

## Related Brookings Resources

- *Brookings Trade Forum*  
Susan M. Collins and Dani Rodrik, eds.  
(published annually)
- *Brookings Papers on Economic Activity*  
William C. Brainard and George L. Perry, eds.  
(published annually)
- *The Future of North American Integration: Beyond NAFTA*  
Peter Hakim and Robert E. Litan, eds.  
(2002)
- "A Prescription to Relieve Worker Anxiety"  
Brookings Policy Brief #73  
Lori G. Kletzer and Robert E. Litan  
(March 2001)
- *North American Free Trade: Assessing the Impact*  
Nora Lustig, Barry P. Bosworth, and Robert Z. Lawrence  
(1992)

To receive a weekly e-mail about Brookings news, events, and publications, sign up for the Brookings Alert at [www.brookings.edu](http://www.brookings.edu).



1775 Massachusetts Ave., N.W.  
Washington, DC 20036

## “Offshoring” Service Jobs: Bane or Boon — and What to Do?

LAEL BRAINARD AND ROBERT E. LITAN

Americans worry the economy is permanently shedding jobs and compressing wages, not only in manufacturing but also now in services. **A** once assumed immune to foreign competition. The digitization of information and expanded bandwidth abroad are enabling companies to outsource to low-wage countries services ranging from routine call center work to higher-value software programming, medical diagnosis, and research and analytical activities.



At a call center in Bangalore, India, employees provide service support to international customers.

The offshoring debate comes during a recovery with unusually low job creation, causing anxiety about employment and trade. Concern runs across political and demographic lines, prompting calls for measures to slow down or even halt offshoring.

The nation still has a lot to learn about offshoring because existing data are incomplete or contradictory. Economic theory and past performance suggest that although offshoring provides overall economic gains, it also is redistributive, with affected workers facing possible job loss and wage pressures. The challenges are to ensure that American workers have the critical skills to compete successfully in the global economy, that America remains the most attractive location for high value services and manufacturing, and that the playing field does not artificially induce U.S. firms to go abroad. Most immediately, lawmakers must address the serious challenges faced by permanently displaced workers.

### SERVICES OFFSHORING: HOW MUCH, HOW FAST?

Despite the headlines, we know surprisingly little about how many jobs have moved offshore in the recent past, let

alone how many are likely to do so in the future. Goldman Sachs estimates that offshoring has accounted for roughly half a million layoffs in the past three years. Looking forward, perhaps



Lael Brainard is director of the Initiative on Poverty and the Global Economy and New Century Chair in International Economics at Brookings.



Robert Litan is a senior fellow in Economic Studies at Brookings and vice president for research and policy at the Kauffman Foundation.

the best-known projection is by Forrester, an information technology consulting firm, which expects the number of U.S. jobs outsourced to grow from about 400,000 in 2004 to 3.3 million by 2015. If this estimate turns out to be accurate, then offshoring could result in roughly 250,000 layoffs a year.

How should we think about that number? It is small relative to total U.S. employment of 137 million, and accounts for less than 2 percent of the roughly 15 million Americans who involuntarily lose their jobs each year. But to workers who lose their jobs, and to the far larger number of workers who worry that they will lose theirs, the foreign outsourcing total, whatever it is, resonates powerfully. Indeed, a recent study by Ashok Deo Bardhan and Cynthia A. Kroll at the University of California, Berkeley, suggests that up to 14 million Americans now work in occupations—including financial analysts, medical technicians, paralegals, and computer and math professionals—that could reasonably be considered “at risk.”

Gathering more accurate official data about the extent of offshoring may be difficult. The data on services collected by the Bureau of Economic Analysis, for example, do not show any noticeable upticks in net imports in the services where outsourcing is believed to be prevalent—a finding that raises questions about the accuracy of those numbers.

Meanwhile, the Labor Department surveys employers regularly, asking if they have had significant layoffs attributable to

moving offshore. But firms are reluctant to offer such information, and without extensive (and expensive) verification of their survey responses, Washington is unlikely to get a good handle on the real numbers any time soon.

## THE ECONOMIC THEORY OF OFFSHORING

Economic theory points to two quite robust conclusions about the likely economic impact of offshoring. Overall, offshoring will offer economic gains. But some American workers, companies, and possibly communities will just as surely lose out in the process.

Offshoring is closely related to technological advance: both are driven by competitive pressures to reduce costs and both result in displacement of existing jobs. Productivity gains and the displacement of existing jobs associated with technological advance have been features of the U.S. economy since its inception. Indeed, manufacturing productivity has been increasing roughly 3.5 percent per year over the last two decades, which helps explain why the share of U.S. workers engaged in producing “things” has declined significantly, although the pace has been very uneven.

International trade works much the same way. Economists such as Catherine Mann of the Institute for International Economics and, more recently, the President’s Council of Economic Advisers point to the overall benefits of offshoring to the U.S. economy. They typically argue that it helps lower costs and prices. A recent study by the consulting firm

McKinsey and Company estimates that the net cost savings of moving some jobs offshore is about 50 percent. This is far lower than the wage differential between U.S. and foreign workers, which sometimes runs from 80 percent to 90 percent because of costs incurred for coordination and telecommunications. Nonetheless, it is still sizable. In turn, lower inflation and higher productivity allow the Federal Reserve to run a more accommodative monetary policy, meaning that overall and over time the economy will grow faster, creating the conditions for higher overall employment. Catherine Mann has estimated that GDP growth would have been lower by 0.3 percent a year between 1995 and 2002 without foreign outsourcing of jobs in information technology.

Foreign outsourcing may also accelerate the formation of innovative products and services—an effect that has thus far been unmeasured but may be important. Some new and young firms, especially those that rely on information technology, are using highly trained foreign technicians (principally in India and China) to build prototypes of new products and services. In this way, U.S.-based firms that ultimately employ highly trained U.S. employees to bring new products and services to market can develop those products and services at far lower cost, and often more quickly, than if the activities that took place at the “proof of concept” stage were conducted solely in the United States.

But if fewer people are needed in existing jobs and occupations, then won't total employment fall over time? Historically,

the number of jobs has closely followed the growth of the labor force, despite major increases in foreign trade and the advent of a host of new job-displacing technologies, such as voicemail, word processors, and optical scanners. Indeed, despite a surge in openness, the U.S. economy since 1985 has added 30 million workers to its payrolls, even taking into account the recent recession and the unusually low job creation during the recovery. At the same time, median family income has jumped 20 percent. Structural changes, including trade and technology, influence where the jobs are, not the total number of jobs.

The policy challenge arises from the second sure bet from economic theory and practice. Offshoring, like trade and technology, is a process of creative destruction whereby workers in affected industries face the very real possibility of losing not only their jobs but also their health care. Even worse, some workers fall down the economic ladder when they have no choice but to take new jobs at lower pay and thus face the prospect of lower lifetime earnings.

This concern is particularly acute because it comes at a moment when anxieties about jobs and wages are running high. Against the backdrop of a breathtaking acceleration in manufacturing job losses over the past few years, the jobs picture remains murky two years into recovery. Stephen Roach of Morgan Stanley estimates that the current “jobless” recovery is short 2.4 million jobs compared with the previous “jobless” recovery of the early 1990s, and Laura Tyson, dean of the London Business

*“Economic theory points to two quite robust conclusions... Overall, offshoring will offer economic gains. But some American workers, companies, and possibly communities will just as surely lose out in the process.”*



School, estimates that even those Americans who have jobs are short about \$350 billion in “missing income.”

In this kind of economic climate, it is easy to understand why many Americans lack interest in parsing out how much dislocation is due to offshoring and how much to other causes and instead simply want to put on the brakes.

Just how redistributive is offshoring likely to be? Here, both the theory and the evidence only give partial

answers. As an example, the McKinsey study estimates that for every dollar of U.S. services activity that is offshored, there is a global gain of \$1.47, suggesting a net gain of 47 cents. In their analysis, India captures 33 cents of the total, leaving the United States with the remaining \$1.14. How is this \$1.14 distributed? “Reemployed” workers get 47 cents (a substantial reduction), additional exports account for a relatively modest 5 cents, and shareholders and

consumers of the firms doing the offshoring gain the other 62 cents. U.S. shareholders and consumers win while U.S. workers lose.

Indeed, this plays into a broader set of distributive trends that have been quite negative for workers since the end of the 2001 recession, although current data are not adequate to determine how big a role offshoring has played. The administration’s tax policies have exacerbated

**ADDITIONAL READING**

Council of Economic Advisors, *Economic Report of the President*, 2004.

David T. Ellwood, “Grow Faster Together. Or Grow Slowly Apart. How Will America Work in the 21st Century?” (Aspen Institute, Domestic Strategy Group, 2002).

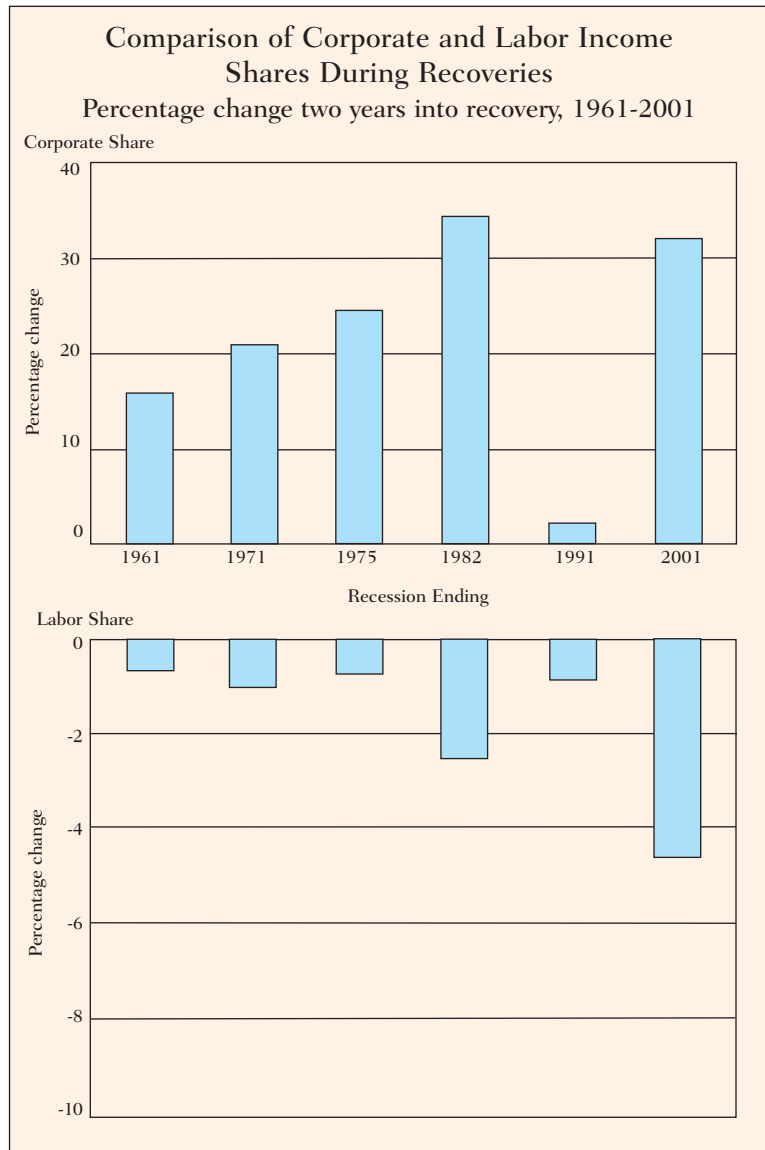
Erica L. Groshen and Simon Potter, “Has Structural Change Contributed to a Jobless Recovery?” *Current Issues in Economics and Finance*, (Federal Reserve Bank of New York, August 2003), Vol. 9, No. 8.

Michael Mandel, *Rational Exuberance* (Harper Business, forthcoming).

Catherine L. Mann, “Globalization of IT Services and White Collar Jobs: The Next Wave of Productivity Growth,” Institute for International Economics Policy Brief (December 2003).

McKinsey Global Institute, “Offshoring: Is It a Win-Win Game?” (August 2003).

Figure 1:



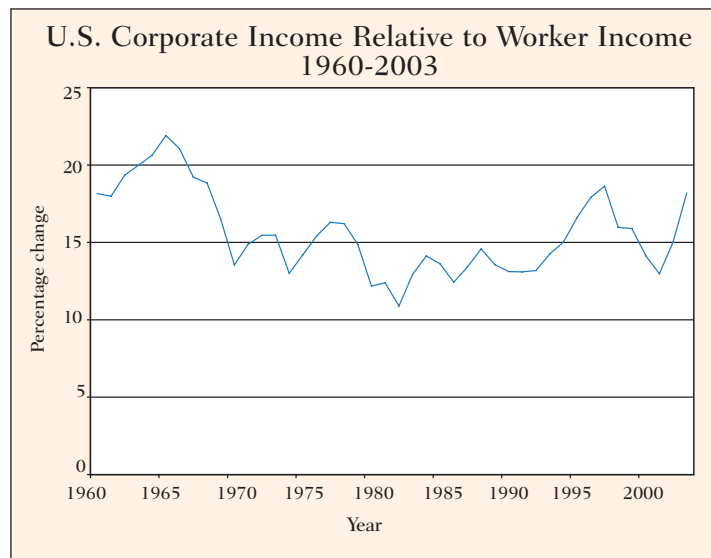
Source: *The Economic Report of the President*, 2004

rather than offset these developments. Figure 1 (page 4) shows that on a pre-tax basis, the profit share has grown much more strongly in the current recovery than in the recovery of 1992-93, while worker compensation has suffered a more pronounced decline than in any previous recovery in the last four decades, a point also highlighted by Jared Bernstein of the Economic Policy Institute.

This new allocation may be only temporary. Over the longer run, competition among firms should drive down profits, and consumers should benefit from lower prices. Historically, as shown in figure 2, there does not appear to be a long-term trend in the share of income going to profits relative to labor compensation.

Even so, longer term averages often conceal what is happening to individual workers. Economic research has established that the wages of low-skilled workers—those in the bottom of the income distribution—were pushed down in the 1980s and early 1990s by a combination of foreign trade, immigration, and a drop in demand caused by changes in technology that favor greater skills. This downward pressure increased income inequality during this period until the mid-1990s, when the rising tide of the

Figure 2:



Source: *The Economic Report of the President*, 2004

overall economy lifted all boats. Now that college-educated, white-collar American workers will increasingly be in competition with highly qualified workers in the developing world whose wages are a fraction of their own, won't they be subject to the same pressures?

In a forthcoming book, *Business Week's* chief economist, Michael Mandel, worries that the answer to this question is "yes," and he may well be right. If Mandel's assumption is correct, the "skills premium" that educated workers earned in the past may be pushed down in the future, thus reversing a decades-long trend. At the same time, however, wages within sectors may diverge. In services, for example, some workers whose jobs are vulnerable to offshoring could suffer erosion of their wages while others in supervisory positions may see compensation gains. With all these possible changes, it is no wonder that fears about foreign outsourcing resonate across a broad spectrum of society.

*"Manufacturing productivity has been increasing roughly 3.5 percent per year over the last two decades, which helps explain why the share of U.S. workers engaged in producing 'things' has declined significantly."*

#### ADDITIONAL READING (CONTINUED)

Ashok Deo Bardhan and Cynthia A. Kroll, "The New Wave of Outsourcing," Fisher Center for Real Estate and Urban Economics (University of California, Berkeley, Fall 2003).

Senator Max Baucus, "Preparing America to Compete in the 21st Century and Beyond," remarks at the Brookings Institution, March 3, 2004.

Anthony P. Carnevale and Donna M. Desrochers, "Standards for What? The Economic Roots of K-16 Reform" (Educational Testing Service, 2003).





*“Unless policymakers get out ahead of the offshoring debate, they will find themselves reacting to a host of band-aid proposals that do more harm than good.”*

## POLICY AGENDA

One thing is clear. Unless policymakers get out ahead of the offshoring debate, they will find themselves reacting to a host of band-aid proposals that do more harm than good. They should be proactive and take five important steps:

**Improve the data that the government collects.** Despite the challenges associated with gathering accurate, official data on offshoring, policymakers must make it a priority to greatly improve the statistics on this phenomenon so that policymakers, education and training experts, companies, and workers can make informed decisions sooner rather than later. Data collection on services must be expanded to include smaller transactions and be conducted on a more regular basis. Both the Bureau of Economic Analysis and the Bureau of Labor Statistics should look at developing additional survey questions to better measure the extent of services activity moving offshore and the concomitant changes to domestic employment, wages, and productivity. Because of the importance of this challenge, the Brookings Institution is organizing a data workshop to explore gaps between the key policy questions and the existing data available to address them.

**Ensure that America remains the most attractive location in the world for high-value services and manufacturing.** Policymakers should take a hard look at distortions in the tax code that may artificially encourage offshoring, such as the current corporate tax system that permits the deferral of taxation on foreign earnings but not on domestic earnings, and that results in the highest corporate tax burden among

industrialized countries. Recent proposals that would end the preferential tax treatment of foreign earnings and lower the corporate tax on domestic earnings merit special attention. A second critical priority is to strengthen support for research and development—the key to creating jobs of the future. Instead, recent budgets have cut federal support for R&D in engineering and the physical sciences relative to the size of the economy. Another policy long advocated by economists is to make permanent the federal tax credit for R&D. Finally, it is important to reduce reliance on an employer-based system of health insurance that adds to costs of U.S. firms and to the overall insecurity of displaced workers.

**Give American workers the knowledge and skills they need to compete in the global economy.** Cultivating a competitive, highly skilled workforce means strengthening the kindergarten through twelfth-grade curriculum, investing in science and engineering higher education, and restoring funding to community colleges and retraining programs that have suffered large cuts in recent years. America will not be able to hold onto the highest paying jobs in the world if the number of college graduates with degrees in physical sciences, math, and engineering continue on a downward trend.

Designing policies to strengthen the skills of the American workforce is particularly critical because the American economy is likely to confront a rapidly increasing skill shortage on the heels of the offshoring debate. In separate reports, Anthony Carnevale and Donna M. Derochers of Educational

Testing Service and David Ellwood of Harvard University have written about a looming “skilled-worker gap.” Carnevale and Derochers forecast a gap of 5.3 million skilled workers by 2010 and 14 million by 2020. This is attributable both to the aging American workforce and to the expectation that increases in average educational attainment achieved over the past two decades will level off over the next two decades. Meanwhile, the demand for skills will continue growing at a rapid pace.

**Do more on trade, not less.** Policymakers must make sure trade agreements are being enforced and must also regain the market-opening momentum that has disappeared in recent years. Ultimately, it will not be feasible to sustain political support for the relative openness of U.S. services markets while countries such as India maintain high barriers on entry into their own services markets.

**Pay attention to legitimate regulatory issues.** While policymakers should refrain from blunt, potentially counterproductive approaches, they must address oversight of consumer privacy, cyber security, and consumer protection when services—especially those dealing with sensitive medical and financial information—are produced in other countries with different laws, regulations, and professional credentials. Moreover, consumers have a right to know in services, no less than in manufacturing, where country of origin labeling is mandated by law.

**Address the dislocation faced by workers in the services sector through wage insurance, adjustment assistance,**

**and training.** This is the most urgent priority. Although Congress made far-reaching reforms to the Trade Adjustment Assistance program in 2002—including adding a health care benefit—it ultimately rejected efforts by Democratic Senators Max Baucus of Montana, Jeff Bingaman of New Mexico, Minority Leader Tom Daschle of South Dakota, and others to extend its reach to services workers. Software programmers are now suing the Department of Labor to gain access to the same extended unemployment insurance and retraining benefits long guaranteed to trade-impacted manufacturing workers. Congress could make the suit moot by making clear that service workers are covered by TAA.

Wage insurance should be a central part of the safety net for displaced services workers. In 2002, Congress amended the Trade Promotional Authority Act (TPA) to include a program providing wage insurance to workers older than fifty who can prove that trade is a “major cause” of their displacement. The goals of the wage insurance program were not only to ease the economic dislocations associated with trade-induced displacement, but also to encourage affected workers to search for and accept new jobs quickly. Payments start when workers take new jobs and stop two years from the date they were laid off. Workers who qualify receive, temporarily, half the earnings they lose when taking a new job, up to an annual ceiling of \$10,000.

One easy way to address worker displacement by offshoring, then, would be to make such workers eligible for wage insurance, albeit with some qualifications: lowering or eliminating the age requirement and possibly raising the

*“Although Congress made far-reaching reforms to the Trade Adjustment Assistance program in 2002...it ultimately rejected efforts...to extend its reach to services workers. Wage insurance should be a central part of the safety net.”*

The authors are grateful to Gary Burtless, Bill Dickens, Isabel Sawhill, and Charles Schultze of the Brookings Institution and Catherine Mann of the Institute for International Economics for helpful comments.



## Recent Policy Briefs

- “Global Economic Governance at a Crossroads: Replacing the G-7 with the G-20”  
Colin I. Bradford, Jr. and Johannes F. Linn  
(April 2004)
- “How to Balance the Budget”  
Alice M. Rivlin and Isabel V. Sawhill  
(March 2004)
- “The Insurance Industry in America”  
Richard J. Herring and Robert E. Litan  
(March 2004)
- “The Uncertain Future of the Telecommunications Industry”  
Robert E. Litan and Roger G. Noll  
(January 2004)
- “Traffic: Why It’s Getting Worse, What Government Can Do”  
Anthony Downs  
(January 2004)

**Editor**  
Elana Mintz

**Production/Layout**  
Mary Techau

**Vice President of Communications**  
Stephen G. Smith

**The Brookings Office of Communications**  
202/797-6105

[communications@brookings.edu](mailto:communications@brookings.edu)

The views expressed in this Policy Brief are those of the authors and are not necessarily those of the trustees, officers, or other staff members of the Brookings Institution.

Copyright © 2004  
The Brookings Institution

Cover Photo: Reuters

compensation limit to reflect the likely higher income of many dislocated services workers.

Limiting the kinds of benefits available under the Trade Adjustment Assistance law to workers displaced by trade and offshoring more generally raises fundamental questions of fairness—in addition to the difficulties of identifying the cause of displacement. Why should those protections not also be available to workers who are permanently displaced for other reasons, notably improvements in technology and shifts in consumer demand?

Because there is no satisfactory answer to this question—other than one of cost to the federal government—one author of this brief (Litan) proposed three years ago, with Professor Lori Kletzer of the

University of California at Santa Cruz, to offer wage insurance to all permanently displaced workers, regardless of age. The proposed insurance would be identical to that in the TPA program except that it would also provide a federal subsidy for up to six months of health insurance coverage. Had both programs been in place in 1997, for example, when the national unemployment rate was 4.9 percent, the annual total cost would have been \$3.6 billion. With today’s 5.6 percent unemployment rate, and the likelihood that average wage losses suffered by displaced workers have increased since 1997, a reasonable estimate is that the two programs would now cost roughly \$4.5 to \$5 billion. Over ten years, a program costing about \$50 billion could easily be refunded out of just a small portion of the revenues from repealing the 2001 tax cut for those few in the top bracket. B

**Tell us what you think of this Policy Brief.**  
**E-mail your comments to [yourview@brookings.edu](mailto:yourview@brookings.edu).**

### The Brookings Institution

1775 Massachusetts Ave., NW  
Washington, DC 20036

NONPROFIT ORG.
U.S. POSTAGE
PAID
FREDERICK, MD
PERMIT NO. 225



â€œOffshoring Service Jobs: Bane or Boon - and What to Do?â€, Lael Brainard and Robert Litan, April 2004. â€œOffshoring, Import Competition, and the Jobless Recoveryâ€, Charles Schultze, August 2004. â€œThe Outsourcing Bogeymanâ€, Daniel Drezner, Foreign Affairs, May/June 2004. â€œHardheaded Optimism About Globalisationâ€, Amar Bhide, Columbia University, forthcoming. From the Bureau of Labour Statistics. â€œOccupational Employment Projections to 2012â€, Daniel Hecker, Monthly Labour Review, February 2004. â€œThe 1988-2000 Employment Projections: How Accurate Were They?â€, by Andrew Alpert and Jill Auyer, Occup There is also a variety of job websites, forums and ranking sites that document the work ethics and culture of companies, even revealing details such as salary, benefits and other perks for a competitive comparison. In addition, customers are equally capable to broadcast their dealings with any particular company, whether itâ€™s a good experience or not. As a result, companies must constantly be ready to professionally handle any unforeseen scenarios as well as practice an ethical work culture at all times or face embarrassing consequences and even suffer damaging losses similar to how United Ai The Brookings Institution, "Offshoring" Service Jobs: Bane or Boon and What to Do?" The Brookings Institution is an independent, nonpartisan organization devoted to research, analysis, education, and publication focused on public policy issues in the areas of economics, foreign policy, and governance. This paper looks at the "incomplete or contradictory" evidence surrounding offshoring. Center for Trade Policy Studies This Cato Institute Center for Trade Policy Studies's mission is "to increase public understanding of the benefits of free trade and the costs