September 30, 1999 No. 6

Trade, Jobs, and Manufacturing
Why (Almost All) U.S. Workers Should Welcome Imports

by Daniel T. Griswold

Executive Summary

Many Americans assume that imports are bad for economic growth, production, and employment, a "burden" we must bear to help other nations recover their economic health. In reality, the level of imports has no negative impact on total employment, and the vast majority of Americans work in sectors of the economy that do not face significant import competition.

Like technology, trade tends to shift resources to industries where worker productivity (relative to compensation) and returns on investment are higher compared with other domestic industries. The limited and temporary dislocation caused by import competition should not cause us to sacrifice the lasting benefits that competition creates.

The large majority of America's nonfarm workers, about 85 percent, are employed in service-providing industries, construction, and government—sectors where import competition is minimal. To those workers, imports are an unambiguous blessing that spurs innovation, expands consumer choice, and raises real wages.

Even in the more tradable sector of manufacturing, import penetration is low in most industries. Based on an analysis of 1994 import, production, and employment figures, 2.2 million Americans work in manufacturing industries with an import penetration of 30 percent or more. Workers in trade-sensitive manufacturing industries thus account for only 12 percent of total manufacturing workers and less than 2 percent of total nonfarm workers.

Technological change and other non-trade factors account for most of the workers displaced from their jobs each year. In the three-year period from 1995 through 1997, three-quarters of the 8 million Americans displaced from their jobs were in sectors that by their nature are relatively insulated from import competition. Only 23 percent were in manufacturing, and 2 percent in mining and agriculture.

The focus of public policy should be not on "saving jobs" through trade barriers but on allowing companies to create new jobs and enabling workers to adjust to a changing workplace.

Daniel T. Griswold is associate director of the Cato Institute's Center for Trade Policy Studies.

CATO INSTITUTE

The lingering myth that imports cause a net decrease in jobs is refuted by the evidence of the last two decades.

Introduction

If you believe the conventional wisdom on trade, most American workers should be looking over their shoulders in fear of imports. Apprehension about trade and jobs has only intensified since the Asian financial crisis began in 1997, stoked by predictions that a flood of imports, if it ever comes, would threaten to put millions of Americans out of work by displacing what they produce with cheaper foreign-made substitutes.

Critics of free trade contend that lower consumer prices are a small consolation if millions of Americans lose their jobs because of imports. In daily news reports on trade, a rising level of imports is assumed to be bad for economic growth, production, and employment. This spring, as the Commerce Department announced a string of record monthly trade deficits, reports routinely asserted that the widening gap between imports and exports meant slower growth for the economy. One news report on the surprisingly strong first-quarter growth numbers credited robust consumer spending for "more than offsetting the drag from imports."[1]

Even the most ardent proponents of free trade will grant that its benefits, although almost always outweighing its costs, are not universally distributed. Along with the many winners come a smaller but still real number of losers: people whose jobs are indeed put in jeopardy and even eliminated by competition from imports. For those people, the benefits of lower prices, higher quality, and wider consumer choices can be swamped, at least temporarily, by the trauma of losing their jobs.

This paper tackles the question of how many American workers compete directly against imports, specifically in the politically sensitive manufacturing sector, and to what extent, if any, public policy should be driven by concern for workers who could be displaced by import competition. The aim of the paper is to place a reasonably accurate boundary on the number of Americans whose jobs could conceivably be threatened by imports.

We begin by examining the relationship between international trade and the aggregate number of jobs in the U.S. economy. Does trade cause a net increase or decrease in jobs, or is total employment determined by other factors? In the main section we attempt to measure the number of manufacturing jobs in the U.S. economy that are in industries in which competition from imports is a significant factor.

Whether approaching the question from the top down or the bottom up, the answer appears to be the same: The number of workers who have reason to fear for their jobs because of imports remains relatively small by any measure.

The Impact of Trade and Technology on Jobs

The benefits of international trade to a nation's economy are not "jobs, jobs, jobs" but "wealth, wealth, wealth." International trade allows Americans to create more wealth with our stock of labor, capital, and technology by encouraging competition, specialization, and economies of scale.

Total employment in the U.S. economy is not determined by trade policy. A nation's unemployment rate depends on nontrade factors such as monetary policy, the business cycle, and wage and labor-market flexibility, not on the openness of its economy to trade. Countries relatively open to international trade experience a range of unemployment rates, over time and compared with each other, as do countries relatively closed to trade.

The lingering myth that imports cause a net decrease in jobs is refuted by the evidence of the last two decades. Since 1980, the annual volume of imports to the United States has more than tripled. During that same period, the number of Americans employed has increased by 31 million.[2]

The argument that imports cause a decline in net employment is not only wrong; it is the exact opposite of the truth. In the last two decades, annual changes in import volume and civilian employment in the United States have been *positively* correlated. That is, the more net

jobs our economy has created, the faster the volume of imports has grown. (See Figure 1.) Since 1991, the statistical correlation between job growth and import volume has been a strong .89.[3]

The explanation is simple: As more Americans find jobs and begin cashing their paychecks, demand rises for goods and services, from both domestic and foreign producers. Contrary to populist wisdom, a "flood" of imports has not been a leading indicator of massive job layoffs, but a current indicator of an employment boom.

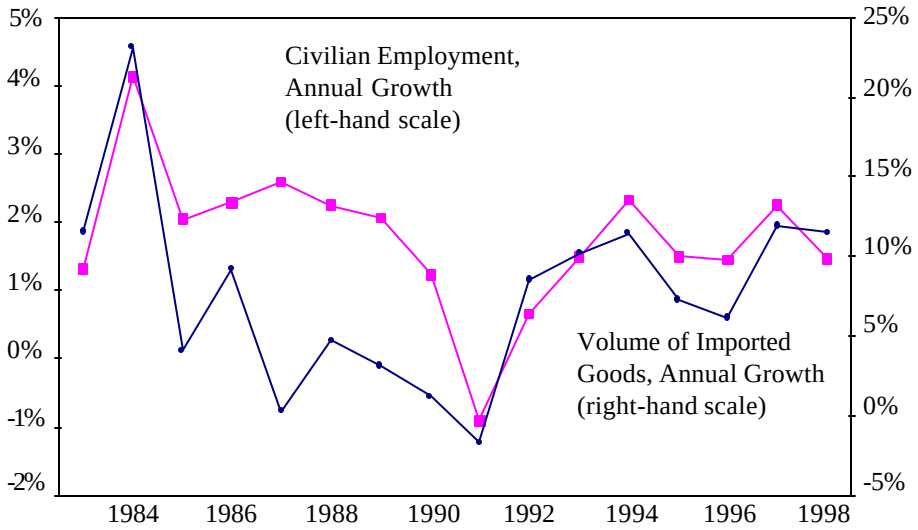
Fears that trade will reduce the total number of jobs are strikingly similar to apprehensions in the past about new technology. Whereas the Luddites of two centuries ago warned that automated production would lead to massive unemployment, today's protectionists make the same claim against free trade. But instead of smashing mechanical looms as their intellectual forefathers did in England in the 18th century, they seek today to impose barriers against foreign-made steel, defend quotas on imported textiles and apparel, and block initiatives to lower trade barriers at home and abroad.

Like technology, international trade tends to shift resources to sectors where worker productivity (relative to wages) and returns on investment are higher compared with other domestic industries, while eliminating jobs in less productive and less profitable sectors. Import competition forces less efficient producers to either modernize their production processes or face bankruptcy. The capital and workers forced to leave the declining industries can then be employed in industries that are more efficient, competitive, and profitable.

Along with spurring competition, imports enhance domestic productivity by providing lower-cost inputs and capital equipment for U.S. producers. In 1998, more than half the $919 billion in goods Americans imported were not final consumer goods but rather capital goods ($270 billion) or industrial supplies and materials ($203 billion).[4] Such imports as petroleum, raw materials, steel, and semiconductors are used directly by American producers to lower the cost of their final products. The lower costs in turn lead to increased sales at home and abroad and, in many cases, higher employment within the industry. The capital goods imported by American companies allow the workers they employ to produce goods more efficiently, which leads to higher real wages.

Figure 1

Jobs and Imports Grow Together



Source: *Economic Report of the President 1999*, Bureau of Labor Statistics.

The short-term dislocation caused by import competition should not be allowed to deprive us of the immediate and longer-term benefits that competition creates. In a major speech in Dallas in April, Federal Reserve Board chairman Alan Greenspan warned against blocking progress in a mistaken effort to blunt the localized pain of transition:

> While major advances in standards of living are evident among virtually all nations that have opened their borders to increased competition, the adjustment trauma has also distressed those who once thrived in industries that were then at the cutting edge of technology, but which have since become increasingly noncompetitive. Economists will say that workers should move from the steel districts of western Pennsylvania to a

vibrant Silicon Valley. And eventually they, or more likely, their children, will. But the adjustment process is wrenching to an existing workforce made redundant largely through no fault of their own. It may be argued that all workers should have the foresight to recognize long-term job opportunity shifts and move in advance of obsolescence. This regrettably is a skill not in great abundance—among business managers or the economists who counsel them as well as among workers.

Yet the protectionist propensity to thwart the process of the competitive flow of capital, from failing technologies to the more productive, is unwise and surely self-defeating. History tells us that not only is it unwise to try to hold back innovations, it is also not possible over the longer run. Generation after generation has experienced episodes in which the technologically obsolescent endeavored to undermine progress, often appealing to the very real short-term costs of adjusting to a changing economic environment. From the Luddities to the Smoots and the Hawleys, competitive forces were under attack. In the end they did not prevail and long-term advances in standards of living resumed.[5]

The real impact of trade on the labor force is not to expand or contract the net number of jobs but to quicken the pace of change in the demand for labor among competing industries. And the impact of trade on the composition of jobs tends to be overstated, with a relatively small share of jobs in sectors of the economy exposed to heavy import competition.

The real impact of trade on the labor force is not to expand or contract the net number of jobs but to quicken the pace of change in the demand for labor among competing industries.

Few Workers Compete against Imports

The large majority of American workers have no reason to fear that their job security could be undermined by imports. Even though America's integration with the global economy has grown dramatically in the past two decades, huge sectors of the American economy remain largely nontradable in the international market.

As a general rule, goods are much more easily traded across international borders than are services. Most goods are well suited to being made in one location and sold and consumed in another. They are relatively portable and becoming more so all the time as the average weight of goods per dollar of real value continues to fall. By contrast, a typical service product, such as a haircut, medical examination, or computer network installation, usually requires that the provider and the consumer be in the same location. We can import toys, television sets, and bottles of wine far more easily than we can import manicures, legal advice, and fresh-baked pizza.

American spending patterns confirm that goods are far more tradable than services. In 1998, goods accounted for 44 percent of the personal consumption expenditures of Americans but for 84 percent of imports. Services, in contrast, accounted for 56 percent of personal expenditures but for only 16 percent of imports. The ratio of imports to personal expenditures for goods is more than six times higher than for services.[6]

More than three-quarters of America's nonfarm, wage-earning employees, 102.5 million, now work in the relatively nontradable service-providing sectors, while another 25.2 million work in goods-producing sectors. And of those in goods-producing industries, 6.2 million work in construction,[7] an industry that by its localized nature is not subject to much import competition. That leaves the goods-producing sectors of manufacturing, mining, and agriculture as the principal industries exposed to foreign competition.

In 1998, 19.0 million workers were employed in mining and manufacturing, about 15 percent of total nonagricultural employment. That means 85 percent of civilian, nonagricultural workers are employed in those broad sectors where import competition is minimal or nonexistent. (See Figure 2.) These workers earn their livings in retailing and

wholesaling, transportation and public utilities, finance, insurance and real estate, other service industries, and government. For the vast majority of these workers imports pose no threat to job security.

Last year, an additional 3.4 million Americans worked in agriculture, one of the most trade-oriented sectors of the U.S. economy. The number of self-employed farmers and farm workers has been in relative decline for more than a century, and today they represent only 2.6 percent of total employment in the United States.

Fear of imports looms large in some sectors of agriculture, such as dairy products, sugar, and peanuts, but for those who make their living in the larger export-oriented sectors such as wheat, corn, and soybeans, the chief worry is not rising imports but sagging exports caused by economic troubles abroad.

Even in the farm sectors most vulnerable to import competition, the potential job losses are minuscule in relation to the overall U.S. labor force. Consider two of the most heavily protected industries in U.S. agriculture: sugar and dairy products.

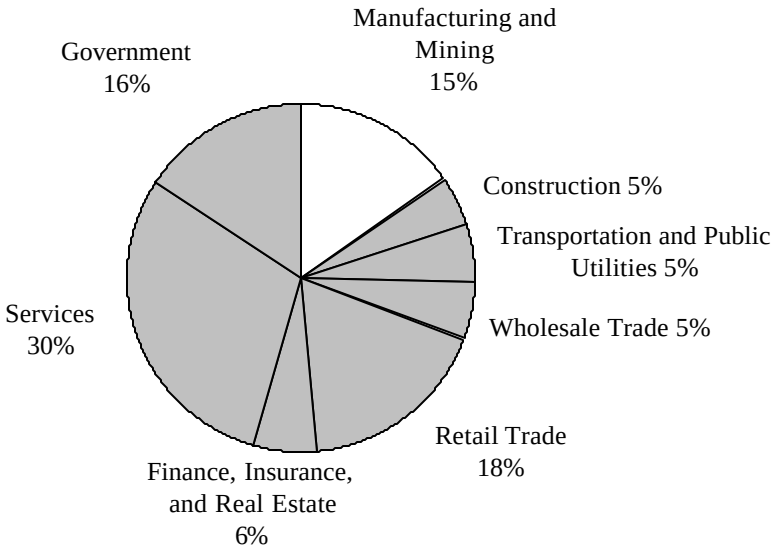
According to the International Trade Commission, the repeal of all price supports and import barriers in the dairy industry would cause imports of butter, cheese, and dry and condensed milk products to rise by between 12.4 and 13.7 percent. The resulting loss of jobs in the industry, according to the ITC model, would total 430.[8]

If sugar and sugar-containing products were completely opened to global competition, imports would surge by almost 50 percent and domestic production would fall by 7.2 percent. The resulting job losses in the sugar-processing, sugar-containing products, and sugar-crop sectors would total 2,290 out of 16,400 full-time jobs in the industry[9]—a small number compared to an average of 235,000 net new jobs the U.S. economy has created *each month* during the past seven years.

Those workers in farming, manufacturing, and mining who face import competition are among a minority of American workers, and a small minority at that.

Figure 2

Most Nonfarm Workers Are Employed in Nontradable Sectors



Source: Joint Economic Committee of Congress, "Economic Indicators," April 1999, p. 14. Employment numbers are for nonfarm workers only.

Domestic Manufacturers Dominate U.S. Market

Public concern about imports and jobs has focused primarily on manufacturing, where workers are thought to be the most vulnerable to import competition. But even in manufacturing, the large majority of workers are in industries where imports account for a relatively small to nonexistent share of domestic supply.

To cut through these ill-defined fears, this study attempts to measure just how many Americans work in manufacturing industries where import penetration is high.

An import-sensitive industry is defined as a four-digit Standard Industrial Classification sector where annual imports in 1994 (the latest data available) totaled 30 percent or more of new supply,[10] with new supply defined as industry shipments plus imports.[11] The total number of workers in import-sensitive industries is then calculated by adding the number of workers in each industry.[12]

The 30 percent threshold is somewhat arbitrary, as would be a threshold of 20 percent or 40 percent. But a domestic industry with just

under 30 percent import penetration, although still affected by imports, would remain the dominant provider of domestic supply. In other words, domestic industries that provide more than 70 percent of new supply are not considered import sensitive for the purpose of this study.

Of more than 450 separate four-digit SIC manufacturing sectors for which trade and production data were available, 66 were identified by our study as being import sensitive, that is, having an import penetration ratio of 30 percent or more. (See Table 1.)

Employment in those import-sensitive industries in 1994 totaled 2.19 million, a surprisingly small number when compared with overall total employment in manufacturing and the civilian economy. In 1994, employment in import-sensitive industries was only 11.9 percent of the 18.3 million workers employed in manufacturing and 1.9 percent of the overall civilian workforce of 114.2 million.[13]

Employment in import-sensitive industries in 1994 totaled 2.19 million, a surprisingly small number when compared with overall total employment in manufacturing and the civilian economy.

Import Penetration Highest in Clothing and Computers

The largest sectors exposed to import competition are clothing, leather products, computer and office equipment, and electronic components.

Among the categories of men's and boys' furnishings, imports accounted for slightly more than one-third of the new supply in 1994. Among the women's and misses' outerwear sectors, the import penetration was even higher at 38.1 percent. The 559,400 workers employed in these two industries have reason to worry about the long-term viability of their jobs.

Another major sector with high import penetration is leather and leather products, where total imports account for 58.8 percent of new supply. In some four-digit SIC sectors, such as women's footwear, nonrubber footwear, and handbags and purses, import penetration reached more than 75 percent. The number of Americans working in the leather and leather products industry in 1994 totaled 112,900.

The other major import-sensitive sectors are computer and office equipment—electronic computers, terminals, calculators, office machines, and parts—and electronic components and accessories. In both of those sectors, imports account for more than 36 percent of new supply. Employment in 1994 totaled 574,700.

Other sectors with high import penetration in 1994 were primary and secondary nonferrous metals, motorcycles and bicycles, toys and sporting goods, pianos and organs, watches and clocks, jewelry and silverware, household vacuum cleaners, household audio-visual equipment, blowers and fans, and several types of industrial machinery.

Although economically insignificant, some of those sectors retain an aura of industrial romance. Harley-Davidson and Schwinn remain household names, for example, even though total employment in the domestic motorcycle and bicycle sector (SIC 3750) in 1994 was only 20,400. The public attention devoted to imports in these and other sectors far outweighs their relative importance to the national economy.

High Imports, High Exports

Not all the import-sensitive industries are on the list because of a lack of comparative advantage. In the area of computers and electronic components, for example, American products are on the cutting edge of technological advancement. In these high-tech sectors, import penetration is high because of the international nature of the production process. Components are made in a number of countries and assembled in yet another, and then the final product is often reexported.

As a result, some of the sectors on the list can have both high import and high export sensitivity. In three of them—pulpmill products (SIC 2610), other nonferrous metals (SIC 3339), and electronic capacitors (SIC 3675)—exports approximately equal or exceed imports. In a number of other sectors, including computers and office equipment (SIC 3570), special industry machinery (SIC 3555), blowers and fans (SIC 3564), electronic components and accessories (SIC 3674), electronic resistors (SIC 3676), engine electrical equipment (SIC 3694), and pianos and organs (SIC 3931),

exports are half or more of imports.[14]

Employment in those sectors with a high level of exports (50 percent or more of imports) totaled 877,800, or more than 40 percent of the employment in import-sensitive industries. Although employees in those sectors could in theory be displaced by import competition, they also have much to gain from free trade because of the globally integrated nature of their industries.

Domestic Factors Drive Auto and Steel Industries

The list of import-sensitive sectors does not include some high-profile industries that have complained in the past about import competition. The automobile industry's import penetration level in 1994 was 28 percent, just below the threshold set in this study for an import-sensitive industry.

The case of domestic autos illustrates the fact that an industry's economic health is determined primarily not by import competition but by domestic factors, such as the health of the economy, the quality of management, and changing consumer tastes. The automobile industry is thriving today—with record sales and employment near an all-time high—because of a buoyant economy, rising demand for larger cars, and huge investments in new product design and production techniques that allow American carmakers to produce better cars at competitive prices.

Another highly visible industry not on the list is steel. In 1994, import penetration in the domestic steel industry was 17.8 percent of new supply. During 1998, with the industry in the throes of the alleged steel "crisis," import penetration still reached only 29 percent, and it has been receding in 1999.

Like automobiles, whatever alleged problems the steel industry has experienced in the past or present result less from imports than from purely domestic factors. In the steel industry, the driving force behind job losses has been rising productivity. Since 1980, the number of man-hours required to produce a ton of steel has dropped by 60 percent, from 10 to less than 4. As a result, the number of workers employed by the steel industry has fallen by roughly the same percentage, from 400,000 in 1980 to 160,000 today.[15]

Although imports play an important role in meeting domestic demand and keeping competitive pressure on U.S. producers, the American steel industry—like the automobile industry—still dominates the domestic market by providing more than 70 percent of new supply.

Imports have played a role in spurring necessary restructuring in the steel and automobile industries; however, they cannot be blamed as the fundamental cause of job losses in those industries.

U.S. Manufacturing Thrives As Imports Rise

The experience of the U.S. manufacturing sector since 1994 only confirms that imports are not a threat to the large majority of manufacturing jobs. In fact, the economic expansion of the 1990s has been characterized by a simultaneous increase in manufacturing imports, domestic manufacturing output, and, until recently, manufacturing employment.

Between 1991 and 1998, the value of manufactured goods imported to the United States more than doubled.[16] During that same period, manufacturing output rose by a healthy 40 percent, with production of durable goods, including motor vehicles, machinery, and appliances, up a robust 65 percent.[17] Meanwhile, domestic employment in manufacturing during that time actually climbed by 366,000, from 18,406,000 in 1991 to 18,772,000 in 1998.[18]

Despite worries about an alleged "export" of jobs, manufacturing employment in the United States has been remarkably stable in the past 25 years, fluctuating between 18 million and 21 million. In fact, total employment in manufacturing today is slightly higher than it was in 1975.[19]

From mid-1998 to mid-1999, manufacturing employment fell by nearly 400,000, providing ammunition for labor union leaders and other critics of free trade who argue that imports are destroying America's industrial base. But the recent dip in manufacturing

Like automobiles, whatever alleged problems the steel industry has experienced in the past or present result less from imports than from purely domestic factors.

Table 1

Import-Sensitive U.S. Industries, by Four-Digit SIC Category, 1994

SIC Code	Product Description	Workers	Imports ($ million)	Shipments ($ million)	New Supply ($ million)	Imports/ New Supply
2091	**Canned and cured fish**	7,400	799.4	896.6	1,696.0	47.1%
2253	**Knit outerwear mills**	59,600	3,794.9	5,263.8	9,058.7	41.9%
2254	**Knit underwear mills**	24,200	573.5	912.4	1,485.9	38.6%
2271	**Carpets and rugs**	3,200	634.5	557.5	1,192.0	53.2%
2299	**Nonwoven fabrics and other textile goods**	29,600	388.1	448.3	836.4	46.4%
2320	**Men's and boys' furnishings**	266,000	8,801.5	17,519.2	26,320.7	33.4%
2321	Men's and boys' knit shirts		3,276.4	5,212.5	8,488.9	38.6%
2322	Men's and boys' knit underwear		339.4	539.9	879.3	38.6%
2329	Men's and boys' sweaters		1,932.8	2,680.9	4,613.7	41.9%
2330	**Women's and misses' outerwear**	293,400	13,983.1	22,733.8	36,716.9	38.1%
2331	Women's and misses' knit shirts and blouses		2,843.6	4,146.5	6,990.1	40.7%
2335	Women's, misses', and infants' dresses		2,801.1	6,396.2	9,197.3	30.5%
2337	Women's, misses', and juniors' coats and capes		2,473.0	4,055.2	6,528.2	37.9%
2339	Women's, misses', and juniors' bathing suits		5,865.5	8,135.9	14,001.4	41.9%
2341	**Women's and children's knit underwear**	39,400	1,404.5	2,437.5	3,842.0	36.6%
2350	**Hats, caps, and millinery**	20,600	716.1	990.3	1,706.4	42.0%
2360	**Women's, misses', and juniors' outerwear**	45,100	2,756.5	3,926.3	6,682.8	41.2%
2380	**Miscellaneous apparel and accessories**	40,100	2,857.5	1,918.0	4,775.5	59.8%
2381	Gloves and mitttens from purchased fabrics		200.4	379.3	579.7	34.6%
2384	Robes and dressing gowns		257.9	339.0	596.9	43.2%
2385	Raincoats and other waterproof outergarments		777.3	189.2	966.5	80.4%
2386	Leather- and sheep-lined clothing		1,291.0	237.6	1,528.6	84.5%
2389	Belts and other leather accessories		331.0	772.9	1,103.9	30.0%
2429	**Special product sawmills**	1,800	176.2	154.1	330.3	53.3%
2610	**Pulpmills**	12,600	2,420.8	4,423.9	6,844.7	35.4%
2833	**Medicinals and botanicals**	20,700	3,400.4	6,189.3	9,589.7	35.5%
3021	**Rubber and plastics footwear**	10,800	3,175.6	961.2	4,136.8	76.8%
3100	**Leather and leather products**	112,900	13,643.9	9,544.6	23,188.5	58.8%
3111	Finished and unfinished leather		896.9	3,037.8	3,934.7	22.8%
3131	Boot and shoe cut stock and findings		480.8	318.7	799.5	60.1%
3143	Men's footwear, except athletic		2,041.8	2,461.0	4,502.8	45.3%
3144	Women's footwear, except athletic		3,906.2	949.9	4,856.1	80.4%
3149	Footwear, except rubber		2,492.0	308.9	2,800.9	89.0%
3151	Leather gloves and mittens		270.8	142.5	413.3	65.5%
3161	Luggage		1,831.6	991.4	2,823.0	64.9%
3171	Women's and children's handbags and purses		1,017.6	303.9	1,321.5	77.0%
3172	Personal leather goods		422.5	392.9	815.4	51.8%
3199	Miscellaneous leather goods		206.3	434.1	640.4	32.2%
3253	**Ceramic wall and floor tile**	12,800	613.0	847.3	1,460.3	42.0%
3262	**Glass and semiglass table and kitchenware**	5,100	358.2	361.7	719.9	49.8%
3269	**Miscellaneous pottery products**	14,800	1,513.8	720.0	2,233.8	67.8%
3280	**Cut stone and stone products**	13,400	504.8	1,111.9	1,616.7	31.2%
3313	**Electrometallurgical products**	5,400	948.0	1,197.8	2,145.8	44.2%
3330	**Primary nonferrous metals**	40,500	6,302.1	8,360.8	14,662.9	43.0%
3333	Unspecified nonferrous metals		1,084.7	526.3	1,611.0	67.3%
3334	Primary aluminum		2,416.7	5,576.6	7,993.3	30.2%
3339	Other nonferrous metals		2,800.7	2,257.9	5,058.6	55.4%
3340	**Secondary nonferrous metals**	16,100	3,516.7	7,151.8	10,668.5	33.0%

SIC Code	Product Description	Workers	Imports ($ million)	Shipments ($ million)	New Supply ($ million)	Imports/ New Supply
3541	**Machine tools, metal-cutting types**	37,400	2,463.3	3,658.1	6,121.4	40.2%
3552	**Textile machinery**	15,400	1,819.9	1,908.3	3,728.2	48.8%
3553	**Woodworking machinery**	11,100	597.6	1,200.5	1,798.1	33.2%
3555	**Printing trades machinery**	21,800	1,600.2	3,250.8	4,851.0	33.0%
3564	**Blowers and fans**	32,400	1,510.1	3,459.5	4,969.6	30.4%
3566	**Speed changers, drivers, and gears**	15,500	1,027.4	2,054.0	3,081.4	33.3%
3570	**Computer and office equipment**	354,200	50,081.1	83,079.6	133,160.7	37.6%
3573	Electronic computers		46,271.6	78,151.3	124,422.9	37.2%
3574	Parts, attachments, subassemblies		1,689.0	1,346.8	3,035.8	55.6%
3579	Computer terminals, calculators, office machines		2,120.5	3,581.5	5,702.0	37.2%
3635	**Household vacuum cleaners and appliances**	24,700	564.0	338.8	902.8	62.5%
3651	**Household audio and video equipment**	59,900	16,675.0	10,285.6	26,960.6	61.8%
3674	**Electronic components and accessories**	220,500	23,986.3	42,252.1	66,238.4	36.2%
3675	**Electronic capacitors**	20,400	915.8	1,871.9	2,787.7	32.9%
3676	**Electronic resistors**	10,600	551.9	806.0	1,357.9	40.6%
3694	**Engine electrical equipment**	69,800	4,357.6	8,683.2	13,040.8	33.4%
3750	**Motorcycles, bicycles, and parts**	20,400	1,825.2	2,632.1	4,457.3	40.9%
3873	**Watches and clocks**	8,400	2,493.5	822.6	3,316.1	75.2%
3910	**Jewelry, silverware, and plated ware**	51,000	10,394.1	6,095.0	16,489.1	63.0%
3911	Jewelry and precious metal		8,405.4	4,459.2	12,864.6	65.3%
3914	Silverware and plated ware		326.3	753.9	1,080.2	30.2%
3915	Lapidary work, diamond cutting, and polishing		1,662.4	881.9	2,544.3	65.3%
3931	**Pianos, organs**	13,400	795.7	1,061.6	1,857.3	42.8%
3942	**Toys and sporting goods**	43,000	7,837.4	4,552.6	12,390.0	63.3%
3951	**Pens, markers, mechanical pencils**	32,200	553.8	1,230.0	1,783.8	31.0%
3960	**Custom jewelry and notions**	28,700	1,519.4	2,995.8	4,515.6	33.7%

Total workers in import-sensitive manufacturing industries **2,186,300**

Total U.S. manufacturing employment, 1994 **18,321,000**

Percentage of manufacturing workers in import-sensistive industries **11.9%**

Sources: Bureau of Labor Statistics (published and unpublished employment data) and Robert C. Feenstra, National Bureau of Economic Research Trade Database.

If the defenders of the labor-market status quo need a villain, it should be technology, not international trade. Technology shoves far more Americans out of jobs than do imports.

employment has been caused almost entirely by a falloff of exports, not by a surge of imports.

In 1998 and the first half of 1999, the total value of manufacturing goods imported to the United States continued to rise; what changed was the collapse in the growth of exports. The cause, of course, was the implosion of demand in the troubled economies of East Asia. While the long-predicted "flood" of cheap imports never arrived, export growth dried up, falling to 0.7 percent in 1998 and actually declining 1.5 percent in the first six months of 1999 compared with the same period in 1998.[20]

Contrast the experience of the past 18 months with 1997, when manufacturing employment rose by 303,000.[21] During that banner year for job growth, the value of manufacturing imports actually grew faster, at 10.6 percent, than during the last 18 months. The difference was that, during 1997, manufacturing exports grew an even faster 12.9 percent, compared with virtually no export growth in the last 18 months.

The experience of 1997 and previous years demonstrates that a rising level of imports is compatible with rising employment and production in manufacturing. It also shows that the recent downturn in manufacturing employment should be blamed not on import competition but on falling exports.

Trade Adjustment Assistance Ignored by Workers

Further evidence of the minor effect imports have on job displacement can be found in the scant use of federal Trade Adjustment Assistance programs.

Special benefits for workers displaced by trade were first enacted under the Trade Expansion Act of 1962 and have been continued in modified form in subsequent trade bills. The North American Free Trade Agreement Implementation Act, passed in December 1993, contained adjustment assistance specifically for workers displaced by the expansion of trade with NAFTA partners Mexico and Canada.

In the first five years since the implementation of NAFTA, 1994 through 1998, 564,967 American workers were certified as eligible for benefits under TAA and NAFTA-TAA programs.[22] That averages to 112,993 workers per year who were officially eligible for assistance by virtue of being displaced by trade. When compared with total U.S. employment that averaged more than 119 million a year during the same period, it means that less than one worker out of a thousand qualified each year for such assistance.

The large majority of workers eligible for trade adjustment benefits did not choose to participate in the program. Those workers either found new jobs soon after being displaced, dropped out of the workforce altogether, or financed their own job retraining independent of federal trade adjustment programs. Only about one in four workers eligible—or a total of 150,998—actually received trade readjustment allowances through TAA or NAFTA-TAA from 1994 through 1998. On average, during the five years after the passage of NAFTA, only 30,200 workers a year collected federal benefits for being displaced from their jobs by international trade. During those five years, federal trade adjustment assistance was collected by about 0.025 percent of workers each year, or one worker out of every 3,940 employed.

Labor union leaders and other critics of open trade complain that the criteria for qualifying for TAA are too strict, reducing eligibility below what it would be if the true impact of trade were measured. But critics of the program counter that the criteria may in fact be too loose, providing aid when job losses are only incidentally connected to trade. Even if participation were to double, assistance would still be collected by a tiny fraction of American workers.

By any measure—whether counting employment in broad sectors, industry by industry, or through federal trade adjustment assistance programs—the number of U.S. workers whose jobs are realistically threatened by import competition remains small relative to the overall workforce.

Technology: The Great Displacer

If the defenders of the labor-market status quo need a villain, it should be technology, not international trade. Technology shoves far more Americans out of jobs than do imports.

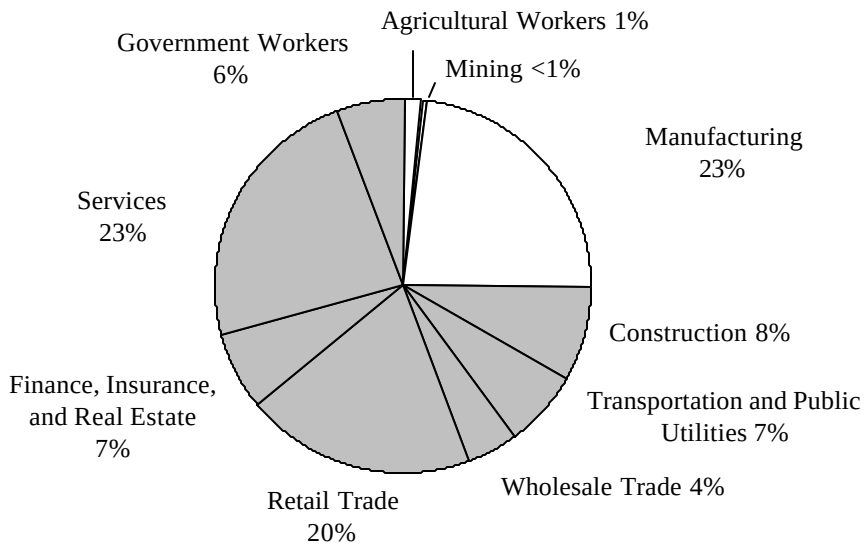
In the last two decades, tens of thousands of telephone operators and bank tellers have been displaced from their jobs, not by imports, but by computerized switching and automatic teller machines. Further back in American history, entire industries have downsized or disappeared because of changing technology. For example, employment in the railroad industry plunged in the second half of this century because of competition from domestic airlines, automobiles, and trucks, not from foreign railroads. Employment in the agricultural sector fell steadily for decades, again not because of imports—America has long been a net exporter of food—but because of a mechanical revolution on the farm.

Recent employment data confirm that imports are not the major cause of job displacement. According to the Bureau of Labor Statistics, 7.95 million workers were "displaced" in 1995, 1996, and 1997 from jobs they had held for more than three years. The BLS defines displaced workers as those who have lost their jobs because work was insufficient, the plant or company where they worked shut down or moved, or their position or shift was abolished. Workers put out of work by imports would typically fit under this category.

Of all the displaced workers counted by the BLS, 1.78 million, or less than one-quarter, were working in the manufacturing sector when they lost their jobs. Twice as many displaced workers, a total of 3.70 million, were in the essentially nontradable wholesale and retail sectors or in other service industries at the time they lost their jobs. Another 2.12 million displaced workers were in other largely nontradable sectors, such as construction, transportation services, utilities, finance, insurance, real estate, and government.[23] Only 2 percent were employed in the tradable sectors of mining and agriculture. (See Figure 3.)

Figure 3

Displaced Workers, by Sector, 1995–97



Source: Bureau of Labor Statistics.

In other words, three-quarters of the workers displaced in 1995–97 were working in sectors of the economy that by their nature are largely insulated from import competition. Those workers were displaced not by imports but by new technologies and changing market conditions.

If the goal of public policy is to spare workers the trauma of displacement, then workers need protection from technological change and domestic competition, not only from imports. Of course, the result of such a policy would be an economy in which innovation and progress are stifled by the heavy hand of government.

Conclusion

Public policy should be designed to benefit the nation as whole. It should, to borrow a phrase from the Constitution, "promote the general welfare." It should not benefit a small group of producers and their workers at the expense of everybody else—which is precisely the aim of protectionist trade measures.

The fact that such a small percentage of American workers are employed in manufacturing industries with high import penetration

only confirms that free trade delivers net benefits to far more workers than it could possibly harm. Presidential and congressional candidates who talk about "saving jobs" by raising barriers to imports are really talking about dragging down the real incomes of the vast majority of Americans for the temporary benefit of a small fraction of workers.

It is debatable whether protectionism even serves the long-term interest of workers in protected industries. In the apparel and textile industries, for example, employment has continued to fall despite an elaborate system of import quotas in place for more than three decades. Protectionism only delays the necessary transition of workers to sectors of the economy in which their experience and energies can be put to more productive use.

Protectionism only delays the necessary transition of workers to sectors of the economy in which their experience and energies can be put to more productive use.

The aim of public policy should not be to block change by raising barriers to imports, any more than it should be to block change by thwarting new technologies or ways of doing business. Instead, the emphasis should be on making it easier for industries and workers to adjust to change.

Public policy should focus on removing those labor-market regulations that make it difficult for companies to create new jobs and for workers to change jobs. In the private sector, the trend toward job retraining should be encouraged. Introducing more competition into primary and secondary education would help prepare students to fill the more knowledge-intensive jobs being created in greater proportion today by the U.S. economy.

The evidence in this study points to the futility of using trade barriers to save jobs. For most American workers and their families, imports are an unambiguous blessing. Unrestricted access to imports provides them with a wider variety of goods and services at lower prices and better quality, raising their real wages with virtually no downside risk to job security.

Notes

1. John M. Berry, "U.S. Economy Keeps Surging; Consumer Spending Drives Growth to 4.5% Rate," *Washington Post*, May 1, 1999, p. A1.

2. The annual employment and import data are from the Council of Economic Advisers, *Economic Report of the President 1999*, Tables B-35 and B-104. The import price index used to deflate the nominal value of imports is from the Bureau of Labor Statistics, http://146.142.4.24/cgi-bin/dsrv.

3. A perfect positive correlation would be 1.0. No statistical correlation would be 0.

4. U.S. Department of Commerce, *Survey of Current Business* 79, no. 4 (April 1999): 28.

5. Alan Greenspan, Remarks before the Dallas Ambassadors Forum, Dallas, Texas, April 16, 1999. A full text of the speech can be found at http://www.federalreserve.gov/boarddocs/speeches/1999/19990416.htm.

6. Joint Economic Committee of Congress, *Economic Indicators*, May 1999. See p. 4 for real personal consumption expenditures and p. 35 for imports of goods and services.

7. Ibid., p. 14.

8. U.S. International Trade Commission, *The Economic Effects of Significant U.S. Import Restraints: Second Update 1999*, USITC Investigation No. 332-325, Publication 3201, May 1999, p. 54.

9. Ibid., p. 66.

10. One complication in computing import penetration is that the categories used by the federal government to compile data on trade do not directly correspond to those used to compile data on domestic production and employment. Domestic shipments and jobs are categorized according to the Standard Industrial Classification (SIC) system, while imports and exports are grouped according to the Standard International Trade Classification (SITC) system. The most recent comprehensive

concordance of trade and production data available at the time of this study can be found in Robert C. Feenstra, "NBER Trade Database, Disk 1: U.S. Imports, 1972–1994: Data and Concordances," National Bureau of Economic Research Working Paper no. 5515, March 1996. Those data are available online at ftp://ftp.ssds.ucdavis.edu/pub/Econ/Feenstra/UStrade/sic58_94.asc.

11. Some measurements of import penetration divide imports into apparent consumption, which is shipments plus imports minus exports. In this study, new supply is preferred because it takes into account an industry's exports, which should in theory help offset job losses caused by imports.

12. This methodology closely tracks that used by Robert Bednarzik, a senior economist for the U.S. Department of Labor's Bureau of International Labor Affairs, in a 1993 study. See Robert W. Bednarzik, "An Analysis of U.S. Industries Sensitive to Foreign Trade, 1982–87," *Monthly Labor Review*, February 1993, p. 15. Bednarzik also uses new supply and the 30 percent threshold to determine import-sensitive industries.

13. Lowering the threshold for an import-sensitive industry to 20 percent would roughly double the number of manufacturing workers in such industries, to 4.05 million in 1994, or 22 percent of manufacturing workers. Even at this lower threshold, more than three-quarters of manufacturing workers would be employed in industries that provide 80 percent or more of new supply in the domestic market.

The number of workers in import-sensitive industries has probably increased since 1994, but not dramatically. From 1994 to 1998, imports of goods to the United States as a share of gross national product plus imports rose from 8.8 percent to 9.7 percent. See Joint Economic Committee of Congress, *Economic Indicators,* April 1999, p. 1 for gross domestic product and p. 35 for imports.

14. See Feenstra.

15. For more information about imports and the steel industry, see Brink Lindsey, Daniel T. Griswold, and Aaron Lukas, "The Steel 'Crisis' and the Costs of Protectionism," Cato Trade Briefing Paper no. 4, April 16, 1999.

16. Imports of manufactured goods rose from $392.4 billion in 1991 to $790.8 billion in 1998. See International Trade Administration, U.S. Department of Commerce, http://www.ita.doc.gov/industry/otea/usfth/aggregate/Hl98t03.txt.

17. Joint Economic Committee, May 1999, p. 17.

18. Ibid., p. 14.

19. Council of Economic Advisers, Table B-46.

20. For the monthly manufacturing import and export figures, see U.S. Department of Commerce, U.S. Census, Foreign Trade Divisions, http://www.census.gov/foreign-trade/www/press.html. For annual figures, see International Trade Administration, http://www.ita.doc.gov/industry/otea/usfth/tabcon.html, Table 3.

21. Council of Economic Advisers, Table B-46.

22. The federal Office of Trade Adjustment Assistance does not publish cumulative figures of participation in TAA programs. The figures used here were provided in a letter from the OTAA to the Ways and Means Subcommittee on Trade dated May 26, 1999, and forwarded to the author.

23. See U.S. Bureau of Labor Statistics, http://stats.bls.gov/news.release/disp.t08.htm.

CENTER FOR TRADE POLICY STUDIES

The mission of the Cato Institute's Center for Trade Policy Studies is to increase public understanding of the benefits of free trade and the costs of protectionism. The center publishes briefing papers, policy analyses, and books and hosts frequent policy forums and conferences on the full range of trade policy issues.

Scholars at the Cato trade policy center recognize that open markets mean wider choices and lower prices for businesses and consumers, as well as more vigorous competition that encourages greater productivity and innovation. Those benefits are available to any country that adopts free trade policies; they are not contingent upon "fair trade" or a "level playing field" in other countries. Moreover, the case for free trade goes beyond economic efficiency. The freedom to trade is a basic human liberty, and its exercise across political borders unites people in peaceful cooperation and mutual prosperity.

The center is part of the Cato Institute, an independent policy research organization in Washington, D.C. The Cato Institute pursues a broad-based research program rooted in the traditional American principles of individual liberty and limited government.

For more information on the Center for Trade Policy Studies,
visit www.freetrade.org.

Other Trade Studies from the Cato Institute

"The U.S. Antidumping Law: Rhetoric versus Reality" by Brink Lindsey, Trade Policy Analysis no. 7 (August 16, 1999)

"Trade and the Transformation of China: The Case for Normal Trade Relations" by Daniel T. Griswold, Ned Graham, Robert Kapp, and Nicholas Lardy, Trade Briefing Paper no. 5 (July 19, 1999)

"The Steel 'Crisis' and the Costs of Protectionism" by Brink Lindsey, Daniel T. Griswold, and Aaron Lukas, Trade Briefing Paper no. 4 (April 16, 1999)

"Free Trade, Free Markets: Rating the 105th Congress" by Daniel T. Griswold, Trade Policy Analysis no. 6 (February 3, 1999)

"A New Track for U.S. Trade Policy" by Brink Lindsey, Trade Policy Analysis no. 4 (September 11, 1998)

"Revisiting the 'Revisionists': The Rise and Fall of the Japanese Economic Model" by Brink Lindsey and Aaron Lukas, Trade Policy Analysis no. 3 (July 31, 1998)

"America's Maligned and Misunderstood Trade Deficit" by Daniel T. Griswold, Trade Policy Analysis no. 2 (April 24, 1998)

CATO INSTITUTE