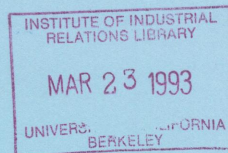


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THE EMPLOYMENT MARKET
Revised Chapter 4 of
Human Resource Management:
An Economic Approach

By

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LOS ANGELES

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Revised Chapter 4

of

Human Resource Management: An Economic Approach

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Chapter 4: The Employment Market

In a later chapter, we will analyze the employment relationship in terms of demand and supply analysis, both from a classical and a more modern economic perspective. It will be seen that one of the characteristics of the real world labor market is its tendency not to "clear" (not to equate demand and supply) in the classical meaning of that term. Similarly, it will be seen that the market does not always clear regarding employee preferences for the number of hours worked and the scheduling of those labor hours. But before we can undertake such analysis, we need to examine the evidence.

For that reason, this chapter focuses heavily on empirical information. How do employees and employers find each other? What is meant by "unemployment" and how does it affect the employer-employee attachments of those who are employed? Do persons not in the labor force at all have recruitment potential? The goal is to provide a realistic picture of the employment market and suggest human resource implications.

Discussion of those issues will serve to introduce two key questions which will arise in a later chapter: Under what circumstances will employers and employees "invest" in the employment relationship through training and skill enhancement?

And how does individual investment in education affect job search and success in the labor market?

Earlier, we have drawn on data from the monthly "Current Population Survey" (CPS) for information on the labor market. The CPS provides a wealth of detailed data on individuals in and out of the labor force, based on a sample survey of about 60,000 households. Let us begin by recalling the three key statuses which are determined in the CPS for noninstitutional individuals of "working age" (defined as 16 years and older): 1) employment, 2) unemployment, and 3) not in the labor force.¹ The labor force is defined as the number of individuals in the first two categories. Hence, the third classification is the residual population, those who are not employed nor unemployed.

I. Employment.

Each of the three statuses is more arbitrary than its label might seem to imply at first impression. For example, someone who is actually working for economic gain at the time of the survey should clearly be counted as employed.² People who are not working in the external commercial setting are not considered as employed, even though they may be engaged in worthwhile activities. Thus, volunteers, homemakers, and students (without jobs), are not recorded as being employed even though their time is usefully

occupied. But not all individuals who think of themselves as having a job (and, hence, as employed) are actually at work.

Insert Box A on volunteer work here

i. Nonworking Workers.

Table 1 shows that on average about 5% of nonagricultural employees in 1991 were, in fact, not at work during the reference week of the monthly survey. Of these "nonworking workers," over half were on vacation, obviously a seasonal activity which is not spread evenly over the entire year. The remainder were idled due to illness, bad weather, industrial dispute, or "other" reasons.

Exactly what these other reasons were is not reported. However, employers - especially larger ones - may grant leaves for jury duty, bereavement, and military service. Leaves (unpaid) for maternity, paternity, adoption, or care of a dependent are now required by law for employers with more than 50 workers, although they were not in 1991. In addition, employers will sometimes grant leaves for such personal reasons as alcohol or drug rehabilitation, educational pursuits, work in a political campaign, or social service work. In one survey, a few employers even cited serving a jail sentence as a reason for unpaid leave.³

Box A

Volunteers

About one fifth of the civilian noninstitutional population aged 16 and over reported doing some volunteer (unpaid) work in 1989. Only 28% of these volunteers had no official labor-force attachment. So most volunteers also had market jobs. Performing volunteer work is associated positively with educational attainment. Women were more likely to report doing volunteer work than men, although the differential reporting rate was not large. For full-time workers, male and female, the rate of volunteer work was about 22% for both sexes.

Some employers actively encourage volunteer work, in part for the good public relations it brings to the enterprise.

Source: U.S. Bureau of Labor Statistics, press release USDL 90-154, March 29, 1990.

As Table 1 shows, 57% of wage and salary earners who had jobs but were not at work were being paid for their absences, mainly workers who were on vacation. However, the converse observation is also significant; 43% of wage and salary workers who were not at work are viewed as employed - and seen by themselves as having a job - even though they are receiving no payment from their employers. This view of the employed workforce is symptomatic of the stakeholder attachment of workers to their jobs. An individual can have a job, yet not be working. American data collection methods, and the way individuals answer CPS questions about their employment attachments, reflect this perceived employee stake.

Also reflecting that stake is the demand for public policies which assure employees rights to hang on to their jobs, even when they are going to be absent from work for long periods. The 1993 law requiring unpaid "family" leaves has already been referenced. Moreover, there is a requirement that if an employer has a (more generous) leave program for other purposes (such as disability), it cannot exclude pregnancy from the program.⁴ Thus, if workers are paid for non-pregnancy disabilities, they must also be paid on the same basis for incapacity due to pregnancy.

ii. Insufficient Hours.

Not all workers who have jobs necessarily are working the hours they wish. In 1991, over 2% of those who usually worked full

Table 1

**Persons With a Job But Not at Work, 1991
(Nonagricultural Workers)**

Reason	With a Job But Not at Work as Percent of all Civilian Employees	Percent of Wage and Salary Workers not at Work Being Paid by Employer(a)
All Reasons	5.1%	57%
Vacation	2.9	72
Illness	1.1	44
Bad weather	.1	-->27
Strike/lockout	*	
Other	1.0	

(a) Excludes private household workers.

*Less than .05%.

Source: Employment and Earnings, vol. 39 (January 1992), p. 200.

time (35 hours or more per week) reported that in the survey week they were working only part time in the survey week because of "economic reasons." These reasons involved insufficient demand for labor by their employer to maintain full time work or an inability to find a full time job.

For example, someone who normally worked full time on a 5 day per week schedule would fall into this category if he/she were suddenly placed on a 3 day per week schedule due to slack work. Also so-counted would be someone who was permanently laid off part way through the reference week, since he/she would have some work activity to report during that week. Over a fifth of individuals who normally worked part time in 1991 reported that their part-time employment was due to economic reasons, i.e., they did not have the full-time work they would have preferred.⁵ Clearly, frustration of employees over differences between their actual weekly schedule, and the schedule they would prefer, can pose a human resource problem for employers.⁶

Insert Box B on Bank of America part-timers here

There has been concern about the status of part-time workers who tend to earn lower hourly wages than full timers and have fewer benefits. If the growth of the part-time workforce was entirely voluntary, than it could be assumed that individuals - seeking

Box B

Shifting to Part-Timers at Bank of America

Bank of America decided in early 1993 to reduce its proportion of full-time tellers which had already been cut to less than 10%. The Bank explained that it operated in a competitive market and needed flexibility in staffing for peak hours of customer usage. However, reduction in hours of some of the remaining full-timers to below 20 hours would lead to their loss of benefits, apart from the pay reduction associated with the hours cut. To cushion the blow, the Bank provided an extension of benefits and continuation of pay for periods ranging 3 to 18 months, depending on prior length of service.

When queried by newspaper reporters, a number of tellers expressed complaints about the hours cutback and the lack of opportunity for longer hours. A local competing bank began to advertise that its workforce was predominantly full time and that customers could expect better service because of that fact. How should an employer, such as Bank of America, weigh such considerations?

Source: Martha Groves and Michael Granberry, "B of A Tellers Get Squeezed: Hours Slashed, Benefits Eliminated for Some Full-Timers," Los Angeles Times, February 6, 1993, pp. D1-D2.

flexibility in work hours - were simply making trade offs. However, the growth in part-time work during the 1970s and 1980s was in the involuntary category.⁷

II. Unemployment.

The word "unemployment" is sometimes used in casual conversation to refer to anyone who does not have a job. Yet there are many people who do not have a job, and do not wish to have one, e.g., retired persons. Historically, when empirically-oriented economists have used the term "unemployment," they have referred to people who do not have jobs but want to work, i.e., to people who are "involuntarily" without employment. Yet because the classical economic model seemed to preclude the existence of involuntary unemployment, arriving at a precise definition posed a significant problem. In the simple classical model, demand = supply, whether what is being demanded and supplied is a product or labor. Unemployment suggests excess supply, which seems to be incompatible with the model.

i. Involuntary Unemployment.

Economists have pointed out that in a formal sense, unemployment involves an asymmetry between capital and labor.⁸ Normally it is expected that capital (the employer) hires labor. Were there no transaction costs, however, workers could just as

well hire capital. Thus, unemployed auto workers might hypothetically hire a car factory and go into business for themselves if a factory owner refused to hire them. In such an imaginary world, there would be little opportunity for unemployment to exist.⁹ But the difficulties involved in an entire factory workforce somehow coalescing itself and hiring the necessary management and capital are self evident.

The fact that there is always some option for self employment of unemployed workers, however, is one of the objections by purists to the very concept of involuntary unemployment.¹⁰ Perhaps the unemployed auto worker cannot really join with other idle individuals to hire an auto factory, because the costs of forming the necessary coalition are too high. But he or she could always offer to cut their neighbors' grass or sell pencils or apples on street corners. Even though such pursuits would pay substantially less than work in a car factory, the unemployed auto worker still "chooses" not to undertake these tasks, and therefore is "voluntarily" idle, according to this view.

Insert Box C on self-employment policies for the unemployed here

Still another objection that has been raised to the concept of involuntary unemployment is that unemployed workers "ought" to bid down the wage for jobs, in effect underselling incumbents. An

Box C

Businesses for the Unemployed?

As the text notes, the unemployed could in theory purchase a capital-intensive factory or, alternatively, sell pencils on street corners. But neither seem a practical option. However, there have been efforts - both in the U.S. and abroad - in assisting the unemployed to open small businesses. Such policies have been used in Britain and France. In Britain, over half of the half million unemployed individuals who were aided during 1983-90 were still in business for themselves 3 years later.

The U.S. Congress authorized assistance to the unemployed to start businesses on an experimental basis but never appropriated the necessary funding. However, two states - Massachusetts and Washington - created assistance funds without federal money. Is self employment a solution to joblessness?

Sources: Harry Bernstein, "Turning Jobless into Capitalists," Los Angeles Times, March 20, 1990, p. D3; "Working for Yourself," Economist, August 29, 1992, p. 57.

unemployed worker could - in theory - enter a workplace and offer to work for a few cents an hour below the wage paid to the existing workforce. Economists with a pragmatic orientation have long recognized that such offers would most likely be met with employer responses that there are "no vacancies." Yet the notion that the labor market should operate like an auction market (even though it does not) has proved to be an intellectual stumbling block for some theorists. That employees refuse to act as if the labor market were a classical auction is taken as a sign by certain theoreticians that their unemployment is not "truly" involuntary.

Although the question of whether unemployment can be viewed as involuntary may seem the stuff of arcane economic theory, it has human resource implications. As will be noted below, employers can offer their workers varying degrees of job security. If unemployment is seen primarily as something curable by the unemployed themselves, then the value of such employer-provided security to them would not be high; they could always solve the problem of joblessness themselves.

On the other hand, if joblessness is more a feature of the economy - micro or macro - than of the individual, the offer of job security can be valuable to employees. And it is comparatively easy to point to reasons - particularly at the macro level - which could lead to sustained unemployment. If, for example, people are unemployed, they will reduce their consumption. But if there is

insufficient consumption, people will be unemployed."¹¹ Such feedbacks between demand and employment are not within the control of unemployed individuals. They fall into the category of what economists sometimes call "coordination failures."¹²

ii. Actual Measurement.

During the Great Depression of the 1930s - when unemployment was the most pressing social issue of the day - debates over the causes and interpretation of unemployment were quite common in the economic literature. The views expressed then still persist in some circles today, although they would probably be articulated more elegantly than they have been stated above. As the Great Depression continued, empirically-oriented economists and statisticians struggled to come up with a definition of unemployment that would permit actual measurement. Ironically, however, it was not until 1940 (when the Great Depression was almost over) that the predecessor to the modern Current Population Survey was established to monitor unemployment and other labor-force characteristics.

Since 1940, the empirical approach to unemployment has been to sidestep any attempt to classify people on the basis of what the survey taker might have viewed as available alternatives for them to unemployment. Since cut-the-grass or sell-pencils-and-apples alternatives are always available, no one would ever be

counted as unemployed using a strict version of such a definition. And any less strict version would be inherently subjective and indefensible as a labor-market indicator. Instead, those being questioned in the CPS tell their own stories in the form of answers to specific questions.¹³ A working-age person is counted as unemployed if he/she meets one of the two following criteria:

1) The individual was available for work during the survey week (except for temporary illness) and had looked for work during the past four weeks, or,

2) The individual had not looked for work because he/she was on layoff status from a job or was waiting to start a new job within 30 days.

Criterion #1 - under which the vast majority of the unemployed are captured - measures unemployment by a self-expressed desire to work as evidenced by some job searching activity.¹⁴ The issue of whether the individual could have found a job if only he/she had searched more diligently is not considered. For example, someone who had received a job offer, but rejected it as unsatisfactory, would still be counted as unemployed.

The CPS survey taker does not dismiss the offer-rejecting individual as being too "picky" and, hence, not really unemployed. As will be seen below, such rejections of offers (including "self

offers" of grass cutting) may be entirely rational responses of individuals. Much depends on what alternatives the job seeker may expect to uncover by continuing to search for other job offers.

Still another reason for avoiding subjective judgments about the diligence of job search is the notion of queuing. Suppose there are 90 jobs available and 100 job seekers. Ten of the job seekers will end up as unemployed, because of the labor demand insufficiency. But 90% of the job seekers will be successful in finding work. Had one of the unemployed ten been more aggressive in search, he/she might have among the successful 90%. But someone else would simply have been elbowed out of the line and wound up as unemployed.

When all is said and done, ten unemployed individuals will remain. The fact that 9 out of 10 are successful does not mean that the unemployed are volunteering to be jobless. The root cause of their joblessness is - after all - that there are fewer jobs than applicants, not a desire on the part of job seekers for leisure.

Criterion #2 recognizes the potential linkage between employer and employee during spells of non-employment, if the employee has an expectation of returning to his/her old job. Formal layoff systems are particularly common in the union sector, but can also be found in nonunion employment. In effect, criterion #2

recognizes that it may not "pay" an employee who believes he has a new or old job "lined up" to search for some other interim job during a spell of non-employment. It is really only in the case of workers with formal layoff systems and predictable probabilities of layoffs and recalls that the voluntary label might be applied. Temporary spells of unemployment might be deemed a feature of their implicit employment contracts with their employers.

Insert Box D on reduced use of temporary layoffs

In any case, because of the costs of turnover, workers on lay off who do search for temporary alternative jobs may be rejected by potential employers on the grounds that they will probably quit when their old jobs resume. Why hire someone who will soon be quitting to work for someone else? Empirical evidence suggests that the probability of finding a new job is lower for workers with some prospect of recall from layoff than for other workers.¹⁵

Since, by some definition, all unemployment can be dismissed as voluntary, there is no perfect approach to measuring unemployment. Thus, for example, the requirement under criterion #1 that those seeking work must cite a search activity within the past four weeks is clearly arbitrary. It could just as well have been set at three weeks or eight weeks.

Box D

Declining Temporary Layoffs

The recession of the early 1990s brought with it concerns about structural shifts in the labor market. While some of the seeming shifts were associated with the slow pace of recovery after the economy hit bottom in 1991, others reflected the tendency for the employment relationship to weaken. Typically in recessions, the number and proportion of workers on temporary layoffs expecting recall increases. The Bureau of Labor Statistics found, however, that less than one sixth of the increase in job losers during the 1990-1991 recession consisted of workers on temporary layoff. In contrast, during the previous four recessions, the proportion had been over 40%.

Source: U.S. Bureau of Labor Statistics, "Recent Job Losers Less Likely to Expect Recall," summary 92-8, July 1992

The "looser" the criteria, e.g., eight weeks rather than three weeks, the higher will the absolute number of unemployed be in any given survey week.¹⁶ However, any plausible measure of unemployment will produce the same general cyclical responses, i.e., more unemployed in recessions and less in booms. Thus, most industrialized countries have adopted some variant of the U.S. approach to unemployment measurement for their own economies.¹⁷

iii. Job Losers.

Perhaps the most common public perception of an unemployed person is someone who has lost a job. Such individuals in fact make up only about 40-60 percent of the unemployed as defined in the CPS, depending on the stage of the business cycle. Times of high unemployment and job scarcity are known as periods of loose labor markets. Job losers become a larger proportion of the unemployed - not surprisingly - during recessions, when the labor market is loose. Their importance in total unemployment falls during booms, when jobs are plentiful and the labor market is termed tight.

Insert Box E: Dear Abby letter

Table 2 illustrates the dominance of job losers in the cyclical fluctuations of unemployment (as opposed to the absolute

Box E

Dear Abby

She's Still Laboring Over Loose Language

By Abigail Van Buren

Dear Abby: In a recent letter, you incorrectly used the phrase "tight labor market" to refer to a situation where jobs are scarce. Actually, a tight labor market is one in which job openings are plentiful and workers who don't like their work can easily quit and find other employment. Economists use the phrase "loose labor market" to describe job scarcity.

Your mistake in terminology is commonly made. So keep the following rhyme in mind:

When the labor market is tight
Tell your boss to fly a kite.
But when the labor market is loose,
Saying that will cook your goose.

Daniel J.B. Mitchell, UCLA Professor

Dear Professor: You could have fooled me. I erroneously assumed that because the terminology "money is tight" means "money is scarce," the same held true for the labor market. Thanks for wising me up.

Although flying a kite was an electrifying experience for Benjamin Franklin, I wouldn't recommend telling one's boss to fly one under any circumstances.

Source: Taken from "Dear Abby column by Abigail Van Buren.
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Table 2

Civilian Unemployment Rates by Reason for Unemployment

	1973 (P)	1975 (T)	1979 (P)	1982 (T)	1990 (P)	1991 (T)
Total	4.9%	8.5%	5.8%	9.7%	5.5%	6.7%
Job losers	1.9	4.7	2.5	5.7	2.7	3.7
Job leavers	.8	.9	.8	.8	.8	.8
Re-entrants	1.5	2.0	1.7	2.2	1.5	1.7
New entrants	.7	.9	.8	1.1	.5	.6

(P) = Business cycle peak; (T) = Business cycle trough

Note: Details need not sum to totals due to rounding.

Source: U.S. Bureau of Labor Statistics, Handbook of Labor Statistics, bulletin 2217 (Washington: GPO, 1985), p. 80; Employment and Earnings, vol. 39 (January 1992), p. 176.

number of unemployed people). Recall that the unemployment rate is defined as the proportion of the labor force which is unemployed, i.e., as U/LF where U = the number of unemployed persons, LF = the labor force = $E+U$, and E = the number of employed persons. The job loser component accounts for much of the variation in the overall unemployment rate between business cycle peaks (denoted "P" on the table) and troughs (denoted "T"). In contrast, unemployment rates for labor-force re-entrants and new entrants (workers who began to seek work but did not have jobs in the immediate past) show milder fluctuations.¹⁸

Not all job loss is related to cyclical demand fluctuations. Because of concern over mass layoffs and plant closings in the 1980s, Congress required the Bureau of Labor Statistics to begin a survey of such occurrences. In 1990, the year in which the recession of the early 1990s began, about 38% of "mass layoff events" - layoffs resulting in at least 50 unemployment insurance claims in a 30-day period - could be classified as demand related in the 45 states surveyed.¹⁹ Seven percent resulted from overseas location or ownership restructurings.²⁰ Three percent resulted from technical problems such as machinery breakdowns.²¹ Thirty-two percent were linked to seasonal factors.²² These four areas accounted for about four fifths of the mass layoff events, with the remainder occurring for miscellaneous or unknown reasons.

Insert Box F on GM plant closing

Box F

Do Communities Have Stakeholder Rights?

Localities in which plants are closed often suffer from depressed economies and real estate markets. On the other hand, localities in which plants are opened enjoy the reverse effects, sometimes leading them to offer tax advantages or build infrastructure to attract new businesses. In early 1993, as General Motors was closing plants in many areas, the Michigan Township of Ypsilanti obtained an order from a local judge barring GM from closing a plant which had previously been given tax abatements. The Township argued that the tax abatements had been granted in exchange for promises that the plant would remain open until 2003. While most analysts expected GM to obtain a reversal in a higher court, the incident raises interesting issues about stakeholder rights.

Source: Donald W. Nauss, "Judge Orders GM Not to Shut Plant, Cites Tax Break," Los Angeles Times, February 10, 1993, pp. A1, A7.

The unemployment rate for job leavers (quitters) shows little cyclical fluctuation on Table 2 since it is affected by two opposing influences. People with jobs are less likely to quit them during business-cycle troughs, since alternative work is scarce. This factor tends to lower the trough unemployment rate for quitters. On the other hand, those workers who do quit despite the bad times will find it harder to find new jobs (and thus will remain unemployed longer) than during good times. And that factor tends to raise their unemployment rate.

iv. Unemployment Duration.

Fear of job loss is an important factor in the lives of many workers. This fear, in turn, affects their relationship with employers, and - therefore - the human resource policy of firms. Other factors held constant, an employer who offers job security, i.e., a reduced possibility of lay off, is more attractive to potential job applicants and incumbents than one offering only uncertain prospects of continued employment.

Unemployment is feared, in part, because of its potential duration. One source of information on unemployment duration is the monthly CPS. Those persons who are identified as currently unemployed by the CPS are asked how long they have been in that

condition. The average response has varied from 8 to 20 weeks, depending on the stage of the business cycle. During periods of high unemployment, the duration recorded rises relative to its level in periods of low unemployment. The long duration during recessions reflects the fact that in loose labor markets, finding a job is difficult and the search for work must be extended. In addition, recessions tend to knock individuals who have a high propensity for long unemployment spells off their career ladders.²³

Two points should be noted. First, the reported 8-20 week responses reflect interrupted spells of unemployment. That is, those responding are currently in the midst of being unemployed and many will remain unemployed for additional weeks. If the crude assumption is made that the average respondent is half way through his/her spell of unemployment, then the unmeasured completed spells will be double the length of the measured interrupted spells. Thus, average completed spells of these workers - spells of unemployment after which the worker has found a new job or has dropped out of the labor force - can be taken to be roughly 16 to 40 weeks in length, again depending on the tightness or looseness of the labor market.

Second, analysts of labor-market phenomena have noted that these long durations can hide the fact that many unemployment spells are much shorter than the average spell. When a person enters unemployment, he/she often leaves that status quickly,

perhaps within a few weeks. But some people have very long spells which drive up the average. For that reason, the median interrupted spell of unemployment reported has been 4-10 weeks in length, compared to the 8-20 weeks of the average interrupted spell.²⁴

Thus, an alternative approach to unemployment duration is to consider how long someone who becomes unemployed can expect to remain in that status. If the analysis is confined only to "new entrants" into unemployment, the estimated completed spell should be shorter than if all currently unemployed persons are considered. This feature is due to the fact that long-term unemployed will be disproportionately represented in the CPS sample of currently unemployed individuals.²⁵

Estimates of expected unemployment spells for the newly unemployed suggest durations ranging from 6 weeks to 15 weeks during deep recessions.²⁶ For those with concerns about human resource policy, i.e., the readers of this text, the important question is what is the average duration of unemployment that can be expected by a job loser who becomes unemployed. It is that group which is most likely to represent attitudes of current or prospective employees.

Some information on unemployment duration for job losers is available. In 1991, for example, 20% of job losers (other than

those on layoff status) reported interrupted spells of unemployment of 27 weeks or more, compared with only 9% for other unemployed persons.²⁷ A "typical" worker whose job is permanently terminated can expect to experience more than a months of unemployment and possibly - particularly in a period of recession - a spell extending beyond a year. Thus, despite the limits of available data, it appears clear that the possibility of unemployment (and attendant income loss and uncertainty) is an important shaper of employee attitudes and motivation.

Debate over the best way to tabulate and present the issue of unemployment duration is best left to specialists and to other books. From the human resource management point of view the key issue is whether unemployment is a significant concern of employees (and, therefore, to employers). The argument here is that it is, and that workers - who are likely to be averse toward the risk of unemployment-related income loss - will be anxious to avoid layoffs. Thus, for many workers, especially those with primary responsibilities for household income, the degree of job security offered by an employer is an important attribute of the total package of working conditions.

v. Income Losses, Employee Attitudes, and Employer Policy.

Sometimes it is argued that unemployment no longer is a serious problem for families since the advent of greater female

participation in the labor force has produced the "cushion" of an extra earner in the household. There is evidence that males feel freer to quit their jobs if they have a working wife, for example.²⁸ But evidence from the CPS suggests that even with two-earner (husband-wife) families, very substantial drops in family earnings can occur if one family member becomes unemployed, especially if the unemployed member is the husband. A very rough estimate would be that if a two-earner family (husband and wife) experiences unemployment of the husband, family wage income will drop by two thirds. If the wife becomes unemployed, the drop will be roughly one third.²⁹

The two-earner argument neglects the growth of single people in the population and of families headed by women. Still, there is no doubt that two-earner families and the availability of unemployment insurance (discussed below) has made unemployment a less severe problem than it was, say, in the 1930s. As will be discussed below, unemployment insurance will typically make up less than 50% of lost weekly wages after layoff and its payments usually terminate after 26 weeks. Thus, even with the advent of unemployment insurance, the income shocks related to unemployment are still sufficiently large so that employees will want to avoid them.

Employees will value privately-developed internal human resource policies that offer protection from unemployment resulting

from fluctuations in economic conditions. And they will be attracted to proposals in the external political setting that require such internal policies to be adopted. The 1992 presidential election, for example, ultimately turned on the unemployment rate and the lack of job creation in the period leading up to election day.

The threat of unemployment, as will be noted in connection with the so-called efficiency wage model in a later chapter, also may have a disciplinary effect. A worker dismissed for inadequate or improper performance can anticipate a period of difficulty in finding a new job. Thus, fear of unemployment may discourage worker activities likely to be disapproved by management.

For example, in the union sector, strike activity tends to diminish during periods of high unemployment. Also during periods of high unemployment, absence rates attributed to illness and injury tend to fall. Apparently, workers felt less secure about "calling in sick." And employers felt more secure about taking measures to control absences.³⁰

vi. Job Security as a Fringe Benefit.

Table 3 presents evidence on the risk that an employee in a particular occupational group will experience some unemployment during the course of a year. In 1987, the average monthly

(to be updated)

Table 3

**Percent in the Labor Force Experiencing
and Unemployment in 1987**

Percent Experiencing Unemployment	
All who worked or looked for work	13.3%
All who worked	12.9
Executives, administrators, managerial	6.0
Professional specialty occupations	5.7
Technicians and related support	7.6
Sales occupations	11.8
Administrative support, including clerical	10.0
Protective services	8.2
Other services except private household	16.7
Mechanics and repairers	12.3
Construction trades	26.7
Other precision production, craft, and repair	11.1
Machine operators, assemblers, inspectors	19.6
Transportation and material moving	19.6
Handlers, equipment cleaners and helpers	25.9

Source: Unpublished data from the U.S. Bureau of Labor Statistics.

unemployment rate for all workers was 6.2%. Yet, 14.3% of individuals who were in the labor force at some time during that year reported experiencing one or more spells of unemployment.

Even when confined only to individuals who actually had jobs during 1987 (as opposed to those who looked for work but never had a job), the table shows the probability of experiencing some unemployment was 12.9%. Table 3 also suggests that job security has aspects of an employee benefit. It is known that jobs which pay higher wages also tend to offer higher benefits, e.g., an electrical engineer is more likely to have a pension plan than a janitor. As job classification rises in the occupational (and pay) hierarchy of Table 3, the risk of having experienced unemployment decreases markedly.

Thus, 25.9% of the "handlers, equipment cleaners, and helpers" classification - low skilled and low paid workers - experienced some unemployment in 1987 compared with only 6.0% of "executives, administrators, and managers." This discrepancy is not merely a blue-collar/white-collar phenomenon. Within the white-collar groupings, sales and clerical workers have higher risks of unemployment than (generally higher paid) managers and professionals. And in the blue-collar groups, with the exception of the highly seasonal construction trades, skilled workers show lower unemployment probabilities than unskilled workers.

Some of these discrepancies in proneness to unemployment occur because employers, for reasons discussed in later chapters, have more reason to hold down turnover costs of the occupations in the higher-paid groups. But some of the difference is also due to the general pattern of offering to the higher paid a variety of desirable job characteristics (including employment security) along with the basic pay rate.

What type of employee would particularly value job security? An important element in determining "tastes" for security is the probability that it would be difficult to find another job once unemployed. Some research has been done on estimating these probabilities.³¹ It appears that the monthly probability of leaving the state of unemployment is lower than average for prime age persons, i.e., persons aged 35-64, especially for males. And it is interesting to note that managers and administrators have particularly low probabilities.

Thus, the estimates indicate that while the chance of becoming unemployed for relative senior workers and for managers is relatively low, if unemployment does occur, these workers face an especially long (and perhaps painful) search before their unemployment ends. Individuals who are knocked off a career ladder may find it difficult to locate a job comparable to the job which was lost. It may not be easy for a 50-year old executive to pick up and find a new position. Thus, the data suggest that relative

security is offered by employers to persons who would be especially hard hit by unemployment and who therefore value protection from such risks.

Note that human resource policies which provide seniority-related security and career ladders paradoxically may worsen the plight of those employees who are dislocated nonetheless. Policies under which new entrants come in at the bottom of the ladder mean that dislocated senior workers will be forced "to start all over again." The possibility of having to face such a loss - a loss of the employee in the stake in his/her old job - adds to pressures from employees for human resource policies of seniority-related security. The existence of "internal labor markets" - systems of promotion from within and career advancement within the firm - thus tends to reinforce itself.

Although job security is something of value to employees, and therefore a potential recruiting tool for employers, changes in the economy have tended to make it more difficult for firms to offer security. Since the early 1970s, product markets have been destabilized by de-regulation (in transportation, communications, and financial services), flexible exchange rates and foreign competition, and shifts in technology. Although it remains the case that the largest fluctuations in employment are felt by blue-collar workers, the economic slump of the early 1990s was dubbed

the "white-collar recession" because of a relative shift of the burden of adjustment to white-collar occupations.

Insert Box G on white-collar recession

vii. Layoff Systems.

As already noted, workers who are on layoff status, but are not seeking work, are counted as unemployed in the CPS. This practice is followed on the grounds that since such workers have a reasonable prospect of recall, job search for them might not be rational. From the employer perspective, a layoff system for dealing with the ups and downs of product market demand offers certain attractions. In a world of imperfect information about employee characteristics, rehiring a worker who has previously been employed by the firm may well be cheaper than hiring a new employee "off the street." The rehired worker has known productivity characteristics; the new one does not.

Apart from purely information considerations, a rehired worker embodies whatever investment in training and skill upgrading the firm has previously provided.³² In contrast, a new worker must be "brought up to speed" by the firm before full productivity is achieved. Thus, the employer saves training costs, as well as screening costs, by the use of rehires from a layoff pool.

Box G

The White-Collar Recession

"...Blue collar workers continue to have much higher unemployment rates than white-collar workers. The 1990-91 downturn was the first one for which occupational data are available in which white-collar employment did not rise. It is also the first recession in which the increase in the number of unemployed white-collar workers was about equal to the increase for blue-collar workers. This means that white-collar workers have been hit harder... than in previous (recessions), though still not as hard as blue-collar workers."

Joseph R. Meisenheimer II, Earl F. Mellow, and Leo G. Rydzewski, "Job Market Slid in Early 1991, Then Struggled to Find Footing," Monthly Labor Review, vol. 115 (February 1992), p. 14.

Box H on Nissan non-layoffs here

In a period of high unemployment, the chances that a laid-off worker will find a new job before being recalled to the old one are reduced. Nevertheless, an employer with a layoff system will probably want to convey to workers who are being laid off that recall may be expected, or - at least - what the probability of recall may be. If a laid-off employee is told that he/she has a good chance of recall within a not-too-long period, he or she is likely to remain available to the employer.

It might be expected, therefore, that unemployment spells by laid-off workers will be shorter than those of other job losers. Labor market evidence bears out this expectation. Table 4 shows that the length of (interrupted) unemployment spells of workers on layoff status tends to be shorter than length of spells for other job losers. In 1991, for example, almost half of all unemployed workers on layoff status reported that their interrupted spells of joblessness had (thus far) been of less than 5 weeks' duration. The corresponding proportion for other job losers - those not on layoff status - was a little over one fifth.

According to Table 4, the significance of temporary layoff unemployment for total unemployment was quite cyclical in the early

Box H

No-Layoffs as an Alternative to Layoffs

In February 1993, Nissan Motor Company of Japan announced a plant closing at one of its major Japanese facilities. It also announced that it planned to trim its workforce by about 10% over three years. However, the Company did not plan any layoffs under its "lifetime" employment system. Instead, the workforce reduction would be accomplished through attrition. Workers from the closed plant would be re-employed elsewhere in the Company. The announcement occurred at a time where large numbers of American auto workers had been laid off at the American "Big-3" companies.

Much ink has been spilled in debate over the merits of, and extent of, the Japanese aversion to outright layoffs. It is certainly not true that layoffs never occur in Japan. And it is true that smaller firms are less likely than large to have formal "lifetime" employment systems. However, numerous researchers have noted that the tendency to avoid layoffs in Japan is real and is found at employers of all sizes.

Clearly, there are costs attached to making labor a fixed cost. But are there any gains from the viewpoint of human resource management?

Source: Paul Blustein, "Nissan to Stop Making Cars at One of Its Japanese Plants," Los Angeles Times, February 24, 1993, p. D2.

Table 4

**Workers on Layoff Relative to All Unemployed
and Job Losers, 1979-91**

Year	Civilian Unemploy- ment Rate	Workers on Layoff as Percent of the Unemployed		Percent of Job Losers with Interrupted Spells of Un- employment Less than 5 Weeks	
		All	All Job Losers	Workers on Layoff	Other Job Losers
1979	5.8%	14%	33%	55%	34%
1982	9.7	20	34	40	25
1990	5.5	15	31	53	33
1991	6.7	15	28	47	27

Source: Employment and Earnings, vol. 39 (January 1992), p. 176,
and earlier issues.

1980s. From the economic peak of 1979 to the trough of 1982, those on temporary layoff rose from 14% to 20% of the unemployed. In contrast, in the economic slump of 1990-91, workers on temporary layoffs held steady at about 15% of all the unemployed. As Box D notes, the recession of the early 1990s featured a substantial reduction in the use of temporary layoffs (layoffs in which those displaced expected to be recalled soon).

Formal layoff systems are more likely to be found in unionized firms than nonunion. Thus, the decline in unionization during the 1980s may well have influenced the drop in the use of temporary layoffs.³³ However, the association of formal systems of temporary layoffs with unions suggests that employee preferences as well as employer preferences play a role in the establishment of layoff rules and procedures.

Formality in the union sector means layoff by reverse order of seniority and recall by seniority order. For reasons to be discussed in a later chapter, seniority is likely to be a key issue for unions, due to their internal political structures. Thus, unions will push employers to obtain seniority-related benefits including job security and recall preference.

Despite such contractual provisions, an employer is likely to prefer to have more discretion in choosing who is laid off and who is recalled. Generally, from the firm's perspective, the optimal

rule is to lay off the least productive employees first. Similarly, the firm will want to recall the most productive workers in the layoff pool before others are recalled. Nonunion employers, who determine layoff policy unilaterally, are likely to reserve more room for managerial discretion in formulating their own policies regarding layoffs.

But even with their more flexible layoff systems, nonunion employers are likely to pay some attention to seniority.³⁴ Seniority is linked to employee loyalty; the most senior workers have remained with the firm the longest. Under an implicit contracting model of the type to be discussed in a later chapter, nonunion employers might well give significant (although not determining) weight to seniority in layoff/recall decisions. In effect, they reward employee loyalty by doing so.

An exception to this rule of rewarding loyalty is possible when the value of continuing the implicit contract declines. There is evidence that nonunion employers who are permanently closing facilities and laying off workers are less likely to give weight to seniority than those making only temporary layoffs. The former no longer see a value in maintaining the implicit agreement, since the employer-employee relationship is ending. But the latter still need to retain employee good will.

It may be that this factor accounts for the findings that many firms gave little advance notice of plant closings before Congress imposed a 60-day notice requirement in 1988 on medium and large sized firms.³⁵ There is evidence that such notice would benefit affected employees, reducing their periods of unemployment, although estimates of the beneficial impact vary widely.³⁶ Yet apparently many employers do not factor this benefit into their human resource policies, perhaps because of the severing of the employer-employee relationship entailed.³⁷

viii. Unemployment Insurance and Layoffs.

In theory, private insurance policies against the risk of unemployment could be offered by insurance carriers to workers. However, a large moral hazard problem would occur under a private unemployment insurance system; it would be difficult for a private insurance carrier to verify that a worker who claimed to be unemployed really could not find a new job. There might be incentives for people who were planning to drop out of the labor force anyway to try to obtain unemployment insurance benefits in a hypothetical private system. The difficulties in defining unemployment might also create an incentive for a private insurance carrier to challenge excessively the validity of worker claims for payments.

Adverse selection problems would also arise. Workers who knew that they were likely to be laid off would naturally seek insurance. Of course, moral hazard and adverse selection present difficulties for insurance carriers in other contexts. But as these problems mount, the ability to offer insurance profitably declines to the point where no policies are offered. Unemployment insurance seems to be such a case; with the limited exception noted in Box I, there are no significant offerings of such insurance from private carriers, nor was there even in the era before it was provided by government.³⁸

Box I on unemployment insurance for mortgages

The only private unemployment insurance arrangements of any consequence which are found in the real world are the Supplemental Unemployment Benefit (SUB) plans specified in some union-management contracts. Under these programs, workers who are laid off receive a special benefit from an employer-run fund which supplements their state-provided unemployment insurance. SUB plans are monitored by the employer, not an outside carrier, and the employer's operation of the plan is monitored, in turn, by the union. Opportunities for moral hazard problems to arise on the employee or employer sides are thus limited.

Box I

Unemployment Insurance for Mortgage Payments

In 1992, some California mortgage lenders, as well as a local home-builders association, began offering borrowers a specialized form of unemployment insurance. Under these programs, borrowers - for an additional premium - can insure themselves against being unable to make mortgage payments due to unemployment for a specified period. The new service was seen by lenders as a marketing attraction and by the builders as a way of attracting new buyers. Similar arrangements exist in Europe and have been tried in other areas of the country.

Evidently, the providers of the insurance feel that borrowers are unlikely to fake unemployment and risk putting their homes in jeopardy. Thus, the moral hazard problem is limited.

Source: Mona Gable, "Layoff Policy Eases Peril of Home Buying," Los Angeles Times, November 1, 1992, pp. K1, K10.

In the absence of unemployment insurance from private carriers, society has chosen to rely on a state-run system. The American unemployment insurance (UI) system was established as a joint federal-state venture during the Great Depression of the 1930s. UI was an important component of the Roosevelt administration's New Deal social insurance arrangements, which also included Social Security.

Generally, the UI system operates today much as it did at its inception. Its intent is still to provide benefits to workers laid off for economic reasons while they search for new employment.³⁹ The federal government imposes a payroll tax whose revenues can be used only to finance a state-run UI program, if the state where the taxes are collected elects to create one.

In principle, a state could refuse to have a UI program. But if it did, the state's employers would still be taxed and its unemployed workers would receive nothing. Thus, the federal government effectively makes an offer the states cannot refuse through its control of the tax system. As of 1991, the tax rate for UI was 6.2% on the first \$7,000 of annual wage income.⁴⁰

Almost all wage and salary earners work for employers covered by UI. (Self employed persons and unpaid family workers are not protected). However, whether an individual unemployed worker is actually eligible for benefits depends on his or her work history.

To establish eligibility, state UI formulas require minimum time periods of prior employment and minimum earnings with an employer. (Thus, new entrants and re-entrants to the labor force are not eligible, even if they are unemployed according to CPS definitions). Benefit payments are determined by formulas specified in the state programs which are linked to the worker's recent earnings history. States impose a dollar cap on their benefits which limit the operation of the formulas.

As Table 5 shows, UI benefits have averaged between 40-50% of average weekly wages of nonsupervisory and production workers on private, nonagricultural payrolls. Actual earnings replacement ratios are probably somewhat higher, since the unemployed are disproportionately low paid. The ratio of benefits to average weekly earnings shown on the table has tended to rise during business cycle troughs, probably because higher-paid workers in the cyclically-sensitive manufacturing industries are laid off in such periods.⁴¹ Since higher-paid workers are eligible for higher benefits, their presence boosts the average UI benefit.

Typically, state UI systems limit benefits to a maximum of 26 weeks. Thus, in severe recessions, the resulting long durations of unemployment tend to cause unemployed workers to exhaust their benefits before new jobs are found. However, until the 1980s, Congress often intervened on an ad hoc basis, providing funds for

Table 5

**Unemployment Insurance Coverage and Benefits,
1969-1991**

Year	Civilian Unemploy- ment Rate	Claimants Receiving Unemployment Insurance Benefits as a Percent of Unemployed Job Losers	Average Weekly Unemployment Insurance Benefit as Percent of Average Weekly Earnings(a)
1969	3.5%	92%	40%
1971	5.9	93	42
1973	4.9	96	41
1975	8.5	91	43
1979	5.8	92	41
1982	9.7	65	45
1990	5.5	78	47
1991	6.7	74	48

(a) Average weekly earnings refers to nonsupervisory and production workers in the private, nonagricultural sector.

Source: U.S. President, Economic Report of the President, January 1993 (Washington: GPO, 1993), pp. 392-393; U.S. Bureau of Labor Statistics, Handbook of Labor Statistics, bulletin 2217 (Washington: GPO, 1985), p. 80; Employment and Earnings, vol. 39 (January 1992), pp. 162, 176.

benefit extensions beyond the 26th week. In the 1980s, however, a break from the earlier pattern occurred.

As Table 5 shows, the ratio of UI recipients to CPS-measured job-loser unemployed persons fell from levels above 90% to around three fourths. This shift resulted from a change in public policy. At the federal level, a swing to a more conservative policy with regard to social benefits associated with the Reagan administration restricted Congressional generosity. Under President Bush, there was a partial return to former practices. Whether the more-liberal Clinton administration will undo the impact of the 1980s remains to be seen. Pressures to reduce the federal budget deficit could limit such efforts.⁴² (UI is included in the federal budget even though it is state-administered.)

Despite the decline in benefit eligibility, however, the presence of the UI system still has the potential to affect labor market behavior. Much of the research concerning the impact of UI on the labor market has focused on workers. It has been argued that by providing a subsidy to job seeking, UI may prolong the average duration of unemployment and, hence, raise the overall unemployment rate.⁴³ Workers may be encouraged to wait for (infrequent) vacancies at high-wage firms.⁴⁴ But the aggregate impact of this influence is complex, since workers who are not eligible for UI will have less competition for the less attractive jobs and may obtain them faster.⁴⁵ Also, it has been argued that

the availability of UI benefits may influence some workers who are not really looking for work to declare themselves unemployed for the purpose of obtaining benefits.⁴⁶

From a macroeconomic perspective, the financial cushion provided by UI has often been viewed as a stabilizing influence on national income. It provides income to laid-off workers whose consumption might otherwise fall. To the extent that UI has this effect, it may reduce the unemployment rate below what it would otherwise be during recessions.⁴⁷

While these possible effects of UI are interesting, further analysis of them would take the discussion far afield from human resource policy. With regard to such policy, three key influences of UI may be cited:

- 1) During union-management disputes, employers have a disincentive to use lockouts, since in many states locked out workers will be eligible for UI benefits whereas in most states strikers are not eligible.⁴⁸ Thus, UI influences employer tactics and bargaining power.

- 2) Employers have certain incentives to challenge payment of UI benefits to workers discharged for improper behavior, i.e., workers who were "fired" rather than laid off for economic reasons. To the extent employers are

successful, the penalty of being fired for misconduct is increased, and employer authority over the workplace is potentially enhanced."

3) Employers have incentives to use layoffs as a means of labor-cost adjustment in preference to wage cuts or hours cuts under certain circumstances.

Since union-management relations will be discussed in subsequent chapters, further elaboration here on influence #1 is not required. The second and third influences, however, are more general, affecting nonunion as well as union employers. And both influences are connected with the practice of "experience rating" in establishing UI tax rates.

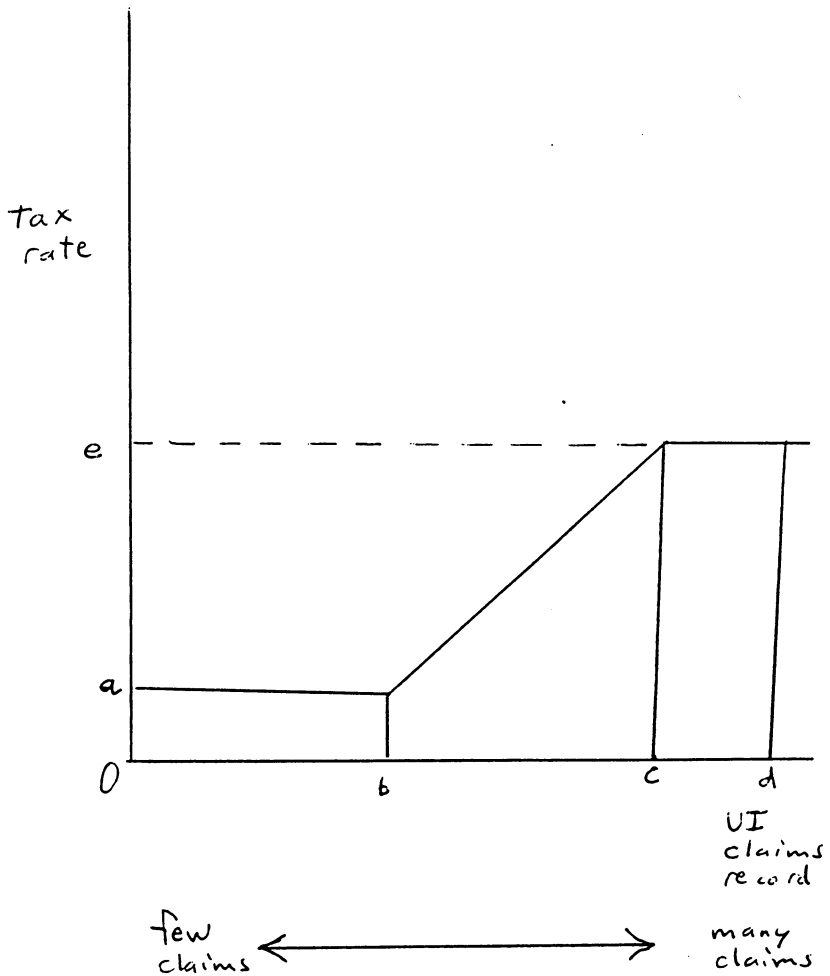
The UI system, as already pointed out, is financed by means of a payroll tax. Because the system was originally designed to resemble a private insurance program, the tax rates charged are not necessarily uniform across employers. Those employers deemed to be good risks - those that are not prone to generate substantial claimants of benefits - can be charged lower tax rates than those deemed poor risks. In this regard, the tax rates are analogous to, say, the variations in automobile liability insurance premiums charged to car owners. Car owners with a history of prior accidents are usually charged more than those with safe records.

States may vary their UI tax rates for individual employers based on the employer's past history (experience) of employee claims for unemployment benefits. An employer whose prior layoff history has generated many such claims will pay a higher tax rate than one with a record of only a few claims. The rules and formulas across the states for determining experience-rated tax assessments are diverse. Nevertheless, a general representation of a "typical" state system of experience rating is depicted on Figure 1.

Insert Figure 1 here

Figure 1 shows that experience rating is not "perfect" in the standard UI system. That is, some employers pay less than the risk they impose on the system would justify, while others pay more. Usually, there is a low minimum tax for employers with very low claimant experience. Thus, the tax rate will be only 0a for employers whose claims record falls below "b" on Figure 1. Above "b", however, the rate rises as the claims record worsens. But even if the claims record rises above "c", the tax rate will not rise above ceiling rate 0e. This pattern means that a rise in claims from "0" to "b" costs the employer nothing in terms of a higher tax rate.⁵⁰ A rise from "b" to "c", in contrast, raises employer tax costs. Finally, a rise from "c" to "d" again costs the employer nothing.

Figure 1
Relation of UI Tax Rate
and Claims Record



Employers will have a financial incentive to challenge employee claims for benefits if their records fall in the bc range. Usually, when employers challenge a claim, they do so on the grounds that the employee was discharged for cause, e.g., misconduct such as theft of company property. State UI regulations generally deny benefits to such claimants, but the employer must be prepared to offer proof of the alleged grounds for discharge.

Thus, influence #2 - outlined above - is operative only over a certain class of employers (those falling in the bc range of claims). Such employers will find it worthwhile to devote resources to examining UI claims against their accounts and to ensure that they have adequate records to document the grounds for discharges.⁵¹ The UI system is yet another influence in the American labor market which causes drift from the historic notion of "at-will" employment. (Under the "at-will" doctrine, employees can be fired for any reason - except those specifically proscribed by law such as race or sex - or no reason at all.) Even though employers under the at-will doctrine are free to discharge on a whim, they have an economic incentive under UI to follow "just-cause" standards and to document their actions.⁵²

Box J on discharge under UI

Box J

Marijuana and Unemployment Insurance

In 1990, the California Unemployment Insurance Appeals Board heard a case about the discharge of an employee who had used marijuana and refused to take a drug test. A majority of the Board felt the discharge had been proper and, hence, the employee was ineligible for UI benefits. But a minority dissented. How would you evaluate the case? Here are the facts:

The employee worked as a janitor for a company which provided cleaning services to living facilities on off-shore oil platforms. Employer policy required an annual physical exam which included a drug test; anyone refusing the drug test was subject to dismissal. However, the employee had tested positive for marijuana at the time he was hired. At that time, the employer apparently did not strictly enforce a drug-free policy. Subsequently, the employee was given another drug test and tested positive for both marijuana and cocaine. The employer did not discharge him, but imposed a 3-week suspension.

A new supervisor chose to enforce the drug-free policy more rigorously and insisted on a drug test when the employee was not expecting one. The employee refused to take the test, telling the supervisor he had used marijuana while on an off-shore leave and would test positive. Because of this refusal, he was discharged.

The Appeals Board majority - while recognizing that drug testing raised certain privacy issues - found that in this case, the employee had no expectation of privacy in the drug-test area since annual and random drug testing was part of his employer's normal procedures. In addition, the Board majority noted the special safety hazards entailed on oil drilling platforms and the perils a drug-impaired employee might create. But the Board minority thought that his occupation - janitor - did not involve major safety concerns and believed that privacy rights outweighed other considerations.

Source: California Unemployment Insurance Appeals Board, *Hayes v. SHRM Catering Services, Inc.*, Case No. 89-11308, Precedent Benefit Decision No. P-B-470, September 6, 1990.

Employers in lines of business which are inherently cyclical or seasonal are likely to have histories of many claims against their accounts. A "poor" claims record will result from cyclical or seasonal adjustments in labor costs via layoffs. The typical employer of this type will probably fall into the cd range of Figure 1. Because the tax rate on such employers is capped at 0e, they pay less than fully experience-rated taxes for UI coverage. There is a net subsidy to the layoffs of these employers which is being financed by tax payments of employers with better records.

This net subsidy reinforces the use of layoffs to reduce labor costs.⁵³ For example, when a seasonal ski resort hotel lays off its employees at the end of the winter, the laid off workers will probably be eligible for additional weeks of benefits. And it is likely that they will actually collect these benefits, since the chance of finding local employment during the off-season period is small.

From the employee perspective, the benefit of working at the hotel includes both cash wages during the active season and the expected UI benefits during the off-season. But the hotel does not fully finance the UI benefits. Hence, there is a net subsidy to its operations. The hotel can pay lower wages than it would in the absence of UI and still attract sufficient labor. In the long run, the result is more employment in the seasonal, layoff-prone ski-resort industry than would otherwise occur.

Similarly, a cyclically-sensitive industry during an economic downturn could consider three options for reducing labor costs: A) layoffs, B) reductions in weekly hours per worker without layoffs, or C) wage reductions without layoffs. The standard UI system, however, will pay benefits only in the case of option "A". And because the employer does not fully finance its UI benefits (since it is likely to be in the cd range of Figure 1), the UI system effectively subsidizes the choice of option "A" over "B" and "C".

In recognition of the artificial subsidy to option "A", some states have sought to make "B" more attractive by permitting so-called "work sharing" options. Under these arrangements, workers may be partially laid off, i.e., work only part of their normal weekly hours, and be paid proportionately partial UI benefits. However, the regulations surrounding defining eligibility for work sharing UI payments have been cumbersome.⁵⁴ No attempts have been made to eliminate the artificial disfavoring of option "C" by UI programs. Indeed, severe moral hazard problems would arise were such efforts to be made.⁵⁵

ix. Searching for Jobs and Job Applicants.

In a world of perfect and complete information, workers would not spend time searching for jobs, nor would employers have any unfilled vacancies. Workers and firms would instantaneously and

costlessly find one another. But with imperfect information, it is likely that both firms and workers will spend time and resources coming together.

Economists have generally modeled the searching process from the worker side. A worker enters the labor market with only an imprecise idea of the actual job offers available. He/she may have an unrealistic notion of what wage his/her labor is likely to fetch in the market place. As a result, the worker depicted on Figure 2A decides not to accept wage offers below W_0 initially (at time t_0).

Figures 2A and 2B here

However, there may not be any jobs the worker can obtain at a wage as high as W_0 . (Or, if there is a distribution of wage offers by employers, there may be such a low probability of finding a W_0 offer that none is located). As time progresses and the worker remains without a job, a more "realistic" appraisal of the labor market may set in. The worker will reduce his/her "reservation wage" to progressively lower levels as time passes, thus increasing the chance of finding a job.

Thus, for example, at time t_1 on Figure 2A a wage offer of W_1 would be rejected as too low. (The reader should include in the

Figure 2A
Job Search Behavior

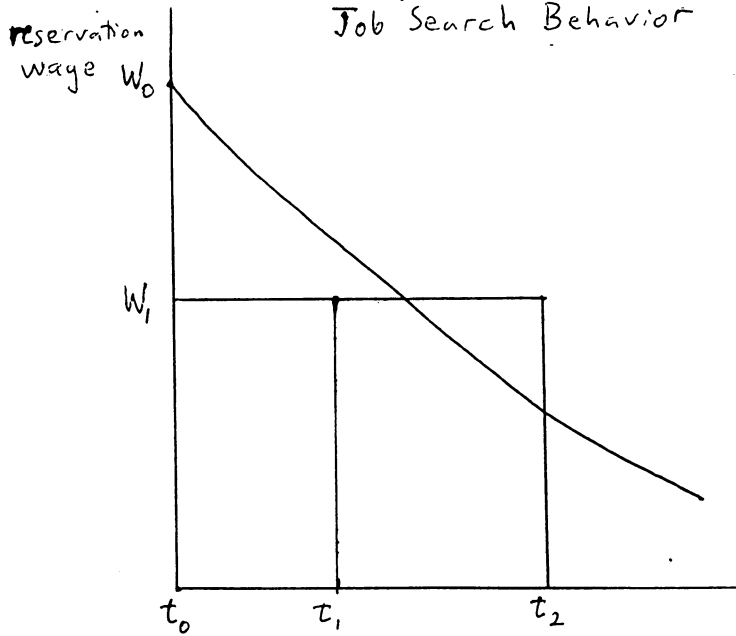
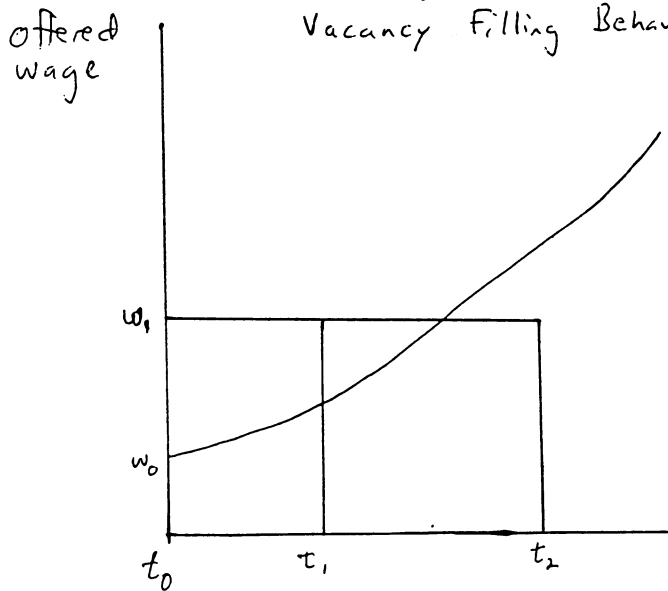


Figure 2B
Vacancy Filling Behavior



definition of "wages" all conditions of work, i.e., wages plus non-wage benefits). But by time t_2 , a wage offer of W_1 would be accepted. By time t_2 , the worker has learned from experience that higher-wage offers are unlikely to be found and that continued search for such offers will probably simply extend the period of unemployment (and lost income) without payoff.

Obviously, the speed with which the adjustment takes place will vary from worker to worker. Some job seekers will start out with realistic expectations about what kinds of offers are likely to be available. Reservation wage schedules for such knowledgeable workers will start lower than those of someone with inflated expectations.

There is evidence that more experienced workers (presumably with more knowledge about the labor market) search for jobs more efficiently and effectively than others.⁵⁶ There is also evidence that when the nature of the labor market changes abruptly - so that prior knowledge becomes obsolete - unrealistic reservation wages are set. During the early-to-mid 1980s, when high-wage manufacturing industry experienced many layoffs, the resulting unemployed were reluctant to accept the low-wage jobs available in their areas and kept searching for wages to which they were accustomed.⁵⁷ From an human resource perspective, this means that recruitment needs of lower-paying employers will not necessarily

be eased immediately by increased unemployment of formerly high-wage workers. A period of adjustment may be required.

Although economists have neglected the employer search process in filling vacancies, much the same concept could be applied. An employer might initially have an unrealistically low expectation of the price of hiring a worker for a given job. Thus, on Figure 2B, the initial wage offering might be only w_0 .

But as time passed and the vacancy went unfilled, the employer might re-evaluate and progressively raise the wage offer. Thus, at time t_1 , a worker who happened along with a reservation wage of w_1 would find the offered wage too low to accept. By time t_2 , however, the offered wage has climbed still higher, so that such a worker would gladly accept the then-prevailing offer.

Search models of the type just described explain what economists call "frictional" unemployment, i.e., a minimal level of unemployment which can be attributed to information costs. Similar models might be made for other kinds of markets where information is imperfect and where, because of the importance of the transaction, it pays for both buyers and sellers to invest time and money in a searching process. Obvious examples come from the real estate field, e.g., markets for houses and markets for apartment rentals. The analogy to frictional unemployment in such

markets is the stock of unsold houses at any point in time or the apartment vacancy rate.

Models of searching have some bearing on cyclical fluctuations in unemployment. Some economists have argued that unemployment rises in recession because workers are initially unaware that the probability of a job offer at their reservation wage has fallen. In this view, a lag in information causes workers to keep their reservation wage schedules too high, thus reducing their chances of finding work and increasing the duration of unemployment.

There are difficulties with such views, however. One problem is that they require too long an information lag. Can it really be the case that workers in 1933 were unaware that the Great Depression (which had begun four years earlier) was upon them? Even in lesser recessions, the same objections hold. Workers in 1990-91 had only to watch the evening news on TV to discover that the U.S. economy had experienced a recession and that jobs had become scarce.

Simple search models require the presence of unrealistic naivete on the part of workers to help much in explaining cyclical unemployment fluctuations. They also do not explain wage rigidity on the part of employers with regard to their current workforces.⁵⁸ Another problem with using search models to explain cyclical fluctuations in unemployment relates to the distribution of wage

offers. It is true that a job seeker who has a more realistic view of what offers might be available will obtain work faster. This obvious point might make it seem, therefore, that the problem of unemployment is due mainly to individual behavior regarding reservation wages. However, as pointed out earlier, if 100 workers are seeking 90 jobs, ten will inevitably lose out. The more realistic worker will have a better shot at the available jobs than the others; he/she will be at the head of the queue. But if all workers were somehow made equally realistic and knowledgeable, there would still be ten unemployed workers left over.

Despite these important limitations, search models do shed certain insights on both sides of the labor market. The model suggests a trade off process being made on both sides. Workers who embark on job search know in general terms the kinds of jobs they hope to find. In setting the reservation wage, the worker is saying implicitly,

"I know that if I lower my sights, I'll find something. But I would rather search longer - even though it 'costs' me the wages from a less attractive job I probably could have obtained - and find a better job. In the long run, the benefits from longer search will outweigh the immediate costs."

Similarly, the employer is saying:

"I know that if I put a high enough wage on this job offer, I could have a line of applicants which would wrap around the block. I could then pick the best applicant from the pool. But I would rather 'pay' the cost of lost production while the vacancy is unfilled and offer a lower wage, since eventually a satisfactory worker will come along. In the long run, the benefits of waiting will outweigh the immediate costs of lost production."

Such statements could be modeled as investment decisions in the face of uncertainty.⁵⁹ Decisions on how to set offered or reservation wages involve evaluation of current costs relative to expected future benefits, using an appropriate discount rate. But even without the specification of a precise model, the approach has an implication for human resource policy in filling vacancies. Simply setting some surveyed average wage on a vacancy may not be the best strategy for the employer. There is a time element involved, which must be considered.

The question should always be, "How long can I 'live' with this job unfilled?" If the answer is "not very long," a higher wage should be set. But if the answer is that it is possible to "make do" at moderate cost while the position remains open, then a more modest offer is appropriate.⁶⁰ An employer ought to look periodically at how long job vacancies have typically remained open under current policy with regard to wage offers. It should consider changing that policy if the duration seems out of line with internal needs (either too long or too short).

Unfortunately, information on employer strategies for filling vacancies is much more limited than information on worker methods for finding a job. A series was kept on employer vacancy rates (defined analogously to unemployment rates) by the U.S. Bureau of Labor Statistics for certain industries, until it was discontinued

in the 1970s for conceptual and budget reasons.⁶¹ However, there is evidence that during boom periods, employers make more of an effort to attract workers than during recessions.

The Conference Board, a private business research group, maintains an index of help-wanted advertising based on the number of classified ads appearing in major newspapers in 51 cities.⁶² Such advertising is one of the most widely-used recruitment tools and is regarded by employers as highly effective.⁶³ It is therefore appropriate to regard help-wanted advertising as a proxy for job vacancies.

As can be seen from Table 6, the help-wanted index moves as would be expected, that is, inversely to the unemployment rate. During recessions, employers advertise for employees less often. This diminution of advertising effort reflects both a reduction in available jobs and - as will be shown below - an increase in unsolicited applications from job seekers when times are bad. The difficulty with the help-wanted index is not in its short-run behavior, but its long-run trend, which is affected by such influences as the decline in the number of urban newspapers.⁶⁴ Human resource management professionals who use the index as a gauge of labor market pressures should concentrate on its short-term fluctuations.

Table 6

**Help-Wanted Advertising and the Condition
of the Labor Market, 1969-1991**

Year	Civilian Unemployment Rate	Conference Board Help Wanted Advertising Index, 1967 = 100
1969 (P)	3.5%	121
1971 (T)	5.9	83
1973 (P)	4.9	126
1975 (T)	8.5	80
1979 (P)	5.8	158
1982 (T)	9.7	86
1990 (P)	5.5	128
1991 (T)	6.7	93

Note: P = business cycle peak; T = business cycle trough.

Source: U.S. Bureau of Economic Analysis, Business Statistics, 1963-91 (Washington: GPO, 1992), pp. 43, 59.

Data from the CPS contain information available on job seeker behavior which is of potential relevance to the formulation of employer recruitment strategy. Table 7 shows job seeking methods cited by the unemployed in 1979, 1982, 1990, and 1991. (The figures exclude those individuals on layoff status who were awaiting recall to their former employer and not searching). Typically, job seekers cited less than two methods of search and the predominant method, by far, was to approach employers directly.

These figures, in short, bear out the popular image of "pounding the pavement" looking for work. Of course, employers can also be approached by telephoning the personnel office or sending a resume. An actual visit to the personnel office by a job applicant is not always necessary for an initial contact.

To the extent that information is available on employer practices, it also supports the importance of direct contacts from employees as the key method of recruitment. For nonexempt personnel, over 90% of employers in one survey reported using unsolicited applications at their personnel offices as a recruiting tool. More importantly, for these workers it was the top-ranked method as measured by the number of new employees recruited.⁶⁵

As Table 7 shows, a large fraction of job applicants will be coming to employers regardless of the state of the economy. But the absolute number will vary with the business cycle; during

Table 7

Searching Methods Cited by the Unemployed (a)

Search Method	1979	1982	1990	1991 All	1991 Job Losers
Public employment agencies	27%	24%	23%	23%	30%
Private employment agencies	6	6	9	9	10
Employer directly	71	78	72	73	73
Placed or answered ads	30	35	40	41	45
Friends or relatives	14	16	20	22	25
Other	6	5	5	5	6
Average number of search methods cited	1.5	1.6	1.7	1.7	1.9

OU: Excludes unemployed individuals on layoff status.

Source: U.S. Bureau of Labor Statistics, Handbook of Labor Statistics, bulletin 2217 (Washington: GPO, 1985), pp. 86-88; Employment and Earnings, vol. 35 (January 1988), p. 177.

recessions there are more job seekers than during booms. Many employers, therefore, will not find it worthwhile to engage in substantial outreach efforts, especially if the economy is slack. Exceptions occur among employers with special needs (such as affirmative action programs) and employers experiencing severe labor shortages for particular occupations. In addition, employers seeking employees with unusual qualities or technical qualifications may find a large applicant pool to be necessary and thus are unlikely to follow a passive recruitment strategy.

The relatively low use of private employment agencies may be surprising to some readers. Such agencies charge fees for their services, either to the employer or employee, assuming that a successful placement occurs. Apparently, both sides prefer to avoid such fees, thus holding down their use of such agencies.

Public employment services - which charge no fee to either side - have a much higher usage rate. But there is a requirement that applicants for UI benefits register with the state public employment service. Not surprisingly, the usage rate for these agencies is higher for job losers (the group within the unemployed which is eligible for UI) than for others.

Still, the reported use of public employment services is far below 100%, even for this group. It appears, therefore, that many job losers do not cite the public employment service as a job

seeking method, even though they have in fact registered with it. Possibly, the services are not perceived as likely to produce a placement by workers, and thus are not reported to CPS interviewers. Employers indicate that the public employment services are frequently used as recruitment tools, but rank them low in actual hires, except for nonsupervisory workers. Even for that group, direct contacts from applicants and help-wanted advertising rank higher in terms of new recruits hired.⁶⁶ However, employer perceptions may not be entirely correct; unemployed workers who report using the public employment service have about the same monthly probability of finding work as other workers.⁶⁷

III. Persons Not in the Labor Force.

At first blush, persons identified as not in the labor force, i.e., neither employed nor unemployed, might seem to constitute a group irrelevant to the concerns of employers. In fact, within the pool of persons not in the labor force, there are individuals who are potential recruits for jobs. And there are people who might enter the labor force and seek work (become officially unemployed) if they felt conditions were sufficiently favorable to finding work opportunities.

i. Persons Who Do Not Want Work.

Table 8 shows that individuals in the civilian noninstitutional adult population range across a spectrum marked by their degree of labor market attachment. Of the almost 190 million people who were in this population in 1991, about 59 million were not in the labor force and expressed no current interest in working. Presumably, even some of these persons could be enticed into employment, if conditions offered were sufficiently attractive, or if their family's economic situation shifted in an adverse direction.⁶⁸ But, by self-declaration, their linkage to the labor market was extremely weak. Thirty-nine percent of these individuals were women who reported being homemakers and 33% were persons who are self-described as retired.⁶⁹

Box K on keeping house

ii. Persons With Some Interest in Work.

However, another group of persons considered to be not in the labor force indicated - when asked - that they would like to have had a job but were currently occupied with other non-work pursuits (such as school or household tasks) or had some work-hindering disadvantage (such as illness or disability). The people in this group (4.7 million in 1991) seemed to be saying that they would have liked a job if one had come their way and had met their particular needs and situations. But the desire to work was not

Table 8

**Degree of Labor Market Attachment, 1991
(Civilian Noninstitutional Population)**

Employed:	116.9 million
Unemployed:	8.5 million
Not in Labor Force:	64.5 million
Not in Labor Force But Want Job Now:	5.7 million
Not looking because think cannot get job (discouraged workers):	1.0 million
Not looking because going to school, ill health/disabled keeping house, retired, other reason:	4.7 million
Not in Labor Force and Do Not Want Job Now:	58.7 million

Note: Total Civilian Non- institutional Population:	189.8 million

Source: Employment and Earnings, vol. 39 (January 1992), pp. 162, 204.

Box K

Keeping House vs. Market Work

Although sex roles with regard to market (paid) work have obviously changed since the end of World War II, the issue is less clear with regard to household chores. Women now participate in the workforce in much higher proportion than in the 1940s. But CPS data suggest relatively few men indicate that they are not participating in the labor force because of housekeeping responsibilities. Of the 23.2 million people who indicated they were not seeking work because of housekeeping in 1991, less than 2% were men. In short, there are many housewives but - despite changes in social attitudes - very few house-husbands.

Source: Employment and Earnings, vol. 39 (January 1992), p. 204.

sufficiently strong to impel an active search for such jobs. The linkage between this population and the labor market was somewhat stronger than that of those people who said they absolutely did not want jobs.

iii. Discouraged Workers.

A little over a million individuals indicated that they wanted a job but were not looking for one because they did not think work could be found. These persons - sometimes called "discouraged workers" - express a stronger interest in work than the previously cited groups. But they do not meet the test for being counted as officially unemployed (since they are not seeking work). Not surprisingly, the size of the discouraged worker pool fluctuates with the number of officially unemployed, since both classifications are related.

iv. The Effective Recruitment Pool.

Those persons who can cite the requisite work seeking activity (or who are on layoff status) are counted as unemployed in official statistics. They are still more strongly linked to the labor market than the groups discussed above, even though they did not have jobs at the time of the survey. Of course, the most strongly linked to the employment market in 1991 were the almost 117 million persons who actually had jobs.⁷⁰

These figures carry an important message for employers. Those employers who have policies of actively recruiting new workers are not confined to recruitment from the pool of unemployed individuals. Obviously, employers often recruit employees directly from other employers. That is, many new recruits transit from job to job without passing through a period of unemployment. But it is also the case that new employees can be obtained from among those persons who are not in the labor force at all. There are people who are neither employed nor officially unemployed, but who nevertheless might accept a job offer.

Table 9 illustrates this point. Based on a special study of CPS data, the table shows the average previous month status of employed individuals during 1984. About 95% of people employed in a particular month that year were also employed the previous month. (Most of these people, it can be assumed, were in fact employed in the same job from month to month). In an average month, just under 2% of the employed had entered employment after being unemployed the previous month. But over 3% entered employment after not being in the labor force at all in the previous month. That is, more people entered employment from outside the labor force than from the pool of unemployed! Those persons who made the transition from not in the labor force to employed were disproportionately female, as the table shows.

(to be updated if possible)

Table 9

Average Monthly Shifts into Employment, 1984

Percent of Employed in Current Month by Source from Previous Month	All Employed	Employed Males	Employed Females
Employed in previous month	95.2%	96.0%	94.3%
Unemployed in previous month	1.7	1.9	1.4
Not in labor force in previous month	3.1	2.2	4.3

Note: Figures represent averages of monthly data.

Source: Paul O. Flaim and Carma R. Hogue, "Measuring Labor Force Flows: A Special Conference Examines the Problems," Monthly Labor Review, vol. 108 (July 1985), p. 11.

v. Employer Recruitment Strategies.

In seeking new recruits, employers can follow a strategy of simply waiting for job applicants. Such people will be unemployed and actively seeking work. Or they will be employed people engaged in job search while working, presumably because they are dissatisfied with their current positions. However, an employer who is willing to accommodate the needs of people who are out of the labor force (not searching), but who have some interest in working, will find that a significant labor pool is available.

There are methods of attracting this pool. Use of bonuses to current employees who bring in recruits may succeed in tapping people who otherwise are not seeking work. One study found that 28% of surveyed employers offered such bonuses.⁷¹

Another method is to make employment attractive by accommodating worker needs. For example, the firm can offer flexible hours, create arrangements permitting work at home (say, through computer terminals), or facilitate child care, etc. The ability to provide such accommodations, and the costs of doing so, will vary across employers. Although the direct labor costs paid to workers may be lower if the employer draws on a pool of individuals who otherwise cannot be in the labor market, there are expenses related to providing this flexibility.

The most obvious costs for individuals whose hours or work site needs must be accommodated are the inherent problems of coordination and control. People whose hours vary substantially from "normal" work schedules, or who work at home, are difficult to supervise. In addition, if these non-searchers are to be attracted into "regular" employment, coverage of worker transportation expenses, and other potentially expensive inducements may be needed.

vi. Outreach and the State of the Labor Market.

Employers are most likely to engage in outreach to the pool of workers not in the labor force during very tight labor markets, when shortages of workers and unfilled vacancies overcome these costs. Perhaps the most prominent example of such behavior occurred during World War II, when booming production demands for labor (related to the war effort) and reductions in labor supply (due to military conscription of males) forced employers to seek every available worker. The result was a considerable recruitment of women, who at that time had much lower participation rates than they do today, into nontraditional blue-collar jobs.

But even apart from the extreme circumstances of World War II, there are examples of employer outreach. In the late 1980s, certain parts of the country began to experience labor shortages. As a result, employers engaged in various outreach strategies.

For example, some firms sent buses into depressed urban areas to bring out and hire disadvantaged minority workers who might otherwise not have had job opportunities.⁷²

vii. Future Job Desires.

Absent such efforts, individuals in the not-in-the-labor-force classification may nevertheless become part of the available labor pool. Included in the CPS are questions to persons not in the labor force about their future work seeking intentions. Thus, in 1991, about 15% of those persons of working age who were not in the labor force indicated that they would be seeking work within the next 12 months.

Sixteen percent of individuals indicating they would be seeking work in the future had never worked before. Such persons were mainly young individuals planning to enter the labor market for the first time after leaving school. Almost half, however, had worked during the previous year. These respondents were also typically young, probably students who enter and leave the labor force during their school vacations.⁷³

IV. Conclusions.

The employment market has been shown in this chapter to be a fluid system of matching employers and employees. It contains

persons of varying degrees of attachment to employment. And it varies in its state of tightness: while there are always both job seekers and unfilled vacancies present, the balance between the two changes with the business cycle. The recruitment policies followed by employers will vary accordingly between passivity and active search for new hires, with more active recruitment strategies needed during business-cycle booms.

Available data suggest that job security is likely to be of concern to many employees. With security of employment, longer employer-employee attachments result. In turn, the potential recoupment periods for "human capital" investments made by both the employee and the employer lengthen, raising the rate of return. But, providing job security is potentially costly in the face of demand variability and employers will probably provide less of it in the 1990s than in earlier decades. In a later chapter, the interconnection between job security and investments in employees will be explored.

EXERCISE FOR THE STUDENT

Obtain information from the U.S. Bureau of Labor Statistics or its publications on the unemployment rate for a particular city or state. Trace the movements of this rate over time. What implications for employers in the area are there in the absolute level of the rate compared with rate for the U.S. as a whole? In the changes of the area rate over times?

QUESTIONS AND KEY CONCEPTS

- 1) What implications are there for the employment relationship in the concept of workers who are on leave from their positions?
- 2) What hurdles are there for employees seeking to obtain jobs which provide the number of hours per week they would like to work?
- 3) What hurdles are there for employees seeking to obtain jobs which provide a schedule of hours which meets their other (non-job) needs?
- 4) What role does seniority play in layoff systems?
- 5) Is the source of recruitment confined largely to individuals who are currently in the labor force?
- 6) How does the tax system for unemployment insurance affect the propensity of employers to use layoffs as a method of adjustment to demand fluctuations?

Concepts:

clearing of the labor market, discouraged workers, employees as stakeholders, experience rating of unemployment insurance, frictional unemployment, labor force, internal labor markets, interrupted spell of unemployment, job search model, layoffs and recall by seniority, loose labor market, methods of job search, recruitment of individual not in the labor force, reservation wage, state employment services, Supplemental Unemployment Benefits, temporary layoffs, tight labor market, unemployment, unemployment insurance, unemployment rate

FOOTNOTES

1. The institutionalized population which is not included consists of inmates of prisons, mental institutions, sanitariums, and homes for the aged, infirm, and needy. Other detailed information on the Current Population Survey can be found in U.S. Bureau of Labor Statistics, BLS Handbook of Methods, a publication which is periodically updated.
2. Self-employed individuals and unpaid workers in family enterprises who worked 15 or more hours per week are also counted as employed, even though they do not earn wages or salaries.
3. Bureau of National Affairs, Inc., Policies on Leave from Work, PPF survey no. 136 (Washington: BNA, 1983), pp. 3, 34.
4. This requirement was enacted by Congress in 1978 as an amendment to Title 7 of the Civil Rights Act. Issues surrounding equal employment opportunity (EEO) will be discussed in a later chapter.
5. Employment and Earnings, vol. 39 (January 1992), p. 171.
6. Presumably, there are some full time workers who would prefer part time work, but cannot find such a job. These individuals are not regularly reported in the Current Population Survey.
7. Chris Tilly, Short Hours, Short Shift: Causes and Consequences of Part-Time Work (Washington: Economic Policy Institute, 1990).
8. Weitzman, Martin L., "Increasing Returns and the Foundations of Unemployment Theory," Economic Journal, vol. 92 (December 1982), pp. 787-804.
9. There could be "frictional" unemployment in such a situation if there were imperfect and costly information about the labor market. This concept is discussed later in this chapter.
10. For example, consider the view of Robert E. Lucas that "to explain why people allocate time... to unemployment we need to know why they prefer it to all other activities." (italics added) The comment is quoted in Alan S. Blinder, "Keynes, Lucas, and Scientific Progress," American Economic Review, vol. 77 (May 1987), p. 131. See also Robert M. Solow, "Unemployment: Getting the Questions Right," Economica, vol. 53 (Supplement, 1986), pp. S23-S34, especially S33-S34.
11. Modern theories of unemployment have both micro and macro aspects. Usually, some kind of rigidity is posited which prevents market clearing. See Carl Davidson, Recent Developments in the Theory of Involuntary Unemployment (Kalamazoo, Mich.: Upjohn Institute, 1990).

12. If all firms could be persuaded to hire, they would collectively raise the demand for their products and unemployment would be reduced. But there is no incentive for any one firm to expand employment since the demand effects would be too diffused for that firm to recapture them in added sales.

13. Actually, the person responding to the Current Population Survey answers on behalf of all members of the household.

14. In 1991, only 15% of those counted as unemployed were reported to be on layoff, i.e., the remaining 85% were covered by criterion #1. Source: Employment and Earnings, vol. 39 (January 1992), p. 176. Formal layoff systems are discussed below in the text.

15. Lawrence Katz, "Layoffs, Recall and the Duration of Unemployment," working paper no. 1825, National Bureau of Economic Research, January 1986.

16. The way in which questions are asked and the timing of the questions will influence the results obtained. For example, in the Current Population Survey, there are always eight active "rotation groups." A group enters the sample for four months, drops out for four months, and then returns for four months. It has been found that the unemployment rate reported by the first rotation group (the group which has just entered the survey) tends to be higher than that of the other groups. Reasons for such biases are not known. See National Commission on Employment and Unemployment Statistics, Counting the Labor Force (Washington: GPO, 1979), pp. 134-136.

17. Figures on unemployment adjusted to U.S. definitions for various countries appear in the data appendix to the Monthly Labor Review and other publications of the U.S. Bureau of Labor Statistics. In addition, an annual article in the Monthly Labor Review describes foreign labor market developments in detail.

18. Officially, there were actually two back-to-back recessions during the 1979-82 economic slump. The table ignores the interim "peak" during this period, which was really a pause on the way down.

19. Demand related is defined here as bankruptcy, contract cancellation or completion, import competition, or slack work. See U.S. Bureau of Labor Statistics, Mass Layoffs in 1990, bulletin 2395 (Washington: GPO, 1992), p. 9.

20. Included are changes in ownership and domestic or overseas relocation.

21. Included are repairs, automation, environment-related problems, material shortages, and model changes.

22. Included are vacations, weather-related problems, and seasonality.

23. Michael R. Darby, John C. Haltiwanger, and Mark W. Plant, "The Ins and Outs of Unemployment: The Ins Win," working paper no. 1997, National Bureau of Economic Research, August 1986.

24. Analysis of unemployment duration can be found in Hyman B. Kaitz, "Analyzing Spells of Unemployment," Monthly Labor Review, vol. 93 (November 1970), pp. 11-20; Kim B. Clark and Lawrence H. Summers, "Labor Market Dynamics and Unemployment: A Reconsideration," Brookings Papers on Economic Activity (1:1979), pp. 13-60; George Akerlof and Brian G.M. Main, "Unemployment Spells and Unemployment Experience," American Economic Review, vol. 70 (December 1980), pp. 885-893 (comments and replies appear in the December 1983 issue); Michael W. Horrigan, "Time Spent Unemployed: A New Look at Data from the CPS," Monthly Labor Review, vol. 110 (July 1987), pp. 3-15.

25. Suppose that there are two classes of individuals. People in group S experience only short spells of unemployment of 1 week when they become unemployed; people in group L experience long spells of 10 weeks. Suppose every week one person from each group becomes unemployed and that this process goes on indefinitely. In the steady state, the unemployed will consist of one person from group S and ten from group L. The average completed spell of those currently unemployed will be $9.2 \text{ weeks} = [(10 \times 10) + (1 \times 1)]/11$. The average completed spell of those entering unemployment will be $5.5 \text{ weeks} = (10 + 1)/2$. This example is a variant of one appearing in Horrigan, "Time Spent Unemployed," op. cit., p. 4.

26. Hal Sider, "Unemployment Duration and Incidence: 1968-82," American Economic Review, vol. 75 (June 1985), pp. 461-472, especially p. 469.

27. Employment and Earnings, vol. 39 (January 1992), p. 177. Additional information on unemployment duration for job losers is presented on Table 4, below.

28. Kathryn L. Shaw, "The Quit Propensity of Married Men," Journal of Labor Economics, vol. 5 (October 1987), Part 1, pp. 533-560.

29. Median family income of two-earner (husband and wife) families can be compared with median earnings of one earner families (just husband or just wife) to estimate the contribution of adding a wife (or husband) to the family's earners. Estimates are also available for families where just the husband is unemployed (and the wife works) or just the wife works (and the husband is unemployed). The two thirds/one third estimate in the text is based on such comparisons.

30. Bruce W. Klein, "Missed Work and Lost Hours, May 1985," Monthly Labor Review, vol. 109 (November 1986), pp. 26-35.
31. Michael R. Darby, John C. Haltiwanger, and Mark W. Plant, "The Ins and Outs of Unemployment: The Ins Win," op. cit.
32. Training is discussed in a later chapter.
33. A later chapter will deal with the decline in union membership.
34. Katharine G. Abraham and James L. Medoff, "Length of Service and the Operation of Internal Labor Markets" in Barbara D. Dennis, ed., Proceedings of the Thirty-Fifth Annual Meeting, Industrial Relations Research Association, December 28-30, 1982 (Madison, Wisc.: IRRR, 1983), pp. 308-318; Katharine G. Abraham and James L. Medoff, "Length of Service and Layoffs in Union and Nonunion Work Groups," Industrial and Labor Relations Review, vol. 38 (October 1984), pp. 87-97.
35. U.S. General Accounting Office, Plant Closings: Limited Advance Notice and Assistance Provided Dislocated Workers, GAO-87-105 (Washington: GAO, 1987), pp. 34-39. The 1988 legislation contained a complex set of exclusions for smaller employers and small-scale layoffs.
36. Ronald G. Ehrenberg and George H. Jakubson, "Advance Notice Provisions in Plant Closing Legislation: Do They Matter?", working paper no. 2611, National Bureau of Economic Research, June 1988; Christopher J. Ruhm, "Advance Notice and Postdisplacement Joblessness," Journal of Labor Economics, vol. 10 (January 1992), pp. 1-32.
37. It is important to note that there is a distinction to be made between benefiting the employees concerned by advance notice requirements and benefiting society as a whole. Advance notice might provide an advantage to the affected workers - by giving them more time to search for a limited number of jobs - to the disadvantage of other job seekers. However, such societal and public policy issues would not be of concern to the individual employer.
38. A few unions operated informal unemployment benefit systems before the Great Depression for their members.
39. Workers who quit their jobs may not be eligible for benefits, or may be eligible for only reduced benefits, although eligibility and benefits (if any) will depend on the circumstances of the quit. As will be discussed below, workers who are discharged for misconduct are generally ineligible.

40. The employer can receive a credit of up to 5.4% of the 6.2%, with the remaining 0.8% used to finance federal and state administrative costs of the unemployment insurance system. Some states use wage bases higher than the \$7,000 basic amount in order to generate higher revenues for their program. Under "experience rating" (see below in the text), employers may not in fact pay the full 5.4% and still be given credit for it against their federal tax obligation. State-by-state details on the UI system can be found in annual volumes issued by the National Foundation for Unemployment Insurance & Workers' Compensation entitled Highlights of State Unemployment Compensation Laws.

41. There is evidence that the mix of individuals unemployed changes during cyclical downturns. See Michael L. Darby, John Haltiwanger, and Mark Plant, "Unemployment Rate Dynamics and Persistent Unemployment Under Rational Expectations," American Economic Review, vol. 75 (September 1985), pp. 614-637.

42. Gary Burtless, "The Tattered Safety Net: Jobless Pay in the United States," Brookings Review, vol. 9 (Spring 1991), pp. 39-41.

43. Finis Welch, "What Have We Learned from Empirical Studies on Unemployment Insurance?," Industrial and Labor Relations Review, vol. 30 (July 1977), pp. 451-461; Pedro Portugal and John T. Addison, "Problems of Sample Construction in Studies of the Effects of Unemployment Insurance on Unemployment Duration," Industrial and Labor Relations Review, vol. 43 (April 1990), pp. 463-477.

44. Lawrence M. Kahn and Stuart A. Low, "Systematic and Random Search: A Synthesis," Journal of Human Resources, vol. 23 (Winter 1988), pp. 1-19. The fact that there are jumps in job finding which occur among the unemployed at around the time the UI benefits run out suggests that the presence of the benefits does enable workers to prolong their searches. See Bruce D. Meyer, "Unemployment Insurance and Unemployment Spells," working paper no. 2546, National Bureau of Economic Research, March 1988. One experiment found that offering workers a bonus if they found a job early reduced the duration of UI claims. See Stephen A. Woodbury and Robert G. Spiegelman, "Bonuses to Workers and Employers to Reduce Unemployment: Randomized Trials in Illinois," American Economic Review, vol. 77 (September 1987), pp. 513-530.

45. Clair Vickery, "Unemployment Insurance: A Positive Reappraisal," Industrial Relations, vol. 18 (Winter 1979), pp. 1-17.

46. Technically, the CPS has nothing to do with an individual's eligibility for UI. Thus, a respondent who is not really seeking work need not fear that disclosing this information to the CPS survey taker will result in loss of benefits. (Responses to the CPS are confidential). However, respondents may not know this fact or may not believe assurances they are given. In any case, since

UI payments are contingent on registration with the state employment service, the respondent can always cite such registration as a job-seeking activity.

47. UI effect as a macroeconomic stabilizer is weakened by the system of "experience rating" of UI taxes collected from employers. Average tax rates of employers will rise during recessions under this arrangement. (See below in the text for more on this feature of UI.) In theory, consumption might not be affected by a temporary fall in income due to layoff. However, the evidence suggests that consumption and income are linked. See Robert E. Hall, Consumption, working paper no. 2265, National Bureau of Economic Research, May 1987.

48. Strikers are eligible for benefit in Rhode Island and New York. State laws vary as to the definition of a striker and the determination of whether a dispute is a strike or lockout. Employers may sometimes be able to create a situation in which the union is "forced" to declare a strike, thus avoiding having non-working union members be eligible for benefits. In turn, unions can sometimes try and force a lockout, say by striking only a key plant and offering to work at other plants.

49. Employers may also challenge the eligibility of claimants on grounds other than that they were fired for misconduct.

50. Strictly speaking, as the employer approaches point "b", it progressively exposes itself to the risk that further layoffs might push it into the rising tax rate range bc. There is empirical evidence, however, that employers tend to stay within their tax rate schedule from period to period. See Denton Marks, "Incomplete Experience Rating in State Unemployment Insurance," Monthly Labor Review, vol. 107 (November 1984), pp. 45-49.

51. The state UI systems have appeals tribunals which examine employer challenges and protests of denials of benefits by claimants. Box J contains an example.

52. The at-will doctrine, wrongful discharge, and just cause are taken up in subsequent chapters.

53. Robert H. Topel, "On Layoffs and Unemployment Insurance," American Economic Review, vol. 73 (September 1983), pp. 541-559.

54. See the symposium on work-sharing UI programs in Barbara D. Dennis, ed., Proceedings of the Thirty-Eighth Annual Meeting, Industrial Relations Research Association, December 28-30, 1985 (Madison: Wisc.: IRRR, 1986), pp. 424-464.

55. Imagine a UI system which paid benefits to workers whose wages were cut. An employer paying less than fully experience-rated taxes would have an incentive to hire workers at artificially high

wages, and then cut those wages once eligibility of the workers was established, to induce a UI subsidy. If the rules required that UI would be paid only if the wage cuts were in lieu of a layoff, it would be difficult (if not impossible) to provide such proof. Hence, wage-cut benefits would not be paid. If the rules required that the UI authorities would have to disprove assertions that the wage cuts were in lieu of layoffs, they would never be able to do so and the subsidy would be automatic.

56. Kahn and Low, "Systematic and Random Search: A Synthesis," op. cit.

57. Lawrence H. Summers, "Why Is the Unemployment Rate So Very High Near Full Employment?," Brookings Papers on Economic Activity (2:1986), pp. 339-383.

58. Suppose currently employed workers are naive about the demand for labor. Their employers would begin to cut pay, as recession loomed. But the naive workers would quit as pay fell, on the (incorrect) assumption that they could find work at the old wage somewhere else. In fact, quit rates fall as the economy goes into recession; they do not rise as the naive-worker hypothesis would suggest.

59. Steven A. Lippman and John J. McCall, The Economics of Search (Cambridge, Mass.: Harvard University Press, 1985).

60. It will be noted in a later chapter that considerations of wage structure and cross-job wage equity may rationally be important to employers. Such considerations could constrain the wage-offer decision.

61. Some states elected to continue the program within their jurisdictions. See Katharine G. Abraham, "Structural/Frictional vs. Deficient Demand Unemployment," American Economic Review, vol. 73 (September 1983), pp. 708-724.

62. Audrey Freedman and Kenneth Goldstein, "Labor Market Data from The Conference Board" in Barbara D. Dennis, ed., Proceedings of the Thirty-Eighth Annual Meeting, Industrial Relations Research Association, December 28-30, 1985 (Madison, Wisc.: IRRR, 1986), pp. 34-41.

63. Bureau of National Affairs, Inc., Recruiting and Selection Procedures, PPF survey no. 146 (Washington: BNA, 1988), p. 9.

64. As the number of newspapers in an urban market declines, the index is biased upwards, since the probability that an employer will use the sampled newspaper for help-wanted advertising increases. These and other problems are discussed in Katharine G. Abraham, "Help-Wanted Advertising, Job Vacancies, and

Unemployment," Brookings Papers on Economic Activity (1:1987), pp. 207-243.

65. Harriet Gorlin, Personnel Practices I: Recruitment, Placement, Training, Communication, information bulletin no. 89 (New York: The Conference Board, 1981), pp. 11-12.

66. Bureau of National Affairs, Inc., Recruiting and Selection Procedures, op. cit., pp. 7-9. A common view of public employment agencies among employers is that they do not refer the best applicants, i.e., better applicants are available through other sources. This poor image may lead to negative "signaling" of applicants referred by public employment agencies, i.e., employers may assume that they are of lower quality. The concept of signaling is discussed in a later chapter.

It might be noted that the CPS estimates of the number of job searching methods used is well below that found in another survey, the National Longitudinal Survey (NLS). It may be that the CPS' reliance on indirect questioning of one member of the household regarding behavior of all household members causes this result. The NLS data suggest that friends and relatives are more commonly used than the CPS reports, especially by young people. See Harry J. Holzer, "Search Method Used by Unemployed Youth," Journal of Labor Economics, vol. 6 (January 1988), pp. 1-20.

67. Steven M. Bortnick and Michelle Harrison Ports, "Job Search Methods and Results: Tracking the Unemployed, 1991," Monthly Labor Review, vol. 115 (December 1992), pp. 29-35. Those using the public employment service are more likely also to be receiving UI payments. So they are less likely to drop out of the labor force if they do not find employment than other workers.

68. Economists sometimes speak of an "added worker" effect, the reverse of the discouraged worker effect. (The latter is discussed below in the text). Added workers are those who have been impelled to enter the labor force because of job loss of someone else in the family. The two effects are likely to work in opposite directions over the business cycle; as the unemployment rate goes up some workers are discouraged and drop out of the labor force while others are added to it because of the unemployment. However, the discouraged worker effect seems to dominate. Regarding added workers, see Shelly Lundberg, "The Added Worker Effect," Journal of Labor Economics, vol. 3 (January 1985), Part 1, pp. 11-37.

69. Employment and Earnings, vol. 39 (January 1992), p. 204.

70. The reader is reminded that these figures are monthly averages. Hence, there were more than 117 million people who had jobs at some time during 1991.

71. Bureau of National Affairs, Inc., Recruitment and Selection Procedures, op. cit., p. 12.

72. Paul Richter, "Northeast U.S. Frustrated by Acute Labor Shortage," Los Angeles Times, December 23, 1986, Part 4, pp. 1, 20.

73. Employment and Earnings, vol. 39 (January 1992), p. 207.