The NBER Digest
NATIONAL BUREAU OF ECONOMIC RESEARCH, INC.

November 1992

# Workers Pay for Mandated Benefits

In recent years, the federal and state governments have required private firms to provide an increasing number of benefits to their employees, and have proposed additional "mandated" benefits, including health insurance. Now, in a new NBER study, **Jonathan Gruber** finds that certain health benefits mandated by the government in the past were financed entirely by reductions in the wages of the workers who were covered. Because the workers in effect paid for their own benefits, the firms had no incentive to reduce the total amount of labor they used. Thus, total hours of work did not change when the mandated programs took effect.

In **The Efficiency of a Group-Specific Mandated Benefit: Evidence from Health Insurance Benefits for Maternity** (*NBER Working Paper No. 4157*), Gruber analyzes the experience of three states (Illinois, New Jersey, and New York) that mandated in 1976 that maternity benefits be covered in health insurance plans similarly to disabilities or illnesses. He estimates that before the change in the law, over 50 percent of women covered by health insurance had lower coverage for childbirth than for illnesses. After the change in the law, Gruber finds, the cost of insuring women of childbearing age increased by 1 to 5 percent of their wages. In 1990 dollars, Gruber estimates, annual costs ranged from $252 to $984. These increased costs were shifted to the women's wages, or to their husbands' if they had the insurance, Gruber finds.

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However, mandated benefits had little effect on total hours worked. Because the mandated benefits raised the fixed cost of employing a woman of childbearing age, the legislation resulted in an increase in the average number of hours worked by these women and a commensurate decrease in employment.

Gruber finds similar effects of the passage of the 1978 Federal Pregnancy Discrimination Act (PDA). The PDA extended comprehensive maternity coverage to insured women throughout the United States.

# The Free Trade Agreement Could Stimulate U.S. Auto Exports to Mexico

A free trade agreement (FTA) between the United States and Mexico is likely to open the Mexican automobile market to U.S. exports, increase the output of the Mexican auto industry, and rapidly expand the Mexican auto market. According to a new NBER study by **Steven Berry, Vittorio Grilli,** and **Florencio López-de-Silanes**, demand could grow substantially, more than doubling from its present level before the end of the 1990s.

In **The Automobile Industry and the Mexico–U.S. Free Trade Agreement** (*NBER Working Paper No. 4152*), Berry, Grilli, and López-de-Silanes note the increased globalization of the auto industry in recent years, both in terms of production and of markets. Major auto manufacturers today typically produce between 10 percent and 50 percent of their total output abroad. Globalization has made the definition of a "national" auto industry ambiguous. Based on the nationality of the manufacturer, U.S. automakers held the largest share of world production in 1988 (34 percent), followed by Japan (29 percent), and Europe (24 percent). Measured by the location of production, however, the relative market shares change to: Europe (31 percent), Japan (28 percent), and the United States (24 percent).

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The three authors compare the Mexican FTA with the Canadian–U.S. Auto Pact of 1965. This pact eliminated most automotive tariffs between the two countries and had enormous effects on the Canadian auto industry. Production more than doubled between 1965 and 1970, and almost tripled by 1979, with most of the increase being exported, mainly to the United States. "But the most important lesson for the U.S.–Mexican trade agreement," they state, "is that the Auto Pact created a new, large market for U.S. manufacturers." U.S. exports to Canada grew from under 200,000 autos before 1965 to about 500,000 five years later and about 1.3 million today.

Berry, Grilli, and López-de-Silanes expect that the U.S.–Mexican FTA will lead to similar growth in trade in vehicles and auto parts, in both directions. Since Ford opened its first Mexican plant in 1925, the auto industry has become an important example of industrial integration between the United States and Mexico, despite years of avowedly protectionist policies in Mexico. The authors find that the most vibrant, globally oriented sectors of the Mexican auto business today are engine plants, "Maquiladora" auto part plants (mostly located near the border), and high tech auto assembly plants. Mexican exports to the United States tend to be labor-intensive products, including windshield wipers, car seats, seat belts, and ignition wiring. On the other hand, Mexico shows a large "dependence on imports of components for both vehicle exports and the growing domestic market."

The authors argue that the FTA, together with continued economic growth in Mexico, will increase Mexican demand for autos greatly. They estimate that eliminating existing Mexican trade barriers to autos produced in the United States, combined with continued Mexican economic growth at its current 3 percent rate, would more than double auto sales in Mexico in five years.

The authors predict that much of this increased demand will be met by U.S. factories. "As Canada did in the Sixties, Mexico could offer the opportunity for the creation of a large new market just next door." Although Mexican exports to the United States undoubtedly will increase, U.S. trade barriers to Mexican products were low or nonexistent even before the FTA. "If these U.S. [auto] plants were likely to move en masse to Mexico, they would have done so already," the authors conclude. RN

# Retiring CEOs Maintain Corporate Investment

Long-term corporate investments usually involve expenditures in the present that only begin to pay off several years into the future. Since chief executives of large corporations typically receive bonuses based mainly on current earnings, they seem to have a disincentive to make long-term investments as they approach retirement. But a new NBER study by **Robert Gibbons** and **Kevin J. Murphy** finds instead that, during the year or two prior to a CEO's retirement, corporate spending on R and D and advertising typically remains constant or even rises slightly.

In **Does Executive Compensation Affect Investment?** (*NBER Working Paper No. 4135*), Gibbons

and Murphy examine the investment patterns of 916 large U.S. corporations whose CEOs left office during 1970–88. At any given date, 20 percent of the CEOs at these firms were in their final two years of office, 38 percent were in their final four years, and 52 percent were in their final six years.

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Gibbons and Murphy observe that the vast majority of CEOs at large firms receive bonuses based on accounting earnings rather than on stock market measures of their firms' performance. The median bonus is half the CEO's base salary, an amount that might be expected to discourage investments that reduce the firm's current earnings while increasing profits in the long run.

Gibbons and Murphy calculate that spending on R and D (adjusted for inflation and for industrywide trends) is about 5 percent higher in the CEO's last year in office than average spending during the CEO's entire career. Spending on advertising is 3 percent higher, and capital spending is about 8 percent higher, than the CEO's career average. Thus bonuses that seem to reward CEOs for focusing on short-run profits apparently do not discourage investment in these areas.

Gibbons and Murphy offer three explanations for their findings. First, CEOs may leave overall investment expenditure unchanged, but switch to projects with more immediate payoffs. Second, a top management team whose members are not about to retire may decide on investment policy along with the CEO. Third, the CEO's bonus may be too small to influence investment decisions. "Slashing R and D expenditures by $100 million near the end of a CEO's career will increase his cash compensation by $17,700—or less than one week's pay for the typical CEO of a large manufacturing firm," they write.

## Pupil–Teacher Ratio Is Same, but Wage Gap Widens, for Blacks and Whites

The student–teacher ratio, one of the main statistics used to measure the quality of American education, is now approximately the same for black and white students in U.S. public schools. This is in stark contrast to the situation earlier in the twentieth century, according to a recent NBER study by **Michael Boozer, Alan Krueger,** and **Shari Wolkon**.

In **Race and School Quality since *Brown vs. Board of Education*** (*NBER Working Paper No. 4109*), the authors report that, in school year 1915, there were 60.8 black students per teacher and 37.6 white students per teacher in the public schools. In 1953–4, there were 31.6 black students per teacher and 27.6 white students per teacher in the public schools. By 1966, the ratio had fallen to 26.1 for black students and to 24 for whites. By 1989, the student–teacher ratio in public schools had fallen even further, to 18.1 for black students and 18.3 for white students.

However, for Hispanic students in 1989, the student–teacher ratio was 20.3. This higher ratio, the authors note, is because Hispanics are concentrated in the western states, where pupil–teacher ratios are generally higher.

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By another measure of quality, computer usage, whites are still ahead of blacks and Hispanics. In 1989, 56 percent of white students used computers in school, versus 39 percent of black students and 42 percent of Hispanic students. Nearly half of this gap in computer usage is accounted for by higher family income for whites and school location, the researchers find.

This disparity in computer usage could cause differences in earnings later on. The authors estimate that workers who learn how to use a computer earn as much as 15 percent more than those who do not, all other things equal. In 1989, white workers were much more likely to use computers at work than black workers: the difference was 13.4 percentage points. Fifteen years earlier, though, when computers on the job were extremely rare, the gap in the use of computers between black and white workers was trivial. Thus, lower use of computers by black workers could have led to as much as a 2 percentage point increase in the black–white wage gap, the authors estimate. This is about one-third of the 5.6 percentage point increase in the black–white wage gap between 1976 and 1990.

The authors' data for pupil–teacher ratios come from the U.S. Department of Education. Their data on wages and computer usage are extracted from the Census Bureau's Current Population Survey. DRH

# New NBER Book

## NBER Macroeconomics Annual 1992

The *NBER Macroeconomics Annual 1992*, the seventh volume in a series, is now available from the MIT Press. The clothbound edition is $35.00; the paperback sells for $16.95.

This volume, edited by NBER Research Associates Olivier J. Blanchard and Stanley S. Fischer, includes papers on: the operation of monetary policy, by Ben S. Bernanke, NBER and Princeton University, and Frederic S. Mishkin, NBER and Columbia University; a comparison of economic growth in Hong Kong and Singapore, by Alwyn Young, NBER and MIT; and a postmortem on the debt crisis, by Daniel Cohen, CEPREMAP.

In addition to their NBER affiliations, Blanchard and Fischer are professors of economics at MIT.

This volume should be ordered directly from the MIT Press, 55 Haywood Street, Cambridge, MA 02142; (617) 253-2884.

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*Preparation of the* **Digest** *is under the supervision of Donna Zerwitz. The articles indicated by RN and DRH were prepared with the assistance of Rob Norton and David R. Henderson, respectively.*

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