Offshoring (a.k.a. Offshore Outsourcing) and Job Insecurity Among U.S. Workers

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Summary

Offshoring or offshore outsourcing is the term now being applied to describe the practice among U.S. companies of contracting out the jobs of white-collar workers in service sector industries to firms located beyond our borders. The outsourcing of service sector jobs to specialized firms within the United States began in response to the early 1980s recessions when employers increased their focus on the company's core mission and contracted out peripheral activities to other U.S. businesses. The 2001 recession prompted employers to achieve further efficiencies by tapping into the global supply of labor. They utilized now widely disseminated technologies that permit low cost, good quality, and high speed transmission of voice and data communications to outsource service sector jobs abroad. Events also transpired in the intervening years that enhanced the ability of other countries (e.g., India and China) to export goods and services to the United States.

U.S. white-collar and blue-collar workers are anxious about job security because of the ongoing increase in global economic integration. Offshore outsourcing, which is one form of globalization, recently has adversely affected particular white-collar jobs: information technology (IT) occupations (e.g., computer systems analysts and software engineers) and IT-enabled occupations (e.g., telemarketers and accounting clerks). Factory workers continue to experience job anxiety as their ranks further dwindle at the same time that the U.S. population overall reaps benefits from international trade (e.g., lower priced goods for consumers).

Some observers believe that the United States has seen just the tip of the offshoring iceberg. By one estimate, about one-fourth of all U.S. jobs possess characteristics that will make them susceptible to outsourcing to globally dispersed talent within a 10- to 20-year time frame. Other observers expect that firms will lose enthusiasm for offshore outsourcing due to various reasons (e.g., less-than-anticipated cost savings, customer dissatisfaction) and consequently will use the business practice more strategically. No regularly collected series provides data on the total number of workers who actually have thus far lost jobs to offshoring. (See CRS Report RL30799, *Unemployment Through Layoffs and Offshore Outsourcing*, for the number of workers let go permanently in mass layoffs as a result of the movement of work to other countries.)

Congress has a longstanding interest in assisting workers who lose jobs through no fault of their own. In addition to unemployment benefits, laws currently exist to help displaced workers undertake education and training (e.g., the Workforce Investment Act, WIA). The Worker Adjustment and Retraining Notification Act (WARN) requires covered employers to give employees, among others, advance notice of a plant closing or mass layoff. Trade Adjustment Assistance (TAA) focuses specifically on workers who lose jobs due to international trade. (TAA generally does not apply to layoffs in service sector industries.) Alternative Trade Adjustment Assistance (ATAA) provides wage insurance to older workers displaced by trade who accept new jobs paying less than the jobs they lost.

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Introduction

Offshoring, also known as offshore outsourcing, is the term now being used to describe the nascent practice among companies located in the United States of contracting out the performance of service sector activities (e.g., call center operations) to businesses located beyond U.S. borders. The term is equally applicable to U.S. firms' outsourcing goods production (e.g., textiles) to other countries, which has been occurring for decades. It commonly is assumed that the work sent overseas was being or could have been performed by U.S. workers, thereby resulting in an actual loss of jobs or forgone employment opportunities.

As is often the case with an emerging trend, little concrete information is available about the offshoring of U.S. jobs. Instead, anecdotal accounts were initially conveyed by the media. These have been followed by projections of the share of U.S. jobs possessing characteristics that make them appear vulnerable to outsourcing. No regularly collected series currently provides data on the total number of U.S. workers who actually have lost their jobs due to overseas outsourcing.[1] The one government survey that, in 2004, began to ask firms about the movement of work to other nations is limited to companies that have conducted permanent large-scale layoffs of workers.

Moreover, there is some uncertainty about what should be considered offshoring.[2] Many observers appear to define it as the contracting out of work to non-U.S. companies located abroad and to the foreign subsidiaries of U.S. corporations. Others take a broader perspective, and include the purchase of services from U.S. outsourcing firms and from foreign-owned outsourcers with U.S. offices that can utilize workers living abroad, living in the United States (e.g., U.S. citizens and legal permanent residents as well as persons with H-1B professional specialty visas), or a combination of the two.

Uncertainty also surrounds the short- and long-run labor market implications of offshore outsourcing. For example, some observers initially blamed this business practice for much of the "jobless recovery" from the 2001 recession, while others countered that the historical link between economic growth and job creation remained intact. Unlike many past cycles, permanent rather than temporary layoffs dominated the 2001 recession and early recovery. This might have been related to firms seeing the recession as an opportunity to cut payroll costs and improve efficiency through operational changes such as outsourcing jobs to other U.S. industries and to other countries. Some economists estimated that a larger-than-usual share of laid-off workers were not rehired by their former employers as a result of this perceived structural change, which caused many displaced workers to undertake the time-consuming task of finding new jobs at other companies or in other industries.[3] Other economists estimated that the 2001 recession had about the same effect on all major industry groups and that the pace of job growth would accelerate as it eventually had following all past recessions[4]—a contention that has proved true.

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[1] For more information, see CRS Report RL30799, *Unemployment Through Layoffs and Offshore Outsourcing*, by Linda Levine. (Hereafter cited as CRS Report RL30799, *Unemployment Through Layoffs and Offshore Outsourcing*).

[2] For a review of the various meanings in the literature of offshoring see National Academy of Public Administration, *Off-Shoring: An Elusive Phenomenon*, Washington, DC, January 2006.

[3] 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.

[4] Ellen R. Rissman, "Can Sectoral Labor Reallocation Explain the Jobless Recovery?," *Chicago Fed Letter*, December 2003.

Estimates of net job loss (gross job gains minus gross job losses) early in the current decade that might have been due to offshoring range from 3% to 10%.[5]

While acknowledging that offshoring and other forms of globalization (e.g., direct investment and other capital flows) can cause painful dislocations for workers in the short-run, most economists agree that it benefits the nation as a whole by enabling U.S. companies that import goods and services to sell their products to consumers at lower prices, providing consumers with more choices, and by expanding markets for U.S. firms.[6] Others dispute the degree to which U.S. consumers actually benefit, suggesting that the shareholders of companies engaged in offshoring instead gain through increased dividends. These individuals also believe that outsourcing jobs overseas has different implications for the United States than outsourcing to other industries within our borders that are regulated by U.S. laws (e.g., minimum wage and other labor standards).[7]

Still others note that the current overseas movement of work is not defined by skill level. The jobs of both bookkeeping clerks and radiologists are amenable to offshoring, for example. They further wonder whether offshoring will result in college graduates facing a dwindling supply of entry-level jobs that traditionally have served as stepping stones to high-skilled positions, and question the adequacy of the government's safety net to meet the needs of already well-educated, well-paid workers who lose their jobs to offshore outsourcing (e.g., financial analysts and income tax preparers).[8]

This report does not attempt to sort through all these issues, some of which are addressed in other CRS reports.[9] Instead, it begins by examining the antecedents of offshoring service sector activities and then synthesizing the voluminous writings in recent years about the business practice. The reemployment and earnings experiences of displaced workers are next analyzed, focusing specifically on evidence of a rise in job insecurity among white-collar workers in the service sector. The report closes with discussion of existing federal legislation and proposals meant to ameliorate the impact of offshore outsourcing on U.S. workers.

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[5] The 10% figure appears in Jyoti Thottam, "Is Your Job Going Abroad?," *Time*, March 1, 2004 (Hereafter cited as Thottam, *Is Your Job Going Abroad?*). The 3% figure was developed by William Dickens, Senior Fellow, Economic Studies, The Brookings Institution, and presented during a March 3, 2004 Brookings forum on offshoring.

[6] Lynn A. Karoly and Constantijn W.A. Panis, *The 21st Century at Work*, prepared by the RAND Corporation for the U.S. Department of Labor, 2004. (Hereafter cited as Karoly and Panis, *The 21st Century at Work*.)

[7] John Sullivan, "Forum Reveals Divisions Over Effects of Exporting U.S. Jobs to Other Countries," *Daily Labor Report*, December 12, 2003.

[8] Alan S. Blinder, "Offshoring: The Next Industrial Revolution?," *Foreign Affairs*, vol. 85, issue 2, March/April 2006. (Hereafter cited as Blinder, *Offshoring: The Next Industrial Revolution?*.); and Christopher Koch, "Backlash," *CIO Magazine*, September 1, 2003.

[9] See, for example, CRS Report RS21118, *U.S. Direct Investment Abroad: Trends and Current Issues*, by James K. Jackson, and CRS Report RL32484, *Foreign Outsourcing: Economic Implications and Policy Responses*, by Craig K. Elwell.

The Development of Offshore and Domestic Outsourcing

The overseas relocation of manufacturing work predates by decades the current wave of offshoring service sector jobs. Major U.S. companies, initially responding to heightened competition from Japanese and European multinational corporations, opened facilities abroad during the 1970s and 1980s that turned out goods formerly produced by comparatively well paid, often unionized U.S. factory workers (e.g., assembly-line workers in the automotive industry).

Additionally, U.S. companies reacted to the back-to-back recessions of the early 1980s by focusing on their core missions and contracting out activities that specialized domestic enterprises could perform more efficiently (e.g., janitorial services). Firms restructured their operations by outsourcing jobs to temporary help supply agencies, professional and business services establishments (e.g., accounting firms), and independent contractors. U.S. demand for employment (including temporary help) services continued to increase during the 1990s. It is projected to be one of the industries experiencing the most job growth in the coming years,[10] thus indicating that domestic outsourcing of formerly in-house functions is a permanent reorganization of how work is performed.

The latest recession, which ended in November 2001, prompted employers to achieve further efficiencies by taking advantage of technological innovations that minimize the importance of physical distance between companies. The now widespread dissemination of technologies that enable relatively low cost, good quality, and high speed transmission of voice and data communications has enabled U.S. firms to extend offshoring beyond the factory jobs of blue-collar workers to the services jobs of white-collar workers (e.g., computer programmers and call center operators). Service sector jobs at risk of being offshored thus are both those held by information technology (IT) workers and technology-enabled workers.

Events that transpired during the intervening decade of the 1990s enhanced the ability of other countries to export services—particularly IT services—to the United States and other developed countries (e.g., the United Kingdom). One such event was the Y2K crisis: U.S. firms, in response to a tight supply of computer programmers in the late 1990s, turned to companies principally located in India to make the code fixes needed to avert problems with computer systems by the time 2000 arrived; the domestic firms that utilized these programmers reportedly were pleased with the quality of their work.[11] Another event was the educational systems of foreign nations graduating an abundant supply of well educated, sometimes English speaking individuals. In some cases, the number of persons with IT and accounting skills exceeded the immediate needs of their local economies (e.g., China, Eastern Europe, India, and the Philippines).[12] And, because

[10] Eric B. Figueroa and Rose A. Woods, "Industry Output and Employment Projections to 2016," *Monthly Labor Review*, November 2007. (Hereafter cited as Figueroa and Woods, *Industry Output and Employment Projections*.)

[11] Jeffrey Marshall, "Outsourcing Overseas: Savings Road Leads to India," *Financial Executive*, September 2002.

[12] Pete Engardio, Aaron Bernstein, and Manjeef Kripalani, "The New Global Job Shift," *Business Week*, February 3, 2003 (Hereafter cited as Engardio, et al., *The New Global Job Shift*.); Larry Greenemeier, "Offshore Outsourcing Grows to Global Proportions—U.S. Companies Extend Their Search Beyond India for IT Help Overseas," *InformationWeek*, February 11, 2002; and Drew Robb, "Offshore Outsourcing Nears Critical Mass—The IT Talent Shortage in the United States is Driving More Companies to Use Overseas Developers," *InformationWeek*, June 12, 2000.

English is the language of the computer industry regardless of country, IT services can be provided by a wide array of non-English speaking, comparatively low wage nations (e.g., Argentina, Brazil, Bulgaria, China, the Czech Republic, Hungary, Jordan, Lithuania, Mexico, Slovenia, Russia, and Ukraine).

These developments are reflected in the latest employment projections of the U.S. Bureau of Labor Statistics. Although the professional and business services industry (e.g., computer systems design and related services) is still expected to remain among the fastest growing in the economy, the Bureau projects that the rate of job growth could slow from 2.7% annually between 1996 and 2006 to 2.1% annually between 2006 and 2016, "mainly due to productivity gains and offshore outsourcing."[13]

Current and Future Prospects for Offshoring Jobs

Reasons for Worker Anxiety

The current wave of offshore outsourcing has caused considerable anxiety among both employed and unemployed workers. The seemingly greater publicity generated by the extension of offshoring from manufacturing to service sector industries is the case for the following reasons:

(1) White-collar workers comprise the majority of all U.S. workers and most white-collar workers are employed in the service sector, which accounts for the vast majority of total U.S. employment. In other words, many more people today believe their jobs are at risk of being exported.

(2) Domestic outsourcing and offshore outsourcing result in job losses for those employees who no longer are required to produce the goods and services that their employers decided to purchase. Some displaced workers must seek jobs in other fields because the domestic firms that specialize in providing outsourced functions do so more efficiently than their former employers. Others who lose their jobs to domestic outsourcing can continue to perform similar work—perhaps for lower wages and fewer benefits—by finding jobs in the industries now supplying goods and services to their ex-employers (e.g., as workers on the payrolls of temporary help agencies rather than manufacturers).[14] Thus, a key difference between domestic and offshore outsourcing is that none of the jobs that are contracted out remain available to U.S. workers when employers send the work to companies located overseas.[15]

The loss of service sector jobs to offshoring has led people to ask what field is going to be the next generator of jobs for U.S. workers, and more particularly, of good jobs. The question is not easily answered. Candidates that have been put forth (e.g., nanotechnology and biotechnology)

[13] Figueroa and Woods, *Industry Output and Employment Projections*, p. 56.

[14] For information on the statistical exaggeration of the employment decline in manufacturing because workers still are engaged in goods production despite being categorized in the employment services industry see Council of Economic Advisors, *Economic Report of the President* (Washington, D.C.: GPO), February 2004.

[15] However, offshoring likely creates other jobs for U.S. workers (e.g., those who develop the contracts for outsourced activities and those who oversee their performance). In addition, if the overseas firms and workers who perform these contracted activities subsequently purchase U.S. products and make investments in the United States, their actions will create jobs in the United States.

are unlikely, at present, to provide as many new jobs as are thought to be moving abroad; further, life sciences jobs have themselves begun to be sent overseas.[16] Although U.S. workers have been encouraged to focus on upgrading their skills to be capable of performing the high-level, high-paying jobs that are expected to be created by further U.S. technological innovation,[17] an oft-posed question in response to this advice is: in what occupations? The acquisition of IT skills had been the mantra for several years; however, these are among the jobs that appear newly at risk of being exported. Because a key difference between jobs susceptible to offshoring is the degree to which they involve impersonal services (e.g., accountants) or personal services (e.g., hairstylists), which "does not correspond to the traditional distinction between high-skilled and low-skilled work, simply providing more education cannot be the whole answer."[18]

How Many Jobs Are We Talking About?

People also have questioned whether we now are seeing the initial leakage of service sector jobs from the United States, with many more to follow in an expanding range of white-collar occupations. The query has elicited very different replies.

The Tip of the Iceberg?

Offshoring of white-collar jobs initially involved "simple service work, like processing credit-card receipts, and mind-numbing digital toil, like writing software code."[19] It more recently has expanded to such functions as providing help desk support to U.S. customers, processing home loans of U.S. mortgage applicants, interpreting CT scans of U.S. hospital patients, preparing corporate financial analyses for U.S. investors, and developing computer-generated blueprints for industrial plants and residential housing in the United States. Surveys of U.S. companies show they appear increasingly willing to send overseas a wide variety of more complex IT functions such as application design and development, IT infrastructure management, and packaged application implementation.[20]

Some observers foresee substantial increases in offshoring because of U.S. employers' satisfaction with overseas service providers[21] and because of the 45%-55% cost savings it arguably generates.[22] For example, the average M.B.A. employed in India's financial services industry in 2003 reportedly earned 14% of the salary of comparably employed U.S. workers, while IT professionals earned 13% as much and call center staff earned 7% as much as their U.S. counterparts.[23]

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[16] Andrew Pollack, "Medical Companies Joining Offshore Trend," *New York Times*, February 24, 2005.

[17] Clare Ansberry, "Why U.S. Manufacturing Won't Die," *Wall Street Journal*, July 3, 2003; and Steve Lohr, "Many New Causes for Old Problem of Jobs Lost Abroad," *New York Times*, February 15, 2004.

[18] Blinder, *Offshoring: The Next Industrial Revolution?*.

[19] Engardio et al., *The New Global Job Shift*, p. 50.

[20] Jeff Moad, "Offshore Job Competition to Increase," *eWeek*, January 31, 2003; and Jaikumar Vijayan, "Companies Expected to Boost Offshore Outsourcing," *Computerworld*, February 17, 2003.

[21] "New Study Finds Companies are Satisfied with Offshore Outsourcing of IT, Business Process and Contact Center Services," *Business Wire*, February 4, 2004.

[22] McKinsey Global Institute, *Offshoring: Is It a Win-Win Game?*, August 2003. (Hereafter cited as McKinsey Global Institute, *Offshoring: Is It a Win-Win Game?*)

[23] Saritha Rai, "Financial Firms Hasten Their Move to Outsourcing," *New York Times*, August 18, 2004.

Forrester Research, Inc. is the source of perhaps the first and most commonly cited statistics on offshoring. According to a 2004 update of its original forecast that appears to have been based on discussions with experts, a total of 3.4 million service sector jobs might move abroad by 2015.[24] This is a cumulative figure, and although 3.4 million may sound large in an absolute sense, it represents a minimal share of total U.S. employment in a single year.

Forrester's update reflects its assessment that the overseas movement of jobs will occur at a greater rate in the near term than initially anticipated. As shown in **Table 1**, 830,000 white-collar service sector jobs might have relocated offshore between 2003 and 2005; with almost 400,000 more of these jobs expected to be sent abroad in the three following years, the total for the 2003-2008 period could reach 1.2 million. Computer occupations might represent one of every five white-collar service sector positions outsourced overseas through 2008.

Table 1. Cumulative Number of U.S. Service Sector Jobs Projected to Shift Offshore by Occupational Group

(numbers in thousands)

Occupational Group	2003	2004	2005	2006	2007	2008
Administrative support	146	256	410	475	541	616
Computer	102	143	181	203	228	247
Business and financial operations	30	55	91	105	120	136
Management	3.5	15	34	42	48	64
Sales	11	22	38	47	55	67
Architecture	14	27	46	54	61	70
Legal	6	12	20	23	26	29
Life sciences	.3	2	4	5.5	6.5	9
Art, design and related	2.5	4.5	8	9	10	11
Total	315	540	830	960	1,100	1,200

Source: Adapted by CRS from John C. McCarthy, *Near-Term Growth of Offshoring Accelerating*, Forrester Research, Inc., May 14, 2004.

Note: Statistics are shown only through 2008, the period during which Forrester provides data in one-year intervals. By 2010, Forrester estimates a total of 1.7 million will have gone offshore for a two-year increase of one-half million. Over the next five years, Forrester estimates another 1.7 million jobs will be transferred to other countries for a grand total of 3.4 million by 2015.

Bardhan and Kroll estimated that more than 14 million jobs, a number approaching 12% of U.S. employment annually in the early years of the current decade, have attributes that could allow them to be sent overseas (e.g., no in-person customer servicing required; an IT-enabled work process that can be accomplished via telecommuting; jobs that can be routinized; a fairly wide gap between a job's pay in the United States compared to in a destination country; and a destination country having few language, institutional, and cultural barriers).[25] While these jobs

[24] John C. McCarthy, *Near-Term Growth of Offshoring Accelerating*, Forrester Research, Inc., May 14, 2004.

[25] Ashok Deo Bardhan and Cynthia A. Kroll, "The New Wave of Outsourcing," *Fisher Center Research Report*, University of California-Berkeley, fall 2003. (Hereafter cited as Bardhan and Kroll, *The New Wave of Outsourcing.*); and Cynthia A. Kroll, "State and Metropolitan Area Impacts of the Offshore Outsourcing of Business Services, and (continued...)

are at risk of being offshored, the number represents an outer limit. The occupational groups identified as being susceptible to offshoring include office support (e.g., data entry and payroll clerks), auditors and tax preparers, computer programmers and software engineers, medical transcriptionists and paralegals, and technical writers. They are concentrated in such industries as information, finance and insurance, and professional and business services.

A study released by the Brookings Institution built upon the work of Bardhan and Kroll, Forrester Research, and others to develop projections of the percent of jobs in 246 metropolitan areas that might be lost due to service offshoring over the 2004-2015 period. Offshoring is not expected to greatly affect employment in most metropolitan areas, with just 2.2% of the jobs in these 246 areas likely to be offshored between 2004 and 2015.[26] But the analysis suggests that five metro areas might lose 3.1% to 4.3% of their jobs by 2015: Boulder, CO; Lowell, MA; San Francisco, CA; San Jose, CA; and Stamford, CT. Another 23 areas might have between 2.6% and 3.0% of their jobs offshored. Those metropolitan areas estimated to be most vulnerable to service offshoring tend to be very populous, having 1 million or more inhabitants (e.g., Dallas, TX; Minneapolis, MN; and Washington, DC). They also tend to be located in the Northeast (e.g., Bergen-Passaic, NJ; Boston, MA; and Hartford, CT) and West (e.g., Denver, CO and San Jose, CA). In addition, they have high concentrations of IT jobs (e.g., Boulder, CO; Huntsville, AL; and Lowell, MA) or IT-enabled back-office jobs such as data-entry keyers and telemarketers (e.g., Des Moines, IA; Omaha, NE; and Wilmington, DE).

Jensen and Kletzer developed a different geographically based approach to estimate the share of tradable (offshorable) and nontradable (nonoffshorable) jobs in manufacturing and nonmanufacturing (e.g., agriculture, mining, construction, services) industries. About 9.4% of total U.S. employment in 2000 was found to be in tradable industries, according to one of their estimates. More specifically, 13.7% of employment in professional services industries may be vulnerable to offshoring compared to 12.4% of employment in manufacturing industries. Examining the data by occupation, Jensen and Kletzer estimated that at least 60% of workers in the following jobs may be susceptible to offshoring: computer and mathematical; legal; life, physical, and social sciences; business and financial operations; and architecture and engineering. "Outside of education and healthcare occupations, the typical "white-collar" occupation involves a potentially tradable activity."[27] This suggests that—to the extent nontradable industries can pare off the duties of white-collar employees—the industry results understate the percentage of workers at-risk of offshoring.

(...continued)

IT," *Fisher Center Research Report*, University of California-Berkeley, 2005. See, also, C. Alan Garner," Offshoring in the Service Sector: Economic Impact and Policy Issues," Federal Reserve Bank of Kansas City's *Economic Review*, third quarter 2004.

[26] Robert Atkinson and Howard Wial, *The Implications of Service Offshoring for Metropolitan Economies*, The Brookings Institution Metropolitan Policy Program, February 2007.

[27] J. Bardford Jensen and Lori G. Kletzer, *Tradable Services: Understanding the Scope and Impact of Services Outsourcing*, Institute for International Economics, WP 05-9, September 2005, p. 11.

Table 2. Occupational Categories by Degree of Offshorability

		Occupations		
Category	**Degree of Offshorability**	**Examples**	**Number**	**2004 Employment (in millions)**
I	Highly offshorable	computer programmers and systems analysts; telemarketers; bookkeeping, accounting and auditing clerks	59	8.2
II	Offshorable	computer software engineers; accountants; machine operators, team assemblers, and production worker helpers	151	20.7
III	Non-offshorable	general and operations managers; stock clerks, and order fillers	74	8.8
IV	Highly non-offshorable	business operations specialists	533	92.6
Total			817	130.0

Source: Alan S. Blinder, *How Many U.S. Jobs Might be Offshorable?*, CEPS Working Paper No. 142, March 2007.

As shown in **Table 2** above, Blinder created an index of "offshorability" for 291 blue-collar, white-collar, and service occupations based on the degree to which the jobs can be accomplished electronically. The majority of occupations in which most persons were employed in 2004 are considered highly *non*-offshorable—that is, they must be performed by individuals located near their U.S. customers. Blinder characterizes categories I and II as the most conservative estimate of potentially offshorable jobs (22.2% of total 2004 employment). He calls categories I, II, and part of III a moderate estimate of jobs vulnerable to offshoring (25.6% of total employment). Although Blinder labels categories I, II, and all of III as a too aggressive estimate of jobs susceptible to offshoring in the near term (29.0% of total 2004 employment), he suggests that further technological and other advancements might make the estimate more reasonable over a 10- to 20-year period. Blinder goes on to say that "Contrary to conventional wisdom, the more offshorable occupations are not low-end jobs, whether measured by wages or by education."[28]

Some estimates of the impact of offshore outsourcing on U.S. employment have focused on IT jobs in particular. Gartner Inc. announced in mid-2003 that it expected 10% of IT jobs at IT companies in the United States and 5% of IT jobs at other U.S. companies to be sent overseas by the end of 2004. It further speculated that by 2005, employers would have rehired less than 40% of the workers whose jobs they had offshored.[29] Gartner subsequently reported that less than 5% of IT jobs in the United States and in other developed countries already have been sent overseas, but it believes the proportion could climb to 30% by 2015. While not disputing the 30% claim, some other organizations think it will take longer to reach the figure: 20 to 25 years rather than 10 years.[30]

[28] Alan S. Blinder, *How Many U.S. Jobs Might be Offshorable?*, CEPS Working Paper No. 142, March 2007, p. 35. (Hereafter cited as Blinder, *How Many U.S. Jobs Might be Offshorable?*.)

[29] Diane Morello, *U.S. Offshore Outsourcing Leads to Structural Changes and Big Impact*, Gartner Inc., July 23, 2003.

[30] Paul McDougall, "Gartner Predicts Huge Increase in Offshore Outsourcing by 2015," *InformationWeek*, March 31, 2005.

But Gartner does not expect offshoring to cause a net loss of IT jobs in the United States. Relatedly, in a study sponsored by the Information Technology Association of America (ITAA), Global Insight estimated that actual and potential software and IT services jobs lost as a result of offshoring between 2000 and 2003 numbered fewer than 112,000. It further projected a net gain in aggregate U.S. employment in the coming years associated with sending more IT work overseas.[31] Indeed, some U.S. companies reportedly have offshored aggressively and become more efficient competitors, thereby enabling them to expand rather than shrink their domestic workforces.[32]

There are those who think that offshoring may allow the notion, which has been around since the 1980s, of a "virtual corporation"—with all but a firm's crucial activities performed by outside contractors—to become a reality. They believe that

> the rise of the offshore option is dramatically changing the economics of [corporate] reengineering. With millions of low-cost engineers, financial analysts, consumer marketers, and architects now readily available via the Web, CEOs can see a quicker payoff.... Then the efficiency gains kick in. A $10 billion company might initially only shave a few million dollars in wages after transferring back-office procurement or bill collection overseas. But better management of these processes could free up hundreds of millions in cash flow annually. Those savings, in turn, help underwrite far broader corporate restructuring that can be truly transformational.[33]

Overblown Fears?

One explanation for why perhaps only one-tenth of the potential market for offshoring global IT and business processes work has been realized thus far is that "executives have a lot to learn about using offshore talent to boost productivity.... The management challenge will grow more urgent as rising global salaries dissipate the easy cost gains from offshore outsourcing."[34] Some therefore remain cautious about how rapidly offshoring will lead to the creation of globally distributed corporations. They suggest that what might occur is overzealous pursuit of offshoring followed by retrenchment, during which time U.S. employers will learn the types of jobs best suited to the practice and how to manage a globally dispersed workforce.[35] Deloitte Consulting concluded that

> outsourcing will lose "holy grail" status. In the future, companies will not outsource because it is the latest management fad, and "it is the thing to do.... Organizations will carefully define core, strategic, and "thought-leadership" functions and will keep those inhouse to retain knowledge, confidentiality, and control over key functions. Some organizations will decide to outsource only short-term.... Many organizations will also engage in large scale re-insourcing thereby further eroding the outsourcing market.[36]

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[31] Global Insight, *Executive Summary: The Comprehensive Impact of Offshore Software and IT Services Outsourcing on the U.S. Economy and the IT Industry*, October 2005. Note: One industry group is expected to suffer net job losses: publishing, software, and communications might have 60,658 fewer jobs in 2010, due to this business practice.

[32] Pete Engardio, "The Future of Outsourcing," *Business Week*, January 30, 2006.

[33] Ibid., p. 57.

[34] Ibid., p. 58.

[35] Sharon Gaudin, "Nearly 1 Million IT Jobs Moving Offshore," *Datamation*, November 19, 2002.

[36] Deloitte Consulting, *Calling A Change in the Outsourcing Market: The Realities for the World's Largest Organizations*, April 2005, p. 25.

Both Dell and Lehman Brothers, for example, returned some inquiry help services and call center work to the United States due to customer dissatisfaction.[37] Other U.S. firms have had to employ IT service providers located in the United States to fix software produced abroad. Even when imported services are not flawed, some employers have overestimated the cost savings from outsourcing because a service's purchase price is affected by more than inter-country wage differentials (e.g., travel and managerial oversight costs).[38] META Group noted that firms often calculate labor cost savings by making a "person-to-person comparison (e.g., a full-time equivalent in India will cost 40% less)" and ignoring "hidden costs and differences in operating models" that bring down savings to 15%-20% in the first year of offshoring.[39] Perhaps reflecting these shortcomings of offshoring, the share of IT employers that prematurely terminated contracts with overseas IT service providers reportedly rose from 21% in 2004 to 51% in 2005.[40]

At least two factors that could have put the brakes on the offshoring have failed to do so, however. Offshore providers of IT services, for example, were able to allay U.S. outsourcers' fears about security shortly after the terrorist attacks of September 11, 2001.[41] Despite 9/11, U.S. airline carriers have continued their "increased outsourcing of maintenance jobs overseas—to places like Singapore, Brazil, the Dominican Republic—not only for international aircraft but even for planes on purely domestic routes."[42] In addition, concern periodically has arisen among U.S. outsourcers over unrest in some regions (e.g., disputes between India and Pakistan as well as in the Middle East). Global providers of software services have responded by placing more of their clients' work in a variety of countries, including the "near-shore" markets of Canada and Mexico.[43] Some individual U.S. employers also believe that moving work to nearby Canada, which has fewer cultural differences with the United States than India or the Philippines for example, likely reduces its customers' potential antipathy to offshoring.[44]

> In summary, most studies find the extent of job losses from services offshoring relatively small in the aggregate, but somewhat concentrated in a few industries and occupations. The job losses stem from both a direct impact of offshoring, which displaces some workers, plus an indirect impact through the productivity enhancements that it provides. However, there are still unanswered empirical questions, including the just-mentioned productivity effect. Indeed, offshoring could raise productivity directly or indirectly by displacing low-wage [low-skilled] jobs and creating high-wage ones, but it could also do just the opposite [i.e., result in displacement of well-paid, high-skilled workers].[45]

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[37] Khozem Merchant, "Tough Call for the US Cost-Cutters," *Financial Times*, December 22, 2003.

[38] Olga Kharif, "The Hidden Costs of IT Outsourcing," *BusinessWeek online*, October 27, 2003; and Ryan B. Patrick, "Signs of Offshore Backlash Growing," *Computerworld*, January 8, 2004.

[39] "Offshore Outsourcing Cost-Savings Perceptions Differ from Realities," *Business Wire*, January 13, 2004.

[40] "Study Points to Employer Dissatisfaction, Interest in China as Trends in IT Outsourcing," *Daily Labor Report*, June 14, 2005.

[41] Julie Gallagher, "Redefining the Business Case for Offshore Outsourcing," *Insurance & Technology*, April 2002.

[42] Al Kamen, "In the Loop," *Washington Post*, February 27, 2004, p. A21.

[43] "Gartner Dataquest Says IT Outsourcing Industry to Advance with Increased Demand in Offshore Outsourcing," *Business Wire*, January 30, 2003.

[44] Ian Austen, "Canada, the Closer Country for Outsourcing Work," *New York Times*, November 30, 2004.

[45] Robert W. Bednarzik, "Restructuring Information Technology: Is Offshoring a Concern?" *Monthly Labor Review*, August 2005.

Job Insecurity Since the 1980s

The state of mind that now prevails is one that characterized the initial years of the 1990s, when the labor market was slowly recovering from the 1990-1991 recession and stories of worker anxiety over job insecurity abounded in the media. A month hardly went by without at least one major U.S. company announcing a layoff that involved thousands of employees.[46] The leading explanation for the heightened feeling of worker anxiety in that period was "corporate downsizing" (i.e., a net decrease in a firm's employment) that often involved internal company restructuring through flattening the organizational pyramid (i.e., eliminating layers of middle management jobs).

Increased Displacement of White-Collar Workers Precedes Offshoring of Service Sector Jobs

Data from the Displaced Worker Supplement (DWS) to the Current Population Survey supports the impression that the nature of permanent job loss has changed. Generally speaking, long-tenured white-collar workers in some service sector industries have become more susceptible to displacement. But, blue-collar workers continue to be at the greatest risk of layoff.[47] (See the box below for a description of the displaced worker population.)

The U.S. Bureau of Labor Statistics (BLS) defines *displaced workers* as persons at least 20 years old who had worked for their employers at least three years before losing their jobs because of plant or company closings and moves, insufficient work for them to do, or abolishment of their positions and shifts. The definition is intended to identify workers who had some attachment to their employers, were terminated through no fault of their own, and who did not expect to be recalled to their former jobs.

1980s

The risk of job loss among manufacturing industry workers improved from 1981-1982 to 1991-1992 (two comparable periods). As the economy recovered from the severe 1981-1982 recession, the chance of losing a manufacturing job decreased. During the milder 1990-1991 recession, the displacement rate[48] among manufacturing workers rose to 7.1% but did not reach its 1981-1982 level of 8.2%. (See top panel of **Table 3**.) In contrast, the job security of most other workers worsened or stayed about the same. The incidence of permanent layoffs in finance, insurance, and real estate quadrupled to 5.5%. While the displacement rate also climbed (but less steeply) in wholesale/retail trade, construction, and in services, none of the service sector industries was close to manufacturing's risk of job loss.

The shift in the industrial pattern of displacement translated into a change in its occupational distribution in light of the predominance of blue-collar workers at manufacturers and white-collar

[46] For more information, see CRS Report RL30799, *Unemployment Through Layoffs and Offshore Outsourcing, Unemployment Through Layoffs: What are the Reasons?*

[47] Little attention typically is paid to the displacement of workers in service occupations, who include cooks and servers, cleaners and maintenance workers, hairdressers and child care workers, and police and firefighters. Workers in service occupations are less likely than blue-collar and white-collar workers to be affected by offshoring because many of their jobs require face-to-face interaction with customers.

[48] The displacement rate is the number of displaced workers in a particular group divided by the tenure-adjusted, two-year average estimate of employment for that same group.

workers in the service sector. The probability of permanent layoffs fell among blue-collar workers to 5.3%. It rose to 3.7% among white-collar workers. (See bottom panel of **Table 3**.)

Table 3. Displacement Rates by Industry and Occupation of Lost Job, 1981-1982 and 1991-1992

Characteristic	1981-1982	1991-1992
All long-tenured workers age 20 and older	3.9	3.9
Industry		
Mining	13.6	7.4
Construction	7.6	8.4
Manufacturing	8.2	7.1
Transportation and public utilities	4.1	4.4
Wholesale and retail trade	3.7	4.7
Finance, insurance, and real estate	1.4	5.5
Services	2.3	2.9
Government	1.2	1.1
Agriculture	5.4	3.8
Occupation		
White-Collar Workers	2.6	3.7
Managerial and professional specialty	2.1	3.6
—Executive, administrative, and managerial	2.5	4.8
—Professional specialty	1.7	2.4
Technical, sales, and administrative support	3.0	3.7
—Technicians and related support	3.3	3.7
—Sales occupations	3.7	3.6
—Administrative support, including clerical	2.5	3.8
Blue-Collar Workers	7.3	5.3
Service Workers	2.0	2.1
Farming, Forestry, and Fishing	0.9	1.4

Source: Ryan T. Helwig, "Worker Displacement in 1999-2000," *Monthly Labor Review*, June 2004.

White-collar workers whose risk of displacement increased to the greatest extent were employed in managerial occupations and in administrative support (including clerical) occupations. The chance of job loss among executives, administrators, and managers almost doubled to 4.8%. The increased focus of displacement on those who themselves manage companies had a widespread psychological impact: "When people on higher rungs of the corporate ladder lose their jobs, it throws fear into the hearts of thousands of workers" and represents "a corporate vote of no confidence in any worker's job security."[49] Among those in administrative support jobs, the displacement rate rose by half to 3.8%. The likelihood of permanent layoffs increased somewhat,

[49] Perri Capell, "Endangered Middle Managers," *American Demographics*, January 1992, p. 37.

to 2.4%, among professionals as well. *These data lend support to the widespread belief of white-collar workers that their jobs are less secure, but the change pre-dated any noticeable offshoring of service sector jobs.*

1990s

Displacement rates improved virtually across-the-board during the long economic expansion of the 1990s. Even when examined against a fairly comparable period 10 years earlier, the probability of job loss was lower in 1999-2000. (See **Table 4**). However, for the first time since the DWS data were collected, *the risk of permanent layoffs among employees of the services industry group (e.g., telecommunications firms and providers of computer services to other businesses) rose to the point that it equaled the average displacement rate*.[50]

The limited supply of workers available to U.S. employers in the late 1990s was responsible for the reduced likelihood of being laid off—with the possible exception of professionals.[51] It has been suggested that any offshoring of services that occurred during this time "can be seen as spinoffs from the US because of tight labor markets, rather than job transfers out of the US in search of lower labor costs."[52] The services offshoring that continued to occur during the 2001 recession and sluggish recovery in the following two years could have "involve[d] the transfer of US jobs and occupations to other countries," however.

Table 4. Displacement Rates by Industry and Occupation of Lost Job, 1989-1990 and 1999-2000

Characteristic	1989-1990	1999-2000
All long-tenured workers age 20 and older	3.1	2.5
Industry		
Mining	10.0	7.5
Construction	5.9	3.3
Manufacturing	5.0	4.7
Transportation and public utilities	3.6	2.7
Wholesale and retail trade	3.9	3.1
Finance, insurance, and real estate	3.5	3.7
Services	2.1	2.5
Government	0.4	0.5
Agriculture	3.2	1.7
Occupation		
White-Collar Workers	2.7	2.4

[50] Among the approximately 2 million workers displaced in 1999-2000, DWS data show there were some 69,000 long-tenured workers permanently let go from the computer and data processing services industry.

[51] About 33,000 long-tenured computer systems analysts and scientists as well as some 11,000 long-tenured computer programmers were displaced during the 1999-2000 period according to DWS data.

[52] Bardhan and Kroll, *The New Wave of Outsourcing*, p. 3.

Characteristic	1989-1990	1999-2000
Managerial and professional specialty	2.3	2.1
—Executive, administrative, and managerial	3.4	2.7
—Professional specialty	1.3	1.6
Technical, sales, and administrative support	3.1	2.7
—Technicians and related support	3.2	2.7
—Sales occupations	2.9	2.9
—Administration support, including clerical	3.2	2.6
Blue-Collar Workers	4.5	3.3
Service Workers	1.6	1.4
Farming, Forestry, and Fishing	1.5	0.5

Source: Ryan T. Helwig, "Worker Displacement in 1999-2000," *Monthly Labor Review*, June 2004.

2000s

Data covering the initial years of the current decade not unexpectedly show an increase in the incidence of displacement compared to the booming 1990s. In 2001-2002, which includes the 2001 recession and lackluster recovery in the labor market, the displacement rate was 4.3%. This is somewhat above the rate attained during the two earlier periods, shown in **Table 3**, that included recessions. By 2003-2004, the risk of permanent job loss dropped to 3.1%, which partly reflects the eventual response of the labor market to the ongoing economic expansion.

As shown in **Table 5**, which contains new industry and occupation classification systems, there is evidence of the information industry recording the highest rate of permanent job loss, at 9.6%, in the 2001-2002 period. (The information industry includes wired telecommunications carriers, radio and television broadcasting and cable, motion pictures and video, newspapers, and publishing.) Another industry with a well above-average displacement rate was professional and business services, at 7.1%; some IT-intensive industries (e.g., computer systems design and related services as well as architectural and engineering services) lie within this industry group. Both information and professional/business services previously were classified within the services industry group which, as noted above, earlier showed an increase in permanent layoffs. But by 2003-2004, the two industries exhibited sharply reduced displacement rates (5.0% and 4.1%, respectively)—reflecting some recovery from the burst IT-telecom bubble. The incidence of displacement in cyclically sensitive manufacturing also fell, but to a lesser extent, from 8.7% to 6.4%.

From an occupational perspective, the incidence of displacement was well above average among factory workers and managers. In 2001-2002, workers in production jobs reported the highest incidence of permanent job loss, at 8.7%. While the rate of permanent job loss fell from 5.2% in 2001-2002 to 4.0% in 2003-2004 for those in management, business, and financial operations occupations, it remained above the all-occupation average. The decrease also was smaller than experienced by workers in production jobs, whose likelihood of permanent job loss dropped to 5.3% in 2003-2004, but this, too, was still above the all-occupation average.

Table 5. Displacement Rates by Industry and Occupation of Lost Job, 2001-2002 and 2003-2004

Characteristic	2001-2002	2003-2004
All long-tenured workers aged 20 and older	4.3	3.1
Industry		
Mining	2.3	5.5
Construction	4.1	4.6
Manufacturing	8.7	6.4
Transportation and public utilities	3.9	3.8
Wholesale and retail trade	4.8	3.2
Financial activities	3.4	4.0
Information	9.6	5.0
Professional and business services	7.1	4.1
Education and health services	2.0	1.4
Leisure and hospitality	2.6	2.4
Other services	2.8	1.9
Government	0.6	0.7
Agriculture	4.1	1.2
Occupation		
Management, professional, and related occupations	3.9	2.9
—Management, business, and financial operations occupations	5.2	4.0
—Professional and related occupations	3.1	2.2
Sales and office occupations	4.4	3.2
—Sales and related occupations	5.2	3.4
—Office and administrative support	3.9	3.0
Natural resources, construction, and maintenance occupations	5.0	3.8
—Farming, fishing, and forestry	4.2	0.4
—Construction and extraction occupations	4.4	4.0
—Installation, maintenance, and repair	5.8	4.1
Production, transportation, and material moving occupations	6.9	4.6
—Production occupations	8.7	5.3
—Transportation and material moving	4.4	3.5
Service occupations	2.2	1.6

Source: Unpublished data from the DWS.

Reemployment Prospects

In addition to the shift in focus of permanent layoffs across industries and occupations, perceptions about "what happens afterwards" exacerbate concern over job insecurity. If people

think there are other jobs available that will pay them as much as their current jobs, anxiety about displacement likely will be less intense than if they think their chance for reemployment in comparable jobs is slim.

Despite variance in the size of the majority depending upon the strength/weakness of the labor market, most displaced workers have been able to find new employment. As shown in **Table 6**, about three out of four workers displaced in 2003-2004 again had jobs in January 2006. Even among workers in production jobs, the majority—about two out of three—succeeded in obtaining new positions. The issue for most displaced workers, then, is not so much a lack of jobs per se as it is the quality of their new jobs vis-a-vis their former jobs.

Table 6. Displaced Workers by Occupation of Job Lost in the 2003-2004 Period and Employment Status in January 2006

Occupation of Job Lost	Total (in 000s)	Employment Status (percent distribution)			
		Total	Employed	Unemployed	Not in the Labor Force
Total	2,418	100	76	8	16
Management, professional, and related occupations	863	100	78	8	14
—Management, business, and financial operations	460	100	75	9	16
—Professional and related occupations	404	100	81	6	13
Sales and office occupations	605	100	76	6	18
—Sales and related occupations	244	100	82	6	13
—Office and administrative support	361	100	73	5	22
Natural resources, construction, and maintenance occupations	270	100	73	11	16
—Construction and extraction occupations	145	100	79	10	11
—Installation, maintenance, and repair	123	100	79	7	13
Production, transportation, and material moving occupations	490	100	69	12	18
—Production occupations	331	100	67	12	21
—Transportation and material moving	159	100	77	11	12
Service Occupations	175	100	79	6	14

Source: Unpublished data from the DWS.

Note: The occupational classification system changed with this round of the DWS. Percentages may not add to 100 due to rounding.

Wage Prospects

Job quality commonly is measured in terms of earnings levels. About equal numbers of employees displaced from full-time jobs in 2003-2004, who were reemployed full-time in January 2006, were earning less or more than they had in their pre-displacement positions. (See

Table 7.) This marks a continued departure from the usual pattern of more than one-half of full-time job losers subsequently getting full-time jobs paying as much or more than they previously earned.[53]

Table 7. Workers Displaced From and Reemployed in Full-Time Wage and Salary Jobs, by Earnings on Pre- and Post-Displacement Jobs

	Reemployed in Full-Time Wage and Salary Job in January 2006 (percent distribution)				
		Earnings Compared to Those on Job Lost (percent distribution)			
Occupation of Job Lost	**Total Who Reported Earnings**	**At Least 20% below**	**Below but Within 20%**	**At Least Equal but Within 20%**	**At Least 20% above**
Total	100	28	22	32	17
Managerial, professional and related occupations	100	25	21	38	17
—Management, business, and financial operations	100	23	27	33	17
—Professional and related occupations	100	27	14	43	16
Sales and office occupations	100	28	26	25	20
—Sales and related occupations	100	19	25	37	19
—Office and administrative support	100	33	28	18	21
Natural resources, construction, and maintenance occupations	100	28	17	35	19
—Construction and extraction occupations	100	28	12	41	18
—Installation, maintenance, and repair	100	27	24	28	21
Production, transportation, and material moving occupations	100	37	19	30	14
—Production occupations	100	38	23	23	15
—Transportation and material moving	100	34	9	45	11
Service occupations	100	23	30	32	14

Source: Unpublished data from the DWS.

[53] According to immediately prior survey, only 40% of displaced workers reemployed full-time in January 2004 were earning at least as much as they had on their pre-displacement jobs. Comparable figures from earlier DWS surveys ranged from 52% to 61%.

Note: The occupational classification system changed with this round of the DWS. Percentages may not add to 100 due to rounding.

Reemployed professionals typically have been among those who fared the best when pre- and post-displacement earnings are compared. The occupations in which displaced professionals become reemployed provides a partial explanation for this finding: as most of these workers typically had obtained new jobs within the same occupational group,[54] they tended to retain the reward for experience (tenure) in their field that they would have lost had they switched occupations. In January 2006, 59% of professionals reemployed full-time in wage and salary jobs earned at least as much as they had in their pre-displacement jobs.

Although trade-related job loss among IT and IT-enabled professionals is such a new phenomenon that its consequences have not been much researched, some surmise from earlier studies of worker displacement that offshoring may prove to be less "costly in terms of unemployment and permanent wage loss as earlier waves of blue-collar, trade-related, job displacement were."[55] Their speculation is based upon the studies' findings that more educated workers usually have an easier time finding new jobs and generally incur smaller wage declines.

Others argue, however, that offshoring will exert downward pressure on the wages of higher skilled workers. Additionally, studies typically estimate that trade has had a fairly small effect on the U.S. wage structure (e.g., by depressing the relative wages of low skilled workers), but "if trade in services that involve more highly skilled jobs continues to grow, trade will affect a larger share of the workforce, so the effect on the wage structure could become larger over time."[56]

Those full-time employees displaced from management and related occupations as well as from production jobs continued to experience poor wage outcomes compared to professional and related workers. As shown in **Table 7**, 50% of managers and 38% of these blue-collar workers were able to obtain post-displacement jobs that paid at least as well as their pre-displacement positions, compared to 59% of professionals. Differences in the degree of earnings loss by occupation may have to do with the nature of the skills—general or specific—that members of occupational groups typically possess. An analysis of white-collar displacement found evidence to "suggest that managers experience `larger earnings losses than otherwise equivalent white-collar workers,"[57] which accords with the idea that a fairly large portion of the skills that managers and blue-collar workers possess are job- or industry-specific. Because skills of this nature are not readily transferable from one job to the next, managers and blue-collar workers appear less able than others to command wages on their new jobs that are comparable to their past earnings levels.[58] An above-average share of displaced blue-collar workers find new jobs in service occupations (e.g., janitorial and maintenance positions as well as food preparation and serving jobs)—usually the lowest paying of all occupational groups.[59] This might partly explain

[54] "Displaced Professional Workers Most Likely to Return to the Same Occupation," *Monthly Labor Review*, October 1999.

[55] Karoly and Panis, *The 21st Century at Work*, pp. 172-173.

[56] Ibid., p. 177.

[57] Lori G. Kletzer, "White-Collar Job Displacement," *Proceedings of the 47th Annual Meeting, Industrial Relations Research Association*, 1995, p. 105.

[58] According to Derek Neal, "Industry-Specific Human Capital: Evidence from Displaced Workers," *Journal of Labor Economics*, vol. 13, no. 4, October 1995, workers who switch industries upon reemployment (e.g., due to the long-term employment decline at manufacturers) incur larger wage costs than workers able to remain in their pre-displacement industries.

[59] Ryan Helwig, "Worker Displacement in a Strong Labor Market," *Monthly Labor Review*, June 2001.

the relatively high prevalence (38%) of workers who lost production jobs and upon reemployment found themselves earning at least 20% less than they had in their prior jobs.

Federal Assistance for Workers Displaced by Offshoring

Congress has demonstrated a longstanding interest in assisting workers who have lost jobs through no fault of their own (e.g., it has provided regular and, from time to time, extended unemployment insurance benefits). The following discussion is limited to programs meant to mitigate the adverse impact of offshore outsourcing on U.S. workers.

Current Federal Law

Assistance for Workers Harmed by Trade

When displacement is expected to be caused by government action, such as enactment of international trade agreements, Congress has created special programs to help these individuals. The Trade Adjustment Assistance (TAA) program was initiated in 1962 and is now authorized temporarily in the Trade Act of 1974 (P.L. 93-618) as amended. Generally speaking, the program offers an additional period of income support once workers displaced by the importation of articles or shift in goods production outside the United States have exhausted their regular and extended unemployment benefits and have met a job training requirement. These workers also are eligible to receive search and relocation allowances, as well as tax credits to make obtaining health insurance more affordable. TAA is a vehicle that policymakers have shown interest in utilizing to assist workers in the service sector who lose their jobs to offshoring (e.g., by broadening the definition of an article).[60]

Advance Notice of Plant Closings and Mass Layoffs

The Worker Adjustment and Retraining Notification (WARN) act also was enacted to help workers laid off through no fault of their own to more quickly find new employment. Although "retraining" is part of the statute's title, P.L. 100-379 does not authorize training. Enacted in 1988 and not substantively amended since then, WARN requires employers to provide written notice of mass layoffs and plant closings to workers or their representatives, state dislocated worker units, and the chief elected official of a unit of local government at least 60 days before the event. The advance notice requirement applies to employers, closings, and layoffs of a certain size.[61]

Education and Training

Education and training frequently are mentioned as ways not only to enable displaced workers to obtain new jobs but also to empower individuals to take advantage of technology's effects on the

[60] CRS Report RS22718, *Trade Adjustment Assistance for Workers (TAA) and Alternative Trade Adjustment Assistance for Older Workers (ATAA)*, by John J. Topoleski.

[61] CRS Report RL31250, *The Worker Adjustment and Retraining Notification Act (WARN)*, by Linda Levine.

world of work. At present, the Workforce Investment Act (WIA, P.L. 105-220) provides services targeted at "dislocated workers" who include job losers unlikely to be recalled to work in their former industries and occupations. Unlike TAA, training for dislocated workers through WIA is not an entitlement.[62] Tax incentives also are in place to encourage people to utilize their own resources to expand and improve their skill sets.[63]

Individuals who lose their jobs to offshoring might not think they need to undertake retraining or skill upgrading, however. Experienced workers with IT qualifications likely expected hiring to pick up once firms resumed substantial computer-related spending for example. Although IT employment rebounded from the depths reached after the telcom bubble burst several years ago, it remains below peak demand for computer programmers, systems analysts, and engineers.[64] Other individuals, while acknowledging their need to retrain, probably are stymied by the widening range of work that appears susceptible to being offshored. Some researchers have found little or no relationship between an occupation's vulnerability to offshoring and its skill level as measured by either educational attainment or earnings.[65]

Wage Insurance

Offshore outsourcing generally was not being discussed when Kletzer and Litan suggested in early 2001 that wage insurance be provided to mitigate the adverse impact of involuntary worker displacement. They proposed that for those longtime full-time employees who become unemployed through no fault of their own and who subsequently accept full-time jobs paying less than their pre-displacement wages, government provide a subsidy through the federal-state Unemployment Insurance system equal to a portion of the wage loss for up to two years following reemployment.[66] Such a program, they contended, would reduce worker anxiety over trade liberalization, among other factors that can result in job loss (e.g., technological innovation), and would help speed reemployment of dislocated workers.

At a 2004 briefing on offshore outsourcing, Catherine Mann of the Institute for International Economics pointed to the wage insurance program in the Trade Act of 2002 as model for serving a broader eligible population.[67] The existing demonstration program (the Alternative Trade Adjustment Assistance, or ATAA), which is funded through the Federal Unemployment Account, is available only to some older workers who lose their jobs due to international trade.[68]

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[62] CRS Report 97-536, *Job Training Under the Workforce Investment Act (WIA): An Overview*, by Ann Lordeman.

[63]CRS Report RL31129, *Higher Education Tax Credits and Deduction: An Overview of the Benefits and Their Relationship to Traditional Student Aid*, by Linda Levine and Charmaine Mercer, *Higher Education Tax Credits and Deduction*, by Linda Levine and Charmaine Mercer.

[64] CRS Report RL31973, *Programs Funded by the H-1B Visa Education and Training Fee, and Labor Market Conditions for Information Technology (IT) Workers*, by Linda Levine and Blake Alan Naughton.

[65] Blinder, *How Many U.S. Jobs Might be Offshorable?*.

[66] Lori G. Kletzer and Robert E. Litan, *A Prescription to Relieve Worker Anxiety*, Institute for International Economics, Policy Brief 01-2, February 2001.

[67] Fawn H. Johnson, "Expanded Wage Insurance Programs Would Calm Outsourcing Fears, Analysts Say," *Daily Labor Report*, April 5, 2004.

[68] A required minimum of petitioning workers must be at least 50 years old (i.e., three workers in groups of 50 or less, or 5% of groups of 50 or more); the skills of those at least 50 years old in the group are not easily transferable; and conditions in the industry are adverse. More information on the ATAA demonstration can be found at http://www.doleta.gov/tradeact.

Little is known thus far about how well the wage insurance component of the ATAA program is performing, however. On the basis of results of an evaluation of the Canadian Earnings Supplement Project, which was conducted between 1995 and 1998, the benefits of a wage insurance program may be modest.[69] The two-year supplement replaced 75% of the earnings lost by displaced workers, up to $250 per week, who were reemployed within a 26-week period in lower-paying full-time (30 hours a week) jobs. Displaced workers were randomly assigned to a group that was offered the supplement and to a group that was not (the control group). Only 20% of supplement group members received payments; this low take-up rate is attributed to the inability of eligible workers to quickly find new full-time jobs. The program was estimated to produce a small but statistically significant difference in the full-time reemployment rate of supplement compared to control group members—with the difference occurring toward the end of the period when workers were eligible for the supplement. At its widest, the difference in full-time reemployment rates was 4.4 percentage points. The gap gradually narrowed, and by one year after assignment of displaced workers to the supplement or control group, their full-time reemployment rates essentially were the same. The supplement did contribute greatly to the incomes of those fairly few individuals who received it, however, with payments averaging some $8,700 over a one-and-a-quarter-year period.

In contrast to government-sponsored initiatives, the McKinsey Global Institute put forth a wage insurance proposal that lies entirely in the private sector. It recommended that, as part of a severance package, businesses purchase insurance for displaced workers to cover their lost wages during the median period of unemployment for their occupational group and provide them with a portion of any wage loss incurred upon reemployment in full-time jobs.[70]

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[69] Howard S. Bloom, Saul Schwartz, Susanna Lui-Gurr, and Suk-Won Lee, "Testing a Financial Incentive to Promote Re-Employment Among Displaced Workers: The Canadian Earnings Supplement Project (ESP)," *Journal of Policy Analysis and Management*, summer 2001, vol. 20, no. 3.

[70] McKinsey Global Institute, *Offshoring: Is It a Win-Win Game?*