



# *Trading Up*

## *How Expanding Trade Has Delivered Better Jobs and Higher Living Standards for American Workers*

by Daniel Griswold

### Executive Summary

Opponents of trade liberalization have sought to indict free trade and trade agreements by painting a grim picture of the economic state of American workers and households. They claim that real wages have been stagnant or declining as millions of higher-paying middle-class jobs are lost to imports. But the reality for a broad swath of American workers and households is far different and more benign.

Contrary to public perceptions:

- Trade has had no discernible, negative effect on the number of jobs in the U.S. economy. Our economy today is at full employment, with 16.5 million more people working than a decade ago.
- Trade accounts for only about 3 percent of dislocated workers. Technology and other domestic factors displace far more workers than does trade.
- Average real compensation per hour paid to American workers, which includes benefits as well as wages, has increased by 22 percent in the past decade.

- Median household income in the United States is 6 percent higher in real dollars than it was a decade ago at a comparable point in the previous business cycle. Middle-class households have been moving up the income ladder, not down.
- The net loss of 3.3 million manufacturing jobs in the past decade has been overwhelmed by a net gain of 11.6 million jobs in sectors where the average wage is higher than in manufacturing. Two-thirds of the net new jobs created since 1997 are in sectors where workers earn more than in manufacturing.
- The median net worth of U.S. households jumped by almost one-third between 1995 and 2004, from \$70,800 to \$93,100.

The large majority of Americans, including the typical middle-class family, is measurably better off today after a decade of healthy trade expansion.

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## Introduction

Although economists since Adam Smith have explained how free trade raises the wealth of nations and the material well-being of their citizens, many Americans—arguably a majority—remain skeptical. Their doubts are reinforced by politicians and commentators who point to jobs lost to imports from low-wage countries and statistics that seem to indicate that living standards for a majority of Americans are not improving.

Specifically, the critics of trade and globalization state as a matter of fact that the real wages earned by most American workers have been stagnant or in decline for decades. They claim that higher-paying manufacturing and white-collar jobs are being destroyed by imports and outsourcing, while the jobs left behind are lower-paying service jobs such as flipping hamburgers or cashiering at big-box retailers. In the verdict of public opinion, trade and globalization are held partly if not primarily responsible for the perceived loss of jobs, downward pressure on wages, and a middle class under siege.

Beyond dispute is the fact that the U.S. economy is more open and globalized than ever before. Two-way trade in goods and services and outward and inward flows of foreign investment have reached record levels. Since the mid-1960s, imports as a share of gross domestic product have jumped from 6 percent to 22 percent, while exports have grown from 6 percent to 16 percent.<sup>1</sup> In the past two decades, the U.S. government has enacted such trade-expanding legislation as the North American Free Trade Agreement with Canada and Mexico, membership in the World Trade Organization, and permanent normal trade relations with China. What is debatable is how the U.S. economy and American workers and households have fared in this period of expanding engagement in the global economy.

Skeptics of trade and even some supporters paint a bleak but unjustified picture of current conditions. At a February 2007 hearing before the House Committee on Education and Labor, Richard Trumka, secretary-treasurer of the AFL-CIO, testified, “Despite strong economic

statistics for the U.S. economy overall, the vast majority of Americans are struggling to maintain their living standards in the face of stagnating wages, rising economic insecurity, eroding health care and retirement benefits and mounting debt. At the richest moment in our Nation’s history, the American dream is fading for the majority of American workers.”<sup>2</sup>

In an essay in the July/August 2007 edition of *Foreign Affairs*, titled “A New Deal for Globalization,” pro-trade economists Kenneth F. Scheve and Matthew J. Slaughter cite figures that imply that wages have not grown since 2000 for a large majority of American workers and warn of a coming backlash against trade. “U.S. policy is becoming more protectionist because the American public is becoming more protectionist, and this shift in attitudes is a result of stagnant or falling incomes. Public support for engagement with the world economy is strongly linked to labor-market performance, and for most workers labor-market performance has been poor.”<sup>3</sup>

What is the real story on jobs, living standards, and the middle class in the United States today, and what role has expanding international trade played in the changing number, composition, and compensation of American workers? This study finds that much of the anxiety expressed about trade, jobs, and living standards is not supported by the evidence. Among the key findings:

- Trade has had no discernible, negative effect on the number of jobs in the U.S. economy. Our economy today is at full employment, with 16.5 million more people working than a decade ago.
- Trade accounts for only about 3 percent of dislocated workers. Technology and other domestic factors displace far more workers than do changing patterns of trade.
- Average real compensation per hour for American workers, which includes benefits as well as wages, has increased by 22 percent in the past decade.
- American workers today can buy a wider array of affordable goods because of trade.

- Median household income in the United States is 6 percent higher in real dollars than a decade ago at a comparable point in the previous business cycle.
- Middle-class households have been moving up the income ladder, not down. The share of U.S. households earning between \$35,000 and \$75,000 in real dollars has been gradually shrinking over the years, but so too has the share of households earning less than \$35,000, while the share earning more than \$75,000 continues to grow.
- The net loss of 3.3 million manufacturing jobs in the past decade has been overwhelmed by a net gain of 11.6 million jobs in sectors where the average wage is higher than in manufacturing. Two-thirds of the net new jobs created since 1997 are in sectors where workers earn more than in manufacturing.
- The net worth of American households and nonprofit organizations jumped 85 percent between 1996 and 2006, from \$30 trillion to \$56 trillion.
- The median net worth of U.S. households rose by almost one-third between 1995 and 2004, from \$70,800 to \$93,100.
- Thanks to lower interest rates delivered in part by more open global capital markets, American households have not experienced any significant increase from a decade ago in debt payments as a share of family income. The debt ratio in 2004 was 14.4 percent, up only slightly from 14.1 in 1995.

By any reasonable measure, American workers and families are better off now than during comparable periods in the past, and expanding engagement in the global economy has played an important role in the ongoing, upward trend in American employment and living standards.

## Trade and Jobs: Why Both Sides Are Wrong

Trade is not about more jobs or fewer jobs, but about better jobs. Advocates of trade liberal-

ization who claim that lower barriers boost the total number of jobs in our economy are as wrong as skeptics who argue that lower barriers mean fewer jobs. During the debate over NAFTA in 1993, people on both sides were guilty of this fundamental mistake. Independent presidential candidate H. Ross Perot famously predicted that passage of the agreement would create “a giant sucking sound” as jobs and investment headed south across the border. Advocates of the agreement, including the Clinton White House, countered that NAFTA would create hundreds of thousands of net new jobs. Both sides were wrong to the extent they predicted a net change in jobs either way.

Trade does cause certain jobs to disappear, certain companies to go out of business, and certain sectors of the economy to shrink. That is what we would expect from increased competition, domestic as well as international. But trade as a rule does not affect the total number of jobs or the overall rate of employment or unemployment. Studies that claim that trade expansion, trade deficits, or trade agreements have caused the loss of some specific number of jobs during a certain period of time are misleading if they imply that today’s economy has that many fewer jobs than it would have otherwise. Trade does not affect the total number of jobs in an economy for three reasons.

### Trade: A Net Wash on Total Employment

First, if workers, capital, and resources can shift within the domestic economy, jobs eliminated by import competition will quickly be replaced by jobs created elsewhere. Focusing merely on jobs lost because of imports ignores the offsetting jobs that trade and globalization create through other channels. One channel is expanding exports, as U.S. producers ramp up production to meet demand abroad as well as at home. Trade competition also reduces costs for U.S. producers by allowing them to buy raw materials, intermediate inputs, and capital machinery at lower, more competitive global prices. Lower producer costs translate into higher profits, attracting more investment and creating more employment in those sectors that benefit from open markets. Trade also delivers lower

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prices on imported consumer goods, giving households more money to spend on domestic goods and services, stimulating further employment gains. Globalization also means more international investment flowing into the United States. Inward foreign direct investment creates jobs by establishing foreign-owned production facilities in the United States, while inflows of financial capital create jobs by reducing long-term interest rates, thus promoting greater investment and job creation by domestic companies.

Second, the much-misunderstood reality of comparative advantage means that our economy will always be globally competitive in a range of sectors. If we lose our competitive edge in one sector or industry, because of shifting technology and factor prices or the emergence of new global competitors, the competitive edge of other sectors will be enhanced. The insight of comparative advantage, first expounded by David Ricardo in 1817, is that a country will tend to export what it can make more efficiently relative to what else it could produce domestically given its own endowment of resources. Another country may (in theory, anyway) be able to produce everything at a lower per unit cost than we can produce domestically, but we can still gain from exchanging what each country is relatively most efficient at producing. If the United States loses its shoe industry to lower-cost global competition, the reality of comparative advantage means that we will likely gain competitiveness and export share in pharmaceuticals, civil aircraft, financial services, and other sectors where we are relatively more efficient than making shoes. We may lose call center jobs, where we are relatively less efficient, but gain jobs in financial analysis or computer engineering. American workers will always be relatively more productive in some sectors than others in the domestic economy, ensuring that we will always be competitive in a range of global export markets.

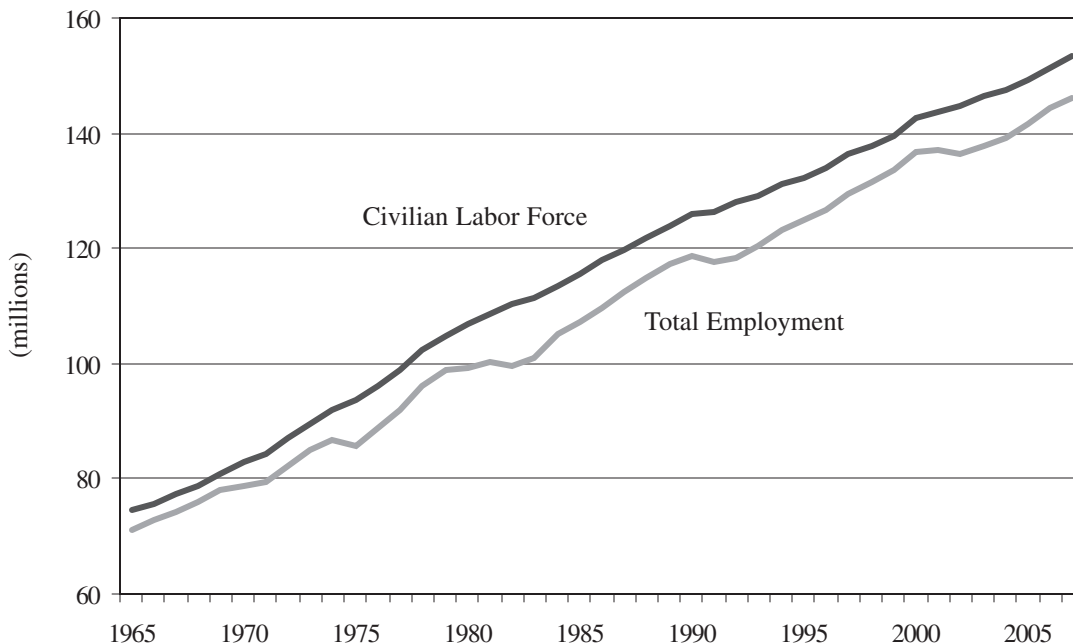
Third, trade tends not to affect the overall number of jobs because of other, more powerful and counterbalancing factors in the broader economy such as monetary policy and foreign exchange rates. If a surge in imports did cause

widespread layoffs in certain sectors, the resulting increase in unemployment would push the Federal Reserve to tilt toward a looser monetary policy and lower interest rates to stimulate the overall economy. Increased imports would also have the effect of pumping more dollars into international markets, causing the dollar to depreciate on foreign currency markets. A weaker dollar, in turn, would make U.S. exports more attractive, stimulating employment in export sectors while dampening demand for imports, thus offsetting initial jobs losses.

In the same way, if trade restrictions could somehow artificially stimulate employment in certain sectors, driving unemployment below its normal rate, the Federal Reserve would likely move in the opposite direction, tightening monetary policy and credit to prevent overheating and potential inflation. Higher interest rates, in turn, would cool other sectors of the economy, offsetting the initial job gains from protection. Higher barriers to imports would also constrict the number of dollars flowing into international markets, causing the dollar to appreciate above the exchange rate that would have prevailed without the trade barriers in place. The stronger dollar would dampen international demand for our exports and stimulate demand for imports, again offsetting any short-term employment gains in the protected sectors. For all those reasons, changes in trade flows have not determined the overall level of employment in the U.S. economy.

Even the most cursory glance at the employment numbers during recent decades should dispel any fear that trade and globalization threaten overall employment. Across the decades, against a backdrop of rising levels of trade and repeated business cycles, a central truth has stood out: In the long run, job growth in the United States tends to track growth in the labor force. As new workers have entered the labor market, U.S. producers have found profitable ways of employing them. Job growth invariably reverses during recessions, but then catches back up with labor-force growth during expansions, driving the unemployment rate back down to a level consistent with “full employment.”

**Figure 1**  
**U.S. Employment Grows with Labor Force**



Source: *Economic Report of the President*, 2002.

In the past four decades, during a time of expanding trade and globalization, the U.S. workforce and total employment have each roughly doubled. As Figure 1 shows, total employment has closely followed labor-force growth. Since 1965, the number of people employed in the U.S. economy has increased from 71.1 million to 146.1 million, while the number in the civilian labor force has grown from 74.5 million to 153.2 million—both growing at an identical annual rate of 1.73 percent. Total employment will stall and even reverse during recessions, but will invariably resume its upward climb as the economy recovers. Despite fears of lost jobs, total employment in the U.S. economy has grown by 16.5 million since 1997, 46.8 million since 1980, and 75.0 million since 1965.<sup>4</sup> After four decades of demographic upheaval, technological transformations, dramatically rising levels of trade, and half a dozen recessions and recoveries, the current unemployment rate of 4.6 percent is virtually the same as it was in 1965.<sup>5</sup> Obviously, an increasingly globalized U.S. economy is per-

fectly compatible with a growing number of jobs and full employment.

#### Trade's Small Role in "Job Churn"

Expanding international trade does eliminate a certain number of jobs each year. We often see that reality in the news media and sometimes in our own communities: an auto-parts supplier downsizes its workforce, an apparel factory closes its doors, a telecommunications firm outsources a call center to India. Affected workers are real people with bills to pay and dependents to support. But the number of people dislocated from their jobs each year because of shifting trade patterns is relatively small in America's dynamic market economy where "job churn" is a normal, healthy fact of life.

The number of workers who lose their jobs because of expanding trade, outsourcing, and businesses moving offshore probably falls in the range of 300,000 to 500,000 each year. The Economic Policy Institute, a left-of-center research organization in Washington, claimed in a 2001 paper that rising imports had elimi-

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nated 3 million “actual and potential jobs” from 1994 to 2000—an average of 500,000 per year.<sup>6</sup> In a more recent study, EPI claimed that our economy lost 200,000 jobs a year just from trade with China in the past decade.<sup>7</sup> Lori Kletzer, in a 2001 study for the Institute for International Economics, estimated that trade accounted for 320,000 job losses annually from 1979 to 1999.<sup>8</sup> Even if we accept the highest of those figures, jobs lost because of expanding trade are a relatively small component of the underlying churn in the U.S. labor market.

Every year, the U.S. economy creates and destroys millions of jobs. According to the U.S. Department of Labor, an average of 32.1 million jobs were created and 30.4 million were eliminated annually between 1992 and 2006, creating an average annual net job gain of 1.7 million.<sup>9</sup> About half the churn is seasonal, but the other half is permanent, meaning that each year about 15 million jobs disappear, never to be seen again.<sup>10</sup> If changing flows of trade account for the loss of 500,000 jobs a year, trade would be responsible for about 3 percent of the overall churn in the labor market.

Job displacement because of expanding trade also appears small when compared to weekly filings for unemployment compensation. If the estimates of job losses from trade expansion are correct, about 10,000 workers lose their jobs in a typical week because of trade-related causes. That provides plenty of sound bites and television images for the critics of trade. And yet, in a typical week, even when the economy is humming, more than 300,000 people will file claims for unemployment insurance. By that yardstick as well, workers displaced by expanding trade account for only 3 percent of total displaced workers.

What accounts for the other 97 percent of job turnover? Technology probably accounts for most permanent job displacement. For example, introduction of the personal computer 25 years ago has eliminated hundreds of thousands of jobs for typists, secretaries, and telephone operators. The daily newspaper business has seen venerable papers close their doors and hundreds of thousands of reporting, editing, and production positions eliminated because of the migra-

tion of readers and advertising to the Internet. Kodak, the camera company headquartered in Rochester, New York, has laid off 30,000 workers since 2004—not because of unfair trade by foreign competitors, but because of the proliferation of digital cameras and plunging sales of film. Tower Records shut down its U.S. stores and laid off workers, not because of imports, but because iPods and other digital-music devices have cut deeply into sales of compact discs.

Workers also lose their jobs because of changing consumer tastes and domestic market competition as one American company cuts into the market share of another. There is nothing unique or disturbing about the fact that changes in international trade account for a small share of job displacement in the U.S. labor market.

Trade, like technology, affects the type of jobs in our economy but not the total number. If workers and capital can move freely between states and between sectors, jobs lost in one area will tend to be replaced by jobs created in another. The overall number of jobs depends on the growth rate of the economy and labor force, business investment, the flexibility of employers to hire or lay off workers, and other broader factors. A nation open to the global economy can enjoy low unemployment, just as a country with a closed economy can suffer high unemployment, and vice versa. It is simply wrong to blame trade for causing a net loss of jobs or anything other than a small fraction of job displacement.

## **Real Wages, Better Compensation**

Critics of trade respond that our economy may be creating enough jobs, but the new jobs pay less than the jobs being destroyed. The result is stagnant or falling real wages and living standards and a shrinking middle class. Typical is the assertion of Sen. Sherrod Brown (D-OH) in his 2004 book, *Myths of Free Trade*: “The median real wage—the level at which 50 percent of the country’s wage earners are above and 50 percent of the country’s wage earners

are below—in the United States has been stagnant over the last twenty-seven years. Compare that stagnation of wages among half the population with the period from 1946–1973, when the average U.S. wage increased by 80 percent.”<sup>11</sup>

In their *Foreign Affairs* article, economists Scheve and Slaughter stated that, between 2000 and 2005, “more than 96 percent of U.S. workers are in educational groups for which average money earnings have fallen.” The only educational groups that saw their wages rise during that period were the 4 percent of workers with a PhD, MBA, JD, or MD, creating what the authors called an “astonishing skewness of U.S. income growth.”<sup>12</sup> In his 2000 book *The Race to the Bottom*, Alan Tonelson wrote that, since 1973, “three quarters of the U.S. workforce, not a small group of losers, has experienced declining living standards, and today’s globalization policies bear much responsibility.”<sup>13</sup>

The belief that most American workers are earning less than in years past rests on a faulty understanding of how trade affects the economy and living standards and a misinterpretation of recent wage and income data. Greater freedom to trade, in practice as well as theory, has helped to lift the wages and incomes of most Americans to levels above what they would be had markets remained closed. Contrary to the common tale, expanding levels of trade in recent decades have been accompanied by rising real hourly compensation for American workers and a higher median income for households.

### How Trade Raises Wages

Trade raises the general wage level by expanding opportunities for Americans to work in sectors where productivity and pay exceed the average. Because of comparative advantage, American workers tend to be most productive in the sectors that are most capital intensive—that is, the sectors requiring large investments in physical and human capital and intellectual property. Examples of such industries are pharmaceuticals; chemicals; civilian aircraft; sophisticated machinery; microproces-

sors; and professional services in finance, insurance, accounting, and other sectors. Those industries also tend to pay higher-than-average wages. As the more competitive industries expand output and employment, the overall wage level tends to rise as they compete in the labor market to hire new workers.

Americans find it hardest to compete internationally in sectors that are relatively labor intensive, such as toys, sporting goods, shoes, and apparel. Those industries tend to pay lower-than-average wages. As the American economy opens itself to global competition, we tend to import more of the labor-intensive goods, reducing relative employment in lower-paying sectors, while we export more of the capital-intensive goods, promoting greater employment in higher-paying sectors. Thus expanding trade tends to raise overall wage and income levels. Even for the majority who work in nontrade sectors, global competition delivers lower prices for everyday consumer goods, allowing workers to stretch their paychecks further.

Yet official statistics show that the average real hourly wage paid to American workers is lower today than in the 1970s. From a peak of \$8.99 an hour in 1972, the average real wage (in 1982 dollars) declined steadily to a low of \$7.52 in 1993 before rising again to \$8.32 during the first half of 2007.<sup>14</sup> The statistic that the average real wage remains below its peak of more than 30 years ago has become a rhetorical battering ram against trade liberalization, but it fails to capture the reality of the progress Americans have made in a more globalized era.

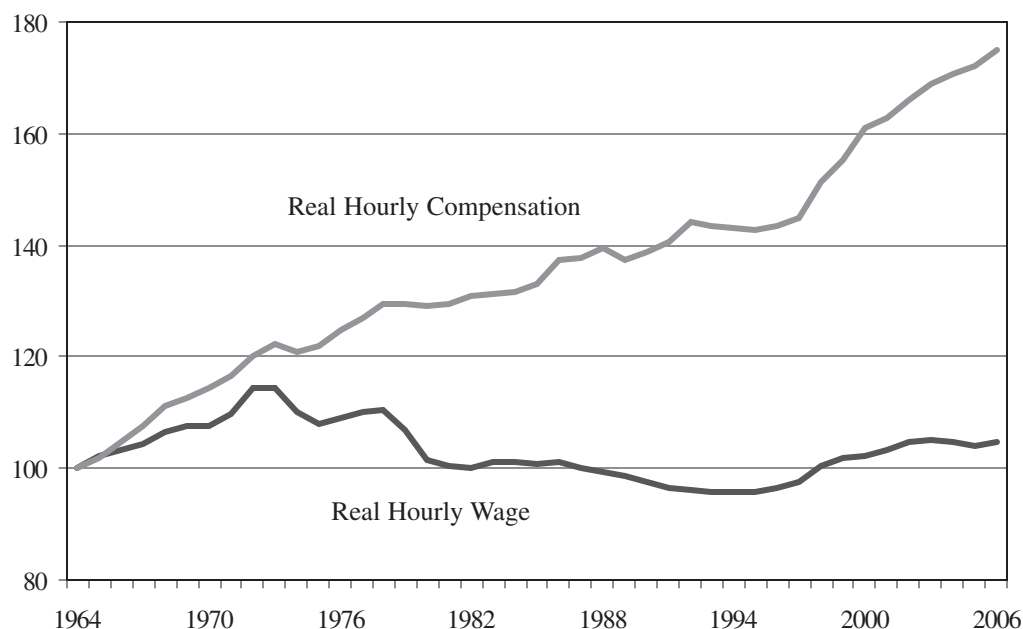
### The Unreality of the Real Wage Data

The average real wage is a fundamentally flawed measure of the well-being and progress of American workers, for three reasons: First, the real wage does not include benefits. Second, it relies on cost-of-living estimates that have tended to systematically overstate inflation in recent decades and thus understate gains in real earnings. Third, real wage numbers are often compared to previous peak years, a practice that tends to minimize longer-term upward trends.

By excluding benefits, the real wage data underplay the real gains made by American

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**Figure 2**  
**Real Wages vs. Real Compensation, 1954–2007**



Source: *Economic Indicators*, Government Printing Office.

workers. Although money wages remain a majority of total compensation, benefits have grown as a share of the average worker's compensation package. Those benefits help Americans pay for medical care and retirement. More companies than in decades past are also offering dental and eye care benefits, more generous paid leave, and matching 401(k) contributions. The average real wage numbers fail to capture those real benefits.

A more accurate measure of earnings is "real hourly compensation," which includes not only wages but benefits. The Bureau of Labor Statistics data on wages and benefits combined tell a more accurate and encouraging story about the well-being of the average American worker. Since 1973, average real hourly compensation for American workers has increased 45 percent, for an average annual growth rate of more than 1.1 percent.<sup>15</sup> Figure 2 shows that real hourly compensation has not only climbed since 1973, but its rise has accelerated in the past decade along with America's growing economic openness. The average American worker has not suffered from "stagnant" earnings in the past three decades but in fact has enjoyed real gains.

Even the more comprehensive compensation numbers tend to understate the real gains American workers have enjoyed in recent decades. Economists have long realized that the Consumer Price Index tends to overstate the cost of living compared with past years because it often fails to accurately capture the increased quality of new and improved products. As Michael Cox and Richard Alm explained in their 1999 book, *Myths of Rich and Poor*, new products do not show up in the CPI shopping cart until several years after they have become popular with consumers. For example, pocket calculators were not added until 1978, VCRs until 1987, and cell phones until 1998 (by which time nearly 40 percent of households already owned one).<sup>16</sup> That means the CPI fails to capture the steep price declines that often mark new electronic consumer goods as they become ubiquitous.

The inability of the CPI to fully capture such advancements means that the rise in the cost of living (i.e., inflation) has been systematically overstated. In the mid-1990s, a number of studies attempted to measure the upward bias of the

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CPI. Estimates ranged from 0.5 percent a year to 1.7 percent per year. Falling in the middle of the range was the official Advisory Commission to Study the Consumer Price Index, known less formally as the Boskin Commission. In a report in December 1996, it determined that the CPI had overstated inflation by 1.1 percent per year. That may seem a small amount, but compounded over years and decades, such a bias can have a large impact on real wages or compensation, leading to a significant understatement of the real purchasing power of U.S. wages today compared with the past.

Thanks in no small part to international trade, American workers today benefit from an ever expanding and improving array of products on which they can spend their paychecks. In the mythical golden era of 1973, the average American worker earning a supposedly higher real wage could not buy a microwave oven; a personal computer; a cell phone; a laser printer; a CD, DVD, or MP3 player; an iPod, digital camera, or camcorder; or a car with air bags and anti-lock breaks.<sup>17</sup> When we fully account for benefits as well as wages and the wider and more useful array of products we can buy today, the average American worker is much better compensated than his counterpart in decades past.

### Selective Comparisons, Wrong Base Years

Yet another major problem with how wage and income figures are handled in the trade debate is the selective use of base years. Wages, like household income, business profits, and net worth, tend to rise and fall with the business cycle. A trend can be made to appear more negative than it really is by comparing the current level with a base year that represents a cyclical peak. In the same way, a trend can be made to look more positive by comparing the current level with a base year in the trough of a recession. The most accurate, underlying trends can best be discerned by comparing years at similar stages of the business cycle—peak to peak, trough to trough, or somewhere in between.

It is no coincidence that critics of trade, or their unwitting fellow travelers, almost always compare current economic conditions with

those in 2000 or 1973. Both those years represent economic peaks that were followed the next year by recessions. Both years, in hindsight, are atypical and thus provide misleading benchmarks for judging current conditions.

The year 1973 marked the final sprint of a Nixon-era, election-cycle expansion fueled by easy monetary policies and wage and price controls that kept inflation temporarily bottled up (only to have it explode into double digits in 1974). The price controls caused real wages to appear deceptively high that year, making it a misleading benchmark on which to judge subsequent years. Similarly, 2000 marked the fevered peak of a remarkable decade long-expansion fueled by real productivity gains but also hypercharged by the dot.com bubble that began to deflate in March of that year. Choosing either of those years as a benchmark will tend to minimize whatever economic progress has been made in the years that followed.

Today's average real wage tends to look weak in comparison with 2000 not because trade and globalization are weighing down the earnings of Americans but because we are still climbing back out of the cyclical downturn of 2001. Recent hikes in energy prices have also bitten into real wage growth, offsetting productivity gains fueled in part by increasing trade and globalization.

A more objective and accurate measure of economic trends results from comparing current conditions with those at a similar stage of previous business cycles. According to the National Bureau of Economic Research, the U.S. economy has suffered five recessions since the early 1970s—in 1974–75, 1980, 1981–82, 1991, and most recently 2001.<sup>18</sup> The right benchmark for current conditions is not the peak year of 2000, but the comparable year in the previous cycle when the economy was at the same stage of recovery from recession as it is today. We are now seven years removed from the most recent cyclical peak of 2000, so the comparable year in the previous cycle would be 1997, also seven years removed from the previous peak year of 1990. In the same way, the right benchmark for 2006 data should be 1996, and for 2005 data 1995.

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In the decade since 1997, as the U.S. economy has become more globalized, real compensation per hour for American workers has risen by 22 percent.

In that light, the real hourly compensation and even the flawed real wage data look much more benign: In the decade since 1997, as the U.S. economy has become more globalized, real compensation per hour for American workers has risen by 22 percent. More remarkably, the growth in real hourly compensation has accelerated in the past decade, rising at an annual rate of 2 percent compared with an anemic annual rise of 0.7 percent between 1973 and 1997. Even the average real wage—despite the overstatement of inflation and omission of benefits—was 8.2 percent higher in mid-2007 than 10 years ago.<sup>19</sup>

#### Growth of Middle-Class Service Jobs

Behind the rise in average real wages and compensation is a changing mix and growing number of middle-class service jobs. The common story is that trade has caused the loss of well-paying, mostly unionized, middle-class manufacturing jobs while the service economy creates mostly lower-paying jobs in food service

or retail. While some better-paying manufacturing jobs have indeed disappeared, the trend in recent decades has been for lower-paying factory jobs to be replaced by better-paying service jobs. In a 2004 speech on “Trade and Jobs,” the current chairman of the Federal Reserve Board, Ben Bernanke, informed a North Carolina audience, “During the 1990s, average earnings in manufacturing industries that showed net declines in employment (weighted by the number of job losses) were \$10.63 per hour. During the same period, wages in expanding service-providing industries (weighted by the number of jobs gains) were \$11.26 per hour, about 6 percent higher.”<sup>20</sup>

That pattern has continued through the current decade. Between 1997 and the first half of 2007, the U.S. labor market did in fact shed a net 3.3 million manufacturing jobs, but that has been overwhelmed by a net gain of 11.6 million jobs in sectors where the average wage is higher than in manufacturing (see Table 1). Education and health services alone added 4.1 million jobs

**Table 1**  
**More Jobs, Better Paying Jobs**

Employment Sector	Number of Jobs (1,000s)			% Change	Average Wage (2007)
	1997	2007	Change		
Utilities	621	551	-70	-11	\$27.60
Information	3,084	3,090	6	0	\$23.85
Natural resources and mining	653	714	61	9	\$20.80
Construction	5,813	7,679	1,866	32	\$20.74
Professional and business services	14,333	17,848	3,516	25	\$19.86
Financial activities	7,178	8,451	1,273	18	\$19.51
Wholesale trade	5,663	5,974	311	5	\$19.36
Education and health services	14,088	18,221	4,133	29	\$17.82
Transportation and warehousing	4,026	4,521	495	12	\$17.56
<b>Subtotal</b>	<b>55,459</b>	<b>67,049</b>	<b>11,590</b>	<b>20.9</b>	
<b>Manufacturing</b>	<b>17,418</b>	<b>14,086</b>	<b>-3,332</b>	<b>-19</b>	<b>\$17.12</b>
Trade, transportation, and utilities	24,700	26,423	1,723	7	\$15.68
Other services	4,825	5,466	641	13	\$15.09
Retail trade	14,390	15,376	987	7	\$12.74
Leisure and hospitality	11,016	13,474	2,458	22	\$10.24
<b>Subtotal</b>	<b>54,931</b>	<b>60,739</b>	<b>5,808</b>	<b>10.6</b>	

Source: U.S. Bureau of Labor Statistics.

between 1997 and 2007. Another net 3.5 million new jobs were created in the professional and business service sector, 1.9 million in construction, and 1.3 million in financial activities—all sectors where average wages are significantly higher than in manufacturing.<sup>21</sup> In total, two-thirds of the net new jobs created in the past decade are in sectors where the average wage is higher than in manufacturing.

Granted, the number of jobs also grew in service sectors that pay less than manufacturing, but such jobs accounted for only a third of the net new jobs created in the past decade. The growth rate of jobs in the lower-paying service sectors in the past decade was only half the growth rate of jobs in the better-paying service sectors. Jobs added in the lower-paying retail trade, leisure, and hospitality sectors—including flipping burgers and cashiering at big-box retailers—accounted for less than a quarter of the nonmanufacturing jobs added in the past decade. Manufacturing jobs really are being replaced by service jobs in our economy, but two of every three new jobs are in sectors that pay more than the typical manufacturing job.

Despite the mythologizing about manufacturing jobs, the American middle class today earns its keep from better-paying service-sector jobs. Knock on doors in a typical middle-class American neighborhood and you will meet people who work, not in factories, but in the service sector: teachers, managers, carpenters, architects, engineers, computer specialists, truck drivers, loan officers, vocational counselors, public relations specialists, automotive service technicians, accountants and auditors, police officers and fire fighters, insurance and real estate agents, registered nurses, physical therapists, dental hygienists and other health care professionals, and self-employed business owners. These are the occupations that now form the backbone of the American middle class.<sup>22</sup>

Rising real wages and compensation during the past decade pose a serious challenge to the “trade is making us worse off” thesis. If we are to believe that expanding trade and competition with low-wage countries have eliminated high-paying manufacturing jobs and depressed the earnings of U.S. workers, how do the critics of

trade explain the remarkable labor-market gains of the past decade? Since 1997, during a period of rapidly increased trade and globalization, the number of workers employed in the U.S. economy jumped by more than 16 million, while the unemployment rate is now slightly below what it was a decade ago at a similar stage in the business cycle. And those employed workers, as we’ve seen, are earning significantly higher real hourly compensation than workers a decade ago when the U.S. economy was less globalized. That record is not an indictment of more liberal trade but a vindication.

## A Middle-Class Service Economy

A related theme repeated by critics of trade is that global competition has “squeezed” the American middle class. Large sections of Lou Dobbs’s latest book, *The War on the Middle Class*, are devoted to criticizing trade expansion as a major battle front. As trade and globalization destroy higher-paying manufacturing jobs, the story goes, the great American middle class finds itself shrinking and in threat of disappearing altogether.

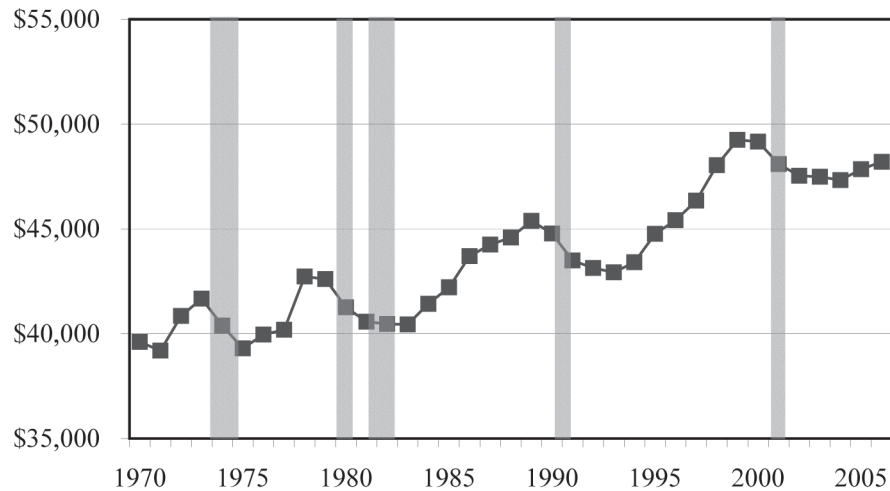
As with the employment and wage data, truth about the size and state of the American middle class has become another casualty of anti-trade propaganda. America remains a solidly middle-class country, with a large and growing number of middle-class households earning their living in the service sector. To the extent that trade has affected the middle-class job market, it has tended to create better-paying jobs while eliminating lower-paying jobs. Real household income in America, like real hourly compensation, has continued to trend upward through the downs and ups of recurring business cycles.

## The Upward Trend in Household Incomes

Opponents of trade expansion frequently compare the latest median household income figures with those of the year 2000, making the same mistake we often see with the wage and job figures. But when compared with previous

Despite the mythologizing about manufacturing jobs, the American middle class today earns its keep from better-paying service-sector jobs.

**Figure 3**  
**Median Household Income, 1970–2006**



Note: Shaded areas mark recessions.  
Source: U.S. Census Bureau.

years at similar stages in the business cycle, the latest household income numbers fail to provide any support for dire warnings about a shrinking middle class or declining household income.

According to the most recent numbers from the U.S. Census Bureau, the median income of America's 116 million households was \$48,201 in 2006. That figure was indeed lower than the median income of \$49,163 earned in the peak year of 2000. But the more accurate benchmark should be 1996, which (like 2006) occurred six years after the previous cyclical peak. By that more objective benchmark, 2006 median household income was up 6.1 percent from the \$45,416 figure of a decade ago. (All income figures are expressed in real 2006 dollars.)<sup>23</sup>

The positive trend in household income probably understates the living-standard gains of individuals within households. The average number of people per U.S. household has been declining for decades because of the growth of single-parent households; the greater number of young, single people living outside their parents' home before they marry; more elderly widows; and fewer children per family. Between 1970 and 2005, the average number of people per household fell from 3.2 to 2.6. That means the

higher incomes earned by today's households are supporting fewer members, allowing even more purchasing power per person. After a decade of expanding trade and globalization, American households, like individual workers, are earning more. There is no reason to believe that trend will not continue.

As Figure 3 shows, median household income fluctuates with the business cycle but trends upward overall. Like the waves of an incoming tide, household incomes retreat during recessions, then climb back during the recovery and expansion to eventually exceed the previous peak, only to repeat the cycle. During the previous three business cycles, median household income fell an average of 4.7 percent from peak to trough, and remained below the peak for an average of five years.<sup>24</sup> The most recent trend in household income is following a long-established pattern. Opponents of trade liberalization who dwell on the fact that household income is still below the 2000 peak confuse a temporary cyclical dip with the ongoing, long-term progress enjoyed by American households.

#### Behind the "Shrinking" Middle Class

The American middle class is not disappear-

**After a decade of expanding trade and globalization, American households, like individual workers, are earning more. There is no reason to believe that trend will not continue.**



ing but moving up. According to the Census Bureau, 32.8 percent of American households earned a middle-class income between \$35,000 and \$75,000 in 2006. That share of households was indeed down slightly from the 33.8 percent that fit the definition of middle class in 1996. But if the middle class has been shrinking, it is not because more families have been squeezed by globalization and other pressures into lower income brackets. The share of households earning below \$35,000 also shrank during the past decade, from 39.6 percent to 36.7 percent. Meanwhile, the share of households earning \$75,000 or more jumped from 26.5 percent to 30.4 percent.<sup>25</sup>

If we define middle class more broadly, say \$35,000 to \$100,000, or \$25,000 to \$75,000, or \$25,000 to \$100,000, the same pattern emerges: The middle class continues to slowly shrink over time, while the share of households earning less also shrinks and the share earning more continues to grow. The great American middle class has been shrinking not because more households have slipped down the income ladder but because more have moved up.

Contributing to that upward mobility has been the growth of two-earner households. Some critics decry the trend of women joining the workforce as another negative result of globalization, claiming that the alleged downward pressure on wages has forced wives and mothers to leave home for the workplace to help the family pay its bills. But this argument ignores the ample evidence that real hourly compensation and the number of higher-paying service-sector jobs have been rising over time, not falling. Critics also ignore the many positive reasons why so many women have decided since the 1970s to work outside the home for pay. Those reasons include growing levels of education among women, growing career opportunities in the expanding service sector, and the wider availability of labor-saving appliances and prepared foods that have reduced labor demands at home—reasons that have nothing to do with globalization and a “middle-class squeeze.”

Most women have always worked, whether in the home or in an office or factory. The differ-

ence today compared to four or five decades ago is that a significantly larger share now get paid in dollars in the labor market, which has expanded the financial opportunities of American families. As Cox and Alm observed in their book, *Myths of Rich and Poor*, “When men went to work outside the home, the family’s living standards rose because of the tremendous gains from specialization and exchange. Why do we insist that the same transition for women can only mean a pinch on households’ possibilities? It makes no sense to suggest that the economic rules flip-flop when a second adult takes a job. Working women are a sign that families are making themselves better off, not slipping toward poverty.”<sup>26</sup>

America remains a solidly middle-class country. A majority of Americans see themselves as middle class. They earn middle-class incomes and lead middle-class lives. Through recurring business cycles and the changing composition of employment, median household income has trended upward as a rising number of families move into the middle-class and an even larger number move to the upper-income brackets. Expanding trade and globalization have played a positive role in helping Americans make the transition to a middle-class service economy.

## An Explosion of Household Wealth

Even if American workers and middle-class families have seen their standard of living improve during a time of increased globalization, the critics say it has come at the expense of the household balance sheet. At a January 2007 congressional hearing on the middle class, Yale University professor Jacob Hacker testified that middle-class families with children “are drowning in debt,” noting that “in 2004, personal debt exceeded 125 percent of income for the median, married couple with children.”<sup>27</sup> Another witness, citing similar numbers, concluded that, “Declining wealth and fewer savings pose significant risks to middle-class families facing unemployment. The weakest job growth rate since the Great

The great American middle class has been shrinking not because more households have slipped down the income ladder but because more have moved up.



**The increase in net wealth since the mid-1990s has not been confined to the rich, but has been broadly shared by the middle class. The median net worth of U.S. households jumped by almost one-third between 1995 and 2004, from \$70,800 to \$93,100.**

Depression means that people who lost their job had a much harder time finding jobs than before.”<sup>28</sup>

Those witnesses, like most other critics of the recent era of trade expansion, miss the real picture of how American households have accumulated wealth during an era of unprecedented integration in the global economy. Globalization and trade expansion have not only helped American families improve their cash flow through new and better-paying jobs, those trends have also helped Americans boost their net worth through the accumulation and appreciation of household assets. The median amount of debt held by American households has indeed risen in the past decade, but the amount of assets those families hold has increased even more rapidly, nearly doubling the net worth of American households in the past decade.

Globalization has helped to boost the net worth of American households, first, by raising household income above what it would be without expanded trade and, second, by expanding Americans’ opportunity to tap into global capital markets directly and indirectly. Along with growing trade in goods and services, recent decades have seen an expanding flow of capital across international borders. Outward foreign investment has boosted returns for U.S. companies that invest abroad as well as for individual and institutional U.S. investors who have added foreign holdings to their portfolios. Inward foreign investment has created well-paying jobs for American workers while bidding up the value of real estate, business, and financial assets held by American households. According to a recent study by the National Bureau of Economic Research, foreign capital flowing into the United States reduces long-term domestic interest rates by almost a full percentage point below what they would be if we had to rely solely on domestic savings to fund investment.<sup>29</sup> Lower interest rates, in turn, have boosted asset prices while lowering borrowing costs and debt-service payments.

Recent decades of expanding trade and globalization have helped American households significantly improve their balance sheets. According to the Federal Reserve Board’s quarterly Flow

of Funds report, the net worth of American households and nonprofit organizations jumped 85 percent between 1996 and 2006, from \$30.1 trillion to \$55.6 trillion. Household liabilities did increase during the past decade, but by an amount that remained comfortably below the increase in assets. From 1996 to 2006, total liabilities of U.S. households and nonprofit organizations grew from \$5.4 trillion to \$13.3 trillion, an increase of \$7.9 trillion that was dwarfed by the \$33.3 trillion increase in the value of assets.

Between 1996 and 2006, the value of real estate held by U.S. households more than doubled, from \$8.3 trillion to \$20.6 trillion; the value of bonds and bank and money-market fund deposits rose from \$5.8 trillion to \$9.7 trillion; and holdings of stocks, mutual fund shares, pension fund reserves, equity in noncorporate businesses, and other equity assets rose from \$20.0 trillion to \$34.4 trillion, despite the sharp stock-market correction of 2000–2002.<sup>30</sup>

The increase in net wealth since the mid-1990s has not been confined to the rich, but has been broadly shared by the middle class. According to the most recent Survey of Consumer Finances, the median net worth of U.S. households jumped by almost one-third between 1995 and 2004, from \$70,800 to \$93,100. Households earning in the middle quintile saw their median net worth increase from \$57,100 to \$72,000, an increase of 26 percent, and those in the second income quintile from the top saw their net worth jump from \$93,600 to \$160,000, a 71 percent increase. Despite public worries about retirement insecurity and loss of pension benefits, U.S. households headed by workers aged 55–64 had a median net worth in 2004 of \$248,700—a 75 percent improvement from the net wealth of similar households that were nearing retirement a decade before.<sup>31</sup>

The proportion of families owning their primary residence and retirement accounts both increased in the past decade. From 1995 to 2004, the share of all families that owned their own homes increased from 65 to 69 percent, and home ownership among families in the middle-income quintile increased even more, from 63 to 72 percent. Ownership of retirement accounts also increased in the same period, from 45 to almost 50 percent among all

families and 48 to 53 percent among those in the middle-income quintile.<sup>32</sup>

A closer look at the balance sheet of American households shows that families have not been “drowning in debt” nor have they been borrowing just to pay for daily necessities. According to the Survey of Consumer Finances, 72 percent of the debt Americans incurred in 2004 went toward the purchase or improvement of a primary residence, virtually identical to the share in 1995. Another 9.5 percent went to the purchase of other residential property and 6.7 percent to the purchase of vehicles, both down only slightly from 1995 levels. Another 3 percent of debt was incurred to finance education, up slightly from 1995. Only 6 percent of the new debt taken on by U.S. households in 2004 was used to pay for consumption of goods and services, up just slightly from the 5.6 percent so used in 1995.<sup>33</sup> A majority of U.S. households, according to the survey, had no credit card debt in 2004.<sup>34</sup>

Thanks to lower interest rates delivered in part by more open global capital markets, American households are spending about the same share of their income on debt payments as they were a decade ago. On average, U.S. households spent 14.4 percent of their family income on debt payments in 2004, not significantly different from the 14.1 percent spent in 1995. The share of families with a debt ratio above 40 percent did not change much either, increasing from 11.7 to 12.2 percent.<sup>35</sup>

Clearly American families are not drowning themselves in debt to pay for groceries or even big screen televisions. They are borrowing to buy homes and durable goods. If debt has risen compared to income, more than three quarters of the new debt has been used to purchase real estate assets that have risen in value even more sharply than liabilities. The debt ratio of the typical family has remained stable because of the rising incomes and lower interest rates that a more open U.S. economy has helped to deliver.

During the past decade of increased trade and globalization, a broad swath of American households have seen their net worth rise along with real hourly compensation and household income. In contrast to the grim picture painted

in the media and the hearings rooms of Congress, American families have emerged from the most recent recession with more wealth and spending power than a decade ago.

## Conclusion

The anecdotes and skewed comparisons used to argue against trade liberalization are contradicted by the actual progress that American workers and families have made in the past decade. According to all the major indicators of economic and financial well being, Americans are better off than they were at a comparable point in the previous expansion. As Table 2 summarizes, 16.5 million more Americans are working than a decade ago and the rate of unemployment has dropped. Our full-employment, free-trade economy has also delivered 21.6 percent higher real hourly compensation than a decade ago. Real median household income continues to trend upward while the share of households earning more than \$35,000 a year in inflation-adjusted income continues to climb. While debts have increased since the mid-1990s, asset values have increased far more rapidly, improving the median net worth of American households by almost one-third. The large majority of Americans, including the typical middle-class family, is measurably better off today after a decade of healthy trade expansion.

Those who blame trade for “declining real wages” and a “shrinking middle class” are guilty at the very least of a lack of perspective. They have confused the passing pain of a cyclical downturn with the long-term, ongoing, upward trend in U.S. living standards. Trade cannot be blamed for causing recessions. Even the best economists have not figured out how to repeal the business cycle. Trade does, however, boost the overall productivity of the economy and individual workers, allowing more goods and services to be produced in an average hour of work, leading to higher real compensation per hour and a higher median household income than if our economy were less open to trade. In part because of expanding trade, American families emerge from each recession and recovery in

**A closer look at the balance sheet of American households shows that families have not been “drowning in debt” nor have they been borrowing just to pay for daily necessities.**

To promote further progress for American workers and households, Congress and the administration should pursue policies that expand the freedom of Americans to participate in global markets.

**Table 2**  
**Trade and Globalization Balance Sheet**

	Decade Ago	Most Recent	Change	% Change
Exports as % of GDP	13.5	15.6	2.1	16
Imports as % of GDP	15.4	22.2	6.8	44
Real U.S. GDP (2006 \$s)	9,709	13,195	3,486	36
Total Employment (millions)	129.6	146.1	16.5	13
Unemployment Rate	4.9	4.6	-0.3	-6
Real Hourly Compensation (1992 = 100)	100.5	122.4	21.9	22
Median Household Income (2006 \$s)	45,416	48,201	2,785	6
Median Family Net Worth (2004 \$s)	70,800	93,100	22,300	31

Sources: For real U.S. GDP, see Council of Economic Advisers, Table B-2, p. 230. For all other figures, see previous citations.

a better place economically than they would be without trade.

For political and ideological reasons, opponents of trade liberalization have sought to exploit temporary downturns in the U.S. economy to indict the value of trade and trade-expanding agreements. But when we account for the passing phases of the business cycle, current indicators for worker and household well-being have continued to follow a long, upward trend. Trade expansion and growing globalization have helped raise the standard of living for a broad swath of Americans. To promote further progress for American workers and households, Congress and the administration should pursue policies that expand the freedom of Americans to participate in global markets.

## Notes

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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.

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