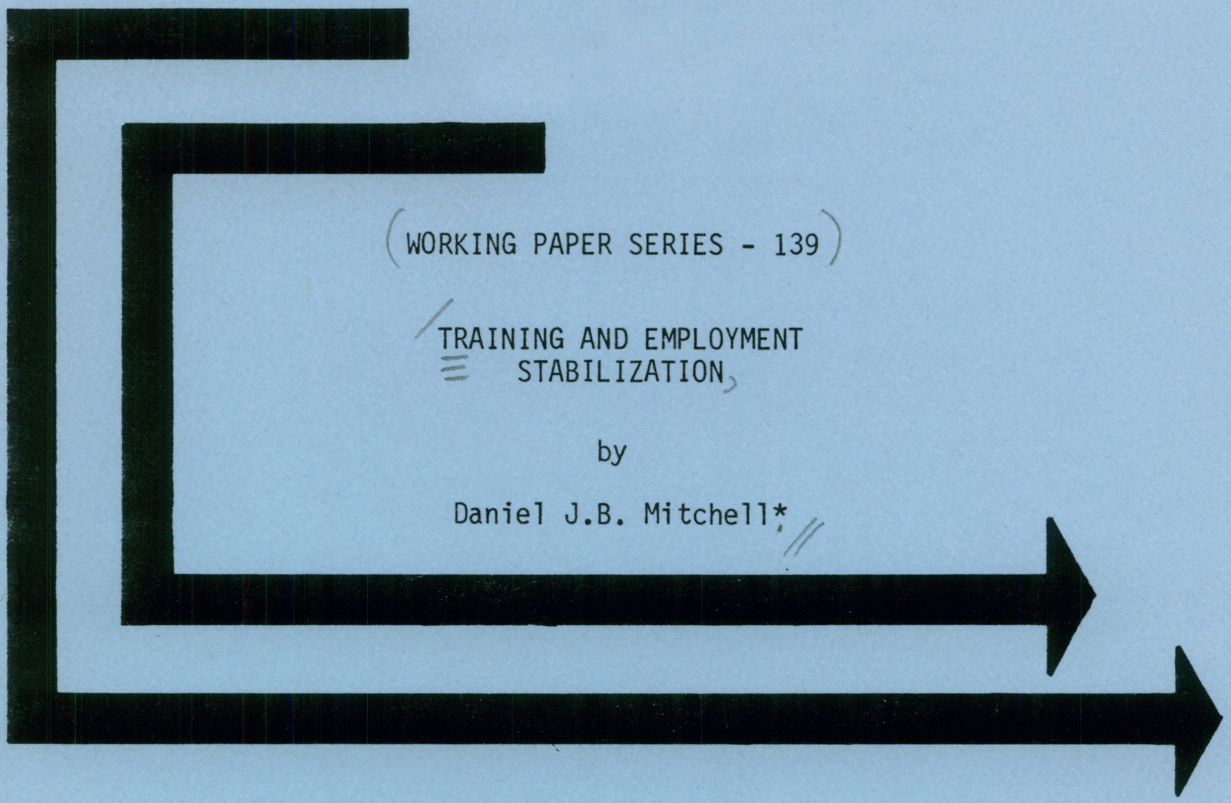

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TRAINING AND EMPLOYMENT STABILIZATION

by

Daniel J.B. Mitchell*

*Daniel J.B. Mitchell
Director
Institute of Industrial Relations
U.C.L.A.
Los Angeles, California 90024-1496
(213) 825-4339

and

Professor
Graduate School of Management
U.C.L.A.

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INSTITUTE OF INDUSTRIAL RELATIONS (Los Angeles)
UNIVERSITY OF CALIFORNIA
LOS ANGELES

CHAPTER 12:

Training and Employment Stabilization

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Chapter 12: Training and Employment Stabilization

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Chapter 12: Training and Employment Stabilization

Earlier chapters have reviewed the attachment of individuals to the labor market and to employment. The fact that individuals do become attached to employers for extended periods has important implications for employer investment in employees and employee investments in skill-acquisition related to their jobs. Unemployment, which the previous chapter showed can be a painful experience for workers, is made more so by the potential loss of employee investment in job skills. This chapter analyzes the process of investment in employees -- both by employers and by employees themselves. It then takes up the possibility of employment stabilization through introduction of share compensation systems which might encourage such investment.

I. Job Tenure.

How long do people generally work for a single employer? From the viewpoint of an employer considering investing in the training of an employee, or an employee considering investing in his/her own job skills, expected job duration is important. The "yield" on the investment will be influenced (positively) by the duration of the job. A longer duration means a longer recoupment period during which the returns can be obtained.

Questions about job duration raise problems similar to those relating to unemployment durations, discussed in the previous chapter. The Current Population Survey (CPS) periodically asks employees how long they have been on their current job. But the responses represent interrupted spells of employment. The answers do not directly indicate how long an individual who says he/she has already been on the job for, say, 5 years will remain employed in that position. That is, the completed spell of employment is not tracked.

In terms of median interrupted job durations, the time reported on the current job in 1983 was 4.4 years for all workers, which broke down into 5.1 years for men and 3.7 years for women. Unfortunately, average data are not published, but the mean would be longer than the median; the potential response is bounded by zero on the low side, but has a very long potential duration on the high side.[1] Thus, if it is assumed that the average respondent is half way through his/her employment spell, a typical completed spell of employment for males would be over 10 years and for females at least 7½ years.

Even these figures can be misleading in their HRM implications because of the inclusion of young people in the CPS sample. Young workers who are queried by the CPS cannot have had extended spells with their current employers; they have not been of working age long enough to have been on the job for many

years. More importantly, young workers have a tendency to seek temporary work, e.g., during school vacations, with very short spells. And even when they have finished their schooling, young workers tend to change jobs more readily than older workers as they seek to find their niche in the labor market. A lack of dependents makes such job changing easier for young people than for their older counterparts in the workforce.

Thus, the strength of job attachment is best seen by analyzing older workers, who have had the chance to have had long working lives, and who are more likely to have "career" positions. For males aged 55-64 years in 1983, median time on the current job was close to 17 years; almost 45% reported having been with their current employer 20 or more years. The corresponding figures for women in that age bracket was a median of over 10 years; almost 21% reported employment spells of 20 or more years.

These older individuals are approaching retirement age, so their current employment spells give some indication of their eventual completed job durations. It can be assumed, therefore, that completed job spells of 20 years for males and 15 years for females are clearly not at all unusual. More precise analysis of CPS data has confirmed the long spells with a single employer which are commonplace in the U.S. labor market.[2]

Employees and employers normally have information as to whether a job situation is long term or temporary. Unfortunately, there is no way of confining the CPS sample only to workers with career positions in firms with formal HRM procedures. But if it were possible to isolate such workers within the sample, their reported employment spells would be even longer than the available numbers suggest. Thus, employers who "invest" in employees by providing them with training, or employees who invest in themselves by acquiring skills valuable to their employers, often have long potential recoupment periods to recapture such investments.

Once it is established that long durations of employment are not unusual, the precise length of an employment spell may not be critical, thanks to the heavy discounting of returns in years far in the future. For example, the present value of every $1 return "paid" at the end of each year for a five-year period is $4.33 at a 5% discount rate. For ten years, the present value rises to $7.72. At 15 years, the value is $10.38 and at 20 years $12.46. Thus, as the duration extends, the extra increment of recoupment matters progressively less. It will not matter very much whether career employees typically stay for 18 or 20 years in making decisions on whether to invest in what economists call "human capital."

II. Education and the Job Market.

One fact that is very clear about human capital is that certain kinds of investment in skill acquisition are rewarded in the labor market. Unfortunately, there are no data gathered on the full extent of on-the-job training that occurs (although some limited survey data will be discussed below). What is most readily measured is formal education, i.e., years of elementary, secondary, and higher education attained by individuals. Questions about educational attainment, job market experience, and income are part of such surveys as the decennial Censuses of Population. From these sources the rewards to education can be documented.

i. Rewards to Formal Education.

In the early 1980s, over seven out of ten eighteen year olds were high school graduates. Moreover, roughly half of those who were not graduates by age 18 subsequently completed four years of high school. About three out of ten high school graduates completed four years of college.[4] Thus, a substantial investment in formal education is now quite common in the United States.

This heavy investment in "human capital" is often taken for granted. But it was not always the norm for entrants into the labor market to be highly educated. At the turn of the century,

only about 6% of the population completed high school on schedule; practically no one attended college.[5] The vast majority of entrants into the labor market had significantly less than a full high school education.

Indeed, because of the large immigrant inflows entering the U.S. from Europe and elsewhere during the early part of this century, many industries had workforces in which the ability to use basic English was quite limited. Not surprisingly, the rewards in the labor market for those who <u>did</u> have substantial educations were quite high at that time, when compared with those of the relatively unschooled. With limited supplies of well-educated employees, and large supplies of the poorly-educated, it is not surprising that such a reward system existed.

Despite the advance in general educational attainment, the labor market today still rewards acquisition of education. Rewards come in two ways: job search success and higher income. The relative advantage of more-educated persons in the labor market may not be as great as was the case in 1900. But it is easy to show, for example, that people with greater educational credentials today have less trouble finding work than those with limited credentials.

Thus, in 1986, among persons aged 16-24 years and not enrolled in school, the unemployment rate for high school

dropouts was 20.2%. Better off by this measure were high school graduates with no college; for them the unemployment rate was "only" 12.4%. And for college graduates the rate was a still lower 5.9%.[6]

Incomes from employment in the modern job market rise with educational attainment. Table 1 shows annual earnings of year-round, full-time workers as recorded in the 1980 Census of Population. Earnings of 25-34 year old males with four years of college were 22% higher than for males with only four years of high school. Similarly, male high school graduates had a 35% earnings advantage compared with men who had eight or fewer years of education. For females the corresponding ratios were 31% and 29%.

ii. Job-Related Skills vs. Signaling.

Employers -- by paying higher salaries to more educated workers and by offering them greater opportunities -- seem to be indicating that such workers are more productive. But is it the case that the educational system itself is imparting valuable, job-related skills? Or is some other process accounting for the pay/education link? These questions cannot be answered definitively, a fact which by itself is important for HRM policy. The lack of a definitive answer suggests the issue of educational

Table 1

Annual Labor Earnings of Full-Time, Year-Round Workers, by Education and Age, 1979 (averages)

	Age of Respondent in 1980				Ratio: Peak Income to Age 25-34 Income
	25-34 years	35-44 years	45-54 years	55-64 years	
Males:					
Elementary					
0-8 years	$12,034	$14,449	$15,439	$14,847	1.28
High School					
1-3 years	13,913	16,993	18,264	17,757	1.31
4 years	16,233	19,904	20,869	20,259	1.29
College					
1-3 years	17,399	22,862	24,306	24,514	1.40
4 years	19,859	29,491	33,864	33,218	1.71
5 or more years	22,462	33,919	38,487	37,777	1.71
Females:					
Elementary					
0-8 years	$8,032	$8,405	$8,515	$8,611	1.07
High School					
1-3 years	8,748	9,343	9,735	9,747	1.11
4 years	10,340	10,961	11,347	11,432	1.11
College					
1-3 years	11,699	12,746	13,001	13,091	1.12
4 years	13,596	15,454	15,312	15,449	1.14
5 or more years	15,540	18,462	18,868	19,056	1.23

Source: U.S. Bureau of the Census, Earnings by Occupation and Education, 1980 Census of Population, PC80-2-8B (Washington: GPO, 1984), p. 1.

requirements for jobs should be periodically addressed by HRM professionals.

For some occupations, there is an obvious connection between schooling and needed job skills. Doctors learn their trade at medical school, lawyers at law school, and engineers at engineering colleges. High school courses in typing and clerical skills and vocational education classes are also clearly job related.

It is not necessary to confine the examples of productivity-enhancing educational investment to such clear cut occupationally-oriented training. The basic elementary level of education also provides skills valued on the job such as literacy, ability to do simple arithmetic, etc. Thus, the tie between certain fundamental skills which are useful to employers and certain aspects of the formal education system is not hard to identify.

But there are many components of education which are not so clearly linked to the job market. What about courses in American history, civics, and physical education in high school? What about liberal arts curricula -- philosophy, literature, music and art appreciation -- at the college level? Are these subjects really providing job-related skills? Just what are employers buying with their pay premiums for education?

The use of educational attainment by employers to ration access to higher-paid jobs has long been subject to criticism. Some observers have argued that the U.S. economy is a victim of "creeping credentialism."[7] They argue that educational requirements keep sliding upwards, even though the true underlying qualifications for jobs have not really changed.

It is easy to point to anecdotal evidence of such an upward creep in credentials. For example, at one time doctors and lawyers did not need to acquire bachelors' degrees before going on to professional school. Librarians, social workers, and--dare it be noted -- even managers seemed able to function satisfactorily with college-level degrees until the MLS, MSW, and MBA became popular. Are employers throwing unwarranted hurdles in the way of young job market entrants?

There are reasons to suspect that there is some creep in the educational requirement process. First, for some professional groups, adding requirements for training tends to keep down competition from new entrants by making entry more difficult. Reduced entry, in turn, helps bid up wages for incumbents. Professional groups sometimes seek government aid in adding educational requirements as part of licensing standards, ostensibly to "protect the public" from poorly trained practitioners. And the education "industry" itself has an

interest in having demands for its services maintained and increased by persons seeking to meet professional training standards.

Second, what economists call "signaling" may play a part in establishing educational credentials as sources of labor market rewards.[5] Employers are basically organizations, and what they need are people who can operate within organizational structures. Student survival in school depends upon possession of certain organization skills. At a minimum, remaining in high school requires an ability to follow orders, to obey rules, to submit to ratings (grades), to cope with bureaucratic procedures, and to get along with others.

Organizational skills may not be taught in school formally, but students who do not have them are likely to become dropouts. Students who cannot cope with high school -- who are chronically tardy or absent, who are disruptive or delinquent, or who simply do poorly academically -- find that the barriers to graduation become progressively higher. An employer may feel that by screening out dropouts, the probability of hiring individuals who could inflict significant costs on the organization is lowered.

Some of these same organizational skills which serve students well in high school are also needed in higher education. But, in addition, survival in higher educational settings

requires greater judgment on the student's part than in high school. Major fields and courses must be selected. Trade offs must be made between time spent on academic pursuits and time spent on social and extracurricular activities. The ability to exercise such judgments in a pressured, but discretionary, environment has parallels with skills needed in many white collar employment settings.

Finally, because employers are organizations, they may well prefer to hire people whose backgrounds do not differ widely from those already on the job and from those who will be hired in the future. It has already been noted that at the turn of the century, few people finished high school. In such a world, there was no stigma attached to being a high school dropout. Indeed, the word "dropout" -- with its connotation of evading a task that should have been completed -- simply did not exist.

An employer in the early 1900s would not have viewed someone who had not completed high school as a social deviant who might disrupt the workplace. Nowadays, as noted above, an employer might easily have such concerns about a dropout job applicant. The employer might acknowledge, in the abstract, that there may be dropouts who would make good employees if given the opportunity. But in the absence of a severe labor shortage, there is little incentive to go through the expense of finding a few "diamonds in the rough."

Similarly, in white collar settings, if most people in the workplace have completed college, they will all share a common experience. Regardless of any technical job skills that may have been learned in college, the common culture that exists among college-educated people may facilitate teamwork and job interactions at the workplace. And it is not only employers who may expect employees to fit certain educational "norms." Fellow employees might also have such expectations of their co-workers, making interaction with persons whose backgrounds don't match the standard model more difficult. Studies of successful business organizations suggest that they often tend to hire a homogeneous workforce, presumably in an effort to promote trust and cooperation.[7]

If signaling by means of educational credentials is an important element in the labor market, one reason may be that more direct measurements of embodied skills are difficult to make. The employer may have difficulty in gauging the actual organizational skills of job applicants based on resumes, application forms, reference letters, and the other tangible evidence that job seekers commonly provide. In such cases, the simplest thing for the employer to do -- if it is believed that the needed skills are correlated with educational credentials-- is to require the credentials as a proxy for the skills.

The temptation to use credentials may be particularly great during periods of slack labor markets, i.e., periods in which unemployment is a problem. When the labor market does not clear, and there are many more applicants than vacancies, some method of rationing available vacancies must be developed. If educational credentials have any predictive value at all, employers may use them as job rationing devices for want of other criteria. Some qualified candidates may be eliminated erroneously by credentialism, but if there is no shortage of applicants, the cost of these errors (to the employer, not the applicant!) is negligible.

As will be discussed in the next chapter, however, use of educational credentials (and tests generally) which can not be shown to be job related or predictive of future job performance are increasingly subject to legal challenge. Judging applicants by credentials and social norms can easily slide into unlawful discrimination based on race or sex. Thus, contemporary HRM professionals are well advised to analyze and reconsider whatever educational standards their firms are employing to screen job applicants.

If credentials required for hiring are merely proxies for skills which can be measured directly, it is desirable to consider use of the more direct measures instead. Where the problem is that productivity is hard to appraise before hiring,

it may be possible to develop better monitoring procedures after hiring. Better monitoring in the immediate post-hire period can be combined with an initial probationary period for new hires during which termination is relatively simple. This approach could substitute for use of educational credentials as productivity proxies.

Finally, of course, employers can themselves provide training for employees in those areas (including organizational skills) which are clearly job related. Options such as employer-provided training have costs.[10] Employers may feel that the benefits of instituting alternatives to the use of educational credentials do not outweigh these costs. But legal pressures may override this objection. And, in any case, as in much of contemporary HRM practice, rigorous evaluations of the costs and benefits of alternatives often have not been undertaken. HRM policies (unfortunately) are often based on impressions and assumptions rather than on objective analysis.

iii. Other Forms of Learning.

Education-related earnings differentials exist in all age brackets. Yet Table 1 reveals another important phenomenon. At any given education level, earnings rise with age -- up to a point. For males, this tendency to rise with age peaks out among 45-54 year olds. But for women, it continues through the 55-64

age classification. There seems to be a reward for experience as well as education implicit in the table's numbers.[11]

Three interpretations of the linkage between age and earnings are possible. One is that workers acquire training on the job, or during their working lives, outside of the formal educational system. This skill acquisition is then rewarded with higher pay. A second explanation is that workers increase their value to employers simply by becoming more experienced, even if they do not receive actual "training." And a third is the idea that employers have implicit contracts which link earnings to seniority (which correlates with age) to encourage job performance along the lines discussed in an earlier chapter. Pay is set low at entry level with the implicit promise that good performance will eventually yield higher pay later on.

Training by Employers.

As noted earlier, extensive data on training at the workplace are not available. But a survey by the Conference Board taken in late 1979 provided some information on such training which is summarized on Table 2. The survey was based on a sample of firms which was biased towards medium and large employers. It indicated that employer training is quite common, that it is frequently aimed at new hires, but that it is often used for skill upgrading of incumbent employees as well.

Table 2

On-Site Training by Employers

	Production/ Operations Workers	Office/ Clerical Workers	Lower Level Exempt
Percent with training	86%	83%	84%
Of those with training:	100%	100%	100%
Objectives:			
Train new hires	87	83	72
Improve performance of current employees	69	78	82
Prepare employees for new duties	65	66	70
Subjects taught:			
Specific job skills	92	84	65
Safety/hygiene	96	53	59
Supervisory skills	19	28	81
Interpersonal skills	17	43	71

Source: Harriet Gorlin, Personnel Practices I: Recruitment, Placement, Training, Communication, information bulletin 89 (New York: The Conference Board, 1981), p. 41.

Employer training tends to focus on technical job skills for nonexempt workers and on supervisory and interpersonal skills for exempt employees.

Employers provide training in a variety of forums. It often occurs directly on the job. But classroom-type instruction is also common. Formal apprenticeship programs are not unusual for production workers, but are rare for other groups. Training is sometimes conducted by full-time instructional staff, sometimes by persons with other functions in the company (personnel department employees, supervisors, etc.), and sometimes by vendors of equipment to the employer. Academics and outside consultants are used for certain types of training, mainly involving exempt employees. In addition, many employers have tuition aid plans for employees who take job-related courses in colleges or vocational schools.

Experience.

It is quite common to find help-wanted ads specifying that "experienced" candidates are being sought. Table 1 indicates that earnings increase with age and one possibility is that simply performing a job for a period of time -- rather than training per se -- adds to employee productivity. The age effect on earnings seems to be more marked among employees who are also more educated and higher paid. Such individuals are unlikely to

be receiving substantially more formal training while employed than they had upon leaving school. Thus, the notion of an important "learning-by-doing" effect is quite plausible. People become better at their jobs by performing them over an extended period.

Experience-related learning about the organization -- and how best to accomplish tasks within it -- may be reflected in another aspect of the earnings numbers of Table 1. The fact that male earnings rise with age more than female earnings suggests that employment continuity (particularly employment continuity with a single employer) plays a role in raising earnings. Individuals who remain with organizations for long periods come to know how things are really done, and who really has authority, as opposed to the formal statements found in company handbooks and organization charts.

Such organizational knowledge has value particularly if the person is progressing up a career ladder. At each promotion, the individual starts in the new position with more baseline knowledge about the job and where it fits into the organization than an outsider would possess. The widespread phenomenon of promoting from within is partly based on the assumption that insider candidates are more valuable than outsiders.

Implicit Contracts.

A third possible explanation of the age/earnings association is the implicit contract model of the employer-employee relationship. Under this model, new employees are brought into the firm at comparatively low pay. In effect, they are paid less than their marginal revenue products initially with the understanding that loyalty and good performance will be rewarded later in their careers. The future reward comes in the form of eventual pay levels above marginal revenue productivity.

From the employer viewpoint, such a system functions as a performance bond, since employees will have a stake in remaining with the firm and will thus want to avoid misconduct and termination. In addition, turnover costs are reduced because recent employees lose their claim to future pay if they quit. And older employees lose their existing pay premiums if they depart before retirement age.

Of the three explanations of the age/earnings correlation, only the implicit contract approach does not directly involve accretion of human capital. But even in the implicit contract case, there is a human capital aspect. The encouragement of long service, as earlier, increases the potential recoupment period for investments made by the employer or employee in job skill improvements.

Thus, even in a world in which the implicit contract idea was initially the only employer motivation in structuring pay, skill-acquisition would soon enter the picture. Long service, implicit-contract employees are more likely to acquire both formal training and the benefits of experience than those hired with expected short durations of employment. Organizations with career appointment policies can be expected to have an important training element within their HRM function.

How important is the implicit-contract explanation of the pay-experience connection? Unfortunately, a definitive answer cannot be given since the statistical correlation between pay and experience is open to varying interpretations. For example, it has been argued that time on the job of current employees (the interrupted spell) is bound to be positively correlated with time that will eventually be spent on the job (the completed spell). Long completed spells might, in turn, be taken a proxy for having skills which the employer valued -- but which are difficult to measure from available data.[12]

Given available information -- including the knowledge that employers do give deference to seniority -- the most reasonable assumption is that the pay-experience linkage is the product of a mix of forces. It partly represents learning on the job and acquisition of skills. Some of the association is linked to

employee characteristics which their employers value, and which therefore keeps them on the job longer. (There is a good "match" between employer and employee which keeps both sides happy). And some are due to implicit contracts which reward long and loyal service.

iv. Who Pays for Investments in Human Capital?

Basic education up through high school is largely financed by the taxpayer. Higher education is also heavily subsidized, through state-run universities and colleges, government-operated low-cost financial aid arrangements for students, tax deductions for gifts to colleges and universities, etc. However, there are significant expenses of education which are borne by students beyond high school in the form of tuition, fees, books, etc., despite these public subsidies.

In addition to out-of-pocket expenditures, and often neglected since they are opportunity costs, are the sacrifices of potential working time. Students who attend college full time, for example, are sacrificing the income they could have earned had they devoted their college hours to the labor market. The same logic applies to any form of training, for example, enrolling in a junior college's vocational track, a secretarial school, or any of the many commercial vocational training enterprises.

The Individual Investment Decision.

Like any other investment decision, an individual's investment in his/her own human capital can be analyzed in present value terms. There is a sacrifice to be made "today" in the form of out-of-pocket and opportunity costs. These costs must be weighed against a positive return "tomorrow." Consider, for example, a hypothetical individual with (only) a high school degree pondering whether or not to go on to college. He/she could be imagined first making a calculation of the expected present value (at some appropriate discount rate) of four years' worth of tuition and other school-related expenses.

The hypothetical high school graduate would then subtract the present value of these school-attendance costs from the expected present value of the extra earnings he/she could expect in the future as a college graduate as opposed to a high school graduate.[13] If the result of the computation is positive, college is a "good" investment for this individual. To the extent that society subsidizes the costs (through low tuition, cheap loans, etc.), the more likely it will be that out high school graduate will select the college option.[14]

Not many persons actually make their educational choices with the precise calculations just described. Apart from the

uncertainties involved -- which are, after all, present in most business investment decisions -- there is the matter of personal commitment. Some people enjoy school, some merely tolerate it, and others detest it. Since education is a consumer good as well as an investment good, these individual tastes will play an important part in enrollment decisions.

But despite all of these caveats, economists have found that individual educational decisions do respond to job and income opportunities. Entry level opportunities have been viewed by students as indicators of future lifetime experience, for want of better predictors. Thus, enrollments in MBA programs have grown because job opportunities have been available to MBAs at attractive salaries. And within the field of management education, when opportunities in investment banking and other financial institutions became particularly enticing in the late 1970s and early 1980s, finance became the hot subspecialty for MBAs at most business schools.

Economists have also found lags in the process that sometimes create cycles of labor shortages and surpluses. It takes time for information about the labor market to work its way to the student enrollment level. And since training may take several years, there is a lag in emptying the educational pipeline or in filling it. The lags produce a so-called "cobweb model" of adjustment.[15]

Consider, for example, the government funding cutbacks for R&D and aerospace which soured the labor market for engineers in the early 1970s. For several years, engineering graduates continued to glut the market, as the school pipeline emptied. But the lesson was learned and the excess supply of engineers was alleviated. By the late 1970s, an engineering shortage started to develop. The pipeline at engineering schools began to fill again in response, but it took several years before those who entered the programs were ready to graduate.

General vs. Specific Training.

Human capital theorists have proposed a distinction between two types of education and training. The kinds of training discussed so far -- enrollments in college or engineering school -- are examples of general training.[16] Such training is distinguished by its applicability to many employers. Simple economic theory -- which will be shown below to need important qualification -- suggests that employers will not pay for general training, because they cannot hope to capture a return on their investment. It suggests, therefore, that the cost of general training will be borne by employees.

Consider an employer looking for a word processor operator. One option is to go into the labor market and find an experienced

operator. Of course, a wage will have to be paid for such a person which reflects the typing and word processing skill involved. Another option is to hire someone without any typing and word processing skills, and then provide the needed training. The unskilled person will initially command a lower wage in the labor market than the experienced word processor operator. This lower wage might seem to be a sufficient cost saving to the employer to pay for the training expenses.

But a problem arises with regard to the second option. The unskilled operator becomes skilled as the result of the training, and can thus command a skilled wage from other employers. If the original employer who provided the training does not raise the level of pay to meet the market, the now-skilled operator can obtain a word processing job (and wage) from some other firm. Thus, the investment in training by the employer does not seem to be a good option after all -- despite the initially lower wage. As soon as there are any returns to general training to be recouped, the employee -- not the employer -- can capture them because of the availability of the outside labor market. Again, it must be stressed that qualification to this conclusion will need to be made.

At the other end of the spectrum is <u>specific training</u>. Specific training is defined as acquisition of a skill valuable only to a <u>single employer</u>. For example, suppose an employer has

developed special in-house computer software to handle its payroll system. Individuals will have to be trained to use this special software since the skills cannot be found on the outside labor market. The simple theory of human capital suggests that the employer will have to pay for this training, since the employee is acquiring a skill with no external use or reward.

In the outside labor market, the newly-trained employee will have no more value to employers than before the training occurred. No other firms have the same payroll system. As a result, the employer -- at least at first blush -- would seem to have no incentive to raise the employee's wage after training. The cost of providing the training is thus captured by the employer in the form of higher productivity, i.e., the ability to use the in-house payroll system, without a commensurate wage increase.

Burden of Payment vs. Location of Training.

Before qualifying the general/specific training distinction, it is important to make clear the notion of "paying for" training. The location of training does not indicate who is paying for it. For example, a firm might pay for training that takes place on the job or in-house. Or it might pay for training in some external school setting. The latter site may not be in proximity to the job, but the training that occurs is still at

the expense of the employer. Stated from the employer viewpoint, this observation seems self-evident. However, the same statement can be made from the employee viewpoint, too.

An employee might self-invest in training by paying the tuition of a vocational school or college. But an employee might also bear the expense of training which takes place at a worksite. In theory, an employer could charge an explicit tuition to employees who wanted to learn at a worksite location. But in practice, such "tuitions" are usually charged indirectly, by having the learner work at a low wage (below the value of his/her productivity) while the training is underway.

The most prominent examples of such arrangements are formal apprenticeship programs, found in such industries as construction. During the apprenticeship period, the apprentice works as a helper to skilled workers who also teach the trade to the newcomer. Other examples can be cited as well. For example, aspiring actors in New York and Los Angeles will work in small "equity-waiver" theatres for little or no pay to acquire acting experience and in the hope of being "noticed." They are investing in themselves while on the job.

Where training takes place is a function of the efficiency with which it can be provided at alternative locations. Some skills are best learned in classroom-type settings provided away

from the workplace. Other skills are best learned at worksites. But who pays for skill acquisition is another matter entirely. The two concepts should not be confused.

The Optimum Location of Training.

The fact that certain kinds of training are best undertaken at the worksite, while others are suited to classroom-type instruction is often neglected, particularly in regards to management education. Management schools are often criticized for too much "book learning," abstraction, and a lack of "hands on" experience. As a result, there is a temptation to fill the curriculum with an excess of cases, internships, etc.

Schools are not worksites, and cannot be transformed into them. Reading and analyzing a case -- where typically all of the crucial variables and circumstances are laid out with the benefit of hindsights not available to those who actually lived the situation described -- is not the same as having to make real world decisions. School settings are best for honing analytical tools, research techniques, and communications skills. Pressured decision making -- with absence of full information -- is best learned by doing, at the worksite (where it normally occurs).

The Blending of General and Specific Training.

Although economists make much of the general vs. specific training distinction, it is hard to find official acknowledgement of it among employers. Perhaps the main behavioral sign of the distinction can be found in the relatively high level of turnover and low pay of clerical employees. Since clerical skills are basically general, employers have little of their own investment embodied in these workers. The salary levels they set for clericals are therefore kept relatively low since the resulting turnover does not cause the employer a substantial loss of investment in training. That is, the costs of turnover are perceived to be small, although it is doubtful that many employers have actually checked out this assumption.

However, even with clericals -- and certainly for other occupational groups -- there is some employer investment involved in hiring expenses, the costs of basic orientation, etc. These are specific investments; they do not have a value on the external labor market. Although simple theory at first suggested that employers would not pay wage premiums to workers with specific investments, turnover cost considerations -- as discussed in an earlier chapter -- indicate that some wage premium will be provided. And once such premiums exist, employer-employee attachments grow, and employment durations lengthen.

As the length of the expected employment duration extends, employees will have some incentives to pay for specific training as well as general. The premiums that employers pay to hold down turnover -- which are associated with specific investments-- create an incentive for employees to make such investments. There will be a return for employees -- in the form of higher wages-- if they undertake the burden of training. Similarly, the likelihood of a long term employment duration undermines the notion that employers will not pay for general training. If the employee is unlikely to leave, the employer's investment in general training might well be recaptured.

In short, wage profiles that rise with seniority and long term employer-employee attachments blur the distinction between general and specific training in many cases. They also make it difficult to determine exactly who is paying for training. Where training in connection with work occurs, the out-of-pocket expenses may well show up on the employer's books. But if employees work at lower pay during the early learning stages of their careers, they may be partially financing their own training -- general or specific -- indirectly.

Measuring Training Costs.

The analysis suggests that if employers were accurately measuring their out-of-pocket training expenses, they might well be obtaining exaggerated estimates of the true costs of training. Hidden subsidies from employees would be missed by such an accounting. This problem is more theoretical than real, however, since employers often do not carefully account for their training costs. Such costs may simply be buried in the budgets of the HRM department or in the expenditures of various line functions.

Use of accounting data on training and other costs of turnover with regard to pay setting and other HRM policies is in its infancy for the vast majority of employers. Indeed, for most, it has yet to be born. The danger at present is more likely to be that training costs are being neglected, not that they are overstated. Thus, attempts to estimate these costs are likely to improve HRM decision making.[17]

III. Employment Stabilization.

The analysis of human capital formation just presented stressed the importance of job duration -- and expected job duration -- in determining how much investment in employees will take place. During the 1980s, considerable debate about corporate restructuring has occurred. As firms merged or spun

off divisions, their HRM systems came under stress. Policies concerning job duration presuppose management continuity. If management cannot be assumed by employees to have continuity, career commitments are uncertain. Employee loyalty and self-investment are likely to be discouraged.

These developments pose a dilemma, not only for HRM professionals, but for America's long-term economic health. On one hand there is a need for flexibility and aggressive management within firms. But on the other hand, if flexibility leads to a lack of employee commitment, that buzzword of the 1980s -- competitiveness -- may be harmed rather than furthered.

A key question for HRM policy is whether flexibility and stability can somehow be fostered simultaneously. If firms are under competitive pressure from new entrants, foreign suppliers and changing exchange rates, and technological advances, how can they provide employment stability? This question is posed as a challenge to employers, but it also has a macro-economic component.

Since the 1930s, the public has tended to look to government to solve the problem unemployment and insufficient labor demand. The "Keynesian" approach to reducing unemployment has been to stimulate the economy through "easy" monetary policy (expansion of the money supply and lower interest rates), increased

government spending, and tax cuts. All of these devices constitute macro solutions which involve no direct employer input. The theory is simply that employers will be stimulated to hire more workers as the demand for production of goods and services increases.

Employers have become somewhat more directly involved in government efforts to reduce unemployment at the micro level. Programs here have included subsidized training for disadvantaged workers to make them more employable. Such training may be provided directly by government, but sometimes is undertaken by employers with some form of government subsidy. There are also programs which reduce the net cost of hiring individuals who might otherwise be chronically unemployed or out of the labor force. These programs operate through direct subsidy to the employer or tax credits available to the employer for each disadvantaged hire.

i. Problems with the Macro and Micro Approaches.

Both the traditional macro and the micro approaches have drawbacks. The key problem for the macro approach is the potential stimulation of inflation as a byproduct of increasing the general level of demand in the economy. Inflation is unpopular and when it occurs, government policies of stimulation tend to be reversed and become demand-restricting. The result

can be "stop-go" policies as government alternates between trying to fight inflation and trying to stimulate increased employment.

Micro approaches, while not directly inflationary, have been criticized on grounds of effectiveness. It has been argued that such programs sometimes fall victim to the general problem of creating optimum incentive systems, which have been discussed in a previous chapter. For example, suppose local government or private operators of micro-level programs are evaluated on the number of job "placements" of the individuals they are training. The operators may respond by deliberately "creaming" the market, i.e., seeking as enrollees individuals with attractive characteristics who probably would have found work anyway. Such strategies will increase the number of recorded placements but do nothing to reduce unemployment.

Similar problems arise with subsidies and tax credits. Employers who receive subsidies to hire certain individuals may simply use these workers in positions they (the employers) would have filled anyway. The subsidized hires effectively displace unsubsidized persons who had (or would have had) the jobs. The queue of job applicants is thus not reduced in length; rather its constituents are simply reshuffled.

Since neither the micro nor the macro approaches to unemployment reduction have proven as successful in practice as

their proponents hoped, it is natural to seek alternatives. There may be linkages between the interest of government in reducing unemployment and avoiding stop-go policies and the interests of employers in combining stability and flexibility. As noted in a previous chapter, increasingly there has been attention to compensation systems in firms as devices to improve performance. Thus, economic discussion has focused on compensation options which could promote and stabilize employment.

ii. The Share Economy Alternative.

One suggestion for modifying traditional compensation arrangements which has received considerable attention -- and provoked substantial debate -- was that a change in the compensation system toward "share" arrangements -- such as profit sharing -- would both stabilize employment and reduce unemployment. Although it had antecedents going back to the 1930s and earlier, this suggestion became identified in the 1980s with the writings of Martin L. Weitzman of M.I.T. and has attracted the interest of a variety of prominent political leaders.[18] Obviously, if the government were to adopt policies aimed at stimulating share systems of compensation, these policies would have a profound impact on employers and HRM specialists.

In the past, profit sharing has been advocated as a device to alter employee behavior, by providing greater motivation, morale, or identification with the employer. But many HRM analysts have disputed the effectiveness of profit sharing, viewed in that way, because of the distant connection between individual worker behavior and the overall economic condition of the firm. Weitzman's proposal sidesteps this old dispute. He argues instead that the key impact of profit sharing (and other related compensation systems based on sharing revenues or value added) is on employer behavior, not on employee attitudes or productivity.

Potential Employment Stabilization.

Weitzman's view can best be understood in two steps. First, it can be argued that share systems create a potential for stabilizing a firm's employment over the business cycle which might not be available with a conventional wage compensation system. Second, it can be additionally argued -- as Weitzman does -- that the potential will in fact be realized under sharing, because of built-in motivators for the employer. He goes still further and argues that firms with share arrangements would not only stabilize employment, but that they would also expand it, i.e., hire more workers than under a conventional wage compensation system. It is fair to say that there has been wider

acceptance of the first proposition -- that there is simply a potential for employment stabilization -- than of the second.

To understand the first argument on potential, consider a firm's weekly payroll. This payroll is composed of three multiplicative elements: the average hourly wage W (which can be understood to include fringe benefits), the number of weekly hours worked per worker H, and the number of employees E. Thus:

(1) $$\text{Weekly payroll} = W \times H \times E$$

Typically, when firms experience a downward adjustment in product demand (and, hence, in labor demand), they react initially by cutting H moderately (perhaps eliminating overtime hours) and then by reducing E (mainly through layoffs). On the other hand, the basic wage schedule underlying W is rarely reduced. Ultimately, therefore, the business cycle is reflected more in variations in E than in wage adjustments.

For example, neglecting fringe benefits for purposes of illustration, suppose a firm pays a straight-time hourly wage of $10/hour, an overtime premium of time and a half, works a 42 hour week (including two hours of overtime), and has 100 employees. Its overtime wage will be $15/hour and, thus, its average hourly wage W will be $10.238.[19] The firm's weekly payroll will therefore come to:

(2) $10.238/hour x 42 hours x 100 employees = $43,000.

Suppose demand for the firm's product declines and management decides it must reduce weekly payroll expenses by $5,000, i.e., to $38,000. The firm might first eliminate overtime hours, cutting the workweek to 40 hours. This reduction will cut the labor input by about 4.8% and will reduce average hourly pay by $0.238, i.e., by about 2.3%, because of the elimination of the overtime premium. Unless the wage schedule underlying W is changed -- that is, unless the basic straight-time wage is cut -- any further reduction in the payroll must come from a decrease in employment by 5 workers to 95. The weekly payroll would then be:

(3) $10/hour x 40 hours x 95 employees = $38,000,

i.e., equal to the new target amount. Thus, of the 11.6% payroll reduction needed, 60% comes from reducing overtime hours and 40% comes from reducing employment.

Of course, an alternative strategy for the firm could be to cut the straight-time hourly wage to $9.50 (a 5% reduction) and to eliminate overtime hours. The original 100 employees could then be retained, but the weekly payroll would still be reduced to the target level:

(4) $9.50/hour x 40 hours x 100 employees = $38,000.

As a first approximation, the firm would be indifferent between the two approaches -- overtime elimination and layoffs vs. overtime elimination and pay cut -- since the weekly dollar outcome is the same. In fact, since the firm could probably obtain some production value from the 5 workers not laid off in the latter strategy -- say, by using them for maintenance operations -- it might be satisfied with a lesser pay cut than the full 50¢.

Profits, sales revenues, or value added will tend to fluctuate with the product demand conditions faced by the firm. If the firm's employees had been part of a share plan, such as profit sharing, their average hourly wage W would have been partially composed of a share-related bonus rather than just of regular wage payments. The equivalent of a wage reduction to $9.50 might have been accomplished as the share-related bonus fell due to depressed demand.

Suppose, for example, that the straight time wage had been $9.00/hour and that a profit sharing bonus equivalent to $1.0238/hour was being paid initially. The weekly payroll (including the bonus) would be $43,000 as before. Now suppose that a fall in demand occurs, reducing profits. If overtime

hours were eliminated and the profit sharing bonus fell to the equivalent of 50¢/hour, the desired payroll reduction to $38,000 would be achieved. Specifically, the calculations are:

Before

40 hours @ $9.00/hour x 100 workers	= $36,000
2 overtime hours @ (1.5)($9.00/hour x 100 workers	= $2,700
42 hours x bonus of $1.0238/hour x 100 workers	= $4,300
Total	= $43,000

After

40 hours @ $9.00/hour x 100 workers	= $36,000
40 hours x bonus of 50¢/hour	= $2,000
Total	= $38,000

Thus, share systems with bonuses geared to demand sensitive indexes such as profits, sales revenue, or value added, can provide automatic labor cost relief to employers. In principle, employers can stabilize employment levels in the face of demand variability by letting the share bonus absorb much of the burden of labor cost reduction. This outcome, as has been stressed, is a potentiality. There is no guarantee in the story (as told so far) that employers would actually stabilize employment if more labor compensation derived from share arrangements (as opposed to ordinary wages). All that has been shown is that the could do so.

Bargaining Over Employment Stability.

One possible linkage between employment stability and a share system could be a formal collective bargaining agreement in cases where the firm is unionized. If a union represented the 100 workers employed by the hypothetical employer just described, it could bargain explicitly for an employment guarantee of 100 jobs in exchange for a reduction in the basic straight time wage and an offsetting share/bonus system. Examples of such developments occurred during the 1980s, as part of the concession bargaining movement.

For example, the 1982 negotiations in the automobile industry between General Motors, Ford, and the United Auto Workers included a profit sharing/job security element. Mass layoffs and the threat of foreign competition had made job security a key issue. The union negotiated a wage freeze (superseding an earlier contract providing for wage increases), a guaranteed income stream plan, and profit sharing.[20]

In short, a mandatory connection between a share system and employment stability could be created as part of a written, bargained "deal" in situations where unions have negotiating rights. Alternatively, a nonunion employer, which followed a unilaterally established full employment policy as part of an "implicit contract" with its workers, might include a share

element in its compensation system. The share arrangement would help "finance" the potential costs of the employment guarantee.

Weitzman and others have argued that the system of bonuses in Japan, where employment security is guaranteed by large firms, functions in this manner.[21] In their view, Japanese firms stabilize employment and let bonus fluctuations absorb some of the costs of this HRM policy. Since Japanese firms have been held up as models of competitiveness, which provide both the flexibility to respond to market pressures and employment security, the profit-related bonus proposition is of special interest.[22]

Risk Averse Preferences and Employee Attitudes.

The introduction of a share system as part of arrangements of employment stabilization can have differential effects on workers.[23] As has been stressed in previous chapters, there are both theoretical reasons for, and empirical evidence of, preferential treatment on the job for more senior employees. In a typical layoff situation, junior workers -- especially in unionized firms -- are more likely to be terminated than senior workers. Hence, the costs of employment reductions at a point in time are not evenly borne by the entire workforce. That is, if employment is to be reduced by 10%, the probability that a junior

worker will be laid off is much higher than 10%; the probability of layoff for a very senior worker may be almost zero.

Given these differential probabilities, the value of an HRM policy conducive to employment stabilization will be worth more to junior workers than to senior workers (since the latter already have relative employment security). Of course, there may be great societal value in seeing reduced unemployment, i.e., in fostering policies which help junior employees avoid layoff risks. But it may be difficult to persuade employers to adopt policies which are of concern mainly to the wider society and to the marginal junior employees.

If there were absolutely no cost to senior workers from a share system of compensation, they would have no reason to oppose its creation. That is, although its benefits to them would be quite limited, there would be little motivation to oppose these minimal benefits if no sacrifice is entailed. The problem is that there will be costs to senior workers under share arrangements in terms of income variability.

Inherent in a share system is fluctuating pay, as the variable to which the bonus is linked (profits, sales revenue, or value added) increases and decreases over time. If profit sharing is used, for example, there will be small or no bonuses during bad years -- when profits are low or even negative -- and

high bonuses during good times. A share system, in short, brings with it an element of risk for workers.

Usually individuals can be assumed to be "risk averse." For example, in the securities market, a bond issued by a highly rated firm can be expected to provide a lower yield than one from a firm on the edge of bankruptcy. The bond market thereby reflects the risk averse nature of investors.

Similarly, there is every reason to think that employees--like investors in bonds -- are risk averse. They may have relatively fixed financial obligations such as mortgage or rent payments. The liquid assets on which they can call if income declines may be limited. Access to capital markets to finance consumption even during periods of temporary income losses may be limited or expensive. For most working households, the chief source of income is from wages; the ability to diversify revenue sources to mitigate risk is limited.

Thus, a share system which provides an expected annual compensation of, say, $25,000 composed of a "sure" $20,000 wage and a probable $5,000 bonus will be valued less by workers (given their risk aversion) than a sure $25,000 wage. Worker preferences might require the employer with a share system to pay a higher expected compensation level than would be required under a sure wage system. That is, the firm might have to offer a sure

$20,000 wage plus an expected $6,000 bonus to make workers feel indifferent between the share system and a sure $25,000 wage.

Alternatively, if the firm switched from a $25,000 sure wage to an expected -- but uncertain -- compensation of $25,000 under a share system, workers might view the switch as equivalent to a pay cut. They might respond as they would to an ordinary pay cut, i.e, with higher turnover and lower productivity and morale. In addition, the firm might find it more difficult to recruit new employees, because of its risky compensation system.

Share Division and Employee Attitudes.

Under a share system, an "earmarked" portion of some value measure -- profits, sales revenue, value added -- is divided among the employees according to a formula. For example, a compensation system might provide that 20% of profits would go to employees as bonuses. As was noted in an earlier chapter, such arrangements can lead to worker resistance to expansion of firm employment levels. Incumbents may resent any new hires the employer brings on board because of a bonus dilution effect.

New hires will add to production and, thus, to the profits, sales revenue, or value added of the enterprise. But it is unlikely that they will add more than the average contribution of the existing workforce; probably -- due to declining marginal

productivity -- they will add less. Bonuses, however, are determined on an average basis, so that adding workers may well reduce the size of the average bonus for the existing workforce. Current employees may not be receptive to adding claimants (new hires) to the bonus pool, since the new claimants dilute the probable share payment.

Of course, worker dissatisfaction about additional hiring might not have an overt means of expression, unless a union is present. However, share systems are sometimes accompanied by the creation of participative worker voice mechanisms, as -- for example -- under the Scanlon plans discussed in an earlier chapter. A parallel is seen between sharing in the financial side of the enterprise and sharing in its direction, through quality circles and other means. Thus, nonunion workers may have a channel through which resentment can be voiced, possibly one created in conjunction with the share system. Or, if no formal channel is available, employees may manifest resentment via lowered productivity and through costly workplace frictions.

Employer Incentive Effects.

It was noted above that the Weitzman argument for a share system depended on two elements: a potential for employment stabilization and an incentive for the employer to actualize that potential and even increase employment. Absent such incentives,

speculation about worker attitudes toward such systems--especially with regard to employment expansion -- might have little practical application. There need be concern about worker reactions only if systems of sharing are widely installed. Thus, the question of employer incentives to establish share systems is obviously crucial.[24]

Weitzman analyzes employer incentives under a share system on the assumption of profit maximization. Thus, profit sharing -- a plan based on the variable economic theory suggests the firm will maximize -- is the most obvious choice for an illustrative example. As shown in an earlier chapter, profit sharing is also the most common form of share system actually in existence. In contrast, productivity gain sharing plans, which are based on sales or value added, are not very common. Apart from theory, then, the greater incidence of profit sharing makes it the most suitable candidate for analysis.

A firm's profits (π) are simply the difference between its revenues (R) and its costs (C). Thus:

$$\pi = R - C \tag{5}$$

Profit maximization is determined by differentiating equation (5) by a decision variable and setting the resulting equation equal to zero. In the standard theory of the firm, the firm's decision

variable is usually depicted as the quantity of output (Q) to be produced and sold. That is, the firm selects an output target consistent with profit maximization. Differentiating by Q produces:

$$(6) \qquad d\pi/dQ = (dR/dQ) - (dC/dQ) = 0,$$

which the student will quickly recognize as the familiar marginal revenue = marginal cost condition, since dR/dQ = marginal revenue and dC/dQ = marginal cost.

Note that if a percentage share of profits (s) were taken from firm owners, say, for corporate income taxes, the firm then would maximize $(1-s)\pi$ rather than π (because $(1-s)\pi$ is what remains for the owners). But since $(1-s)\pi$ is a constant fraction of π, there will be no behavioral difference for the firm in maximizing π and maximizing $(1-s)\pi$.[es] That is, if the firm maximizes π, it will of necessity also maximize $(1-s)\pi$, and vice versa. The firm will make the same output (Q) decision, and therefore the same input decisions, as it would if "s" had not been assessed. In particular, if wage rates were reduced, both the π-maximizing firm and the firm maximizing $(1-s)\pi$ would react in the same way. They would both hire more labor.

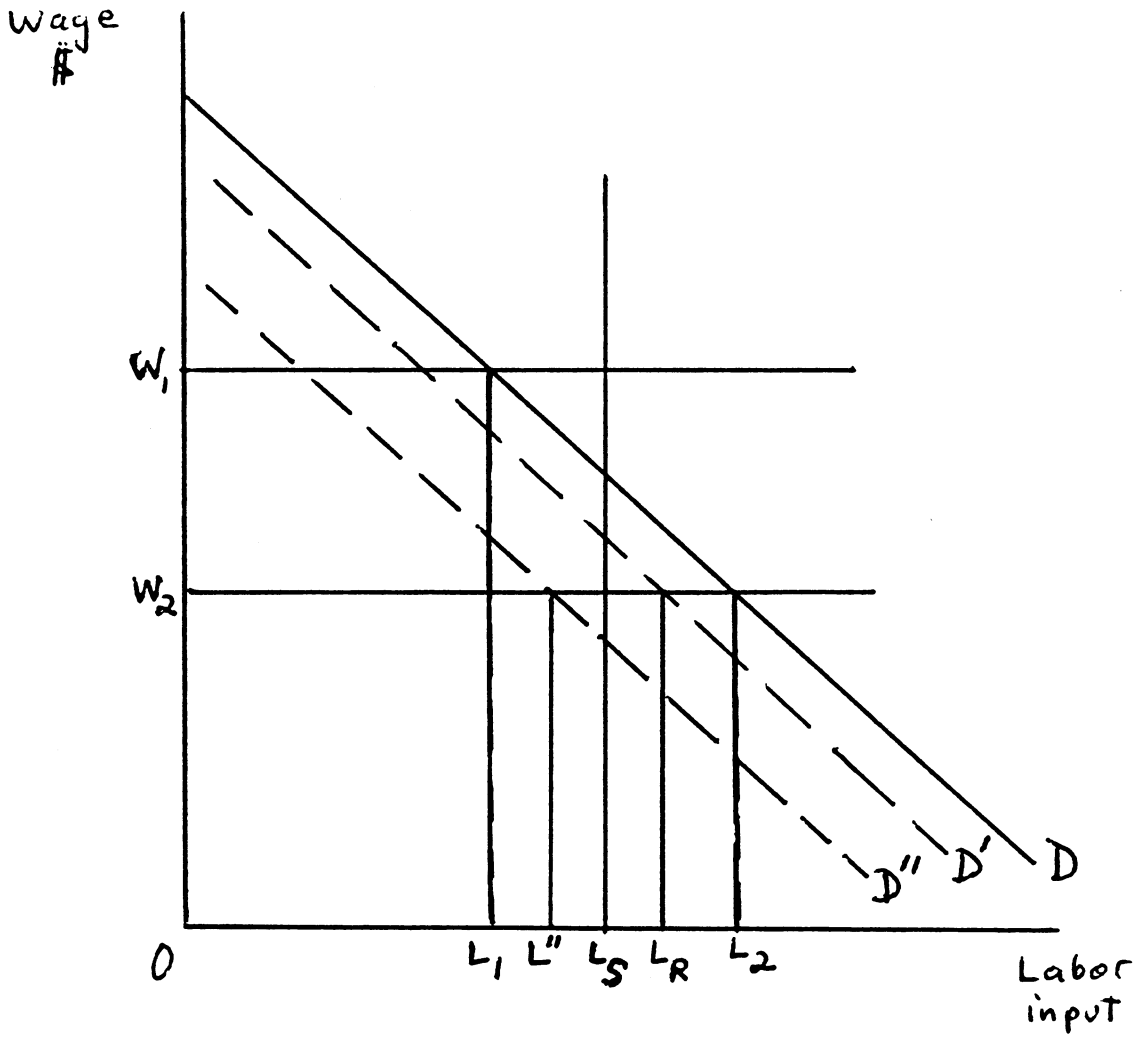
A profit sharing plan is like an tax assessment except that the share "s" goes to the worker, instead of the tax collector.

And here is where the difference sets in. Workers will put some value on the share, even if -- for reasons of risk aversion-- they do not treat the expected bonus as exactly equivalent to a sure wage. The firm can pay a lower basic wage, because it is also offering the share bonus. But the lower wage means more labor will be hired. Thus, Weitzman argues, having a share system creates an incentive for additional hiring and employment.

Figure 1 provides an illustration. The firm's short run demand curve D is depicted as the usual downward sloping line. If the firm had been paying a wage of W_1 before introducing a profit sharing system, it would have wanted to employ L_1 units of labor. Suppose it now introduces a share system with an expected positive bonus. The base wage it now needs to pay drops to W_2, and it thus wants to employe L_2 units of labor.

Under normal conditions, if just one firm wants to expand its workforce, the labor market could accommodate its needs. But if most firms were induced to adopt a share system, their total increase in labor demand might well exceed available labor supply, thus producing a labor shortage. Thus, the firm of Figure 1 might desire L_2 units of labor after it adopts profit sharing, but it might only be able to find L_s units, where $L_s < L_2$. The creation of a generalized labor shortage is a critical element of the Weitzman proposal, because the shortage provides an incentive for the firm to stabilize employment. It is through

Figure 1



the shortage that the potential for employment stabilization under a share system, as discussed earlier, is realized.[26]

Suppose, for example, that the firm of Figure 1 found itself in a labor shortage situation when a moderate reduction in the demand for its product occurred (say, because of a general recession). Its demand for labor might fall to D' under such circumstances. But even with that lower level of demand, the firm would want to employ L_R units of labor, still more than the L_S it actually had. Thus, the firm would not lay off workers, despite the fall in demand, since it did not have enough of them to start. Employment in the firm is thus stabilized in the sense that a moderate fall in demand creates no labor displacement.

Having a share system cannot prevent all displacement, however. For example, if there were a large drop in demand to D", the firm would want only L" units of labor, less than the L_S it has. It would thus lay off L"L_S units. Still, the share system still results in more people employed along demand curve D" than would be employed under a pure wage system.

Share Systems and Public Policy.

The notion that changing the compensation system could make a contribution toward reducing unemployment and toward stabilizing employment is very attractive from the societal

perspective. Weitzman argues that since there is a public interest in these objectives, society ought to provide incentives for employers to shift to share compensation. The individual firm does not "internalize" all of the benefits of a share economy; the overall unemployment rate does not depend on the actions of any one firm. Hence, firms will not institute a share system on the basis of these social objectives.

Absent a subsidy for using a share system, a firm will look only at the traditional arguments for share systems -- that they boost employee productivity and morale -- the arguments discussed in a previous chapter. Such benefits -- if they occur -- are internalized by the firm in the form of greater profits. But as noted in that chapter, these arguments have not been sufficiently convincing to induce most employers to shift to share systems on a widespread basis on their own.

Thus, Weitzman and others sympathetic to the macroeconomic arguments surrounding share systems advocate that tax preferences be given to such arrangements, in order to provide the needed societal subvention. With a subsidy through the tax system, employers will adopt more share plans than they would based only on the alleged productivity/morale effects. The subsidy, in effect, internalizes the external benefits of having share arrangements.

Skeptics of the Weitzman proposal argue that worker resistance to the employment expansion effects and worker risk aversion would prevent the share economy from having the impact that simple economic theory suggests. In this view, unions would keep firms from expanding employment, once the bonus dilution effect was understood. And nonunion firms which followed high wage policies would limit their hiring in order to prevent the dilution, too. In addition, workers would be so disturbed about the income fluctuations inherent in a share system that employers would not install more such systems, even with a tax-preference subsidy. Taxpayers' money would be wasted in subsidies which would go to firms which had already established share plans for their own internal reasons.

Other critics argue that the simple theory on which Weitzman's argument is based is misleading. If workers are hired for long durations under implicit contracts, and not in spot markets, the employer incentive effects may be quite different from those predicted by Weitzman. If, for example, firms implicitly "assured" workers that low bonuses in bad years would be "made up" in good times, the seemingly flexible compensation system would become as rigid as a wage system. The firm's cash saving in labor costs during bad times would be offset by an implicit liability to pay back the saving. A tax-preference subsidy might induce more share plans to be created, but these

plans would not have the effects suggested by Weitzman's analysis.

Despite these objections, the Weitzman proposal has a potential broad political appeal. The effect of a widespread share system of employee compensation cannot be known for sure unless it is actually tried. Hence, arguments against the proposal are hypothetical and hard to prove.

Moreover, as discussed earlier in this chapter, the prospect of employment stabilization -- if not expansion -- through share systems became particularly enticing in the 1980s. Job security is an issue for many workers and will become more important in the remaining years of the 20th century as the U.S. workforce ages. Since neither liberals nor conservatives want to be laid off, the idea of promoting flexible pay is likely to be around for some time -- regardless of the political climate -- and will probably find eventual legislative expression. Employers and HRM specialists would be well advised to expect inducements to shift to share arrangements.

More Share Systems without Tax Inducements?

Trends sometimes develop in compensation practices without external inducements. Could a trend toward more share bonuses develop, even if no tax preferences were enacted? There are some

signs of such developments, signs that HRM professionals would be well advised to watch.

As noted in an earlier chapter, one of the offshoots of concession bargaining by unions in the 1980s was the growth in use of "lump sum" bonuses. These bonuses are specified in two basic ways: flat dollar amounts, e.g., $1,000/year, or proportions of base pay, e.g., 3% of each employee's past year's earnings. They tend to substitute for increases in basic wages.

Over a period of time, if the use of such bonuses becomes entrenched in the collective bargaining system, a variable element geared to profitability and the general economic outlook for the firm could become part of union bargaining. While the basic wage settlement might show little variation in response to market conditions, the bonus element could vary. Thus, in good years contracts might begin with relatively large bonuses; in bad times bonuses might be small or nonexistent. Put another way, lump sum bonuses in American contracts could take on features similar to the Japanese bonuses referenced earlier.

Although lump sum bonuses developed mainly in the union sector, which encompasses only a relatively small minority of the workforce, past experience suggests that union-sector practices often spread into nonunion employment. Employers seeking means of stabilizing employment might find variable bonuses an

attractive option. Fears by employers -- based on the experience of the 1980s -- that product market conditions are likely to be more erratic in the future than they were in the past, make bonuses desirable from the management viewpoint. Bonuses which vary with economic circumstances provide the firm with automatic cost relief during difficult periods; they are not as hard to reduce as wages since the very idea of a bonus is that it is an "extra," i.e., something that is here today but perhaps not tomorrow.

The use of variable bonuses as an important element in compensation policy could serve to reconcile the need for managerial flexibility and employment stability. It would permit greater investment in human capital, both by employers and employees, because it would permit longer expected employment durations. Such investment, in turn, could contribute to the competitive edge American management has been seeking from its HRM practices.

Other Implications of a Share Economy.

Apart from their possible employment and cost effects, share systems could have still other implications for HRM professionals. As noted earlier, there is a linkage between the notion of sharing in an economic sense (financial sharing) and sharing in decisions (managerial sharing). If workers share in

profits, for example, they may well come to want a share in the managerial processes that influence those profits. Thus, a move towards a share economy could trigger broad changes in HRM practices. Similarly, firms which have moved toward management sharing systems such as quality circles, may eventually find that their workforce would like to share in an economic sense in the fruits of their decisions.

Share systems could have implications for unions and their organizing prospects, too. The bonuses under share systems are ultimately based on accounting data from the firm. Particularly with regard to profits, there are many potential uncertainties in calculation. Employees may feel a need for an independent entity to audit the computation. A promised ability to act as an auditor for workers in a share economy could prove to be an appealing organizing tool for unions. Of course, unions would need to develop expertise in areas traditionally left to management to provide such services.

IV. Conclusions.

Recognition of employer-employee attachments is critical to understanding the functioning of the labor market and the making of HRM policy. As demonstrated in the previous chapter, employees may be attached to employers, even when they are not working. An involuntary breaking of the attachment, particularly

in the case of permanent layoff, is costly to employees because of the investment and stake they have in their jobs.

Society attempts to alleviate this problem through such government programs as unemployment insurance. But it is likely -- with an aging workforce -- that demands for still more societal protections against layoffs will grow. In addition, proposals for changes in the compensation system to facilitate long and stable employment durations, e.g., the Weitzman plan, are likely to gain in popularity.

Long duration employer-employee attachments facilitate the training of employees. Both parties have reason to believe that human capital investments can be recouped, if they know that the expected duration of employment is long. To the extent that public policies are adopted which push firms to maintain stable employment relationships with their employees, the incentives for skill acquisition will grow.

FOOTNOTES

1. These data, and others cited below, are from Ellen Sehgal, "Occupational Mobility and Job Tenure in 1983," Monthly Labor Review, vol. 107 (October 1984), pp. 18-23.

2. Robert E. Hall, "The Importance of Lifetime Jobs in the U.S. Economy," American Economic Review, vol. 72 (September 1982), pp. 716-724.

3. The term "human capital" is used in economics to refer to investment in education, training, and learning to enhance employee productivity.

4. Source: U.S. Bureau of the Census, Statistical Abstract of the United States 1986 (Washington: GPO, 1985), pp. 135, 149.

5. U.S. Bureau of the Census, Historical Statistics of the United States: Colonial Times to 1970, Part 1 (Washington: GPO, 1975), pp. 379, 383.

6. Employment and Earnings, vol. 34 (January 1987), p. 164.

7. Ivar Berg, Education and Jobs: The Great Training Robbery (New York: Praeger, 1970).

8. Michael Spence, "Job Market Signaling," Quarterly Journal of Economics. vol. 87 (August 1973), pp. 355-374.

9. William G. Ouchi, Theory Z: How American Business Can Meet the Japanese Challenge (New York: Avon, 1982), p. 77, points out that the search for homogeneity in the successful firms he analyzed can raise issues of race and sex discrimination..

10. The issue of paying for training is discussed below in this chapter.

11. There are various explanations for the drop off in income for males in the oldest age bracket shown on Table 9. Some of the males may have retired from (or lost) their primary jobs and may have embarked on second careers. Others may have suffered injury or illness. Cohort effects are also present on the table. The individuals in the oldest bracket are not the same persons as those who are in younger age categories. Each cohort has had a different labor market history.

12. Katharine G. Abraham and Henry S. Farber, "Job Duration, Seniority, and Earnings," American Economic Review, vol. 77 (June 1987), pp. 278-297.

13. By considering the post-high school earnings he/she would earn, the individual is in effect taking account of the opportunity costs of college. These earnings would include what would be otherwise be earned during the period of college attendance. (Of course, many college students work part time or during the summer while they attend college, so these earnings would also have to be considered).

14. Note that from the individual perspective, it matters little whether the returns from education stem from actual skills acquired or from signaling. The cost/benefit calculation will be exactly the same.

15. Richard B. Freeman, "A Cobweb Model of the Supply and Starting Salary of New Engineers," Industrial and Labor Relations Review, vol. 29 (January 1976), pp. 236-248. The cobweb terminology stems from the cobweb-like appearance of a simple supply/demand diagram incorporating the adjustments.

16. Gary S. Becker, Human Capital: A Theoretical and Empirical Analysis, with Special Reference to Education, 2nd edition (Chicago: University of Chicago Press, 1975), pp. 19-37.

17. Wayne F. Cascio, Costing Human Resources: The Financial Impact of Behavior in Organizations, second edition (Boston: PWS-Kent Publishing Co., 1987), pp. 34-37.

18. Martin L. Weitzman, The Share Economy: Conquering Stagflation (Cambridge, Mass.: Harvard University Press, 1984); Martin L. Weitzman, "Some Macroeconomic Implications of Alternative Compensation Systems," Economic Journal, vol. 93 (December 1983), pp. 763-783; Martin L. Weitzman, "The Simple Macroeconomics of Profit Sharing," American Economic Review, vol. 75 (December 1985), pp. 937-953.

19. A typical worker will be employed for 40 hours at $10 per hour and 2 hours at $15 per hour, thus receiving total weekly pay of $430. $430/42 hours = $10.238.

20. The guaranteed income stream plans in principal guaranteed worker incomes rather than their jobs. However, it provided strong incentive for the employers to provide work, since otherwise workers would be paid while idle.

21. Richard B. Freeman and Martin L. Weitzman, "Bonuses and Employment in Japan," working paper no. 1878, National Bureau of Economic Research, April 1986.

22. Not all observers agree with the interpretation of the Japanese bonus system as an ersatz profit sharing arrangement.

23. Objections to the Weitzman plan based on worker preferences as discussed below can be found in Domenico Mario Nuti, "Profit-Sharing and Employment: Claims and Overclaims," Industrial Relations, vol. 26 (January 1987), pp. 18-29.

24. The discussion below follows that found in Daniel J.B. Mitchell, "The Share Economy and Industrial Relations," Industrial Relations, vol. 26 (January 1987), pp. 1-17.

25. It is not really the case that corporate income taxes have no effect on firm behavior. Real world corporate income taxes, like individual income taxes, are more complex than a simple taking of a constant share "s" of profits or income. Corporate income taxes include preferential treatment for certain kinds of activities and sources of income over others, thus influencing production decisions. Moreover, the analysis in the text is short run. Firms stay in business in the short run as long as they can cover variable costs. In the long run, however, corporate income taxes might influence decisions of individual firms to stay in business, by reducing the rate of return to investment in those firms.

26. Normally, it might be expected that firms in a labor shortage situation would eventually raise wages to bid for labor. Such bidding would alleviate the shortage. However, Weitzman's case is somewhat different. Consider the firm depicted on Figure 4 operating along demand curve D and hiring L_B labor. The cost C of hiring an additional unit of labor L is $W + s(d\pi/dL)$, i.e., the wage plus the share of additional profits which will be paid as a worker bonus. As long as $s>0$, that is, as long as there is a share system, the firm will be happy to hire any incremental labor dL it can find, since it will gain $(1-s)(d\pi/dL)$ by doing so. In the long run, firms will adjust their wage offers and "s" offers to attract more labor. They will maximize profits where C = marginal revenue product of labor. But since $W<C$ when $s>0$, firms would still be happy -- even when they have found their long run equilibrium positions -- to hire more labor and collect the $(1-s)(d\pi/dL)$ that results. It is just that there is no more labor available. The firm is in equilibrium -- it no longer wants to change W or "s" -- but it still stands by to hire any labor that comes along.

Perhaps the best analogy is with a monopoly in the product market. The monopolistic firm determines its output where marginal revenue (MR) = marginal cost (MC). But its price P is greater than MR. The firm would be happy to sell an additional unit of output at price P to anyone who wants it, since it collects P but pays out only MC (where P>MC). However, the firm does not find it worthwhile to lower its price to sell another unit. It has a permanent "shortage" of customers similar to the share firm's permanent shortage of labor.