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Unemployment and Economic Welfare

by David Andolfatto and Paul Gomme

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Introduction

Statistics that measure labor market activity, such as employment and unemployment, are often interpreted in the press and by politicians as measures of economic performance and social well-being. Discussions that focus on cross-country comparisons of unemployment, for example, seem to be based without exception on the premise that unemployment represents a social and economic ill, so that less of it is generally to be preferred. The purpose of this note is to demonstrate that some care should be exercised when constructing a map between labor market behavior and economic welfare and that, generally speaking, such interpretations are not justified in the absence of information concerning the economic circumstances that determine individual labor market choices.

I. Some Labor Market Facts

Each month, the Current Population Survey (CPS) assigns the noninstitutional civilian population of the United States to one of three mutually exclusive groups: Employment, Unemployment, or Nonparticipation. The survey begins by determining whether a person is *employed*, which is defined roughly as having allocated *any* time at all toward paid work in the previous week. Those that are not employed in this sense are defined as *nonemployed*. The survey then asks all nonemployed individuals a series of questions designed to detect some minimum level of *active job search*. Those nonemployed individuals that report themselves as having engaged in some minimum level of active job search over the previous week are classified as *unemployed*.[1] The remaining group of nonemployed individuals are classified residually as *nonparticipants*.

Of course, these three classifications are extremely crude. We know, for example, that there is a tremendous amount of variation in hours worked per month across employed individuals. While it is unclear how much time is typically devoted to job search activities, we can safely assume it varies from a few hours per month browsing over help-wanted ads

■ **1** Individuals who report themselves on temporary layoff are also classified as unemployed whether or not they report any search activity. It should be pointed out, however, that these individuals form only a small fraction of the total number of unemployed.

to many hours per month seeking out job opportunities that are well-matched to an individual's attributes.

Concerning the curious category of unemployment, it seems apparent that the CPS (and, indeed, most people) implicitly attaches a great deal of weight to the time used for job search by the nonemployed. Despite the popularity of the unemployment measure among commentators and policymakers, many economists question the usefulness of the concept of unemployment, preferring instead to focus on employment (or nonemployment) and on the allocation of time across other activities, for example, on-the-job search, learning, and household production. It is also interesting to note that many extensive time-use studies, such as those surveyed in Juster and Stafford (1991), do not even include a category for job search, let alone job search conducted by nonemployed individuals. Ultimately, the justification for isolating job search as a crucial activity distinct from the many other competing uses of time among the nonemployed has to be based on the theoretical and empirical relevance of the concept.

Abstracting from seasonal variation, the CPS reveals that net monthly changes in employment and unemployment tend to be relatively small. However, the stability displayed by these stocks masks the very high degree of turnover that exists in the labor market: Each month, literally millions of individuals make transitions between different labor market states. Historically, about 2 percent of the adult workforce in the United States flows into and out of employment every month.[2] Based on current population estimates, this represents approximately 4 million workers either losing or leaving their jobs, and roughly the same number acquiring jobs, resulting in a total turnover of about 8 million workers per month.[3]

A second striking feature of the CPS flows data concerns the degree of mobility displayed by the group of individuals labeled "nonparticipants." Contrary to what one might expect, fully half of the flows into and out of employment are accounted for by individuals making transitions to and from nonparticipation. While nonparticipants are, by definition, not "actively" seeking employment opportunities, this apparently does not preclude the possibility of being available for employment (for example, if called on by a former employer). This feature of labor market behavior calls into question the usefulness of attempting to make a distinction between unemployment and nonparticipation. However, the absolute size of the flows between employment and unemployment are as large as those that occur between employment and nonparticipation. This, together with the fact that the unemployment stock is much smaller than the stock of nonparticipants, implies that the average probability that an unemployed person makes a transition to employment is much higher than the corresponding probability for a nonparticipant. This feature of the data is consistent with the notion that unemployment is a labor market state that facilitates the job-finding process, an interpretation that conflicts with the common textbook perception that "unemployment represents wasted resources."[4]

The remainder of this paper is concerned with developing a simple theoretical framework that might be used to interpret the labor market behavior described above; this interpretive device is then used to determine under what conditions changes in employment and unemployment can be associated with changes in economic welfare. The analysis proceeds in two steps. First, a basic model of employment–nonemployment is developed and analyzed. This model is then extended to incorporate the phenomenon of unemployment.

II. A Simple Model of Worker Turnover

Consider an economy consisting of a fixed number of individuals. Each person has preferences given at each point in time by $U = \ln(c) + z$, where c represents the consumption of market goods and services and z represents the consumption of services produced in the nonmarket sector.[5] Notice that according to this specification of preferences, individuals find it very painful to subsist at very low levels of market consumption; i.e., $U \to -\infty$ as $c \to 0$.

Each person is endowed with an indivisible unit of discretionary time, which may be utilized either in the production of market goods or services (employment) or in some other activity (nonemployment). People generally differ in how their time is valued across alternative uses. Below, we interpret this heterogeneity as emanating from differences in individual

■ **2** See Blanchard (1997, p. 295).

■ **3** These figures actually underestimate the degree of turnover, as they abstract from job-to-job transitions.

■ **4** Mankiw (1994, p. 137).

■ **5** The structure of the economy will be such that myopic decision-making is optimal.

FIGURE 1

The Work Decision

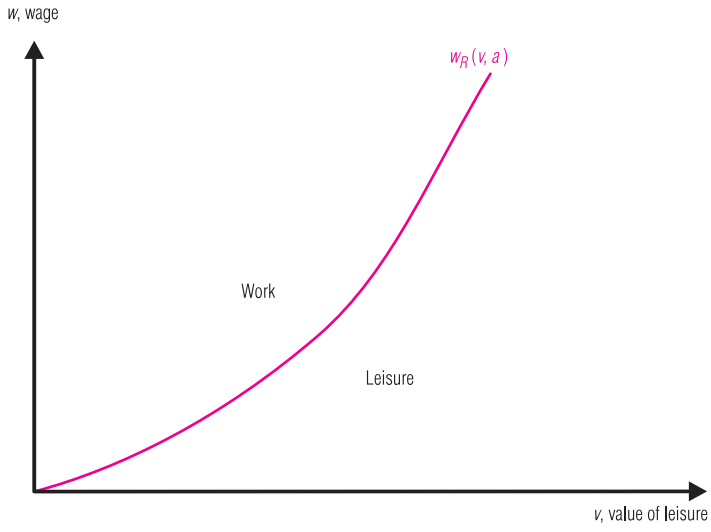
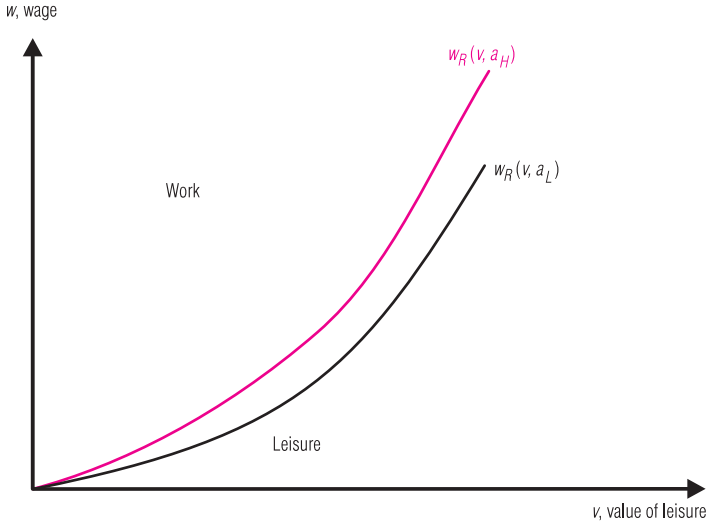


FIGURE 2

The Effect of Nonlabor Income



economic circumstances as summarized by the triplet (w, a, v). Here, w represents the market value of an individual's particular skill (real wage) or, equivalently, the amount of output that can be produced with one unit of labor (productivity). The parameter a represents an individual's nonlabor income, for example, interest income on property, income from a spouse, unemployment insurance, or welfare, charity, and so on. The parameter v represents the value of time allocated to nonmarket activities, for example, home production or leisure.

Generally, we shall think of each of these parameters as differing across individuals at any given point in time as well as changing periodically over time for any one person.[6]

We are interested in modeling an environment where individual labor market transitions are associated with changes in economic well-being, as is likely the case in reality. For this to be true, financial markets must to some extent be incomplete, since otherwise individuals could insure themselves perfectly against any idiosyncratic labor market risk. For simplicity, we assume an extreme form of incompleteness and abstract from financial markets entirely.

In the absence of financial markets, each person faces a simple set of period budget constraints: $c \leq wn + a$ and $z \leq v(1 - n)$, where $n \in \{0,1\}$ represents the time allocation decision. An individual facing economic circumstances (w, a, v) must choose how to best allocate time between employment and nonemployment. The utility payoff associated with employment $(n = 1)$ is given by $\ln(w + a)$, while the utility payoff associated with nonemployment $(n = 0)$ is given by $\ln(a) + v$. Clearly, the individual should choose the action that yields the highest utility payoff.

For a given configuration of (a, v), one can define a *reservation wage* w_R such that any person with an employment opportunity $w \geq w_R$ will choose to work, while any person with an employment opportunity $w < w_R$ will choose some nonmarket activity. The reservation wage is defined to be that wage for which an individual is just indifferent between working or not; i.e., w_R satisfies:

$$(1) \qquad \ln(w_R + a) = \ln(a) + v,$$

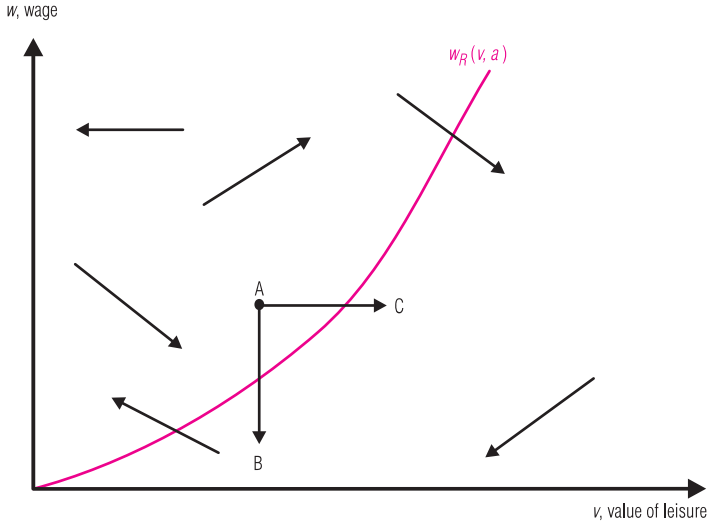
which can be solved explicitly as $w_R = (e^v - 1)a$. Figure 1 plots the reservation wage as a function of v, holding fixed the level of nonlabor income a.

The reservation wage has a very useful economic interpretation. In particular, it can be thought of as representing a person's level of "choosiness" over available job opportunities: A higher reservation wage means that a person is more discriminating. Theory sensibly suggests that a person's level of job-choosiness should depend positively on the level of nonlabor income and on the quality of opportunities in the nonmarket sector. People are more discriminating when they can afford to be. Figure 2

6 In order to maintain the optimality of myopic decision-making, assume that (w, a, v) are identically and independently distributed random variables.

FIGURE 3

Possible Changes in the Value of Leisure and the Wage Rate



plots the reservation wage function for two different levels of nonlabor income $a_H > a_L$.

With the reservation wage so defined, the optimal time allocation decision is given by (see figure 1):

$$(2)\quad n(w, a, v) = \begin{cases} 1 & \text{if } w \geq (e^v - 1)a; \\ 0 & \text{if } w < (e^v - 1)a, \end{cases}$$

with maximum utility given by:

$$(3)\quad W(w, a, v) = \max\{\ln(w + a), \ln(a) + v\}.$$

Theory suggests that an individual is more likely to be employed when w (the return to working) is high, and less likely to be employed when either a or v are high (as these latter variables increase the reservation wage). The welfare function W (also referred to as the indirect utility function) tells us that individual well-being is an increasing function of nonlabor income and a nondecreasing function of both the real wage and the value of time in the nonmarket sector. All of this makes perfect sense. It also implies that *there is no necessary correlation between employment status and economic well-being.*

This assertion holds true at the aggregate level as well. For a theory of aggregate employment, one must describe how the economic attributes (w, a, v) are distributed over individuals. Let $g(w, a, v)$ denote the fraction of the population with attributes (w, a, v). Then aggregate employment is given by:

$$(4)\quad N = \sum_{w,a,v} n(w, a, v)g(w, a, v).$$

Improvements in aggregate economic conditions can be modeled as changes in the distribution function g such that more individuals are concentrated over higher values of w, a, or v. In the first case (higher values of w), aggregate employment can be expected to rise, while in the second and third cases, employment can be expected to fall. In each case, any reasonable measure of social welfare can be expected to increase.

Note that, even in the absence of aggregate uncertainty (i.e., a stationary distribution function g), the equilibrium of this economy will in general feature flows of workers into and out of employment (recall that individuals begin each period by independently drawing a new realization of (w, a, v) from the distribution g). Examples of such transitions are plotted in figure 3. Keep in mind that, because financial markets are absent, these transitions are typically associated with significant changes in personal living standards. Two points deserve to be made here. First, note that one cannot infer any change in personal well-being simply on the basis of an observed change in labor market status. Consider, for example, a person who begins the period at point A in figure 3. Suppose that at the end of the period, we observe that the individual exits employment. Whether this person is better or worse off clearly depends on the change in economic circumstances that triggered the transition. For example, a deterioration in the value of market time (point B) or an improvement in the value of nonmarket activities (point C) may both trigger such a transition. Second, note that these transitions are not the direct cause of any change in living standards; rather they represent the "rational" behavior of individuals in response to exogenous changes in economic circumstances. The following example will illustrate this latter point.

Imagine that individuals in the economy described above differ only with respect to their employment opportunities w and that $w > 0$, so that everyone always has the option of working at a job that produces positive output (note: w may be arbitrarily close to zero so that the opportunity may not be particularly attractive). Let $F(w)$ denote the fraction of workers with a job with a wage no better than w and assume that workers independently draw a new wage every period from the distribution F. Individuals value nonmarket activities identically according to $v > 0$, and we assume that each person has zero nonlabor income; i.e., $a = 0$.

Recall that the reservation wage is given by $w_R = (e^v - 1)a$, so that in this example, $w_R = 0$ since $a = 0$ (people cannot afford to be very choosy here). Since $w > 0$ by assumption, it follows that everyone chooses to work in this economy, and that, consequently, transitions into and out of employment are absent. Judging by these aggregate labor market statistics, the economy appears tranquil (low turnover) and robust (high employment).

However, these statistics hide the fluctuations in individual well-being that occur as people find the return to their labor changing over time. Some individuals may experience precipitous wage declines as the demand for their labor all but disappears (perhaps owing to the arrival of a new technology that is not well-matched to their skills). These unfortunate people refuse to exit from employment (as they arguably should in order to pursue relatively more valuable nonmarket activities such as retraining), since they must work in order to eat; as such, they become a part of the "working poor."

This equilibrium is inefficient relative to one in which insurance markets (or some equivalent institution) operated to alleviate individual income risk. Recall that, at the beginning of each period, an individual draws a new wage according to the distribution F; the expected utility payoff for the representative individual in this world is given by:

$$(5) \quad EU^A = \int_0 \ln(w)dF(w).$$

In addition, note that per capita output is given by $y^A = \int_0 wdF(w)$ with an employment level $N^A = 1$.

Consider now the allocation that would be chosen by a social planner wishing to maximize the expected utility of the representative individual (the same allocation would result in a world with a perfectly functioning insurance market). The social planner must choose a reservation wage w_R that determines who works and who does not, along with a feasible set of consumption levels for the employed y^e and nonemployed y^n. Conditional on these choices, the representative individual has an expected utility payoff given by:

$$(6) \quad EU = [1 - F(w_R)]\ln(y^e) + F(w_R)[\ln(y^n) + v],$$

where $F(w_R)$ represents the probability of nonemployment. Assume that the planner chooses (w_R, y^e, y^n) in order to maximize EU subject to the feasibility constraint (total consumption cannot exceed total output):

$$(7) \quad [1 - F(w_R)]y^e + F(w_R)y^n \leq \int_{w_R} wdF(w).$$

The reader can verify that the solution to this problem entails a reservation wage that is strictly positive, $w_R^* > 0$, together with equal consumption across labor market states, $y^e = y^n = y^* = \int_{w_R^*} wdF(w)$. The expected utility delivered to the representative individual is $EU^* = \ln(y^*) + F(w_R^*)v$. It can be easily demonstrated that $N^* = 1 - F(w_R^*) < N^A$ (employment is lower under the planner), $y^* < y^A$ (output is lower under the planner), and that $EU^* = \ln(y^*) + F(w_R^*)v > EU^A$ (people are better off under the planner). In addition, as time unfolds, note that individuals will generally experience transitions into and out of employment under the allocation chosen by the planner.

The availability of consumption insurance means that people who temporarily find their earnings capabilities severely diminished need not waste valuable time engaged in very low productivity tasks; time can instead be reallocated to more productive nonmarket applications. Employment and market incomes in such an environment are necessarily lower (relative to a situation where everyone is compelled to work), but this does not necessarily imply that economic well-being is lower.

III. Unemployment

Recall that the CPS definition of an unemployed person is someone who is both nonemployed and actively searching for employment. Why are there people in the economy whose economic circumstances are such that they are compelled to spend precious time looking for buyers of labor willing to pay an acceptable price for their particular job skill? It must be the case that people have incomplete information concerning the location of their best job opportunity, and that the job search activity generates information whose expected return exceeds the value of this foregone time spent in alternative activities. Incomplete information of this sort is likely to be a natural feature of any dynamic economy in which changes in the structure of technology and tastes randomly create, destroy, and reallocate employment opportunities across different sectors.

There are several ways in which one might model the job search activity of nonemployed workers. Here, we shall take a particularly simple approach that is in keeping with the

analysis developed earlier.[7] Following the setup above, assume that all individuals have access to some employment opportunity in the market sector. While some readers may view such an assumption as a gross violation of reality, our view is quite the opposite. In particular, note that we do not place any restriction on the *quality* of potential employment opportunities, so that our setup does allow for the possibility that there is a scarcity of what might be considered to be "good" jobs.

As with the earlier analysis, assume that individuals are distributed in some exogenous manner over the space (w, a, v). In that analysis, it was implicitly assumed that individuals had complete information about the location of their best job opportunity (w), so that the job search (and hence unemployment) in that environment proved unnecessary. However, suppose now that while individuals are endowed with a job opportunity w at the beginning of the period, they are generally aware that better (and worse) prospects exist elsewhere. Assume that these prospects p are distributed according to a known distribution $Q(x) = \Pr[p \leq x]$, where $Q' > 0$. Job search is modeled as a random draw from this distribution.

In particular, assume that an individual may divert some given fraction of the period time endowment $0 < (1 - \xi) < 1$ toward job search. (for simplicity, assume that such an action necessitates the abandonment of the beginning-of-period job opportunity). Following this exertion of job search effort, the individual realizes a new job opportunity p from the distribution Q and may at this stage choose to devote any remaining time ξ toward employment or home production activities.

Let us now determine the expected utility payoff associated with the job search decision. Once the new job opportunity is realized, the individual faces a standard employment–nonemployment decision and chooses a reservation wage $p_R(a, v)$ that satisfies:

$$(8) \quad \ln(\xi p_R + a) = \ln(a) + \xi v.$$

If the new employment opportunity offers a wage $p < p_R$, the individual will find it optimal to spend any remaining time at home. With p_R so determined, the expected utility of undertaking the search activity is given by:

$$(9) \quad \lambda(a, v) = Q(p_R)[\ln(a) + \xi v] + \int_{p_R} \ln(\xi p + a) dQ(p).$$

Here, $Q(p_R)$ is the probability that the new job prospect is of an unacceptably low quality, in which case the person earns a utility payoff $[\ln(a) + \xi v]$. The term $dQ(p)$ can be interpreted as the probability of locating a job with wage p, which earns utility payoff $\ln(\xi p + a)$; the second term in the right-hand side of the expression above simply adds up the utility payoff associated with each acceptable job weighted by the probability of finding a job of that particular quality.

In the earlier analysis, which abstracted from unemployment, a reservation wage w_R was determined that partitioned the population into employment and nonemployment; these two groups we shall now refer to as "type-A" and "type-B" individuals, respectively. Think of type-A individuals as those who (given current economic circumstances) prefer work to leisure (i.e., $w > w_R$), while type-B individuals are those who prefer leisure to work (i.e., $w < w_R$).

With the option of job search available, some type-A individuals may now choose to abandon their current employment opportunity in pursuit of a new (and hopefully better) one. The return to work is given by $\ln(w + a)$, while the return to search is given by $\lambda(a, v)$. Clearly, the optimal strategy is to form a reservation wage w'_R satisfying:

$$(10) \quad \ln(w'_R + a) = \lambda(a, v),$$

such that all type-A individuals with $w > w'_R$ should choose to work full-time, while those with $w < w'_R$ should abandon their current employment opportunity in search of another. It can be demonstrated that $w'_R \geq w_R$ for type-A individuals; i.e., the option of a search activity makes these people even more choosy about their beginning-of-period employment opportunity.

Likewise, a group of type-B individuals may now choose to sacrifice some of their leisure time to look for work (i.e., for a wage that dominates their current employment opportunity). As the return to leisure is given by $\ln(a) + v$, the optimal strategy for type-B individuals is to set a reservation "leisure wage" of v_R satisfying:

$$(11) \quad \ln(a) + v_R = \lambda(a, v_R),$$

such that all type-B persons with $v > v_R$ should choose full-time leisure, while those with $v < v_R$ should devote some time to active job search.

■ **7** The model that follows is closely related to that developed by Burdett, Kiefer, Mortensen, and Neumann (1984); and Andolfatto and Gomme (1996).

FIGURE 4

The Search Decision

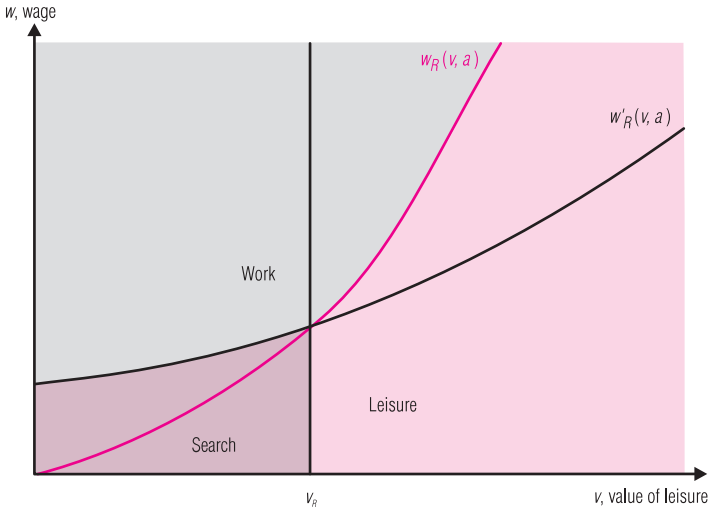


FIGURE 5

The Unemployment Decision

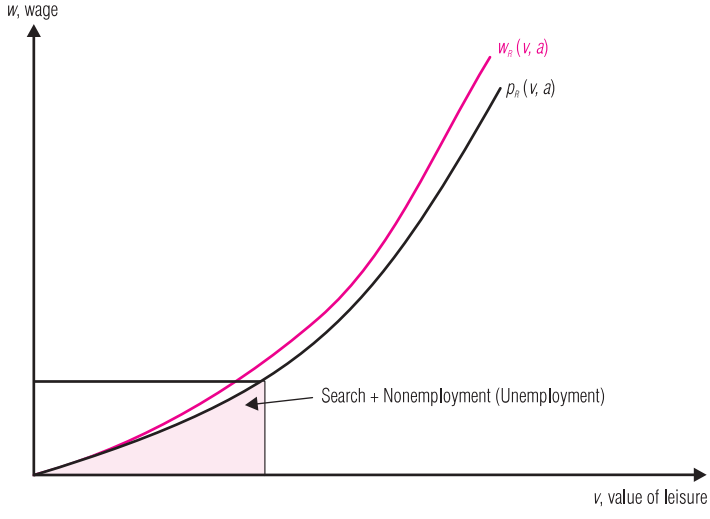


Figure 4 plots the reservation wage functions w_R, w'_R and v_R for a given level of nonlabor income.

In order to calculate the equilibrium level of employment and unemployment, let us assume that the CPS is undertaken at the end of each period. To begin, it is clear that all type-A individuals with $w > w'_R$ would be classified as employed, as these individuals work throughout the period. As well, all type-B individuals with $v > v_R$ would be classified as nonparticipants, as these individuals engage in nonmarket activities throughout the period. All remaining individuals allocate at least some time to search. However, not all of these individuals would be classified as unemployed by the CPS. In particular, all searchers who are successful at finding a suitable job within the reference period of the survey and work any amount of positive hours would be classified as employed. The unemployed are those who search for work but are unsuccessful at obtaining a suitable job within the reference period of the labor force survey. In terms of figure 5, the unemployed would be those who find themselves in the shaded region of the parameter space at the end of the period.

How are the economic attributes (w, a, v) related to individual labor market choices? Recall the earlier analysis of employment and nonemployment. In that model, conditional on the level of nonlabor income a, the employed tended to be those people with high (w/v) ratios; i.e., those individuals whose productivity in the labor market dominated their productivity in the home sector. In that model, the employment decision is a poor indicator of economic well-being, as it depends (conditional on a) primarily on the ratio (w/v), while economic welfare depends on the *levels* of w and v.

What general inferences can be made about unemployment and individual well-being? According to the model of unemployment developed above, there is a sense in which the unemployed tend to be relatively disadvantaged (conditioning on the level of nonlabor income). Being measured as unemployed for the period indicates that, at some time in the recent past, the available job opportunity w was of poor quality and that the value of time spent in alternative uses v was also of poor quality. (Individuals with good quality$w$'s tend to be employed, while individuals with good quality$v$'s tend to be nonparticipants.) As economic well-being depends (indirectly) on the levels of w and v, it follows that choosing to search (a prerequisite for being unemployed) is associated with a low level of welfare.

Having said this, note that there may be many individuals in the model who are employed and yet experience even lower levels of welfare than the unemployed (even holding equal the level of nonlabor income). Recall that after a job search yields an employment opportunity that pays p, an individual is free to work for wage p or spend the time at home earning the "leisure wage" v. If the latter choice is made, then the job search is deemed unsuccessful and the person is classified as unemployed. If the former choice is made, then the

person is classified as employed for the period. Note that this work–leisure choice depends, as before, primarily on the ratio (p/v), and so whether the person chooses employment or unemployment at this stage reveals very little about the levels of p or v (and hence the level of welfare).

For example, consider two individuals with identical p's and a's, but with different v's. It is conceivable that the person with the poor home opportunity will at this stage choose employment, while the person with the relatively good home opportunity will choose not to work (and therefore be measured as unemployed). In this example, the unemployed person is clearly better off than the employed person, while both persons are worse off compared to most other members of the population who did not feel the need to search.

What about the relationship between the level of nonhuman wealth a and unemployment? Consider two societies that are identical in every respect except that one society generates all of its income from labor, while the other is also endowed with a source of nonlabor income $a > 0$. What can be said about the equilibrium level of unemployment and level of welfare in these two economies?

From the earlier analysis of employment and nonemployment, we know that there is no nonemployment (and hence no unemployment) in the economy with zero nonhuman wealth. Individuals may still choose to search and generate new job opportunities p, but when $a = 0$ it turns out that $p_R = 0$, so that individuals will choose to work at whatever new prospect makes itself available (as long as $p > 0$). Thus, we observe paradoxically that the wealthier economy will exhibit a higher measured rate of unemployment. There is a sense here in which unemployment represents a "luxury" that only very rich countries can afford. Citizens of poor countries are compelled to work (either in the market or at home) or die; in either case, they are unlikely to be recorded as being "unemployed" by the CPS.[8]

More generally, the model suggests an ambiguous relationship between unemployment and wealth. The reason for this is as follows. First, from the condition determining v_R, one can demonstrate that v_R is a decreasing function of a. In other words, higher levels of wealth have the effect of making leisure more affordable; this effect leads to higher nonparticipation and hence less search activity (and hence lower unemployment). Second, from the condition that determines w'_R, it appears that w'_R may either increase or decrease with higher levels of wealth. On the one hand, a higher level of nonlabor income may make an individual more willing to forego the hassles associated with job search. On the other hand, a higher level of nonlabor income means that an individual can better afford to engage in job search activities. Which effect dominates depends on the precise form of preferences, the level of nonlabor income, and the distribution of available job opportunities. If w'_R is decreasing in a, then people are less willing to search, so that unemployment falls, reinforcing the participation effect. In this case, unemployment unambiguously declines as nonlabor income rises. If w'_R is increasing in a, then people are more willing to search, leading to an increase in unemployment, offsetting the participation effect. The overall effect on unemployment then depends on the relative strength of these two effects.

Finally, a remark on the optimal level of unemployment. With incomplete consumption insurance markets, the equilibrium level of unemployment will likely be too low. The reason for this is similar to before: Individuals who find themselves temporarily in dire straits are compelled to work rather than search and/or engage in other nonmarket activities. This basic result calls into question the conventional wisdom which views unemployment as "idle" or "wasted" resources.

IV. Conclusions

Economic theory asserts that living standards (utility) ought to depend primarily on the level of broadly defined consumption (including leisure). The simple, yet in many ways plausible, model developed above demonstrated the tenuous link between labor market choices and economic well-being. Economic welfare was shown to be linked indirectly to the *level* of human capital in the market and at home, and to sources of nonlabor income. These parameters determine the individual's ability to generate high consumption levels.

Labor market choices concerning whether to be employed or nonemployed, however, in general reflect the *relative* returns to engaging in alternative activities, and hence are poor indicators of the level of welfare.

■ **8** One might also point out that there is likely very little reason for job search activity in poor, stagnant economies (aside from migration to cities). In such environments, the set of available employment opportunities is likely very limited so that information concerning their location is readily available; individuals face a standard employment–nonemployment decision.

However, the decision to undertake labor market search was shown to be correlated with poor opportunities in the market and at home. Since the extent of search activity and the level of unemployment are obviously linked, there is reason to believe that unemployed workers are generally worse off in welfare terms relative to that set of the population that appears content with current market/home opportunities. However, it would be a mistake to infer that the unemployed are the least well-off members of the workforce. In particular, individuals who are endowed with very poor human capital and no outside source of income may be compelled to work at jobs that others can afford to eschew; these poorly endowed individuals comprise the "working poor."

Thus, while the unemployed tend to be disadvantaged relative to perhaps the majority of the population, it does not necessarily follow that they should constitute the primary target of social policy (should redistribution policy be deemed desirable). Furthermore, it does not necessarily follow that the elimination of unemployment would lead to an improvement in their economic well-being. Whether a reduction in unemployment is associated with an improvement in welfare would depend on the particular change in economic circumstances that altered the return to job search activities. Unemployment may fall because of any number of diverse reasons, for example: (1) an improvement in the quality of labor market opportunities; (2) a deterioration in the distribution of new job opportunities; (3) cutbacks in public unemployment insurance (reductions in a); or (4) the arrival of an oppressive regime that imposes "work camps" and bans job search activity.[9] Clearly, not all of these examples would be unambiguously associated with improvements in overall social welfare.

The undue focus on unemployment as a measure of economic performance and welfare has contributed much mischief to discussions concerning the design and implementation of labor market (and monetary) policy. Throughout the 1980s, for example, the Canadian unemployment rate averaged about four percentage points higher than the United States, after decades of close correspondence.[10] This event was widely portrayed as reflecting some underlying malaise in the Canadian economy, a belief that seemed to persist despite the fact that real per capita income growth and employment rates in the two countries remained similar. Indeed, the Canadian economy even managed to maintain a stable after-tax distribution of income over this high-growth period, while in the United States the income distribution widened. Clearly, one must look deeper than simple measures of labor market activity before making definitive statements about economic performance and well-being.[11]

9 See Eason (1957), who quotes from *Pravda* (January 31, 1954): "In 1953, as in preceding years, there has been no unemployment [in the Soviet Union]."

10 See Andolfatto, Gomme, and Storer (1997); and Burtless (1997).

11 Rogerson (1997) makes a similar point concerning European unemployment.

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