



## Baseball labor relations: the lockout of 1990

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The 32-day lockout of baseball players from spring training camps by team owners in 1990 caused a renewed sense of frustration among fans. Once again, the great American pastime was shut down by a labor dispute.

The second longest work stoppage in baseball history was resolved without lasting damage to the regular season. However, the lockout raises some interesting questions. Could it have been avoided? Why is baseball so prone to work stoppages? Can anything be done to prevent interruption of the sport in the future?

### Background

Much of the past conflict in baseball can be attributed to the need to eliminate the old system of paternalism and remove restrictions on player movement in the labor market. To initiate this change, the players hired Marvin Miller as executive director of their union in 1966. A former official of the United Steelworkers Union, Miller was an exceptionally able leader and negotiator. He won the confidence of the players, and welded the Major League Baseball Players Association into a cohesive unit. Agreements that Miller negotiated with the team owners in 1968 and 1970 set the stage for later breakthroughs that would result in undreamed of economic gains for the players.

The price paid for these gains has been work stoppages. In 1972, the play-

ers walked out of training camps 5 days before the start of the season. At the urging of President Richard M. Nixon, the negotiators met with a Federal mediator, and agreement was reached to increase pension and health insurance funds by \$890,000. The strike caused the cancellation of 86 games of the regular season.

In 1976, the owners locked the players out of training camps for 17 days because no Basic Agreement had been signed. Complicating matters was the 1975 landmark ruling by arbitrator Peter Seitz in the *Messersmith* case, which for the first time granted free agency to players.<sup>1</sup> Reacting to pressures from some of the owners, Commissioner of Baseball Bowie Kuhn ordered the opening of training camps. A new Basic Agreement was reached in August, including a provision allowing players to become free agents after 6 years of major league experience.

In 1981, the key issue was compensation to teams that lost free agents to other teams. Agreement on other issues had been reached the previous year, when a strike had been averted by establishing a joint committee to study free agency compensation. When the committee was unable to resolve the issue, a 50-day strike resulted in the cancellation of 713 games during the 1981 season. Free agency compensation rules were established, but 6-year players continued to have relative freedom to change teams. Another strike occurred in 1985, this time for only 2 days, over many economic issues. An important outcome of this strike was that players would subsequently be required to wait 3 years (rather than the previous 2) to become eligible for salary arbitration.

These work stoppages indicate a continuing inability of the owners and players to reach agreement without having a test of economic strength. As a

result of the confrontations, the players have achieved, among other things, a high level of mobility in the labor market, salary arbitration for veteran players, and a pension plan that is perhaps the most generous in American industry. Despite this wealth and countervailing power, however, the players' relationship with the owners remains adversarial. The old wounds have been slow to heal.

Influencing negotiations in 1990 were the grievance arbitration decisions on collusion. A feature of past Basic Agreements was a provision prohibiting collusion by either players or clubs. In 1985, the owners reduced their signing of free agent players dramatically, and continued to do so in 1986 and 1987. The chilling of the labor market led to grievances by the players' union for each of the 3 years, claiming that the owners had conspired to avoid signing free agents and thus held down their market value. Arbitrators Tom Roberts in the 1985 case and George Nicolau in the 1986 and 1987 cases found against the owners, and it is likely that as much as \$100 million will eventually be paid in damages to the players found to have been the victims of collusion. It is not surprising that the owners were rankled by the collusion decisions. Moreover, the removal of collusion restraints led to a salary explosion, as teams bid astronomical sums for free agents. Prior to the 1990 season, nine players signed multiyear contracts for salaries of \$3 million or more a year. The owners seemed to need protection from their own largesse.

There were other early signs that the 1990 negotiations could lead to trouble. About a year before talks opened, the owners began requiring players to include lockout clauses in individual salary contracts, prescribing that these players would not be paid in the event of a lockout. Also, both sides began to

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accumulate war chests. The owners set aside about \$170 million and arranged a line of credit with Citibank for another \$130 million. The players put away between \$70 to \$80 million from payments under royalty and licensing agreements. Another ominous sign was that, in late 1988, new national television contracts were negotiated that increased revenues to \$1.5 billion over 4 years, providing about \$16 million annually to each of the 26 major league clubs. As this represented a 102-percent increase over the old television agreements, there was substantially more money to fight over.

### **Bargaining issues, 1990**

The principal issues on the bargaining table during the 1990 negotiations are summarized below. The three major positions of the owners were especially controversial because they proposed a radical restructuring of the Basic Agreement. Perhaps their most palatable demand from the players' standpoint was for revenue sharing. Because each side would gain from increases in revenue, there would be mutual incentive to expand the size of the pie. Revenue sharing would also promote financial stability on the downside. That is, should income decrease, say as a result of a serious economic recession, salaries would moderate along with revenues so that clubs would not be caught in a financial squeeze. A related advantage, more to the benefit of the owners than of the players, would be cost certainty, allowing for more accurate planning of budgets and league expansion.

#### **Owners' proposals:**

- Players would be guaranteed 48 percent of revenue from ticket sales and national and local radio and television contracts, which would make up about 82 percent of owners' total revenue.
- A pay-for-performance system, in which players with zero to 6 years experience would be paid on the basis of seniority and performance based on statistical formulas. Each team would pay 1/26th of the total, and multiyear contracts would not be allowed.

- A salary cap limiting the total amount of salary any team could pay to players. Players with 6 years or more experience would still be free agents, but they could not be signed by a particular team if doing so would put that team over the salary limit.

#### **Players' proposals:**

- Eligibility for salary arbitration restored to players with only 2 years of major league experience.
- A raise in minimum salary from the current \$68,000 to \$125,000.
- Continuation of the current formula fixing owners' contributions to the benefit plan (pensions and health insurance) at about one-third of television revenues from the All-Star game, league playoffs, and the World Series. This would work out to about \$83 million a year for the owners' contribution.
- Triple damages for collusion, and language protecting the players' union from future collusion by the team owners.
- An increase in roster size to 25 players from the current 24.

*Implications of the proposals.* The owners' proposal on pay-for-performance was tantamount to establishment of a wage scale for players in the first 6 years. It would have had the effect of eliminating salary arbitration. Apart from the seniority factor, salaries would be determined by statistical formulas based on performance in the player's previous two seasons. Players would be separated into four categories for statistical purposes: (1) starting pitchers; (2) relief pitchers; (3) outfielders, third basemen, first basemen, and designated hitters; and (4) catchers, second basemen, and shortstops. While a creative idea, this proposal had virtually no chance of acceptance by the players. There are too many variables involved in performance. For example, pitchers in small ballparks like Boston's Fenway Park would be at a great disadvantage compared with those in larger parks like Busch Stadium in St. Louis. Also, no account was taken in the formulas of defensive performance or intangibles like character and sacrifice for the ben-

efit of the team, nor was there a precise indication of how salaries would be computed.

The salary cap was proposed to protect teams in smaller markets, such as Milwaukee and Minnesota, from having their free agent players bought up by prosperous teams in New York and Los Angeles. Teams in large cities would be unable to control the market for star players because the salary cap would limit the number of highly paid players they could sign. Teams spend considerable amounts of money in developing young players. A salary cap would discourage free agency and enable a team to retain more of its quality players, thus yielding a greater return on investment.

As to the issues proposed by the players, the most controversial was the change in eligibility for salary arbitration. Initiated pursuant to the Basic Agreement in 1974, salary arbitration allows a player who wants to sign with his old club, but is unable to agree on salary, to present the dispute to an outside, neutral party. Both the player and the club make a final offer on salary and the arbitrator must then pick one offer or the other, with no compromising allowed. Over the years, salary arbitration has been a crucial factor in raising player salaries, perhaps as important as free agency. Even players who lose in arbitration almost invariably wind up getting a significant raise. For example, a typical player might have made \$300,000 in the previous year. In arbitration, he asks for \$700,000 and the club offers \$600,000. Even if the arbitrator picks the club's offer, the player would still get a big raise.<sup>2</sup>

In 1985, the owners contended that their financial considerations necessitated an increase in the length of time required for eligibility for salary arbitration from 2 years to 3 years. The players' union agreed to this change, making players wait the extra year. But the owners' profits subsequently soared to high levels. With the recent increases in television coverage guaranteeing future revenues, the players wanted the eligibility requirement moved back to 2 years. This issue became a major stumbling block for the negotiators.

### The negotiators

Historically, the attitudes and behavior of baseball negotiators have been of paramount importance in determining bargaining outcomes. The verbal exchanges between Marvin Miller and owners' negotiator Ray Grebey provide examples of how clashing personalities can impose barriers to agreement. Although some conflicts are inevitable, there is little doubt that the road to agreement can be relatively smooth or rocky, depending on how the negotiators conduct their business.

In 1990, the players were represented by Donald Fehr, executive director of the players' union. A law school graduate of the University of Missouri, Fehr had joined the law firm of Jolley, Moran, Walsh, Hager and Gordon in Kansas City, which represents the union. His work on the *Messersmith* case led to his appointment as general counsel for the union in 1976. In this capacity, he worked closely with Marvin Miller. Fehr appears to have the same astute but occasionally acerbic approach to negotiations as Miller. When Miller retired in 1983, Kenneth Moffett, formerly with the Federal Mediation and Conciliation Service, succeeded him. But, Moffett's tenure lasted only a few months and he was replaced by Fehr.

The six-member Player Relations Council represents the bargaining arm of the major league baseball team owners. In 1990, its members were: Allan "Bud" Selig (chairman) of the Milwaukee Brewers, Jerry Reinsdorf of the Chicago White Sox, Carl Pohlad of the Minnesota Twins, Fred Wilpon of the New York Mets, John McMullen of the Houston Astros, and Fred Kuhlmann of the St. Louis Cardinals. All the council members are owners of their clubs, except Kuhlmann, who is the president of the Cardinals. Chief negotiator for the owners was Charles O'Connor, who had succeeded Barry Rona as general counsel of the Player Relations Council in 1989. Although new to sports, O'Connor has an extensive background in labor relations.

Two other key participants in the 1990 talks should be mentioned. Fay Vincent, former deputy commissioner of baseball, became commissioner when A. Bartlett Giamatti, the former Yale University and National League

President, died in office after a brief but distinguished service. Steven Greenberg, a lawyer and former players' agent, is baseball's current deputy commissioner.

### The negotiations

The initial negotiating session was held on November 29, 1989, shortly before the Basic Agreement was scheduled to expire at the end of the year. Little progress was made in the early talks. This is typical of negotiations in professional sports. It seems that a strike deadline or start of the regular season must be impending before negotiators become serious about their task. By mid-February 1990, with spring training 2 weeks away, Commissioner Vincent began to sit in on negotiations. Realizing a threat to the opening of training camps, because of a possible lockout by the owners, Vincent made several proposals to get the talks moving.

It was not an easy decision for Vincent to become involved. As Commissioner of Baseball, he is hired and paid by the owners, but he is also responsible for acting in the "best interests" of the game. Failing to try to prevent a lockout or strike would not fulfill that responsibility. While the top management official usually stays in the background during labor-management talks and allows the negotiator to make the deal,<sup>3</sup> there was some precedent for involvement by the commissioner. As mentioned earlier, Commissioner Kuhn had ordered camps to open in 1976 (and was later criticized for not doing more to end the 1981 strike). Commissioner Peter Ueberroth's mediation was helpful in holding the 1985 strike to only 2 days.

Three of Commissioner Vincent's proposals became the focus of attention: (1) minimum salaries of \$75,000, \$125,000, and \$200,000 for players in their first 3 years, with a 75-percent cap on increases in salary arbitration; (2) a 2-year study commission on revenue sharing, and reopener of the 4-year Basic Agreement after 2 years; and (3) no increase in the players' benefit plan. Vincent helped narrow the issues in dispute. Shortly after hearing his proposals, the owners dropped their demands for revenue sharing, pay-for-performance, and salary cap. Given the groundbreaking nature of these demands, especially in light

of baseball's success under the old system, they would have eventually been discarded. Vincent's proposals accelerated this process while allowing the owners to save face.

A few days later, however, the owners made a proposal that enraged the players because it introduced controversial new items for consideration. This offer included prohibiting the use of free agency and multiyear contract comparisons in salary arbitration cases, and eliminating maximum salary cuts (20 percent for 1-year contracts and 30 percent for 2-year contracts) for players with 3 years to 6 years of service. Reacting to the players' outrage, Steven Greenberg telephoned Eugene Orza, associate general counsel for the players' union, to say that "Yesterday didn't happen," and the proposal disappeared.<sup>4</sup>

Meanwhile, on February 15, a lockout occurred when the owners refused to open training camps. Why did the owners resort to this tactic? Although lockouts account for only about 5 to 8 percent of all work stoppages, their frequency is rising. The owners used the lockout mainly as an offensive weapon, to pressure the players into an early settlement. Certain kinds of lockouts may not be legal, such as those calculated to "bust" a union. But, in 1965, the U.S. Supreme Court had held that a company did not violate the Taft-Hartley Act when, after reaching impasse in negotiations, it shut down its plant to put pressure on a union that was threatening to strike during the company's busiest season.<sup>5</sup> Although this case is the leading precedent on the subject of lockouts, its applicability to the baseball lockout was clouded by uncertainty over whether impasse had been reached and the fact that the players' union had not threatened to strike.

Were the owners to start the season after reaching impasse and without an agreement, they would have been able at some later time, perhaps at the end of the season, to impose employment terms unilaterally on the players. This is what occurred in professional football after the unsuccessful players' strike in 1987 over free agency: the football owners put their own free agency rules, known as Plan B, into effect. The baseball players' union would not want to

have the owners impose terms on them. Therefore, the players would almost certainly have had to strike to achieve an agreement before the 1990 season ended. Such a strike—say, in August—would hurt the owners because they derive most of their income from television contracts late in the season, based on revenues from the league playoffs and World Series. Thus, by locking out the players to precipitate an agreement, the owners were defending themselves against a strike later on.

Now that the principal bargaining demands of the owners were off the table, it seemed logical to assume that an agreement would quickly follow. The owners were enjoying unprecedented success with 5 consecutive years of record attendance and a generous new television deal. Player salaries were averaging \$600,000. Why kill the golden goose? With the owners' retreat, however, the union realized that power had shifted dramatically in its favor. At this point, perhaps too greedily, the union made a stand on reducing eligibility for salary arbitration from 3 years to 2 years. Several days went by with considerable discussion but no progress on this issue.

Complicating the situation, as is often the case in sports, was the intraorganizational side of negotiations. This was more a problem for the owners than for the players. The players realize the importance of organizational solidarity and have learned to put aside their differences and stick together. Their union does an excellent job of communicating with the players, so they know what is happening at the bargaining table and why.<sup>6</sup>

The intraorganizational problems on the owners' side were threefold. One was the differing philosophies or approaches toward the union. On the Player Relations Council, for example, owners McMullen, Reinsdorf, Selig, and Pohlad were considered hard-liners, while Wilpon and Kuhlmann were viewed as moderates. Second, there were the differences between owners from large and small markets, which arise over issues like revenue sharing. The New York Yankees, for example, receive \$50 million annually from their local television contract. Clubs in small markets like

Kansas City and Milwaukee, however, receive only about one tenth as much for their local telecasts. Yankee owners would be reluctant to share their revenues with teams in smaller markets. Third, there was the problem of not knowing who is in charge of bargaining for management. Was it Charles O'Connor, the Player Relations Council, or the commissioner's office? Negotiation becomes more complex when there is no single source of authority to rely on.

Initially, there was little concern on either side over the lost spring training time. Virtually all players now attempt to keep in good physical shape year-round. They are not paid for time spent at training camps, except for expenses. From the clubs' standpoint, most lose money on their spring training operations anyway. But some preseason training is necessary to mold players into a team, and about 3 weeks before the scheduled start of the 1990 season, there was pressure for settlement from both sides. Therefore, on March 8, Commissioner Vincent offered to open the training camps if the players agreed not to strike later in the season. The union, as expected, rejected this idea because it would take away their bargaining leverage.

### Settlement

Although salary arbitration became the focal point of the dispute, another remaining issue of importance was the benefit plan covering pensions and health insurance. After initially offering no change in the benefit plan, the owners had gradually increased their offer. It appeared that compromise would be achieved through tradeoffs between the arbitration and benefit plan issues. On arbitration, the union insisted on 2 years' eligibility while the owners stuck at 3 years. Commissioner Vincent proposed a compromise at 2 years and 140 days.

Getting the parties to accept a final compromise was largely the work of deputy commissioner Greenberg. Agreement was reached on arbitration by making 17 percent of the players with between 2 and 3 years of service eligible, assuming they were with the club for at least 86 games during the previous season. The 17 percent will represent about 15 players per year. The players accepted the owners' offer to increase the

benefit fund to \$55 million. In effect, the players got some of what they wanted on salary arbitration and the owners did not give up that much on the benefit fund increase. Key features of the 1990 Basic Agreement follow:

- *Salary arbitration*—Eligibility for the top 17 percent of players with 2 to 3 years of major league service.
- *Benefit fund*—Increased owners' contribution to \$55 million annually.
- *Minimum salary*—Raised from \$68,000 to \$100,000.
- *Roster size*—Increased from 24 to 25 in 1991.
- *Collusion*—Language prohibiting collusion and providing for triple damages.
- *Reopener*—Either side may reopen the 4-year contract on major economic issues after 3 years.
- *Revenue sharing*—A six-member study commission will report on revenue sharing and baseball economics.

Because agreement was not reached until March 19, the requisite 3 weeks of spring training delayed the start of the season from April 2 to April 9. This would have cut the full season of 162 games to 158. However, Commissioner Vincent was able to work out an agreement with CBS, which holds television rights to the league playoffs and the World Series, to push back the start of postseason play so that the postponed games could be made up. Avoidance of a shortened season preserved the sanctity of individual and team performances, which is especially important to baseball purists.

Spring training generates about \$300 million from the 18 teams that train in Florida and another \$145 million from the 8 teams that train in Arizona.<sup>7</sup> Although all of this revenue was not lost, many businesses, nonprofit organizations, and cities dependent on spring baseball were harmed. ESPN, a cable television network, had to cancel several spring training games, but still had to pay for the broadcast rights because it lacked contractual protection against a lockout. There were only 3 weeks of spring training instead of the usual 6, and each team played 15 games rather than 30 games. Club and player losses

were minimal, although several prospective major leaguers did not get much chance to prove their worth before the season, and risk of injury to all players was greater. According to a poll taken by *The Sporting News*, 69 percent of the fans indicated that they would reduce their attendance and broadcast participation if the lockout delayed the regular season.<sup>8</sup> Past experience shows, however, that fan loyalty is not really affected by baseball work stoppages.

A key to future labor peace in baseball may be the adoption of revenue sharing. This practice would help the parties view each other less as adversaries and more as partners. Formation of a study commission, provided in the new Basic Agreement, will assure that revenue sharing will get careful consideration. It is not apparent what effect the 3-year reopener provision will have, if any. There would be just 1 more year remaining under the contract if it were reopened. Exercise of the reopener provision by either side would raise the specter of a work stoppage as early as 1993.

One of the positive outcomes of the negotiations is the relatively great degree of civility displayed between the negotiators. There were some caustic exchanges between the parties through the media, especially in the late stages of the talks, but the attitudes and behavior were generally positive and professional. Fehr, O'Connor, Vincent, and others deserve credit for eschewing the hostility of the past. Their experience during the negotiations should promote a smoother transition to a successor agreement.

ALTHOUGH BASEBALL is the pioneer in developing the sports labor model, it may be time to look to other sports for examples of labor peace. Basketball's system of salary caps and revenue sharing, negotiated in 1983, has been successful. Players are guaranteed 53 percent of gross revenues, and there have been no work stoppages. Nor have there been any in hockey. As in basketball, hockey owners and players view themselves as being in a joint venture. Cooperation, rather than confrontation, is used to resolve issues of mutual concern. There will always be debates over money issues in professional sports. Given the popularity of sports, however,

the profits are ample for all to share. It is primarily a question of developing mechanisms for distributing the gains equitably among the participants. □

### Footnotes

<sup>1</sup> This decision, involving pitchers Andy Messersmith of the Los Angeles Dodgers and Dave McNally of the Baltimore Orioles, enabled players who had played for their clubs for a year without a contract to sell their services to other clubs. For further discussion, see Paul D. Staudohar, *The Sports Industry and Collective Bargaining*, 2d. ed. (Ithaca, NY, Cornell University, New York State School of Industrial and Labor Relations, 1989), p. 35. Available from ILR Press, Ithaca, NY.

<sup>2</sup> In 1990, of the 24 players who arbitrated their salaries, the 14 players who won received increases averaging 141 percent, while the 10 players who lost received increases averaging 123 percent. See Richard Justice, "Root of the Lockout," *San Francisco Chronicle*, Feb. 27, 1990, p. D3.

<sup>3</sup> Paul D. Staudohar, "Baseball Impasse: Locking Out for No. 1," *The New York Times*, Mar. 11, 1990, p. 27.

<sup>4</sup> Murray Chass, "Arbitration Eligibility is Major Hangup," *The Sporting News*, Mar. 5, 1990, p. 13.

<sup>5</sup> *American Ship Building Co. v. National Labor Relations Board*, 380 U.S. 300 (1965).

<sup>6</sup> The use of replacement players was not a threat in baseball. This tactic had been used successfully by owners during the 1987 football strike to divide the players, as discussed in Paul D. Staudohar, "The football strike of 1987: the question of free agency," *Monthly Labor Review*, August 1988, pp. 26-31. Although the active major league roster has 24 players, the total roster is 40 players, which includes players under contract with a major league team but assigned to a minor league club. Because many of these players are or have been members of the players' union, it would be difficult to obtain highly skilled players to serve as replacements.

<sup>7</sup> Data from *Sports Illustrated*, Feb. 19, 1990, p. 7.

<sup>8</sup> "Voice of the Fan," *The Sporting News*, Mar. 19, 1990, p. 3.

### What we do and don't know about training in the workplace

Growing concern over the education and training qualifications of our current and future work force to meet the challenges of increasingly complex jobs has generated a number of studies and

commissions. Intensive investigation over many years has led to a body of knowledge about the value of education to the work force, but surprisingly little is known of the value of occupational training. This summary of a Bureau of Labor Statistics paper, prepared for a December 1990 Organization for Economic Cooperation and Development Conference, reviews what we do and do not know about the extent and cost of training in the United States.

### Investments in skills

Human capital theory was the dominant paradigm in labor economics even before Gary Becker codified much of the theory in human capital. According to this theory, workers invest in schooling and job training to learn or improve skills.<sup>1</sup> They sacrifice current earnings by staying in school rather than working and by accepting lower initial earnings in jobs with large training components. Workers weigh the costs of foregone earnings and expenses against the higher wages received and choose to continue making these investments as long as they are profitable.

Like the worker, firms continue to invest in training employees as long as it is profitable. An employer may be willing to invest in training if the firm can benefit from the investment. Because workers are free to change employers, firms are more willing to pay for training that is specific to the firm rather than general training that may be highly portable.<sup>2</sup>

### Surveys of training

Growing reliance on human capital theory and the paucity of training data led to several projects to measure the extent and cost of worker training. Most data on the extent of formal and informal

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This summary is an excerpt of a paper prepared by a Bureau of Labor Statistics interoffice working group. The group consisted of Harley Frazis, Office of Research and Evaluation; Diane Herz and Susan Shank, Office of Employment and Unemployment Statistics; Deborah Klein, Office of the Commissioner; Larry Rosenblum, Office of Productivity and Technology; Neal Rosenthal, Office of Employment Projections; and William Wiatrowski, Office of Compensation and Working Conditions.

training come from household or employer based surveys. In the United States, household based surveys include the Current Population Survey (CPS), the National Longitudinal Survey (NLS), the Survey of Income and Program Participation (SIPP), and the University of Michigan's Time Use study. Employer based surveys include the Employment Opportunity Pilot Project (EOPP) and a BLS survey of occupational training in selected metalworking industries.

The word "training" encompasses many different activities. The training surveys that have been conducted ask different questions, and are often not comparable. Some of the surveys encompass all skill acquisition, whether by formal or informal means; others are limited to formal arrangements. One natural consequence of these differences in scope is the wide range of estimates of the incidence of training. For example, the Michigan study found 60 percent of workers received job training, while the Survey of Income and Program Participation estimated that about 20 percent did.<sup>3</sup>

A 1983 supplement to the CPS indicated that 55 percent of all workers required some skills or training to get their current job and 35 percent took some type of training to improve their skills while holding their current job. Half of all workers who indicated they required training to obtain their job received that training from employers.<sup>4</sup>

A 1974 BLS survey of occupational training in selected metalworking industries obtained information on enrollments and completions of training programs designed both to qualify workers for employment in 14 specific occupations and to upgrade the skills of workers already employed in those occupations. Only 15 percent of the establishments covered by the survey provided structured training in the selected occupations. Establishments provided training primarily because employers felt job skills could best be taught in their own training programs and because the educational or training background of their employees was inadequate.<sup>5</sup>

### Other measures

Corporate studies have been conducted that focus on different measures of

training. For example, in 1985, the Conference Board surveyed 218 companies to derive information on changes in training over time. The Board found that the proportion of workers receiving training had increased in all major job categories over the 1980-85 period.<sup>6</sup>

Data on training as a benefit to employees is available from the BLS Employee Benefits Survey. The survey found that the majority of workers in medium and large firms are eligible to receive job-related educational assistance.<sup>7</sup>

A different way to look at employer-supported training is to examine the provisions in major collective bargaining agreements. At first, training and educational opportunities were provided to displaced employees in order to facilitate their reentry into the labor force. Subsequently, such opportunities were made available to active employees to enhance their career development. Examples of such provisions are found in the agreements between General Motors and the Autoworkers, AT&T and the Electrical and Communication workers, and USX and the Steelworkers.

### The cost of training

Several studies have attempted to measure both formal and informal training costs and have come up with a wide range of estimates. The results of these surveys have been viewed with some skepticism as they vary widely, reflecting differences in methodology, definition, sample size and selection, and response rates.<sup>8</sup> One commonly cited survey that focused on formal employer-sponsored training was conducted by the American Society for Training and Development. That survey estimated that employers spent approximately \$30 billion in direct costs for formal training in 1984.<sup>9</sup> Annual surveys published in *Training* magazine have come up with similar figures.<sup>10</sup>

The total cost of training may be much higher than these studies indicate. Total training costs borne by employers include not only direct costs, but also the value of foregone production by workers participating in training. The American Society for Training and Development estimated that the annual costs of employer-provided informal training ranged from \$90 to \$180 billion annually.<sup>11</sup> Jacob Mincer esti-

mated the total value of training to be equal to the increase in production due to training. His estimate of \$296 billion in 1987 includes foregone compensation and increased productivity in excess of compensation.<sup>12</sup> Using data from the Time Use survey, he estimated that just the value of workers' time spent in training equaled \$148 billion dollars in 1987.

### The effects of training

How private-sector training affects employment, productivity, and wages has been the subject of a number of recent studies. One analysis utilized combined data on formal and informal training from the Employment Opportunity Pilot Project survey; the researchers found that a 10-percent increase in the amount of time devoted to training was associated with an average 3-percent increase in productivity and a 1.5-percent increase in wages.<sup>13</sup> Other researchers used the 1983 CPS and found that receiving formal company training was associated with wage gains of more than 20 percent.<sup>14</sup>

Data from the National Longitudinal Survey make possible comparisons of the effects of different types of training. Using the survey's young men's cohort, researchers Lee Lillard and Hong Tan found that company training had a greater impact on earnings than did training from any other source.<sup>15</sup> Of all the types of training, managerial training had the largest impact on earnings. The same researchers found that earnings gains tended to decay over a period of 7 to 15 years. Linda Lynch used data from the youth cohort and found that company training and apprenticeships had greater impacts on earnings than did off-the-job training, such as that provided by business colleges and technical institutes.<sup>16</sup>

### What we know

A consensus has emerged on certain issues:

- The likelihood of training declines with age.
- The likelihood of training increases with education.
- Men are more likely to receive training than women and whites are more likely to receive training than blacks.

## Research Summaries

- The likelihood of training increases with firm size.
- Most training is informal.
- Training increases future earnings of workers, but which kinds of training do so and how well training pays is uncertain.

### What we do not know

- We have no universal definition of training.
- Estimates of total amount of training received by workers are very rough and vary widely.
- It is unclear how to measure whether training is successful.
- Estimates of the cost of training are extremely weak.
- Changes in the extent of training over time are unknown.

### What we would like to know

The basic questions we would like to answer are: How much employer-provided training is going on? How much are we spending on training? And, what are the effects of training on individuals, firms, and society?

To answer these questions would require the collection of information from employers on the extent of their training activities, and the content and cost of that training. Ideally, these answers would be tied to the characteristics of individual workers in order to measure the effect of training on earnings and unemployment. Information on firm or job tenure would also be useful and regular data collection to measure change would make analysis possible.

The problem faced in collecting meaningful training data is that both employers and employees have vital information. Employers are the best source of information on cost, hours, and content of formal training. Employees are the best source of similar information on informal training and of data on demographic characteristics.

With this in mind, some specific questions are:

- What kind of training is being offered?
- How many hours are devoted to training?

- What are the direct dollar expenditures by firms and individuals on training?
- How many hours of training per year is the average worker receiving? Does it vary by demographic or occupational group?
- Who pays for training?
- What is the benefit of training to employers and employees?
- Is the amount or content of training changing over time?

According to the BLS paper, the most pressing need is for a broad-based establishment survey of employer-provided training. This survey would focus on the type, extent, and cost of training. The survey would have to be large enough to provide data by both industry and size of establishment. This information would assist policymakers in understanding the transition from school to work, and provide information on work force quality.

The paper concludes that obtaining this type of information would not be easy. Careful attention would have to be given to the design of the survey instrument, and extensive testing and pilot work would be required. The authors envisage the use of both mail and telephone collection to maximize reliability and response rates.

A COPY OF THE FULL PAPER, "Education and Training of American Workers," is available from the Bureau of Labor Statistics, 441 G Street, N.W., Room 2831-A, Washington, DC 20212. □

### Footnotes

<sup>1</sup> See Gary S. Becker, *Human Capital*, 2nd edition (Chicago, University of Chicago Press, 1975).

<sup>2</sup> Two articles that provide reviews of existing literature on the extent and cost of training, and that offer suggestions for training policy, are included in a collection of papers assembled by the Secretary of Labor's Commission on Workforce Quality and Labor Market Efficiency. See Charles Brown, University of Michigan, "Empirical Evidence on Private Training," and Stephen L. Mangum, Ohio State University, "Evidence on Private Sector Training," contained in *Investing in People: A Strategy to Address America's Workforce Crisis* (U.S. Department of Labor, 1989), pp. 301-86.

<sup>3</sup> See *What's It Worth? Educational Background and Economic Status: Spring 1984*, Series P-70, No. 11 (Bureau of the Census, 1984), p. 16. See Frank Stafford and Greg J. Duncan, "The Use of Time and Technology by Household in the United States," *Research in Labor Economics*, Vol. 3, 1980, pp. 335-75.

<sup>4</sup> See *How Workers Get Their Training*, Bulletin 2226 (Bureau of Labor Statistics, 1985).

<sup>5</sup> See *Occupational Training in Selected Manufacturing Industries, 1974*, BLS Bulletin 1976 and ETA R&D Monograph 53 (Bureau of Labor Statistics and Employment and Training Administration, 1977).

<sup>6</sup> Seymour Lusteran, "Trends in Corporate Education and Training," Report No. 870 (New York, The Conference Board, 1985).

<sup>7</sup> See *Employee Benefits in Medium and Large Firms, 1989*, Bulletin 2363 (Bureau of Labor Statistics, 1990); see also, *Employee Benefits in State and Local Governments, 1987*, Bulletin 2309 (Bureau of Labor Statistics, 1988), pp. 76-77.

<sup>8</sup> See Brown, "Empirical Evidence on Private Training"; and Mangum, "Evidence on Private Sector Training."

<sup>9</sup> See Anthony P. Carnevale and Leila Garner, *The Learning Enterprise* (The American Society for Training and Development and the Employment and Training Administration, 1988), p. 17.

<sup>10</sup> Chris Lee, "Where the Training Dollars Go," *Training*, October 1987, pp. 51-65.

<sup>11</sup> See Carnevale and Garner, *The Learning Enterprise*, p. 15.

<sup>12</sup> Jacob Mincer, "Job Training: Costs, Returns, and Wage Profiles," Working Paper No. 3208 (Washington, National Bureau of Economic Research, 1989).

<sup>13</sup> See John M. Barron, Dave A. Black, and Mark A. Lowenstein, "Job Matching and On-the-job Training," *Journal of Labor Economics*, January 1989, pp. 1-19.

<sup>14</sup> Lee Lillard and Hong Tan, *Private Sector Training: Who Gets It and What are Its Effects?* Rand Monograph R-3331-DOL/RC (Santa Monica, CA, Rand Corporation, March 1986).

<sup>15</sup> Lillard and Tan, p. 58.

## First-time mother's return to the work force

The employment status prior to a woman's first pregnancy is probably the most influential factor in her decision to return to work after childbirth. The type of maternity leave arrangement also influences the decision. These conclusions are from a Bureau of the Census study of the results of retrospec-



tive answers of 9,000 women who participated in the 1984 and 1985 Survey of Income and Program Participation.

Patterns of work and leave were different for women who had their first births in the 1961–65 period and those who had their first births in the 1981–85 period. In the 1961–65 group, 60 percent had worked for 6 or more consecutive months before having their first child; in the 1981–85 group, 75 percent had done so.

Since the 1960's, the majority of employed pregnant women have been working full-time—between 80 and 90 percent worked 35 hours or more per week at the last job they had before their child's birth. Women also have been working longer into their pregnancies. Between 1981 and 1985, 30 percent of pregnant workers stayed on the job longer than 8 months into their pregnancies, compared with 10 percent of mothers-to-be in the 1961–65 period.

Along with their higher rates of employment for pregnant workers was an increase in the amount of maternity leave benefits available and being used. In the 1960's, 16 percent of mothers reported receiving maternity benefits,

14 percent reported receiving unpaid leave of absence, and 5 percent were terminated; the majority—60 percent—voluntarily quit their jobs. By the 1980's, the percentage of first-time mothers who reported receiving maternity benefits increased to 47 percent, and the percentage who voluntarily quit decreased to 28 percent. Since the early 1970's, about 20 percent have reported receiving unpaid leave of absence. The proportion terminated has remained at about 5 percent since the 1960's.

A trend of growing labor force attachment among mothers is also evident. Only a small percentage of first-time mothers in the 1970's were working by the third month after childbirth; by the 1980's, one-third of first-time mothers were working by the third month, and slightly more than one-half had returned to work within 1 year. In the 1960's, 16 percent of first-time mothers were working 1 year after childbirth; only one-third had entered or re-entered the labor force 5 years after childbirth.

Between 1981 and 1985, the labor force activities of first-time mothers varied widely by age. Twice as many 18- to 21-year-olds quit their jobs dur-

ing pregnancy than did those 25 years and older (42 percent versus 21 percent). Only 20 percent of 18- to 19-year-olds received maternity benefits, as opposed to almost 60 percent of women 25 and older. Teenage mothers were more likely to have been terminated from work than were older mothers.

In the 1980's, no difference in race was noted regarding maternity benefits or terminations. However, in the 1960's, pregnant white women were more likely to quit their jobs and, consequently, less likely to receive maternity benefits than were pregnant black women, who typically kept their jobs. For most of the years studied, pregnant black women, generally were more likely to be involuntarily terminated from their jobs than were pregnant white women. No difference was noted in leave arrangements by marital status.

The full paper, "Maternity Leave Arrangements 1961–1985," by Martin O'Connell of the Fertility Statistics Branch, Bureau of the Census, was presented at the 1989 meetings of the American Statistical Association. □

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