

The NBER Digest

NATIONAL BUREAU OF
ECONOMIC RESEARCH, INC.

January 1983

Pensions as Severance Pay

Most people regard pensions as a way of saving for retirement at pretax rather than aftertax rates of interest. But NBER Research Associate **Edward P. Lazear** maintains rather that pensions are a form of severance pay, designed to encourage employees to retire at the optimal age. In *Working Paper No. 942, Pensions as Severance Pay*, he finds corroboration for this view in a new set of data drawn from a 1980 study by Bankers Trust of the pension plans of some 200 major corporations.

Most of these 200 companies, with approximately 8 to 10 million (pension) covered employees altogether, have structured their pension plans to induce their employees to retire early or on time. The company encourages this because of the possibility that the worker's output will slip below the amount of his wages; most companies do not want to reduce an older worker's pay.

In the worker's mind, the value of leisure time may be increasing as he ages. At some point, it becomes, in an economist's language, "efficient" (for both the worker and the firm) for the worker to retire. Thus, firms will pay a larger pension value to workers who retire early. In other words, the worker gets a larger pension than would be justified purely on an actuarial basis if he retires earlier rather than later.

If the pension plan were strictly a kind of savings account, its "expected present value" should increase rather than decrease as the normal age of retirement approaches and passes. However, says Lazear, pensions that decline in value with the age of retirement offer evidence that "pensions act as a form of severance pay to insure efficient labor mobility."

Lazear also compares the 1980 data with similar data from a 1975 Bankers Trust study. He finds that there does not appear to have been any dramatic change in pension structure. This would indicate that pensions in 1975 either had already adjusted to the passage in 1974 of ERISA (Employee Retirement Income Security Act), a major bill regulating corporate pensions, or that the bill did not prompt companies to alter significantly the value of their pensions.

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In the 1975-80 period, however, companies did boost the average *nominal* value (before taking account of inflation) of their conventional pensions by about 50 percent. The *real* value of pension benefits has remained constant, or increased somewhat, over the period. However, real wages of most workers declined in that same time span. In the case of "pattern-plan" pensions, where mostly blue-collar workers get a fixed amount of benefits per year of service, the present value of a pension taken some ten years before normal retirement age has jumped 100 percent. (A simple rule-of-thumb way for estimating the present value of a pension is to multiply the final salary of a worker by the number of years he has worked, and take one-thirteenth of that product. It is somewhat

more than this for low-salary workers and slightly less than this for high-salary workers, Lazear finds.)

One alternative theory is that pensions are a form of insurance against illness forcing early retirement. The worker may wish to have higher pensions for early retirees as a safeguard against that contingency. However, Lazear argues against this view, noting that health or disability insurance can perform those functions explicitly.

Moreover, if pensions were meant to be a form of insurance, they would not severely limit the permissible age for early retirement, as they do. Further, pensions are usually based on the salary of a worker in the final few years before retirement. If pensions were insurance, it would be more appropriate to base them on an average income over a lifetime. Thus, if a worker earned less in his final years before retirement, perhaps because of declining health, then he would be protected against ending up with a reduced pension.

In conclusion, Lazear finds some evidence to suggest that higher pensions for early retirement are being used as a substitute for mandatory retirement clauses in labor contracts. In most areas of employment, a 1978 law now prohibits the compulsory retirement of workers before the age of 70. DF

The Transition from School to Work

New research by NBER Research Associate **David A. Wise** and **Robert H. Meyer** of the Council of Economic Advisers finds that there are no striking differences between blacks and whites in the determinants of whether young high school graduates are successful in the work force. In **The Transition from School to Work: The Experiences of Blacks and Whites**, NBER Working Paper No. 1007, they find that the same factors affect the labor-force success and the further education of blacks and whites. This research expands on work Wise and Meyer did together three years ago.

The two authors undertook the new study because so much of the concern about youth unemployment is motivated by the large differences in the unemployment rates for blacks and whites. They find, however, that black and white unemployment rates and earnings among high school graduates actually are quite similar. Their study also suggests that finding jobs has not been much of a problem for high school graduates who are no longer in school; much of the unemployment problem among high school

graduates apparently involves persons in post-secondary schools who are looking for part-time or full-time work.

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The most important predictors of labor-force success for both blacks and whites apparently are academic performance, as measured by standardized test scores, and high school class rank, and whether an individual worked while in high school. In other words, it appears that programs emphasizing work experience and academic achievement may have bigger payoffs than current forms of high school vocational training. Wise and Meyer also find that the same factors affect whether blacks and whites continue their educations beyond high school. Unsurprisingly, a higher proportion of whites go on to some form of post-secondary education. But for individuals with similar academic and socioeconomic attributes, blacks are considerably more likely to continue their educations.

Wise and Meyer base their analysis on data collected by the National Center for Educational Statistics in a longitudinal study of the high school class of 1972. The study gathers a wide range of data on school, family background, attitudes, and aspirations for 23,000 male high school seniors. Three follow-up surveys in October 1973, 1974, and 1976 obtained information for the same people on post-secondary schooling, work choices, and labor-force experiences.

Descriptive statistics taken from the entire sample group reveal a number of interesting findings. Most youths, for instance, find jobs through relatives or friends or by contacting employers directly; comparatively few use private or public employment agencies. Unions serve as a conduit to employment for only a small percentage. Among those who do register with unions, whites are considerably more likely to actually get jobs.

The unemployment rates implied by the survey for those no longer in school are much lower than official unemployment rates. By October 1976, only 5.7 percent of the whites and 6.9 percent of the nonwhites not in school were looking for work. Wise and Meyer conclude that youth unemployment is not a severe problem for high school graduates, either white or nonwhite.

The hourly wage rates of blacks and whites are also very close. Among those not in school, the averages in 1976 were \$4.63 for whites and \$4.37 for non-

whites. Weekly earnings, on the other hand, are further apart because blacks tend to work fewer hours per week. While blacks earned only 6 percent less per hour than whites in 1976, they worked 5 percent fewer hours per week.

Wise and Meyer examine the importance of assorted variables on labor-force success by constructing a model to predict the number of weeks per year that both post-secondary students and nonstudents will work. The variables they use in estimating the model include such things as scores on six standardized academic achievement tests, class rank in high school, the hours worked per week while in high school, and parents' income and education.

The estimated relationship between hours worked in high school and weeks worked after graduation and entry into the labor force is very substantial for both whites and nonwhites. On average, nonstudents who worked 20 hours a week or more in high school work about 10 weeks more per year than those who did not work at all in high school.

Both class rank and academic test scores also are substantially related to weeks worked by nonstudents. Wise and Meyer's equations indicate that an increase or decrease of one standard deviation in class rank alters the number of weeks worked per year by four for whites and three for nonwhites. The effect of test scores is even greater. Evaluated at the mean, an increase of one standard deviation in test scores is worth an added 4.2 weeks of work a year for a white one year out of school, and 5.4 weeks for a nonwhite. The effects of vocational training in high school, on the other hand, are very small and typically are not statistically significant. AE

COLAs in Union Contracts

The level of unemployment insurance benefits in a given manufacturing industry influences both the level of payoffs and the extent of cost-of-living adjustment (COLA) coverage, according to a recent study by NBER Research Associate **Ronald G. Ehrenberg**, and **Leif Danziger** and **Gee San**. In *NBER Working Paper No. 998, Cost-of-Living Adjustment Clauses in Union Contracts*, that key finding emerges from an investigation of why the prevalence and characteristics of COLA provisions vary so widely across U.S. industries.

Cost-of-living escalator clauses tie wages to some index of prices, often the Consumer Price Index (CPI). In the period 1976-81, about 60 percent of

workers covered by major union contracts were also covered by COLAs. But in November 1980, the prevalence of COLAs in major collective bargaining agreements varied widely across industries. The NBER study seeks to explain the determinants of COLAs, their generosity, and their correlation with other collective bargaining agreement characteristics such as deferred increases and length of contracts.

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The authors first develop a series of theoretical frameworks for their analysis, highlighting factors that might influence COLAs including employee risk aversion, characteristics of the bargaining relationship, and characteristics of the unemployment insurance system such as the extent of experience rating and the replacement rate. Some general observations are made; for example, the more risk averse workers are, the more likely it is that they will be covered by a COLA. Also, the more uncertain the rate of inflation is, the greater is the likelihood of indexation.

The authors then proceed to two sets of empirical tests of their model. First, using industry level data for manufacturing in 1975, 1978, and 1981, they seek the determinants of COLA coverage and of layoff rates. They find that higher unemployment insurance replacement rates are associated with a lower probability of indexed contracts and a higher level of layoffs. The more that demand for the industry's product varies with unanticipated inflation, though, the higher is the probability of indexed contracts.

High quit rates in an industry are associated with less COLA coverage. And, in industries with more unions present, each has less bargaining power and there is less COLA coverage. However, the more workers covered by union contracts in the industry, the likelier is COLA coverage. And, increased coverage by multiemployer contracts reduces wage competition among firms in an industry and leads to a greater possibility of COLA coverage.

Second, using data on individual collective bargaining agreements (obtained from the Bureau of Labor Statistics) covering more than 1000 workers in 1981, the authors again focus on the determinants of COLA coverage and the characteristics thereof, as well as the duration of contracts. Unfortunately, the results using these data were much more mixed and did not provide strong support for the model.

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