as high as for whites and showed relatively little response to improved economic conditions. For Hispanic youth, jobless rates declined substantially among high school students and those no longer in school. However, the unemployment rate for out-of-school Hispanic youth remained almost 5 percentage points higher than for white youth.

Recent high school graduates and dropouts

Although there were fewer high school graduates in 1983 than in 1982, about the same number went on to college in both years. (See table 4.) Thus, college enrollment levels remained unchanged, as a somewhat higher entry rate offset the declining school-age population. Black high school graduates continued to be less likely to enter college than white or Hispanic graduates.

Nearly 85 percent of recent high school graduates not enrolled in college were in the labor force in October 1983. This was somewhat higher than in October 1982, but, in contrast to the situation among the total out-of-school youth group, the unemployment rate for recent graduates was virtually unchanged. As among all 16- to 24-year-olds with a high school diploma, lower proportions of black and Hispanic recent graduates were in the labor force compared with whites.

The number of recent high school dropouts declined over the year, reflecting the decrease in the teenage population. In both 1982 and 1983, recent school leavers accounted for about 3 percent of all 16- to 24-year-olds no longer in school, down from 4 percent during the peak years of the baby boom. While about the same proportion of dropouts as a year earlier were in the labor force, unemployment rates for this group decreased by about 10 percentage points for both men and women.



¹ Data in this report are based primarily on supplementary questions in the October 1983 Current Population Survey (CPS), conducted and tabulated for the Bureau of Labor Statistics by the Bureau of the Census. Most data relate to persons 16 to 24 years of age in the civilian noninstitutional population in the week ending Oct. 15, 1983.

Sampling variability may be relatively large in cases where the numbers are small. Small estimates, or small differences between estimates, should be interpreted with caution. For the most recent report in this series, see Anne McDougall Young, "Youth labor force marked turning point in 1982," Monthly Labor Review, August 1983, pp. 29–32, reprinted with additional tabular data and explanatory notes as Bulletin 2192 (Bureau of Labor Statistics, December 1983).

²High School and Beyond (HS&B) is a national longitudinal study of high school students being conducted by the National Center for Education Statistics (NCES).

³Packaging of Grants, Loans, and Earnings for Financing Postsecondary Education, Bulletin 83–2206 (National Center for Education Statistics, February 1984).

⁴Samuel S. Peng, *High School Dropouts: Descriptive Information from High School and Beyond*, Bulletin 83–221b (National Center for Education Statistics, November 1983.)

Auto industry experiments with the Guaranteed Income Stream

PETER CAPPELLI

The Nation's recent experience with high unemployment and occupational dislocation has renewed the interest of workers and their unions in improving employment security through the collective bargaining process. William M. Davis notes, for example, that employment security was the most important topic in the 1983 round of national negotiations, and results of a 1982 survey by D. Quinn Mills also suggest that concern with unemployment has been a major influence shaping current union bargaining positions.

A number of innovative arrangements to improve employment security have come out of recent contract negotiations. Of these, perhaps the most interesting and important are the Guaranteed Income Stream (GIS) plans introduced in the auto industry. These plans address the growing problem of structural unemployment by providing a novel form of income protection for workers, and financial incentives for firms to avoid long-term layoffs and to find alternative employment for workers who are laid off.

GIS versus other plans

There are two basic ways to ensure employment security. The first, and most straightforward, is to guarantee jobs directly, as in the case of contractual manning levels. In practice, these guarantees are difficult for workers to secure because they pose considerable risk to firms facing uncertain product markets. According to a June 1982 Business Week poll, only 2 percent of the firms surveyed were willing to provide explicit employment guarantees even in return for union concessions on other issues.³ The most noteworthy of such agreements, the lifetime employment experiment introduced in the auto industry in 1982, covers relatively few workers in a small number of plants, giving rise to the possibility that these jobs will be guaranteed at the expense of employment and production opportunities at noncovered automaking facilities.

The second and more common method for addressing the problem of unemployment is through income maintenance plans. These protect workers' income from employment adjustments and provide financial incentives for firms to minimize layoffs. The most important of these are supplemental unemployment benefit plans (SUBS), which are a contractual form of unemployment insurance with perfect experience rating—each employer bears the total cost of unemployment benefits for its workers.⁴ (State-sponsored plans, in contrast, involve cross-subsidization because an

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employer's contributions may not completely reflect the benefits its workers receive.)

SUBs and other income maintenance plans create incentives for stabilizing employment because they reduce the marginal cost of employment for covered workers. Because the employer must pay the SUB benefit when its workers are idle, the marginal cost of keeping a worker occupied productively is merely the difference between the SUB payment and the wage rate. One might expect this reduction in the marginal cost of labor to affect firms' operating decisions. With marginal cost pricing, they would be more likely to cut prices during economic downturns, maintaining production and employment levels.⁵ Unfortunately, there is ample evidence that these income maintenance plans do not provide sufficient incentives for companies to stabilize employment in the face of steep recessions and structural changes in product markets. Further, the temporary income protection provided by SUBS, which were designed to cushion against short-term cyclical adjustments, is not adequate for the longer-term, structural unemployment characteristic of the 1980's.

The GIS plan represents an alternative which shares the basic income maintenance approach but differs from SUB plans in several important ways. First, while SUBs and other income maintenance plans end after relatively short periods (for example, 2 years) and provide temporary support for the long-term unemployed, GIS plans furnish benefits to eligible workers until they retire, if necessary. If SUBs provide a "guaranteed annual wage," then GIS plans provide a guaranteed lifetime wage. Second, qualification for GIS eligibility is based on earnings rather than simply on employment status. That is, a laid-off worker could find employment elsewhere and still be eligible for GIS benefits as long as his or her earnings from the alternative job were below a specified level. Finally, the benefits provided by the GIS plan are not completely offset by outside earnings until those earnings reach a specified "breakeven point." This is unlike the case for SUBS, where benefits are completely offset. Thus, workers can increase their net income under the GIS program by accepting other paid employment.

In fact, the GIS plan is a type of negative income tax similar in form to the Family Assistance Plan proposed during the Nixon Administration. Eligible workers receive a minimum benefit, and outside earnings from alternative employment are "taxed" or offset by reductions in that benefit. Because the rate of offset is less than complete (80 percent), workers net 20 cents from every dollar of outside earnings. Therefore, they have some incentive to seek alternative employment. Benefits continue to be paid until workers reach a combined income level (benefits plus earnings) call the "breakeven point" (1/tax rate), which in this case equals 125 percent of the minimum benefit. Beyond

this point, additional earnings are completely offset by benefit reductions, and the plan ceases to function.

Those employees with more than 15 years of seniority (10 years in cases of plant shutdowns) are eligible for the GIS program after their SUB benefits have been exhausted. The minimum benefit is equal to 50 percent of pretax earnings and rises 1 percentage point with each additional year of seniority. The table below shows the net earnings of GIS participants with pretax earnings of \$400 per week at different levels of seniority and outside earnings:

Seniority and minimum benefit	Outside earnings				
	\$0	\$200	\$250	\$325	\$375
15 years (50 percent)	\$200	\$240	\$250*	\$325	\$375
30 years (65 percent)	260	300	310	325*	375
40 years (75 percent)	300	340	350	365	375*

^{*}Indicates breakeven points.

The GIS approach differs from other income maintenance programs both in the type of unemployment it addresses and in the incentives it creates for workers and employers. Unlike SUB plans, which tie laid-off workers to their former employers, GIS plans create incentives to find alternative employment. The complete SUB benefit offset by earnings from an alternative job leaves workers with little financial incentive to look for work elsewhere, and the fact that benefits end after a reasonably short period means that firms have less of an incentive to find new jobs for these workers. SUB plans are beneficial to employers because they increase the likelihood that laid-off workers would be available for recall at the end of temporary cyclical downturns.

GIS, in contrast, provides workers with financial incentives to find alternative employment because the benefit offset is less than complete. Moreover, the long period of eligibility associated with GIS encourages firms to avoid layoffs by increasing the costs of permanent layoffs and reducing the marginal cost of keeping workers productively employed. Once workers are laid off, however, that long period of eligibility creates strong incentives for the firm to help workers find alternative employment at rates of pay above the GIS breakeven level.

Labor force effects of GIS

One can get some idea of the likely effects of GIS plans by looking at the results of the negative income tax demonstration projects that were conducted during the 1970's. From the standpoint of public policy, the most important concern about negative income tax plans was their effect on labor supply. Economic theory suggests that the introduction of minimum benefits will cause an income effect that would curtail labor supply. The benefit offset would reduce the return from working, producing a substitution effect that also reduces labor supply. Results from various demonstration projects showed the effects of negative income tax programs on labor supply to be rather small. Recipients tended to search longer for jobs and found marginally better-paying ones. It also appeared that the employment effects of the negative income tax extended to the families of recipients as well, the most important change being a reduction in labor force participation by wives of recipients.⁷

Another important effect of negative income tax-type plans like GIS may be their influence on the types of jobs that workers choose. To the extent that higher pay compensates for unpleasant work, one might expect GIS to reduce the incentives to accept such work because the worker receives less than the compensating wage differential after the benefit offset.

The magnitude of these effects depends largely on the rate of "tax," or benefit offset, prescribed by the plans. The tax rate determines the breakeven point, as well as the marginal incentives to alter one's behavior. If the rate is too low, the program covers more workers with higher earnings and becomes a burdensome expense to the company; if it is too high, workers have little incentive to pursue alternative employment. It might seem that the GIS 80-percent tax rate is quite high. A worker accepting employment at \$10 per hour, for example, would net only \$2 per hour and would pay government taxes on those earnings. Such a worker in the 30-percent tax bracket would take home only an additional \$1.40 per hour after government taxes and the benefit offset.

Because the GIS plan is new and eligibility was not extended to workers who had previously exhausted their SUB benefits, relatively few workers currently are drawing benefits from the plan. One of the requirements for continued eligibility is that workers must accept suitable employment when it is offered, and many workers lost their eligibility rather than accept transfers to auto plants in other parts of the country. Employers point out that within the same location, there has been little difficulty getting workers to accept new jobs with the company, but that it has been extremely difficult to get them to take jobs with other employers where the pay is less and the benefit offset applies. This suggests that the high rate of benefit offset may be a factor inhibiting reemployment.

In a theoretical sense, perhaps the most interesting aspect of the GIS program is that it represents one of the more clearcut examples of labor-management behavior that has fallen under the rubric of implicit contracting: because the incentives created by GIS plans extend the firm's interest in its employees beyond layoffs through to the end of their working lives, the collective bargaining agreement implicitly becomes almost a lifetime contract. Further, the firm has financial incentives to see that workers find well-paying jobs and the contractual right to ensure that workers accept suitable employment. In this sense, one might expect the firm to take on some of the functions of an employment agency: identifying potential jobs for its laid-off workers, setting up job interviews, perhaps counseling workers in order to improve their success in the job market, and determining the reasons for unsuccessful job search by some plan participants.

WHETHER GIS PLANS will spread to other industries as SUB plans did during the 1950's will depend largely on the pace of structural change in the economy. GIS plans provide protection from structural unemployment for senior employees in a way that SUBS and seniority-based layoffs cannot. If workers in other U.S. industries continue to feel threatened by large-scale layoffs and plant shutdowns in coming years, one might expect their unions to respond with demands for GIS-type programs. In any event, GIS plans represent an important innovation in labor-management relations and signal a renewed effort to address employment problems through the collective bargaining process.

----FOOTNOTES-----

¹William M. Davis, "Collective bargaining in 1983: a crowded agenda," *Monthly Labor Review*, January 1983, pp. 3–16.

²D. Quinn Mills, "When Employees Make Concessions," *Harvard Business Review*, May–June 1983, pp. 103–13.

³Business Week, unpublished results of a June 14, 1982, survey.

⁴For a history of SUB plans and their development, see John Becker, *Guaranteed Income for the Unemployed* (Baltimore, Johns Hopkins Press, 1967).

⁵Peter Cappelli and Barry Nalebuff, "Supplemental Unemployment Benefit Plans and the Response of Employers," mimeo, January 1983.

⁶For a discussion of this position, see Herman Feldman, "The Annual Wage—Where Are We?" *American Economic Review*, December 1947, pp. 15–19.

⁷See Albert Rees and Harold W. Watts, "An Overview of the Labor Supply Results," in Joseph A. Pechman and P. Michael Timpane, eds., Work Incentives and Income Guarantees: The New Jersey Negative Income Tax Experiment (Washington, The Brookings Institution, 1975); and Gary Burtless and David Greenberg, "Measuring the Impact of Negative Income Tax Experiments on Work Effort," Industrial and Labor Relations Review, July 1983, pp. 592–605 for a review of these results.

*Workers continue to be covered by GIS as long as they maintain the required level of seniority. The requirements governing the loss of seniority while on layoff are complex and are subject to negotiation. Those workers currently eligible for the GIS program will continue to be covered by it even if the program is not renewed in future contracts. Questions about eligibility and benefit levels are answered by the joint board (chaired by an independent member) that administers the GIS program.