherlands, Denmark, Belgium and Japan.[38] For specific components of the Bank's evaluation, the U.S. scorecard was mixed. It ranked 13th for the efficiency of customs and border management clearance procedures (Singapore ranked first), fourth for quality of trade and transport infrastructure (Germany was first), third for the ability to track and trace shipments (Finland was first), and eighth for the frequency with which shipments reach consignees within scheduled or expected delivery times (Singapore was again first).

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[37] Koen G. Berden, Joseph Francois, Saara Tamminen, Martin Thelle, and Paul Wymenga, *Non-Tariff Measures in EU-US Trade and Investment: An Economic Analysis* (Rotterdam: ECORYS Nederland BV, 2010), Table 6.3, p. 55.

[38] Jean-Francois Arvis, Monica Alina Mustra, Lauri Ojala, Ben Shepherd and Daniel Saslavsky, *Connecting to Compete 2012: Trade Logistics in the Global Economy, The Logistics Performance Index and Its Indicators* (Washington, D.C.: The World Bank, 2012).

The WTO recently approved a new Trade Facilitation agreement that will go into effect for the United States and other WTO members in 2015. It will necessitate some changes to U.S. practices, changes which the Obama administration believes can be implemented without the need for Congress to enact legislation. For example, President Obama issued an executive order in February 2014 setting a deadline of December 31, 2016, for various U.S. government agencies involved in the process of exporting and importing to fully transition from paper-based to electronic data collection.[39] Businesses will be allowed to electronically transmit through a "single window" the data required to import or export cargo, reducing the time and expense associated with clearing shipments by eliminating the need for businesses to submit information to dozens of government agencies through different channels, often on paper forms. This streamlined process, in turn, should allow more efficient government decision-making along with coordinated and automated messaging about such decisions, thus increasing predictability for the private sector.

- **Negotiate trade agreements that recognize 21st Century global value chains**.

In theory, at least, some U.S. policymakers recognize that future free trade agreements must reflect the importance of global value chains, including the sponsors of the Bipartisan Congressional Trade Priorities Act of 2014, which was recently introduced in both the House and Senate. A summary of the bill's provisions affecting textiles, for example, states that the legislation includes "new provisions [that] support U.S. participation in global value chains and ensure that trade agreements reflect the increasingly interrelated and multi-sector nature of trade and investment activity." However, it then adds that this "negotiating objective is consistent with [the Office of the U.S. Trade Representative's] continued use of a yarn-forward rule of origin, which requires that the yarn production and all operations forward occur in either the United States or the territory of our trading partner."[40]

The reality is that not all textile or apparel products can be sourced within a trade agreement region using a yarn-forward rule of origin, and those goods would not benefit from the lower or eliminated duties that would result from the agreement. In addition, the need to source yarn and fabric from regional suppliers to get the tariff benefits and to maintain the paperwork proving the origin of those inputs, adds time and cost to production. For some trade agreements that have included such a rule of origin, retailers have concluded that the costs outweigh the benefits, and as a result, they have not sourced much apparel from those trade agreement partners.

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[39] The White House, "Executive Order – Streamlining the Export/Import Process for America's Businesses," February 19, 2014, http://www.whitehouse.gov/the-press-office/2014/02/19/executive-order-streamlining-exportimport-process-america-s-businesses.

[40] See "Bipartisan Congressional Trade Priorities Act of 2014: Textiles," http://www.finance.senate.gov/imo/media/doc/TPA%20Textiles.pdf.

Policymakers should include rules of origin in trade agreements affecting apparel that are simpler and that reflect the commercial realities of today's supply chains. Examples include a rule that is based either on a change in tariff heading or a regional value content rule (tougher rules could apply to a specific set of sensitive apparel products when it can be shown that there are sufficient raw materials within the trade agreement region to meet a more restrictive rule of origin). Policymakers should seek to harmonize the very different apparel rules of origin that now prevail in existing free trade agreements, which make it very costly for retailers and others to source those goods from multiple countries or as part of integrated supply chains.[41]

More flexible rules of origin in U.S. trade agreements would increase the supply of products containing U.S. content. Mandating the use of U.S. inputs would not. Flexible rules mean, for example, that cotton exported to a non-U.S. free trade agreement partner country where it is made into yarn shipped to a U.S. FTA partner can be used with U.S. thread to make apparel imported into the United States duty-free under the FTA. This opportunity increases demand for U.S. cotton in non-FTA countries.

More generally, it is important for policymakers to change the rhetoric. The current typical speech takes the tone that "exports are good" and "imports are bad." Not only is this not true, it is counterproductive. It perpetuates the notion that there is such a thing as a wholly "Made in America" product, and that purchasing something labeled "Made in Country X" will somehow contribute to hollowing out the U.S. manufacturing sector. As this report has demonstrated, imports support domestic output and jobs, including manufacturing jobs.

VII. Conclusion

Today, very few products – or parts – are "all or virtually all" manufactured in the United States. Much of what is manufactured in the United States contains imported inputs of some kind. Imported components keep U.S. manufacturing of finished goods competitive. Imported content is not a bad thing. It is a necessary component of global supply chains.

Today, "made" means a lot more than "manufactured." Today, services are integral components of manufacturing. U.S. services jobs related to manufacturing goods in the United States are as important to "Made in America" as the production or assembly jobs themselves. The latter would not exist but for the former. So those jobs and that value must be included when one seeks to know if a product is "Made in America."

But even including the services jobs so integral to U.S. manufacturing in most cases would not deliver a product that can meet the current "Made in America" requirement that "all or virtually all" of the costs of making the product

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[41] These and other recommendations have been offered to policymakers by the Trans-Pacific Partnership Apparel Coalition, see http://www.tppapparelcoalition.org/Position.html.

be incurred in the United States. Global supply chains have moved past that standard. Consumers need to know that most products sold today contain imported inputs and those inputs help to keep American manufacturing – and American manufacturing jobs – competitive. Policymakers need to promote initiatives that keep those supply chains fluid, fast and free of the unnecessary costs and barriers to the movement of goods and services around the world.

So, is anything “Made in America” anymore? Yes, more than you think. Where can we buy it? On every retail store shelf, website, catalog or anywhere else where a consumer can go to purchase a product.