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Federal versus Private Wages

The Federal Salary Reform Act of 1962 requires that the federal government compensate its employees at pay rates comparable to those of similar workers in the private sector and that the federal government should pay enough to compete with private firms for workers. However, according to a recent study by **Steven Venti** that was part of NBER's Project on the Government Budget and the Private Economy, men earned slightly more, and women substantially more, in federal jobs than in the private sector in 1982.

In **Wages in the Federal and Private Sectors** (*NBER Working Paper No. 1641*), Venti notes several potential sources of difference between public and private pay, including: (1) differences in workers' skills or productivity, such as years of education, that can be observed; (2) the same types of differences that cannot be observed, such as quality of education or worker motivation; and (3) overpayment by the government. He attempts to account for the first two factors in order to isolate the amount that the federal government may overpay.

Using data from the 1982 Current Population Survey, Venti finds that on average men earn about 33 percent more in the federal sector than in the private sector. For women, the average advantage of federal work is roughly 39 percent. However, about two-thirds of that difference for men, and about 40 percent for women, is caused by observable differences in productivity. Unobserved differences in productivity, which Venti estimates, explain a bit more of the wage differential for men but appear to be insignificant for women. "After adjusting for both observed and unobserved productivity characteristics," Venti finds, "the federal wage structure exceeds the private wage structure by about 4 percent for males and 22 percent for females."

If federal wages are indeed higher than necessary to attract the required work force, then a queue of workers seeking federal jobs will result. The size of such a queue is an indicator of the extent of federal overpayment. Venti estimates that the queue would be eliminated by reducing federal wages for men by about 16 percent and reducing federal wages for women by about 42 percent. These reductions exceed the skill-adjusted wage differential in order to offset the government's advantage in fringe benefits and nonwage job attributes.

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With wage reductions of this scale, the same size work force would be maintained. Moreover, average levels of education would drop only from 13.9 to 13.8 years for men and from 13.1 to 12.8 years for women, Venti calculates. In other words, the federal sector could attract a work force of current size and roughly current "quality" by offering average wages 16 percent lower for men and 42 percent lower for women, Venti concludes.

Subsidies, Quality, and Regulation in Nursing Homes

Increasing subsidies to the nursing home industry may actually reduce quality, according to a recent study by NBER Research Associate **Paul Gertler.** In **Subsidies, Quality, and Regulation in the Nursing Home Industry** (*NBER Working Paper No. 1691*), Gertler examines the impact of the Medicaid patient subsidy and a cost containment program known as Certificate of Need (CON) on nursing home behavior. He concludes that nursing homes that receive high Medicaid "plus" factors (or subsidies) provide hundreds of thousands of dollars less in goods and services than homes that receive only average Medicaid "plus" factors.

To place Gertler's work in perspective, it is noteworthy that between 1950 and 1980, the nursing home industry expanded from approximately $190 million a year in revenues to more than $18 billion. Most of the expansion took place after 1966, the year in which the Medicaid program began. Although public spending on nursing homes was small before 1966, by 1980 the public share of nursing home expenditures was over 65 percent.

Health care regulators now have the task of trying to control this expansion in costs. At the same time, they want to provide the poor with access to nursing home care and promote a high standard of quality. Medicaid, which is part of the Social Security system, aims at making health care available to the poor who could not afford it otherwise. It is jointly financed by state and federal governments, but administered by the states.

The Medicaid program reimburses nursing homes at a set fee for the care of each Medicaid patient. Typically, writes Gertler, states pay nursing homes via "cost-plus" reimbursement. To limit costs, however, a few states have chosen a prospectively set, flat reimbursement rate that is the same for all nursing homes.

States also try to limit costs through CON programs. A CON program requires government approval for the construction of new nursing homes or the expansion of existing ones. The purpose of the CON program is to reduce costs by avoiding excess capacity in nursing home beds. Its effect, according to Gertler, is to limit the capacity of existing nursing homes and to bar new firms from entering the market.

These government regulations and reimbursement rules have created a two-tier market for nursing home patients. By restricting the supply of beds, CON programs have led to an excess demand for beds by Medicaid patients. Nursing homes know that they can always find another patient to fill an empty bed at the Medicaid reimbursement rate.

The second tier of the market consists of private patients. Medicaid rules require that all patients in a nursing home receive the same quality of care but not that they be charged the same price. Nursing homes can choose to attract higher-paying, private patients by raising the quality of care, or they can provide lower-quality care and still fill their beds with Medicaid patients.

> "Increasing subsidies to the nursing home industry may actually reduce quality."

According to Gertler's findings, an increase in the Medicaid reimbursement rate makes Medicaid patients more attractive to nursing homes. Since they no longer try to draw as many private patients, these nursing homes lower the quality of care. The effect of raising the Medicaid reimbursement rate is thus to increase the access of Medicaid patients to nursing home beds but to decrease the quality of care they receive.

Gertler also finds that limiting the number of nursing home beds has both reduced the quality of care and the number of Medicaid patients receiving care. However, it has also reduced Medicaid spending on nursing home care.

Gertler's study is based on a 1980 sample of 455 proprietary and "not-for-profit" nursing homes in New York State. The average home had 100 Medicaid patients and 24 private patients. DF

Bonds and Loans in International Markets

Investors in bonds issued by less developed countries (LDCs) did a poor job of forecasting the debt crisis of August 1982, according to an NBER study by **Sebastian Edwards.** Until late July of that year, interest rates on bonds issued by Mexico and other deeply indebted LDCs were no higher than the interest rates on much safer bonds. In spite of a series of articles in the *New York Times* and other newspapers which warned of economic difficulties, interest rates on Mexican bonds did not rise until a few weeks before Mexico's official announcement that it was facing serious problems. Since the August 1982 announcement, however, these interest rates have

risen as much as 800 basis points to compensate investors for the perceived riskiness of Mexican bonds. Also, since August 1982 the risk premium on these bonds has fluctuated sharply in response to news about the likelihood of default by LDC debtors.

In **The Pricing of Bonds and Bank Loans in International Markets** (*NBER Working Paper No. 1689*), Edwards explains that interest rates on bank loans often do not reflect the riskiness of loans to LDC debtors; this has been especially true since the beginning of the debt crisis. These loans are often part of complicated rescheduling packages. Since they are tied to interest payments on earlier bank loans, the rates on the new loans are not a good measure of the market's evaluation of the risk of future default. By contrast, interest rates on LDC bonds, especially in secondary markets, move freely in response to changes in the financial markets' perception of risk.

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Edwards also studies the interest premium that borrower countries must pay above the interest rate on risk-free investments, such as the London Inter-Bank Overnight Borrowing Rate or LIBOR. (LIBOR is the equivalent in international financial markets of the prime interest rate in the United States.) He finds that the interest premiums for bonds and for bank loans are influenced by somewhat different factors. However, both interest premiums increase with the size of a country's debt relative to its GNP and decrease with the ratio of its investment to GNP. In other words, the riskiness of bonds and loans is perceived to increase if total external debt rises as a share of a country's output, but the risk falls if the borrowing is used for investment rather than for consumption.

Union Maids: Unions and the Female Work Force

Traditionally, women have been less likely than men to join labor unions, and when they did join, they received no more of a wage boost than the men would have. Now, women want union representation more often than men do, according to NBER Research Associates **Richard Freeman** and **Jonathan Leonard.** Moreover, the union wage differential (that is, the difference between union and nonunion wages) is larger for women than for men in white collar jobs and jobs in the public sector.

In **Union Maids: Unions and the Female Work Force** (*NBER Working Paper No. 1652*), Freeman and Leonard report that while unionization fell from 32 percent of the male work force in 1973 to 24 percent in 1984, the proportion of unionized women in the work force held steady at about 15 percent throughout that period. Much of this difference between men and women is the result of the greater concentration of women in white collar jobs and jobs in the public sector. While union strength fell among blue collar workers and workers in the private sector between 1973 and 1983, it rose among workers in the public sector and held steady among white collar workers.

Freeman and Leonard estimate the 1983 rate of unionization that men and women would have had if their jobs were distributed similarly among occupations and industries. They find that the unionization rate for women would have been four percentage points below the male rate. In 1973, by contrast, this difference was nine percentage points.

Moreover, in new unionization campaigns women are more likely to support unions than are men. In a survey of more than 200 recent National Labor Relations Board elections, unions won 50 percent of the campaigns in which women made up 75 percent or more of the work force but only 40 percent of the campaigns in which less than half the workers were women. Once differences in industry are accounted for, though, these differences in campaign results disappear.

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Furthermore, Freeman and Leonard find that the union effect on wages varies considerably by sector. For instance, among blue collar workers in the private sector, union membership raised wages 24 percent for women and 26 percent among men; among blue collar workers in the public sector, the union wage premium was 18 percent for women and 14 percent for men. Among white collar workers, the union wage premium was also greater for women than for men, regardless of sector. Unions raised female wages by 11 percent and male wages by 4 percent in the public sector; in the private sector, unions raised wages 18 percent for women and 12 percent for men.

Finally, Freeman and Leonard conclude that unions had a negligible impact on the overall male-female wage gap in the United States. Although unions boost female wages more than male wages, the proportion of men who are unionized is greater than the proportion of women who are unionized. The two effects thus offset each other, so that the net effect of unions on sex differences is not substantial.

Disability Insurance

Applications for Social Security Disability Insurance (DI) rose from 9.9 per 1000 insured workers in 1965 to 16.6 per 1000 in 1974 before falling off to 11.7 per 1000 in 1981. These application rates were somewhat dependent on the likelihood of receiving benefits but were even more sensitive to the level of benefits, according to a recent study by NBER Research Associate **Jerry Hausman** and **Janice Halpern.**

Individuals who apply for DI and are rejected can appeal the decision to a review board. Often the board reverses the original decision. In 1965, for example, 49 percent of DI applications were approved initially; an additional 5 percent or so were approved on appeal. By 1970, initial approvals had fallen to 42 percent of applications, but after the appeal process, almost 50 percent of applicants received benefits. By 1980, however, only 22 percent of applications were approved initially, and only 34 percent were finally approved. While the rate of approval was falling, the level of real benefits was unchanged from 1976–81.

In **Choice under Uncertainty: A Model of Applications for the Social Security Disability Insurance Program** (*NBER Working Paper No. 1690*), Halpern and Hausman estimate the extent to which changes in DI benefits or changes in the acceptance rate affect the application rate for disability payments. They calculate that a decline in the acceptance rate from 50 to 25 percent will lead to a decline in applications of almost 14 percent. They also estimate that a 20 percent decline in benefit levels will produce a 22 percent decrease in applications. They conclude that their findings are consistent with observed historical trends in benefits levels, acceptance rates, and applications.

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Halpern and Hausman's work is based on analysis of a 1972 survey of almost 6000 men and women, of whom 1300 received DI, 1100 applied for DI but were rejected, and 3600 did not apply. The survey included detailed questions on the respondents' health, physical abilities, sources of income, and assets.

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