GOVERNMENT POLICIES TO INDUCE EFFICIENT RETRAINING DECISIONS

Velma Montoya/Thompson
The Rand Paper Series

Papers are issued by The Rand Corporation as a service to its professional staff. Their purpose is to facilitate the exchange of ideas among those who share the author's research interests. Papers are not reports prepared in fulfillment of Rand's contracts or grants. Views expressed in a Paper are the author's own, and are not necessarily shared by Rand or its research sponsors.

The Rand Corporation
Santa Monica, California 90406
ABSTRACT

This Paper focuses upon the government's role in retraining unemployed workers during nonrecession periods. To do so, two kinds of deviations from the ideal competitive world of economics are considered. Each deviation leads to economically inefficient retraining decisions and calls for a special kind of government policy to induce efficient retraining decisions. The first deviation supports the suggestion that the government extend unemployment compensation to recently unemployed men and women who retrain rather than search to gain new employment. Improving the allocation between search and retraining has the added feature of reducing the unemployment rate as conventionally measured in the United States. The second deviation supports the government's current subsidization of college-level retraining for middle-class women who are considering entering the labor force after rearing their children.

(For the Compendium entitled "American Women Workers in a Full Employment Economy," to be published by the Joint Economic Committee of the U.S. Congress.)
GOVERNMENT POLICIES TO INDUCE EFFICIENT RETRAINING DECISIONS

By

Velma Montoya Thompson

This Paper discusses the government's possible role in the retraining of unemployed workers during nonrecession periods. Should the government provide unemployment compensation for workers during retraining? Should it subsidize retraining of mature women, who are found more and more on U.S. college and university campuses? To address these two questions, two kinds of deviations from the ideal competitive world of economics are considered. Each deviation leads to economically inefficient (that is, "Pareto nonoptimal") retraining decisions and calls for a special kind of government policy to induce efficient retraining decisions. In the first deviation, workers have systematically incorrect foresight about future job opportunities. Although the deviation is discussed in the economics literature and leads to the modern theory of unemployment, it has not been applied to an environment admitting the phenomenon of retraining. This paper extends the deviation to such an environment and reveals that there is a bias in the current U.S. unemployment compensation system toward job search activities but against retraining. This bias has created an overly large rate of unemployment in normal times, and can be corrected by extending our unemployment compensation system to support worker retraining as well as job search. The option of retraining generally is not available to individuals who are collecting unemployment compensation in the United States.

*Staff Economist, The Rand Corporation. I wish to thank Tony Pascal, Marta Samulion, and Joanne Wuchitech for helpful comments on a previous draft of this paper.
The second part of this paper examines a situation in which parents have no property rights in their grown children. A result of this deviation is that certain kinds of parents will devote fewer resources to child-rearing than is socially optimal. As in the case of the first deviation, the literature on this one has not been applied to an environment allowing parental retraining, nor has it considered the effect of the possibility of retraining on optimal government policies in response to the deviation. Our consideration of this effect suggests the efficiency of retraining subsidies to certain mature women. Such subsidies are already observed in some government programs, principally the more than 500 continuing education programs for women on U.S. college and university campuses. The number of these programs on U.S. campuses grew recently from almost none to over 500 in a little more than ten years.

Studies of women's continuing education programs have been largely descriptive. They show, for example, that the programs provide college-level educational programs for urban, middle-class, mature housewives after a fairly long period of child-rearing (Rice, 1975); these programs provide counseling and retraining opportunities for women considering entering or re-entering the labor force (Women's Bureau, 1974); and women enrolled in adult and continuing education programs have become the fastest-growing group of students (Loring, 1975), their participation often facilitated by governmental subsidies to the sponsoring institutions.¹ The absence of seed money for many of the current women's programs.

¹For example, Title 1 of the U.S. Higher Education Act of 1965 provided seed money for many of the current women's programs.
of analysis and evaluation of continuing education programs for women is lamented by many authors (Women's Bureau, 1974).

On the prescriptive side, the authors of these studies discuss mainly the relative merits of ways to maximize enrollment of women in continuing education programs for a given budget—flexible transfer of credits, flexible class scheduling, provisions for part-time study, financial aid, credit for nonclassroom learning, availability of child-care facilities, and a women's center on campus. They come to no definitive conclusions regarding these methods. Although the authors of these studies have chosen topics of great concern to those involved in existing continuing education programs—and most of the authors are administrators of these programs—they do not attempt to provide government policymakers with a general prescriptive guide sufficient to determine when, if ever, the government should support such programs.

In contrast, we look at the government's socially efficient role with respect to continuing education programs for mature women. The positive value of the public provision of vocational counseling for mature women is rationalized elsewhere (V. Thompson, 1975). Briefly, private employment agencies, which habitually collect only when they find a specific job for a client, will not provide efficient information services. They normally are unable to capture the private returns to these services. A woman who is considering re-entering the labor market after a substantial interruption in employment wants a lot of general information—for example, about her range of job opportunities

---

2One reason is that their surveys fail to induce participants to reveal the relative economic values of the methods to them.
and how to conduct herself in job interviews. Once she acquires this information, she normally can find a job or retraining program on her own, without the specialized help of a private employment agency. If a private employment agency were to attempt to sell its information directly as a counseling service, it would have little incentive to produce the efficient information, because its receipts would then not be tied to the quality of its information. Knowing that, its customers would not be willing to pay much for its information.

In this paper, we focus upon the issue of the government's subsidization of retraining for mature women. Our answer constitutes an attempt to evaluate the recent increase in such subsidies and to provide direction for this policy.
I. RETRAINING AND THE FRICTIONALLY UNEMPLOYED

Paradoxical as it may seem, a positive level of labor unemployment is consistent with efficiency in a free-market economy. To clarify this point and relate it to the proper role of government requires a brief discussion of the nature of labor unemployment. (For more thorough discussions, see Alchian and Allen, 1972; Lucas, 1972; and E. Thompson, 1974.)

Suppose an employer experiences a decrease in demand for his product, so that he lowers what otherwise would have been his wage offers to his existing employees. Two distinct kinds of demand decreases could lead an employer to reduce his wage offers; one is an inter-firm shift in demand, and the other is a decrease in economy-wide, or aggregate, demand. Frictional unemployment is caused by shifts in inter-firm demands for labor. Although aggregate demand over all goods may remain steady, the demands for some goods fall while demands for others increase. For example, changes in consumer tastes often change the relative values of each type of labor in various uses. People whose services fall in value must either accept lower wages or shift to other jobs. When there is a relative shift in demand away from the goods of a certain firm, some of that firm's workers should accept the lower wage offer. Others should initiate a period of search for the best alternative job or retrain for another job rather than accept a lower wage. The workers in the firms enjoying higher demands should stay put. Those who decide to search
during these responses are said to be frictionally unemployed.

Aggregate-demand-deficiency unemployment occurs when there is a general decrease in demand for all goods. Workers should not search or retrain for new jobs because of a downward shift in aggregate demand, but many do so. These workers refuse to accept the lower wage offers in their existing jobs because they believe, erroneously, that other employers have not also reduced their wage offers below the normal trend level. That is, the workers erroneously believe that the aggregative shift is an inter-firm shift in demand. There would be no such inefficient unemployment if workers were correct about the general level of wages. When workers are correct in their assessments of the general wage level, the economy is termed a "full employment" economy. Of course, even in a full employment economy, there may be a positive, optimal level of labor unemployment. Relative demands for various products will continue to change with changing tastes, new products, etc. Such unemployment is all frictional.

In any economy prone to occasional unemployment due to deficiencies in aggregate demand, the normal level of frictional unemployment will be too low (E. Thompson, 1976). Suppose workers are initially correct about the general level of wages, but there is a shift in relative, or inter-firm, demands for labor. These are called "normal times." Some of the workers in firms that offer lower wages as a result of an inter-firm shift, believing erroneously that the lower offers may be the result of an aggregative shift and therefore that wage offers are lower elsewhere, will undertake too little search or
retraining. But none of the workers who are employed in the firms that are now offering higher wages will quit, even if they believe that the shift may be aggregative. The net result is a group of workers who search or retrain too little during normal times because of their inability to distinguish inter-firm shifts from aggregative shifts. (If workers could distinguish between these two types of shifts, aggregate-demand-deficiency unemployment would never occur.) The net value of resources devoted to search or retraining during normal times is therefore too low. Those workers who should be induced by inter-firm shifts to move away from their current types of jobs erroneously believe that the reduction in their current wage offers may be the result of an economy-wide shift in demand.

During periods of recession, too many people are searching for jobs; during boom periods, too few are. These inefficiencies, because of changes in aggregate demand, are fought, albeit imperfectly, with various governmental monetary and tax policies. But how does one fight the inefficiency associated with frictional unemployment? That is, what economic policy mitigates the free market's overly low rate of frictional unemployment?

Policies to combat this inefficiency would subsidize a worker who is faced with a reduced demand for his services from his current firm to search for his best alternative job or retrain. Such subsidies actually are provided in many modern economies in the forms of

---

During a boom, some of the workers who have suffered decreases in real demands in their current jobs as a result of simultaneous inter-firm shifts are unable to see this because of the increase in overall money wage offers due to the rise in aggregate demand and maintain their current employment rather than efficiently searching and retraining for new jobs.
government-provided unemployment compensation or government-provided retraining subsidies to unemployed workers. However, the latter form is generally not available in the United States. It is available only to those who can productively retrain while remaining eligible for normal unemployment compensation or be accepted in one of the few federally subsidized programs that provide a retraining subsidy. The vast majority of the latter are funded under the Comprehensive Employment and Training Act of 1973, which restricts these programs to low-income and disadvantaged people.

For an efficient rate of frictional unemployment during nonrecessionary times, U.S. government policymakers should subsidize job retraining just as they subsidize job search through the unemployment compensation system. There is no reason why a worker who has suffered a decline in the demand for his services by his existing employer should be subsidized to search for a new job but not to be retrained. The retraining subsidy should be about the same order of magnitude as the job search subsidy provided by the unemployment compensation system. It should support both institutional and on-the-job retraining, and it should be provided to both men and women. Of course, a policy

---

4 E. Thompson (1976) rationalizes the use of unemployment compensation to eliminate the inefficiency but does not discuss the parallel role of retraining.

5 To the extent that workers differ according to who should retrain and who should search, the relative subsidies should differ. For example, suppose young workers are (1) less able to distinguish inter-firm shifts from aggregate demand shifts than older workers, and (2) more concentrated in occupations with a high level of inter-firm shifts relative to aggregate demand shifts than are older workers; then, the retraining subsidy should be larger than the search subsidy.
of retraining subsidies would require a mechanism for determining whether an unemployed person is serious about retraining and whether his or her educational plans make sense in the prevailing economic context; otherwise, some might use the system to take long vacations. For this reason, the public Employment Service should administer the retraining subsidy as it does the job search subsidy.

The effects of this retraining subsidy would be to (1) remove some part of the searching unemployed workers from the labor force as conventionally measured, and (2) add to the employed labor force those who would be attracted by the on-the-job training subsidies. Therefore, moving to this more efficient incentive system would lower the measured unemployment rate.
II. RETRAINING AND THE RE-ENTRY WOMAN

Alfred Marshall observed that parents are insufficiently compensated for their costs incurred in child-rearing. "The worker sells his work, but he himself remains his own property: those who bear the expenses of rearing and educating him receive but very little of the price that is paid for his services in later years" (1920, pp. 560-561). Until recently, economists neglected the implications of an environment where parents have complete authority over their minor children but are not entitled to the increase in future productivity created by their parental decisions.

In such an environment, some parents will capture part of the increase in productivity that their decisions create by (1) overly training their children to be grateful so as to induce transfer payments from the children at a later date and (2) overly training their children toward occupations with high monetary relative to nonmonetary rewards (E. Thompson, 1974). Nevertheless, as originally suggested by Marshall, those parents who have sufficient utility for their children's welfare that they give their children unconditional gifts or inheritances will make efficient child-rearing decisions (1920, pp. 561-562; Rhuter, 1976). In such an environment, a government subsidy to the childhood training of those children whose parents are not wealthy or generous to their children can be rationalized.

For the purpose of analysis, assume that several mothers have a comparative social advantage in raising their children themselves in that they can provide higher quality childhood training than any
alternative child care institution with the same opportunity cost. Further assume that these mothers are not sufficiently rich to expect that they will be able to afford straight monetary gifts to their children when they are grown. Such a mother may well choose to work outside the home while her children are young and leave her children in the care of others despite the reduction in the quality of the children's training. She does not receive the direct benefits of the extra quality her training provides them and cannot afford to treat all of the extra benefits to her children as benefits to herself. That is, because such a mother does not internalize all of the social benefits of her own child care, she may do less than the socially optimal amount of it. This mother gains both her current income and the increase in her work productivity associated with her on-the-job training. The mother who chooses to work outside the home while her children are young can expect a stable, secure level of income after her children are grown. In contrast, the mother who chooses to stay home with her young children enhances the quality of their training over what it would be if she chose outside work but does not have the security of a stable income from work once her children are grown. Although her children and society benefit from her decision, she forgoes both current income and investment in her marketable skills derivable from work outside the home. A large proportion of these

---

6Studies supporting this assumption are described later in this section. Fathers are excluded from this discussion on the basis that time budget data show that mothers' time expenditures on children exceed those by fathers by at least a factor of four (Leibowitz, 1972).
mothers will have an incentive to train their children to be overly grateful to them so as to increase the amount of the adult income that their children will be willing to transfer to them and to overly train their children toward occupations with relatively high monetary rewards.

This analysis implies that nonwealthy mothers, who often have a social comparative advantage in child-rearing but a private incentive to work and hire inferior child care, should be subsidized to stay home while their children are young, and that the subsidy somehow ensure a stable source of income to these mothers once their children are grown. Such a policy would induce such mothers to provide an efficient quantity and quality of childhood training. Training or retraining subsidies to women who have stayed home to raise their own children would go a long way toward fulfilling these requirements. Mothers who can count on future marketable skills are much less likely to overly train their children so as to induce future income transfers from them. Since these women cannot borrow against this form of subsidy when they are younger, they cannot use it to over-consume before their children are grown nor to rely on transfers from their children after those children are grown.

The theory excludes not only wealthy mothers but also mothers with a social comparative disadvantage in child-rearing. A number of mothers with substantially less than a high school education may fall into this latter category, as several recent studies argue that children of the poor are more likely better off in day care because of alleged inadequacies in their homes than are children of wealthier
parents (Fein and Clarke-Stewart, 1973; Prescott, 1974; Rowe, 1971). By the above theory, if a mother has a comparative social disadvantage in training her children relative to alternative child care institutions, then the policy implication is that her children's training outside the home should be subsidized. Each individual mother naturally would retain complete freedom of choice as to the care of her own children.

Even with severe social disadvantages, an individual low-income mother might give her child a quality of care superior to that provided by better-educated but less-devoted mothers. In this case, the above policy is imperfect. Arguments for policies based on generalizations as to behavior within broad social classes must recognize variations in individual personality, background, and circumstance. Thus, the extent, if any, of a perfect subsidy to the training of a poor child outside the home depends upon the mother's comparative disadvantage, if any, in child-rearing.

The group of mothers who are nonwealthy high school graduates pretty much characterizes a group commonly thought of as "middle class." Middle-class mothers in the United States generally are assumed to provide a level of child-rearing superior to that available in any reasonable (in terms of costs) full-time day care alternatives (Prescott, 1973). A recent study compares the experiences of two groups of middle-class children (Prescott, 1973). Each member of the first group received one of several kinds of full-time day care. The second group was primarily cared for at home by their mothers and received part-time nursery school care. The latter group was found
to have had the most opportunities for autonomy and initiative, most opportunities for cognitive engagement, and most supports for self-esteem; adults were most available and useful to this group of children. A recent survey of the current knowledge about child-rearing practices of mothers from different social classes incorporates the child-rearing practices of middle-class mothers in recommendations for "ideal" day care programming (Fein and Clarke-Stewart, 1973). In addition, there are recent indications that (1) the education of the mother is much more important than the education of the father (or IQ of the mother) in determining the child's IQ (e.g., Leibowitz, 1974), and (2) the quantity of time spent in child care by more-educated mothers is greater than for less-educated mothers (Hill and Stafford, 1974; Leibowitz, 1972). Hence, according to the above theory, retraining subsidies at a level beyond high school and toward practical studies are justified.

In general, the size and kind of the subsidy would depend upon the extent of the mother's comparative social advantage, if any, in child-rearing. The subsidy should be such that a woman would decide to forgo all or part of it if her return to outside work while her children are young were greater than her return to her own child-rearing services. Because of the subsidies, these private returns are also the social returns. Each woman would be able to decide the optimal timing of her educational investments according to her preferences and abilities. We do not presume to know the exact preferences and abilities of women, as do some authors in the

Real world policies tend to confirm the implications of this theory. Training and retraining opportunities for urban, middle-class, re-entry women have been increasingly provided with the rapid expansion of continuing education programs for women in the last few years (Women's Bureau, 1974). The opportunities range from information about training and employment possibilities to study toward completion of a baccalaureate degree to training and retraining programs in specific professional fields. Also coincident with this theory is that low-income women have been notably absent from these programs. In addition, the trend to make women's continuing education programs available to men has been reversed since the early 1970's (Campbell, 1973). Government training policies for low-income women, whose child-rearing practices have been found to differ from those of middle-income women (Fein and Clarke-Stewart, 1973), contrast with those for middle-income women. The job training of low-income women while their children are young is subsidized by certain federal manpower programs; at the same time, their children are provided with institutionalized child care. The Work Incentive Program (WIN) is a notable example (Anderson and Perry, 1975). Upper-income women generally are provided no retraining subsidies, and none are called for, since upper-income parents fall into the category of unusually generous parents because they often give gifts or bequests to their children.
Finally, a point that is overlooked in the literature on continuing education for women is that existing government subsidies to the college-level training of mature women are very substantial. One of the ironies of recent years has been the concurrent development of a growing public budget for higher education and a widening chorus of people who see little reason for subsidizing it (Solmon and Taubman, 1973). The only two rationales for such subsidies on which most economists will agree are that (1) private capital for loans for higher education is extremely limited because of the lack of legal responsibility or collateral by minors, and (2) society would have large external economic benefits from the development of a genius who would be otherwise unable to capture the value of his product (Marshall, 1920). Since these justifications apply mainly to young people, there seems to be little rationale for training subsidies to mature women on traditional grounds. This theory provides an economic justification for this significant subsidy.
III. POLICY CONCLUSIONS

In periods of nonrecessionary activity, U. S. government policymakers should subsidize retraining as they subsidize job search by way of the unemployment compensation system. The retraining subsidy to a person who is faced with a reduced demand for his services from his current job should be about the same order of magnitude as the job-search subsidy provided by the unemployment compensation system. The subsidy should support both institutional and on-the-job retraining. And it should be provided to both men and women. The public Employment Service should administer the retraining subsidy as it does the subsidy to job search. An additional return from improving the allocation between search and retraining is the reduction of the unemployment rate as conventionally measured in the United States.

There is an economic rationale for the subsidization of college-level training for middle-class women who have stayed home with their children until the children have reached school age. Without such a subsidy, a large proportion of these women will train their children inefficiently. This rationale also justifies the extension of these opportunities for such women beyond the urban areas where the existing college-level training programs tend to be concentrated.
BIBLIOGRAPHY


