
Distribution of Increased Benefits Under Alternative Earnings Tests

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Proposals for changes in the earnings test continue to be made. An important element in a decision to change the test is who receives the increased benefits resulting from the change. This article estimates and analyzes the distribution of increased benefits resulting from: (a) The liberalization in the test contained in the 1977 social security amendments, (b) possible future liberalizations of the earnings test, and (c) repeal of the earnings test. The authors conclude that any changes in the earnings test will not affect 90 percent of the aged population with respect to the level of benefits received because most have little or no earnings. The effect on the other 10 percent of the aged population will depend on which parameter of the earnings test is changed. Lowering the age at which the earnings test no longer applies will be primarily advantageous to the 5 percent of the aged population at the top of the earnings distribution. Increasing the exempt amount within the range considered in this article (from \$6,000 to \$10,000) will be primarily advantageous to the 5 percent of the aged population in the middle of the earnings distribution. Lowering the tax rate on earnings above the exempt amount would affect high and middle earners equally.

The 1977 Amendments to the Social Security Act (Public Law 95-216) included a significant change in the earnings test. Proposals for further revisions of the earnings test will probably continue to be made, particularly by those who are concerned about work incentives. Others will be equally concerned about the distribution of the increase in benefits resulting from changes in the earnings test. This article estimates and analyzes the distribution of increased benefits that result or would result from: (a) The liberalization in the earnings test contained in the 1977 social security amendments; (b) possible future liberalizations of the earnings test; and (c) repeal of the earnings test. Two aspects of these changes are discussed: the distribution

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of additional benefits, and the economic status of those to whom the additional benefits may be paid.

The estimates of the distribution of increased benefits that could result from various changes in the earnings test are made using 1975 data for earnings and for benefits withheld as recorded in the Social Security Administration's Master Beneficiary Record (MBR). A discussion of the precise methodology employed is contained in the technical note at the end of the article.

This article is divided into four sections. The first section describes the earnings test under the current law and compares the present test with the preceding one. The second section analyzes the distribution of the increased benefits that resulted from the 1977 amendments. In the third section the distributions of benefits that would result from several hypothetical changes in the earnings test are presented. The fourth section analyzes what the distribution of benefits would be if the earnings test were eliminated. A summary and some concluding statements regarding policy implications are presented at the end of the article. It should be noted that this article focuses only on the first-round

distribution effects. A number of other important aspects, including the indirect effects resulting from changes in work patterns in response to changes in the earnings test, are ignored.¹

Current Earnings Test

The annual exempt amount—that is, the amount that can be earned with no reduction in benefits—is \$5,000 in 1980 for beneficiaries aged 65 and older. This amount will be increased by \$500 increments annually to reach \$6,000 in 1982. Thereafter, it will increase automatically as wage levels rise. For beneficiaries under age 65, the exempt amount in 1980 is \$3,720; it increases annually with wage levels and is expected to be \$4,440 in 1982.² For beneficiaries with earnings above the exempt amount, benefits are reduced \$1 for every \$2 earned. The age at which the earnings test no longer applies is 72, but the current law lowers that to age 70 in 1982.

The current earnings test reflects liberalizations enacted in 1977. Three major differences exist between that test and the earnings test under preceding law. First, under the current law, beginning in 1982 the age at which the earnings test no longer applies is 70, compared with age 72 in earlier legislation. Second, the current law establishes two different annual exempt amounts—one for beneficiaries aged 65 and over and one for those aged 62-64. Previously, all beneficiaries were subject to the same test. Third, the annual exempt amount for beneficiaries aged 65 and over is higher for each year under the current law than it would have been under the preceding law. For example, the annual exempt amount in 1982 under the current law will be

¹ This article estimates the direct effect of the earnings of retired workers aged 65-71 on the benefits of retired workers (primary beneficiaries) and on the benefits of dependents of retired workers (secondary beneficiaries). Revisions of the earnings test will change the amount and distribution of benefits withheld from these beneficiaries and it is these changes that are analyzed here. But there are other direct and indirect effects of changes in the earnings test that are not analyzed in this article: (a) Changes in the amount of benefits withheld due to earnings of secondary beneficiaries, (b) induced changes in the work efforts (and therefore earnings) of both primary and secondary beneficiaries, and (c) induced changes in the level of benefits resulting from any change in work effort noted in (b).

In addition, as noted above, the analysis is limited to retired workers aged 65-71. Thus, the impact of eliminating the earnings test on eligible individuals aged 62-64 who may apply for actuarially reduced benefits but continue to work is ignored. Unlike nonretired workers aged 65 and over who apply for benefits to become eligible for Medicare, workers aged 62-64 have no incentive to apply for benefits that would be, under the current earnings test, completely withheld. The data resources utilized for this article would not give reliable estimates of changes in benefits for eligible workers aged 62-64, as it cannot be determined from these files how many would apply for reduced benefits if there were no test.

² 1979 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Disability Insurance Trust Funds, U.S. Government Printing Office, Washington, D.C., 1979, page 27.

\$6,000, compared with an estimated \$4,200 under the former law.

Two aspects of the earnings test remain unchanged. First, benefits will continue to be reduced \$1 for every \$2 earned above the annual exempt amount. Second, the annual exempt amount for beneficiaries under age 65 will remain the same.

Impact of 1977 Amendments

The increase in total benefits and the distribution of those benefits by earnings class as a result of the 1977 amendments are presented in table 1. The figures can be considered in two parts. As stated earlier, under the 1977 amendments the annual exempt amount for workers aged 65-69 is \$6,000 for 1982, compared with \$4,200 (estimated) under the former law.³ The simulations using 1975 data show a \$266-million increase in benefits paid to workers in this age group as a result of this change. About 14 percent of the increased benefits will go to persons earning \$10,000 or more, while 70 percent of the increased benefits will go to individuals earning \$4,000-9,999.

Under the current law, the age at which the earnings test no longer applies is also lowered from age 72 to age 70 in 1982. The effect of eliminating the earnings test for workers aged 70 and 71 is to increase benefits paid to them by \$467 million. About 67 percent of this increase will go to individuals earning \$10,000 or more, while only 31 percent will go to individuals earning \$4,000-9,999.

Thus, increasing the annual exempt amount for workers aged 65-69 primarily helps workers in the middle of the earnings distribution. On the other hand, eliminating the earnings test for workers aged 70-71 primarily helps individuals at the top of the earnings distribution.

The total effect of the changes in the earnings test legislated by the 1977 amendments is a \$733-million increase in the amount of benefits paid. About 48 percent of the increased benefits will go to individuals earning \$10,000 or more and about 45 percent to individuals in the middle of the earnings distribution—that is, those earning \$4,000-9,999. Only about 7 percent of the increased benefits will go to

³ Recent projections (see footnote 2) estimated that the 1982 exempt amount would have been \$4,440 for workers aged 65-69 under the former law. Simulations here are based on an estimate for 1982 of \$4,200 made when the 1977 amendments were under consideration. The slight change in the base should not appreciably affect the results. In addition, from a conceptual point of view, the change from \$4,200 to \$6,000 in 1982 represents the intended modification in the earnings test. This change is equivalent to a change from \$2,520 to \$3,600 in 1975. Thus, \$3,600 is used as the basis for the simulations here for the 1977 amendments and for additional changes. The simulations were done in 1978 using the 1975 MBR, the latest data then available. (See the methodology section of the technical note at the end of the article.)

Table 1.—Simulated benefit increases resulting from 1977 amendments: Amount and percentage distribution of benefit increase, by change in earnings test and 1975 level of earnings

1977 earnings test changes	Benefit increase (in millions)	Percentage distribution, by 1975 level of earnings ¹					
		Total	Less than \$4,000 ²	\$4,000-5,999	\$6,000-7,999	\$8,000-9,999	\$10,000 or more
Total.....	\$733	100.0	7.3	14.6	16.2	14.4	47.5
New exempt amount (\$6,000 in 1982) for workers aged 65-69.....	266	100.0	16.5	28.1	24.7	17.1	13.6
Elimination of earnings test for workers aged 70-71.....	467	100.0	2.1	6.9	11.3	12.9	66.8

¹The earnings level will have increased by about 75 percent between 1975 and 1982: the \$4,000-5,999 bracket becomes \$7,000-10,499 in 1982; the two highest brackets become \$14,000-17,499 and

\$17,000 or more in 1982.

² Represents \$2,521-3,999 before the 1977 amendments and \$3,601-3,999 after the amendments.

individuals at the lower end of the earnings distribution.

It should be kept in mind that the changes in the earnings test are being analyzed for 1982, but that the estimates of increased benefits are based on 1975 earnings and benefit levels. The increased benefits paid in 1982 and the values of the earnings-class brackets thus will be substantially higher in 1982. For example, the earnings brackets to which the distributions apply should be increased by about 75 percent between 1975 and 1982 so that the highest bracket in 1982 would be \$17,500 or more, compared with \$10,000 or more in 1975. The estimates, however, do provide a good measure of the increase in benefits resulting from one change relative to another change. The gain in benefits resulting from the elimination of the earnings test for individuals aged 70 and over (\$467 million) is, for example, about 75 percent greater than the gain in benefits resulting from an increase in the exempt amount for individuals aged 65-69 (\$266 million).

the exempt amount was reduced from 50 percent to 33½ percent. The total increase in benefits and the distribution of these benefits by earnings class as a result of each of these liberalizations are presented in table 2.

Increasing the Exempt Amount

If the annual exempt amount for 1982 were increased from \$6,000 to \$8,000 (the 1975 equivalent is from \$3,600 to \$4,800), the increase in benefits would be \$270 million. About 77 percent of the increased benefits would go to individuals in the middle of the 1975 earnings distribution (\$4,000-9,999), and about 22 percent would go to individuals at the top of the earnings distribution (\$10,000 or more). If the 1982 annual exempt amount were increased from \$6,000 to \$10,000 (the 1975 equivalent is from \$3,600 to \$6,000), the increase in benefits would be \$521 million. About 72 percent of the increased benefits would go to individuals in the middle of the earnings distribution, and about 28 percent of the increased benefits would go to individuals at the top of the earnings distribution. (Under the 1977 amendments, which raised the 1982 exempt amount to \$6,000—1975 equivalent \$3,600—only 14 percent of the increase in benefits went to individuals at the top of the earnings distribution.) This analysis of the distributional implications of increasing the exempt amount (including the modification contained in the 1977 amendments) clearly indicates that successive increases in the annual exempt amount concentrate additional benefits among groups with higher and higher earnings, as would be expected.

Alternate Earnings Test Liberalizations

The earnings test has three parameters: (1) The annual exempt amount, (2) the age for application of the test, and (3) the benefit reduction rate or effective tax on earnings above the annual exempt amount. Proposals to change the earnings test and past modifications involve altering one or more of these parameters.

The increase in total benefits and the distribution of those benefits by earnings class for beneficiaries aged 65-69 are analyzed for several hypothetical changes in the earnings test under current law. First, the exempt amount for 1982 was increased to \$8,000 and then to \$10,000 (compared with \$6,000 in 1982 under the current law). Second, the applicable age was reduced to 68 in 1982 (compared with age 70 in 1982 under the current law). Third, the benefit reduction rate was changed to \$1 in benefits for every \$3 of earnings above the exempt amount (compared with \$1 in benefits for every \$2 of earnings under the current law). Put another way, the effective tax rate for earnings above

Lowering the Applicable Age

If the age at which the earnings test no longer applies were lowered in 1982 from age 70 (current law) to age 68, the increase in total benefits would be \$512 million. About 72 percent would go to workers at the top of the earnings distribution, and only about 28 percent would go to individuals in the middle of the earnings distribution. It is worth noting that although raising the

exempt amount to \$10,000 costs about the same (slightly more than \$500 million) as lowering the applicable top age to 68, the distribution of the increased benefits is radically different. Whereas lowering the age from 70 to 68 results in 72 percent of the increased benefits going to individuals at the top of the earnings distribution, increasing the exempt amount from \$6,000 to \$10,000 results in only 28 percent of the increased benefits going to such earners.

The above analysis, coupled with the analysis of the impact of the 1977 amendments (which included both an increase in the annual exempt amount and a lowering of the applicable top age) clearly shows that lowering the age at which the earnings test no longer applies increases benefits primarily for individuals at the top of the earnings distribution, while increasing the annual exempt amount within the \$6,000-10,000 range primarily helps individuals in the middle of the earnings distribution. Neither change has an appreciable effect on individuals at the lower end.⁴

Lowering the Tax Rate

Lowering the tax rate on earnings above the exempt amount from 50 percent to 33 $\frac{1}{3}$ percent has a dis-

⁴ This result is not unexpected given that the band for the lowest bracket is only \$2,521-3,999 before the 1977 amendments and \$3,601-3,999 after. Before the 1977 amendments, for example, the reduction in annual benefits for an individual in this bracket would at most be \$740, whereas an individual in the \$6,000-8,000 bracket could have a reduction as high as \$2,740 per year. It should, however, be noted that 17 percent of those with benefits withheld had earnings in the narrow range \$2,501-3,999, compared with 13 percent for the \$6,000-7,999 bracket. (After the 1977 amendments, only 4 percent of those with benefits withheld were in the range \$3,601-3,999, compared with 17 percent in the \$6,000-7,999 bracket.) None of these facts negates the point that those with low earnings (under \$4,000) would not significantly benefit from a change in the earnings test since most of their earnings are already exempt from the test.

tributational effect about midway between raising the annual exempt amount and lowering the applicable top age. About 50 percent of the increased benefits go to individuals at the top of the earnings distribution, while almost all the remaining benefit increase goes to individuals in the middle of the earnings distribution. Unlike either lowering the applicable top age or raising the exempt amount, lowering the tax rate on earnings above the exempt amount does not change the number of beneficiaries with benefits withheld. It does expand, however, the group having some (as opposed to all) benefits withheld.

Eliminating the Earnings Test

It is sometimes proposed that the earnings test be eliminated entirely. This proposal was considered in the debate over the 1977 amendments. The total increase in benefits and the distribution of those benefits by earnings class as a result of eliminating the earnings test for individuals aged 65-69 (who are subject to the 1982 earnings test under the current law) are presented in table 2. The simulations, using 1975 data, show that the increased benefits for these individuals would total \$1,841 million. About 67 percent of the increase would go to individuals earning \$10,000 or more.

Another perspective is obtained if the earnings distribution for the total population aged 65-69 is analyzed. Only 6 percent of the 8 million persons aged 65-69 in 1975 earned \$10,000 or more, although these high earners comprised 46 percent of the 800,000 persons in that age group whose benefits were withheld because of their earnings (table 3). About 67 percent of the increased benefits that would result from elimination of the earnings test would thus go to 6 percent of the population. About 32 percent would go to individuals

Table 2.—Simulated benefit increases resulting from alternative liberalizations of the earnings test and from elimination of the earnings test: Amount and percentage distribution of benefit increase, by type of liberalization and 1975 level of earnings

Alternative liberalizations	Benefit increase (in millions)	Percentage distribution, by 1975 level of earnings ¹					
		Total	Less than \$4,000 ²	\$4,000-5,999	\$6,000-7,999	\$8,000-9,999	\$10,000 or more
Resulting from alternative liberalizations of the earnings test							
Raise 1982 annual exempt amount for workers aged 65-69 to: ³							
\$8,000 (1975 equivalent, \$4,800).....	\$270	100.0	1.1	27.2	28.6	21.2	21.9
\$10,000 (1975 equivalent, \$6,000).....	521	100.0	.6	18.9	30.2	22.8	27.6
Eliminate earnings test for workers aged 68-69 ⁴	512	100.0	.1	4.3	10.1	13.9	71.7
Lower tax rate for workers aged 65-69 to one-third ⁵	402	100.0	.2	8.1	17.9	21.5	52.3
Resulting from elimination of the earnings test							
Elimination of earnings test for workers aged 65-69.....	\$1,841	100.0	.2	5.3	12.1	15.5	66.9

¹ See table 1, footnote 1.

² See table 1, footnote 2.

³ Tax rate as under present law.

⁴ Exempt amount and tax rate as under present law.

⁵ Exempt amount as under present law.

Table 3.—Earnings of population aged 65-69 in 1975: Number and percentage distribution of total population and of those with benefits withheld, by 1975 earnings

1975 earnings	Population	
	Total ¹	With benefits withheld ²
Total number (in thousands).....	8,049	782
Total percent.....	³ 100	100
0.....	72	.....
\$1-3,600.....	16	.....
3,601-3,999.....	1	4
4,000-5,999.....	3	18
6,000-7,999.....	2	17
8,000-9,999.....	2	15
10,000 or more.....	6	46

¹ Data from Bureau of the Census, **Current Population Survey (CPS) for March 1976**.

² Data from Social Security Administration Master Beneficiary Record (MBR).

³ Totals do not add because of rounding. Estimates, based on the MBR, of workers aged 65-69 earning specified amounts do not match estimates based on the CPS because of: (a) sampling error, (b) underreporting of earnings in MBR and CPS (nonreported earnings are usually allocated in the CPS and they are not in the MBR), and/or (c) the fact that the MBR is a 100-percent file of beneficiaries and the CPS is a sample taken from the entire population, some of whom have seldom worked in covered employment and therefore are not receiving benefits. For further details, see the technical note, page 8.

in the middle of the earnings distribution—7 percent of the 65-69-year-old population. About 13 percent of this age group would therefore receive almost all—99 percent— of the increased benefits that would result from elimination of the earnings test. This distribution is explained by the fact that among individuals aged 65-69 in 1975, 72 percent had no earnings, and 16 percent had earnings below the exempt amount (\$3,600 under our simulations).⁵

The distributive effects on the entire population over age 65 of eliminating the earnings test presents a third perspective that is shown in table 4. Only 17 percent of those aged 65 or older have earnings, and only 6 percent earn more than the annual exempt amount. Those earning \$10,000 or more are about 3 percent of the over age-65 population. Of this 3 percent, about half are aged 65-69 (table 3) and thus would have benefits reduced under the current law in 1982. (Aged men are more likely to have earnings than aged women, and less than 1 percent of aged women earn \$10,000 or more.) Combining the data in tables 2 and 3 shows that about 67 percent of the increased benefits resulting from eliminating the earnings test would go to less than 2 percent of the total aged population (the fraction of the

⁵ Similar analysis can be undertaken for the 1977 amendments or other proposals discussed above. Briefly, a review of the Current Population Survey (CPS) and social security earnings and benefits data indicates that about 10 percent of the population aged 65-71 received about 93 percent of the increased benefits resulting from changes in the earnings test under the 1977 amendments.

aged population earning \$10,000 or more and subject to the earnings test).

Table 4 also presents the mean income from all sources for each earnings level. When pensions and income from assets are added to all other income sources, those who continue to work have the highest incomes.

Summary and Conclusions

The analysis presented in this article can be summarized as follows:

(1) About 93 percent of the increased benefits resulting from the changes in the earnings test legislated by the 1977 social security amendments will go to individuals at the top or in the middle of the earnings distribution.

(2) Lowering the age at which the earnings test no longer applies is advantageous primarily for individuals at the top of the earnings distribution. Specifically, if the age is lowered from 72 to 70, about 67 percent of the increased benefits go to individuals at the top of the earnings distribution. Lowering the exempt age from 70 to 68 would result in about 72 percent of the increased benefits going to individuals at the top of the earnings distribution. If the test were to be eliminated for all individuals aged 65-69 (which effectively reduces the exempt age from 70 to 65) then 67 percent of the increased benefits would again go to individuals at the top of the earnings distribution. Among all individuals aged 65-69, only about 13 percent are at the top or middle of the earnings distribution. Virtually all of the benefits resulting from repeal of the age restriction would go to this group. Conversely, since 72 percent of those aged 65-69 have no earnings and about 16 percent have earnings below the exempt amount, the benefits of almost 90 percent of the population in this age group would not be changed if the earnings test were repealed.

(3) Increasing the annual exempt amount within the range analyzed in this article is primarily advantageous to individuals in the middle of the earnings distribution. Increasing the 1982 annual exempt amount to \$6,000 results in about 70 percent of the increased benefits going to individuals in the middle of the earnings distribution (77 percent if the exempt amount were further increased from \$6,000 to \$8,000, and 72 percent if the exempt amount were increased from \$6,000 to \$10,000).

(4) Lowering the tax rate on earnings above the exempt amount from 50 percent to 33½ percent results in about 50 percent of the increased benefits going to individuals at the top of the earnings distribution and about 50 percent going to individuals in the middle of the earnings distribution.

(5) Under all the hypothetical changes in the earnings test analyzed in this article, virtually none of the

Table 4.—Earnings and mean total personal income in 1975: Number and percentage distribution of population aged 65 and over, by sex and marital status

1975 earnings	All persons		Men				Women			
			Married		Not married		Married		Not married	
	Distribution	Mean income	Distribution	Mean income	Distribution	Mean income	Distribution	Mean income	Distribution	Mean income
Total number (in thousands).....	21,662	.....	6,813	.....	2,100	.....	4,674	.....	8,075	.....
Total percent.....	100	.....	100	.....	100	.....	100	.....	100	.....
All levels of earnings.....	.....	\$5,720	.....	\$7,480	.....	\$5,130	.....	\$1,900	.....	\$3,960
0.....	83	3,880	72	5,950	82	4,400	91	1,590	88	3,680
\$1-3,600.....	11	5,420	15	6,710	12	5,230	7	3,430	9	4,605
3,601-3,999.....	(¹)	7,290	(¹)	8,850	1	6,710	(¹)	4,930	(¹)	6,190
4,000-5,999.....	1	8,290	2	8,955	1	9,080	1	6,280	1	7,890
6,000-7,999.....	1	9,300	2	9,624	1	9,530	1	7,850	1	9,130
8,000-9,999.....	1	11,450	2	11,050	1	11,090	(¹)	10,100	1	12,970
10,000 or more.....	3	22,030	7	23,508	3	18,580	1	14,930	1	15,710

¹ Less than 0.5 percent.

Source: Bureau of the Census, *Current Population Survey for March 1976*.

increased benefits would go to individuals at the lower end of the earnings distribution. Most persons aged 65 and over either earn less than the exempt amount or earn nothing at all.

The policy implications of this analysis are straightforward. Any change in the earnings test will leave 90 percent of the aged population unaffected with respect to the level of benefits received. The effect on the other 10 percent of the aged population will depend on which parameter of the earnings test is changed. Lowering the age at which the earnings test no longer applies will be advantageous to the 5 percent of the aged population at the top of the earnings distribution. Increasing the exempt amount within the range considered in this article (\$6,000-10,000) will be advantageous to the 5 percent of the aged population in the middle of the earnings distribution. Lowering the tax rate on earnings above the exempt amount will affect high and middle earners equally.

Finally, it must be stressed that the estimates presented in this article do not take into account distributive changes arising from changes in labor supply that may result from a change in the earnings test. Past experience has shown that relatively small changes in the exempt amount do not result in significantly large changes in labor supply. Recent changes in the tax rate also have not been very effective in this regard. If the earnings test were repealed, however, or if the exempt amount were raised high enough to cover preretirement earnings levels for most workers, predicting the number who would choose to continue to work and collect benefits, rather than to retire, is speculative. Distributive effects of such global earnings-test changes

that would include such secondary effects must be left for a future study.⁶

Technical Note

Data Sources

The analysis of the effects of alternative earnings tests is based on data from the Social Security Administration's Master Beneficiary Record (MBR) of retired workers and their dependents. Tabulations on the number of retired-worker beneficiaries affected by the earnings test and the amount of benefits withheld were prepared for 1975.⁷ Data from the MBR were used in conjunction with Current Population Survey (CPS) data to derive the general income characteristics of those affected by alternative earnings tests and their relationship to those not affected.

The 1976 CPS was used for demographic information for March of that year and for annual dollar amounts for 1975. Differences exist between CPS and MBR data since the source of the former is a household sample survey and the latter come from 100-percent record data.

Moreover, the two data sets usually do not contain information on the same economic variables. For example, the MBR contains records on individuals who

⁶ For a discussion of some of these issues, see Josephine G. Gordon and Robert N. Schoepfle, "Tax Impact From Repeal of the Retirement Test," *Social Security Bulletin*, September 1979.

⁷ For a more complete description of the data file, see Barbara A. Ligg, "Beneficiaries Affected by the Annual Earnings Test in 1975," *Social Security Bulletin*, December 1978.

would be affected by alternative earnings tests, but not on their families (except in the special sense of social security primary beneficiaries associated with dependents). Because the MBR provides little information about families, "persons" data as opposed to "family" data have been used from the CPS. Therefore, total income figures are for the earners only and do not include amounts received by other family members. Thus, there is an underestimate of total family incomes.

Even if the two data sources contained information on the same variables, the derived estimates could differ. For example, the estimates from the CPS of 6 percent of 8,049,000 and 46 percent of 783,000 shown in table 3 are not identical. The apparent discrepancy of 123,000 is, in fact, well within tolerable limits. First, the actual counts were 448,957 for the CPS and 357,311 for the MBR. If the percentages had not been rounded, the gap would have been 92,646. Second, the CPS is subject to sampling error. According to the CPS guidelines,⁸ the standard error for a base of 10 million is 121,000; thus a confidence range of two standard deviations could explain the differences.

Since sampling errors and rounding could account for the entire difference of 93,000, it is not really necessary to adduce other reasons; however, differences between concepts and reporting in the two data sources also may be responsible in part. The MBR, for example, only contains records of beneficiaries whose benefits derive by definition from covered employment. Since about 90 percent of all employment is covered, not all earners aged 65-69 would be expected to be included in this data source. Moreover, it is well known that there is underreporting of earnings to both the Social Security Administration and the CPS, but in the latter source nonreported earnings are usually allocated.

For these and other reasons, small differences between the two surveys should be expected. The major point of table 3, however—that beneficiaries with significant earnings, and therefore with benefits withheld, represent a small proportion of the total 65-69-year-old population—remains valid.

⁸ Bureau of the Census, *Current Population Survey for March 1976*, P-60, No. 105, page 281.

Methodology

Using the 1975 MBR, the effects of alternative annual earnings tests that were to take effect in various years were simulated.⁹ Under the current provision for automatic adjustment of the exempt amount (in accordance with the increase in average earnings in covered employment), a \$6,000 amount in 1982, for example, is equivalent to a \$3,600 amount in 1975.¹⁰ Benefits of retired workers (and their dependents) subject to the test in 1975 were then recomputed based on \$3,600 as the annual exempt amount of earnings rather than the actual earnings limit of \$2,520. The distribution of the increase in benefits by type of beneficiary unit, monthly benefit amount, and level of earnings was then analyzed. The 1975 equivalents of the final year of legislative increases for the various alternatives are as follows:

1982 exempt amount	1975 equiva- lent
\$6,000	\$3,600
8,000	4,800
10,000	6,000

For each proposal the increase in benefits was calculated as the difference between the amount withheld under two alternative earnings tests.¹¹ As mentioned, the simulations in this article assumed no labor-supply response.

⁹ The monthly retirement test was not factored into the calculations for the various simulations. The simulations compared the various alternatives only with respect to the effects of an annual earnings test. Under the 1977 amendments, the monthly test only applies during specified transition years between nonbeneficiary status and beneficiary status. Ignoring the monthly test in these simulations increases the estimate of benefits withheld by about \$200 million, compared with data in table 6 of the Barbara Lingg article cited in footnote 7. Data in that table include the effect of the monthly test before the 1977 amendments.

¹⁰ Under the former law, the annual exempt amount for 1982 was estimated to increase automatically to \$4,200 under the assumptions used for the 1977 amendments—that is, the trustees' report then available. Similar 1975 proportional equivalents were computed for the various alternatives.

¹¹ When the earnings test is eliminated, the increase in benefits is merely equal to the amount of benefits withheld under the current test for the relevant age group.