

Social Security

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Chapter 8

Medicare Financing Principles and Provisions

The two separate portions of Medicare, Hospital Insurance (HI) and Supplementary Medical Insurance (SMI), have quite different characteristics, especially as to eligibility provisions. For this reason, the basic financing principles underlying them are completely different. On a long-run basis, HI is financed by payroll taxes levied on employed and self-employed persons in covered work and on employers, while SMI is financed by premium payments of those currently protected and by matching contributions (not necessarily *equally* matching) from general revenues.

Under HI, the vast majority of the persons paying taxes at any given time do not have immediate benefit protection if the need for hospitalization should occur at that time. Instead, it may be said that the HI contributors are accumulating earnings credits which may entitle them and their eligible auxiliaries to HI-benefit protection when they reach age 65, or earlier if they become disabled. Of course, there are some contributors who are aged 65 or over, or whose eligible spouse is of this age, so there are instances of simultaneous tax payment and benefit protection. Conversely, under SMI, protection is always concurrent with premium payment and is on an individual basis, rather than a family basis, because it never applies to one family member merely because another is covered.

HI Financing Principles

The general financing principle of HI is that it should be completely self-supporting, as to both benefit payments and administrative ex-

penses, from the taxes received from insured persons covered by the program and from employers. This principle does not require that a fixed, level tax rate should be prescribed in the law for all future years, but rather that there should be a schedule of rates which, over a long-range future period, will accomplish this result. Such financing also consists of interest earnings obtained from the investment of the available assets. The only exceptions to this general principle are in the case of noninsured persons who meet the necessary eligibility requirements (their costs are met from general revenues) and in the case of other noninsured persons who elect coverage on a voluntary, hopefully self-supporting premium basis.

The persons who are subject to HI taxes on their earnings are the same as those under the OASDI and RR programs, plus all federal employees who are not covered under OASDI (primarily those who were hired before 1984 and are under the Civil Service Retirement System or some similar one) and all state and local government employees not under OASDI who were first hired after March 1986 (and also such employees hired before April 1986 where employer elects HI-only coverage).

The methodology for making the long-range cost estimates for the HI system is described in Appendix 8-1.

Individual-Equity Concept

Under OASDI, when individuals contribute more, their monthly benefits will generally be larger, either because of higher earnings or because of greater continuity of employment. HI has an entirely different principle. The same benefits are provided for all who meet the eligibility requirements, regardless of their earnings or their length of contributions in excess of the minimum period required.

The status of married women workers under HI is worthy of note, with the same being true for married men. Under OASDI, a married woman who has covered employment of her own receives, in essence, whichever benefit is the larger—that from her own earnings or that from her husband's earnings. In many instances, she will receive only the latter. Thus it may be argued that she does not obtain anything from her own taxes other than the possible lump-sum death payment available from her own earnings record. On the other hand, there are many instances where her own earnings record produces benefit rights or additional benefit rights. This occurs when her own benefit is larger than that derived from her husband's earnings record, or when she claims benefits before her husband retires from full-time

substantial employment, or in the case of disability or survivor-benefit protection.

Under HI, if a woman has benefit eligibility from her husband's earnings record, then having such eligibility on her own record will rarely be of any additional value. The only exceptions are if she is much older than her husband and reaches age 65 before he is aged 62, or if they are divorced and their marriage had lasted less than 10 years. However, a female worker must pay the HI taxes even if she will be entitled to HI benefits through her husband, and vice versa.

If HI operated on the same financing principles as private insurance, one could well raise several critical questions. First, why should individuals contribute for more than the minimum period required for eligibility? Second, why should married women (or men whose wives are the primary wage earners) be required to contribute at all? Third, what is the advantage to a high-paid employee of paying larger taxes than a low-paid worker? Fourth, for those with maximum taxable earnings, what benefit will accrue to them if the taxable earnings base is increased? In all of these cases, no additional benefit protection is generated by the additional taxes.

The answer to the foregoing questions is simply that social insurance in general—and HI in particular—is (and must be) guided largely by social-adequacy principles rather than individual-equity ones. In fact, as may be seen from the foregoing discussion, the social-adequacy principle is even stronger in HI than in OASDI.

It can be argued that any individual-equity comparisons and considerations should be made for OASDI and HI combined, and not for HI separately. Under these circumstances, the value of the HI protection can be regarded as a uniform, flat benefit for all persons. Even so, it is difficult to show that the young high-paid employees get their money's worth under the combined OASDI and HI systems based on the employee tax alone (although this is probably true when considering OASDI alone). However, for the *average* young employee, the "money's worth" criterion is met for the combination of the OASDI and HI systems.

Financing and Investment Procedures

Insofar as HI is concerned, the financing principle of self-support from contributions and investment earnings is effectuated by the provisions of the law that establish a long-range tax schedule. In the author's opinion, these rates should, according to the best actuarial cost estimates available, provide sufficient income to support the program

over a 25-year period or, preferably, over a 75-year period. In addition, this financing should be sufficient to leave a balance in the fund at the end of that time amounting to one year's outgo.

A separate trust fund is established for HI in the same manner as the OASI and DI Trust Funds. All receipts from taxes, investment earnings, payments from the General Fund of the Treasury for the costs relating to noninsured persons who were blanketed-in without cost to themselves, and the premium payments from the other noninsured persons who elect to participate flow into the HI Trust Fund. Likewise, all benefit payments to hospitals and other institutional providers of services and all administrative expenses, including those of the fiscal intermediaries, flow from it. The investment procedures are the same as those for the OASI and DI Trust Funds (see Appendix 4-2). Just as with OASDI, payments from the General Fund are made for the additional costs resulting from military-service and Japanese-internee wage credits (see Chapter 2).

Allocation of Costs among Contributors

Ever since OASDI began operations in 1937, the taxes with respect to employees have been equally divided between them and the employer (with the sole exception of 1984). There is no actuarial reason for this division; rather, it may be said that this procedure has aesthetic logic and appeal to the general public as being a fair sharing basis. It may be noted that, in some foreign social insurance systems, the share of the employer is more than 50 percent. When HI was established, the 50–50 allocation between employers and workers was adopted without question.

The situation for the self-employed was, however, different under HI than under OASDI until the 1983 Act. When this category was initially covered under OASDI (in 1951), a compromise basis was adopted for its tax rate—namely, 1½ times the employee rate. When the 1965 Act was being developed, the projected self-employed rate under OASDI was thought by some to create a relatively heavy financial burden. Accordingly, a ceiling of 7 percent was then placed on the OASDI rate for the self-employed (if it should rise to this level in the future), which was eliminated by the 1977 Act after being effective in 1973–77. The 1965 Act set the HI rate for the self-employed at the employee rate for all years. The 1983 Act changed the tax-rate basis for the self-employed so that they now pay the combined employer-employee tax rate, but with reductions to approximate the business-expense deductions with regard to the employer tax in computing corporation income tax (see Chapter 2 for the details).

Self-Supporting Principle

Just as under OASDI, the HI program is intended to be on a self-supporting basis over the long range from the worker and employer taxes insofar as the benefit and administrative costs for insured persons are concerned. This is also (hopefully) the case for noninsured persons who elect to participate by paying individual premiums. For analysis of the long-range actuarial status of HI as to the dollar amount of its unfunded liabilities in various past years, see Appendix 4-1, where this is considered for both OASDI and HI.

The benefit and administrative costs applicable to noninsured persons who were blanketed-in at the start of the program are met from the General Fund of the Treasury by periodic payments in reimbursement to the HI Trust Fund. Any delay in making such payments is recognized by appropriate interest-adjustment payments.

The Health Technical Panel of the 1991 Advisory Council on Social Security recommended that 75-year estimates, including comparisons with the Gross National Product and HI taxable payroll, should be made (see Appendix G). The 1991 Trustees Report went only part way, by presenting 10-year projections.

HI Financing Provisions

Tax Rates

HI has, in the past, been financed by an increasing schedule of tax rates that are applicable to earnings in covered employment up to the maximum earnings base, which until 1991 has been the same as the maximum earnings base for OASDI (see Table 8.1, which also shows the combination of these and the OASDI tax rates for purposes of comparison). The same HI tax rate was payable by employers, employees, and the self-employed for 1966–83, but since then the self-employed pay the combined employer-employee rate (although they have a business-expense deduction for income-tax purposes for the employer portion thereof).

The HI tax schedule was on an increasing basis, just as was OASDI. The reason for this was to match up income and outgo approximately, so that current-cost financing would be present. The HI tax rate is scheduled to be level after 1985. It is likely that, due to the abrupt change in the age structure of the population shortly after 2000, a much higher HI tax rate will be necessary then.

In 1991, the maximum taxable earnings base for HI was increased

TABLE 8.1. HI and OASDI Tax Rates under Present Law

<i>Period</i>	<i>HI Rate*</i>	<i>Combined HI and OASDI Rate</i>	
		<i>Employer-Employee</i>	<i>Self-Employed</i>
1966	0.35%	8.4%	6.15%
1967	0.50	8.8	6.40
1968	0.60	8.8	6.40
1969–70	0.60	9.6	6.90
1971–72	0.60	10.4	7.50
1973	1.00	11.7	8.00
1974–77	0.90	11.7	7.90
1978	1.00	12.1	8.10
1979–80	1.05	12.26	8.10
1981	1.30	13.3	9.30
1982–83	1.30	13.4	9.35
1984	1.30	13.7	11.3
1985	1.35	14.1	11.8
1986–87	1.45	14.3	12.3
1988–89	1.45	15.02	13.02
1990 and after	1.45	15.3	15.3 [†]

*Same rate for employer, employee, and self-employed for 1966–83. Thereafter, the self-employed pay twice these rates (but their combined OASDI-HI tax rate is reduced, as shown by the last column, as an allowance for certain business-expense deductions for income-tax purposes).

[†]Certain business-expense deductions for income-tax purposes are applicable with respect to their OASDI-HI taxes.

on an ad hoc basis to \$125,000—rather than have the automatic-adjustment procedure apply (as it did for OASDI, which has a base of \$53,400 for 1991). After 1991, the HI base will be adjusted automatically in the same manner as is done for OASDI, but building on the 1991 base—and is \$130,200 for 1992 and \$135,000 for 1993. This change was made primarily for budget-deficit-reduction reasons, although the HI program will certainly be able to use the additional financing over the long run! The methodology for making the HI cost estimates is described in Appendix 8-1.

According to the cost estimates made just before the enactment of the 1977 Act, the HI Trust Fund would have a satisfactory cash-flow situation for about a decade. The fund ratio (trust-fund balance at the beginning of the year as a percentage of disbursements during the year), according to the intermediate-cost estimate, would be about 50 percent during 1980–83. Thereafter, it would decrease until it approaches zero in the late 1980s. (The critical level for the fund ratio of 9 percent applicable for the OASI and DI Trust Funds—see Chapter 4—does not apply to the HI Trust Fund, because it has more or less uniform flows of both income and outgo on a day-by-day basis.)

The cost estimates made after the enactment of the 1977 Act showed diverse trends. The developing adverse trend of hospital costs was counterbalanced, in part, by legislative changes which tended to control costs or which directly lowered costs. The latter included the elimination of the carry-over deductible, the ad hoc increase in the initial deductible, and the several extensions of coverage (to all federal employees by legislation in 1982, to all nonprofit employees in the 1983 Act, and to new hires of state and local governments after March 1986 by legislation in early 1986). Such extension of coverage reduces cost because the vast majority of such persons would have qualified anyhow on the basis of other employment or that of their spouses.

The 1977 Act juggled the HI tax rates, lowering them somewhat. This was done because this legislation was not intended, in balance, to affect the Medicare program; the reasoning was that it should be left alone until legislative action was taken on national health insurance. The three legislated ad hoc increases in the maximum taxable earnings base (which undoubtedly would result in higher bases than the automatic-adjustment provisions would have produced) would provide more income for HI for all future years (but not additional benefit liabilities in all future years). Accordingly, to maintain the financing of HI in about the same relative position, the HI tax rates were lowered (and, in essence, the rate decreases were transferred to OASDI).

The pattern of the decreases in the HI tax rates made by the 1977 Act was rather erratic. Such decrease in the combined employer-employee tax rate was 0.2 percent for 1978 and 0.1 percent for 1979–84 and for 1986 and after, with no change for 1985.¹ The larger decrease for 1978 was made to provide more financing for the DI Trust Fund, which was then apparently in desperate straits (see Chapter 4).

The cost estimates made in the 1980s continued to show that the cash-flow situation of the HI Trust Fund would be satisfactory until at least the latter part of the decade—due largely to the increasing schedule of tax rates, but in part to the legislative changes as to benefits and coverage and as to provider reimbursement. Nonetheless, serious and continuing financing problems loom ahead, and if nothing else is done, higher tax rates than now scheduled will be required (see Chapter 10 for more specific details).

1. The absence of a change in the tax rate for 1985 was a matter of chance, due to the legislative procedure in the conference committee, which reconciled the differences between the House-passed bill and the Senate-passed bill.

Determination of Premium Rates for Voluntary Coverage

The 1972 Act provided for voluntary individual coverage of non-insured persons who were not blanketed-in on a "free" basis under the original HI legislation. The latter consisted generally of persons who had attained age 65 before 1968, plus the small number who attained age 65 before 1975 and had some QC but not enough to be fully insured. Such voluntary-coverage persons pay a premium rate which is intended to meet the full cost of the benefit protection and the accompanying administrative cost. Persons who enroll late pay an extra premium over the standard rate, that was computed in exactly the same manner as is done under SMI (as described later in this chapter) until July 1986. Beginning then, late enrollments pay only 10 percent extra if they were not enrolled in the past for 12 months or more when they could have been enrolled. Furthermore, this extra charge is payable for only twice the number of full years that they were not so enrolled.

The standard premium rate was established at \$33 per month for July 1973 through June 1974 by the 1972 Act. This was based on actuarial estimates of what the cost for this small, atypical group would be. The law also provided that this rate shall be automatically adjusted for future periods in accordance with the changes in hospital costs for insured persons covered under the program. Specifically, the rate for subsequent years was \$33 multiplied by the ratio of (1) the inpatient hospital deductible for the calendar year in which the premium year commences to (2) \$76,² rounded to the nearest whole dollar.³ The rate so determined for the year beginning January 1988 (after which a different procedure was followed, as described later) was \$234. The corresponding rates for earlier and later years are shown in Table 7.4.

The analysis in the 1976 HI Trustees Report indicated that the \$33 rate initially determined as applicable for the year beginning July 1973 was slightly more than adequate. The subsequent experience for this group was apparently unfavorable, and the increases that would have been necessary to have a self-supporting rate were more than the basis in the law provided. It was estimated that, for the year end-

2. This amount is the deductible that the provisions of the law produced for 1973, although the actual deductible then was set at \$72, due to an unusual ruling of the Price Commission, as discussed in Chapter 6.

3. The premium-payment period was changed to a calendar-year basis by the 1983 Act, so as to coincide with the revised COLA date for OASDI benefits and the revised SMI premium-payment period.

ing June 30, 1977, the rate should have been about \$52 to meet the cost for that year (as against the actual \$45).⁴ The resulting loss to the HI Trust Fund, although only about \$1 million for that year (because of the small number of persons in this group) was, of necessity, borne by the HI contributors as a whole. No other source of financing for any such deficits is provided in the law.

One important reason for the growing deficits over the following years was that the premium-adjustment method takes into account only increases in daily hospital costs, and not also increases in utilization. It would seem that legislative change of the basis for the determination of this premium rate should have been made so that it will be on a self-supporting basis. The ad hoc increase in the HI initial deductible as a result of legislation of a budgetary character in 1981 inadvertently, although fortuitously, helped out in this respect. However, the freezing of the HI voluntary premium rate for July–December 1983 (when the 1983 Act changed the premium-payment period to a calendar-year basis) had the reverse effect, although not to as great an extent.

Effective for 1989, a change was made in the basis for determining the voluntary HI premium rate. Now, such rate is merely the estimated average monthly per capita cost, for the pertinent calendar year, of the total outgo for HI benefits and administrative expenses for *all* HI beneficiaries. The rates so developed for 1989–93 are shown in Table 7.4. The much lower level of the premium rate after 1988 was apparently due to the effect of the Diagnosis Related Groups (DRG) reimbursement procedure in slowing down cost increases. However, it is quite possible that, with the rate based on the average cost for *all* HI beneficiaries, rather than on that for only the voluntary HI ones, the latter may not be paying their true costs. No studies as to the cost for this special group have been published in recent years.

Interrelationship of Hospital Insurance and Railroad Retirement

Employment covered by the RR system is considered covered employment for HI purposes. Persons aged 65 and over and disabled persons who are RR beneficiaries and whose railroad earnings would have made them eligible for OASDI monthly benefits if such earnings had been covered under OASDI are eligible for exactly the same HI

4. The 1977 and subsequent HI Trustees Reports did not contain analyses of this type.

benefits as are OASDI beneficiaries, with one minor exception. RR beneficiaries are also eligible for full HI benefits in Canada (i.e., without regard to the special requirements applicable to OASDI beneficiaries). This provision was included because certain services for U.S. railroads operating in Canada (and generally performed by Canadian residents) are covered under RR; and so equity dictated that this be done.

The law provides that the Railroad Retirement Board collects the HI taxes from railroad employers and employees and then turns them over to the HI Trust Fund *only if the maximum taxable earnings base under RR is the same as that under OASDI-HI*. Otherwise, the HI taxes with respect to railroad employees are to be collected by the Internal Revenue Service in the same manner as is followed for employment covered by OASDI.

Prior to the enactment of Medicare, the RR maximum taxable earnings base was usually higher than that under OASDI. An amendment to the Railroad Retirement Act in 1965 established the RR earnings base for all future years automatically at whatever the OASDI base is. Accordingly, the Railroad Retirement Board will always collect the HI taxes simultaneously with the RR taxes.⁵

The actual operation of the financial-interchange provision between the RR system and HI is carried out on an annual basis, rather than currently as the taxes are collected. The taxes with respect to each 12-month period beginning July 1, after allowing for the difference in earnings-base concepts before 1986, are determined shortly after the close of the period. From this amount, the additional administrative expenses of the Railroad Retirement Board in collecting the taxes are deducted. Then, there is added an amount representing the interest that the HI Trust Fund would have earned on these net taxes if it had received them when they were paid to RR. The result is then transferred to the HI Trust Fund (currently, at the same time as for OASDI—in the following June).

5. One minor difference with respect to HI taxes for railroad employees is worthy of note. The RR earnings base has been on a monthly basis, as contrasted with the annual basis for OASDI, for all years before 1986. Under the \$13,200 annual base for 1974, for example (i.e., \$1,100 monthly for RR), this made a difference only for individuals who earned more than \$1,100 in some months of the year but less in other months. Under the RR basis, the covered wages in the year in these cases was lower than those on the OASDI basis. The law provides that the RR system must turn over to the HI Trust Fund the amount that would have been collected under the "annual earnings base" basis applicable to OASDI, so that the RR system must make up this small difference out of its other available monies. Similarly, the RR system must bear the additional cost of the special Canadian HI benefits. However, in 1986 and after, the RR base has been on an annual basis, so that this situation no longer exists.

SMI Financing Principles

The underlying financing principle of SMI is simple. The participants pay premiums on a term-insurance basis, with the premiums intended to meet part of the cost of the program (no more than half), and the remainder coming from general revenues of the federal government. The premium rate can be changed at annual intervals by promulgation of the Secretary of Health and Human Services (formerly HEW).⁶ This provision is unique among the financing provisions of the various programs under the Social Security Act, because it is the only instance where action other than by Congress can change all of the financing rates on the basis of judgment.

Such an approach seemed necessary and desirable at the start of the program because of the short-range nature of the financing provisions and because of the volatile nature of the benefit costs, which were not at that time reliably predictable over a moderate period of years in the future. Now that the program has been in operation for a considerable number of years, it would be possible to develop an increasing schedule of premium rates for future years that could be put in the law, thus placing the responsibility on Congress (as is the case for HI and OASDI). And, interestingly, this is what was done for 1991–95 by legislation enacted in 1990 that thus temporarily suspended the procedure of annual promulgation by the Secretary of HHS.

The methodology for making the short-range cost estimates for the SMI system is described in Appendix 8-2.

Premium-Rate Basis

Rate Basis for Aged

The standard premium rate is applicable to all persons, regardless of age, sex, or physical condition, who enroll in SMI at the first possible time. Late entrants usually must pay a somewhat higher premium rate to offset the antiselection (and resultant higher average per capita cost) that is likely to result in these cases (as discussed in

6. The original law provided for biennial redeterminations—to be effective for two-year periods, beginning January 1968 and each succeeding second January. The 1967 Act changed this, on a permanent basis, to one-year periods beginning July 1969 and each succeeding July. The 1983 Act provided for annual determinations to be made on a calendar-year basis (so as to conform with the change in the timing of OASDI COLAs).

detail later in this chapter), sometimes incorrectly referred to as a “penalty” rate.

A uniform premium rate for all participants was desired when the program was initiated for persons aged 65 and over. Because the program is a purely voluntary one, it would have been impossible to develop an adequate premium rate based on financing solely from the participants, because of the “vicious circle of antiselection.” Specifically, any uniform rate established would be too high, on an actuarial basis, for the younger and healthier participants, especially if they considered the rate only on a term-insurance basis, rather than on a lifetime basis. As a result, these individuals would tend not to join the plan (or would soon drop out of it), and the premium rate would have to be increased. This snowballing would probably go on and on, so that eventually the plan would have relatively few participants and very high per capita costs.

The solution, therefore, was to have a government contribution or subsidy, so that the plan would be financially attractive to all possible participants, not only on a lifetime basis, but also on a short-term basis. Studies indicated that, if a certain average premium rate was applicable to the entire population aged 65 and over, then a premium rate of half this amount would be somewhat less than the value of the benefit protection for the youngest members of this age group who are in reasonably good health. Accordingly, if the participants pay half the cost, all of them will be getting a good actuarial buy on a current-insurance basis.

Further, those who are the lowest-cost risks will inevitably become higher-cost risks as they become older. Therefore, viewed on a long-term basis, this 50–50 sharing of the cost results in SMI being attractive financially to virtually all potential participants. The only exceptions are those with religious principles against the treatment of illness by physicians and those who have free, or virtually free, medical care provided in other manners, such as veterans with service-connected disabilities or retired members of the uniformed services.

The initial law provided that the monthly standard premium rate should, for any particular premium period, be such that premium income would equal half the estimated cost for benefits and related administrative expenses, including an appropriate allowance for contingencies (also taking into account the interest earnings of the trust fund). The premium rate is rounded to the nearest 10 cents.

The 1972 Act provided that, effective for the year beginning July 1974, an amount equal to half the estimated cost would be termed the *adequate actuarial rate* for those aged 65 and over, such rate being

rounded to the nearest cent. The standard premium rate is derived therefrom, as described later.

Because the premium rate does not vary by geographic regions or by urban-rural residence, although medical costs do vary in this manner, there is somewhat of a reverse income redistribution, which usually does not occur in social welfare programs. Specifically, the cost of SMI, on a relative per capita basis, is higher in the high-income areas than in the low-income ones if only fee levels are considered, and utilization rates are ignored. This means, in essence, that when considered on this basis, the high-income areas receive proportionately more of the government subsidy.

Rate Basis for Disabled

When SMI coverage for disabled beneficiaries was first considered, it was believed that their per capita cost would approximate that for persons aged 65 and over. This belief was not based on any data, but rather on intuitive reasoning (namely, that the disabled are merely prematurely superannuated). However, a later survey of OASDI beneficiaries refuted this by indicating a per capita cost more than twice as high for the disabled as for the aged.

This presented a dilemma from a financing standpoint. If the disabled paid half of their own cost, the premium rate would be very high, and many of the lower-cost risks might not participate, thus starting a circle of antiselection. Another possibility was to determine an average premium rate for the aged and disabled *combined* and to charge all participants 50 percent thereof. This had the obvious disadvantage of the aged paying more than would have been the case if only they were covered, and thus they would apparently be paying part of the cost for the disabled. Yet another possibility was to charge the disabled the same premium rate as the aged and to have the government pay more than half of the cost for them. This had the disadvantage of destroying the 50–50 matching basis between the participants and the government.

When the disabled were covered under SMI by the 1972 Act, effective July 1973, the last-mentioned financing basis was adopted. The 50–50 matching basis for the aged was, at the same time, changed (as discussed hereafter), so that it no longer appeared undesirable to have more than half the cost for the disabled being paid from general revenues—in practice, about 80–85 percent in 1973–87 and in 1992 (although much less in 1988–91—for artificial reasons, as will be discussed later).

TABLE 8.2. Promulgated SMI Standard Premium Rates and Actuarial Rates

Period	Standard Premium Rate	Actuarial Rate ^s	
		Aged	Disabled
July 1966–March 1968	\$ 3.00	\$ 3.00	*
April 1968–June 1970	4.00	4.00	*
July 1970–June 1971	5.30	5.30 (5.13)	*
July 1971–June 1972	5.60	5.60 (5.54)	*
July 1972–June 1973	5.80	5.80 (5.75)	*
July 1973–June 1974	6.30 [†]	6.30 (6.32)	\$14.50 (13.81)
July 1974–June 1975	6.70	6.70 (6.77)	18.00 (17.85)
July 1975–June 1976	6.70 [‡]	7.50 (7.62)	18.50 (19.33)
July 1976–June 1977	7.20	10.70 (10.44)	19.00 (19.38)
July 1977–June 1978	7.70	12.30 (12.28)	25.00 (24.95)
July 1978–June 1979	8.20	13.40 (13.48)	25.00 (24.34)
July 1979–June 1980	8.70	13.40 (14.63)	25.00 (26.47)
July 1980–June 1981	9.60	16.30 (16.65)	25.50 (30.90)
July 1981–June 1982	11.00	22.60 (21.27)	36.60 (39.14)
July 1982–June 1983	12.20	24.60 (24.27)	42.10 (45.59)
July 1983–December 1983	12.20	27.00 (27.75)	46.10 (53.60)
January–December 1984	14.60	29.20 (29.90)	54.30 (57.78)
January–December 1985	15.50	31.00 (33.12)	52.70 (59.10)
January–December 1986	15.50	31.00 (33.86)	40.80 (60.28)
January–December 1987	17.90	35.80 (39.02)	53.00 (61.15)
January–December 1988	24.80	49.60 (49.53)	48.60 (58.39)
January–December 1989	27.90	55.80 (52.64)	34.30 (63.13)
January–December 1990	28.60	57.20 (58.36)	44.10 (68.76)
January–December 1991	29.90	62.60 (64.76)	56.00 (71.10)
January–December 1992	31.80	60.80 (66.99)	80.80 (80.01)
January–December 1993	36.60	70.50 (n.a.)	82.90 (n.a.)
January–December 1994	41.10	(n.a.)	(n.a.)
January–December 1995	46.10	(n.a.)	(n.a.)

*Coverage for disabled commenced in July 1973.

[†]For July and August 1973, this rate was reduced by the Cost of Living Council to \$5.80 and \$6.10, respectively.

[‡]The rate for the 12-month period beginning July 1975 was frozen at this level because of a technical error in the law.

^sThe figures in parentheses are what the actuarial rate would have been if no account were taken of interest earned by the trust fund and of a margin for contingencies and to amortize any unfunded liabilities.

Trends in Premium Rates in 1966–1972

The SMI standard premium for the aged increased significantly after the program began operations in 1966 (see Table 8.2). These increases occurred partly because of liberalizations in the benefit provisions, but mostly because of rising medical prices, which increased more rapidly than the general cost of living and, until 1972, more

rapidly than the level of OASDI cash benefits. This produced a high level of dissatisfaction among the beneficiaries.

Premium-Rate Basis in 1972 Act

As a result, the 1972 Act changed the basis for the determination of the standard premium rate. The percentage increase in the standard premium rate promulgated in December (for the year beginning the following July) could not exceed the percentage increase in the OASDI cash-benefits level from the previous May to what would be payable for the following May, according to the law in effect at the time of the promulgation. (Details on how this procedure is carried out are given in footnote 11.) As before, the standard premium rate cannot exceed the actuarial rate for enrollees aged 65 and over—that is, 50 percent of the estimated cost of the benefits and administrative expenses, on an incurred basis, for the premium year, plus an allowance for contingencies (after consideration of the interest earnings from the trust fund).

It should be noted that the actuarial rate is only an advance estimate of what the experience will be. However, because it is currently made only about four months before the premium year commences, it can usually be quite accurate. The actual experience compared with such estimates is analyzed in Chapter 10.

The rate promulgated may be less than the rate based on the estimated incurred expenditures, because of past more favorable experience than estimated. When that occurs, the margin for contingencies (including the effect of interest earnings of the trust fund) can be made negative, as was the case, for example, for the aged in the July 1979–June 1980 promulgation and for the disabled in the next promulgation. In the same way, the rate promulgated may be higher than is apparently needed to meet the incurred expenditures, when it is necessary to make up past deficiencies, as was the case, for example, for the aged in the July 1970–June 1971 promulgation. The figures in parentheses in Table 8.2 give a much better indication of expected costs than do the promulgated rates.

Thus the estimated costs, disregarding any allowances to make up past deficiencies or, conversely, to lower excessive fund balances and any allowances for interest earnings of the trust fund, were about twice as high for the disabled as for the aged in 1973–87. However, this differential decreased thereafter and was only about 10–20 percent in 1987–92. This phenomenon resulted from a recognition that past estimates of the cost for the disabled had been overstated, and accordingly a large (but unseen) “fund” balance within the SMI Trust

Fund had been built up. Then, as a result, the estimated actuarial rates for the disabled were reduced, to reflect the high interest earnings on such fund balance and to reduce such balance. As shown by the figures in parentheses for recent years in Table 8.2, the basic underlying cost for the disabled is anticipated to be about 20 to 30 percent higher than that for the aged (but not about 2 to 2 1/2 times as high, as was believed to be the case when the disabled were first covered, in the mid-1970s).

As a result of this change restricting the percentage increase in the standard premium rate, SMI enrollees aged 65 or over will almost certainly pay less than half the cost of the program, and the balance will come from general revenues. Correspondingly, SMI enrollees under age 65 who are disabled, in paying the same premium rate as the aged, will meet far less than half of their cost, on the average, because their aggregate per capita cost is higher than that for the aged. As a result, for all enrollees combined, the government contribution will, on the average, always exceed the enrollee standard premium rate.

In 1975–82, the proportion of the cost of SMI borne by the enrollees decreased from 50 percent to 26 percent for the aged, whereas the corresponding figure for the disabled was about 15–20 percent in all years, except during 1988–91 (when it was much higher for the reasons noted previously—see Table 8.3). As long as medical costs covered by SMI continue to rise more rapidly than the general Consumer Price Index (CPI)—and in the absence of any ad hoc OASDI benefit increases exceeding the rise in the CPI—these proportions would continue to decrease, unless legislation preventing this were enacted (as it was in 1983, as described later).

The proportion of the estimated cost borne by enrollees aged 65 and over can increase from one year to the next (but, of course, it can never exceed 50 percent). This can occur in the unusual circumstances that the level of OASDI cash benefits rises more rapidly than SMI costs.⁷ For example, assume that, in a certain year, the actuarial rate for the aged is \$8 and the standard premium rate is \$7.50, which meets 47 percent of the cost of the program. Suppose that, for the next year, the actuarial rate is \$8.50 and the rise in cash benefits is 15 percent. Then, the new standard premium rate could be increased to \$8.50, meeting half the cost, because the rate based on the rise in the OASDI cash-benefits level would not prevent it (115 percent of \$7.50 is \$8.63).

7. This did occur in 1972, when there was a significant OASDI benefit increase, while at the same time strict government controls were imposed on physicians' fees.

TABLE 8.3. Monthly Per Capita SMI Costs for General Treasury* and Proportions of SMI Cost Borne by Enrollee Premium Rate

Period	Monthly Per Capita Cost for General Treasury*		Proportion of Cost Borne by Enrollee	
	Aged	Disabled	Aged	Disabled
July 1966–March 1968	\$ 3.00	†	50%	†
April 1968–June 1970	4.00	†	50	†
July 1970–June 1971	5.30	†	50	†
July 1971–June 1972	5.60	†	50	†
July 1972–June 1973	5.80	†	50	†
July 1973–June 1974	6.36 [†]	\$22.70	49	22
July 1974–June 1975	6.70	29.30	50	19
July 1975–June 1976	8.30	30.30	45	18
July 1976–June 1977	14.20	30.80	34	19
July 1977–June 1978	16.90	42.30	30	15
July 1978–June 1979	18.60	41.80	30	16
July 1979–June 1980	18.10	41.30	32	18
July 1980–June 1981	23.00	41.40	29	19
July 1981–June 1982	34.20	62.20	24	15
July 1982–June 1983	37.00	72.00	25	14
July 1983–December 1983	41.80	80.00	23	13
January–December 1984	43.80	94.00	25	14
January–December 1985	46.50	89.90	25	15
January–December 1986	46.50	66.10	25	19
January–December 1987	53.70	88.10	25	17
January–December 1988	74.40	72.40	25	25
January–December 1989	83.70	40.70	25	41
January–December 1990	85.80	59.60	25	32
January–December 1991	95.30	82.10	24	27
January–December 1992	89.80	129.80	26	20
January–December 1993	104.40	129.20	26	22

*With respect to persons enrolling on time (for those enrolling late, the cost for the General Treasury is higher—being the same multiple of their premiums as for persons enrolling on time).

†Coverage for disabled commenced in July 1973.

*Based on average of rates payable during the period (see footnote † in Table 8.2).

The same thing can also occur if the actuarial rate is artificially held down by entering into it a negative margin for contingencies (to reflect past very favorable experience resulting in a large buildup of the trust fund). This occurred in connection with the promulgation for the aged for July 1979–June 1980, and again for 1986, when it was consciously decided to allow the trust-fund balance to decrease. So the actuarial rate was maintained at the previous level, despite the estimated rise in incurred expenditures (see Table 8.2). As a result,

the proportion of the cost borne by the enrollees increased slightly (see Table 8.3).

Similarly, the actuarial rate for the aged for July 1980 to June 1981 was held below the rate based on estimated incurred expenditures, so as to draw down the fund balance somewhat. However, the estimates made in late 1980 showed that the recent experience had been somewhat unfavorable as compared with previous estimates. The incurred expenditures used in determining the actuarial rate were estimated at \$15.15 for the year ended June 30, 1980, versus the original estimate of \$14.63; for the next year, the corresponding figures were \$18.11 and \$16.65, respectively. Accordingly, when the actuarial rate for July 1981 to June 1982 was determined, the estimate as to the incurred expenditures was increased significantly (to \$21.27) and a margin for contingencies was added.

The law requires that, for information purposes, the actuarial rate for disabled enrollees should be promulgated at the same time as the standard premium rate and the actuarial rate for enrollees aged 65 and over. Such rate for disabled enrollees is used to determine the government contributions with respect to them (see Table 8.2 for the rate so determined in the past). The actuarial rates promulgated for the disabled have fluctuated significantly. Little change was made in the rates for July 1975–June 1977 compared with that for July 1974–June 1975. Similarly, the actuarial rate for July 1978–June 1980 was the same as that for July 1977–June 1978, and that for the next year was only slightly larger. However, the actuarial rates for subsequent years up through 1987 were significantly higher.

Mathematically speaking, the per capita government cost for those enrolling on a timely basis, which is determined separately for aged and disabled enrollees, is the excess of twice the actuarial rate over the standard premium rate. Appropriate increases are made in the government contribution for late entrants.⁸ The multiplying factors to be applied to the enrollee premiums each month in order to obtain the government contribution are shown in Table 8.4 for various past years.

Technical Flaw Introduced in 1973

The 1973 Act was concerned primarily with increasing the level of OASDI cash benefits. In doing so, it changed the automatic-

8. Specifically, the government contribution for these individuals is the enrollee premium (including the additional amount for late entrance) multiplied by the ratio of (1) twice the actuarial rate, minus the standard premium rate, to (2) the standard premium rate.

TABLE 8.4. Multiplying Factors applied to SMI Enrollee Premiums to Obtain Government Contribution

<i>Period</i>	<i>Multiplying Factor for</i>	
	<i>Aged</i>	<i>Disabled</i>
July 1966–June 1973	1.000	*
July 1973–June 1974	1.000 [†]	3.603 [†]
July 1974–June 1975	1.000	4.373
July 1975–June 1976	1.239	4.522
July 1976–June 1977	1.972	4.278
July 1977–June 1978	2.195	5.494
July 1978–June 1979	2.268	5.098
July 1979–June 1980	2.080	4.747
July 1980–June 1981	2.396	4.313
July 1981–June 1982	3.109	5.655
July 1982–June 1983	3.033	5.902
July 1983–December 1983	3.426	6.557
January–December 1984	3.000	6.438
January–December 1985	3.000	5.800
January–December 1986	3.000	4.265
January–December 1987	3.000	4.922
January–December 1988	3.000	2.919
January–December 1989	3.000	1.459
January–December 1990	3.000	2.084
January–December 1991	3.187	2.746
January–December 1992	2.824	4.082
January–December 1993	2.852	3.530

* Coverage for disabled commenced in July 1973.

[†] For July and August 1973, the factor was somewhat higher (see footnote [†] in Table 8.2).

adjustment provisions to become operative for June of each year, beginning in 1975, rather than January. Inadvertently, this created a serious anomaly under SMI. If in the future only the automatic-adjustment provisions were applicable in increasing OASDI benefits, then it would *never* be possible for an increased premium rate under SMI to be promulgated.⁹ The solution to this unintended result was

9. The reason this result would occur is that the promulgation made in a given December could not increase the premium rate by a greater percentage than benefits for the next June (according to the law in effect in that December) would be increased over the level for the previous June (when the most recent automatic adjustment would have been made). Such increase in benefits for the previous June would carry through the succeeding months until an automatic adjustment for the following June would be promulgated, which would not be done until April. Thus, in each December, the OASDI benefit level for the next June would appear to be the same as it was for the previous June—even though an increase for that next June might later occur—and so no increase in the premium rate could ever be made!

quite simple. The comparison of the OASDI benefit levels should be made each December between the preceding May and the next May. In 1975, legislation was enacted to correct this error.¹⁰

Premium-Rate Basis under Legislation in 1982 and After

The continuing decrease in the proportion of the cost of the SMI program paid by the enrollees, plus budgetary considerations, resulted in legislation in 1983 which prevented the standard premium rate from falling below 50 percent of the actuarial rate (i.e., 25 percent of the program cost) during the two premium years commencing July 1983 (and later years too). Specifically, the standard premium rate was fixed at such proportion of the actuarial rate. Without this change, the proportion of the program cost for those aged 65 and over (as measured by twice the actuarial rate) met by the enrollee premium would have fallen to 24 percent for both 1984 and 1985, and even lower for subsequent years. Then, the enrollee premium rates, and thus the proportions of program costs, would have been based on the latter relationship, and would always have been lower.

When the 1983 Act changed the date for the OASDI COLAs from June to December, the enrollee premium rate was frozen for six months (July–December 1983) at the amount applicable for July 1982 through June 1983. This was done so that OASDI beneficiaries who were covered under SMI would not have a small decrease in their benefits for these six months (which would have been quite costly administratively to have done). The government contribution for these six months, however, was based on the actuarial rate determined for July 1983 through June 1984 (see Tables 8.3 and 8.4 as to the effect thereof). The 1983 Act also provided that the SMI enrollee standard premium rate for calendar years 1984 and 1985 would be 50 percent of the actuarial rate.

Legislation in 1984 extended this basis for two additional calendar years, 1986–87, and legislation in 1986 and 1987 extended it for 1988–89. If the “permanent” method for determining the standard premium rate had applied for 1990, it would have been \$29.00 (the OASDI COLA for December 1988 of 4.0 percent applied to the 1989 premium rate of \$27.90). However, legislation in 1989 once again extended the “50 percent of the actuarial rate” basis, and the standard premium rate was set at \$28.60; this result was a small reversal of the

10. This was not effective for the premium rate promulgated in December 1974 for the year beginning July 1975. The erroneous freezing of the premium rate thus has had a continuing effect on all subsequent premium rates.

usual result that the 50-percent basis yields a higher premium rate (and occurred because the estimated actuarial rate rose so little from 1989 to 1990—because the allowance for a contingency margin for 1990 was negative, due to the favorable experience in 1989 up until the promulgation date). Unless further legislative action were taken, it is likely that such proportion would decrease thereafter, because quite probably SMI costs will rise more rapidly in the future than the CPI, which “drives” the OASDI COLAs.

In 1990 Congress extended its consideration of the overall budget-deficit situation from a 1-year basis to a 5-year one. In part for this reason, the Omnibus Budget Reconciliation Act of 1990 established in law the standard premium rates for each of the five years, 1991–95 (see Table 8.2). The legislative history does not explain how these rates were developed. However, the 1991 rate of \$29.90 is merely that which would be derived from the “permanent” method in the law—namely, the 1990 rate of \$28.60 increased by the December 1989 OASDI COLA of 4.7 percent. The successive relative increases in the premium rate for each year in 1992–95 are 6.4, 15.1, 12.3, and 12.2 percent respectively. It would thus appear that, at least for the premium rates for 1993–95, there is some legislative intent to increase the proportion of the cost that is borne by the enrollee premiums.

In the future, as a result of the 1983 Act, the SMI rate promulgations are to be made each September, to be applicable for the following year. The specific procedure is described in a subsequent section.

Financing and Investment Procedures

The premiums are collected from the enrollees in several ways. The primary method is by deduction from OASDI or RR monthly benefits. The premium collections are deposited in the SMI Trust Fund, as are the contributions from the federal government, which are computed (as described previously) from the total enrollee premiums each month. The intent of the law is that the government contributions should be placed in the SMI Trust Fund simultaneously with the participant premiums. If this is not done, then interest in an appropriate amount is paid to the trust fund by the General Treasury.

Benefit payments are disbursed from the trust fund, as are the administrative expenses of both the government agencies involved and the carriers. Any assets not needed as a cash working balance are invested in the same manner as for the OASI, DI, and HI Trust Funds (see Appendix 4-2). The initial law provided, on a temporary basis,

for a guarantee by the federal government of the solvency of the SMI Trust Fund; this expired at the end of 1969 (described in detail in Appendix 8-3).

Standard Premium

The standard premium rate for each 12-month period beginning with January is, as a result of the 1983 Act, promulgated by the Secretary of Health and Human Services (HHS—formerly HEW) in the preceding September (previously in December, applicable for the next June). Initially, the rate was prescribed by law, but it was provided that, in the future, the promulgation procedure would be used so that actuarially adequate rates would be in effect. However, as noted previously, the premium rates for 1991–95 were established by law, rather than by promulgation.

In the future, after 1995, the Secretary of HHS will promulgate the standard premium rate by making two determinations. (For calendar years 1984 through 1990, the standard premium rate was specified by law to be 50 percent of the actuarial rate—i.e., to meet 25 percent of the estimated cost of the program for those aged 65 and over.) First, the adequate actuarial rate for persons aged 65 and over is estimated for the premium year under consideration, following the method described in Appendix 8-4. Second, the current standard premium rate is increased by the percentage rise in the OASDI cash-benefit level (as measured by the Primary Insurance Amount [PIA] for Average Indexed Monthly Earnings [AIME] of \$900) from the November preceding the September promulgation to the following November.¹¹ For example, for the determination of the SMI pre-

11. Before the promulgation made in December 1979, the measuring PIA was based on an Average Monthly Wage (AMW) of \$750, whereas in that promulgation and subsequently, the measuring PIA is based on an AIME of \$900. These two average-earnings figures were selected arbitrarily; they represent roughly the level for an average worker in 1979. Of course, as long as the benefit increases are the same percentage for all AIMEs (as will always be the case under the automatic-adjustment provisions), it makes no difference what figure is used for measuring the AIME.

The benefit formula to be used with the AIME of \$900 is that of the cohort attaining age 62 in the year preceding the year in which the promulgation is made, both for the PIA for the November of that year and for the PIA for the following November. The latter PIA is determined under the assumption that the law will not be changed after the September in which the promulgation is made. Thus, in essence, the comparison to be made is really the PIA for the promulgation month of September versus the PIA for the preceding November (or even, it could be said, by comparing the PIAs for the November and December preceding the promulgation month).

Before the 1983 Act, which advanced the OASDI COLA date by six months and

mum rate for 1996 under the second method, the standard premium rate for 1995 will be increased by the percentage COLA increase applied to November 1994 benefits (i.e., the increase in the CPI from the third quarter of 1993 to the third quarter of 1994).¹² The promulgated standard premium rate is then the smaller of these two amounts, rounded to the nearest 10 cents.

Further, for persons who are entitled to OASDI benefits in the November and December preceding the premium year, the increase in the premium rate cannot exceed the dollar amount of the COLA increase—applicable only to those with very low benefits.

As an example of how the promulgations of the standard premium rates are made, let us consider the \$8.70 rate for the year beginning July 1979. The rate for the preceding premium year was \$8.20. When this was increased by the 6.5-percent OASDI cash-benefits increase made for June 1978, the result was \$8.73, which was rounded to \$8.70 (the nearest even 10 cents). The adequate actuarial rate for persons aged 65 and over for the applicable future premium year was estimated at \$13.40. Accordingly, the promulgated rate was \$8.70, the lower of these two figures.

The past history of the determination of the SMI standard premium rates and the actuarial rates is given in Appendix 8-4.

The underlying financing principle of SMI is that the standard premium rate and the government contributions determined therefrom for each 12-month period should be sufficient, on an incurred-cost basis, to meet the benefit cost and administrative expenses for such year. In theory, the balance in the SMI Trust Fund at the end of each premium year should be at least equal to the incurred but unpaid benefits then outstanding (and the related administrative expenses) as a result of medical services furnished before such date. Such lag results both from delay in filing claims and from the time necessary to adjudicate and pay claims. Such a requirement of reserves being at least equal to incurred but unpaid liabilities is applicable to insurance

therefore did likewise for the SMI premium-payment period, the various measuring dates in the preceding paragraphs were six months earlier, although the promulgation date was only three months earlier.

12. Illogically, there is a one-year lag between when an OASDI COLA is given and when it is used in determining the increase in the SMI premium rate. This could easily have been avoided (and been administratively feasible too) if the promulgation month had been October (when the COLA increase rate for OASDI for December would have first been known), instead of September. However, at the time of enactment of the 1983 Act, the HCFA opposed this, for no good reason other than that it would have had to act expeditiously in order to have the change in the SMI premium rate coordinated with the OASDI COLA increase in the December benefit checks to be issued early in the following month.

companies in the health insurance field, as a result of state regulatory laws; a company that does not meet it in the aggregate would be declared insolvent.

No such legal-solvency requirement applies to SMI. Rather, it can continue to function as long as it has sufficient cash resources to operate on a cash-flow basis. Such situation of sufficient cash resources but inadequate reserves on an incurred-cost basis has been present in the past, because at some times the premium rates have been inadequate on an incurred-cost basis. Thus, considering the past operation of the system as of the end of the premium-rate year (June 30 through 1983 and December 31 for 1983 and after) of various years, the balance of the SMI Trust Fund was less than the outstanding liability for incurred but unpaid benefits in 1968–73. (Specific data on this matter are given in Table 10.33.)

The Health Technical Panel to the 1991 Advisory Council on Social Security made several recommendations as to measures of SMI costs (see Appendix G). In brief, SMI costs, which were recommended to be projected over the next 75 years (instead of for only 3 years), should be measured against both the Gross National Product and the average OASDI benefit paid to persons aged 65 and over. Also, the cost of the matching government contributions should be measured against both GNP and HI taxable payroll. The 1991 SMI Trustees Report did not contain any of these recommended additions to the analysis, but it did present 10-year projections (as did also the 1992 report).

For the first time, the 1991 report shows estimates of the progress of the SMI Trust Fund beyond the next two years. The fund balance at the end of 1990 was \$15.5 billion. In 1991, income is estimated at \$50.4 billion, and outgo is estimated at \$48.8 billion, so that the fund balance at the end of the year is \$17.1 billion. The estimated disbursements in 2000 are \$184.5 billion, or 3.8 times as large as in 1991. The fund balance is estimated to remain at a level of about \$15 billion during the period when the premium rate is established by law (1991–95) and then to increase gradually to \$26 billion at the end of 2000 (the premium rates used in the projection beyond 1995 are not stated).

The disbursements for benefit payments and administrative expenses represented 0.81 percent of the Gross National Product in 1990 and are estimated to almost double by 2000 under the intermediate-cost estimate (1.52 percent of GNP). Under the low-cost and high-cost estimates, the corresponding figures for 2000 are 1.27 percent and 1.83 percent respectively.

SMI Financing Provisions

Determination of Premium Rates

The higher premium rate payable by those who enter after the initial enrollment period is based on the number of months between the close of the individual's initial enrollment period and the last month of the general enrollment period in which enrollment occurs (exclusive of months when the individual was in an employer-sponsored group health insurance plan; see discussion in Chapter 6, p. 541). For each full 12 months so involved, the standard premium rate is increased by 10 percent, with the premium rate actually payable being then rounded to the nearest 10 cents.

The 10-percent increase factor was not scientifically determined as an exact offset to the higher costs anticipated for the delayed-enrollment group. Rather, it was arbitrarily set at this figure to recognize, at least partially, this factor. No adequate data were available for making a precise determination of the amount needed for true actuarial equivalence.¹³ Also, it was hoped that a charge of this magnitude would strongly encourage enrollment as soon as eligibility was present.

Some examples of how these increased premium rates are determined may be helpful. Suppose that Mr. A attains age 65 in March 1991, but does not enroll in SMI in his initial period (December 1990 through June 1991). If he then enrolls in January–March 1993, there will have been 21 months between the end of his initial period and the end of his actual enrollment period. Accordingly, his premium rate during his entire future period of continuous participation will be 10 percent higher than the standard premium.

As another example, suppose that Ms. B attains age 65 in July 1991, but does not elect to participate in SMI in her initial enrollment period, which ends in October 1991. If she decides to enter SMI by enrolling in January–March 1992, only five months are involved in the determination of her premium rate (namely, November 1991 through March 1992), so that she does not have any increase and thus pays only the standard rate, beginning for July 1992. Nonetheless, the possible antiselection due to her late entry is recognized, because the effective date of coverage is delayed until July 1992.

An increased premium rate is also applicable for individuals who

13. Neither the Social Security Administration nor the Health Care Financing Administration has yet made any study of the actual cost experience for late enrollees (or, at least, nothing in this area has been made publicly available).

terminate coverage, but who reenter during a subsequent general enrollment period. Under these circumstances, the increased premium rate is based on the number of months after the effective month of termination and up through the last month of the general enrollment period (again, exclusive of months when in an employer-sponsored group health insurance plan). Such months are added to any months that were used as a basis for determining an increased premium rate when the individual first enrolled.

For example, Mr. A had an increased premium rate of 10 percent above the standard premium rate, because he had a period of 21 months between the end of his initial period and the end of the enrollment period in which he elected to participate. Suppose that, in the first quarter of 1995, Mr. A decides to terminate (effective at the end of June 1995). Then, in the general enrollment period ending in March 1999, he decides to reenter the program (effective July 1999). His total months to be considered for purposes of the increased premium rate are then 66 (the original 21 months, plus the additional 45 months). Accordingly, his premium rate will be the standard rate increased by 50 percent (10 percent for each full 12 months).

Collection of Premiums

The enrollee premiums are payable monthly in advance. Wherever possible, they are deducted from monthly benefit payments under OASDI, RR, or Civil Service Retirement (CSR) (except in some cases where the individual is also receiving public assistance, as discussed later). In nondeduction cases, a grace period of up to 90 days is allowed.

The procedure is relatively simple for OASDI and RR beneficiaries who are receiving benefits regularly from month to month—that is, they are not affected by the earnings test. Under these circumstances, the SMI premium for a particular month is merely deducted from the monthly benefit check for the previous month, which is sent to the beneficiary just after the end of such month. When an individual is receiving both OASDI and RR benefits, the procedure (following changes made by the 1972 Act) is to deduct the premium from the RR benefit.

Although federal employees under CSR (who were hired before 1984) are not covered by OASDI and were not covered under HI until 1983, with respect to such employment, they may participate in SMI. Under these circumstances, the premiums are deducted from their CSR annuity if they are not also receiving an OASDI or RR benefit (in case they are receiving an RR benefit, the premiums are

always deducted from the latter). Also, if the spouse of the CSR annuitant is under SMI, the spouse's premiums may be deducted from the annuity if the annuitant agrees. The same deduction procedure is also applicable to certain small retirement systems administered by the Office of Personnel Management (formerly the Civil Service Commission).

An exception occurs with regard to automatic deduction of SMI premiums from monthly benefit checks under OASDI, RR, and CSR. State public assistance agencies are permitted (or, in some instances, required) to "buy in" for certain such aged and disabled recipients, including recipients under the federal Supplemental Security Income program who are eligible for Medicaid. Under such circumstances, the state may make arrangements so that the SMI premiums will not be deducted from such benefits. This procedure simplifies administration for the public assistance agency, because it need not reimburse the recipient for the cost of the SMI premium in cases that would otherwise involve automatic benefit deduction. On the other hand, the administration is made somewhat more complex for OASDI, RR, and CSR, because there will be cases transferring back and forth from the automatic-deduction procedure as they go on and off public assistance.

Appendix 8-1

Methodology for Long-Range Hospital Insurance Cost Estimates

Principal Elements and Factors

There is a somewhat greater *relative* range of probable costs for HI benefits than for OASDI monthly cash benefits (which have been payable for 53 years). When HI was under consideration, data were incomplete or unavailable for some of the many cost aspects and factors underlying these benefits as they would be provided under a social insurance system. Also, service benefits quite obviously do not have costs as readily determinable as cash benefits that are directly related to covered earnings. However, it should be recognized that, similarly, when the present OASDI cash-benefits program was inaugurated in 1935, little was known about many of the factors entering into the actuarial cost estimates. Then, as later was necessary for health benefits, assumptions had to be made on the basis of the data available, using the best possible actuarial judgment.

From a cost standpoint, the major proposed HI benefit was cover-

age of the cost of hospital care. A great amount of data was available in regard to the use of hospital services by aged persons. However, little of such data related to the hospitalization that would occur and to the actual cost of providing such care under the conditions resulting from the availability of a hospital insurance program that would pay for almost the full cost of services for this population.

Thus, despite the availability of much data, precise estimates of the cost of the HI proposals were not possible because of the many biases in the data and the many adjustments required. Data were lacking to form a guide for such elements as the extent of changes in hospital utilization that might occur after enactment with respect to persons who had not had insurance in the past but who would then have benefit coverage.

The important elements in making HI cost estimates are the following:

1. The number of persons eligible for benefits, by age and sex, in all future years (developed from the OASDI cost estimates).
2. The average number of days of utilization of hospital or SNF services per year per eligible (or, for HH benefits, the average number of visits per year per eligible), by age and sex. (Note that disabled beneficiaries, although younger than old-age beneficiaries, have higher utilization, even though utilization increases with age for the latter.)
3. The average reimbursable unit cost of each type of covered service, by age and sex (after allowance is made for the effect of any cost-sharing provisions).

The benefit costs are estimated by merely summing the products of items 1, 2, and 3 for each age-sex group for any particular year. The administrative expenses are determined as a percentage of the benefit payments. The tax income is determined in the same manner as is done for OASDI.

Knowing the actual utilization experience under the past operation of the program does not fully solve the cost-estimating problems for this factor. Still remaining is the question of whether utilization will increase as people become more familiar with the protection offered by the program, or as there is more general tendency to use hospitals to care for acute or terminal cases, especially when the direct cost to the beneficiary is low.

Another important cost-estimating problem is that the estimated cost of HI can vary greatly when only small changes are made in the assumption about future trends in hospital costs. For example, if hos-

pital costs are assumed to increase at 7 percent per year for 25 years, the cost of the program in this period would be about 65 percent higher than if such increases were at a rate of 3 percent.

Dynamic versus Static Economic Assumptions

The long-range OASDI actuarial cost estimates made before 1971 assumed that earnings would be level in the future. This assumption meant that the costs of the cash benefits relative to payroll would not be affected by any rising earnings trend that might develop. The reason was that it was assumed that the benefit structure (including the maximum earnings base that is creditable toward benefits and that is subject to taxes) would be adjusted to keep pace with the rising earnings.

When earnings levels rose in the past (increasing both benefit outgo and tax income—the latter more than the former, because of the weighted benefit formula), this factor was recognized in subsequent OASDI cost estimates. Any resulting net reduction in cost was thus made available for the financing of the program, including proposed benefit liberalizations. Changes financed entirely in this manner tended to keep the benefits of the system up to date with changes in economic conditions during the 1950s and 1960s.

For purposes of consistency with the procedure for the OASDI cost estimates, the early HI estimates (before 1965) were based on such a level-earnings assumption. With such an assumption, it is sufficient for the purposes of long-range cost estimates merely to analyze possible future trends in hospitalization costs *relative* to covered earnings. Accordingly, any study of the past experience of hospitalization costs should be made on this relative basis. The actual experience in years before the enactment of Medicare indicated, in general, that hospitalization costs had risen much more rapidly than the general earnings level, with the differential being in the neighborhood of 3 to 4 percent on annual basis.

One of the uncertainties in the initial cost estimates for the proposed hospital benefits—and one that still remains in making cost estimates—was how long and to what extent this tendency of hospital costs to rise more rapidly than the general earnings level would continue in the future, and whether or not it might, in the long run, be counterbalanced by a trend in the opposite direction. One factor to be considered was the relatively low wages of hospital employees. These wage levels had been catching up with the general level of earnings and might obviously be expected to catch up completely at some future date and then level off, rather than to increase indefi-

nately at a more rapid rate than earnings generally. Another factor to consider was the development of new medical techniques and procedures, with their resultant increased expense.

In connection with the latter element, there are possible counterbalancing factors insofar as the overall cost is concerned. The higher costs involved for more refined and extensive treatments may be offset by several factors. First, there may be better general health conditions, so that, in the long run, less hospitalization is needed. Second, more out-of-hospital facilities may be developed, with resulting lower overall costs when these services are used instead of hospitals. Shorter durations of hospitalization and lower expenses for curative treatments may occur as a result of preventive measures. Also, it is possible that, at some time in the future, the productivity of hospital personnel will increase significantly; then, as in other fields of economic activity, prices for such services will increase less rapidly than the earnings of such workers and, in fact, of all workers in the country.

For more than four decades, however, hospital costs have been increasing at a rate which is roughly double that of earnings. There are reasons why this trend may continue for some time in the future. First, the acceleration of medical research has resulted in the discovery and use of new, and generally more expensive, techniques. Second, the increasing level of skills required by hospital technicians has resulted in the more rapid rise in earnings for such persons. Third, the most advanced, high-quality medical techniques will be made available to all persons.

In making HI cost estimates, it might be assumed that the costs of hospitalization would continuously rise more rapidly than the general earnings level. A more reasonable approach, however, is to assume that hospital costs will increase more rapidly than earnings for a number of years and that thereafter these two elements will rise at the same rate.

Alternatively, it might be assumed that hospital costs will eventually increase at a *slower* rate than the general earnings level. This assumption can be rationalized on the basis that, in general, prices do not increase as rapidly as earnings, because of increased productivity. Following this line of reasoning, it is possible that this could ultimately occur in the case of hospital costs, although there is the offsetting element of the increasing cost of product improvement (in this instance, more complex medical procedures). Such an assumption was recommended by the 1963-64 Advisory Council on Social Security. However, in connection with later legislation, it was assumed that the ultimate rate of increase for hospital costs would be the same as that for earnings in covered employment.

Effect of Changes in Maximum Taxable Earnings Base

The major problem in making actuarial cost estimates for HI on a level-earnings assumption was that, unlike the situation for the OASDI monthly benefits, an unfavorable cost result is shown when total earnings levels rise, unless the maximum taxable earnings base and the dollar amounts of the deductibles are kept up to date. The reason is that the underlying fundamental actuarial assumption is that hospital costs will rise at the same rate over the long run as the total earnings level. However, the tax income rises less rapidly than the total earnings level, because it depends on the taxable earnings level, which is dampened because of the effect of the earnings base. For example, in 1974 the \$13,200 earnings base resulted in only 85.3 percent of the total payroll in employment covered by OASDI and HI being subject to tax. Thus, a 1-percent increase in total earnings would produce an increase of only about 0.85 percent in taxable earnings and, accordingly, in tax income.

Accordingly, it was necessary in the early HI actuarial cost estimates to assume either that earnings levels would be unchanged in the future or that wages would continue to rise and that the system would be kept up to date insofar as the earnings base and cost-sharing provisions were concerned.

The assumption that the earnings base would be kept up to date with increases in the earnings level could be realized if Congress takes the necessary action to raise this base from time to time. Still another possibility—and what has actually been the case since the 1972 Act—is to have the earnings base on a dynamic basis by being automatically adjusted for changes in wage levels. In the same manner, the cost-sharing provisions could be kept up to date by ad hoc legislative changes or by automatic-adjustment provisions (as was actually legislated initially).

The cost estimates for HI made in recent years have assumed that earnings levels would increase in the future (using the same assumptions as in the OASDI cost estimates—see Chapter 4). Similarly, it has been assumed that, over the first 25-year period in the cost estimate, hospital daily costs would rise somewhat more rapidly, but that thereafter the costs per unit of service will increase at the same rate as average hourly earnings rise.

Cost Interrelationship of Benefits

An important factor in connection with the actuarial analysis of HI is the cost interrelationship among the several types of benefits pro-

vided. For example, if hospital benefits were provided, but SNF care were not, there would tend to be more utilization of the hospital benefits, because individuals would be likely to stay longer in a hospital (at little or no cost to themselves) rather than to enter an SNF operating at lower costs but with the full cost to be paid by them. Similarly, if no outpatient hospital diagnostic benefits were provided and if there were no deductible in the hospital benefits, there would be a financial incentive for individuals to enter a hospital (with resulting higher cost to the program) to obtain these services without any personal cost.

Likewise, the availability of HH services can reduce hospital stays in certain cases. Otherwise, individuals might enter a hospital or stay in it longer if, in doing so, it would cost less personally than obtaining HH services at their own expense. On the other hand, the HH services, when available, will undoubtedly be utilized by many persons who would not otherwise have been in hospitals. In the same way, the presence (or absence) of a deductible provision for one benefit can influence not only the cost of that benefit but also the costs of other types of benefits.

Valuation Period

Another important factor is the length of the period over which the cost estimates are made. Originally, for the sake of consistency, the HI cost estimates were made over the same period as the OASDI ones (into perpetuity, until the cost estimates made in 1964, but then for 75 years). Beginning in 1965, the HI cost estimates were generally made for a future period of only 25 years, because longer estimates did not seem feasible in light of the many changes in medical practice and services that may occur in the future. At times, such cost estimates had been made for 75-year periods (see Chapter 10), but the “official” ones were considered to be the 25-year ones, until in 1985 and after a 75-year basis applies. On the other hand, it did not seem prudent to make the estimates only over such a short period as three to five years, because this would not adequately portray the long-range upward cost trend which is almost certain to result from the rising trend of both hospital costs and the number of eligible persons, and possible utilization as well. A 25-year valuation period can be criticized for largely ignoring the period beginning after 2010, when more and more of the post-World War II baby boomers will become eligible for HI benefits as aged persons and will be such a high proportion of the working-age population.

The long-range actuarial status of the HI Trust Fund is developed

from the estimated taxes, benefit payments, and administrative expenses in exactly the same manner as is done for OASDI, including allowance for the interest earnings of the trust fund, which was not done for OASDI until 1988. However, for HI, allowance was made for the building (and maintenance) of the fund balance at a level equal to only 6 months' outgo in the Trustees Reports for 1981–90 (one year's outgo prior to the 1981 Trustees Report), but beginning with the 1991 Trustees Report the one-year basis used for OASDI was adopted. More details on the methodology and assumptions used in making the HI cost estimates may be found in the annual reports of the Board of Trustees of the HI Trust Fund.

Determination of Tax Schedule

If there is not a close actuarial balance, the tax schedule should be adjusted accordingly (by legislation). The general financing theory for HI should, in the view of the author, be to have an increasing tax schedule in the 75-year valuation period considered, so as to meet the rising cost (primarily due to hospital costs increasing more rapidly than the general earnings level, but also due to the increase in the proportion of eligibles to covered workers and to the gradually increasing average age of the eligible population) on a current-cost financing basis. Neither Congress nor the Executive Branch has seen fit to adjust the HI tax schedule in this manner, or in any other way, to recognize the sizable lack of actuarial balance shown in all of the actuarial valuations made since 1977.

Table 10.20 presents data on such valuations for HI in previous years, while Table 4.5 shows these results for certain years in terms of dollars, on a present-value basis.

Appendix 8-2

Methodology for Short-Range SMI Cost Estimates

Initial Cost Estimates

As discussed previously, the SMI program had been considered for only a relatively short time before it was enacted—in contrast to the long period during which HI was a national issue. Only a relatively small amount of data was available for persons aged 65 and over with regard to insurance programs like SMI. As a result, considerably

greater difficulties arose in making actuarial cost estimates for SMI than for any of the other programs.

The cost estimate used in determining the initial premium rate specified in the 1965 Act was based, insofar as assumptions for the utilization of services were concerned, on data from the experience of the Connecticut-65 program (which was an insurance-company-operated, mass-enrollment, comprehensive health benefits plan for persons aged 65 or over, which terminated when Medicare went into operation). Subsequent cost estimates were based on the experience under SMI as it evolved.

One problem that arose in connection with the initial SMI cost estimates was the estimate of the participation in this voluntary plan. No pertinent experience existed that could be used as a guide in this respect. If participation were at a relatively low level, a very considerable amount of antiselection would be possible. In other words, it would be likely that, under such circumstances, only the worst risks would elect to participate. Then the per capita cost would turn out to be much higher than anticipated. However, the fact that the federal government would, under the original law, pay half the cost made the program attractive, so that even the lowest-cost groups would find it advantageous to participate.

Because of these uncertainties as to the extent of participation, it seemed advisable in the initial cost estimates to assume a range in the estimated participation rate of the eligible population aged 65 and over. The low estimate assumed 80 percent, while the high estimate assumed 95 percent. Even in the former case, the participation assumed seemed adequate, so that no antiselection of any serious magnitude could be expected. Previous experience under group health insurance had indicated that participation of at least 75 percent is adequate protection against antiselection. In subsequent estimates, the actual enrollment experience (beginning at 94 percent in 1966 and increasing to 97 percent for the aged and 92 percent for the currently disabled) was an accurate guide in making the assumption for this element for the future.

Principal Factors Involved

The important elements in making cost estimates for SMI benefits are (1) the number of persons enrolled and (2) the average annual per capita cost of the benefits, on an incurred-cost basis.

Because cost estimates for SMI involve projecting the premium rate for only a short time, there is not the same difficulty involved as in the

HI cost estimates, where trends of hospital costs must be projected for many years into the future. Nonetheless, an important aspect of making the SMI estimates is to derive suitable assumptions as to increases in physicians' fees and other covered charges in the period covered by the cost determination of the premium rate. Allowance also has to be made for the secular trend of increasing utilization of medical services.

The cost of a program such as SMI must properly be measured on an accrual basis, rather than on a cash basis. This is necessary to match the costs incurred in a period with the premium applicable to that period. The actuarial rate (from which the enrollee premium rate is derived) is, by law, to be determined in this manner, but estimates of the operation of the trust fund must be prepared on a cash basis, to show the actual SMI assets that will develop.

This involves still another difficulty—namely, estimating the extent of the lag that will occur. The relevant factors currently involved are the delay in the presentation of bills by physicians to the carriers who administer the program and the administrative lag involved in adjudicating the claims.

Current Methodology

Unlike the HI cost estimates, the cost estimates for SMI do not involve the development of the enrolled population by age-sex groups, with corresponding annual per capita benefit costs. However, such a subdivision is made currently for the category aged 65 and over and for the disabled category, because the law requires this and because the costs are so different for these two groups. Experience data are available by age and sex for enrollees aged 65 and over, but these are not utilized for the cost estimates, because the change in the age-sex composition of this group from one year to the next is relatively small and thus would have little effect on the estimates.

In making an SMI cost estimate for a near-future year, the average annual per capita costs experienced in the most recent past years are projected ahead. Such projection is based on trends experienced to date and estimated for the near future as to unit costs and utilization of covered services. The effect of the initial deductible must be considered, too, because it results in the situation whereby a certain increase in unit costs and/or utilization produces more than a corresponding increase in the per capita benefit costs. For example, if an individual has covered costs of \$200 in one year, the SMI reimbursement is \$80 (80 percent of the excess of \$200 over \$100). However, if such costs

the next year increase 20 percent (to \$240), the reimbursement is \$112, or 40 percent higher.

More details on the methodology and assumptions used in making the SMI cost estimates may be found in the annual reports of the Board of Trustees of the SMI Trust Fund.

Appendix 8-3

Provisions for Temporary Government Guarantee of Solvency of SMI Trust Fund

When HI was inaugurated, a contingency margin in its financing in the initial years arose from the fact that payroll taxes were collected six months in advance of when benefits were first available. It did not seem expedient to follow this procedure in SMI—collecting premiums well before benefit protection began. Rather, premiums were made payable at the beginning of the first month of operation. Although some funds would be accumulated—because of the effects of the \$50 initial deductible and the natural lag in filing claims and in adjudication—it was believed essential that there should be some additional financial backstop.

Accordingly, the original law authorized an appropriation from general revenues to be made available to the SMI Trust Fund to serve as a contingency reserve, to be drawn upon only if needed for payment of expenditures under the program. The amount of this authorization was set at six months of contributions of the per capita federal matching amount applicable in 1966–67 (i.e., \$18), times the estimated 19 million persons eligible to participate in the program when it would begin operations on July 1, 1966, or roughly \$342 million. In actual practice, only \$100 million was appropriated initially, although the remainder could have been appropriated if needed. None of this was actually used, because the experience—at least on a cash basis—was close enough to the level anticipated by the financing provided so as not to require it.

The law provided that any part of the contingency reserve actually used must be repaid, without interest, by the SMI Trust Fund at some later date. The provision for a contingency reserve lapsed at the end of 1969. A sufficient contingency reserve is intended to be provided in the future through the provision that the premium rates promulgated should be sufficient both to pay the necessary cost of the program and to maintain such reserve.

Appendix 8-4

Past History of Promulgations of SMI Standard Premium Rates

Premium Rates in 1966–1967

The original law provided that the standard premium rate for July 1966 to December 1967 should be \$3 per month. An amendment in 1967 extended this period for three months. A later amendment in 1967 provided that the subsequent new rate should be determined for the period April 1968 through June 1969. This rate was promulgated in December 1967 at \$4 per month. The increase was due to the liberalized benefits provided by the 1967 Act, the small inadequacy in the initial premium rate, and the anticipated future increases in physicians' fees and in utilization of covered services.

Promulgation in 1968

When Secretary of Health, Education, and Welfare Wilbur J. Cohen made the promulgation required by law in December 1968, he held the standard premium rate at \$4 per month for July 1969 through June 1970. This action was taken despite the recommendation of the Chief Actuary of the Social Security Administration (SSA) that the rate should be at the least \$4.40—and preferably \$4.50.¹⁴ The real reason behind the freezing of the premium rate was political. In December 1968, when the promulgation was made (as required by law), Secretary Cohen was a “lame duck,” having been appointed by President Johnson, who would go out of office the next month; President Nixon, who was of the opposite political party, would then take over.

Such action was “justified” on the ground that administrative restrictions were at the same time being introduced to curtail the amounts of physicians' fees “recognized” under the program as being reasonable charges.¹⁵ The attempted political effect of holding down the premium rate was to show the outgoing Democrats as the “good

14. The 1972 Act made changes in the wording of the law relating to the promulgation, so as to make it clearer that it should be based on actuarial computations, rather than on the apparent whim or desire of the Secretary of HEW.

15. In the author's view, this administrative action was not in accord with the letter or the spirit of the law. It represented a twisting of the concept of “reasonable charges” as being based on currently prevailing and customary charges. Moreover, the author

guys" insofar as the enrollees were concerned. Then, if the subsequent experience were above that on which the frozen premium rate was founded (as the SSA actuaries believed it would be—and as it was), the Republicans would be blamed for the corrective increase, plus any further one to allow for future experience. And that is exactly what did happen. Moreover, the SMI Trust Fund was almost completely exhausted at the end of the premium period, June 30, 1970.

Promulgations in 1969–1972

In December 1969, the new Secretary of HEW, Robert H. Finch, promulgated the standard premium rate for the 12 months beginning July 1970 at the actuarially determined amount of \$5.30 per month. The Nixon administration announced that the existing \$4 rate was providing inadequate financing and half of the \$1.30 increase resulted for this reason. The rest of the increase took into account future recognizable increases in physicians' fees and other covered services, increases in utilization, the changes in the per capita costs due to the change in the mix of services and providers, and the need to build up the trust fund from the very low level to which it had fallen (and from which it would continue to fall during the remainder of the then-current premium year), so that it could meet any unforeseen contingencies.

The subsequent promulgated standard premium rates for the 12-month periods beginning in July 1971 and 1972 (see Table 8.2) were also based on the actuarially determined amounts. The increases reflected the anticipated future changes in charges for covered services and in the pattern of services used and, for the 12-month period beginning July 1973, in the benefit liberalizations in the 1972 Act (after adjustment for the reduction in cost due to increasing the amount of the initial deductible).

Revised Rate Basis under 1972 Act

The provision resulting from the 1972 Act that limits the percentage increase in the premium rate to no more than the percentage increase in the OASDI cash-benefits level had no effect on the promulgation for the 12-month period beginning July 1973, because the benefits increased by 20 percent from June 1972 to June 1973, while the promulgated actuarial rate for persons aged 65 and over of \$6.30

believed at the time—and the later experience seemed to verify—that the introduction of fee controls would not have the full effect expected, because of the tendency of some physicians to avoid or evade them.

was an increase of only 9 percent. Accordingly, the promulgated standard premium rate for such year was \$6.30. At the same time, the promulgated actuarial rate for disabled enrollees under age 65 was \$14.50.

However, in June 1973 the Price Commission took the similar, unusual action that it had taken in connection with the HI initial deductible (as discussed in Chapter 6) and froze the premium rate at \$5.80.¹⁶ This was done only for the month of July and the first 12 days of August (so that the rate for that month was \$6.10, the average of 12 days at \$5.80 and 19 days at \$6.30). This caused great administrative difficulties (and expense), because the millions of OASDI monthly benefit checks for June (which contained the deduction for the July SMI premium) had already been prepared with the \$6.30 rate being deducted, and the same thing was done for the July checks. The correction could not be made until the November checks, which were thus at a higher rate than those of the two surrounding months, thus causing confusion for the beneficiaries. The net result of these small reductions in individual premiums was a refund of about \$14 million in the aggregate. At the same time, to make up for this loss of income as against the actuarial rate, there was an increase of this amount in the government contribution. Also, there were significantly higher administrative expenses, which in fact represented a sizable proportion of the premium refunds. This is a vivid example of how government controls on prices can sometimes produce absurd results.

For the remainder of the premium year, the government payment for those aged 65 and over was the same as the enrollee premium rate. For disabled enrollees, the government contribution of \$22.70 (namely, 2 times the actuarially adequate rate of \$14.50, minus the enrollee premium rate of \$6.30) per capita per month for persons enrolling in a timely manner met 78 percent of their cost (see Table 8.3). Or, to put it another way, for the remainder of that year the total government contribution with respect to enrollees aged 65 and over was exactly the same as the aggregate enrollee premiums. For disabled enrollees, the total government contribution was 3.6 times as large as the aggregate enrollee premiums (see Table 8.4).

Technical Error Introduced by 1973 Act

The \$6.30 premium rate would have been maintained for the 12-month period beginning July 1974 if no benefit increase applicable to

16. The figure of \$5.80 was based on the previous \$5.60 rate, increased to allow for the anticipated actuarial experience.

June 1974 had been enacted before January 1974, because the benefit level would then have remained unchanged from June 1973 to June 1974, and so no increase in the rate would have been permitted by the law. The 1973 Act, however, provided an 11-percent benefit increase effective for June 1974. Accordingly, the standard premium rate could have increased from the \$6.30 rate for the previous year to as much as \$7.00 (after rounding to the nearest 10 cents), but to no more than the actuarial rate for persons aged 65 and over. Such rate was determined to be \$6.70, so that the limitation based on the increase in OASDI benefits did not have any effect.

As a result, the government contribution for persons aged 65 and over for the year beginning July 1974 was the same as the enrollee premium rate. At the same time, the government contribution of \$29.30 per month for disabled enrollees enrolling on time—4.4 times the enrollee premium—represented 81 percent of their cost.

The situation for the year beginning July 1975 was somewhat different. For the first time, the enrollee standard premium rate for the aged (which, due to a technical error in the law, continued at \$6.70 per month) was lower than half the total cost—namely, only 45 percent thereof, because the per capita government contribution was \$8.30 per month.

Correction of Technical Error in 1975

The aforementioned technical error in the law, which if not changed would have resulted in freezing the amount of the standard premium rate for all future years, was corrected by legislation in 1975. A logical adjustment procedure was adopted to conform with the principles of the 1972 Act (as erroneously modified by the 1973 Act). The change simply was to measure OASDI benefit increases from Mays rather than Junes (as discussed earlier in this chapter).

The original corrective legislation that was proposed would have remedied the situation before the erroneous procedure had effect. Unfortunately, however, legislative delays occurred, and it was not possible to do so. As a result, the correct procedure was first used for the determination of the standard premium rate for the 12-month period beginning July 1976. Although it would have been possible to have built the new rate on what it should have been if the error in the law had not been present, this was not done.¹⁷ Instead, the errone-

17. In other words, the premium rate for the 12-month period ending June 1976 that was to be used as the base would have been recomputed as if the technical error in the law had not been present, rather than using the frozen \$6.70 rate as the base.

ously low premium rate for the 12-month period ending June 1976 was used as the base.

Promulgations in 1975 and After

For all premium years subsequent to the one that ended in June 1976, until the temporary (actually, for seven years) freezing of the standard rate at 50 percent of the actuarial rate by legislation in 1982, such rate was determined by the method of applying the increase in the level of OASDI cash benefits for the preceding June to the current premium rate. For example, for the promulgation made in December 1978 for the premium year beginning in July 1979, the \$8.20 rate applicable in July 1978 through June 1979 was increased by 6.5 percent—to \$8.70 (after rounding to the nearest 10 cents). This procedure was used because the adequate actuarial rate for the aged was higher in each instance (see Table 8.2)—and, in fact, became increasingly so over the years, because physician fees and other SMI medical-care costs rose more rapidly than the general CPI.

As a result, the relative proportion of the cost of SMI for enrollees decreased, from 50 percent in periods before July 1975 to only 24 percent for the premium year beginning July 1981. Or, to express the situation in another way, the standard premium rate increased by 64 percent from June 1975 to July 1981, but the actuarial rate for the aged rose by 237 percent during that time.

As may be seen from Table 8.2, the unadjusted actuarial rate for those aged 65 and over increased steadily over the years, rising from \$3.00 at the start to \$66.99 for 1992. A large part of this increase of 22 times was due to the rising trend in physician fees and other medical expenses covered by SMI.¹⁸ The remainder of the increase arose from increased utilization of covered services, liberalization of the benefit provisions by amendments, and the necessity for higher rates to build up the size of the SMI Trust Fund to a reasonable level after it had been almost exhausted at the close of the premium period ending June 1970 (as discussed in more detail in Chapter 10).

The estimated adequate actuarial rate for the disabled had increased sporadically over the period that this category had been covered under SMI. At the start, only sparse data were available for estimating this rate. In the subsequent years, no detailed data on an incurred basis were presented publicly, so it would seem that, as yet, adequate information for estimating costs was not available. This

18. The physician-fee component of the CPI increased by 6.5 times from 1966 to July 1991.

may explain the unusual trend of this rate—namely, a sharp increase in the second year, then an almost level rate in the next two years, followed by another sharp increase and again a leveling-off for the next three years, followed by a sharp jump in the following year and then gradual increases, of about 10 percent per year until 1985 (see Table 8.2). However, in the early 1980s, more adequate data for cost-estimating purposes have apparently become available, as evidenced by the trend of the figures for what the rate would be if it were based solely on estimated incurred expenditures (in parentheses in Table 8.2). However, after 1984, such estimated incurred expenditures showed a relatively level trend, with a slow rise generally from year to year.

The determination of the standard premium rate for 1984–90 as 50 percent of the actuarial rate and the setting of such rate for 1991–95 has been discussed in detail in the main text of this chapter.