

"THE ECONOMIC APPROACH TO HUMAN RESOURCE MANAGEMENT AND INDUSTRIAL RELATIONS"

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The Effective Use of

Human Resources

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Economics is usually viewed as a descriptive and explanatory discipline, i.e., an interpreter of economic phenomena. But, as a recent article by Faulhaber and Baumol points out, sometimes economic ideas and innovations influence actual practice.¹ That in itself is not a new observation; Keynes observed many years ago that "practical men, who believe themselves to be quite exempt from any intellectual influence, are usually the slaves of some defunct economist."² But Keynes' reference was to ideology and, therefore, to macro-level public policy. Indeed, Keynes himself was a prime example of an economist whose ideas influenced macro public policy.

Faulhaber and Baumol, however, refer to micro-level public policies (such as utility regulation) and to the actual practice of business. Utility regulators have adopted economic ideas on efficient pricing, they point out, and the ideas have thus influenced the internal practices of regulated firms. And, especially in the financial sector, businesses have applied economic innovations directly, such as the now-famous (or infamous) institution of portfolio insurance.

In this essay, I ask the question "Can it happen here?" with "here" meaning the fields of human resource (HR) management and industrial relations (IR). Are there economic innovations destined to spill over into actual HR-IR practice? The answer I will give is that while there are no innovations as concrete as

portfolio insurance on the horizon, new economic thinking will undoubtedly influence management education and practice.

HISTORICAL BACKGROUND

Although there are many strands of research in the HR-IR areas, economics certainly played an important historical role. Examples of prominent researchers would include such names as John R. Commons, Paul H. Douglas, and John T. Dunlop. In general, however, economic researchers focused on the union-related aspects of the subject. This concentration was partly due to the interest in unions as instruments of social reform and, in the 1930s and 1940s, from the sense that unions and collective bargaining were the wave of the future in the labor market.

Early Economic Research and Writing

Economic researchers in the post-World War II period generally believed that even though the majority of the workforce was nonunion, nonunion employers were passive followers of union practices. Thus, labor economists tended to leave research into nonunion personnel practices to others. On the other hand, because much of what was observed in the union sector did not accord with classical economic theory, postwar labor economists tended to be dissatisfied with existing microeconomic thought. Instead, they followed an "institutional" (semi-descriptive) approach. As a result, a rift was produced between labor economics and mainstream economic theory. This rift led, for example, to the formation of the Industrial Relations Research Association as a breakaway group from the American Economic Association in the late 1940s.

Textbooks of that era in industrial relations often included macroeconomic concerns such as inflation, unemployment, and income distribution. Productivity was treated mainly at the economy-wide level, not at the level of the firm. Other sections of these books focused on the institutions, history, and law of collective bargaining.³ The economics component and the rest of the text were really two separate books bound within the same cover. Student readers of these texts could easily come away with the impression that traditional economics had little to say

about real world employment relationships. And, of course, they would have been correct.

Competition from Other Disciplines

In fact, economists had considerable competition from writers and researchers who came to HR-IR with very different perspectives. First, there were the practitioners themselves who developed the field. Perhaps the most prominent early example was Frederick W. Taylor, the father of "scientific management," who approached the issue of employee incentives and motivation from the viewpoint of an applied industrial engineer.⁴

A second prominent group consisted of behavioral scientists who often dismissed simple models of "economic man" as unrealistic. The authors of the famous Hawthorne studies of the late 1920s and early 1930s were good examples.⁵ They developed notions of teamwork and group dynamics that were simply out of the range of classical economics. Behavioral scientists also provided the management community with practical innovations, such as employee attitude surveys, which could be applied in pursuit of managerial objectives.⁶

Finally, lawyers became more and more important to the HR-IR field as government regulation of the labor market increased. Initially, labor law was seen as largely the regulation of collective bargaining, i.e., the Wagner Act and its descendants, with minor footnotes for other programs such as the minimum wage and state Workmen's Compensation statutes. However, the second wave of legal regulation in the 1960s and 1970s, especially equal employment opportunity (EEO) regulation, opened up new legal vistas, even as the union sector declined relative to the overall workforce. Court decisions in areas such as wrongful discharge further developed the field of individual job rights (as opposed to collective rights).

DIFFICULTIES WITH THE CLASSICAL MODEL

Classical economic analysis had difficulty in dealing with the kinds of issues that practitioners faced in the employment situation. First, the standard model focused on the individual in a competitive market. Notions of team production, rather than individual, were not addressed. Questions of obtaining coopera-

tion within a work group, or between supervisors and subordinates, were not considered. Rules such as "wage = marginal revenue product of labor" assumed an independent individual, not an individual within a group. Moreover, the rules of marginalism, while useful for pedagogical purposes, found no practical application among employers. Indeed, institutional critics pointed out that firms showed no signs of making marginal decisions or having the data to do so.⁷

A more fundamental problem was the classical assumption of an auction-style labor market which automatically equated supply and demand. A market which instantaneously "clears" obviates concerns about unemployment (or labor shortages). Thus, questions about job security, job search, and recruitment make no sense in such a market. Of course, economists knew that something called unemployment existed and was of great concern to public policy. But much ink was expended debating whether unemployment was "voluntary," and, hence, did not really matter. Development of modern techniques to measure unemployment—something that was not accomplished in the United States until 1940—was left to applied empirical pragmatists; theoreticians had little of use to say about the issue. The model of a perfect, auction labor market also assumed perfect information. Either labor was assumed to be homogeneous or employers were assumed to know precisely the productivities of individual workers. In such a world, issues of screening, monitoring, and incentives do not arise. Such questions were left to others to discuss.

Macro Problems

In the post-World War II period, there developed a pragmatic, empirically oriented brand of Keynesianism. Keynesian pragmatism recognized the phenomenon of unemployment; indeed, lowering unemployment was viewed as the major goal of public policy. However, Keynesians were prepared to accept the labor market as a peculiar place in which things happened that were strange (not readily explicable by prevailing micro theory). It was accepted that the labor market did not clear. Perhaps this lack of clearing occurred because of wage rigidity or perhaps for other reasons—the precise explanation was not needed for Keynesian remedies to be applied. Similarly, wages might rise even in the face of surplus labor. But rather than wait for the reasons for this mysterious inflation to be worked out, it was thought best to rely on empirically observed regularities.

The best known empirical regularity related to the labor market was the "Phillips curve," which postulated an inverse relationship between the rates of wage inflation and unemployment.⁸ Many versions of the Phillips curve were estimated; standard wage equations soon included other explanatory variables, particularly variables related to price inflation, along with unemployment. However, instability in the numerous wage equations that were developed, and poor inflation forecasting in the 1970s, led to greater interest in the nitty-gritty of wage determination.

One response to "stagflation" in the 1970s and early 1980s was Martin L. Weitzman's suggestion that widespread profit sharing—a "Share Economy"—would alleviate the problem. Weitzman's view of profit sharing differs fundamentally from that taken by HR managers. He is not interested in the alleged motivational effects on employees claimed by traditional profit-sharing proponents. Instead, he sees profit sharing—for reasons which cannot be developed here—as providing a motivation for employers to increase employment and avoid layoffs.

Weitzman's Share Economy suggestion has created considerable interest in macroeconomic circles and among some political leaders. It has already led to adoption of special tax incentives for profit sharing in Britain. As a byproduct of the debate over the Weitzman proposal, economists have become

SOURCES OF RECENT ECONOMIC INTEREST IN HR AND IR

Various developments have led to a new economic interest in HR-IR issues. These include difficulties in macroeconomic management which appeared in the late 1960s and 1970s, a variety of pressing social problems, and a growing interest in the economics of education. Also important was the increased availability of data sets and the improvement of technology to handle them.

interested in the traditional (motivational) effects of profit sharing and—by inference—of other pay systems.

Social Problems

A variety of social problems in the 1960s gave rise to new economic research. Apart from cyclical unemployment—which in principle should respond to macroeconomic remedies—there was increasing discussion of structural unemployment, which presumably had micro-level roots. Structural unemployment was seen as a mismatching of worker skills with employer demands, a phenomenon which is not easily accommodated into a classical auction labor market. Keynesian-oriented economists initially tended to debunk the notion of significant structural unemployment (or, at least, the idea that it was getting worse) as a diversion from appropriate macro remedies. But the idea of structural unemployment gradually took hold, and formed the basis of an expansion in government-sponsored training programs in the 1960s and 1970s.¹⁰

Research into the phenomenon of structural unemployment was, not surprisingly, initially carried out by institutionalist labor economists. They found a division of the labor market into a primary sector of "good jobs" and a secondary sector of "bad jobs."¹¹ Good jobs featured high pay and benefits and employment stability, but demanded good work habits. Bad jobs were low paid and employers providing such jobs tolerated high turnover and absenteeism. Of special interest was the fact that firms in the primary sector seemed to establish policies of promoting good jobs in the primary sector seemed to be rationed.

These findings of "internal labor markets" cried out for an explanation. Economists were attracted to modeling what was being observed, but doing so within the spirit of standard economic analysis. Clearly, however, the standard model had to be extended and revised to make the accommodation. Empirical observation thus stimulated the process of an expanded economic approach.¹²

Another social issue which came to a head in the 1960s was equal employment opportunity. Various laws and government regulations designed to deal with the issue proved to be quite intrusive into firm-level HR-IR policies, since discrimination could affect virtually any personnel decision: recruitment, screen-

ing, evaluation, pay, layoffs, etc. The controversy which resulted was bound to attract the interest of economists, particularly to the issue of whether the new regulations "worked." In addition, where there is a considerable public policy concern, there are often considerable funds for research and academic rewards. That proved to be the case with EEO policy.

Discrimination, at the very least, requires modification of the classical model.¹³ Otherwise, it would seem irrational (not profit maximizing) for firms to decline to use particular groups of employees on the basis of irrelevant criteria. Remedies sought by various advocates—especially comparable worth—challenged the assumptions of the standard model. It became necessary for economists interested in discrimination, even if only to defend the classical view, to consider internal HR policies. In addition, a postwar economic tool—econometrics—came increasingly to figure in court decisions, thus pulling empirically oriented economists into the fray.¹⁴

Human Capital

One of the social issues of the postwar period that attracted considerable attention was education and training as a means of fostering economic advance and social equality. Although academics often prefer noneconomic approaches to their activities, the labor market consequences of education have never been far from the public eye. At one end of the scale, reducing high school dropout rates has long been seen as a tool for reducing joblessness and crime. In the middle, access to college has been viewed as improving upward social mobility. And at the highest end, academic research is said to foster productivity improvements and economic growth.

There is much to be said about all of these propositions, but that must be left to other forums. What matters here is that they all are suggestive of a capital investment. Expenditures on education—whether public or private—lead to "payoffs" in the future. How much those expenditures should be is in principle subject to investment criteria, such as rate of return. Thus, the human capital approach developed.¹⁵

Among the ideas developed in the human capital literature was the distinction between general and specific investments in skill acquisition. General skills are applicable to many employers; therefore, firm-financed investments in them would be difficult to

recoup.¹⁶ Specific skills, on the other hand, are of value only to a single employer and must therefore be employer-financed. Many qualifications to these ideas can be made. However, they do provide a rationale for firm-financed investments in some kinds of training. If so, firms have an investment of sorts in their employees. And just as physical capital can be lost through depreciation, so the firm's human capital investment can be lost through turnover. It is a commonplace for HR managers to use phrases such as "people are our most important assets." Such phrases make no sense in the context of the traditional, auction labor market model. But they do find resonance—or potentially do—with the human capital model. Thus, the human capital approach tends to bring the practitioner's world and the economist's world closer together.

Availability of Data

The impact of the computer and the availability of computerized data sets in the 1960s and 1970s created new opportunities for empirical research into the workings of the labor market. In some cases, it became possible to extract more detail out of existing data sets. The Current Population Survey, from which monthly data on employment, unemployment, and labor force participation are developed, began to yield interesting information on labor market flows. For example, the duration of unemployment began to be examined, and distinctions between layoff unemployment and other forms became apparent.¹⁷ Thus, attention was again focused on the non-clearing aspect of the labor market.

New information on the duration of employment also came to the attention of economists. It became apparent in the 1980s that very long durations of employment with a single employer (job tenures) were not at all unusual.¹⁸ The tenure data helped emphasize the employment situation as a potentially long-term relationship, not a fleeting, auction-style contact.

KEY CONCEPTS OF THE NEW ECONOMIC INTEREST IN HR AND IR

With the new interest of economists in the HR and IR fields have come some new concepts. These include internal

labor markets (already mentioned above), implicit contracting in the labor market, insider/outsider relationships, conflicts between principals and agents, team production, and efficiency wages. As in any new area, there are disagreements about these concepts and their implications. My summary below will, of necessity, be inadequate.

Internal Labor Markets

The idea of there being an internal labor market, i.e., an institutional arrangement of promoting from within and of internal rule making, is not a new one. Institutional research prior to the 1960s spoke of internal wage structures within firms, which were only indirectly linked to the outside labor market.¹⁹ The internal labor market idea is also connected to the modern view of the corporation as internalizing certain functions that might otherwise be done through markets. A decision to follow a promote-from-within policy can be compared with other "make or buy" decisions by the firm.

In principle, therefore, an economic cost-benefit analysis can be undertaken to determine whether a firm should use an internal or external labor market approach. Certainly, some measure of the employer's investment in workers is important to this calculation. The external labor market will not supply specific skills. Recent discussion in HR circles of the use of a "contingent" workforce, e.g., office temporaries, rather than "regular" employees, suggests that the market is ripe for the development of empirical tools to facilitate such decisions.

Implicit Contracting

The observation of long-duration employer-employee attachments suggests that the employment relationship can be described as contractual. Unlike an auction market, in which buyer and seller are in contact only momentarily, there seems to be an ongoing "understanding" between employer and employee.

The very concept of "my job" suggests an enduring prospect with certain rights and obligations. Workers seem to feel they have (or should have) ownership rights in their jobs.²⁰ However, with the minor exception of a few movie stars, professional athletes, and top executives, and the major exception of collective bargaining agreements, most employees do not have explicit (written)

contracts with their employers. Hence, economists have come up with the phrase "implicit contracting" to describe their relationship.

There are various views concerning the reasons why such implicit contracts might exist in the economics literature. One view, associated with the late Arthur M. Okun, stresses turnover costs as the main cause.²¹ According to Okun, there are considerable costs of turnover which can be avoided if firms keep quit rates down, by encouraging long durations of employment tenure.

Firms make implicit promises of fair treatment over the long haul to their employees. Instead of being exposed to the "invisible hand" of Adam Smith's external market, workers receive an Okun-style "invisible handshake." In particular, since the relationship is ongoing, decisions on wages will only reflect transitory forces, such as recessions, to a limited extent. Workers might receive a wage increase, or at least no decrease, even when there is an external labor surplus. Obviously, measurement of turnover costs becomes important in the context of this model. Another view of the internal labor market is that it is a way of economizing on decision costs.²² It would be costly to re-contract with employees every morning as to pay, benefits, responsibilities, etc. But this view also raises questions about the magnitude of that cost. With temporary employees, for example, there is in effect a form of frequent re-contracting. What approach is optimal for the firm?

Finally, there is an insurance view of implicit contracting. Workers are seen as risk averse; they would like to avoid income fluctuations. Hence, firms provide relatively inflexible wages (which do not fluctuate wildly with business-cycle conditions) and a measure of job security (perhaps linked to seniority). Issues which arise here surround alternative forms of providing income insurance—if that is what employees desire.

Employees might well want job security protections in a world of implicit contracting. In the alternative auction-model world, workers can always find employment and security is not of concern. But where there are career ladders and guarantees, anyone who is knocked off the ladder (discharged) may have a hard time finding another entry path.

Indeed, any model which proposes a long-term relationship is likely to feature some kind of job rationing. Hiring represents a costly commitment that cannot be made to everyone who walks in the door. It also raises the possibility of a time profile of

wages that differs from current productivity. Specifically, there are models in which workers are "underpaid" at entry and "over-paid" later in their careers, as allegedly happens under Japanese lifetime employment practices. The later overpayment could function as an incentive for good behavior during the initial period. It may serve as an alternative form of efficiency wage of the type discussed below.

The evidence on pay-by-seniority is mixed.²³ But the idea is of interest in various areas of concern to HR-IR practitioners. It sheds light on age discrimination suits in which allegations are made that the firm discharged older workers to hire younger, cheaper workers. If, in fact, pay always reflects current productivity, then firms would not save money by firing older workers and replacing them with younger ones. The younger workers would be cheaper, but would produce correspondingly less, eliminating the saving. But if firms have implicit contracts to overpay to high seniority employees, then age discrimination might be seen as a breach of contract. The high pay of seniors today is a deferred (promised) reward for past service.

The legal view of age discrimination—and other forms of wrongful discharge—is potentially reinforced by the implicit contract model. Watch for this approach in your neighborhood courtroom! Note also the connection of implicit contracting models to plant closing and advance notification legislation. Thus, the implicit contracting approach may soon make itself felt in legislative halls, as well as in court.

There are also implications in implicit contracting for situations in which firms have terminated defined-benefit pension plans in order to claim fund "surpluses." When these terminations occur, employers are legally bound to give incumbent employees annuities which meet the current legal obligations of the terminating plan. However, the current legal obligations tend to underestimate the value of the plan to incumbents.

Defined-benefit pensions typically involve lumpy benefit schedules. The plan often becomes substantially more valuable for employees when they reach particular levels of tenure or age. The date of vesting is one obvious critical date. Another is the age of early retirement.

When plans are terminated, workers

world, such pension terminations may also be seen as potential breaches of contract.

To be sure, the implicit contracting view raises many questions, as yet unanswered. Perhaps the most obvious is why implicit understandings—if they really are contracts—are not made explicit. Why is it that nonunion workers rarely have written contracts? Is the fact that the contract is unwritten a signal that it represents only a general intent, not an ironclad guarantee? If the implicit contracting approach does make its way into the courtroom, surely this objection will also surface. Ultimately, the current ambiguity about the employment relationship may lead to legislative interpretation of just what the employment relationship does and does not entail. In the interim, employers are likely to become more careful and explicit about what they are promising.

Insiders and Outsiders

In an auction market, prices are determined by supply and demand. An increase in the supply of labor, other things equal, will drive down the wage. But in the real world, employers seem reluctant to lower wages just because there is a queue of "outsiders" looking for jobs. They seem to protect insiders (incumbent workers) to the detriment of outsiders.

Recent economic literature has noted the conflict of interest between insiders and outsiders.²⁴ It is argued that insiders may have the means, through group action, to make it worthwhile for the employer to protect them. In union situations, of course, there is an institution available to "voice" the concerns of the insiders. The example of two-tier wage bargaining (in which wage reductions are conceded by the union only for new hires) comes to mind. But proponents of the insider-outsider model argue that nonunion workers may also have some leverage. The discovery, for example, that nonunion workers can take action to restrict output was made decades ago.²⁵

Principal-Agent Analysis

Where there are barriers to, or costs of, information, it is difficult to ensure that you will get what you paid for. Top management may not act in the interest of stockholders. Auto repair shops may undertake unneeded repairs. Purchasing agents may

accept "gifts" from suppliers in return for contracts. There are remedies for these abuses, but the remedies themselves are imperfect and almost always costly.

In the employment situation, the employer is the principal and the employee is the agent. Actually, there are likely to be hierarchies of principals and agents, travelling down the authority structure. Dealing with the principal/agent dilemma sometimes involves screening. Before employees are hired, resources are expended to look for characteristics that will ensure later performance, through tests, interviews, and even urine samples. Employers or their agents seek signals or indicators which will predict on-the-job performance.

Use of signals is common in the insurance business. Teenage males are known to be high risk drivers *on average*, and so pay higher premiums for coverage. In the labor market, use of some signals—especially race, sex, and national origin—is forbidden by law. But absent legal restriction, it may be rational for employers to engage in what economists call "statistical discrimination," i.e., make assumptions about individuals based on group membership. In some cases, such practices can be self-reinforcing. Thus, in a world in which finishing high school has become a norm, someone who doesn't finish, *knowing that employers use a high school diploma as a cue to future behavior*, is labeling himself or herself as a deviant. It is possible to create models in which requirements for educational credentials become rational demands for employers, even if the credentials themselves do not relate directly to job skills.

After screening and hiring comes monitoring. But monitoring is also imperfect; in many cases what is measured is input rather than output, e.g., hours of work measured by time clocks, or quantity but not quality. Often evaluations are subjective in nature, e.g., performance appraisal, and may be affected by biases or perverse incentives confronting supervisors. It is well known that performance appraisals often lead to rankings of everyone in the group as above average. Supervisors may fear that angering an employee with a poor rating may lead to noncooperation that will ultimately reflect badly on themselves. The incentives are perverse, but it is extremely difficult to design a performance appraisal system that properly overcomes the perversity at manageable cost.

Sometimes, firms attempt to overcome the principal/agent problem through the pay system. Formula arrangements, such

as piece rates and sales commissions, are examples. The pay plan defines a monitoring indicator and ties pay directly to it. Economic analysis, however, suggests that such systems may not completely solve the perverse incentive problem.

The employer under a simple incentive system must pay the employee an amount per piece that is less than the full value of the piece to the employer; otherwise there would be no profit. Similarly, commissions must be at less than 100 percent of value. Thus, the value of incremental effort to the employee is worth less than it is to the employer. The interests of the two parties are not married, despite surface appearances.

Consider, as an example, the 6 percent commission often paid to real estate agents. To the seller of the house, each incremental \$1,000 of added sales price is worth \$940 (i.e., \$1,000 minus the 6 percent commission), but only \$60 to the agent. The agent, therefore, will spend only \$60 worth of time, effort, advertising, etc., to obtain a result worth far more to the seller. Seller and agent interests are not identical, and cannot in practice be made identical. But viewed in this way, it may be possible to design alternative pay systems which come closer to the ideal convergence of incremental welfare.

Team Production

Teams in the work place include groups of workers on assembly lines, members of product development task forces, and people in close proximity who must simply get along with one another to do a day's work. But the common phenomenon of team production raises a number of difficult problems in the work place.²⁶ In principle, the ideal monitor of a team is the individual who receives the residual value of the team's output after costs are paid. In a small firm, the owner-manager plays this role. But in a large firm, the monitor will be an agent of the principal—with all of the accompanying problems.

Apart from the motivation of the monitor, two other issues often arise. First, if output depends on team cooperation, then it is difficult to monitor the contribution of individuals. Observing the output of an individual may be misleading, since others may be responsible for the individual's performance (good or bad). Second, the cost of putting a poor performer in a team may be quite large, since the efforts of all the other members may be thwarted. A rotten apple spoils the entire barrel. This

cost may explain why minimum standards and discharges are used by employers to deal with poor performers rather than lower wages; there may be no positive wage which can offset the damage done by the poor performer.

If a team is composed of N people, and the rewards of performance are divided equally among them, an individual contributing \$1 to the group's reward will get back only \$1/N. As N increases, there is the potential for the "free rider" problem to creep into the team. (Individuals may be willing to let others in the group put in the effort, since they will share in the rewards anyway). Group rewards, such as profit and gain sharing, cannot by themselves completely resolve this problem, because of the reward division. Given problems of agent monitoring in large organizations, the economic analysis of teams ironically suggests that the solution lies in behavioral techniques aimed at fostering peer pressure and cooperation.

Efficiency Wages

Given the difficulties of screening and monitoring, employers in theory might require employees to post bonds for good performance. Such a system would be costly to operate, in part because of the moral hazard involved. If employers were the judges of employee performance, they might be tempted to assert inadequate performance, simply to collect the bond. If employees were made the judges of their own performance, there might as well be no bond at all. A bonding system would require the use of neutral judges (arbitrators?) who would frequently assess the performance of all employees against some agreed upon standards.

Although bonding seems impractical, efficiency wage models suggest that an alternative could be (and is being) used. Consider the classical auction market and add two assumptions. Assume that employees can vary their work effort and that employers cannot predict the performance of new hires. If shirkers are caught on the job, they are discharged, but they suffer no penalty. They simply go back to the auctioneer and obtain another job. Since the market always clears, and other employers do not know of their propensity to shirk, the shirkers are always employed by someone at the going wage.

If catching shirkers (monitoring) is costly, employers can indirectly create a bonding system by paying something more

than the going wage.²⁷ A shirker who is caught at a firm which pays an above-the-market efficiency wage loses the efficiency wage premium. The premium thus functions as an *ersatz* bond. Of course, if all firms pay above the average, the average will rise and the market will not clear. The penalty for shirking, therefore, will become a spell of unemployment rather than employment at a lower wage.

Efficiency wage premiums might vary by firm according to the quality of employee being sought. Firms at which shirking was especially costly and at which monitoring costs were high would pay higher wages than others. Of course, since discharge inflicts an economic penalty on employees, issues arise concerning the standards used to impose such discipline. Some firms might wish to provide employees with review systems, assurances of just cause, etc. This observation brings us back to the expanding legal concept of wrongful discharge.

Finally, it is important that workers who are paid efficiency wages perceive they are receiving a wage premium. In a perfect classical market, a single firm paying an above-market wage would be apparent to all participants. But in the real world, where an array of pay policies exists, the perception issue becomes more important. Traditional proponents of pay plans such as profit sharing and incentives often have insisted that employers should add the bonus on top of the going wage, so workers would see they are getting something extra.²⁸ One view in the efficiency wage literature is that the higher wage is a "gift exchange" of extra pay for extra effort.²⁹

HR VERSUS IR

Much of the recent economic thinking described above was not focused on unionized employees. This represents a break from the institutional labor economics of the early postwar period which concentrated heavily on unions and bargaining. It undoubtedly reflects the shrinkage of the union sector relative to the overall workforce since the 1950s.

However, despite the newer HR, rather than IR, focus, there is still much work in economics aimed at the union sector. The union sector is attractive to researchers in part because contracts there are explicit and, thus, easier to study than implicit nonunion understandings. It would be a mistake to

regard union agreements as simply a writing down of otherwise implicit contracts. Union contracts have many features which are motivated by a desire to reduce strike risk—something almost entirely absent in the nonunion sector.³⁰ However, data on union contract features, wage settlements, strikes, etc., have historically been more readily available than data on personnel practices, pay, and employee discontent in the nonunion sector. This feature may change; there were significant budgetary curbs in the early 1980s, adversely affecting union data collected by the U.S. Bureau of Labor Statistics. Thus, reduced data availability may eventually push researchers away from IR topics.

Concession Bargaining in the 1980s

Even if the long-run trend in labor economics is away from union-centered research, developments in the union sector in the 1980s helped maintain the interest of economists. Specifically, unions underwent a period of concession bargaining involving pay freezes and cuts, workrule relaxations, etc. Unions in recent years could be forgiven if they felt like patients with "interesting" diseases who are therefore surrounded by inquisitive doctors. However, the union sector in the 1980s did provide researchers with something as close to laboratory experiments as can be found in economics.

What would happen to wage bargaining if markets were suddenly made more competitive due to deregulation? What would happen if low-cost foreign suppliers suddenly appeared due to dollar appreciation? What would happen to escalator clauses if inflation rates dropped markedly? The 1980s brought about all of these developments, providing a new stimulus for union-sector research.

Issues with Implications for the Nonunion Sector

Although concession bargaining may be viewed as a relatively narrow short-term phenomenon, there are other aspects of union-management relations about which research may have spillover effects into other fields. Economists have long noted that strikes are influenced by macroeconomic variables, such as the state of the business cycle.³¹ But this observation raises a theoretical puzzle. If strikes are viewed as the result of "mistakes" by the parties concerning the intent and strength of their

opposite numbers, then strikes should be random events.³² The fact that they are not suggests a problem with the model.

One element omitted from the mistake approach is that the union-management relationship is *ongoing*. Bargaining behavior today may influence future bargaining outcomes. A concession today may erroneously signal weakness to the other side and cause that side to press too hard in the next round, triggering a strike. Thus, bargainers may find consistent behavior the best way to minimize strike costs over the long run. Today's strike-causing rigidity of position paradoxically may reduce tomorrow's strike risk.

Conflicts are not unique to the union sector. Where there are ongoing relationships, e.g., between supervisors and subordinates or between divisions within an enterprise, less dramatic bargaining may occur. But models drawn from the union sector may ultimately illuminate these less visible forms of conflict and point to methods of conflict resolution.

Finally, it has been argued in the 1980s that—contrary to the views of many managers—union workers have higher productivity than nonunion, and that this added productivity is due to the "voice" mechanisms that unions provide (grievance handling, etc.).³³ There is much controversy surrounding the empirical basis of this assertion. However, if voice is important, then nonunion firms would do well to consider enhancing their grievance mechanisms (which are often less formal than their union counterparts') and developing other employee communications mechanisms. Case study evidence suggests that progressive nonunion firms already do emphasize these strategies.³⁴

WILL ECONOMIC RESEARCH HAVE AN IMPACT ON HR-IR?

Skeptics may well argue that interesting though the developments described above may be to the economics profession, they will have little impact on the actual practice of human resource management and industrial relations. Perhaps the interest in HR-IR is just a case of economists rationalizing real world phenomena to accord with their models. Managers, it might be argued, have nothing to learn from this cathartic exercise.

Such skepticism cannot be disproved definitively. But there are points to be made on the other side. First, as noted at the outset, economic ideas have a way of influencing regulators and

judges. Regulators and judges are called upon to enforce statutes which are often vague. Analytical approaches which provide guides for rational decision making are always attractive. Thus, even if economic ideas are not directly applied by managers, the externally imposed rules they must obey often have economic content.

Second, there have been changes in management education which may influence the views of tomorrow's managers. Management education, especially at the MBA level, shifted heavily towards finance in the 1980s. Modern finance today is largely applied microeconomics, and students therefore are exposed to more economics in the course of their education than before. Undoubtedly, there will be some shift away from finance—the economics more fluently than earlier cohorts of managers.

Finally, an important side of modern economics is empirical. The chipping away at unrealistic theory within economics is in part due to the increased availability of data and improved data handling methodology. This trend in economics is also a feature of management education. Use of statistics and empirical methodology is an important part of the MBA curriculum. Modern economics and modern management methods have more in common as a result.³⁵

While it is true that labor economics has not produced anything for HR-IR practitioners as applied as portfolio insurance has been for financial managers, there are some products on the market already. Statistical techniques for EEO issues have already been mentioned. In addition, there is growing use of economic content in such areas as human resource accounting.³⁶ Economics is likely to be an important influence on HR-IR in the future.

NOTES

1. Gerald R. Faulhaber and William J. Baumol, "Economists as Innovators," *Journal of Economic Literature*, Vol. 26 (June 1988), pp. 577-600.
2. John Maynard Keynes, *The General Theory of Employment, Interest, and Money* (New York: Harcourt, Brace & World, 1936), p. 383.
3. See, for example, Lloyd G. Reynolds, *Labor Economics and Labor Relations*, 3rd edition (Englewood Cliffs, N.J.: Prentice-Hall, 1959).
4. Frederick W. Taylor, *The Principles of Scientific Management* (New York: Harper & Brothers Publishers, 1911).
5. F.J. Roethlisberger and William J. Dickson, *Management and the Worker: An Account of a Research Program Conducted by the Western Electric Company*, Harvard University Press, Chicago (Cambridge, Mass.: Harvard University Press, 1967 [1937]).
6. Sanford M. Jacoby, "Employee Attitude Surveys in Historical Perspective," *Industrial Relations*, Vol. 27 (Winter 1988), pp. 74-93.
7. Richard A. Lester, "Shortcomings of Marginal Analysis for Wage-Employment Problems," *American Economic Review*, Vol. 36 (March 1946), pp. 63-82.
8. A.W. Phillips, "The Relation between Unemployment and the Rate of Change of Money Wage Rates in the United Kingdom, 1861-1957," *Economica*, Vol. 25 (November 1958), pp. 283-299.
9. Martin L. Weitzman, *The Share Economy: Conquering Stagflation* (Cambridge, Mass.: Harvard University Press, 1984).
10. Charles C. Killingsworth, "The Fall and Rise of the Idea of Structural Unemployment," in Barbara D. Dennis, ed., *Proceedings of the Thirty-First Annual Meeting*, Industrial Relations Research Association, August 29-31, 1978 (Madison, Wis.: IRRA, 1979), pp. 1-13.
11. Peter B. Doeringer and Michael J. Piore, *Internal Labor Markets and Manpower Analysis* (Lexington, Mass.: Heath, 1971).
12. Michael L. Wachter, "Primary and Secondary Labor Markets: A Critique of the Dual Approach," *Brookings Papers on Economic Activity* (3:1974), pp. 637-680.

13. Gary S. Becker, *Human Capital: A Theoretical and Empirical Analysis with Special Reference to Education* (New York: Columbia University Press, 1964).
14. Joseph L. Gastwirth, "Statistical Methods for Analyzing Claims of Employment Discrimination," *Industrial and Labor Relations Review*, Vol. 38 (October 1984), pp. 75-86.
15. Gary S. Becker, *The Economics of Discrimination* (Chicago: University of Chicago Press, 1957).
16. It is important to distinguish between the location of training and who pays for it. In principle, training can be on the job, yet be paid for by the employee (typically by working at a lower apprentice or trainee wage during the training period). Similarly, training can be at an off-the-job training site (such as a school), and yet be paid for by the employer.
17. Kim B. Clark and Lawrence H. Summers, "Labor Market Dynamics and Unemployment: A Reconsideration," *Brookings Papers on Economic Activity* (1:1979), pp. 13-60; Martin S. Feldstein, "The Importance of Temporary Layoffs: An Empirical Analysis," *Brookings Papers on Economic Activity* (3:1975), pp. 725-744.
18. Robert E. Hall, "The Importance of Lifetime Jobs in the U.S. Economy," *American Economic Review*, Vol. 72 (September 1982), pp. 716-724.
19. For example, see the discussion of "job clusters" in John T. Dunlop, "The Task of Contemporary Wage Theory," in John T. Dunlop, ed., *The Theory of Wage Determination* (New York: St. Martin's Press, 1964), pp. 3-27, especially, pp. 16-133.
20. Frederic Meyers, *Ownership of Jobs: A Comparative Study* (Los Angeles: UCLA Institute of Industrial Relations, 1964).
21. Arthur M. Okun, *Prices and Quantities: A Macroeconomic Analysis* (Washington: Brookings Institution, 1981), pp. 26-22.
22. Michael L. Wachter and Oliver E. Williamson, "Obligational Markets and the Mechanics of Inflation," *Bell Journal of Economics*, Vol. 9 (Autumn 1978), pp. 549-571.
23. One view is that the rising wage-tenure profile is due to a job matching process rather than an underpay-overpay implicit contract. From this perspective, employees who remain for long periods with an employer are well matched to that employer, and so receive a commensurate (higher)

wage. See Katherine G. Abraham and Henry S. Farber, "Job Duration, Seniority, and Earnings," *American Economic Review*, Vol. 77 (June 1987), pp. 278-297. The difficulty is that the degree of job matching must be inferred from the tenure data themselves, thus raising questions about the interpretation of the remaining tenure variable.

24. Assar Lindbeck and Dennis J. Snower, "Wage Setting, Unemployment, and Insider-Outsider Relations," *American Economic Review*, Vol. 76 (May 1986), pp. 235-239.
25. Stanley B. Mathewson, *Restriction of Output among Unionized Workers* (Carbondale, Ill.: Southern Illinois University Press, 1969 [1931]).

26. Armen A. Alchian and Harold Demsetz, "Production, Information Costs, and Economic Organization," *American Economic Review*, Vol. 62 (December 1972), pp. 777-795.
27. George A. Akerloff and Janet L. Yellen, eds., *Efficiency Wage Models of the Labor Market* (New York: Cambridge University Press, 1986).
28. J.E. Walters, *Applied Personnel Administration* (New York: John Wiley and Sons, 1931), p. 143; Arthur W. Burritt, Henry S. Dennison, Edwin F. Gay, Ralph E. Heilman, and Henry P. Kendall, *Profit Sharing: Its Principles and Practice* (New York: Harper & Brothers, 1918), p. 8.
29. George A. Akerlof, "Labor Contracts as Partial Gift Exchange," *Quarterly Journal of Economics*, Vol. 97 (November 1982), pp. 543-569.
30. Sanford M. Jacoby and Daniel J.B. Mitchell, "Does Implicit Contracting Explain Explicit Contracting?" in Barbara D. Dennis, ed., *Proceedings of the Thirty-Fifth Annual Meeting, Industrial Relations Research Association*, December 28-30, 1982 (Madison, Wis.: IRRA, 1983), pp. 319-328.
31. Albert Rees, "Industrial Conflict and Business Fluctuations," *Journal of Political Economy*, Vol. 60 (October 1952), pp. 371-382.
32. The mistake model appears in John R. Hicks, *The Theory of Wages*, 2nd edition (New York: St. Martin's Press, 1966), pp. 136-157.
33. Richard B. Freeman and James L. Medoff, *What Do Unions Do?* (New York: Basic Books, 1984), chapters 5 and 11.
34. Fred K. Foulkes, *Personnel Policies in Large Nonunion Companies* (Englewood Cliffs, N.J.: Prentice-Hall, 1980), chapters 13-15.

35. I have recently developed a textbook for human resource courses which features the ideas summarized in this paper: *Human Resource Management: An Economic Approach* (Boston: PWS-Kent Publishing Co., 1989).
36. See Eric G. Flamholtz, *Human Resource Accounting*, 2nd edition (San Francisco: Jossey-Bass, 1985); Wayne F. Cascio, *Costing Human Resources: The Financial Impact of Behavior in Organizations*, 2nd edition (Boston: PWS-Kent Publishing Co., 1987).

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