The growth of fringe benefits: implications for social security

Official projections of long-range social security deficits assume continued worker preference for fringes in lieu of cash pay; sensitivity of the projections to the resulting erosion of the program's tax base is such that closer scrutiny of this assumption is warranted

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Relative to cash pay, fringe benefits[1] have increased phenomenally during the past three decades. Although the official social security projections include the assumption that this phenomenal rate of growth will continue, no attention has been paid to the implications such growth is likely to have for long-range deficits in the social security trust fund.

The projections assume that employer costs for fringe benefits will increase faster than cash wages at an annual compound rate of 0.4 percent, the average annual rate during 1950–80, over the entire 75-year period after 1980. Thus, the ratio of fringes to total compensation would rise from 15.8 percent in 1980 to 37.8 percent in the year 2055, and conversely, cash pay would decline from 84.2 percent to 62.2 percent.[2] Any increase in fringes relative to workers' cash pay (taxable payroll) is very important because such pay is the tax base that finances social security. Fringes accepted in lieu of taxable pay reduce this base, and boost the percentage of taxable payroll required for paying benefits.

When scheduled social security taxes (as a percentage of taxable payroll) are less than scheduled benefit payments (also as a percentage of taxable payroll), a deficit results, which is the current situation. Ultimately, therefore, the estimated cost of benefits as a percentage of taxable payroll determines how high social security tax rates need to be for the program to be self-supporting. For this reason, the Trustees of the social security program use the percentage of taxable payroll figure in reporting to Congress on the long-range financial health of the system, and Congress, in turn, uses this percentage as a yardstick in considering changes in the program.

This article explains how assumptions about the future growth rate of fringes affect the projected long-range deficit of social security. While the following analysis raises questions about the validity of the official assumption that fringes will grow faster than cash wages by 0.4 percent a year (hereafter called the "faster growth rate assumption"), the author's intention is not to assert that the assumption is necessarily erroneous. Rather, the development herein of an alternative scenario in which fringes and wages grow at the same rate (henceforth labeled the "equal growth rate assumption") is but a means to demonstrate that changes in the assumption about the growth rate of fringes can make surprisingly significant differences in estimated long-range deficits. It is important to recognize the direct linkage between the growth in fringes relative to cash wages and the consequent social security deficits.

Furthermore, it is not the author's purpose to dispute the useful functions that many fringes perform, or to

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advocate that the further growth of fringes be checked. By calling attention to the importance of a heretofore unanalyzed and generally overlooked assumption, this article is intended primarily to arouse interest in additional studies of the implications of the growth in fringes for social security's long-range deficits. However, certain of the ideas presented may also stimulate further research into the design of fringe benefits with particular concern for their rising costs.

The first part of the article explains why the projected long-range actuarial position under social security is highly sensitive to the assumption about future growth of fringe benefits. The next section identifies two broad trends in the growth of fringes during 1950–79: a trend toward relatively more private fringes and another toward relatively more old-age protection. The third section explores the idea that there does not seem to be an *a priori* case for continued growth in fringes in the future. The final section discusses some of the implications of the assumption about the growth rate in fringes for the future financial status of social security.

The importance of assumptions

A worker's total compensation typically consists of cash pay and fringe benefits. The cash wages of covered workers and the earnings of self-employed persons (up to a statutory ceiling) are subject to social security taxes, while fringes are not. Thus, taxable payroll may be thought of as the part of cash earnings of workers and of self-employed persons that is subject to social security taxes.[3]

Table 1 shows that cash payroll as a percentage of total compensation declined steadily over the last 30 years, falling from 95 percent in 1950, to 92.2 percent in 1960, 89.7 percent in 1970, and 84.2 percent in 1980. The reason for the decline is that the growth rate of fringes exceeded that of wages by an average 0.4 percent per year during 1950–80. The "faster growth rate assumption" embodied in official actuarial projections for social security is an extrapolation of this trend.

Based on this assumption, the long-range deficit of the social security cash benefit program (OASDI) is estimated to average 1.52 percent of taxable payroll during 1980–2054, according to the intermediate-cost projection in the 1980 *Trustees Report*.[4] But if the alternative "equal growth rate assumption" were used, the long-range deficit would be reduced to 1.03 percent of taxable payroll. In other words, the "equal growth rate assumption" results in a one-third smaller deficit as measured in terms of taxable payroll.

The difference between 1.52 percent and 1.03 percent is significant because these figures imply vastly different deficits to be met. The "faster growth rate" projection suggests that program expenditures will match revenues only if the social security tax rate were raised each year by 1.52 percent of that year's taxable payroll, or social security benefits were reduced to that extent, or a combination of the two. The taxable payroll in 1980 was estimated at approximately $1,145 billion; 1.52 percent of that amount is $17.4 billion. By comparison, 1.03 percent of that amount—the deficit according to the "equal growth rate" estimate—would be $11.8 billion, or $5.6 billion less.

The "equal growth rate assumption" also affects the program's actuarial position during each of the 25-year subperiods of the 75-year projection, as indicated in table 2. Specifically, there would be a 24-percent greater surplus during 1980–2004, a 41-percent smaller deficit during 2005–29, and a 16-percent smaller deficit during 2030–54.

If the assumption that fringe benefits will continue to grow at a faster rate than cash pay proves to be correct, the percentage of taxable payroll required for paying benefits will rise. This is true even though benefit payments will be somewhat lower because the amount of cash wages credited toward social security benefits will be smaller.

For example, suppose that $840 of every $1,000 of employee compensation is taxable payroll, and that $84 is required for paying social security benefits. The $84 constitutes a 10-percent tax on the $840 taxable payroll.

The 1981 projections

Since the completion of this article, which relates to estimates of social security long-range deficits presented in the 1980 *Trustees Report*, the 1981 *Report* has been released. However, the analysis and conclusions in this article are not altered by the new report.

In the 1980 *Trustees Report*, the 75-year deficit for the period 1980–2054 was estimated at 1.52 percent of taxable payroll according to the intermediate-cost projection, under the "faster growth rate assumption" (assuming fringes to grow faster than wages by 0.4 percent annually). The 1981 *Trustees Report* presents two intermediate-cost projections, II-A and II-B, instead of one as in previous years. According to the 1981 report, the 75-year deficit for the period 1981–2055 is estimated at 0.93 percent of taxable payroll under II-A, and 1.82 percent under II-B.

In response to the author's inquiry about the 1981 projections, the Office of the Actuary of the Social Security Administration has indicated the following:

(1) Among the assumptions which vary between II-A and II-B is that concerning the growth rate of fringes versus that of wages. Although both projections use a "faster growth rate assumption," II-A assumes that fringes will grow faster than wages by an annual compound rate of 0.3 percent, while II-B assumes 0.4 percent (the same as in the 1980 projection).

(2) If the "equal growth rate assumption" were used, the deficit would be reduced to 0.53 percent of taxable payroll under II-A, and to 1.20 percent under II-B. In other words, the long-range deficit under II-A falls by 46 percent, and that under II-B, by 34 percent.

Table 1. Actual and projected distribution of total compensation between cash payroll and fringe benefits, selected years, 1950–2055

[In percent]

Year	Cash payroll	Fringe benefits
Actual:		
1950	95.0	5.0
1960	92.2	7.8
1970	89.7	10.3
1980	84.2	15.8
Projected:		
1990	80.6	19.4
2000	77.5	22.5
2020	71.5	28.5
2035	67.4	32.6
2055	62.2	37.8

SOURCE: Actual distributions were calculated by the author from data provided on computer printouts by the U.S. Department of Commerce. Projections were furnished by the Office of the Actuary, Social Security Administration.

Now suppose, alternatively, only $620 of $1,000 of employee compensation is taxable payroll. With cash wages accounting for a smaller proportion of total compensation subject to social security taxes, social security benefits will also be relatively lower (although not proportionately so, because of the weighted formula used to calculate the benefits of individual workers, and, to a lesser extent, because some of the proportionate decline in cash pay would have occurred in wages already above the taxable ceiling). Taking these factors into account, suppose that $74 would be needed to make the lowered social security benefit payments. The $74 tax on $620 cash pay means a tax rate of 12 percent of taxable payroll. In other words, the lower the taxable payroll as a percentage of total compensation, the higher the required social security tax rate.

Of course, if the assumed growth of fringes as a proportion of total compensation does not take place, expenditures under social security will represent a smaller percentage of taxable payroll. Again, the important point is that differing assumptions about the ratio of cash pay to total compensation can make a significant difference in the projected social security deficit.[5]

Two broad trends in fringe benefits

The following analysis of trends in fringe benefits is based on data relating to "supplements to wages and salaries" published by the U.S. Department of Commerce. These supplements (fringes), together with "wages and salaries," make up the total "compensation of employees." The discussion covers the years 1950, 1960, 1970, and 1979. (Comparable statistics for 1980 were not available at this writing.) In 1979, supplements (or fringes) amounted to 15.4 percent of total compensation of employees.[6]

The fringe benefit data published by the Commerce Department are divided into "employer contributions for social insurance" and "other labor income," and are shown in table 3 as public fringes and private fringes, respectively. Two broad trends concerning fringes in the past three decades are readily discernible from these data. The first concerns the changing distribution of fringes between those sponsored by governmental units (public fringes), and those under the aegis of the private sector (private fringes). While the total dollar volume of fringes increased during 1950–79, a decreasing proportion was attributable to public fringes and a growing proportion to private fringes. (See table 4.) In 1950, the distribution was 53.3 percent for public fringes and 46.7 percent for private plans. By 1979, the direction was reversed: 47.3 percent of all fringes were public, and 52.7 percent were private.

Relative to the total, the individual components of public fringes (except medicare) declined slightly or stabilized, especially since 1960. By far the largest public fringe is OASDI, which grew from 16.7 percent in 1950 to 25.6 percent in 1970, and then declined to 22.3 percent in 1979. Medicare hospital insurance, enacted in 1965, increased from 3.7 percent of total fringes in 1970 to 4.7 percent in 1979.

With regard to private fringes, pension and profit sharing, group health insurance, and group life insurance as a category increased in relative importance, rising steadily from 35 percent of total fringes in 1950 to 45.6 percent in 1979. However, the individual items in this category showed somewhat different developments, as indicated in table 3: (1) private pension and profit sharing plans, the most important of all fringes in 1979 (accounting for 24.4 percent of all fringes, compared with 22.3 percent for OASDI), increased from a little over one-fifth of the total in 1950 to nearly one-quarter in 1979; (2) private group health insurance plans nearly

Table 2. OASDI surplus or deficit as a percentage of taxable payroll under different assumptions about the rate of fringe benefit growth, selected periods, 1980–2054

Period	Surplus (+) or deficit (−)		Change in surplus or deficit due to difference in assumption
	"Faster growth rate assumption" [1]	"Equal growth rate assumption" [2]	
75-year annual average:			
1980–2054	−1.52	−1.03	+ .49 (32 percent smaller deficit)
25-year annual averages:			
1980–2004	+ 1.19	+ 1.47	+ .28 (24 percent greater surplus)
2005–2029	−1.17	−.69	+ .48 (41 percent smaller deficit)
2030–2054	−4.58	−3.86	+ .72 (16 percent smaller deficit)

[1] Data are from the *1980 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Disability Insurance Trust Funds (The 1980 Trustees Report)*, House Document No. 96–332, 96th Cong., 2d. Sess., p. 48.

[2] These data were provided by the Office of the Actuary, Social Security Administration, and are based on the same assumptions underlying the intermediate-cost projection in the *1980 Trustees Report*, except for that concerning the rate of growth of fringes.

Table 3. Amount and percentage distribution of employer costs for fringe benefits by sponsoring sector, selected years, 1950–79

[Amounts in millions of dollars]

Type of benefit by sector	1950		1960		1970		1979	
	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent
Total fringe benefits	$7,818	100.0	$23,000	100.0	$63,240	100.0	$225,026	100.0
Total public fringes[1]	4,164	53.3	11,780	51.2	30,733	48.6	106,432	47.3
OASDI (social security cash benefits)	1,308	16.7	5,632	24.5	16,182	25.6	50,161	22.3
HI (Medicare hospital insurance: social security noncash benefits)	([2])	([2])	([2])	([2])	2,342	3.7	10,487	4.7
State and local employees' retirement	510	6.5	1,775	7.7	5,091	8.1	17,425	7.7
Federal civilian employees' retirement	316	4.0	838	3.6	2,215	3.5	6,785	3.0
Railroad retirement	282	3.6	297	1.3	517	0.8	1,671	0.7
Workers' compensation (Federal, State, and local governments)	188	2.4	413	1.8	872	1.4	3,949	1.8
Unemployment insurance (State, Federal, and railroad)	1,473	18.8	2,808	12.2	3,475	5.5	15,906	7.1
State cash sickness benefits	7	([3])	7	([3])	28	([3])	43	([3])
Total private fringes	3,654	46.7	11,220	48.8	32,507	51.4	118,596	52.7
Pension and profit sharing	1,713	21.9	4,866	21.2	13,050	20.6	54,899	24.4
Group health insurance	745	9.5	3,374	14.7	12,099	19.1	41,574	18.5
Group life insurance	285	3.6	1,080	4.7	2,891	4.6	6,009	2.7
Insurance for workers' compensation	791	10.1	1,529	6.6	3,786	6.0	13,943	6.2
Supplemental unemployment insurance	([2])	([2])	120	0.5	111	0.2	590	0.3
Other	120	1.5	251	1.1	570	0.9	1,581	0.7

[1] The total public fringes in the Commerce Department data also include insignificant amounts of veterans' life insurance which are not shown here because they are not an employer-paid fringe benefit.

[2] Program not in effect.

[3] Less than 0.05 percent.

NOTE: Due to rounding, sums of individual items may not equal totals.

SOURCE: Computed from data furnished by the U.S. Department of Commerce.

doubled in relative importance over the same period, rising from 9.5 to 18.5 percent of all fringes; and, (3) private group life insurance declined relatively, from 3.6 percent of the total in 1950 to 2.7 percent in 1979.

The second broad trend pertains to the changing distributions of fringes that provide retirement benefits, primarily deferred compensation (old-age protection) and those that provide benefits only when contingencies such as illness, disability, or unemployment occur (current protection). During 1950–79, there was a clear movement toward relatively more old-age protection and less current protection. The distinction between these two types of protection is not clear-cut, particularly in the case of social security, but an approximation may be achieved by assigning 80 percent of OASDI to the cost for retirement benefits (including benefits for surviving spouses age 60 and over) and the remaining 20 percent to benefits for persons below retirement age.[7] Thus, old-age protection encompasses Federal civilian employees' retirement, State and local employees' retirement, railroad retirement, private pension and profit sharing plans, medicare hospital insurance, and the approximately 80 percent of OASDI paid to retirees, or to their surviving spouses age 60 and over. Current protection includes unemployment insurance, workers' compensation, group health and life insurance, supplementary unemployment insurance, and private insurance for workers' compensation, plus the remaining 20 percent of OASDI.

Table 4. Employer costs for public and private fringe benefits as percent of total fringe benefits, selected years, 1950–79

Type of benefit	1950	1960	1970	1979
Total public fringes[1]	53.3	51.2	48.6	47.3
OASDHI	16.7	24.5	29.3	27.0
State and local government employees' retirement, Federal civilian employees' retirement, and railroad retirement	14.1	12.6	12.4	11.4
Workers' compensation, and unemployment insurance	21.2	14.0	6.9	8.9
Total private fringes[2]	46.7	48.8	51.4	52.7
Pension and profit sharing, group health insurance, and group life insurance	35.0	40.6	44.3	45.6
Private workers' compensation, private supplemental unemployment insurance	10.1	7.1	6.2	6.5

[1] Includes State cash sickness benefits, and veterans' life insurance, each of which amounted to minor percentages.

[2] Includes "others" which amount to minor percentages as shown in table 3.

NOTE: Due to rounding, sums of individual items may not equal totals.

As indicated in table 5, fringes that provide old-age protection rose from 49.5 percent of the total in 1950 to 53.4 percent in 1960, 57.2 percent in 1970, and 58.4 percent in 1979. By contrast, those providing current protection declined from 50.5 percent in 1950 to 46.6 percent in 1960, 42.8 percent in 1970, and 41.6 percent in 1979.

Factors affecting growth of fringes

Fringe benefits provided by the private sector were rare prior to World War II. During the war, when the War Labor Board held down wages, employers seeking workers in a tight labor market offered some inducements in the form of noncash compensation. Largely a

post-World War II phenomenon, private pensions have grown significantly since 1950, having been ruled a proper issue for collective bargaining by the U.S. Supreme Court in the *Inland Steel Case* of 1949. Since the war, other health and welfare benefits have also developed rapidly.

The swift expansion in the scope and variety of fringes attests to the useful functions they serve for employers, workers, and unions. For employers, fringes are a tool for personnel management and for promoting efficiency by raising morale and reducing turnover. From the workers' point of view, group plan participation reduces the cost of fringes through administrative and other scale economies, and enables some workers to secure coverage or protection they could not otherwise afford. Pensions, and health and welfare benefits provide a sense of economic security to these workers and their families. And, workers may prefer at least some level of fringes to cash compensation because the former are not subject to taxes. (In fact, inflation and the resulting income-tax "bracket creep" may have contributed greatly to the growth of fringes, particularly for higher-paid workers.) Finally, inasmuch as negotiated fringes promote economic security for union members, adding new fringes and improving existing ones tend to strengthen unions as organizations.

Some have asserted that as long as tax laws give preferential treatment to fringes and inflation persists, workers will seek fringes instead of cash compensation. But how long will workers prefer more fringes to higher wages? Is there an *a priori* case for the contention that outlays for fringes will continue to rise faster than cash wages?

Because cash pay is income available to the worker to spend, and fringes are not, a shift to fringes deprives workers of some freedom of choice.[8] Intuitively, one might assume that there is a limit to people's willingness to have less and less discretion concerning their pay.

Although workers may value fringes for the benefit they yield, many fringes fall into the category of "current protection." There is probably a point at which people become reluctant to trade cash income for fringe benefits they may never have to use.

And, even when the growth in fringes is expected to yield deferred income—as in the case of greater "old-age protection"—there must be a limit to the tradeoff of current for future consumption. The desire to raise (or simply to maintain) one's current standard of living would be a powerful counter to continuation of past trends in growth of fringes. The traditionally low savings rate in this country is evidence of a general preference for current consumption over future security.

Inflation affects fringes in several conflicting ways. Inflation may cause higher-paid individuals to prefer fringes that are not subject to tax so as to avoid higher marginal income tax rates. Conversely, people who earn less may opt for more cash pay in order to meet the higher cost of living. And, finally, employers may resist the rising costs of fringes by curbing their growth, eliminating some fringes, or requiring cost-sharing by employees.[9]

To the extent that inflation has induced a strong demand for fringes, much of that stimulus might disappear if income tax brackets were indexed for inflation, or if income taxes were cut. And, workers might well prefer more cash pay to fringes if there were stronger income tax incentives for private savings for retirement. There are currently a number of legislative proposals to expand the Keogh Plan and Individual Retirement Accounts.[10]

Moreover, if fringes continue to rise as a proportion of total compensation, the Treasury Department might be increasingly active in questioning the tax-exempt status of employer contributions to benefit plans, except for those contributions traditionally exempted. Section 61 of the Internal Revenue Code and the regulations issued under that section define gross income as including "all income from whatever source derived," and define income as "compensation for services," whether in the form of services, meals, accommodations, stock, other property, or cash.

The last 30 years were a period in which fringes began to be developed, and much of their rapid growth could be attributable to the developmental stage of an emerging institution. By now many workers already have, to a greater or lesser extent, health plans, pensions, and the like. Even if these plans are improved, new kinds of fringes are added, and workers not now

Table 5. Composition of employer costs for fringe benefits by type of protection, selected years, 1950–79

[In percent]

Type of protection	1950	1960	1970	1979
Old age protection	49.5	53.4	57.2	58.4
OASDI (80 percent of OASDI)	13.4	19.6	20.5	17.8
HI (Medicare hospital insurance)	...	...	3.7	4.7
State and local government employees' retirement, Federal civilian employees' retirement, and railroad retirement	14.1	12.6	12.4	11.4
Private pension and profitsharing	21.9	21.2	20.6	24.4
Current protection[1]	50.5	46.6	42.8	41.6
OASDI (20 percent of OASDI)	3.3	4.9	5.1	4.5
Private group health and private group life insurance	13.1	19.4	23.7	21.2
Workers' compensation, and unemployment insurance (public)	21.2	14.0	6.9	8.9
Workers' compensation, and unemployment insurance (private)	10.1	7.1	6.2	6.5

[1] Includes State cash sickness compensation, veterans' life insurance, and "other," which amounted to minor percentages as indicated in table 3.

NOTE: Due to rounding, sums of individual items may not equal totals.

covered (or not adequately covered) are given first-time (or improved) coverage, there are no obvious reasons for fringes to increase faster than wages for the next 75 years.

The preceding discussion suggests that there is not an *a priori* case for the proposition that fringes will continue to grow faster than cash wages, particularly at rates observed over the last 30 years. It may be that factors tending to restrain the continued growth of fringes relative to wages will outweigh those tending to promote relative growth. If the future rate of growth in fringes stays the same as the rate of growth in wages, the 1980 ratio of cash pay to total compensation will persist for the next 75 years. What are the implications for the social security system should this so-called "equal growth rate assumption" prove correct? And, conversely, what might happen if the "faster growth rate assumption" is borne out by reality?

Implications of different assumptions

One consequence of an "equal growth rate" is that taxable payroll would constitute a greater proportion of total compensation than is now officially projected. As taxable payroll increases (up to the taxable earnings ceiling), so would social security benefit payments, because social security benefits are related to a worker's earnings history. As more wages become taxable for social security purposes, more wages would be credited toward social security benefits.

However, social security benefit payments would not rise as fast as the taxable payroll for two reasons. First, some of the increase in cash pay would not be subject to social security taxes at all (or be credited toward social security benefits) because it would exceed the taxable earnings ceiling. In other words, cash wages above the statutory limit for social security taxes are irrelevant for our purposes, because neither social security taxes nor social security benefits will be affected. It is well to recognize, however, that only about 10 percent of total payroll is currently above the taxable ceiling.

Second, and even more important, is the effect of the weighted formula for calculating workers' OASDI benefits. For example, consider an individual earning a cash salary of $22,000 in 1981, and fringe benefits of $5,000: fringes amount to 18.5 percent of the total compensation of $27,000. If the worker's salary had been $24,000 and fringes, $3,000 (or 11.1 percent of total compensation of $27,000), social security tax payments would have been 9.1 percent greater; but the social security benefit accrual rate (based on the 1981-cohort formula) would have been only 4.1 percent higher.[11] In other words, social security taxes would increase more than social security benefits would.

Inattention to the effect of growing fringes on the size of social security deficits has the potential of exaggerating the concern over the financial health of the program. The above analysis clearly indicates that the long-range social security deficit would be smaller than is officially estimated if an "equal growth rate assumption" were used. But what if the "faster growth rate assumption" proves true?

It may be surprising, but social security's long-range deficit might still be overstated, if the following development takes place. Given the trends toward relatively more private fringes and old-age protection, increases in future benefits would most likely be for old-age protection sponsored by the private sector. This implies that, as private pension plans spread or are improved, the relative role of social security will diminish. The result would be a distribution of old-age protection between social security and private pensions that is different from that embodied in the official projection. With a reduced relative role for social security, program expenditures should fall, and the deficit would again be smaller than estimated.

OF COURSE, both the "faster growth rate assumption" and the "equal growth rate assumption" may be unrealistic, and the future growth rate of fringes may lie somewhere between or outside these assumptions. Given the linkage between future growth rate in fringes and the size of the projected deficit, any reduction in the rate of increase in fringes from that currently assumed will reduce the long-range social security deficits. And, even should the disproportionately high growth of fringes continue, or accelerate, deficits may not reach levels which would otherwise be expected because of shifts in the composition and sponsorship of benefits. □

FOOTNOTES

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The views presented in this article are the author's own, and are not necessarily shared by any of the aforementioned persons, or by the organizations with which the author is affiliated.

[1] "Fringe benefits" refers to a large number of noncash forms of compensation that many workers receive as part of the total compensation package. In deference to common usage, the term "fringe benefits" or "fringes" will be used interchangeably with "employee benefits."

[2] Each of these percentages expresses fringe benefits as a ratio to to-

tal compensation. If fringes were expressed as a percentage of cash payroll, as is common in employee benefits parlance, the 15.8 percent of total compensation in 1980 would translate into 18.8 percent of payroll, and the 37.8 percent of total compensation being projected for the year 2055 by the Office of the Actuary becomes 60.8 percent of payroll. Moreover, the fringes being included in these percentage figures do not include "payments for time not worked" (lunch breaks, coffee breaks, paid holidays, and paid vacations).

[3] The official definition of the taxable payroll is:

> "the amount which, when multiplied by the combined employer-employee tax rates, yields the total amount of taxes that would be paid by employers, employees, and the self-employed. In this way expenditures, when expressed as percent of taxable payroll, can be compared directly to the combined employer-employee tax rate to determine whether the system is operating at a surplus or deficit. In practice, the taxable payroll is calculated as a weighted average of the earnings of employers, employees, and the self-employed, where the weighting is done to take into account the lower tax rates on self-employment income, on tips, and on multiple-employer 'excess wages' as compared to the combined employer-employee rates."

See Steven F. McKay, *Long-Range Cost Estimates for Old-Age, Survivors, and Disability Insurance System, 1980*, Actuarial Study No. 83 (Social Security Administration, Office of the Actuary, 1980), p. 10.

[4] The shortfall of 1.52 percent of taxable payroll was the difference between expenditures and tax rates (both expressed as a percent of taxable payroll) that are scheduled in the law currently in effect; that is, the type and levels of benefits, as well as the combined tax rates now set forth in the law, are unchanged in all future years. Under the intermediate cost projection, annual expenditures for OASDI during 1980–2054 average 13.74 percent of taxable payroll, while the combined employer-employee tax rate for OASDI averages 12.22 percent. See *1980 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Disability Insurance Trust Funds (The Trustees Report)*, House Document No. 96–332, 96th Cong., 2d. Sess., p. 4.

[5] Although the focus of this article is the long-range deficit, it should be emphasized that differing growth rates in fringes will have important effects on short- and medium-range deficits as well. For example, a decline in the proportion of total compensation going to fringes will have the effect of reducing deficits in the immediate future for at least two reasons: (1) There is a lag between the time workers pay higher social security taxes based on greater cash wages and the time they receive the social security benefits based on those greater wages; and, (2) although social security benefits paid to those coming on the rolls will increase somewhat because of the earnings indexing factor (that is, because they are based on average annual covered wages which will be higher as a result of the workers' greater cash earnings), increases in benefit payments due to this factor are much smaller in comparison to increases in social security taxes based on higher wages now prevailing. The data for the period 1980–2004 in table 2 illustrate the point.

[6] The reader may be struck by this seemingly small percentage. For example, the widely quoted study by the Chamber of Commerce of the United States (*Employee Benefits, 1979* (Washington, 1980), p. 30) stated that total fringes amounted to 31.8 percent of payroll in 1979.

The Chamber's figure differs significantly from the 15.4 percent we computed from Commerce Department data for two major reasons: (1) the Chamber's figures include "payments for time not worked"; and, (2) the Chamber relates fringes to cash payroll, while this discussion relates fringes to total compensation in using the Commerce Department data. When the Chamber of Commerce data are adjusted (to remove payments for time not worked from fringes, and to relate fringes to total compensation), fringe benefits in 1979 amounted to 15.7 percent of total compensation, which is very close to the 15.4 percent figure based on the Department of Commerce data.

Another major source of data on fringes is the BLS Employment Cost Index (ECI). The first ECI publication presented wage and salary data for the fourth quarter of 1975. The program was subsequently expanded to include employee benefit costs, and recently published its first annual estimates of total compensation (wages plus fringes) relating to calendar 1980. The fringes covered in the index included payments for time not worked, such as paid holidays, and paid vacations.

[7] The distinction between old-age protection and current protection is still not clear-cut even with the indicated 80–20 division of employer contributions for OASDI. Federal civilian employees' retirement, State and local employees' retirement, and railroad retirement systems also provide disability and survivors' benefits to some extent. Medicare hospital insurance is included in old-age protection because it is a program for the elderly, although it covers some disabled persons regardless of age. However, the main trend identified would not be affected by fine-tuning the data.

[8] It is possible that the development of "cafeteria" or flexible benefit plans, under which workers are given a choice among different types and amounts of fringes (beyond certain basic benefits that every worker must have), will alleviate the problem of loss of freedom of choice. However, any conclusions must await widespread implementation of such plans.

[9] Conventional designs for fringe benefits have not adapted to changing life-styles and work-styles (such as two-earner families) in recent years. Therefore, there are at present some duplicative, costly, and not-so-useful fringes. If cafeteria or flexible benefit plans described in the previous footnote were widely adopted, they might well result in cost saving or cost control in the future.

[10] The recently enacted Economic Recovery Tax Act of 1981 provides for indexing of income taxes beginning in 1985, for overall tax rate reductions, and for expanded use of Keogh Plans and Individual Retirement Accounts.

[11] In 1981, the combined employer-employee social security tax rate for OASDI is 10.7 percent. The social security tax on the $22,000 salary is $2,354 and on $24,000, $2,568; $2,568 is 9.1 percent larger than $2,354.

In 1981, the primary insurance amount (PIA) is calculated by adding the products of the following three steps:

(a) 90 percent of the first $211 of the average indexed monthly earnings (AIME), plus
(b) 32 percent of the AIME over $211 and through $1,274, plus
(c) 15 percent of the AIME over $1,274.

For $22,000, AIME of $1,833 gives PIA of $614.00, and for $24,000, AIME of $2,000 gives PIA of $639.00; $639.00 is 4.1 percent larger than $614.00.

APPENDIX: Impetus for this analysis

The author's curiosity about the effect on social security's deficits of the assumption concerning the growth rate of fringes was first aroused by the accompanying tabulation which he constructed from tables 14 and 15 of a September 1980 actuarial study published by the Social Security Administration.

Table 14 of that study presents OASDI expenditures as a percentage of taxable payroll, while table 15 shows the same expenditures as a percent of gross national product. Each table provides data for selected years from 1980–2055, the 75-year annual average, and the averages for the three 25-year subperiods. According to the author's calculations, the rates of increase between 25-year periods are much larger when OASDI expendi-

Table A-1. Projected OASDI expenditures as a percent of taxable payroll and as a percent of gross national product, and changes between selected periods, 1980–2054

Period	Expenditures as percent of taxable payroll	Rate of increase between periods (in percent)	Expenditures as percent of gross national product	Rate of increase between periods (in percent)
25-year annual averages:				
1980–2004	10.66	...	4.58	...
2005–2029	13.57	27	5.32	16
2030–2054	16.98	25	6.08	14

NOTE: OASDI expenditures were based on the intermediate-cost projection.
SOURCE: Calculated from Steven F. McKay, *Long-Range Cost Estimates for Old-Age, Survivors, and Disability Insurance System, 1980,* Actuarial Study No. 83 (Social Security Administration, Office of the Actuary, 1980), pp. 51–52.

tures are expressed as a percentage of taxable payroll than when the same expenditures are expressed as a percentage of gross national product. The actuarial study provides no discussion of the difference.

The author discovered that the reason for the discrepancy is the assumption embodied in the official actuarial procedure that fringes will grow faster than wages by 0.4 percent per year during 1980–2054. In response to his inquiry, the Office of the Actuary of the Social Security Administration indicated that the annual differential growth rate of 0.4 percent was chosen because it was the average experienced during 1951–80. Social security actuaries also noted that the rate was actually about 0.3 percent per year during the 1950's and 1960's, and about 0.7 percent annually during the 1970's.

The social security penalty

Secondary earners are dually entitled to primary benefits as workers and to secondary benefits as wives. But they often do not work long enough in paid employment to obtain primary benefits as workers which are higher than their secondary benefits as wives. The dual entitlement provision of social security guarantees them a minimum benefit, defined by the wife's benefit. That is, if the primary benefit based on her earnings record is less than her wife's benefit, she will receive a supplemental benefit equal to the difference. The existence of this minimum guaranteed benefit causes the appearance of an inequity. Since wives are guaranteed the wife's benefit as a minimum, wives who combine homemaking with part-time or intermittent work appear to get no return or a very low return for the social security taxes that they pay while in the labor force.

—JUDITH B. FINN
The Treatment of Women Under Social Security: A Critique of the Proposed Reforms (Washington, The Free Congress Research and Education Foundation, 1981), p. vi.