

2009

Employment and Training Policy in the United States during the Economic Crisis

Christopher J. O'Leary

W.E. Upjohn Institute, oleary@upjohn.org

Randall W. Eberts

W.E. Upjohn Institute, eberts@upjohn.org

Citation

O'Leary, Christopher J., and Randall W. Eberts. 2009. "Employment and Training Policy in the United States during the Economic Crisis." Presented at the Asia-Pacific Economic Consortium forum on Human Resources Development, entitled "Implementing Public TEVT Programmes in the Midst of the Financial Crisis-HRD Policies in Collaboration with Employment Security," Overseas Vocational Training Association, Chiba City, Japan, November 18-20.
<https://research.upjohn.org/confpapers/22>

Employment and Training Policy in the United States during the Economic Crisis

Christopher J. O’Leary and Randall W. Eberts
W.E. Upjohn Institute for Employment Research
300 South Westnedge Avenue
Kalamazoo, Michigan 49007 USA
oleary@upjohn.org
eberts@upjohn.org
Tel: 1-269-343-5541
Fax: 1-269-343-3308

November 2009

Paper prepared for the Asia-Pacific Economic Consortium (APEC) forum on Human Resources Development (HRD) 2009 entitled “Implementing Public TEVT Programmes in the Midst of the Financial Crisis—HRD Policies in Collaboration with Employment Security” held at Overseas Vocational Training Association (OVTA), November 18–20, 2009, Chiba City, Japan. We thank David Balducchi, Kevin Hollenbeck, Rob Pavosevich, Melinda Pitts, and Robert Straits for useful suggestions. Opinions expressed are ours and do not express the positions of the W.E. Upjohn Institute or the U.S. Department of Labor. We are responsible for any errors or omissions.

Introduction

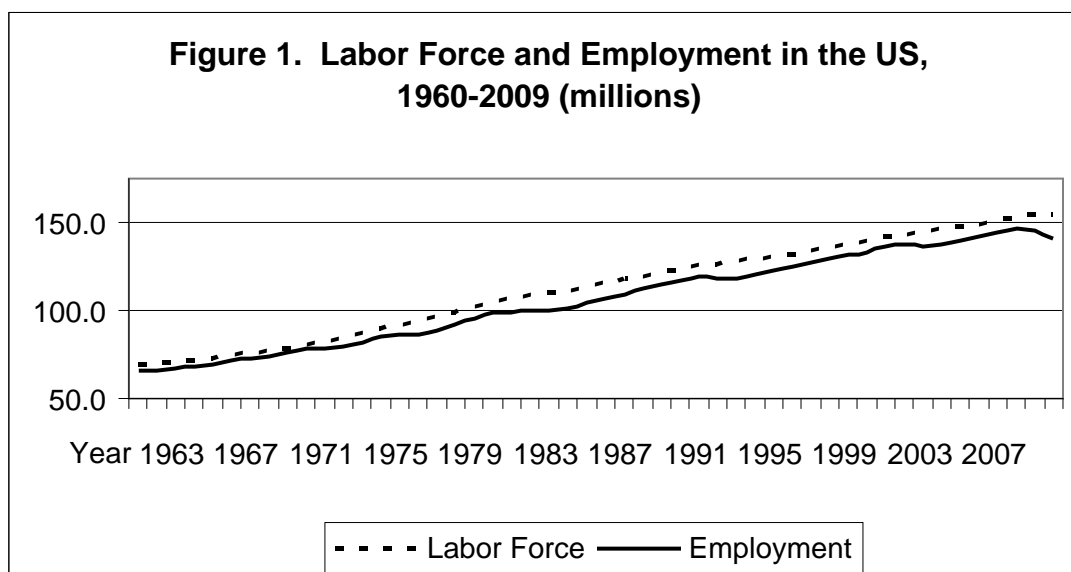
In the United States, government action to promote employment has usually been initiated by the federal government in times of crisis. Historically, states and localities have been reluctant to independently undertake public employment policy, for fear of handicapping competitiveness of resident industries with added costs. Federal leadership has permitted states to address important labor market problems with a reduced risk of job loss to competing states.

This paper examines labor market conditions leading up to the current economic crisis and documents the dramatic changes that unfolded in a short period of time. It reviews the burden placed on existing labor market support programs and the broad federal response to the problem through modifications of existing programs and the introduction of new mechanisms to help Americans cope with labor market adjustments. The particular focus of the paper is on federally supported public programs for occupational job skill training.

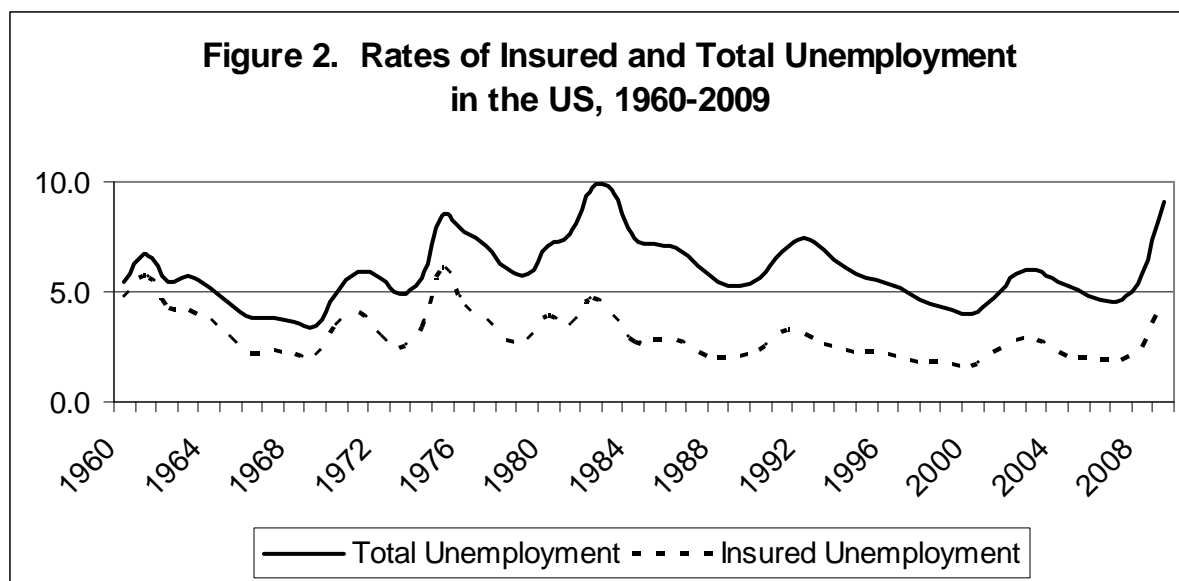
The labor market situation in the economic crisis

Trends in unemployment

Over the past 50 years, the U.S. labor force has grown at an average annual rate of 1.6 percent per year. From a level of 70 million in 1960 the labor force has more than doubled to 154 million (Figure 1). Total employment has risen at the same annual average rate in these years. However, the composition of the labor force has changed in that time. The labor force participation of women has risen steadily since 1970. The share of females in the labor force has risen to 47 percent today from 38 percent in 1970. At the same time, the labor force shares of older, part-time, and self-employed workers today remain near their 1970 proportions despite some fluctuation in the intervening years (BLS 2009).



The economic recession in the United States officially began in December 2007.¹ Since that time the number of unemployed Americans has more than doubled from 7.5 to 15.7 million in October, 2009. In that period, the monthly unemployment rate increased from 4.9 to 10.2 percent of the labor force.² These dramatic changes happened in an extremely short period of time. Only one other time since 1948 has the average monthly national unemployment rate been higher, and that was during the deep recession of 1982 when the unemployment rate hit 10.8 percent, and that level was reached over a time span nearly four years in duration (Figure 2).



With peak unemployment over the past 50 years in 1982, Figure 2 illustrates a differing pattern of unemployment over time before and after that date. The unemployment lows during economic expansions were successively higher preceding 1982, and the unemployment lows during economic expansions were successively lower following 1982. The year 1982 is also around the tipping point in business interaction with the federal-state unemployment insurance (UI) system. Before that time temporary furloughs were commonly followed by employer recalls. Permanent industrial restructuring began in the early 1980s and accelerated in the following years. Manufacturing plant closings and mass layoffs mushroomed in the 1980s. In 1986, the Economic Dislocated Worker Adjustment Act (EDWAA) created a new federal funding stream for job retraining of dislocated workers, and the 1993 federal UI reforms instituted the Worker Profiling and Reemployment Services (WPRS) system targeting early job search assistance to UI beneficiaries at risk of long term joblessness. Unemployment reached a cyclical low in 1989 at 5.3 percent of the labor force; the next business expansion resulted in unemployment reaching an even lower 4.0 percent in the year 2000.

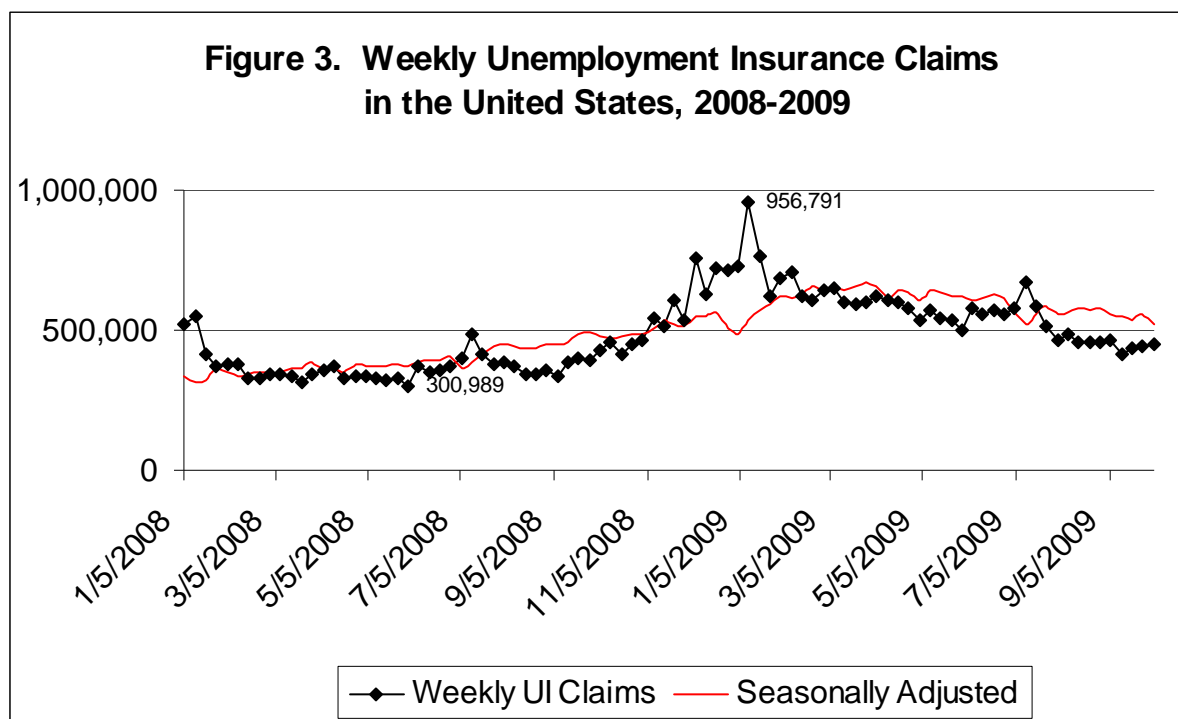
¹ National Bureau of Economic Research (NBER) business cycles expansions and contractions, <http://www.nber.org/cycles/cyclesmain.html>

² Labor force statistics from the Current Population Survey, Bureau of Labor Statistics, U.S. Department of Labor, <http://www.bls.gov/webapps/legacy/cpsatab1.htm>

The macroeconomic stability after the 1980s has been attributed to a new era of steady monetarist economic management. Credit tightening by the Federal Reserve (Fed) central bank in 2001 led to a rise in unemployment followed by a gradual return to low of 4.6 percent in 2006 and 2007. The previous economic recovery was supported by cuts in federal personal income tax rates as well as lower interbank lending rate targets by the Fed. Unemployment remained at historical lows until the tremors of the recent financial crisis began to rock markets.

Unemployment resulting from the economic crisis

New claims for unemployment insurance (UI) benefits averaged 322,000 per week from 2005 through 2007. In the 52 weeks from October 2008 through October 2009 UI claims averaged 577,000 per week. In the week ending ten days before Barack Obama was inaugurated President of the United States, a total of 956,791 Americans filed new claims for UI benefits (Figure 3). The new President seized the initiative to renew employment policy, and occupational skill training received prominent attention, in the federal macroeconomic stimulus bill called the American Recovery and Reinvestment Act (ARRA) of 2009.



From September 2008 to September 2009 the rate of unemployment rose dramatically from 6.2 to 9.8 percent of the labor force, and the composition of the unemployed changed substantially (Table 1). Full-time workers employed more than 33 hours per week were impacted more than part-time workers who often hold multiple jobs. Among full time workers the unemployment rate rose from 6.3 to 10.7 percent, while for part-time workers unemployment rose from 5.9 to 6.4 percent from September, 2008 to September, 2009. However, this favorable comparison masks an increase in the rate of involuntary part-time work by those who would prefer full-time work (BLS 2008). In the 12 months starting September, 2008 young workers experienced increases in unemployment proportionate to

Table 1 Changes in Rates of Unemployment by Sex, Age, Full-time or Part-time Status and the Distribution of Total Unemployment by Duration from September, 2008 to September, 2009 in the U.S.

	9/30/2008	9/30/2009
Full-time	6.3	10.7
Men 16+	6.7	11.6
Men 20+	6.3	11.0
Women 16+	5.7	9.5
Women 20+	5.3	9.0
Both 16 to 19	29.6	43.3
Part-time	5.9	6.4
Men 16+	7.3	7.9
Men 20+	5.0	5.4
Women 16+	5.0	5.5
Women 20+	3.7	4.2
Both 16 to 19	14.4	17.2
Total Unemployment	6.2	9.8
Distribution of Unemployment by Duration		
Less than 5 weeks	29.8	19.4
5 to 14 weeks	32.1	25.6
15 weeks and over	38.1	54.9
15 to 26 weeks	16.9	19.3
27 weeks and over	21.2	35.6

SOURCE: U.S. Bureau of Labor Statistics, Current Population Survey, Monthly Tables.
<http://www.bls.gov/cps/tables.htm#monthly>

that for all full-time workers, but starting from a very high rate the final unemployment levels are staggering. Among full-time workers aged 16 to 19 unemployment rose from 29.6 to 43.3 percent, and among part-time youths unemployment rose from 14.4 to 17.3 percent.

The wave of industrial restructuring starting in the 1980s continued through much of the remainder of the century. Compared to the very quick rise in unemployment in 2008 and 2009, the recent previous recessions occurred during a phase of steady decline in manufacturing employment and were followed by what came to be known as jobless economic recoveries. That is, unemployment was slow to fall as economic activity resumed. Economic restructuring involved employment shifts across employers and industries requiring occupational change and retraining of the workforce. The present recession has caused unemployment to rise higher than previous recent recessions, and the rise has occurred much more quickly with unemployment surging at a feverish pace.

The stock of unemployment at any time is the net result of new inflows from job loss, new labor market entry and re-entry, minus outflows due to new employment and labor force withdrawals. The rise in unemployment resulting from inflows among the jobless swamped

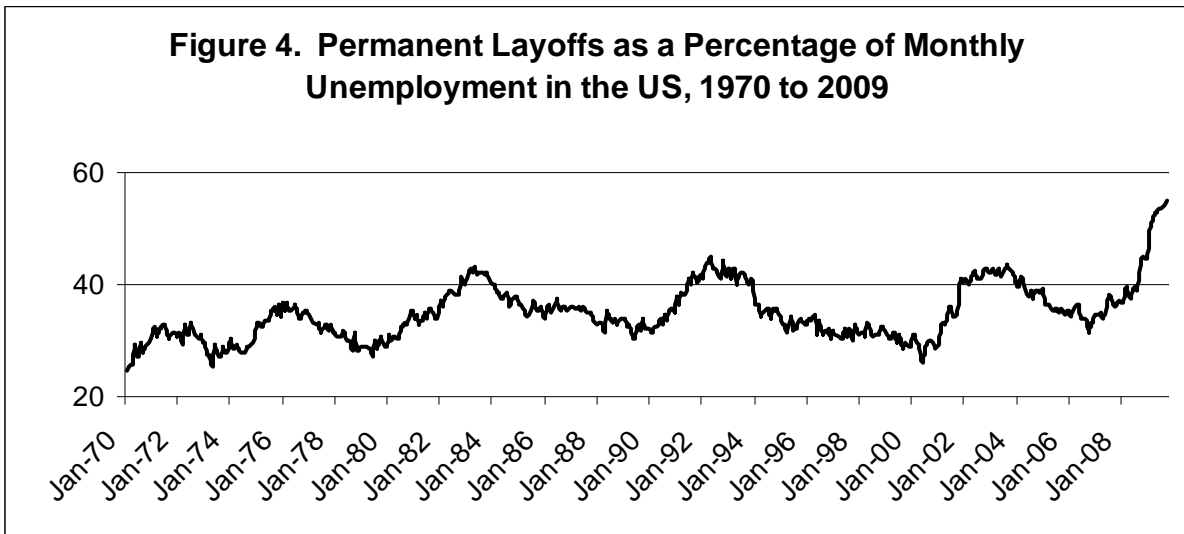
all other flows. In the three months from December 2008 through February 2009 a total of 9.8 million new claims for UI were filed.

This large and quick rise in unemployment has led some analysts to speculate that the current recession is different than the previous two. Erica Groshen (2009) of the Federal Reserve Bank of New York asserted that “deeper recessions tended to be more cyclical” so that a larger share of job separations may be temporary rather than permanent layoffs in such recessions. She cites job losses in the current recession as being more widely diffused across industries and posits that temporary and permanent layoffs may be more balanced now than in other recent recessions. The previous recessions were engineered by the Fed gradually raising the target interbank lending rate 25 basis points every six weeks. However, the current wave of layoffs was largely driven by the complete unavailability of credit to business at any price. Businesses that normally manage operating cash flows with bank lines of credit found those sources evaporated overnight. Banks were hoarding cash to secure their own balance sheets as value in their loan portfolios evaporated.

Other analysts suggest that a jobless economic recovery might persist for longer than seen in recent recessions. Writing on the Atlanta Federal Reserve Bank macroblog, Melinda Pitts (2009) cites evidence that very small businesses, employing 50 or fewer persons, contributed 45 percent of the nation’s job losses during the first year of the current recession. That is significant given the facts that one-third of job growth is attributed to very small firms in the expansion preceding the 2001 recession and that only 9 percent of job losses in the 2001 recession originated in such firms. Pitts quotes William Dudley, president of the Federal Reserve Bank of New York, as saying that: credit worthiness of small business borrowers has deteriorated, “some sources of funding for small businesses—credit card borrowing and home equity loans—have dried up ... and, small businesses have few alternative sources of funds.”

Recent data from the BLS (2009) indicates that permanent layoffs as a share of total unemployment have reached an all time high of over 55 percent (Figure 4). This rate had previously only reached 42 percent in 1983, 45 percent in 1992, and 44 percent in 2003. The current dramatically higher rate of permanent layoffs suggests a protracted period of high joblessness in the coming months.

In terms of exposure to hardship from job loss, the increase in the share of long-term unemployment is an informative measure. With long-term joblessness defined as more than 6 months out of work, the rate of long-term joblessness increased from 21.2 percent of all unemployed in September, 2008 to 35.6 percent of those unemployed in September, 2009 (Table 1). In the United States, the maximum duration of entitlement to regular unemployment insurance benefits is 26 weeks in all but two states where it is 30 weeks. In the current labor market, a sizeable proportion of all UI beneficiaries are at risk of exhausting benefit entitlement.

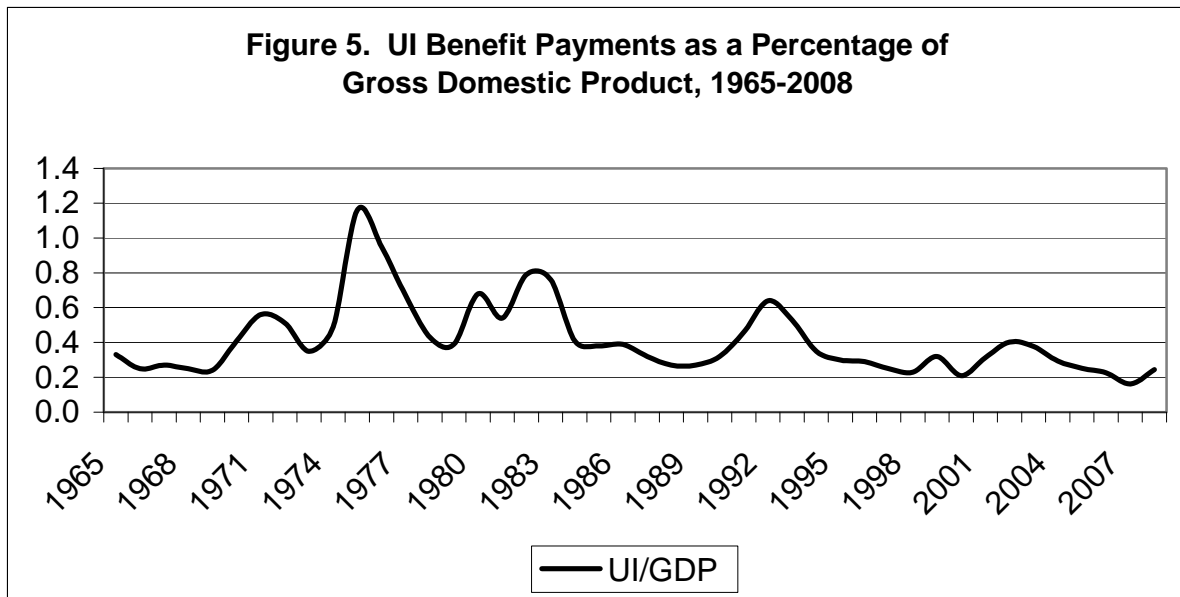


Since 1960 the labor force share of workers covered by UI has trended upward. Today nearly all wage and salary employers are required to pay UI taxes on their payrolls, and employees covered by UI included 86.8 percent of the labor force in 2008. The majority of workers not covered by UI work in self-employment, with others working on family farms or for churches. The dramatic rise in UI coverage from 57.7 percent of the labor force in 1960 resulted mainly from 1972 UI reforms bringing non-profit and governmental agency employers under the system.

Despite the broadened coverage, the ratio of insured to total unemployed has fallen in half from 86 in 1960 to 43 percent in 2008 (Figure 2). The declines were sharpest in the 1960s and fell again in the 1970s. The reduced share of jobless workers receiving UI benefits dampens the strength of the UI system to inject spending during economic downturns thereby acting as an automatic macroeconomic stabilizer. As a share of aggregate economic activity, measured by gross domestic product (GDP), total UI benefits have been declining in importance (Figure 5). Since 1965, UI benefits as a share of GDP have ranged between 0.16 and 1.16 percent. The highest rates occur during recessions when GDP is depressed and UI benefit payments have increased. Since the peak of 1.16 percent in 1975, the subsequent recessions have seen UI-GDP ratios at successively lower cyclical peaks reaching 0.79 percent in 1982, 0.64 percent in 1992, and 0.40 in 2002. After the 1982 recession when many States were forced to borrow from the federal government to pay UI benefits, several states increased their UI eligibility requirements. This lowered UI reciprocity rates and reduced the counter cyclical effectiveness of the UI system to inject significant amounts of UI benefits automatically during economic recessions.³

³ Recent estimates based on five post World War II recessions suggest a spending multiplier of UI benefits to be 2.15 during periods of high unemployment. That means each \$1.00 of UI benefits received by the unemployed acts to increase gross domestic product (GDP) by \$2.15 through respending in the economy.

Figure 5. UI Benefit Payments as a Percentage of Gross Domestic Product, 1965-2008



As a percentage of GDP, UI is making up a larger share during the current recession. This is because both GDP declined and there have been huge increases in the number of beneficiaries and their average duration of benefit receipt. Additionally, there have been a series of federally financed UI benefit extensions for exhaustees of the regular 26 week entitlement. Two extensions of up to 20 weeks and a third adding up to 13 weeks, depending on the level of unemployment in a State, so that the maximum potential duration of benefits in many states with high unemployment is now 79 weeks. As unemployment continues to rise, Congress just passed another extension of UI benefits adding 20 weeks of benefits in States with unemployment over 8.5 percent and 14 weeks of benefits in other States. President Obama signed this benefit extension into law on Friday, November 7, 2009. The total amount of UI paid out in the 12 months ending June 30, 2009 is \$75.0 billion in regular UI benefits plus more than \$34.7 in federally funded extended benefits.⁴ That total is 0.77 percent of GDP at the \$14.3 billion annual rate estimated in October, 2009 (BEA 2009).

Regarding UI for jobless workers, the main elements of the American Recovery and Reinvestment Act of 2009, signed by President Obama in February, include provisions to:

- Continue federally funded extended UI benefits up to 33 weeks through December 31, 2009 for a cost of \$27 billion.
- Increase UI benefit amounts by \$25 per week through June 30, 2010 for a cost of \$9 billion.
- Make a \$7 billion distribution from the Unemployment Trust Fund, of the type granted by the Reed Act, to states having legal provisions for items listed in

⁴ In addition to fully paying for benefits under the permanent extended benefits program, the federal government has also fully paid for a series of extended UI benefits programs. As of September 16, 2009 the funding levels are: Tier 1 \$21.6 billion, Tier 2 \$6.5 billion, ARRA April \$0.4 billion, ARRA May \$1.1 billion, ARRA June \$1.9 billion, and ARRA July \$3.3 billion for a total of \$34.7 billion (USDOL, ETA 2009).

McDermott UI Modernization Act. The money would be allocated to the states based on their share of the nation's unemployment. States would receive one-third of their allocation for having an alternate base period (ABP) for monetary determination of UI eligibility.⁵ The remaining two-thirds would be granted for having two of the following four provisions: 1) permitting claimants who normally work part-time jobs to be seeking only part-time work as reemployment, 2) permit eligibility for job separations due to employer harassment or compelling family reasons, 3) have allowances of at least \$15 per dependent up to at least \$50 total per week, and 4) job search waivers for 26 weeks given to beneficiaries involved in commissioner approved job training.

- Pay COBRA costs to extend health insurance coverage to the unemployed, extending the period of COBRA coverage for older and tenured workers beyond the 18 months provided under current law.⁶ Specifically, workers 55 and older, and workers who have worked for an employer for 10 or more years will be able to retain their COBRA coverage until they become Medicare eligible or secure coverage through a subsequent employer. In addition, subsidizing the first 12 months of COBRA coverage for eligible persons who have lost their jobs on or after September 1, 2008 at a 65 percent subsidy rate, the same rate provided under the Health Care Tax Credit for unemployed workers under the Trade Adjustment Assistance program. Estimated cost \$30.3 billion.
- Provide a 100 percent federal funding through 2010 for optional State Medicaid coverage of individuals (and their dependents) who are involuntarily unemployed and whose family income does not exceed a State-determined level, but is no higher than 200 percent of poverty, or who are receiving food stamps.

Expectations of employment and training programs in the economic crisis

The ARRA brought significant additional federal funding to employment policy programs. For program year 2009 the ARRA money for occupational skill training doubled the levels authorized before the recession was recognized. Delivery of services for ARRA funded employment and training efforts relied largely on existing institutional arrangements. Some programs that had withered in recent years were renewed. Innovations came mainly in the form of income replacement and supportive services during retraining and job search, as well as new mechanisms for assuring effective use of funds for public employment programs.

⁵ The UI base period is the time frame over which prior earnings are examined to determine an individual's UI eligibility and benefit entitlement. The standard base period (SBP) is the first 4 of the 5 most recently completed calendar quarters. The alternate base period (ABP) would be the 4 most recently completed calendar quarters. For example, if the SBP was July 2008 to June 2009 the ABP would be October 2008 to September 2009.

⁶ The Consolidated Omnibus Budget Reconciliation Act (COBRA) of 1986 gave workers and their families who lose their health benefits because of a job separation the right to continue health benefits provided by the group health plan of their prior employer for limited periods of time. The separating employees who choose to continue coverage must pay the health insurance premium themselves.

Existing Institutional Framework

The triad of public employment policy programs started in the 1930s during the Great Depression. The Wagner-Peyser Act of 1933 established the U.S. Employment Service and the Social Security Act of 1935 established the federal-state unemployment insurance (UI) program. Federal training policy also had its origin in depression era *New Deal* programs for public works. Occupational skill training was reborn several years later following post-war recessions.⁷

In the wake of World War II, at a time when returning soldiers swelled the civilian labor force and there were expectations that unemployment would rise, the Employment Act of 1946 (P.L. 79-304) declared it to be a responsibility of the federal government to use all practical means "to promote maximum employment, production, and purchasing power."⁸ Following economic stagnation in the 1950s, public job training programs for dislocated workers began with the 1962 Manpower Development Training Act (MDTA). Under MDTA, training was viewed as an anti-poverty program, and the federal government took a centralized and categorical approach to eradicating poverty. Funding from the federal government was targeted to specific groups. Funds were available on a formula basis to communities based on population and estimates of the proportion below the poverty income level. Rudimentary systems for monitoring use of training funds were established in the final years of MDTA.

The Comprehensive Employment and Training Act (CETA) of 1973 brought a new approach to raising the job skill levels of the economically disadvantaged. In an effort to de-categorize and de-centralize program administration and service delivery, CETA introduced the concept of local advisory boards to guide program planning and monitoring of participant outcomes for performance measurement. CETA offered both classroom job skill training and on-the-job training through work experience at public and non-profit employers.

The 1980s brought a "conservative challenge on the principles, policies and programs of the liberal tradition of federal activism in economic and social affairs as it evolved in the half of the century starting with the new deal" (Palmer 1983, p. 9). Policy aimed to increase earnings and employment while decreasing dependency on public cash assistance welfare payments. Classroom skill training was identified as a major weakness of existing programs. An emphasis was placed on customized training to serve specific needs of local employers with jobs available to be filled.

The Job Training Partnership Act (JTPA) of 1982 limited training choices to skills in occupations with job demand locally. JTPA increased the private sector membership on local advisory committees to ensure that business interests were served. By the time JTPA was enacted in 1982, CETA type public service employment programs were taboo. Such direct job creation efforts were regarded as expensive, research had detected significant deadweight through fiscal substitution, and the popular media had documented instances of fraud and abuse (Johnson and Tomola 1977).

⁷ See O'Leary and Straits (2004) for a more extensive exposition of these ideas.

⁸ See Samuelson (1973, p. 354).

The JTPA emerged in a time of crisis as a truly bi-partisan effort with prime sponsorship from the liberal Senator Ted Kennedy of Massachusetts and the conservative Senator Dan Quayle of Indiana. JTPA included two key features that may now be regarded as hallmarks of bi-partisan compromise employment policy legislation: program evaluation requirements and a “sunset” date. An ongoing system of performance measurement was instituted and a comparison group design net impact evaluation was required before JTPA reached sunset ending five years after authorization. Under JTPA, participant employment and earnings rates were monitored, and an adjustment methodology was implemented to defeat cream skimming by program administrators tempted to enroll more able program participants to yield high measured levels of program performance.

Two pieces of legislation signed into law by President Clinton changed welfare and employment policy in America. The Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA) established Temporary Assistance for Needy Families (TANF) in 1996 as the main federally funded program for cash assistance to needy families. The fundamental requirement for states under PRWORA is to have most TANF recipients working within two years of first receiving benefits. The Workforce Investment Act (WIA) of 1998 included many of the political characteristics in PRWORA. WIA reoriented the employment and training system to be customer focused with an emphasis on return to work. It created one-stop career centers in all labor market areas to provide all employment services under one roof, established individual training accounts to promote customer choice, and extended performance measurement to support a system of consumer reports on training providers.

Funds under WIA are allocated to states with governors enjoying much more discretion than they had under prior job training legislation. This represents devolution of the federal role. The specific components of programs vary across states, and even within states, but the desired outcome is clear. WIA instituted the principle of “work first.” The practical implication was that the best training is a job. Getting people in jobs quickly was the theme with a reduced emphasis on formal education leading to university degrees. The WIA program introduced individual training accounts (ITA—vouchers) and included a variety of training types including: occupational skill training through: class room training, or less than classroom (ITA) or voucher, customized, occupational skills, OJT, incumbent worker, work plus training (Table 2).

To get a sense of the proportions of program participants in the various types of training the data from Michigan since the start of WIA on July 1, 2000 are illustrative (Table 3). In Michigan 32.7 percent of skill training took place in classrooms where every seat was occupied by a WIA funded participant. The entire class was scheduled by a local Workforce Investment Board (WIB). An additional 42.5 percent of participants engaged in individual training chosen in consultation with a staff person at a WIA one-stop center known as a Michigan Works office. Individual training is paid for with an individual training account (ITA) voucher issued by the local WIA administrative unit for the exact cost of the training. On-the-job training was received by 14.1 percent of trainees. Incumbent workers receiving skills upgrades to avoid job loss at employers accounted for 4.9 percent of training

Table 2 Types of Training Permitted with Workforce Investment Act Funding

CLASSROOM TRAINING

Academic and/or occupational training conducted in an institutional setting or through distance learning using technology. Effective classroom training will provide linkages between academic and occupational learning.

CUSTOMIZED TRAINING

1) Designed to meet the special requirements of an employer (including a group of employers); 2) Conducted with a commitment by the employer to employ an individual upon successful completion of the training; and 3) For employers who pay for not less than 50 percent of the cost of the training.

OCCUPATIONAL SKILLS TRAINING

Consists of training and education for job skills required by an employer to provide individuals the abilities to obtain or advance in employment or adapt to changing workplace demands. Job skills training focuses on educational or technical training designed specifically to help individuals move into employment. Placement into this activity requires the appropriate basic skills education for individuals assessed at math and/or reading levels below ninth grade.

ON-THE-JOB TRAINING

Training by an employer that is provided to a paid participant while engaged in productive work in a job that: 1) provides knowledge or skills essential to the full and adequate performance of the job; 2) provides reimbursement to the employer of up to 50 percent of the wage rate of the participant, for the extraordinary costs of providing the training and additional supervision related to the training; and 3) is limited to the period of time required for a participant to become proficient in the occupation for which the training is being provided.

REMEDIAL TRAINING

Training that is necessary to raise a participant's job skill level so the participant can qualify for certain vocational skills training or help them achieve employment. There are various types of remedial training which may be required or taken in conjunction with some types of occupational training. Types of remedial training may include: GED, Developmental Math, Reading and English, English as a Second Language.

SOURCE: Workforce Investment Act regulations.

Table 3 Michigan WIA Training Participants, July 1, 2000 - November 30, 2008

Training Type	Participants	Percent
Adult Education	198	0.3
Classroom Training	25,538	32.7
Customized Training	1,987	2.5
Entrepreneurial Training	18	0.0
Job Readiness	279	0.4
Literacy	96	0.1
Occupational Skills	33,118	42.5
On-the-Job	10,968	14.1
Skills Upgrade	3,860	4.9
Workplace Training	1,926	2.5
Totals	77,988	100.0

participants. Employer designed customized training provided in classrooms away from the employer location to new prospective employees was received by 2.5 percent of participants. Soft skills training in proper behavior when on a job was provided under the heading workplace training to 2.5 percent of participants. In the summer of 2009 the 100,000th WIA participant entered WIA training through a Michigan Works one-stop center.

Changes adopted in the economic crisis

In response to the economic crisis, the biggest job training policy response by the federal government was to increase funding for existing programs across the board. A summary of program funding to training in program year 2008 compared to 2009 is presented along with supplemental funding provided in February 2009 in Table 4. As the table shows, ARRA funding more than doubled federal support for job training planned in the 2009 budget.

About two-thirds of the additional training money added to WIA by ARRA was actually spent for work experience by youth aged 14 to 24 during the peak rate of job loss in the second and third calendar quarters of 2009. The program called, Summer Youth had been largely dormant the previous few summers, but the ARRA injection resulted in hundreds of thousands of work placements for youth paying the federal minimum wage of \$7.25 per hour for about 30 hours per week. The volume of employment may have temporarily lowered unemployment in some communities by about 0.75 percentage points, and provided valuable work experience to disadvantaged youth from low income families. In previous summers many youth quit the summer program before it was finished, in 2009 nearly all summer youth participants worked for the full number of weeks available, usually 6 to 10 weeks. Summer

Table 4 United States Federal Spending on Employment and Training, 2008-2010

	2008	2009	ARRA-2009	2010
Adult Employment and Training Activities	\$849,101	\$861,540	\$500,000	\$861,540
Dislocated Workers Employment and Training Activities	1,323,373	1,341,891	1,450,000	1,413,000
Youth Activities	924,069	924,069	1,200,000	924,069
Green Jobs Innovation Fund	0	0	0	50,000
Workforce Data Quality Initiative	0	0	0	15,000
Reintegration of Ex-Offenders	73,493	108,493	0	115,000
Career Pathways Innovation Fund	122,816	125,000	0	135,000
Pilots, Demonstrations and Research	48,508	48,781	0	57,500
Evaluations	4,835	6,918	0	11,600
Women in Apprenticeship	983	1,000	0	1,000
Denali Commission	6,755	3,378	0	0
Indian and Native American Programs	52,758	52,758	0	52,758
Migrant and Seasonal Farmworkers	79,668	82,620	0	82,620
Youthbuild	58,952	70,000	50,000	114,476
Job Training for Employment in High Growth Industries	0	0	750,000	0
Total Budget Authority	\$3,545,311	\$3,626,448	\$3,950,000	\$3,833,563

SOURCE: ETA (2009).

youth earnings contributed to household income, and could have positive lasting effects for program participants.

The ARRA aimed to preserve and create jobs and to assist those most impacted by the recession. Recognizing the importance for workers to possess the appropriate skills demanded by employers, the ARRA more than doubled the appropriations for additional training and instruction for dislocated workers and disadvantaged adults from the amount appropriated in the 2009 budget. In total, an additional \$3 billion is available to train and upgrade the skills of displaced or economically disadvantaged workers.

While these funds support training for eligible workers from all sectors hit hard by the recession, auto workers have received particular attention because of the huge job losses the

sector has incurred during the past year. During the 12-month period ending in January of this year, national employment in the production of motor vehicles plunged by 41.3 percent, a loss of 84,400 jobs. During the same time period, the nation's tier one auto parts manufacturers cut 21.8 percent of their workforce, a reduction of 125,600 jobs. More significant cuts are expected as Chrysler and General Motors have entered into bankruptcy in order to restructure their troubled organizations. To help lessen the hardship, dedicated funds have been set aside to assist laid-off auto workers.

The ARRA funding for worker training is channeled through the existing workforce development programs funded and administered by the U.S. Department of Labor (USDOL). Consequently, the type of training remains the same, while the capacity to serve additional workers has been expanded under the ARRA program. Five programs receive most of the ARRA training funds: 1) the Dislocated Worker program, 2) economically disadvantaged Adult program, 3) Trade Adjustment Assistance, 4) National Emergency Grants and 5) Worker Training and Placement in High Growth and Emerging Industries. The first two programs are under the Workforce Investment Act, which since 1998 has governed most of the federal workforce development programs. Together, the dislocated worker and adult programs received \$1.750 billion in stimulus funds. The Trade Adjustment Assistance program received \$353 million more for training and other support activities, and the High Growth and Emerging Industries initiative was appropriated an additional \$750 million. The ARRA gave the National Emergency Grant program, which responds to plant closing and mass layoffs, an additional \$200 million.

The two WIA programs have received the largest share of the stimulus dollars for training.⁹ WIA is a partnership among federal, state and local agencies. The Employment and Training Administration (ETA) of USDOL establishes the parameters of the programs, and the state and local agencies provide the services. WIA program funds flow from the federal government through the states to the local Workforce Investment Boards (WIB). Each of the more than 500 local WIBs is responsible for administering the WIA programs in their jurisdiction and in contracting with local organizations to provide the services. The WIBs typically contract with local community colleges, local secondary school districts, and private companies to provide the training. Training services include occupational skills training, on-the-job training, programs that combine workplace training and related instruction, including registered apprenticeship, training programs operated by the private sector, skill upgrade and retraining, entrepreneurship training, job readiness training, adult education and literacy training and customized training. Additionally, states can enter into contracts with institutions of higher education, such as community colleges, or other eligible training providers to facilitate the training of a group of individuals in high-demand occupations.

Training under WIA takes place in various venues and encompasses instruction regarding different levels of skills. Occupational skills training refers to training for a particular skill or for a set of skills necessary to qualify for an occupation. Community colleges and private training providers typically provide this type of training, which takes

⁹ WIA includes a third program—youth, but most of the stimulus dollars for this program are used to employ economically disadvantaged youth during the summer months when school is not in session, and little is used for training.

place outside the workplace and in a classroom setting. On-the-job training (OJT) takes place in the workplace and provides job seekers with work experience and skills training that will help them qualify for and retain employment. The OJT program pays the workers' employer half the costs of training. Apprenticeship training combines education and work experience and results in a portable credential that is recognized by employers nationwide. Customized training is designed to upgrade the skills of incumbent workers in specific businesses. Businesses apply for the grants, and once approved the training is tailored to their needs and the services are provided either at the company or at community college training centers. Under this program, the employer pays for at least half the cost of the training. The High Growth and Emerging Industries initiative provides specific training for workers to qualify for energy efficiency and renewable energy jobs and for careers in the health care sector.

WIA also provides general remedial instruction to economically disadvantaged workers, many of whom have received welfare assistance for some time and find that they do not have the work experience or the basic skills to qualify for even the most remedial jobs. Job readiness and adult education and literacy training provide the basics needed to enter the workforce. Entrepreneurship training focuses on helping employees own their own businesses. It offers the basics of starting and running a small business, including instruction on how to write a business plan and to obtain financing. The program also provides technical assistance and counseling.

The Trade Adjustment Assistance (TAA) program is similar to the dislocated worker program with respect to the type of training provided, but it differs with respect to the level of intensity and scope of supportive services. First, only workers over the age of 50 are eligible for TAA services, since the program is intended to assist established workers whose companies have been adversely affected by foreign competition and who because of their age and tenure in one specific occupation may have difficulty transitioning to another job demanding different skills. Second, training can be full-time and not simply on a part-time basis. Third, to provide financial support while the worker is engaged in training and to help with job relocation expenses, TAA offers up to 130 weeks of cash payments, provides subsidized health insurance, and covers costs associated with job search and relocation. While a generous program, participation is limited. A worker is eligible only if the company he or she works for meets certification requirements, and the worker has to earn less than \$55,000 a year in reemployment.

In addition to these established programs, the Obama Administration recently announced a program that is specifically targeted to helping workers and communities affected by the fallout in the auto industry, particularly those hurt by the bankruptcy of Chrysler and General Motors. The program provides training to workers and economic development assistance to the communities in which they live. At this time, the administration has committed around \$50 million to this effort and it is anticipated that more may be allocated. Services include training and job search assistance to workers and economic development assistance to communities.

Roles of related programs

Financial support during training program participation

One of the ARRA options for UI modernization was a broadening of “commissioner approved training.” That is, UI beneficiaries can participate in job training approved by the state employment security agency and continue to receive regular weekly UI benefits as a type of training stipend. The ARRA offered an incentive payment to states amounting to one-third of their share of the \$7 billion available (based on their share of all UI covered payrolls) if they extended the concept of commissioner approved training. The requirement was to add 26 additional weeks of UI benefits, at the claimants’ usual beneficiary rate, for participants in approved job training after exhaustion of their first 26 weeks of regular UI benefits. To date 19 States have qualified for their full UI modernization incentive payment, and only 3 States have chosen the enhanced job training stipend as an option for modernization. The cost to States of adopting this option is potentially high relative to other UI modernization options. Furthermore, it could be more cost effective for States to offer wider access to work search waivers for UI beneficiaries participating in job training during their first 26 weeks of UI eligibility. Under such arrangements many training participants could return to work even before exhausting their initial 26 week UI entitlement.

During on-the-job training and work experience the training participants are paid as employees, however, sometimes the training wage is somewhat lower than the earnings rate for regular employees. Wages may be paid to incumbent workers during participation in retraining.

Efforts to promote participation in training programs

The training waiver for UI modernization has been buttressed by the U.S. Department of Labor providing guidance to States to seek funding through other existing federal programs to pay for higher education such as the “Pell Grants.” While the type of training funded through the ARRA may be the same as provided under existing workforce development programs, the ARRA encourages states and local WIBs to incorporate innovative approaches in delivering these services. The ARRA provides additional funds to agencies that commit to implementing new strategies. One major area of emphasis is meeting the skill needs of existing and emerging regional employers and high-growth occupations. To achieve this goal, the USDOL encourages states and WIBs to integrate assessment and data-driven career counseling into their service strategies in order to align training with areas of anticipated economic and job growth. To help with this effort, ARRA funds can be used to upgrade information technology to better target Unemployment Insurance recipients so WIB staff can refer them to services—including training services—that best meet their needs. A specific proposal is to integrate labor market data, such as job demand projections and career requirements, directly into a strategic decision-making system that can be used by staff who work directly with displaced workers. This would give front-line staff more comprehensive and current information about job prospects and skill requirements.

Another area of emphasis is the strengthening of partnerships among WIBs, businesses, economic development agencies, and educational institutions. Such partnerships

can enhance communication among the various entities so that needs and concerns of the various partners can be quickly identified and acted upon. Partnerships also provide more seamless service integration within the workforce development system as well as between the workforce development programs and educational programs. Bringing educational institutions more closely together with workforce development programs creates the opportunity to align education and training at every level so that workers can easily gain the instruction they need to move along their career paths. This alignment would include assessments and certifications articulated to the requirements at each level of education and employment.

Reemployment services after completion of training programs

All U.S. residents and all training participants have free access to job matching services available through the Wagner-Peyser funded public employment service. Additionally, job skill training participants have additional advantages in securing a job.

On-the-job training participants have an opportunity to develop an extended relationship with an employer and to demonstrate capacities and aptitudes.

Customized training participants are trained with the express purpose of satisfying specific employer demands, and the employer helps screen the training participants so a job opportunity is implicit following completion of training.

Incumbent worker training is WIA funded job training that can take place either at the employer location or off-site. Federal funding is provided to save jobs that are at risk. Once training is completed the employer has an obligation to retain the newly retrained employees.

Performance Monitoring and Accountability

The USDOL has long recognized the importance of accountability and transparency by establishing performance measures as an integral part of the federal workforce system. Under the Workforce Investment Act (WIA), the Employment and Training Administration (ETA)—the entity within the U.S. Department of Labor responsible for WIA—established three basic performance measures: 1) entered employment, 2) job retention, and 3) earnings levels. Each state negotiates with the USDOL to set standards, and the states in turn negotiate with each of their local Workforce Investment Boards (WIBs) to determine their performance targets.

The current system of performance measurement for disadvantaged and dislocated adults has three common measures computed as follows:

Entered Employment—Of those not employed at the date of participation:

Number of adult participants employed in the first quarter after the exit quarter
(divided by)
Number of adult participants who exit during the quarter

Employment Retention—Of those employed in the first quarter after the exit quarter:

Number of adult participants who are employed in both the second and third quarters after the exit quarter (divided by)
 Number of adult participants who exit during the quarter

Average Earnings—Of those adult participants who are employed in the first, second, and third quarters after the exit quarter:

Total earnings in the second plus the total earnings in the third quarters after the exit quarter (divided by)
 Number of adult participants who exit during the quarter

For disadvantaged and dislocated adults the negotiated and actual performance results for program year 2007 were:

Disadvantaged Adults	Negotiated 2007	Actual 2007
Entered Employment Rate	79.9%	69.6%
Employment Retention Rate	83.9%	83.8%
Average Earnings Q2+Q3	\$11,011	\$13,575

Dislocated Workers	Negotiated 2007	Actual 2007
Entered Employment Rate	85.3%	72.5%
Employment Retention Rate	89.6%	87.2%
Average Earnings Q2+Q3	\$14,149	\$15,188

The current system of performance measurement for disadvantaged youth has three common measures computed as follows:

Placement in Employment or Education—Of those who are not in post-secondary education or employment (including the military) at the date of participation:

Number of youth participants who are in employment (including the military) or enrolled in post-secondary education and/or advanced training/occupational skills training in the first quarter after the exit quarter (divided by)
 Number of youth participants who exit during the quarter

Attainment of a Degree or Certificate—Of those enrolled in education (at the date of participation or at any point during the program):

Number of youth participants who attain a diploma, GED, or certificate by the end of the third quarter after the exit quarter (divided by)
 Number of youth participants who exit during the quarter

Literacy and Numeracy Gains—Of those out-of-school youth who are basic skills deficient:

Number of youth participants who increase one or more educational functioning levels
 (divided by)

Number of youth participants who have completed a year in the program (i.e., one year from the date of first youth program service) plus the number of youth participants who exit before completing a year in the youth program

For disadvantaged youths the negotiated and actual performance results for program year 2007 were:

Disadvantaged Youths	Negotiated 2007	Actual 2007
Placement in Employment or Education Rate	61.6%	62.3%
Attainment of Degree or Certificate Rate	47.8%	56.8%
Literacy and Numeracy Gains	36.9%	30.4%

As the practice of setting performance standards evolved, States and WIBs increasingly found that negotiations were not taking into account factors that affected their performance but were beyond their control and not related to the services they provided. These factors include the conditions of the local labor market and the personal characteristics and work history of participants in their programs. Without accounting for differences in these factors across states and across WIBs, those entities with more favorable labor market conditions or more capable participants are likely to have higher outcomes, and those for which these factors are unfavorable can expect lower outcomes. Consequently, differences in these outcomes are not the result of how well service providers have met the needs of their customers, but reflect factors outside their control and extraneous to the effectiveness of their service delivery.

Therefore, a concern that quickly surfaced in implementing the ARRA was whether the targets, if set unrealistically high, would discourage states and WIBs from enrolling those individuals who need the services the most. Recently the ETA has responded to this concern by adjusting the targets at the national level to take into account the effect of higher unemployment rates on the performance measures. Since WIA was implemented in 1998, targets have been set progressively higher each successive program year, raising the bar for performance without adjusting the targets for changes in national or local economic conditions. However, the depth of this recession has prompted the ETA to establish a target-setting procedure that is objective, transparent, and reflective of current conditions. It does this by estimating the effect of changes in unemployment rates on the three performance measures and then using that estimate to adjust performance standards according to the assumptions for next year's unemployment rates as presented in the President's 2010 Budget Request to Congress. These adjusted performance targets in turn affect the targets at the state and local levels, but still do so through negotiations.

The next step is to extend this objective procedure of setting national targets to setting targets for states and WIBs. This requires adding the effect of differences in personal characteristics to the effect of differences in unemployment rates in order to calculate the adjustments. A similar procedure was used under the Job Training Partnership Act, the immediate predecessor to WIA. Implementing such a target-setting procedure moves the performance measures closer to reflecting the value-added of the services provided by workforce development programs rather than simply recording the effects of all factors (most of which are extraneous to the value-added of the services) on a worker's employment outcomes. Such a performance system helps to lessen adverse incentives to "cream-skim" the registration of customers and encourages the delivery of services to those who need them most in these difficult economic times. The performance measurement methodology adopted by the U.S. Department of Labor for gauging valued added while counteracting cream-skimming was developed at the Upjohn Institute by Eberts, Bartik, and Huang (2009).

In addition to adhering to the existing performance system, as adjusted to account for economic conditions, the ARRA stresses transparency and accountability in the use of funding provided by the Act. One innovative addition is a website that tracks the money spent under ARRA. The website, Recovery.gov, follows the disbursement of all ARRA funding, not only those for training and other workforce development programs. The Office of the Vice President is charged with the responsibility of ensuring that all recovery funds are spent as the legislation intended and in the most effective way to promote a quick and sustained recovery.

Effectiveness of Training

Although WIA has been in place for more than a decade, there has never been a rigorous evaluation of its effectiveness using a field experiment involving random assignment. Congress, on the other hand, required that WIA's predecessor—the Job Training and Partnership Act—be evaluated using the random assignment approach.¹⁰ Therefore, most of what we know about the effects of job training programs is from that evaluation. However, Upjohn Institute staff and others have conducted evaluations of WIA for a few states using a non-experimental econometric approach yielding results that are consistent with the JTPA field experiment estimates. Therefore, results from both studies are summarized to offer a perspective on the effectiveness of job training.

In general, results from the JTPA field experiment found positive but modest effects of job skill training on employment and earnings. The effects varied by gender, economic and labor market status, and the way in which training services were delivered. As shown in Table 5, women appeared to respond more favorably to training than men. Earnings gains after 30 months from leaving the training program were nearly 7 percentage points higher for women than men. Adult women on welfare benefited even more. The same advantage was found for young women, although the results are not statistically significant.

Curiously, adult men and women fared better in on-the-job training under JTPA whereas, young men and women responded more favorably to classroom training, although the results for youth were not statistically significant. Finally, even though adult women had higher earnings gains than adult men, the net benefits to society for men and women were about the same. Programs with only classroom training did not generally have statistically significant results, except for women, and when classroom training was strongly linked to employers.

¹⁰ The field experiment methodology creates a comparison group by randomly assigning individuals to either a treatment group or a control group. Individuals in the treatment group receive training, and those in the control group do not. As the assignment is random and with a large enough sample, the average characteristics of persons in the two groups should be similar in terms of observable factors such as demographics as well as unobservable attributes such as motivation for employment. In principle this approach eliminates selection bias. Therefore, examining differences across treatment and control groups in the means of worker outcomes, such as employment and retention rates, yields net impacts of training.

Table 5 Subgroup Net Impact Estimates of the JTPA National Evaluation

	Earnings (30 months)	% chg from control group	Net Benefits Enrollees	Net Benefits Society
Adult Men	\$1,599*	8.0%	1,822	524
OJT	2,109	9.8	2,232	648
CT	1,287	7.1	-1,694	323
Adult Women	1,837***	14.8	1,422	512
OJT	2,292**	15.3%	1,695	1,091
CT	630	5.5	287	-1,027
Adult Welfare Women	2,387***			
OJT	4,833***			
CT	1,077			
Youth Male	-868	-5.0	-530	-2,923
OJT	-3,012	-3.9	-2,481	-6,766
CT	251	8.9	815	-1,608
Youth Female	210	2.0	-121	-1,180
OJT	-579	-12.5	-1,003	-2,670
CT	839	1.6	1,100	-1,028

SOURCE: National JTPA Evaluation (Orr et al., 1996).

The quasi-experimental econometric evaluations of WIA training have been done in a few states using program administrative and wage record data. The results from these studies as presented in Table 6 have been standardized by Hollenbeck (2009) to constant 2008 dollars. To create comparison groups for training participants all of these studies used the non-experimental approach of statistical matching on scores of the propensity to participate in training. Net impacts of training were then determined by comparing outcomes for individuals who participated in the training programs to their matched counterparts who enrolled in the employment service but never participated in any specific programs. With the exception of reemployment rates in Indiana, the results are consistent across the studies and across the states. The evidence suggests that job training under WIA is effective, especially in increasing employment rates, but also in generating higher earnings.

Table 6 Summary of Estimates of Training Effects from Non-Experimental Evaluations of WIA Job Training

Study Authors (Year)	States	Employment Rate (percentage points)	Quarterly Earnings (dollars)
Hollenbeck and Huang (2003)	Washington	7.9	\$767
Hollenbeck et al. (2005)	7 States	4.4	\$836
Hollenbeck and Huang (2006)	Washington	8.1	\$709
Heinrich, Mueser, and Troske (2008)	12 States	5.5	\$782
Hollenbeck (2008)	Indiana	18.2	\$692

NOTE: Quarterly earnings are in 2008 dollars. All entries, unless denoted with a † are significant at the 0.05 level. na = not available.

Hollenbeck and Huang (2003); Area: WA; Treatment: exit in 1997/1998; Follow-up period: 8 to 11 quarters after exit.

Hollenbeck, Schroeder, King, and Huang (2005); Area: 7 states; Treatment: exit in 2000/2002; Follow-up period: 2 to 7 quarters after exit.

Hollenbeck and Huang (2006); Area: WA; Treatment: exit in 2001/2002; Follow-up period: 9 to 12 quarters after exit.

Heinrich, Mueser, and Troske (2008); Area: 12 states; Treatment: entry in 2003/2005; Follow-up period: 11 to 14 quarters after entry.

Hollenbeck (2009a); Area: IN; Treatment: exit in 2005/2006; Follow-up period: 7 quarters after exit.

SOURCE: Hollenbeck (2009b).

Summary

The American Recovery and Reinvestment Act (ARRA) doubled the amount of money available to train and retrain workers. This injection of funds into the existing workforce training system increases the capacity of the system to help displaced workers adjust to the restructuring taking place in the economy and to help marginally attached workers acquire the skills necessary to gain a foothold in the job market. Studies of the effectiveness of training programs suggest that training helps. It increases both employment rates and earnings, but training appears to help displaced workers less than the economically disadvantaged. Of course, skills alone are not enough to help the millions of unemployed find jobs. Additional jobs must be created. The training component of ARRA is one of many facets of the stimulus effort.¹¹ By equipping workers with the skills demanded by businesses now and in the future, the training initiative is intended to help speed up the recovery and provide the talent that businesses need as investments to sustain a productive economic expansion.

¹¹ The Congressional Budget Office (CBO 2009) estimates that in the third quarter of calendar year 2009, an additional 600,000 to 1.6 million people were employed in the United States, and real (inflation-adjusted) gross domestic product (GDP) was 1.2 percent to 3.2 percent higher, than would have been the case in the absence of the American Recovery and Reinvestment Act of 2009.

References

- BEA. 2009. Gross Domestic Product: Third Quarter 2009 (advance estimate). BEA 09-47. Washington, DC: Bureau of Economic Analysis (BEA), U.S. Department of Commerce.
- BLS. 2008. "Involuntary Part-time Work on the Rise," in *Issues in Labor Statistics*, Number 08-08 (December). Washington, DC: Bureau of Labor Statistics (BLS), U.S. Department of Labor.
- BLS. 2009. The Employment Situation: Table A8. Washington, DC: Bureau of Labor Statistics (BLS), U.S. Department of Labor.
- CBO. 2009. "Estimated Impact of the American Recovery and Reinvestment Act on Employment and Economic Output as of September 2009." Washington, DC: Congressional Budget Office (November).
- Eberts, Randall, Timothy Bartik, and Wei-Jang Huang. 2009. "Methodology for Adjusting GPRA Workforce Development Program Performance Targets for the Effects of Business Cycles." Upjohn Institute Working Paper 09-154. Kalamazoo, MI.: W. E. Upjohn Institute for Employment Research.
<http://www.upjohn.org/publications/wp/09-154.pdf>
- ETA. 2009. Budget Summary. Washington, DC: U.S. Department of Labor, Employment and Training Administration (ETA).
- Groshen, Erica. 2009. "The Dynamics of Unemployment and Reemployment in an Economic Downturn," presentation at the Reemployment Summit sponsored by the U.S. Department of Labor, Employment and Training Administration, January 27–29, 2009, Baltimore, Maryland.
- Heinrich, Carolyn J., Peter R. Mueser, and Kenneth R. Troske. 2008. "Workforce Investment Act Non-Experimental Net Impact Evaluation." Report to U.S. Department of Labor. Columbia, MD: IMPAQ International.
- Hollenbeck, Kevin M. 2009a. *Rate of Return Estimates for Workforce Programs in Indiana*. Project Report to be submitted to Indiana Chamber of Commerce Foundation. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research.
- Hollenbeck, Kevin. 2009b. Does the Workforce Investment Act Work? Paper presented at the 31st annual research conference of the Association for Public Policy Analysis and Management, Washington Marriot Hotel, November 3-5, Washington, DC.
- Hollenbeck, Kevin M., and Wei-Jang Huang. 2003. *Net Impact and Benefit-Cost Estimates of the Workforce Development System in Washington State*. Technical Report No. TR03-018. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research.

- . 2006. *Net Impact and Benefit-Cost Estimates of the Workforce Development System in Washington, State*. Technical Report No. TR06-020. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research.
- . 2007. *Sensitivity Testing of Net Impact Estimates of Workforce Development Programs Using Administrative Data*. Presented at IZA Conference on Evaluation. Bonn: Germany.
- . 2008. *Workforce Program Performance Indicators for The Commonwealth of Virginia*. Technical Report No. 08-024. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research.
- Hollenbeck, Kevin M., Daniel Schroeder, Christopher T. King, and Wei-Jang Huang. 2005. *Net Impact Estimates for Services Provided through the Workforce Investment Act*. Employment and Training Administration Occasional Paper 2005-06. Washington, DC: U.S. Department of Labor Employment and Training Administration.
- Johnson, George E. and James D. Tomola. 1977. "The fiscal substitution effect of alternative approaches to public service employment policy." *Journal of Human Resources* 12(1): 1–26.
- O’Leary, Christopher J., and Robert A. Straits. 2004. "Intergovernmental Relations in Employment Policy: The United States Experience." In *Labour Market Policy and Federalism: A Comparative Perspective*, Alain Noël, ed. Montreal and Kingston: McGill-Queen’s University Press.
- Orr, Larry L., Howard S. Bloom, Stephen H. Bell, Fred Doolittle, Winston Lin, and George Cave. 1996. *Does Training for the Disadvantaged Work?: Evidence from the National JTPA Study*. Washington, DC: The Urban Institute Press.
- Palmer, John L. 1987. "The Next Decade: The Economic, Political, and Social Context of Employment and Training Policies," *Policy Studies Review* 6(4): 685–694.
- USDOL. 2009. Employment and Training Administration sources. www.doleta.gov