

Policy Watch

Trade Adjustment Assistance

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This feature contains short articles on topics that are currently on the agendas of policymakers, thus illustrating the role of economic analysis in illuminating current debates. Suggestions for future columns and comments on past ones should be sent to C. Eugene Steuerle, c/o *Journal of Economic Perspectives*, The Urban Institute, 2100 M Street NW, Washington, D.C. 20037.

The Evolution of Trade Adjustment Assistance

The Trade Adjustment Assistance Reform Act of 2002 profoundly changed the nature and scope of U.S. policy for addressing dislocations of workers caused by trade. First, the legislation will potentially double the number of TAA recipients and more than triple the total cost of the program to almost \$2 billion annually, making it a much more important component of the patchwork of programs serving the unemployed (Congressional Budget Office, 2002). Second, it introduces new elements such as wage insurance and health credits into a program that had previously included primarily only training and cash benefits. The addition of these benefits creates both the opportunity for gains from greater coordination and the potential for costly distortions and serves as a testing ground for the broader use of such provisions. Although the program still covers only a small (and peculiarly

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selected) fraction of the unemployed, these changes affect the incentives faced by many workers and may have far-reaching consequences in health and labor markets.

To put these changes in context, it is useful to begin with a brief history of trade adjustment assistance. Trade adjustment assistance (TAA) was formally introduced in the Trade Expansion Act of 1962 when it was used “to compensate workers for tariff cuts under the Kennedy Round of multilateral negotiations” (Feenstra and Lewis, 1994, p. 217) and other liberalizations. Similar provisions to compensate workers displaced by trade were also included in the Canadian-American Auto Agreement, the Manpower Development and Training Act of 1962 and the Economic Opportunity Act of 1964 (Richardson, 1982). TAA thus aimed to serve both economic and political goals, decreasing political resistance to new trade agreements and smoothing the cost of frictional unemployment by providing income support and retraining as workers moved from shrinking to growing sectors.

The 1962 version of trade adjustment assistance, however, had extremely limited eligibility and benefits; in the first seven years, no applicants were certified for benefits, and more than half of applicants were denied benefits in the early 1970s (Richardson, 1982). The Trade Act of 1974 increased the generosity of TAA benefits and expanded eligibility, and the Department of Labor loosened the criteria for the certification of firm eligibility, creating the modern TAA program. Workers laid off from firms certified by the Department of Labor to have been adversely affected by trade were eligible for retraining and for 52 weeks of cash assistance beyond that provided by the unemployment insurance program. In 1976, the first full year of operation under the new law, TAA covered 62,000 workers at a cost of \$79 million.

By the early 1980s, concerns arose about the targeting and growing cost of the trade adjustment assistance program. A 1980 expansion had led to coverage of 532,000 workers at a cost of \$1.6 billion (U.S. House of Representatives, 2003, Table 6-3). By this time, TAA provided more generous cash assistance than unemployment insurance: TAA provided 70 percent of workers’ previous wages, compared with the 65 percent provided by unemployment insurance (Magee, 2001). Despite the perception that TAA recipients were particularly disadvantaged in the labor market, during the 1970s they did not appear to have more difficulty finding reemployment than other unemployed workers. In fact, Magee (2001, p. 109) cites studies showing that workers qualifying for TAA in this period were “more likely to be recalled to their old jobs, less likely to switch industries, and did not have longer unemployment spells than other displaced workers (Corson and Nicholson, 1981; Richardson, 1982).”

In 1981, a set of amendments to the Trade Act of 1974 reduced TAA cash benefits to the level of unemployment benefits and only provided cash assistance

after unemployment benefits had been exhausted.¹ The incoming Reagan administration tightened enforcement of the eligibility rules. As a result, by 1982, total recipients of trade adjustment assistance dropped to 30,000 and costs dropped to \$103 million (U.S. House of Representatives, 2003, Table 6-3). The number of recipients fell still lower as the economy expanded in the mid-1980s. A 1986 amendment added a job search requirement, and a 1988 amendment required workers to participate in training in order to receive cash benefits. These amendments suggested a shift toward retraining workers and facilitating structural adjustment. During this period, the characteristics of qualifying workers also changed. In contrast to research on the 1970s, Decker and Corson (1995) found that in the 1980s TAA recipients predominantly lost their jobs due to plant closings and were therefore not likely to be recalled by their previous employer. They also found that these workers had longer spells of unemployment and often had bigger drops in reemployment wages relative to their previous jobs than other workers who exhausted their unemployment insurance benefits.

In 1993, as part of the push to secure the passage of the North American Free Trade Agreement (NAFTA), Congress created NAFTA Transitional Adjustment Assistance (NAFTA-TAA), a separate trade adjustment assistance program for workers displaced by trade with or plant relocations to Canada or Mexico, and the Clinton administration committed to assisting secondary workers (upstream suppliers and downstream finishers) through dislocated worker programs in the Workforce Investment Act of 1998. Worker groups could simultaneously apply to both traditional TAA and this new program—and 75 percent of NAFTA-TAA certified workers were also included in TAA petitions (GAO, 2001)—although they could receive benefits through only one program. Two of the most important differences between TAA and NAFTA-TAA were that NAFTA-TAA covered secondary workers and did not require workers to prove that increases in imports caused their job loss if they were displaced when a plant moved to Canada or Mexico. Finally, the Secretary of Labor had discretion to waive training requirements in TAA, while such waivers were not allowed in NAFTA-TAA.

The workers eligible for modern trade adjustment assistance were not a representative cross-section of the labor force nor of the traded goods sector. Table 1 shows the distribution across industries of workers who were certified for assistance (but did not necessarily participate in the program) from 1975–2002, compared to the current distribution of all workers and of imported goods. Since 1975, for example, almost 30 percent of TAA workers had been employed in motor vehicles (although this fraction was much lower in the 1990s) and 20 percent in apparel and textiles (35 percent in the 1990s), but these groups together represented less than 2 percent of workers in 2001, and motor vehicles and apparel

¹ Before 1981, TAA supplemented unemployment insurance benefits (up to 75 percent of former wages) and provided income support of up to 65 percent of former wages after unemployment insurance benefits expired.

Table 1
Workers Certified by Industry

	<i>Workers certified (1975–2002)</i>	<i>Fraction of total labor force working in industry (2001)</i>	<i>Fraction of value of U.S. imported goods coming from each industry (2002)</i>
Total	3,316,000	132,213,000	\$653,359 million
Motor vehicles	28.3%	1.3%	14.5%
Apparel	18.6%	0.4%	5.4%
Steel	6.7%	0.2%	1.1%
Footwear	4.4%	0.0%	1.4%
Electronics	10.4%	1.5%	5.4%
Oil and gas	5.7%	0.3%	9.1%
Fabricated metal products	2.8%	1.1%	
Textiles	3.6%	0.4%	1.4%
Other	19.5%	94.8%	

Note: Row category definitions vary slightly across columns.

Sources: *Green Book* (2003, Table 6-2); Statistical Abstract of the U.S. (2002, Table 603); BEA (<http://www.bea.doc.gov/bea/newsrel/trad0703.xls>).

represented only 20 percent of the value of imported goods in 2002. Table 2 shows that TAA recipients in 1990–2000 were disproportionately female, less educated and older, and Decker and Corson (1995) find that they were more highly paid than other unemployed workers. Magee (2001) finds that unionized workers and those displaced by trade from less-developed countries were more likely to have their TAA petitions approved. Rogers (1998) finds that 58 percent of all unemployment spells end in recall, while in contrast, Marcal (2001) shows that less than 12 percent of TAA recipients were working for their former employer three years after layoff. It is not clear, however, that TAA workers fare any worse than other unemployed workers with the same demographic characteristics and employment profiles (Irwin, 2002).

The primary focus of trade adjustment assistance has been on displaced workers, and we will focus on that component of TAA, as well. However, the program has also included small provisions for aiding firms and communities. The Trade Expansion Act of 1962 also created a firm-based component of the TAA program, designed to provide technical assistance and (until 1986) loans and loan guarantees to firms adversely affected by increased imports (EDA, 2003). The Department of Commerce established 12 regional TAA Centers in 1978 to help firms with their TAA petitions and to help them develop business plans for dealing with increased international competition. Firms whose business plans were approved were eligible for matching funds of up to \$75,000 for technical assistance with implementation, including market research, information technology consulting, product development and quality programs. Firm TAA also included industry

Table 2
Worker Characteristics, 1999–2000

<i>Characteristic</i>	<i>TAA and N-TAA participants</i>	<i>Unemployed or dislocated workers</i>	<i>Total U.S. workforce</i>
Fraction male	36% ^a	52% ^b	53% ^a
Average age	43 ^a	34 ^b	39 ^c
Limited English proficiency	12% ^a		8% ^g
Average hourly wage	\$12.13 at separation \$10.31 at reemployment ^a		\$13.36 for production workers ^a
Median tenure	7 years at separation ^a	2 years at separation ^e	3.5 years ^a
Education			
Less than high school	25% ^a	23% ^b	10% ^a
High school graduate	55% ^a	29% ^b	32% ^a
Some post-high school	17% ^a	24% ^b	28% ^a
College graduate	4% ^a	16% ^b	30% ^a
Unionization (1989/90)	73% ^d	35% ^d	16% ^f

Sources: ^aGAO Report 01-988T (Table 1).

^b Refers to unemployed workers. Statistical Abstract of the U.S. (2000, Tables 646, 674, 678).

^c Statistical Abstract of the U.S. (2000, Tables 646, 712).

^d Marcal (2001). Refers to 1988–1989 TAA recipients versus UI exhaustees.

^e CPS, 2000, Dislocated Worker Supplement. Refers to workers dislocated in past 3 years (mean tenures is 4.9 years).

^f Statistical Abstract of the U.S. (2002, Table 628, for 1990).

^g CPS, 1995, Race and Ethnicity Supplement. Refers to fraction of employed workers reporting that they understand English “not well” or “not at all.” Twelve percent of workers are immigrants.

grants, but no such grants have been given since 1995, and those allocated in the early 1990s comprised less than 5 percent of the firm program’s budget (Congressional Research Service, 2000, Table 1). The 1993 NAFTA version of TAA also created the Community Adjustment and Investment Program, which was intended to provide assistance through grants and loan guarantees to communities significantly adversely affected by trade with Canada and Mexico and to firms providing new jobs in those communities. The initial CAIP appropriation was \$22.5 million, with additional appropriations of \$20 million. Only a handful of communities have received aid through CAIP.

2002 Reauthorization of Trade Adjustment Assistance

By the early 2000s, trade adjustment assistance had evolved into a program that provided generous support for a very limited number of workers. Worker groups of three or more or their representatives could apply to the Department of Labor to have workers in their firm certified as eligible for TAA benefits. Workers in certified firms could then apply to receive up to 52 weeks of cash assistance beyond

that provided by unemployment insurance, but were required to participate in a training program to receive that support. Training was available for up to 104 weeks. The number of new workers receiving assistance varied from a low of 24,000 in 1998 to a high of 37,000 in 2002 (U.S. House of Representatives, 2003, Table 6-3). In 2001, roughly 145,000 workers were “certified” as potentially eligible for the program, and 33,000 took up benefits, which cost approximately \$360 million (GAO, 2001). The average worker received \$222 per week in cash benefits for 31 weeks and \$2,900 in training (almost \$4,000 per worker actually enrolled) (U.S. House of Representatives, 2003). Total spending on benefits for these workers was over \$200 million, with some additional spending for job training and other programs.

In 2002, the political climate was ripe for a grand reworking of trade adjustment assistance. The Bush administration badly wanted congressional renewal of “trade promotion authority,” which would require Congress to hold an up-or-down vote on new trade agreements without proposing amendments. However, the economy had gone through a recession in 2001, and job growth had remained stagnant in 2002. In exchange for trade promotion authority, Congress demanded substantial expansions of the trade adjustment assistance program, resulting in the Trade Adjustment Assistance Reform Act of 2002. Table 3 summarizes these expansions, which we discuss in turn. They have the potential to change the program from one designed primarily to provide political cover for trade agreements to one with much farther reaching effects.

Eligibility and Coverage

A much broader set of workers is now eligible for TAA. In the past, the main criteria for displaced worker eligibility were that “workers have been totally or partially laid off and that sales or productions have declined, and that increased imports have contributed importantly to worker layoffs” (U.S. Department of Labor, 2003a).² The 2002 act broadens this definition in two ways.

First, the 2002 act merges the trade adjustment assistance program with its previously separate cousin, the smaller NAFTA-TAA program, and uses the more expansive NAFTA-TAA basis for eligibility. Secondary workers at an affected firm’s upstream suppliers and downstream customers who are indirectly affected by trade may now be eligible for TAA. The inclusion of these secondary workers in TAA is expected to increase the number of certified workers from 130,000 to 180,000 (Congressional Budget Office, 2002). The inclusion of workers laid off in plant relocations is expected to increase certifications by an additional 20,000 workers. To receive benefits, workers in certified firms must show a decline of at least

² In a 1988 amendment, Congress also extended eligibility to those who provided essential services to companies adversely affected by trade. However, this extension was not implemented because the import fee on which it was conditioned was never established (GAO/HRD-93-36 Dislocated Worker Assistance Program).

Table 3

Program Features over Time

	<i>Trade Act of 1974</i>	<i>1981–2001</i>	<i>Trade Act of 2002</i>
Eligibility		Workers who can demonstrate that “increased imports of articles like or directly competitive with articles produced by the firm . . . have ‘contributed importantly’ to both the layoffs and the decline of sales or production” (2000 Green Book). In 1988, Congress adds eligibility for natural gas and oil drilling and exploration workers. In 1993, NAFTA-TAA covers workers displaced by trade with Canada and Mexico, including secondary workers and workers affected by plant relocations.	Includes not only primary, but also upstream and downstream workers displaced by increased imports or due to a plant relocating overseas. Includes farmers who experience price declines due to imports.
Additional requirements for benefit receipt	None	Workers must actively participate in job search (1986) and complete authorized training unless specifically excused by the Secretary of Labor (1988). Training waivers are not possible in NAFTA-TAA.	Workers must participate in job search and training, but may receive a waiver for up to six months for the later if they meet one of six criteria (the Secretary of Labor has the discretion to issue longer waivers).
Duration of cash assistance (excludes weeks receiving unemployment insurance)	52 weeks	52 weeks (Workers participating in authorized training may receive an additional 26 weeks of cash assistance.)	78 weeks (Workers participating in remedial education are eligible for an additional 26 weeks of cash assistance.)
Training		Up to 104 weeks	Up to 104 weeks
Job search allowances		Grants not to exceed the lesser of 90 percent of costs or \$800 per beneficiary (raised to \$1,250 in the Trade Act of 2002). Recipients must apply within the later of one year of certification (or last complete layoff) or within six months of completing training.	
Relocation allowances		The lesser of 90 percent of relocation expenses and three times the worker’s average weekly wage or \$800 per beneficiary (raised to \$1,250 in the Trade Act of 2002). Applicants must apply within 14 months of TAA certification (or last complete layoff) or within six months of completing training (whichever is later) and must have a job offer at the time of application.	
Health insurance	None	None	Refundable/advanceable tax credit for 65 percent of health insurance costs can be used to purchase COBRA, individual health insurance, coverage through a spouse’s plan (if the employer subsidizes less than 50 percent of the cost) or a state insurance pool.
Additional programs		Supplemental Wage Allowance Demonstration (1988)	Alternative Trade Adjustment Assistance (five-year demonstration)

20 percent in wages or hours and must enroll in training. The Congressional Budget Office estimates that 30 percent of these certified workers will eventually draw TAA benefits. This represents a significant increase from the 23 percent seen in 2001, in part because of likely increases in take-up in response to the increased generosity of the program.

Second, for the first time farmers are now eligible for trade adjustment assistance. This part of the program, administered by the U.S. Department of Agriculture, is eligible for appropriations of up to \$90 million per year. Farmers with average adjusted gross income less than \$2.5 million are eligible for free technical assistance and for up to \$10,000 of cash assistance (per year) when both the price of the commodity they produce is 20 percent less than the national average over the last five years and increases in imports contributed importantly to this decline (USDA, 2003).³

Cash Benefits

Benefits for TAA recipients have been expanded along many dimensions. First, workers may now receive cash benefits for up to 78 weeks if they continue to be enrolled in training, rather than 52, in addition to the 26 weeks of unemployment insurance they may receive. The size of the cash benefit remains the same as that under unemployment insurance. Those enrolled in remedial education can receive an additional 26 weeks of benefits, for a total of 130 weeks of cash assistance.

While workers are still required to receive training to receive cash assistance, it may now be easier to waive that requirement. Training costs for the program are capped at \$220 million per year, double the previous combined TAA and NAFTA-TAA funding level.⁴ Workers are eligible for higher job search allowances and relocation allowances, as well as the benefits available to other unemployed workers under the Workforce Investment Act of 1998.

Alternative Trade Adjustment Assistance for Older Workers: Wage Allowances

Typically, trade adjustment assistance cash payments end when workers take new jobs. As in unemployment insurance, the rationale for this structure of benefits is that workers need assistance only until they begin to earn wages again (insurance against unexpected loss in wages). One negative consequence of this insurance structure is that it dulls the incentive to find employment quickly or to accept a job with lower wages. In 1988, a supplemental wage demonstration project intended to add incentives for quick reemployment, even at lower wages, was authorized by

³ Funds permitting, the USDA's Farm Service Agency will provide assistance "equal to the product of the amount of the commodity produced in the most recent marketing year multiplied by one-half the difference between an amount equal to 80 percent of the average of the national average prices of the commodity for the 5 marketing years preceding the most recent marketing year and the national average price of the commodity for the most recent marketing year" (USDA, 2003). However, the sum of counter cyclical payments and TAA payments may not exceed \$65,000.

⁴ Other government funds may be used for training when TAA's training funds are exhausted.

Congress as part of the amendments to trade adjustment assistance, although no states seem to have implemented the demonstration.

The 2002 act includes a provision for similar wage allowances. Certain workers age 50 or older are eligible for a new pilot program, Alternative Trade Adjustment Assistance (ATAA), that would provide them with cash benefits equal to 50 percent of the difference between their old salary and their new salary (capped at \$10,000 total), health care assistance for up to two years and the standard relocation allowance (if applicable) in lieu of regular TAA benefits if they are reemployed within 26 weeks of separation at lower wages and earn less than \$50,000 in their new job (U.S. Department of Labor, 2003b). The goal of this program is to insure workers against lower reemployment wages while encouraging them to find reemployment relatively quickly (within 26 weeks). A worker group must apply specifically for ATAA when filing its TAA petition. Some of the eligibility criteria include that the petitioning group have a “significant” number of workers over age 50, that the workers possess skills that are “not easily transferable” and that “competitive conditions within [the] industry are adverse” (Department of Labor, 2003c).⁵ Once the U.S. Department of Labor certifies a group as eligible for TAA and ATAA, those eligible for ATAA have the option of applying for ATAA or TAA.

Health Insurance Credits

Recipients of trade adjustment assistance are eligible to receive an uncapped refundable advanceable tax credit to pay up to 65 percent of their health care premiums.⁶ This tax credit is essentially a voucher for the purchase of health insurance (since, as described below, it does not depend on the amount of taxes owed and can be used to offset the cost of health insurance whenever it is purchased) and may be used in several ways. For example, under the Consolidated Omnibus Budget Reconciliation Act of 1985 (COBRA), workers leaving a job may continue to purchase their old employer-sponsored health insurance plan for up to 18 months, and the new credit can be used toward this purchase. The credit can also be used to continue individual insurance that the worker had had for more than 30 days before dislocation, to pay for coverage through a spouse or to participate in a state insurance pool. This provision represents a significant increase in the value of benefits available to workers. The average annual group health insurance premium for a family of four is around \$5,500 (Gruber, 2000). The health credit thus represents more than 30 percent of the cash benefit the average

⁵ The fact that such benefits are available only to older workers who work in firms with many other older workers makes an odd distinction between firms with heterogeneous workers and those with homogeneous workers. The Department of Labor is interpreting “a significant number of workers” as the lesser of 50 workers or 5 percent of the affected workers (in firms with fewer than 50 trade impacted workers at least three must be 50 or older), as explained in DOL (2003c).

⁶ These provisions for assistance in purchasing health insurance will also apply to a broader set of workers, including some steel industry retirees and other Pension Benefit Guaranty Corporation recipients not eligible for Medicare.

TAA recipient would receive (65 percent of \$5,500 per year is \$70 per week, and the average cash benefit was \$222 per week in 2001).

Trade Adjustment Assistance for Firms and Communities

Separate TAA benefits continue to be available for firms and communities, but these programs are small. The firm program for trade adjustment assistance is minimally funded, at \$16 million annually (although this represents an increase from the \$11 million budget for 1999). While the Community Adjustment and Investment Program continues to provide assistance based on previous awards, it has not accepted new grant applications since 2001, no new funds were appropriated in 2002, and the program was not included in the 2003 budget.

Preliminary Evidence and Expectations

Because workers have only been eligible for the new TAA benefits since November 2002 (and some benefits did not phase in until 2003) and because of the broad scope of the changes, there is little direct evidence on the effect of the recent program changes on take-up, duration of unemployment, reemployment wages, labor markets or health care markets. However, evidence from past studies of TAA and of unemployment insurance offer some evidence about what to expect.

Effects on Individual Unemployment Spells

Increasing the length of time that trade adjustment assistance benefits are available could increase the length of time that the average worker is unemployed. There is a well-documented spike in the likelihood of an unemployed worker becoming reemployed at 26 weeks—that is, when unemployment benefits expire (Katz and Meyer, 1990a). Card and Levine (2000) find that extending unemployment benefits by 13 weeks increases the average number of weeks of unemployment by one week, and others have found an even greater sensitivity (for example, Katz and Meyer, 1990a). With the Trade Adjustment Assistance Reform Act of 2002 extending benefits by 26 weeks, the duration of benefit receipt and unemployment spells may significantly rise for affected workers.⁷

Making benefits more generous may both increase take-up and increase the duration of unemployment. Anderson and Meyer (1997) find an elasticity of take-up with respect to benefit generosity of around 0.5 or higher in the unemployment insurance program. Estimates also suggest that more generous benefits lengthen unemployment spells, with a 10-percentage-point increase in generosity leading to an increase in duration of as much as one week or more (Meyer, 1996).

⁷ Note that newly covered secondary workers were suddenly eligible for two years of benefits and thus faced a much larger change in incentives. For a small subset of recipients as discussed below, however, the ATAA experiment may provide modest incentives for faster reemployment.

Applying evidence from unemployed workers in general to workers receiving trade adjustment assistance is problematic, since TAA workers have different employment and demographic profiles from the average unemployed worker. Gibbons and Katz (1991) find that workers displaced by plant closings are less likely to face the same stigma as other unemployed workers, for example, so some trade adjustment assistance workers may fare better upon reemployment. In addition, TAA requires (most) workers to get training during this period, imposing a cost on continuing to get benefits that is not faced by most unemployment insurance recipients.⁸ Despite these caveats, the increase in generosity of benefits for TAA recipients is so large that both take-up and duration seem bound to increase. Even if TAA recipients value the health insurance credit at only 50 percent of the actual expenditure on premiums, the credit alone could increase take-up by 10 percent and average duration by half a week. With 70,000 more workers potentially eligible for TAA, increases in take-up and duration make the program even costlier, as reflected in the Congressional Budget Office (2002) estimates.

Effects on Reemployment Wages

Are these potentially longer spells of unemployment helpful to workers, allowing them to wait for the best job match available, or are they detrimental, allowing skills to erode and reducing reemployment wages? The evidence suggests that a longer spell of unemployment does not lead to a better job match. For example, Meyer (1995) reviews a series of “reemployment bonus” experiments (in which workers were offered bonuses to find jobs more quickly) and finds that workers offered such bonuses did find jobs more quickly, but not at the expense of lower reemployment wages. Workers may also be harmed by long unemployment spells through stigmatization or through skill atrophy (Blanchard and Diamond, 1994; Pissarides, 1992). Addison and Portugal (1989) find that a 10 percent increase in the duration of unemployment may lower reemployment wages by 1 percent. Decker and Corson (1995) find that the training provided through trade adjustment assistance does not seem to increase reemployment wages. While Marcal (2001) also fails to find evidence that training increased reemployment wages, she finds some evidence that trainees had higher employment rates relative to recipients not in training and to those who have exhausted unemployment insurance benefits.⁹

Because of the new wage allowance program, older workers face a distinct set of incentives when choosing a new job. The new wage allowance program provides

⁸ Black, Smith, Berger and Noel (2003) review the evidence on the effect of unemployment insurance “profiling,” where the recipients of unemployment insurance who are projected to have the longest insured unemployment spells are required to get job search assistance. The threat of this requirement (rather than the services themselves) seems to reduce duration, suggesting that the training required of trade adjustment assistance recipients may serve to reduce their spells, as well.

⁹ There is some limited evidence that older individuals’ reemployment wages are higher because of unemployment insurance (Ehrenberg and Oaxaca, 1976).

lower benefits to workers whose new wages are higher, which works like a tax on seeking out the highest-paying job. Because the benefit is only available to workers reemployed within 26 weeks, it may encourage workers to become reemployed more quickly, but it also provides incentives only in a narrow band around week 26. It may also dull workers' incentives to seek out the highest-paying job available. The eligibility cutoff of reemployment wages of less than \$50,000 creates enormous implicit tax rates in that region. For example, an ATAA-eligible worker who used to earn \$60,000 but is reemployed at \$40,000 would be eligible for \$10,000 in wage insurance. The same worker reemployed at \$50,000 would be eligible for nothing—a 100 percent tax rate from this program alone. A useful research project will be to study how older workers react to these incentives.

Effects on Firm Decisions

Firm decisions may also be affected by the expansion of the program. One well-documented problem with the unemployment insurance system is that firms may game the system through temporary layoff and recall of workers (Anderson, 1993). For example, firms may lay off workers seasonally and let unemployment insurance pay them for part of the year, because the unemployment insurance taxes paid by many firms are not adequately "experience rated"—these firms pay less in taxes than their workers receive in benefits for each of these layoffs. Katz and Meyer (1990b) find a spike in recalls at 26 weeks, suggesting that firms time recalls to correspond with workers' exhaustion of unemployment benefits. Imperfect experience rating may account for 20 to 50 percent of temporary layoffs (Topel, 1984; Card and Levine, 1994), with manufacturing receiving the biggest net unemployment insurance subsidies through temporary layoffs (Anderson and Meyer, 1993; Meyer and Rosenbaum, 1996).

Because trade adjustment assistance requires firms to demonstrate a decline in employment due to trade, it may be less subject to this kind of moral hazard. Also, as discussed above, TAA workers are less likely to be recalled to their original employers than are other unemployed workers. That said, firms may be less likely to offer generous severance packages (and workers may be less likely to flee declining industries) because of the increased generosity of TAA benefits.

Effects on Health Markets

The addition of the health care credit is perhaps the biggest structural change in the trade adjustment assistance program and could serve as a pilot program for health insurance tax credits for a broader segment of the population. Take-up of the health care credit is likely to be high, since it can be used for insurance from a wide variety of sources. The fact that it is "refundable" means that workers who owe no taxes will still be able to use the full credit amount (because if the credit amount is larger than a worker's tax bill, the difference is refunded for use toward insurance premiums), and the fact that it is "advanceable" means that workers will not have to wait until they file taxes to use the credit (since it can be used to pay

an insurance premium at the time the insurance is purchased). While an advanceable credit alleviates concerns about unemployed workers' liquidity constraints, it also dramatically increases the complexity of administering the program. Overall, the credit is equivalent to a voucher for the purchase of health insurance.

This health insurance credit may affect other aspects of the health insurance market, including the individual health insurance market and the presence of state high-risk pools. The rationale for subsidizing the purchase of individual insurance only when such insurance had been purchased more than 30 days before the layoff occurred is to discourage firms (and workers) from discontinuing coverage immediately before layoffs and to discourage individuals from moving from employer-sponsored insurance to the individual health insurance market. That said, the ability to use the credit in the individual market seems likely to increase participation. Subsidies to encourage people to join state insurance pools may help states establish such pools. Thirty states currently offer high-risk pools, designed to provide coverage to people with medical conditions that make private individual insurance particularly expensive for them. States that do not already have such pools for those without health insurance are being encouraged to create them through Department of Health and Human Services grants (and subsidies to offset partially the losses that the pools incur). The Congressional Budget Office (2002) expects that half of the states without high-risk pools will use this opportunity to establish them.

Discussion

Smoothing transitions for trade-displaced workers can help to make international trade closer to a true Pareto improvement. Moreover, trade adjustment assistance could facilitate the passage of international agreements to liberalize trade. Indeed, the small size of the program in the past—for example, trade adjustment assistance in 2000 covered less than 1 percent of the unemployed and had a budget less than 2 percent of the unemployment compensation program (U.S. Department of Commerce, 2002, Tables 416 and 593)—suggested that its role was more one of political expedience than of vital importance to structural adjustment. Like any program, trade adjustment assistance must face political realities. That said, the current incarnation of TAA falls short of the ideal program in several important ways, and the expansions of 2002 dramatically increase the program's potential to affect labor and health markets more broadly.

First and foremost, it is not clear why a program should single out workers adversely affected by international trade, rather than providing retraining and income support to all workers in shrinking sectors or even all unemployed workers. Increased import competition accounted for only 1.5 percent of separations due to mass layoffs in the late 1990s (Irwin, 2002, p. 100, from Bureau of Labor Statistics data). The expansion of TAA benefits in 2002 to upstream and downstream

secondary workers highlights the inherent arbitrariness of drawing a sharp eligibility line based on something that has such diffuse effects as trade. In fact, policymakers on both sides of the aisle have proposed replacing trade adjustment assistance with a broader program (such as the dislocated worker program proposed in the 1994 Reemployment Act) or consolidating it with existing worker assistance programs (such as proposed inclusion in the 1998 Workforce Investment Act).

Second, the particular parameters of the program may not be desirable. Providing income support for unemployed workers for as long as two and a half years may decrease their work prospects more than the extra training they get increases them. Requiring all workers to receive training to receive income support may encourage workers to get training they do not need or value. The nonlinear structure built into the wage insurance option creates the kind of cliffs that are likely to induce significant distortions. The health insurance benefit exacerbates these incentive problems and presents serious administrative challenges.

We believe that a more flexible structural adjustment program would meet the economic goals of the current TAA program while minimizing the distortions that the program creates. The current program expansions have the laudable feature of addressing many different costs of dislocation in a coordinated framework, but the substantial constraints imposed by the structure of the benefits undermine the program's efficiency and undermine its potential to address structural adjustment costs more broadly. The ideal program would give workers more control over the resources available to them and make the size of those resources less dependent on extended unemployment spells. Making the program more flexible in this way could both reduce administrative costs and improve worker outcomes by mitigating adverse incentives and maximizing the program's impact.¹⁰

One way to create such flexibility would be to create "adjustment accounts" for workers, who could then allocate the funds as they saw fit between income support, job training, wage allowances, child care, health insurance and so on. These accounts could be available to all unemployed workers or to unemployed workers in shrinking sectors—not limited to those manufacturing workers categorized as adversely affected by trade. Imposing lifetime limits on the availability of the accounts to workers could minimize gaming by employers and workers. Workers could choose the combination of benefits best tailored to their circumstances. If policymakers are concerned that workers may spend down the accounts too quickly, relying on the availability of support from other government programs, withdrawals from the account could be limited in size and eligibility for other programs could be determined jointly. Allowing workers to make these decisions

¹⁰ The Firm TAA program serves as example of the costliness of centralized decision making about the use of flexible funds. In its evaluation of the Firm TAA program, the Urban Institute (1998) found that only 55 percent of the program funds went to firm assistance, with much of the rest devoted to the very involved certification process.

would relieve the Department of Labor of its role in policing program recipients' participation in training and other requirements, while aligning recipients' incentives with the reemployment goals of the program. No doubt this would make the program more attractive to workers and would likely increase take-up. This increase in program size would have to be balanced against the increase in efficiency and the redistribution it would entail.

Choosing the right program parameters within this more flexible system requires estimates of several key elasticities, such as the effect of longer benefits on unemployment duration and reemployment wages for recipients of benefits, recipients' valuation of health insurance credits and so on. The Trade Adjustment Assistance Reform Act of 2002 will generate a substantial natural experiment, both because the changes in the program are substantial and because those already receiving such benefits before the legislative change must continue under the rules of the previous program for the next two years. The new elements of the program may serve as a trial for the broader use of wage insurance and health insurance tax credits. Studying this experience may provide information about how workers respond to adjustment assistance and may enable the creation of more efficient programs in the future.

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References

- Addison, John T. and Pedro Portugal.** 1989. "Job Displacement, Relative Wage Changes, and Duration of Unemployment." *Journal of Labor Economics*. 7:3, pp. 281–302.
- Anderson, Patricia M.** 1993. "Linear Adjustment Costs and Seasonal Labor Demand: Evidence from Retail Trade Firms." *Quarterly Journal of Economics*. November, 108, pp. 1015–042.
- Anderson, Patricia M. and Bruce D. Meyer.** 1993. "The Unemployment Insurance Payroll Tax and Interindustry and Interfirm Subsidies," in *Tax Policy and the Economy*, 7. James Poterba, ed. Cambridge, Mass.: MIT Press, pp. 111–44.
- Anderson, Patricia M. and Bruce D. Meyer.** 1997. "Unemployment Insurance Take-Up Rates and the After-Tax Value of Benefits." *Quarterly Journal of Economics*. 112:3, pp. 913–37.
- Black, D., J. Smith, M. Berger and B. Noel.** 2003. "Is the Threat of Reemployment Services More Effective than the Services Themselves? Evidence from UI System Using Random Assignment." *American Economic Review*. September, 93:4, pp. 1313–327.
- Blanchard, Olivier-Jean and Peter A. Diamond.** 1994. "Ranking, Unemployment Duration, and Wages." *Review of Economic Studies*. 61:3, pp. 417–34.
- Card, David and Phillip B. Levine.** 1994. "Unemployment Insurance and Taxes and the Cyclical

and Seasonal Properties of Unemployment.” *Journal of Public Economics*. 53:1, pp. 1–29.

Card, David and Phillip B. Levine. 2000. “Extended Benefits and the Duration of UI Spells: Evidence from the New Jersey Extended Benefit Program.” *Journal of Public Economics*. 78:1-2, pp. 107–38.

Corson, Walter and Walter Nicholson. 1981. “Trade Adjustment Assistance for Workers: Results of a Survey of Recipients Under the Trade Act of 1974,” in *Research in Labor Economics*, 4. Ronald G. Ehrenberg, Farrell Bloch, Joseph Reid and Solomon W. Polachek, eds. Greenwich, Conn.: JAI Press, pp. 417–69.

Decker, Paul T. and Walter Corson. 1995. “International Trade and Worker Displacement: Evaluation of the Trade Adjustment Assistance Program.” *Industrial and Labor Relations Review*. 48:4, pp. 758–74.

Ehrenberg, Ronald and Ronald Oaxaca. 1976. “Unemployment Insurance, Duration of Unemployment, and Subsequent Wage Gain.” *American Economic Review*. 66:5, pp. 754–66.

Feenstra, Robert C. and Tracy R. Lewis. 1994. “Trade Adjustment Assistance and Pareto Gains from Trade.” *Journal of International Economics*. 36:3-4, pp. 201–22.

Gibbons, Robert and Lawrence F. Katz. 1991. “Layoffs and Lemons.” *Journal of Labor Economics*. 9:4, pp. 351–80.

Gruber, Jonathan. 2000. “Transitional Subsidies for Health Insurance Coverage.” MIT and NBER, June.

Irwin, Douglas. 2002. *Free Trade Under Fire*. Princeton: Princeton University Press.

Katz, Lawrence F. and Bruce D. Meyer. 1990a. “The Impact of Potential Duration of Unemployment Benefits on the Duration of Unemployment.” *Journal of Public Economics*. February, 41, pp. 45–72.

Katz, Lawrence F. and Bruce D. Meyer. 1990b. “Unemployment Insurance, Recall Expectations and Unemployment Outcomes.” *Quarterly Journal of Economics*. 105:4, pp. 973–1002.

Magee, Christopher. 2001. “Administered Protection for Workers: An Analysis of the Trade Adjustment Assistance Program.” *Journal of International Economics*. 53:1, pp. 105–25.

Marcal, Leah E. 2001. “Does Trade Adjustment Assistance Help Trade Displaced Workers?” *Contemporary Economic Policy*. 19:1, pp. 59–72.

Meyer, Bruce D. 1995. “Lessons from the U.S. Unemployment Insurance Experiments.” *Journal of Economic Literature*. March, 33:1, pp. 91–131.

Meyer, Bruce D. 1996. “What Have We Learned from the Illinois Reemployment Bonus Experiment?” *Journal of Labor Economics*. 14:1, pp. 26–51.

Meyer, Bruce D. and Dan T. Rosenbaum. 1996. “Repeat Use of Unemployment Insurance.” National Bureau of Economic Research No. 5423.

Pissarides, Christopher A. 1992. “Loss of Skill During Unemployment and the Persistence of Employment Shocks.” *Quarterly Journal of Economics*. 107:4, pp. 1371–391.

Richardson, J. David. 1982. “Trade Adjustment Assistance under the U.S. Trade Act of 1974: An Analytical Examination and Worker Survey,” in *Import Competition and Response*. Jagdish N. Bhagwati, ed. Chicago: University of Chicago Press, pp. 321–68.

Rogers, Cynthia L. 1998. “Expectations of Unemployment Insurance and Unemployment Duration.” *Journal of Labor Economics*. 16:3, pp. 630–66.

The Economist. 2002. “A Step Forward; World Trade Talks.” July 29.

Topel, Robert H. 1984. “Experience Rating of Unemployment Insurance and the Incidence of Unemployment.” *Journal of Law and Economics*. 27:1, pp. 61–90.

Urban Institute. 1998. “Effective Aide to Trade-Impacted Manufacturers.” Economic Development Administration, U.S. Department of Commerce.

U.S. Congress, Congressional Budget Office. 2002. *Pay-As-You-Go Estimate of H.R. 3009: Trade Act of 2002*. Washington, D.C., September 21.

U.S. Congress, Congressional Budget Office. 2003. *Economic and Budget Issue Brief*. Washington, D.C., May 12.

U.S. Congress, Congressional Research Service, J. F. Hornbeck. 2000. *RS20210 Trade Adjustment Assistance for Firms: Economic, Program, and Policy Issues*. Washington, D.C., February 1.

U.S. Congress, Congressional Research Service, James R. Storey. 2000. *IB98023 Trade Adjustment Assistance for Workers: Proposals for Renewal and Reform*. Washington, D.C., October 3.

U.S. Congress, General Accounting Office, Loren Yager, Director International Affairs and Trade. 2001. “Trade Adjustment Assistance: Improvements Necessary, but Programs Cannot Solve Communities’ Long-Term Problems.” Testimony before the U.S. Senate Committee on Finance, Subcommittee on International Trade, Washington, D.C., July 20.

U.S. Department of Agriculture, Foreign Ag-

riculture Service. 2003. "Trade Adjustment Assistance for Farmers: Trade Act of 2002, FAQs." Washington, D.C.; Available at <http://www.fas.usda.gov/itp/taa/taafaq.htm>.

U.S. Department of Commerce. 2002. *Statistical Abstract of the United States: 2000*. Washington, D.C.

U.S. Department of Commerce, Bureau of Economic Analysis. 2003. "U.S. International Trade in Goods and Services News Release." Washington, D.C., September; Available at <http://www.bea.doc.gov/bea/newsrel/trad0703.xls>.

U.S. Department of Commerce, Economic Development Administration. 2003. "Trade Adjustment Assistance." Washington, D.C.; Available at <http://12.39.209.165/xp/EDAPublic/Research/TradeAdj.xml>.

U.S. Department of Labor, Bureau of Labor Statistics. 2002. *The Employment Situation: May 2002*. Washington, D.C.

U.S. Department of Labor, Employment & Training Administration. 2003a. "Trade Adjust-

ment Assistance." Washington, D.C.; Available at <http://www.doleta.gov/programs/factsht/taa.asp>.

U.S. Department of Labor, Employment & Training Administration. 2003b. "Trade Adjustment Assistance Reform Act of 2002." Washington, D.C.; Available at http://www.doleta.gov/tradeact/2002act_summary.asp.

U.S. Department of Labor, Employment & Training Administration. 2003c. "Interim Operating Instruction for Implementing Alternate Trade Adjustment Assistance for Older Workers." Washington, D.C.; Available at <http://www.doleta.gov/tradeact/directives/teg12-03.cfm>.

U.S. House of Representative, Committee on Ways and Means. 2000. "2000 Greenbook." Washington, D.C.

U.S. House of Representatives, Ways and Means Committee. 2003. "2003 Green Book." Available at <http://waysandmeans.house.gov/Documents.asp?section=813>.