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Costs and Benefits of Trade Adjustment Assistance

C. Michael Aho and Thomas O. Bayard

5.1 Introduction

The notion of an adjustment assistance program for American workers displaced by import competition dates back to 1945. A proposal for a Trade Adjustment Assistance (TAA) program was first placed on the national agenda in 1954 by David McDonald, head of the steelworkers' union, as a member of the Randall Commission. As part of the package to ensure labor support for the Kennedy Round of the Multilateral Trade Negotiations, the Trade Expansion Act of 1962 established TAA for workers whose layoff could be attributed to a tariff reduction in the industry. The program provided compensation and adjustment services to trade-displaced workers. In 1974 TAA was liberalized to cover all cases where imports "contributed importantly" to worker displacement. This liberalization was an important factor in securing passage of the Trade Act of 1974 which gave the president authority to enter into the Tokyo Round of Multilateral Trade Negotiations.

In the early 1970s TAA was described by advocates of free trade, especially members of the business and academic communities, as "an integral part of U.S. trade policy." But by 1980–81 the TAA program came under intense criticism for being expensive, inefficient, and inequitable. In response to these criticisms, the administration made important legislative changes in the program during the budget reconciliation process in 1981. Recently, amid growing concern that protec-

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tionist sentiment is rising and that trade policy will become a partisan issue, there has been renewed support for some form of trade adjustment assistance, although not necessarily for the current program (Bergsten and Cline 1982). The TAA program is due to expire in 1983, and Congress will hold hearings and may mandate further revisions then as a condition for maintaining some form of trade adjustment assistance.

In light of the debate surrounding TAA, this paper reexamines the basic and frequently conflicting rationales for a categorical assistance program for trade-displaced workers. It attempts to quantify wherever possible both the costs and benefits of TAA and discusses possible modifications to the current program.

Section 5.2 discusses the equity, efficiency, and political rationales for government involvement in the adjustment process and compares the merits of general and categorical dislocation programs for trade-displaced workers. The section also assesses the goals of adjustment policy—to provide compensation, to facilitate expanded trade, and to promote market adjustment—and the likely trade-offs among these goals. The entire discussion focuses only on the process of worker adjustment to economic dislocation. While firm and community adjustment are important aspects of the problem of economic dislocation, to consider them here would take us too far afield.

Section 5.3 attempts to estimate the costs and benefits of TAA as it was amended in the Trade Act of 1974. As is the case with many social programs with multiple and frequently ill-defined objectives, it is easier to conceptually define the costs and benefits than it is to quantify them. Nonetheless, the section provides up-to-date empirical information which may be useful to policymakers in their evaluation of the program.

The final section summarizes our findings and raises questions which should be addressed in a comprehensive review of the program.

5.2 Rationales for Government Intervention in the Adjustment Process

There are three broad and frequently interrelated reasons for the government to intervene in the process of adjustment to economic change: equity, efficiency, and political efficacy.

5.2.1 Equity

Rarely does an economic change (e.g., a tariff reduction, deregulation, a shift in tastes, a technological innovation, a change in resource endowments, etc.) benefit all members of society. Typically, some individuals gain and others lose in both the long and short run. A change is potentially beneficial to society if the gainers could potentially compensate the losers so that everyone affected is at least no worse off. The decision to

actually compensate the losers depends on both equity and political considerations.

In general, the equity basis for compensation is the widely held notion that, when the nation as a whole gains potentially from an economic change, the potential losers should be compensated for at least part of their losses. The magnitude of compensation on equity grounds depends on a socially accepted notion of equity. For some societies, it may depend on the losers' relative position on the income distribution: the relatively poor should have more of their losses compensated than the relatively rich. For other societies, compensation on equity grounds may be strictly proportional to losses.

The equity basis for compensation may speak for the need for a special categorical program like TAA for trade-displaced workers if it can be shown that they differ systematically from other workers who incur adjustment costs from non-trade-related changes. One difference, for example, might be that trade-displaced workers are economically or socially disadvantaged relative to workers who are displaced by technological or other changes. If the government's goal is to improve the income distribution, then a case might be made for a special and more generous form of compensation targeted specifically at workers in import-competing industries.²

There is almost no evidence on this point. We do know that workers in import-sensitive industries are generally more economically disadvantaged than workers in manufacturing as a whole (Aho and Orr 1981). There may be some presumption, therefore, that the average trade-displaced worker should have more of his loss compensated than the average manufacturing worker who is displaced for other reasons. However, any displaced worker is likely to be a "marginal" worker and therefore to have different characteristics than the average worker. A priori, it is difficult to argue that a trade-displaced worker is any different than the average, say, technologically displaced worker. The main empirical evidence from a survey done by Mathematica Policy Research (Corson et al. 1979) suggests that the occupational and demographic characteristics of TAA recipients are very similar to those of unemployment insurance (UI) recipients.³

A second possible difference between trade-displaced workers and other displaced workers is that, regardless of their current position on the income distribution, workers in import-competing industries tend to have higher adjustment costs and should therefore have more of their losses compensated. This seems to be less an argument for a special categorical program for trade-displaced workers than an argument that any compensation scheme based on equity considerations should provide the same proportional (i.e., to losses) compensation to all workers. The small

amount of empirical evidence available suggests that TAA recipients in general do not have higher earnings losses than UI recipients. It could be argued that the true adjustment costs (including nonmonetary costs) are higher for workers in the import-competing sectors. However, it could also be argued that nonmonetary losses are simply proportional to monetary costs. We have no good evidence on the issue of nonmonetary losses.

Another equity argument for a special categorical compensation program for trade-displaced workers is that they have been harmed by a specific historical government policy of promoting expanded trade and are therefore more deserving of compensation than workers who have been displaced for reasons unrelated to government policy. The argument would be stronger if it could be shown that trade-displaced workers have been hurt solely or primarily because of government changes in trade restrictions or because of changes in other trade policies. This was the rationale for the adjustment assistance provisions of the Trade Expansion Act of 1962, which provided compensation for injury incurred as a result of tariff reductions.

The argument has since been extended to suggest that the absence of government intervention to restrict increased imports justifies special compensation for trade-displaced workers. This was an implicit justification for the adjustment assistance provisions of the Trade Act of 1974, which completely severed the connection between tariff reductions and compensation and instead made workers eligible for compensation if it could be shown that imports had "contributed importantly" to worker displacement.

Both of these arguments presuppose the existence of an implicit social contract between the government and workers in import-competing industries implying that the government will compensate them for any losses they incur because of trade changes. But it is very hard to distinguish this from the notion of a more general implicit contract between the government and all workers implying that the government will compensate any worker for losses due to the failure of government to prevent any type of economic change. If the failure of government to prevent a change harmful to some is accepted as a valid criterion for compensation, in principle all workers should be potentially eligible, and there is no equity basis for categorical programs. If specific government action (as opposed to inaction) is accepted as a criterion for compensation, then the equity argument for categorical programs is somewhat stronger.

However, it may simply be the case that voters and policymakers view import-related injury as inherently more "unfair" than losses caused by domestic factors like labor-saving technological change or competition from domestic producers, even if the occupational and demographic characteristics and losses of those affected are identical. Equity consid-

erations might then require a categorical and more generous compensation and assistance program for trade-related injury.

There is one major equity argument against any sort of dislocation program, whether categorical or general. To the extent that displaced workers compete for jobs with new entrants and reentrants (who are frequently women and young people) into the labor force, an effective dislocation program may impose costs on new entrants in the form of longer duration of job search or lower starting wages.

5.2.2 Economic Efficiency

The efficiency argument for government intervention in the adjustment process is that market imperfections or externalities prevent or impede efficient adjustment.

Wage and Price Rigidities

Changes in supply or demand generally cause changes in both output and prices. In markets in which wages and prices are slow to decline in response to long-term shift in supply or demand, more of the required adjustment must come in the form of declines in output and employment. Some of the unemployment resulting from this wage and price rigidity may be involuntary in the sense that workers would be willing to accept work at a lower wage, but are unable to find work at the prevailing (rigid) wage.⁵

The preferred response to wage and price rigidities creating involuntary unemployment might be to attack the problem directly by initiating antitrust action against monopolistic/oligopolistic price-setters. However, this is often infeasible, either politically or because the antitrust mechanism is very slow, so there may be some scope for government intervention to aid workers.

The efficiency argument for government intervention in the case of involuntary unemployment resulting from wage/price rigidities is that the wage inflexibility increases the duration of search and therefore the social cost of unemployment (i.e., output foregone). The government may be able to reduce duration by providing information on alternative employment opportunities as well as retraining and relocation allowances. There is also a strong equity argument for providing income maintenance because the unemployment is involuntary.

Labor Market Congestion

A large-scale permanent layoff may cause some labor market congestion (an externality) if the local labor market is relatively small and workers are relatively immobile. This congestion means that it takes longer for an average displaced worker to find a job than it would in the absence of a mass layoff. One policy response could be to provide job

seekers with better information about employment opportunities in other areas or industries and, if need be, to provide training and relocation assistance to speed up the adjustment process.

The literature on labor market congestion also suggests that it may be optimal to slow down the process of adjustment by providing temporary and declining wage subsidies to firms undergoing pressure to adjust their work force when congestion in the "comparable labor market" (defined both in terms of geographic contiguity and comparable skill levels) delays the rate of transfer of workers to other jobs (Lapan 1976, 1978; Cassing and Ochs 1978). Parsons (1980) distinguishes between the congestion effects of an industry's own unemployment rate and the congestion effects of the national unemployment rate. Empirically, he found that the industry unemployment rate seemed positively related to the rate of labor transfer, but that the national unemployment rate was negatively related. Regardless of the type of congestion, an important cause of labor market externality is the slow rate of adjustment of real wages. The optimal dynamic wage subsidy declines as real relative wages in the industry undergoing adjustment decline.

Labor Immobility

Labor immobility per se is not necessarily a market imperfection requiring government intervention on efficiency grounds. If wages were flexible, workers who could not move geographically or across industries because of social or family ties or lack of required skills would have the option of remaining employed at a lower wage. In this case, there is no efficiency rationale for intervention (Magee 1973).

However, if wages are inflexible, immobility may give rise to large-scale and possibly long-term unemployment. The appropriate role of government policy might then be to provide adjustment services such as counseling and training. There may also be an equity and an efficiency rationale for income maintenance because the demographic and occupational characteristics (age, race, sex, marital status, low skills, etc.) giving rise to geographic and occupational immobility also tend to be associated with economically disadvantaged groups, and because immobility causes the duration of job search to increase.

Risk, Uncertainty, and Imperfect Capital Markets

It is frequently argued that investment in human capital is generally more risky than investment in physical capital because owners of human capital do not have access to capital markets allowing them to diversify their assets and otherwise reduce the risk of a decline in demand for their services. It is true, however, that workers may be able to reduce the risk of layoff or income losses through judicious selection of certain skills and by seeking employment in certain industries (Grossman and Shapiro

1981). It is also true that the current tax laws allow workers to depreciate most of the cost of their investment in human capital at the time they make the investment, whereas owners of physical capital must depreciate it over a longer period. Nevertheless, it can be argued that, in the absence of any program to subsidize education and training and in the absence of an unemployment insurance system, workers will tend to underinvest in human capital.

The role of government policy toward capital market imperfections might be to provide loans for training and education (and living expenses while in training). In some cases the government may be able to provide an unemployment insurance scheme more efficiently than either private insurance companies or what would result from bargaining between workers and their employers over unemployment benefits and job security provisions. The argument for government insurance rests on the notion that a very large insurer like the government could pool risk and provide insurance at lower cost. This is not to deny the important role of collective bargaining between management and labor in providing insurance and job security. However, government may be required to supplement this, especially when firms possess monopsony power.

It might also be argued that the government could improve the information available to workers seeking to acquire human capital by providing estimates of the long-term demand for various skills. The Bureau of Labor Statistics and the Employment Service currently provide considerable information of this sort.

None of the preceding discussion about the efficiency rationales for government intervention provides much presumption in favor of a categorical program for trade-displaced workers over a more general program for all dislocated workers. As in the case of the equity arguments for TAA, the efficiency basis for a special program for trade-displaced workers must rest on the fact that they are different from most other workers who lose their jobs. Specifically, it must be shown that the occupational and demographic characteristics of workers in import-competing industries (or the characteristics of import-competing industries) are such that trade-displaced workers require special assistance.

It could be argued that many of the same characteristics of tradedisplaced workers that may give rise to an equity basis for special compensation may also give rise to an efficiency rationale for special adjustment services. The same caveat to the discussion of the equity argument applies here: we do not know for certain that the occupational and demographic characteristics of trade-displaced workers are significantly different than those of workers displaced for other reasons.

If trade-displaced workers could be shown to have less occupational or geographic mobility or to face more risk or uncertainty of displacement than other displaced workers, then an argument could be made in favor of special adjustment services and unemployment insurance for them. Both Aho and Orr (1981) and Mathematica have shown that the worker populations in import-sensitive industries tend to have slightly higher proportions of women and older workers than the manufacturing average. These are precisely the groups who tend to face sociological or human capital barriers to mobility. However, there is little evidence that TAA recipients on average experience significantly higher earnings losses than UI recipients, so it is difficult to argue for special assistance on either equity or efficiency grounds.

The risk and uncertainty factor has never really been investigated. Shifts in trade are possibly less predictable than shift, for example, in tastes or technology. If so, an argument could be made in favor of special government insurance programs to reduce the adjustment problems of workers in certain traded goods industries if these industries are subsidized abroad or if they are considered important for national security or prestige.

5.2.3 Political Efficacy

The political argument for government intervention is really the best argument for categorical programs to supplement a more general, and less generous, dislocation program. The political argument is that certain interest groups have sufficient political power to block or delay socially beneficial changes unless they are generously compensated and otherwise assisted. The case for a special program like TAA for trade-displaced workers is that the alternative to TAA is increased trade barriers or greater difficulty in reducing existing trade restrictions because of the political power of the potential "losers."

The past and potential political benefits of TAA are substantial. It is generally accepted that the adjustment assistance provisions of both the 1962 and 1974 trade acts were important in obtaining legislative authority for and muting workers' opposition to the Kennedy and Tokyo Rounds of the Multilateral Trade Negotiations (MTN) (Frank 1977). Of course, it is impossible to know whether the MTN would have been approved by Congress in its present form in the absence of TAA. It is also impossible to know how much the current TAA program has reduced the incidence and severity of protectionism.

Nevertheless, it seems likely that the TAA program does serve to reduce protectionism. The amount of political pressure (e.g., campaign contributions and votes) that potential losers are likely to exert on Congress and the executive branch is probably an increasing function of their expected losses. Since studies of the TAA program (Corson et al. 1979; Richardson 1982a; Jacobson 1980) have shown that it provides fairly generous compensation for earnings losses, it is likely that the program has reduced the pressure for trade restrictions by reducing

expected losses. Beyond this, the program also serves to provide policy-makers with a more palatable alternative to either increased trade barriers or no response at all to demands by their constituents for assistance. Further, a well-publicized and fairly generous compensation program may reduce public sympathy for protectionist demands. Richardson (1979) cites evidence from political polls suggesting that voters are, in fact, less sympathetic to demands for import protection if there is an alternative way to compensate and assist those injured by import competition. In general, TAA theoretically serves to reduce both the supply and the demand for trade restrictions in the political market for protection.

However, there may be an important exception to the proposition that TAA reduces workers' demands for protection. Ethier (1982) has developed a cyclical model of dumping in which the existence of TAA actually induces foreign dumping and increases domestic employment variability. He suggests that "if the presence of dumping has the political effect of generating protectionist sentiment, the addition of TAA will increase such sentiment—just the opposite of its political intent, and contrary to general belief." This conclusion seems to rest on the assumption that it is the existence per se of dumping that generates demands for protection. Dumping provides a political focal point around which to mobilize workers and the public in support of trade restrictions. If TAA increases the magnitude of dumping and the number of workers affected, it should also stimulate greater protectionist sentiment.

Two factors may tend to offset this. The first is that the level of TAA compensation, while it affects the magnitude of dumping and layoffs, also affects an individual worker's net income loss due to dumping, which is probably also a determinant of the demand for protection. The net effect of TAA on the demand for protection would seem to depend on whether the greater political visibility of dumping, combined with the larger number of workers affected, is offset by the lower, private individual cost of unemployment.

The second possible offsetting factor is the manner in which TAA is financed. In Ethier's model, TAA is not financed by experience-rated taxes on firms (as is UI), but rather out of general revenues. In these circumstances, TAA would tend to encourage layoffs (and dumping). Experience-rated taxes on employers would tend to reduce layoffs and (assuming the tax is not shifted back onto employees) this would reduce workers' (but not employers') support for protectionist policies. In fact, the current TAA program is *not* experience rated, and as we discuss later, there is empirical evidence that TAA encourages temporary layoffs.

Even without the prospect of new multilateral trade negotiations, a strong political case still can be made for continuing a special program for workers in import-sensitive sectors if it is granted that these workers are

politically more effective than other workers. There are several characteristics of the import-competing sectors contributing to the political effectiveness of trade-displaced workers. Proponents of trade restrictions have fewer free-rider and organizational problems than opponents both because the benefits of protection are relatively concentrated and the costs are diffuse, and because the industries themselves are more heavily unionized and have higher firm concentration ratios. A large number of states are potentially affected by imports, with a large number of congressional and electoral votes at stake (Bayard and Orr 1982; Baldwin 1982; Wolf 1979). Firms and workers injured by imports may be able to exert more effective political pressure for protection than those harmed by forces identifiable as domestic in origin, such as internal demand shifts or technological changes. This could be the case if voters and policymakers considered foreign competition more unfair than domestic competition, or if there are fewer effective countervailing political pressures when the source of injury is foreign rather than domestic.

The case for a categorical program also rests on the proposition that trade is becoming increasingly important to the United States and that conflicts over trade policy, both among domestic actors and between the United States and its trading partners, are likely to intensify over time (Aho and Bayard 1983).

A number of major sources of potential conflict over trade are on the horizon: the rapid growth of exports of manufactures from the newly industrialized countries; possible negotiations between the developed and developing countries to assure market access and to integrate the developing countries more fully into the trading system; the active industrial policies practiced in many industrial countries to develop specific sectors (particularly high technology industries); and continued conflict with Japan over market access (Blackhurst, Marian, and Tumlir, 1978). In addition, proponents of export promotion should also recognize that one cannot promote exports without also increasing imports, thereby provoking protectionist demands at home.

The medium-term outlook for growth and employment is bleak, and most countries are under significant political pressure to reduce unemployment. The combination of slow growth and painful but necessary adjustments to changes in the structure of comparative advantage is likely to generate protectionist pressures.

The basic political rationale for TAA is to reduce opposition to policies promoting expanded trade and to provide an alternative to protectionism. The demand for programs to promote expanded trade, as well as opposition to these policies, is likely to increase in the future. The political basis for TAA is likely to grow correspondingly stronger over time.

5.2.4 The Goals of an Adjustment Assistance Program

Three major goals of a categorical adjustment assistance program are: to provide compensation, to facilitate expanded trade, and to promote market adjustment. In this section we explore some of the problems involved in determining the appropriate mixture of compensation and adjustment provisions and some of the conflicts and trade-offs between the goals.

Both equity and political considerations may dictate that tradedisplaced workers should receive special, and presumably more generous, compensation than workers who are displaced for reasons other than changes in trade. Examined separately, the equity, efficiency, and political criteria may suggest entirely different magnitudes of compensation. The equity rationale for compensation might suggest that the government should calculate the earnings and benefit losses (and, if possible, all the other nonmonetary costs of unemployment) and set the compensation level proportional to these losses. The political basis for compensation does not lend itself to such an easy calculation. If the policy objective is to reduce political pressures that can block or delay socially desirable changes, then the relative political power of the potential losers, rather than their losses per se or their position on the income distribution, determines the magnitude of their compensation. The amount of feasible compensation is clearly somewhere between nothing and the present value of the gains that would accrue to society if the change occurs. Beyond this, it is a political decision to determine whether tradedisplaced workers should be compensated for part of, all of, or more than their losses.

In some import-sensitive industries, workers may earn oligopolistic rents or returns from the past structure of protection. On equity grounds, it seems unfair to compensate displaced workers for the loss of these particular rents. However, the same industry characteristics allowing firms and workers to collect these sorts of rents may also be contributing to their political power to influence trade restrictions. On political grounds, therefore, it may be necessary to compensate workers for losses of these returns. The efficiency implications of compensating workers for oligopolistic/oligopsonistic or protectionist rent losses are entirely negative. Compensation could create problems of moral hazard—workers might be induced to enter or to stay in an industry in which the risk of the loss of these rents was reduced by a generous compensation scheme. Compensation of these losses would tend to slow the rate of adjustment to changes in trade and reduce the social gains from adjustment.

The efficiency rationale for compensation is that it allows workers to engage in socially efficient job search. It is generally accepted that if

compensation is tied to duration of unemployment, there is an increase in duration which may or may not be socially desirable. On the one hand, increased duration may improve the quality of the match between workers and job opportunities (and hence, increase earnings). On the other hand, compensation reduces the incentives to accept a job quickly and may result in excessive duration. The socially efficient compensation scheme would provide benefits up to the point where the marginal social gain to higher earnings was equal to the marginal social loss due to longer unemployment duration. It is easy to conceive of circumstances in which the socially efficient compensation differs from (i.e., is probably less than) compensation based on equity or political considerations.

There may be several trade-offs between compensation in the form of cash payments and compensation in the form of adjustment services. The workers' losses are caused by the initial spell of unemployment and the subsequent losses in lifetime earnings because of the loss of human capital. But both of these are in part determined by the availability of adjustment services. If government-provided adjustment services are effective in assisting workers to acquire new jobs and skills more rapidly than they would in the absence of the government adjustment services, then the amount of cash compensation required is reduced. To determine the appropriate mix of cash payments and adjustment services, the government needs considerable information about the efficacy and returns to training, relocation, counseling, and other adjustment services for various types of workers.

In all of this, an implicit assumption has been that trade-displaced workers are for the most part likely to be permanently displaced. The results of the Mathematica survey (Corson et al. 1979) suggest that most TAA recipients have been on temporary layoff and have returned to their old industry, and sometimes to their old job with their old firm. Other studies (see table 5.2) found that a higher proportion of displaced workers actually changed jobs or employers. Differences in the incidence of permanent displacement could be the result of a number of factors, including differences in worker eligibility criteria and differences in the stage of the business cycle when layoffs occurred.

In the case of temporary displacements, there is no efficiency basis for either compensation or adjustment services. (Uncertainty over whether displacement is temporary or permanent might provide a basis for some adjustment services and compensation on efficiency grounds.) Both the equity and the political criteria could suggest the need for some compensation for temporary displacements but would not indicate any need for adjustment services.

It could be argued that if firms and workers were fully informed that the industry is periodically subject to temporary trade-related displacements, there would be no equity basis for compensation because the wage-

bargaining process would have already compensated workers for the risk of temporary displacement. On the other hand, there may still be a political basis for "compensation" for even temporarily displaced workers in the traded goods sector if these workers could otherwise block the increase in imports. The level of compensation could be fairly small because the intensity of their lobbying effort is likely to be small, given the fact that the wage structure may already reflect the risk of temporary layoff or reduced hours.

The discussion thus far has provided an overview of the rationales for trade adjustment assistance. Given that a TAA program has several potentially conflicting goals—to compensate the "losers" for equity reasons, to buy out those who could impede socially beneficial changes, and to promote efficient labor market adjustment—it is probably not surprising that the current program has attracted so much criticism. Different critics may wish to structure the program to emphasize one specific goal, but any change in program emphasis is likely to evoke criticism for neglecting the other goals. Any attempt to change the current program emphasis must be based on some sort of cost/benefit calculus. In what follows we attempt to make these calculations, although many of the costs and benefits are obviously difficult to quantify.

5.3 Estimating the Costs and Benefits of TAA

5.3.1 Conceptual Overview

As is the case for many social programs with multiple and frequently ill-defined objectives, it is easier to conceptually define the appropriate costs and benefits than it is to quantify them. It is doubtful that the drafters of the TAA legislation in the Trade Act of 1974 were able to make any calculation of the potential costs and benefits of the program. This is not surprising, given the relatively small scope of the 1962 TAA program and the limited empirical research on adjustment assistance available at the time. However, in the last ten years the Labor Department has funded several important studies of both the 1962 and 1974 TAA programs as well as extensive research in the broad area of measuring the costs of worker displacement. In this section we first review the major conceptual problems involved in evaluating the costs and benefits of adjustment assistance, and then we draw on the empirical evidence to assess the TAA program.

Potential Benefits

The political benefits of adjustment assistance are the social gains from liberalized trade, or a reduction in the incidence and severity of protectionism. The potential benefits of freer trade (whether from multilateral

trade negotiations, as in the Kennedy and Tokyo Rounds of the MTN; from unilateral reductions in tariff barriers, as in the U.S. generalized system of tariff preferences for developing countries (GSP); or from the avoidance of new trade barriers) are the reduction (or avoidance) of price distortions causing inefficiencies in consumption and in the allocation of resources between the export, import-competing, and nontraded goods sectors of the domestic economy.

As we show later, the annual social (as distinct from private) gains from marginally freer trade are fairly small. It is necessary to emphasize the marginal nature of these calculations because even the most ardent proponents of TAA have never suggested that it can be used to buy once-and-for-all elimination of all trade barriers or to prevent any increase in existing restrictions. However, it is also important to point out that the gains from freer trade are annual ones and that, even when they are heavily discounted, the cumulative social gain can be quite large.

Within the context of the political implications of a TAA program are several other potential benefits, none of which is easily quantified. Gold-farb and Cordes (1979, 1980) have suggested that one potential benefit of any scheme compensating individuals for losses resulting from government action (but not necessarily inaction) is that it fosters the notion that the government is "fair" and unarbitrary in its decision making. The Trade Act of 1962, for example, provided compensation for workers hurt by government action—tariff reductions; the Trade Act of 1974 broadened eligibility for compensation to include injury caused by government inaction—failure to prevent an increase in imports.

An adjustment assistance program, regardless of its domestic equity and efficiency implications, may generate significant foreign policy gains. To the extent that it reduces the use of trade restrictions, TAA promotes expanded trade and a more efficient allocation of resources worldwide. Indeed, the OECD secretariat (1979) has urged the use of "positive adjustment" programs as a substitute for protectionist policies that inhibit the growth of world trade. Maintaining and expanding the liberal world trading system is a major goal of U.S. foreign policy. By demonstrating strong U.S. commitment to adjustment rather than protection, the TAA program may encourage a similar commitment to free trade in other countries.

This demonstration effect may be particularly important for the developing countries. They are acutely aware of the need for adjustment assistance programs in the developed countries as an alternative to protectionism. At the fifth session of the United Nations Conference on Trade and Development (UNCTAD 1979), the Group of 77 argued strongly in favor of adjustment programs. By promoting a reduction in developed country trade barriers, an adjustment assistance program both facilitates a transfer of resources to the developing countries and serves to

encourage the developing countries to accept the legitimacy of the principle of free trade.

All of these "political gains" from TAA are based on the assumption that it really buys freer trade by reducing political demands for protection. This is probably unprovable, but we believe that the theoretical arguments presented earlier support the proposition. If TAA is effective in reducing both the demand and the supply of protectionism, there may be additional social gains in the form of reductions in the use of productive resources to lobby for and against trade liberalization and also in the use of resources needed to administer trade restrictions. However, it may be that resources not spent on lobbying or administering trade barriers simply will be diverted to equally unproductive activities elsewhere.

The time dimension is particularly important in any discussion of the potential efficiency gains of adjustment assistance. While the benefits of freer trade occur over an indefinite period of time, the social cost is incurred in the relatively short run. The social cost of trade liberalization is the value of output foregone when resources are involuntarily unemployed during the period of adjustment. The involuntary nature of unemployment is important to emphasize. It is only to the extent that unemployment is the result of market distortions (like wage and price rigidities, labor market congestion, imperfections in the markets for information and capital, etc.) that there is any social gain from government intervention in the adjustment process. Clearly, even if wages and prices were perfectly flexible, there would be some unemployment in the import-competing sector as workers voluntarily become unemployed in order to search for their best alternative employment. This sort of unemployment should not be counted as a social cost because, if search is rational, workers seek alternative employment until the marginal income gains of finding a better job are equal to the marginal income foregone by continuing to search.

The efficiency gain from TAA then is the value of output gained by reducing involuntary unemployment caused by existing market imperfections. Although it seems callous to some, the value of leisure ideally should be subtracted from the output cost of involuntary displacement. In practice (e.g., Bale 1976) the social costs of unemployment, and thus the benefits of reducing it, are usually calculated as the total duration of unemployment times the pretax wage in the next-best employment. These calculations tend to overstate the potential gains from promoting more efficient adjustment by counting all the duration as involuntary and by failing to value leisure.¹⁰

Richardson (1982b) has suggested that TAA also may facilitate efficient adjustment if it provides workers, firms, and investors in import-competing sectors with an additional "diagnostic signal," both incremental to the usual market indicators and preferable to the perverse

signals created by trade distortions. If TAA correctly encourages a leading or anticipatory adjustment to expected changes in firms' competitiveness, it will tend to reduce the duration of unemployment and perhaps also the possibility of labor market congestion which can happen when all of the adjustments occur in a fairly short period. For TAA to play a positive role in promoting adjustment, it must be interpreted as an accurate harbinger of longer-run secular changes. If it is used or viewed as income maintenance to help workers endure relatively short-run or cyclical fluctuations, it is unlikely to serve a useful adjustment function.

The equity gains from TAA are the most difficult to quantify because they rest on a socially accepted definition of equity. Although it may be possible to infer a social welfare function from the government's treatment of various income and social groups and then to compare the actual treatment of TA recipients by income and social class with "predicted treatment," we do not attempt this. Rather, in what follows we simply present data on TAA recipients' characteristics and adjustment experiences and allow readers to draw their own conclusions about the equity of the program.

Potential Costs

Most of the costs of an adjustment assistance program fall under the heading of efficiency losses caused by distorting market incentives to adjust to freer trade. The potential problem with any program attempting to compensate displaced workers is that it will simultaneously serve as a disincentive to adjustment.

Attempting to compensate workers by tying compensation to the duration of unemployment may lead to an increase in unproductive search by lowering the cost of searching. We show below that many of the recent TAA recipients were on temporary layoff. The high benefit levels and extended potential duration of benefits (52–78 weeks for TAA vs. 26–39 weeks for UI recipients) may encourage workers to simply await recall rather than engage in any search. In cases where workers correctly anticipate that layoffs are temporary, it may not be privately or socially productive to engage in job search. However, in cases where layoffs are actually permanent or very long-term and expectations of temporary and short-term displacement are incorrect, high TAA payments and extended availability may impede adjustment.

In contrast to UI payments, which are financed by taxing firms based on their layoff behavior, TAA payments are not experience rated. This leads to several possible implications for firm behavior. On the one hand, TAA may serve as a subsidy if firms and workers incorporate expected TAA payments into their wage bargains. If workers negotiate a wage package including payments in the event of layoff and the existence of TAA allows firms to substitute TAA for firm-financed unemployment

benefits or to lower wages, the firm's labor costs are lower by the amount of expected TAA. This in turn allows import-competing firms to produce a higher level of output or earn higher profits and encourages both capital and labor to remain in import-competing firms when they should be transferred to other sectors where the social value of output is higher.

On the other hand, it is possible that TAA benefits are not reflected in either lower wages or benefits. Even if workers captured all of the benefits of TAA and firms were not able to lower wages or benefits directly as a result of TAA, it could still serve to reduce total labor costs and hence raise profits. To the extent that firms hoard labor through the business cycle or in response to short-run shocks, TAA facilitates worker attachment to firms by reducing incentives to look for a new job and therefore reduces the optimal amount of labor hoarding and the firm's labor cost and encourages temporary layoffs. For our purposes, what matters is that, because it is a subsidy, TAA may reduce firms' and workers' incentives to adjust to a long-run change in comparative advantage if it simply allows firms that are otherwise uncompetitive to stay alive longer, or if it simply encourages workers to linger longer waiting for recall.¹¹

Although TAA payments are transfers from taxpayers to workers and therefore are not social costs per se, the program's administrative costs and the efficiency costs of using the tax system to raise revenue to fund TAA payments are legitimate social costs.¹² In the next section, we report TAA's administrative costs, but no attempt is made to quantify the disincentive costs of raising funds to finance TAA.

5.3.2 Quantifying Costs and Benefits

To facilitate an evaluation of the TAA program, tables 5.1 and 5.2 present data from the major studies on the occupational and demographic characteristics and adjustment experiences of TAA recipients. The data summarize the results of these studies, but the reader is cautioned not to make explicit comparisons between various studies. In many cases the data are noncomparable because they pertain either to the 1962 or 1974 TAA programs and therefore were based on very different worker eligibility criteria. One major result emerging from these studies is that the adjustment process differs quite dramatically both across industries and occupational and demographic groups and across the stages of the business cycle. One of the major problems, therefore, in designing TAA studies is the selection of appropriate control groups. It is possible to make explicit comparisons between, say, UI and TAA recipients in the Mathematica (Corson et al. 1979) or Neumann and Glyde (1978) studies because attempts were made to select appropriate controls, but it is not appropriate to explicitly compare, say, McCarthy's (1974) results with Neumann and Glyde's since they involve very different populations, drawn at different times, and affected by different phases of the business cycle.

Table 5.1 shows the occupational and demographic characteristics of TAA recipients under both the 1962 act (Bale 1973; McCarthy 1974; and Neumann and Glyde 1978) and the 1974 act (Corson et al. 1979) and also of workers in industries that have lost job opportunities because of imports between 1965 and 1975 (Aho and Orr 1981). Table 5.2 presents data on the adjustment experiences of trade-displaced workers under the two programs.

As discussed briefly in section 5.1, the studies offer very little support for the notion that, in general, trade-displaced workers are very different from other displaced workers. What can be said is that they consistently appear to be somewhat older, have longer firm tenure, and are more heavily unionized. Based on these characteristics, human capital theory would predict somewhat higher earnings losses for trade-displaced workers than for others. However, the fact the TAA recipients also appear to be somewhat less educated and less skilled than other workers would tend to imply lower losses.

The evidence in table 5.2 suggests that permanently displaced TAA recipients may have more adjustment problems than other permanently displaced workers. Neumann and Glyde's sample of TAA recipients under the 1962 act was almost all permanent displacements. They found that they tended to have significantly longer initial unemployment duration and larger initial wage losses than the UI control group. Similar results emerge from the Mathematica survey of TAA recipients under the 1974 act. TAA recipients who changed jobs had an initial spell of almost 42 weeks, compared to 33 weeks for UI recipients. Permanently displaced TAA beneficiaries also tended to have larger initial wage losses than the UI job changers. Overall, Mathematica estimated that the earnings losses for TAA job changers were somewhat higher than for the UI control group, although the difference was not very significant.¹³

However, only a small fraction of TAA recipients (28 percent) in the Mathematica sample actually changed jobs (vs. 42 percent of UI). Moreover, Mathematica found that most TAA recipients expected their layoff to be temporary (81 percent of TAA vs. 73 percent of UI). This may help to account for the relatively small fraction of TAA recipients who received training or counseling. Overall, comparing the entire TAA sample to the UI sample, TAA recipients did not have significantly higher earnings losses than UI recipients.

These results stimulated the press and policymakers to question the overall equity of the TAA program. While the results do tend to support the notion that permanently trade-displaced workers have somewhat greater adjustment costs than job changers in the UI control group, the permanently displaced tend to be a fairly small subset of TAA recipients,

at least for the sample period (prior to 1979). (Since 1979 a large number of auto workers have received TAA and a significant fraction of them may be permanently displaced.) Even this generalization is too broad. As table 5.3 shows, the earnings loss estimates in the Mathematica survey vary greatly across industries. For example, permanently displaced auto workers lost \$8,000-12,000, while permanently displaced apparel workers lost roughly \$6,000. At the same time, temporary displacements in some industries tended to be "overcompensated" for their earnings losses.

Overall the results of the Mathematica survey suggest that TAA recipients, whether permanently or temporarily displaced, tend to have a higher proportion of their losses compensated than the appropriate UI control group. The TAA population does not appear to be very different from the control group in terms of either occupational and demographic characteristics or adjustment costs. It is correspondingly difficult to justify a categorical program for trade-displaced workers solely on equity grounds.

Although it is very difficult to quantify the efficiency implications of the TAA program, the results of the Mathematica survey do not support the notion that TAA has encouraged much labor market adjustment. As table 5.2 shows, only a small fraction of TAA recipients actually changed jobs. Most workers returned to their old employer and frequently to their former job. By the time they were interviewed, Mathematica found that 16 percent of TAA recipients had left their industry and 25 percent had changed occupations (vs. 31 percent and 39 percent of the UI control group). Correspondingly, very few TAA recipients utilized the adjustment provisions of the program. Only 6 percent of TAA recipients received training versus 12 percent of the UI group.14

There is evidence from both the Neumann and Glyde and the Mathematica surveys that the higher wage replacement ratio for TAA recipients has lead to longer duration of unemployment. Neumann and Glyde found that a ten percentage point increase in the gross (pretax) wage replacement ratio induced a 3-3.5 week increase in unemployment duration. This estimate is very large relative to studies of UI recipients, where the normal range of estimates is between .5 and 1.0 weeks per ten-point increase in the replacement ratio. Mathematica's estimate of the impact of a ten-point increase in the net (posttax) wage replacement ratio was roughly 1.8 weeks for TAA recipients.

Thus far no one has been able to explain satisfactorily the high estimates of the impact of changes in wage replacement ratios for TAA recipients relative to UI recipients. One possible explanation is that, since the TAA component of the wage replacement ratio is not experience rated, firms may use TAA to finance temporary layoffs. As discussed earlier, TAA may encourage temporary layoffs by reducing the

Table 5.1

Occupational and Demographic Characteristics of Trade-Sensitive Workers

	1962 TAA	A Program		1974 TAA Program				
Balea	McCarthy ^b	Neuman	Neumann/Glyde ^c		maticad	Aho/Orre		
TAA Recipients	TAA Recipients	TAA Recipients	UI Recipients	TAA Recipients	UI Recipients	Import- Sensitive	Manufacturing Average	
424	191	309	115	590	276	NA	NA	
1972	1973	1975	1975	1978–79	1978–79	1970	1970	
44	53.7	46.0	38.4	39.9	35.9	NA	NA	
NA	55.0	NA	NA	38.0	31.0	NA	NA	
NA	2.5	NA		13.3	27.9	15.8	16.4	
NA	54.5	NA		15.5	13.1	28.0	26.5	
91	99	86.9	78.2	82.9	80.4	88.5	89.9	
9	1	13.1	21.8	17.1	19.7	11.5	10.1	
32.8	21.5	NA	NA	NA	NA	37.1	41.7	
8–9	9.0	10.3	12.6	10.4	11.4	NA	NA	
	TAA Recipients 424 1972 44 NA NA NA 91 9	Bale ^a McCarthy ^b TAA TAA Recipients Recipients 424 191 1972 1973 44 53.7 NA 55.0 NA 2.5 NA 54.5 91 99 9 1 32.8 21.5	TAA TAA TAA Recipients Recipients Recipients 424 191 309 1972 1973 1975 44 53.7 46.0 NA 55.0 NA NA 2.5 NA NA 54.5 NA 91 99 86.9 9 1 13.1 32.8 21.5 NA	Bale ^a McCarthy ^b Neumann/Glyde ^c TAA TAA TAA UI Recipients 424 191 309 115 1972 1973 1975 1975 44 53.7 46.0 38.4 NA 55.0 NA NA NA 2.5 NA NA 54.5 NA 91 99 86.9 78.2 9 1 13.1 21.8 32.8 21.5 NA NA	Bale ^a McCarthy ^b Neumann/Glyde ^c Mathe TAA TAA TAA UI TAA Recipients Recipients Recipients Recipients 424 191 309 115 590 1972 1973 1975 1975 1978–79 44 53.7 46.0 38.4 39.9 NA 55.0 NA NA 38.0 NA 2.5 NA 13.3 NA 54.5 NA 15.5 91 99 86.9 78.2 82.9 9 1 13.1 21.8 17.1 32.8 21.5 NA NA NA	Bale ^a McCarthy ^b Neumann/Glyde ^c Mathematica ^d TAA TAA TAA UI TAA UI Recipients Recipients Recipients Recipients Recipients 424 191 309 115 590 276 1972 1973 1975 1975 1978–79 1978–79 44 53.7 46.0 38.4 39.9 35.9 NA 55.0 NA NA 38.0 31.0 NA 2.5 NA 13.3 27.9 NA 54.5 NA 15.5 13.1 91 99 86.9 78.2 82.9 80.4 9 1 13.1 21.8 17.1 19.7 32.8 21.5 NA NA NA NA	Bale ^a McCarthy ^b Neumann/Glyde ^c Mathematica ^d A TAA TAA TAA UI TAA UI Import-Sensitive 424 191 309 115 590 276 NA 1972 1973 1975 1975 1978-79 1978-79 1970 44 53.7 46.0 38.4 39.9 35.9 NA NA 55.0 NA NA 38.0 31.0 NA NA 2.5 NA 13.3 27.9 15.8 NA 54.5 NA 15.5 13.1 28.0 91 99 86.9 78.2 82.9 80.4 88.5 9 1 13.1 21.8 17.1 19.7 11.5 32.8 21.5 NA NA NA NA NA 37.1	

Married (%)	NA	NA	84.8	67.8	79	68.1	NA	NA
Sex (%)								
male	51	71	57.6	64.3	61.5	64.5	48.9	70.6
female	49	29	42.4	35.7	38.5	35.5	41.1	29.4
Union (%)	NA	NA	78.5	43.5	81,3	65.8	51.3	49.0
Job tenure mean (years)	10.6	13	17.7	5.6	11,8	7.8	NA	NA
Households with income below the poverty level (%)	NA	NA	NA	NA	1.9	3.7	9.8	7.0
Skilled			- 0 (
workers (%)	NA	15.1	20.6	35.6	26.7	38.4	38.8	50.0

Sources:

^aMalcolm Bale, "Adjustment to Freer Trade: An Analysis of the Adjustment Assistance Provisions of the Trade Act of 1962," report prepared under

contract from the U.S. Department of Labor, 1973.

bJames McCarthy, "Trade Adjustment Assistance: A Case Study of the Shoe Industry in Massachusetts," report prepared under contract from the U.S.

Department of Labor, 1974.

*George Neumann and Gerald Glyde, "The Labor Market Consequences of Trade Displacement: Evidence from the Trade Adjustment Assistance

[&]quot;George Neumann and Gerald Glyde, "The Labor Market Consequences of Trade Displacement: Evidence from the Trade Adjustment Assistan Program of 1962," report prepared under contract from the U.S. Department of Labor, 1978.

^dWalter Corson, et al., "Final Report: Survey of Trade Adjustment Assistance Recipients" report prepared by Mathematica Policy Research, Inc., under contract from the Office of Foreign Economic Research, U.S. Department of Labor, 1979.

eC. M. Aho and J. Orr, "Trade Sensitive Employment: Who Are the Affected Workers?" Monthly Labor Review, (Feb. 1981): 29-35.

Table 5.2 Adjustment Experiences of TAA Recipients

							1974 TAA	Program		
	1962 TAA Program			Mathematica						
	Bale	McCarthy	Neumanı	n/Glyde		TAA			UI	
	TAA	TAA	TAA	UI	New Job	Old Job	All	New Job	Old Job	All
Duration of first spell of unemployment (weeks)	31	18.2	48.7	33.3	41.8	17.4	21.9	32.8	16.3	21.9
2. Workers who changed employers (%)	NA	virtually all	77.9	57.4	_	_	28	_		42
3. Average weekly wage before layoff (\$)	NA	100.40	140.90	132.80	206	228	223	190	198	195
4. Average weekly wage on first job after layoff (\$)	NA	92.64	99.3	109.4	152	249	225	159	219	193
5. Average hourly wage before layoff (\$)	3.02	NA	3.40	3.30	NA	NA	NA	NA	NA	NA
6. Average hourly wage on first job after layoff (\$)	2.68	NA	2.50	2.86	NA	NA	NA	NA	NA	NA

7.	Change in average weekly wage (%)	NA	-7.7	-29.5	- 17.6	-26.2	+9.2	+1.0	-16.3	+ 10.6	-1.0
8.	Change in average hourly wage (%)	-11	NA	-26.9	-13.2	NA	NA	NA	NA	NA	NA
9.	Average earning loss (\$)	3,370- 11,689	NA	NA	NA	(12,200– 12,900)	(1,900– 3,300)	(3,900– 5,200)	(9,800– 11,000)	(1,700– 3,200)	(4,700– 6,100)
10.	Total compensation (\$) TAA UI	2,059 NA NA	2,708 1,072 1,636	NA NA NA	NA NA NA	5,400 2,100 3,300	2,900 1,100 1,800	3,300 1,300 2,000	2,600 — 2,600	1,900 — 1,900	2,200 NA 2,200
11.	Compensation rate (10/9) (%)	61.1–17.6	NA	NA	NA	(44–42)	152–88	(85–64)	(27–24)	(111–60)	(47–36)
12.	Net loss (\$) (9-10)	1,300- 9,600	NA	3,300– 26,300	NA	(6,800– 7,500)	(-1,000 to 400)	(600– 900)	(7,200– 8,400)	(-200 to 1,300)	(2,500– 3,900)
13.	Ratio of weekly TAA and UI to pre-layoff weekly wage (%)	nd NA	NA	63.9	51.6	NA	NA	.61	NA	NA	NA
14.	Received training (%)	3.8	0	15.2	1.7	7	NA	6.4	NA	NA	12.0

4.3

39

NA

5.4

NA

NA

12.0

Sources: See table 5.1.

31.3

NA

19.1

15. Received counseling (%)

Table 5.3 Mean Present Discounted Value of After-Tax Earnings Losses, UI and TAA Benefits, and Net Losses by Industry and Recall Status, TAA Sample (in dollars)

	A	utomobile	,		Steel		Oth	ner Dutiab	les	F	ootwear			Apparel	
	Never Re- called	Ever Re- called	Total												
Earnings losses													_		
Constant real earnings Adjusted real	15,200	2,400	3,600	13,600	2,400	3,100	17,500	0	2,700	10,300	3,700	9,200	10,800	2,100	4,400
earnings ^a	19,100	6,400	7,600	17,600	5,300	6,000	18,500	700	3,400	9,900	3,400	8,800	10,800	2,100	4,400
Benefits															
UI	4,800	2,400	2,600	2,300	2,300	2,300	4,500	1,200	1,700	2,800	2,900	2,800	2,900	800	1,400
TAA	2,400	1,600	1,600	4,100	1,200	1,400	2,400	500	800	1,200	1,000	1,200	2,300	900	1,300
Net loss ^b Constant real															
earnings Adjusted real	8,000	-1,600	-600	7,100	-1,100	-600	10,600	-1,600	200	6,200	-200	5,200	5,600	400	1,800
earnings ^a	12,000	2,400	3,300	11,000	1,700	2,300	11,600	-900	1,000	5,900	-500	4,800	5,600	400	1,800
Sample size	17	160	177	8	132	140	15	84	99	30	6	36	55	149	204

under contract from the Office of Foreign Economic Research, U.S. Department of Labor, 1979.

^aAdjusted by industry for changes in mean weekly earnings and for the effect of increased job experience.

Source: Walter Corson, et al., "First Report: Survey of Trade Adjustment Assistance Recipients, report prepared by Mathematica Policy Research, Inc.,

[&]quot;Adjusted by industry for changes in mean weekly earnings and for the effect of increased job experience."

bThe net loss equals the earnings loss minus UI and TAA benefits. It excludes supplemental unemployment benefits (SUB) received by some workers. These benefits were received by 81 percent of the automobile workers, 65 percent of the steel workers, and 26 percent of workers in others durables. Workers who received SUB received an average of \$1,200 and paid back an average of \$590 to the SUB funds after receipt of TAA. Workers in the steel industry were not required to return portions of their SUB payments, while most automobile (85 percent) and other durable goods workers (60 percent) did.

firms' need to hoard labor during cyclical and seasonal changes in output because TAA benefits increase worker attachment to the firm. Preliminary results from a study by Utgoff (1982) for the Department of Labor tend to support this hypothesis.

While extended duration in the case of temporary displacement is certainly a social cost, extended duration for permanent layoffs need not be a social loss if it results in higher subsequent earnings or less employment variability. The evidence for TAA recipients is mixed. Neumann and Glyde found a significant positive effect of a higher wage replacement ratio on subsequent wage gains. Mathematica found no statistically significant increase in wages. However, using the Mathematica data, Richardson (1982a) found that the longer duration for TAA recipients may have increased the efficiency of the initial search. His tentative conclusion (based on a relatively small sample of permanently displaced TAA recipients) is that TAA may have reduced the incidence and duration of subsequent spells of unemployment by improving the first match between workers and jobs after receipt of TAA. The evidence from UI research is also mixed. Ehrenberg and Oaxaca (1976) found an earnings gain, while Classen (1977) did not.

Overall, it appears unlikely that the current TAA program has resulted in significant efficiency gains in terms of promoting labor market adjustment to changes in trade. In large part this is because very few TAA beneficiaries were permanently displaced, at least until recently. There is some reason to believe that many of the auto workers currently receiving TAA are on permanent layoff and that they will use more of the adjustment assistance provisions of the program than earlier TAA recipients.

The political rationale for the TAA program is that it is an important element of U.S. commercial policy. In the trade policy context, TAA can be viewed as a "political buy-out"—it both reduces opposition to free trade policies by lowering the adjustment costs of the potential "losers" and provides policymakers with an attractive alternative option, intermediate between protection and no import relief. Admittedly, the evidence to support this proposition is anecdotal: it is very difficult to know what policymakers would have done in the absence of the program. In an earlier paper (Aho and Bayard 1980) we presented some of the evidence for the political gains from TAA, and these are reviewed here.

It is probably not a coincidence that the 1962 and 1974 TAA programs were components of legislation authorizing U.S. participation in the Kennedy and Tokyo Rounds of the MTN. Indeed, in the 1950s and early 1960s labor leaders supported free trade policies and urged adoption of adjustment assistance programs to gain worker support for trade liberalization. By 1970 most labor unions had shifted to a position opposing free trade and in support of legislation like the Burke-Hartke bill which would have rolled back U.S. imports to 1965–69 levels.¹⁵

Bergsten (1972, 703) has argued that one of the major administration motives for seeking legislative authority for U.S. participation in the Tokyo Round was the desire to preempt legislation like Burke-Hartke. The Trade Act of 1974 provided both the negotiating authority for the Tokyo Round and the provisions of the new TAA program. In large part, the linking of TAA with the trade negotiations may have reflected the recognition that organized labor had the political power to impede, if not thwart, the negotiations. While many labor leaders were skeptical and sometimes hostile to TAA by the 1970s (it was often described as "burial insurance"), by reducing the potential costs of trade liberalization, the expanded TAA program embodied in the 1974 trade act may have served as a "sweetener" (as Robert Strauss, the U.S. Special Trade Representative, used to call concessions to interest groups) to help reduce labor's concerns about the negotiations.

However, the causal linkage of TAA to the MTN does not necessarily imply that it was a quid pro quo for labor's acquiescence to either U.S. participation in the Tokyo Round or the final trade package negotiated. At the time the MTN agreements were presented to Congress for ratification, legislation was also introduced (but never passed) to expand the TAA program. Only at the time did labor insist that TAA was "an important adjunct to the MTN package" and that it represented "a trade-off... for government action to further trade liberalization."

It may be that the lack of explicit linkage in 1974 and the introduction of that linkage by 1979 were tactical moves by labor to secure greater influence over both the actual trade negotiations and the scope of the TAA program. Similar considerations may have led Kirkland (1981) to label the subsequent TAA budget cuts as "another broken promise to those who pay the price of trade liberalization."

The strongest evidence that TAA played a role in the MTN is at best circumstantial: the surprising lack of labor opposition to passage of the MTN package. The Trade Agreements Act of 1979 implementing the Tokyo Round agreements was ratified by overwhelming votes of 395 to 7 in the House and 90 to 4 in the Senate. However, the fragility of political support for freer trade, and the linkage between TAA and a liberal trade policy, was noted by Representative Charles Vanik (former chairman of the Subcommittee on Trade) in arguing for an expanded TAA program: "Trade support on the Hill is fragile—there are 100 members of Congress who don't believe in trading with anybody. A majority in opposition to free trade can be achieved if labor is alienated." (Barrons, 5 May 1980).

Table 5.4 provides a survey of various estimates of the welfare gains from the MTN. The estimates range from \$130 to \$900 million annually. These are static estimates. They do not include the potentially large dynamic gains from freer trade. The estimates also pertain only to the effects of the tariff cuts, which were themselves only a small part of the

MTN. Most of the negotiations involved codes of conduct on nontariff measures. If they are fully implemented and enforced, these codes could also result in significant welfare gains. Thus the total welfare gains from the Tokyo Round could be several times the estimates shown in table 5.4, and we would argue that at least some of these gains can be attributed to TAA.

The assumption in all of this is that a liberal adjustment assistance program can be used to gain political support for liberal trade policies and did in fact play an important part in securing congressional support for the Tokyo Round agreements. Moreover, in the absence of a program such as the Tokyo Round negotiations, the United States might have taken two steps backward. Magee's (1972) estimates, adjusted to 1979 dollars, suggest that by 1980 the static welfare loss for the United States of reducing imports to their 1965–69 level, as the Burke-Hartke bill proposed, would have been \$6–11 billion annually. Although this probably overstates the case, even trade restrictions in selected industries can have significant consumer and welfare costs when compared with the administrative costs and the benefit levels of the TAA program.

Table 5.5 gives the welfare and consumer cost estimates for four industries where import relief (that is, increased protection) was recommended by the U.S. International Trade Commission or considered by the Carter administration (automobiles). Although the Trade Act of 1974 also includes an escape clause (section 201) for import relief, the existence of TAA provides the president and Congress with an intermediate option between increased import restrictions and no relief. In each of the four cases shown in table 5.5, the president rejected relief and recommended that expedited adjustment assistance be granted instead.

Table 5.5 shows that even in one of the smaller industries, leather wearing apparel, the estimates of the indefinite annual welfare loss of an additional 25 percent tariff ranged from \$27 to \$60 million, depending on the elasticity assumptions and the degree to which price increases are passed on to the consumer. More significantly for income redistribution, the estimated annual consumer costs were between \$61 and \$135 million. By comparison, if the entire work force in the leather wearing apparel industry were made redundant and received 70 percent of their former wage (say, 20 percent from TAA for the first 26 weeks and the entire 70 percent for the next 26 weeks) for 52 weeks, benefits paid out under the TAA program would have been only about \$21.5 million.

In the more controversial case of automobiles, the annual welfare costs of restricting Japanese imports to 1979 levels (a reduction of some 250,000 units) would range from \$43 to \$55 million. The estimated consumer costs range from \$1–2 billion annually. In announcing his decision not to provide import relief for the automobile industry, President Carter noted that "between this fiscal year and the next, we are

regotiations			
Study	Estimate	Assumptions	Comments
1. Baldwin/Mutti/Richardson ^a	\$129 million	—30% linear cut: excludes textiles —undiscounted 1979 dollars	Based on tariff line detail. Includes adjustment costs.
2. Cline/Kawanabe/Kronsjo/Williams ^b	\$433 million	-30% linear cut;	Basically the same as the

\$770 million

Rough Orders of Magnitude of the Annual Static Welfare Gains from the Tariff Cuts Agreed to in the Multilateral Trade

excludes textiles

products excluded
—undiscounted 1979 dollars

-30% linear cut;

-undiscounted 1979 dollars

developing countries includedtextiles and certain agricultural

Baldwin model. Excludes

Excludes adjustment costs.

adjustment costs.

Table 5.4

3. Magee^c

Negotiations

4. Stern/Deardorff ^d	\$710 million (\$905 million in 1979 dollars)	—undiscounted 1976 dollars —uses actual MTN tariff cuts	Based on tariff averages rather than tariff line detail. Excludes adjustment costs.
5. Bayard/Wipf ^e	\$200–500 million (\$225–638 million in 1979 dollars	 undiscounted 1976 dollars lower est. assumes fixed exchange rates; upper estimate assumes flexible rates. uses actual MTN tariff cuts. 	Basically the Baldwin model. Based on tariff line detail. May overestimate gains because it fails to account for lost quota rents when tariffs are reduced. Excludes adjustment costs.

Note: None of the estimates takes into account the impact of growing trade volumes on the static annual welfare estimates.

Sources:

Baldwin, R. E., J. H. Mutti, and J. D. Richardson, 1980. Welfare effects on the United States of a significant multilateral tariff reduction. *Journal of*

International Economics 10: 405-23.

bW. R. Cline, N. Kawanabe, T. O. M. Kronsjo, and T. Williams, Trade Negotiations in the Tokyo Round, Washington, D.C.: The Brookings Institution,

^oW. R. Cline, N. Kawanabe, T. O. M. Kronsjo, and T. Williams, *Irade Negotiations in the Tokyo Rouna*, wasnington, D.C.: The Brookings Institution 1978. Figure presented was adjusted by Richardson (1979, pp. II.7–10).

°S. P. Magee. "The Welfare Effects of Restrictions on U.S. Trade," *Brookings Papers on Economic Activity*, no. 3 (1972): 645–707. Figure presented was adjusted by Richardson (1979, pp. II.7–10).

^dR. M. Stern, and A. Deardorff, "An Economic Analysis of the Effects of the Tokyo Round of the MTN," report prepared for the Senate Finance Committee, June 1979, p. 64.

eT. Bayard, and L. Wipf, "Trade, Employment, and Welfare Effects of the Tokyo Round Tariff Cuts," paper presented at the American Economic Association meetings, Atlanta, December 1979, p. 8.

Case	Relief Requested	Estimated Annual Consumer Cost	Estimated Annual Welfare Cost	Comments	Workers Certified for TAA	Number of Workers in the Industry ^a
Autos ^b (Spring 1980)	Quota or OMA to restrict Japanese imports to 1979 levels, probably cutting imports by 250,000 units.	\$1–2 billion ^c	\$43–55 million	(Not an escape clause [201] case) In announcing his decision, the president noted that, "between this fiscal year and the next, we are budgeting over a billion dollars extra to provide trade adjustment assistance to tide the	267,236	900,700

auto workers over until new jobs can be provided for them."

Leather wearing apparel ^b (February 1980)	Tariff (25% increase)	\$61–135 million	\$27-60 million	(201 case)	366	3,328
Copper ^b (August 1978)	Value-bracketed tariff (\$.1622 specific)	\$90–1,600 million	\$2-140 million (includes value- bracketed rents)	(201 case) The president noted that a large number of workers in the industry were eligible for and would receive TAA.	69	44,620
Stainless steel flatware ^b (March 1976 and March 1978)	Quota (10,600 thousand dozen units)	\$7.6 million	\$4.8 million	(201 cases)	222	5,521

^aU.S. International Trade Commission Reports on Section 201 of the Trade Act of 1974 cases. Employment data for automobiles are from unpublished Bureau of Labor Statistics data for SIC 3711 and 3714.

^bThe consumer and welfare cost estimates for the 201 cases were pulled from interagency staff calculations and involve a variety of methodologies and assumptions. The welfare estimates for autos are based on the Council of Economic Advisors' assumptions and data.

^cTestimony of George Eads of the Council of Economic Advisors before the House of Representatives, Committee on Ways and Means, Subcommittee on Trade, 18 March 1980.

budgeting over a billion dollars extra to provide trade adjustment assistance to tide the auto workers over until new jobs can be provided for them." To the extent that the existence of the current TAA program makes it easier politically for the president to deny import relief, the program can generate significant welfare gains.

Table 5.6 shows the administrative costs, payments to beneficiaries, and number of beneficiaries in the TAA program since it was liberalized in 1975. In comparing tables 5.4 and 5.6, the sum of administrative costs and payments to workers is clearly far less than the annual static welfare gains from the Tokyo Round tariff cuts alone, at least until 1980. The rise in TAA payments in 1980 was the result of the enormous increase in TAA petitions from automobile workers.¹⁹

On economic efficiency grounds (as opposed to budgetary considerations), it is not appropriate to compare the welfare gains for the nation as a whole with the sum of administrative costs plus beneficiary payments. It is more appropriate to compare these welfare gains with the administrative costs because they alone represent a net use of social resources. The TAA payments represent a transfer and therefore are not a social cost.

5.4 Summary and Conclusions

Any overall evaluation of the TAA program must necessarily be somewhat subjective. In our opinion the political gains of the TAA program, in the form of the welfare benefits of freer trade, are enormous. Whether these political gains outweigh the sum of the administrative costs, induced labor market inefficiencies, and inequities of the program is more a matter of personal opinion than of professional judgment, given the difficulty of evaluating many of the costs of the program. Until the crisis in the auto industry caused a substantial rise in TAA recipients and

Table 5.6	Trade Adjustment Assistance under the Trade Act of 1974:
	Administrative Costs and Benefit Payments (\$ millions)

	Administrative Costs ^a	Benefits Payments	Beneficiaries
1975			
(April-June)	\$2.0	\$0.2	NA
1976 FY	9.3	150.3	46,824
1977 FY	11.5	147.9	137,960
1978 FY	19.5	258.2	156,599
1979 FY ²	18.2	265.0	131,722
1980 FY	29.0	1,630.0	368,265

^aSource: General Accounting Office, Restricting Trade Act Benefits Can Save Millions, 15 January 1980, Washington, D.C.: GPO; and recent budget estimates. Includes federal offices and state employment offices' administrative costs.

expenditures, the annual welfare gains from the MTN alone probably greatly exceeded the sum of TAA administrative costs and beneficiary payments. Taking these beneficiary payments as a maximum estimate of the costs of the program's inequities and inefficiencies, it still appears that there were substantial net benefits from the program, at least until 1980.

The sharp increase in payments in 1980–81 focused the public's and policymakers' attention on the program. Although program costs were expected to fall dramatically by 1982, as the auto industry began to adjust to import competition and higher oil prices, the TAA program was restructured and several modifications were made to attempt to reduce the program's inequities, inefficiencies, and costs. In particular, benefit levels were reduced to UI levels (roughly 50 percent of the average weekly wage) and the combined duration of UI and TAA can not exceed 52 weeks, except for workers receiving training. In addition, the administration proposed a tightening of TAA eligibility requirements so that imports must constitute "a substantial cause" of worker displacement. Substantial cause means a cause that is important and not less important than any other cause. The substantial cause criterion is the same as that used for the escape clause for import relief. Congress initially agreed to tighten eligibility, but later decided to retain the original requirements.

Cumulatively, these changes are likely to both lower TAA expenditures and redress some of the program's inequities and inefficiencies. However, given the trade-offs discussed in this paper, it is likely that these changes also will curtail the program's political effectiveness in reducing the incidence and severity of protectionism.

The program is due to expire on 1 October 1983. In deciding whether to extend, modify, or terminate it, policymakers must weigh the somewhat elusive political benefits of TAA against its more visible (but no less difficult to measure) equity and efficiency costs. It is likely that budgetary considerations also will continue to play a role in policy deliberations. We conclude with two observations that may help to focus the debate over TAA.

The first observation is that, no matter how well-designed the program is, there may always be fundamental trade-offs between the three basic objectives of TAA. Shifts in the program's emphasis toward one objective will often reduce its effectiveness in one or more of its other functions. Much of the evolution of TAA since 1962 can be traced to shifts in policy objectives (Richardson 1982b). The original TAA program was primarily oriented toward equity and (to a lesser extent) efficiency considerations. The relaxation of eligibility criteria (first in 1970 and again in 1974) and the increase in compensation levels reflected growing concern about political opposition to traditional free trade policy. The recent revisions lowering benefits were designed to redress perceived inequities and inefficiencies and to reduce expenditures.

Although our purpose here is not to make detailed suggestions for program reform, three general principles should guide any further changes in the program's emphasis. First, if the program is to be effective in reducing political resistance to U.S. trade policy, and if it is to provide an alternative to protection, the criteria for eligibility should be weaker than those for import relief under the escape clause, and compensation should be somewhat more generous than UI benefits. Second, if equity considerations are to be emphasized, the program should focus on the problems of permanently displaced workers, since they tend to suffer the largest losses. Third, if efficiency considerations dominate, the program should experiment with combinations of cash compensation and services to promote adjustment, and the TAA component of compensation should be at least partly experience rated to reduce disincentive effects.

The second observation is that the program's objectives and desirability should also be evaluated in the context of prospective U.S. trade policy and problems in the 1980s. Earlier it was suggested that trade and trade-related adjustment problems will become increasingly important in this decade. The United States is also considering the possibility of new multilateral trade negotiations to stem the proliferation of trade distortions both here and abroad.

These considerations suggest the need to maintain the domestic political consensus in support of free trade. As Martin Wolf (1979, 7) has noted, "the key aim of any adjustment policy is to make acceptance of the particular change more politically feasible, and all alternatives have to be evaluated in this light." If the alternative to TAA is increased protectionism, the fundamental issue is whether TAA's political contribution to American trade policy will be sufficient to justify its existence.

Notes

1. The TAA program established in the Trade Act of 1974 provided cash payments, training, employment services, and job search and relocation allowances to workers certified by the secretary of labor as having been laid off or forced to work reduced hours because of imports. Cash payments are administered through state unemployment compensation programs and, combined with state unemployment compensation payments, were equal to up to 70 percent of the average wage in manufacturing. Benefits were available for 52 weeks, with an additional 26 weeks available for workers who received training or who were over 60 years old. The Trade Act of 1974 significantly eased the criteria for eligibility established under the Trade Expansion Act of 1962. The 1962 act stipulated that the single most important cause of worker displacement had to be an increase in imports resulting from a tariff reduction. In contrast, under the 1974 act the connection between increased imports and a tariff reduction was completely severed and, in addition, imports need only have "contributed importantly" to worker displacement, where "contributed importantly" is defined as a cause that is important but not necessarily more important than

any other cause. For a detailed discussion of the history of TAA in the United States, see Frank (1977) and Diebold (1972, 151–54). Some of the problems with the program were reported on the front pages of the Washington Post (9 April 1980) and the New York Times (21 April 1980). Major articles on TAA also appeared in Barrons (5 May 1980), the National Journal (10 May 1980), and the Washington Post (10 February 1981). The program was modified in the Budget Reconciliation Act of 1981. These changes are discussed in section 5.4.

- 2. Diamond (1982) points out that the government might want to use categorical programs to affect the income distribution because of economic and political limitations associated with progressive income taxation. Akerlof (1978) has shown that categorical programs effecting a desired change in the income distribution may be more efficient than general programs because a categorical program will generally introduce smaller disincentive effects into the economy as a whole.
- 3. Corson et al. (1979, table II-1, p. 17; table II-2, p. 21). TAA recipients tended to be somewhat older, less educated, and to have longer tenure than UI recipients in the Mathematica survey. These differences are more pronounced when permanently displaced TAA and UI recipients are compared. Of course, this begs the question of whether current TAA recipients are necessarily representative of trade-displaced workers.
- 4. Corson et al. (1979, table VI-3, p. 143). However, permanently displaced TAA recipients tended to have somewhat greater losses than permanently displaced UI recipients.
- 5. It should be recognized that some wage/price rigidity is optimal in the sense that the transactions and information costs of continuously adjusting wages and prices exceed the gains. In some cases, workers may be willing to accept some short-run unemployment due to cyclical or seasonal shifts in demand knowing that the probability of recall is high. In these cases, neither firms nor workers may desire to adjust wages or prices in response to short-run fluctuations. In these cases, there is no equity or efficiency basis for either compensation or adjustment services because the existing wage structure presumably already compensates workers for the risk of short-term unemployment.
- 6. We owe this argument to Harry Gilman who pointed out to us that most of the cost of acquiring human capital is the income foregone while in training. The argument does not apply to expenditures on school tuition, etc., which are not depreciated under the tax laws unless they are used to improve existing skills or are a requirement of the existing job. See also Becker (1975, 22–24) and Boskin (1975).
- 7. Corson et al. (1979). Many of the TAA recipients in 1979–82 in the automobile industry may be permanently displaced. The Mathematica survey found that 81 percent of TAA recipients expected to be recalled (vs. 73 percent of UI recipients in manufacturing) and that 72 percent were actually recalled (vs. 58 percent for UI recipients in manufacturing). Mathematica also found that the earnings losses of permanently displaced TAA recipients were somewhat higher than the losses of permanently displaced UI recipients (see table VI-3, p. 143 in Corson et al. (1979).
- 8. Under the 1962 act, no workers were certified eligible for TAA until 1969. Between 1970 and 1974 about 47,000 workers received \$69 million in benefits. See Bayard and Orr (1979) for a comparison of the 1962 and 1974 TAA programs. Bale's (1973) study of the 1962 program was completed while the provisions of the new program were under discussion, but it is not clear that his report was considered by the drafters of the 1974 legislation. Bale's study tended to support the notion that trade-displaced workers experienced high adjustment costs. See also Bale (1976).
- 9. This discussion ignores second-best considerations. Freer trade is assumed to be welfare improving, even though relaxing some distortions in the presence of others that are unchanged is not necessarily socially beneficial. Although some of the calculations presented in the next section are made in a general equilibrium framework, at best they

incorporate only the most readily quantifiable effects, such as terms of trade changes under flexible exchange rates.

- 10. An exception is Glenday, Jenkins, and Evans (1980) who adjust their calculations both for the value of leisure and for the distortion in wages caused by trade restrictions.
- 11. Several industries have supplemental unemployment benefits (SUB) as part of their wage package. In some, like the auto industry, TAA payments are deducted from SUB if the layoff is temporary. In others, like the steel industry, TAA is in addition to SUB.
- 12. The 1974 trade act stipulated that all TAA payments and administrative costs were to be funded out of customs revenues, but this provision was never implemented. Regardless of the source of funding, if TAA payments are incremental to other government expenditures and require a higher deficit or higher taxes, there are efficiency costs of raising the funds.
- 13. A variety of methodologies are used in the studies reported in table 5.2 to estimate earnings losses. Conceptually, the appropriate concept is "lifetime earnings losses" composed of the loss caused by the initial spell of unemployment, the lifetime losses resulting from a loss of firm-specific human capital and union rents, and losses from the instability of future employment because of the loss of seniority. See Jacobson and Thomason (1979) and Gilman (1979). The Mathematica (Corson et al. 1979) estimates are based on the losses incurred in the first three years after the initial layoff.
- 14. The training and other adjustment provisions for TAA recipients were never fully funded. Although the Trade Act of 1974 established a trust to be funded from tariff revenues, it has never been implemented. In the past, training has been funded out of miscellaneous funds, including the secretary of labor's discretionary funds under Title III of the Comprehensive Employment and Training Act. With the increased demand for training during the fiscal year 1980, however, the \$12 million allocated was exhausted during the first quarter.
- 15. The criteria for eligibility under the 1962 act were quite stringent and no workers were certified for TAA until 1970. There is no clear connection with the shift in union attitudes, but in 1970 the eligibility criteria for TAA under the 1962 act were relaxed and 47,000 workers eventually received benefits.
- 16. Bayard and Orr (1982) hypothesized that actual receipt or a high probability of receipt of TAA benefits during the MTN negotiations (1975–79) would have tended to reduce lobbying against tariff cuts. However, their preliminary results suggest no significant relationship between TAA expenditures and the tariff reductions.
- 17. See Senate Committee of Finance, Subcommittee on International Trade, Hearings on the Trade Adjustment Assistance Act, 9 July 1979. 96th Congress, 1st Session. The quotations are from the testimony of John Sheehan, Legislative Director of the United Steelworkers, pp. 84, 166.
- 18. The welfare estimates do not include the quota rents that might accrue to Japanese exporters. If these were included, the welfare costs could be \$1-2 billion annually, given the Council of Economic Advisors' assumptions. In May 1981 the Japanese government announced a cutback of auto exports of 140,000 units. Internal Department of Labor estimates are that the welfare costs could be as high as \$220 million (depending on the beneficiaries of the quota rents) in the first year of export restraints.
- 19. The budget overruns caused by the massive layoffs in the automobile industry gave impetus to a reappraisal of the costs and benefits of the TAA program. In fiscal year 1980 \$381 million was budgeted for TAA compared with actual expenditures of \$1,630 million. It can be argued that the budget overruns reflect a crisis in the industry rather than a major failure of the program.

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Comment J. David Richardson

This is a fine survey and updating of the U.S. experiment with Trade Adjustment Assistance (TAA) over the past twenty years. It does a great service by tabulating quantitative results from other studies on a comparable basis and by assessing often-neglected administrative costs of the TAA program. Many sensible suggestions are given, some implicit, some explicit, for restructuring TAA to better meet its multiple goals.

I have a few differences in emphasis. One is that I think the authors still sell short the benefits of the TAA experiment. For example, they recognize its political efficacy but do not sufficiently acknowledge its role as catalyst in the congressional passage of the Trade Expansion Act of 1962 and the Trade Act of 1974. Since these laws led to the two deepest and most liberalizing rounds of trade agreements in the postwar period, at least some of the benefits from these agreements should properly be attributed to TAA. Or, while the authors acknowledge that TAA and its 1974 revisions encouraged organized labor to support the Kennedy and Tokyo Rounds, they might have pointed out that it also encouraged "organized capital" to support these initiatives. TAA was viewed by many firms in 1962 as the guid pro guo for escape clause action. Also, while acknowledging TAA's potential as a "diagnostic signal" for workers and firms to adjust, it is worth adding that it did so without itself distorting or weakening any of the natural market signals to adjust (prices, profits, market shares, etc.). Finally, I believe that the authors should give more than just one line to the way TAA encouraged growth in U.S. trade, especially with developing countries, by being a substitute for trade barriers that are all the more tempting to use against those without credible retaliation.

To the authors' suggestions for restructuring TAA, I would add: extension of existing U.S. employment subsidy programs, such as targeted job credits, to workers certified as having been permanently (not temporarily) displaced by trade; self-financing and voluntary loan/insurance programs for the same kind of worker to underwrite retraining and perhaps relocating; and conditional extension of unemployment benefits

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beyond normal for trade-displaced workers—conditional, for example, on employed workers and firms bearing some sizeable portion of the extra financial burden through negotiated "cost sharing."

Otherwise I take issue with the authors in only one important matter. Most studies of TAA experience find that workers who are permanently displaced by trade suffer more severe adjustment problems and earnings losses than other permanently displaced workers. The authors consign a semblance of that observation to their note 4, while saying in the text that "TAA recipients in general do not have higher earnings losses." Yet the text's conclusion characterizes only the study by Corson et al. (1979) and obviously reflects the high proportion of temporarily displaced TAA recipients in that study. That conclusion does not do justice to earlier studies, nor to the legitimate equity goal of TAA. That goal may indeed have been perverted in the early 1980s, but its usual legitimacy for permanently displaced workers has not been undermined as deeply as the authors suggest.

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