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THE EFFECTS OF REMOVING 70- AND 71-YEAR-OLDS FROM COVERAGE UNDER THE SOCIAL SECURITY EARNINGS TEST

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This study attempts to answer the question of how persons aged 65-69 would respond to the elimination of the earnings test (sometimes called the retirement test), by looking at the changes in labor market behavior of 70- and 71-year-olds whose earnings test coverage was eliminated beginning in 1983. In particular, it tries to determine whether 70- and 71-year-olds increased their labor force participation and earnings once the earnings test was removed. This issue is important because proposals to eliminate the earnings test for persons aged 65-69 generally assume that a portion of the additional benefit expenses would be recovered by income and payroll taxes generated by increased work effort among this age group. The major findings are:

- Economic theory predicts that removing the RET for persons currently covered by it will have mixed effects on their labor supply and earnings.
  - Some workers with earnings below the earnings threshold will increase their hours of work and earnings.
  - Some workers with earnings above the threshold will decrease hours of work and earnings although some may increase both.
  - Removing the RET can be expected to have little impact on the number of workers re-entering the labor market. Persons who are motivated to re-enter the workforce should have earnings above the earnings threshold.
- The analysis using the Continuous Work History Sample (CWHS) data (the preferred data set) shows the following effects from removing the RET.
  - Labor force participation rates for men and women aged 70 and 71 are not affected.

- There is an increase in the percentage of men (but not women) earning below the RET earnings threshold when they are covered by the RET and above the threshold when they are not.

- There are no measurable effects on earnings of men or women aged 70 and 71.

o The analysis using Bureau of Labor Statistics data shows a marginal increase in the labor force participation rate for men, but no effect for women. The effect on earnings could not be ascertained using the BLS data.

o Even though the effects of removing the RET would probably be greater for 65- to 69-year-olds than they are for 70-and 71-year-olds, the size of these effects cannot be determined.

Economic Theory

It is often assumed by those proposing the elimination of the earnings test that work effort and earnings of persons affected will increase if the retirement earnings test is removed. However, this result is by no means certain. The earnings test is considered a work disincentive because, for a range of earnings above the earnings test earnings threshold, Social Security benefits are reduced by $1 for each $2 earned. Thus, the monetary gain from an additional hour of work is reduced by 50 percent.[1] This monetary reduction is caused by the reduction in Social Security benefits due to earnings above the threshold. Because the returns from working are reduced over

1. Beginning in 1990, Social Security benefits for persons aged 65-69 will be reduced $1 for each $3 of earnings above the earnings test threshold.

the range the earnings test applies, some people will reduce their work effort. This is known as the substitution effect. In effect, the price for not working has fallen and workers will substitute nonwork time for work time. On the other hand, the reduction in the monetary returns from working caused by the earnings test means that a worker's disposable income has fallen. In order to recoup some of the lost income, he or she may increase hours of work, or at least modify the reduction in hours of work caused by the substitution effect. This second effect is known as the income effect. Whether a person increases or decreases his or her work effort because of the earnings test depends on the relative strengths of the income and substitution effects.

Removing the earnings test will cause the income and substitution effects to work in directions opposite those above. For those people who had Social Security benefits reduced because of the earnings test, removing the test means they can work without having their benefits reduced. Their incomes will increase in the amount of the Social Security benefits formerly withheld. This increase in income means they can reduce their hours of work and maintain the same level of disposable income as they had while the earnings test was in effect. If the earnings test is removed, the income effect will tend to reduce hours of work. Because Social Security benefits are no longer reduced by earnings above the earnings test threshold, an additional hour of work in the range that the earnings test applies will no longer

reduce the monetary gain from working. Because the returns from working have increased, the worker will tend to substitute work time for nonwork time. Removal of the earnings test will cause an increase in hours worked via the substitution effect. The net effect of removing the earnings test will depend upon the relative strengths of the income and substitution effects.

Workers earning above the level at which all Social Security benefits would be lost to the earnings test will face only an income effect and their work effort and earnings are expected to decrease somewhat. There is no substitution effect for them because removal of the earnings test will not affect the net wage paid for an additional hour of work. Persons earning at a level between the earnings test threshold and the level where all benefits are taxed away will face both effects. Their work effort could increase or decrease, depending on which effect dominates. Even if they decrease their hours of work, the net earnings (earnings minus Social Security benefits withheld because of excessive earnings) of people in this group could increase. The earnings of this group should remain above the earnings threshold. Persons earning at or just below the earnings threshold should have no income effect because they either already are, or could be, receiving the full Social Security benefit to which they are entitled. Removing the earnings test should increase the work effort and earnings of this group.

In a world where people could fine-tune the amount they worked, we would expect to observe a change in the distribution of hours worked for persons affected by the removal of the earnings test, but we would not expect to see a change in the number of workers. Persons out of the labor force would have been able to work and receive earnings while the earnings test was in effect without reducing their Social Security benefits. Likewise, those who had earnings below the threshold could increase their earnings without reducing their Social Security benefits. In reality, however, some people are constrained to work a set minimum number of hours in order to get a job paying what they consider a decent wage. They have the choice of working and foregoing some or all of their benefits or of taking benefits and either not working or working at a job paying a lower wage rate. Because of the existence of this "all or something less" type constraint, it is possible that some people who are not working, or whose earnings are well below the earnings test threshold, will increase their work effort (via the substitution effect) if the earnings test is removed. We would expect the earnings of people thus affected by the earnings test elimination to move above the old earnings test earnings threshold.

The available literature generally indicates labor supply effects of removing the retirement earnings test are likely to be small. These studies estimate that the income effect is important and suppresses the increase in hours of work due to

higher net wages. One study finds that the magnitude of the income effect increases with age, implying that the net positive effect on hours worked of eliminating the earnings test will be smaller the older the affected individual is.[2] Thus, it is possible that the estimated effects of eliminating the earnings test for 70- and 71-year-olds will understate the effects on 65- to 69-year-olds.

To date, no systematic study of these possible behavioral responses of 70- and 71-year-olds to the elimination of the earnings test has been undertaken. This study attempts to fill the gap by looking at how they changed their work and earnings behavior after the earnings test was eliminated for them in 1983.

Data Sources

Data from two different sources are analyzed to determine whether the elimination of the earnings test affected the proportion of 70- and 71-year-olds who worked or the amount of earnings they received from their work. Data on labor force participation rates (LFPRs) from 1970 to 1987, obtained from the Bureau of Labor Statistics (BLS), are analyzed first. These data

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2. For a more detailed discussion of the relevant literature, see "The Effects of the Social Security Earnings Test on the Labor Market Activity of Older Americans: A Review of the Evidence," by Michael V. Leonesio, **Social Security Bulletin**, May 1990.

give the official government estimates of LFPRs and from them we can look at trends both before and after the elimination of the earnings test. Unfortunately, these data do not tell whether persons who were already working increased or decreased their work effort or, more importantly from our perspective, their earnings. If it is believed that the additional benefit payments resulting from the elimination of the earnings test are to be offset by increased income and payroll taxes, then it is imperative that estimates of changes in aggregate earnings be available.

To look at how earnings levels changed after older workers were no longer constrained by the earnings test and to get a better idea of how individuals change their labor force behavior at older ages, we looked at a sample of data from the Social Security Administration's CWHS. This data set contains administrative data on a random sample of approximately one percent of all persons ever issued a Social Security number. The data set contains information on beneficiary status by year, on reported covered earnings from self-employment and wage and salary jobs, and, after 1977, on total compensation as reported on the individual's W-2. Using this data set we are able to estimate the number of beneficiaries who have earnings after age 65. We can determine whether the earnings of older workers increase or decrease through time, especially at the age when the earnings test no longer applies, and whether they reenter the

labor force once they are no longer affected by the earnings test.

The CWHS also has several shortcomings that make it a less than perfect data set for studying the issue at hand. First, it contains only 3 years of data after the earnings test was eliminated for 70- and 71-year-olds. It will be difficult to determine whether changes that occur in their behavior are long-term effects or only temporary effects that diminish after a short period. It will also be difficult to determine if there are behavioral changes that appear gradually. Second, because the CWHS is created from administrative records, there are few demographic and socioeconomic variables such as education, health, marital status, or total income level that can be used as independent predictors of their post-age 65 labor force behavior. Finally, the earnings recorded on the CWHS are covered earnings only. Earnings from noncovered employment are not listed.

In the final section, we attempt to relate how the results from the first two sections can be used to gauge how 65- to 69-year-olds might react to the elimination of the earnings test.

Analysis of BLS Labor Force Participation Rates, 1970-87

In trying to determine whether the elimination of the earnings test for persons aged 65-69 will result in a significant

increase in their work effort, it is instructive to look at changes in the labor market activity of 70- and 71-year-olds after they were no longer subject to the earnings test beginning in 1983. We concentrate in this section on the LFPRs of 70- and 71-year-olds and persons 2 years younger (68-69) and 2 years older (72-73). The 68- and 69-year-olds is the group most likely to behave like the 70- and 71-year-olds when they were covered by the earnings test. The 72- and 73-year-olds is the group whose behavior should be the most similar after the earnings test was removed.

If the removal of the earnings test caused 70- and 71-year-olds to return to the labor market or to remain in the labor force when they otherwise would have retired, then we should see a statistically significant change in their LFPRs after the earnings test was removed. Because there was no change in the earnings test for persons younger than the 70-71 age group, we would not expect to see much of a difference in their LFPRs because of the removal of the earnings test for 70- and 71-year-olds. While some members of this younger age group may decide to delay withdrawal from the labor force because they are closer to the age when their Social Security benefits will not be affected by their earnings level, others may decide to withdraw temporarily from the labor force and reenter once their earnings no longer affect their benefit level.

Even though there was no change in the earnings test for 72- and 73-year-olds, we may observe a small, perhaps delayed, change in the LFPRs of this group. The reason for this is that if 70- and 71-year-olds increase their LFPR, then there will be more workers turning age 72 than there were when the earnings test applied to 71-year-olds and some of these "new" workers will continue working after they turn age 72. However, because the age at which earnings no longer affect benefits has fallen from age 72 to age 70, some workers may substitute labor at ages 70 and 71 for labor at older ages.

The Data

The data for LFPRs for the period 1970 to 1987 was obtained from BLS and included the civilian noninstitutional population and the number in the labor force by sex and single years of age. LFPRs for men and women aged 68 and 69, 70 and 71, and 72 and 73 were computed from the BLS data.[3] As is obvious from the data (see table A, appendix A), the LFPRs for all age groups and for both sexes declined between 1970 and 1987. What is not so obvious is that, for men, the LFPRs of persons aged 70 and 71 declined more in percentage terms over both the entire 1970-87 period and the post-earnings test 1982-87 period than did the LFPRs of the other groups. For women, the LFPRs of the 70- and

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3. See appendix A for a more detailed discussion of the data used in this section.

71-year-olds declined faster over the longer period than did the LFPRs of the younger and older groups, but increased slightly over the shorter period compared with a slight decline for the other two age groups.

An examination of the LFPRs for these men and women reveals that the trends are very different for the two sexes (see chart 1). For women, most of the decline over the 1970-87 period occurred during the first 5 years of the period (all the decline for the 68- and 69-year-olds and 80 percent of that for the other two groups occurred during this 5-year period). The trend for men shows a more steady decline, although the rate of decline varies by age group. The different patterns of LFPRs for men and women, especially after 1974, suggest that there may be different forces affecting the work and retirement behavior of the two sexes.

One partial explanation of the different patterns of LFPRs is that, while the rate of labor force withdrawal by women may have increased over time, the movement of women into the labor force at these ages may also have increased. A look at the raw data for these women indicates that, while women's LFPRs fell slightly over the 18-year period under study, the number of women in the labor force has not fallen but has actually increased slightly. Changes in labor force participation rates measure net changes (entries into the labor force minus withdrawals from it) and it is possible that over the 1974-87 period the number of

working women entering these age groups have roughly equalled the number who withdrew from the labor force. Men have not been participating in the recent migration into the labor force as women have, so changes in men's LFPRs in this age group are much more likely to be a pure measure of labor force withdrawal than it is for women. We speculate, too, that women tend to work in less physically demanding jobs and some of the occupations they are employed in may not have experienced the same degree of technological change as those of men. Thus, the incentives for women to retire because of health problems or because of obsolescent job skills may be less than for men.

The variables we will use to explain the changes in LFPRs are: a trend variable, TREND, (1 in 1970, increasing by 1 each year) that serves as a proxy for a multitude of forces that change through time; an earnings test dummy variable, RETDUM, (0 for the period 1970 through 1982, the period 70- and 71-year-olds were subject to the earnings test, and 1 otherwise) whose coefficient measures the change in LFPRs for the 1983-87 period compared to the 1970-82 period;[4] an unemployment variable, UNEMP, (the unemployment rate for all civilian worker men or women) that acts as a proxy for the availability of employment

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4. Ideally, the coefficient for this variable would measure only the change in LFPRs caused by the elimination of the earnings test. Unfortunately, it will, in reality, pick up the effects of any other permanent or semipermanent changes that began at about the same time the earnings test was eliminated for the 70- and 71-year-olds. One effect it may pick up is the recovery from the recession of the early 1980s.

opportunities for older workers; and a replacement rate variable, REPRATE, measuring the average size of Social Security benefits for each group relative to the average earnings in the economy for that year, whose coefficient is intended to measure the retirement incentives of the Social Security system other than those embodied in the earnings test.

We expect the TREND, UNEMP, and REPRATE variables to have negative coefficients for all six sex/age groups under study (our reasons are explained more fully below). If removing the retirement earnings test on persons aged 70 and 71 increases their numbers in the labor force, then we would expect the RETDUM variable to have a positive coefficient. Theoretically, the coefficient on the RETDUM variable for all three age groups could be either positive or negative. On the surface, one would not expect removing the earnings test for 70- and 71-year-olds to have much of an impact on the LFPRs of persons who are younger or older. However, if workers decide to reallocate their work effort to ages 70 and 71 from these other ages, then the RETDUM coefficient for the younger and older groups would be negative. On the other hand, if removing the earnings test for persons aged 70 and 71 causes younger workers to remain in the labor force when they otherwise would have withdrawn or increases the number of <u>workers</u> turning age 72, then the RETDUM coefficient for these other age groups would be positive.

Casual observation of the data show that the LFPRs for both sexes and all three age groups have declined over the 1970-87 period. As stated above, the TREND variable serves as a proxy for a number of variables whose values change through time. These variables include, but certainly are not limited to changes in: Attitudes toward retirement; the demand for labor services of older workers: entitlement to, and levels of, private pension benefits; health; longevity; etc. Increases in some of these variables cause LFPRs to increase, while increases in others cause them to decrease. In theory, the coefficient on the TREND variable could be positive or negative. Because we feel there has been a strong shift in attitudes about work and leisure in favor of leisure by older workers and their potential employers and because we feel this change in attitudes probably overshadows the effects of changes in other variables, we predict a negative coefficient for the TREND variable.

The unemployment variable is used as a proxy for the employment opportunities faced by older workers. As economic conditions worsen, the unemployment rate tends to rise. Some older workers who find themselves unemployed will opt to drop out of the labor force and receive retirement benefits. Thus as the unemployment rate increases, we expect the LFPR of older workers to fall somewhat. As economic conditions improve, some older workers who had dropped out of the labor force will return to work.

The REPRATE variable measures average Social Security benefits for a given sex/age group relative to average wages in the economy. As this ratio increases, the relative cost of withdrawing from the labor force falls and more people should stop working.

If the removal of the earnings test causes 70- and 71-year-olds to return to the labor force or to continue working when they otherwise would have retired, then the RETDUM variable should have a positive sign. Not being subject to the retirement earnings test may cause more people to be in the labor force, but theoretically this would occur if there are constraints on the minimum hours a person had to work to receive his or her normal wage rate. The coefficient of the RETDUM variable measures the size of this increase. We expect the coefficient on this variable to be positive and significant for the 70- and 71-year-olds and small for the other two age groups.

The Model

The general form of the model we use in the regression analysis is:

$$LFPR = b\ X + e$$

where X is the vector of independent variables (including a constant term), b is the vector of coefficients to be estimated,

and e is an error term that is assumed to be independent of the explanatory variables, to have a normal distribution with a mean of 0 and a constant variance.

We ran this model using ordinary least squares separately for men and women in each of the 2-year age groups, 68 and 69, 70 and 71, and 72 and 73, and for all three age groups in a combined version of the model for each sex. Because of the small sample sizes in the 2-year age group models (only 18 observations each), there is a strong possibility that the estimated coefficients will not be measured very precisely and will have large standard errors. Thus, any results obtained should be viewed as tentative or suggestive and not as hard evidence of the existence of a retirement earnings test effect or lack thereof.

The results of the 2-year age group regressions for men are presented in the first three columns of table 1. The adjusted R-squares are high which suggests a large portion of the variation in the respective labor force participation rates is explained by the models. However, this may be due also to regressing a trend variable on a highly trended dependent variable. It is discouraging that only one of the independent variables in any of the three equations has a coefficient that is significantly

different from zero, but as noted above, this is not totally unexpected given the small sample size.[5]

The constant terms in these equations indicate LFPRs decline as one ages. The coefficient on the RETDUM variable in the regression for 70- and 71-year-olds is significant at the 5 percent level and indicates removing the earnings test increased the LFPR of 70- and 71-year-olds by slightly more than 2 percentage points. The coefficients for the TREND and REPRATE variables are not significant in any of the equations.

The earnings test dummy variable was not statistically significant for either the 68- and 69-year-old or 72- and 73-year-old men. We did not expect it to be significant for the younger group, but thought it might be significant for the older group. Because it might have taken a couple of years for the effects of the earnings test elimination to have reached the 72- and 73-year-olds, we lagged the earnings test dummy variable 2 years and reran the regression for the older group of men. The results remained essentially the same--none of the independent variables was significantly different from zero.

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5. The lack of significant coefficients combined with a high adjusted R-squared term is an indication that multicollinearity may be a problem. We tested the independent variables for multicollinearity and found that the TREND and REPRATE variables were highly collinear. We decided to leave both variables in the equation because our primary interest is in the RETDUM variable.

Because there are only 18 years in the period under study, the tests for significance suffer because there are so few degrees of freedom. One way to increase the number of degrees of freedom is to combine three age groups into a combined regression model. We have done this and added the following to the list of independent variables: AGE70 (= 1 for 70- and 71-year-olds and = 0 otherwise) and AGE72 (= 1 for 72- and 73-year-olds). The coefficients on the AGE70 and AGE72 variables measure how the LFPRs for 70- and 71-year-olds and 72- and 73-year-olds differ at the mean from that for 68- and 69-year-olds. We have also modified the RETDUM and TREND variables to create the following new variables: RETDUM70 (= RETDUM * AGE70); RETDUM72 (= RETDUM * AGE72); RETDUM68 (= RETDUM for 68- and 69-year-olds); TREND68 (= TREND for persons aged 68 and 69); TREND70 (= TREND * AGE70); and TREND72 (= TREND * AGE72). The coefficients on the RETDUM68, RETDUM70, and RETDUM72 variables measure the separate effects on persons aged 68 and 69, 70 and 71, and 72 and 73 of removing the earnings test for 70- and 71-year-olds. Similarly, the coefficients for the TREND68, TREND70, and TREND72 variables measure the separate trend effects for each age group.

The results of this regression are presented in the last column of table 1. The results are very consistent with those of the three individual regressions. However, because of the increase in the number of degrees of freedom, more coefficients are significant at the 5 percent level. The AGE70 and AGE72

coefficients indicate LFPRs decline with age. The coefficient on the RETDUM70 variable is slightly smaller in magnitude and now only just significant at the 5 percent level, but still indicates removing the earnings test for 70- and 71-year-olds resulted in an approximate 2 percentage point increase in the LFPR for men in that age group. The coefficients for RETDUM68 and RETDUM72 are not significantly different from zero.

The coefficients on the TREND terms are significant for persons aged 68-69 and 70-71 at the 5 percent level. The coefficients are negative and decline in size with age indicating LFPRs have been falling over the 1970-87 period and fall faster for younger age groups. The REPRATE coefficient is significant in the combined model. It suggests that, for every percentage point increase in average annual Social Security retired-worker benefits relative to the average national earnings level, the LFPR for these men will fall by about four-tenths of a percentage point. The coefficient for the unemployment variable is small, positive, and insignificant.

We tried several other specifications of the regression models. These other specifications did not improve any of the regression results and some weakened the results for the 70- and 71-year-old men. For example, we replaced the unemployment variable with a gross national product (GNP) variable. The coefficient for RETDUM (for men aged 70 and 71) fell to 0.73 with a t-statistic of 0.78. When we added a variable to see if

removing the earnings test might have affected the trend (RETDUM * (TREND-13)), the coefficient on RETDUM increased to 2.26 but it was no longer significant at the 5 percent level (t-statistic = 1.92). The retirement earnings test trend variable itself was very insignificant. When we dropped the REPRATE variable because it and the TREND variable were collinear, the coefficient on the RETDUM variable dropped to 1.55 and was almost significant (t-statistic = 2.13). Our conclusion is there is a marginal indication using the BLS labor force data that removing the earnings test increased the LFPR of 70- and 71-year-old men by about 2 percentage points.

Regression results for women are given in table 2. The model obviously fits the 70- and 71-year-olds much better than the younger and older groups. Almost 90 percent of the variation in the LFPR of 70- and 71-year-olds is explained by the model compared with roughly half for 68- and 69-year-olds and only one-fifth for the 72- and 73-year-olds. Only one of the independent variables has a significant coefficient, the replacement rate variable for 70- and 71-year-old women.[6] The RETDUM variables are not significant for any of the three groups of women. The combined model for women did not improve the results.

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6. We checked for multicollinearity among the independent variables for the women's regression models. There is collinearity between the TREND and REPRATE variables as there was for men, but to a lesser degree.

We tried other model specifications for the women as we did for the men. None of the specifications resulted in a significant coefficient for the RETDUM variable for any of the three groups of women.

The conclusion of this part of the analysis is that the removal of the retirement earnings test for 70- and 71-year-olds in 1983 may have led to higher LFPRs for men in this age group (in the neighborhood of 2 percentage points higher), but that there is no evidence that it affected the LFPRs for women in this age group. Even for men, the results are only marginally significant. The size and significance of the regression coefficient on the earnings test dummy variable is sensitive to the particular specification of the regression model. This may be due in part to limitations in the data, but may also be due to a true lack of significance.

Based on the results that eliminating the earnings test increased the labor force participation rate for 70- and 71-year-old men by 2 percentage points and had no effect on the labor force participation rates for women, removing the test brought an additional 30,000 men aged 70 to 71 and no additional women into the labor force in 1987. We should note that not all of these 30,000 men will be reentrants to the labor force. Many of them will be stayers, that is men who would have retired in the presence of a retirement earnings test but who stayed because the test no longer applied to them.

If 30,000 additional people aged 70 and 71 were in the labor force in 1987 because the earnings test had been repealed for them, we still do not know what happened to the aggregate earnings of the 70- and 71-year-old group. Certainly these 30,000 will have higher earnings than they would have had in the presence of the test, but what happened to the earnings of persons who would have been in the labor force even with the test? Fundamentally, this is the crucial issue. This question cannot be answered using only labor force participation rate data. A data set with earnings is needed.

Analysis of Continuous Work History Sample, 1970-85

We selected a 10 percent sample of CWHS cases (0.1 percent of the population) who were born from 1895 to 1920 and were alive in 1970 or at age 65, whichever was later.[7] These were persons who were aged 65 to 75 from 1970 to 1985, the latest year for which CWHS data are available.[8]

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7. We did not utilize the entire sample with these characteristics because of the enormous amount of computer time it took to process the entire sample and because of the time constraints imposed on us for completing the project.

8. For more information on the CWHS, see appendix B.

Beneficiary Status

The CWHS allows us to separate the older population into three groups--beneficiaries, insured nonbeneficiaries, and uninsured nonbeneficiaries. While it may appear that for purposes of the earnings test, the uninsured nonbeneficiaries are not really of interest, we determined that many of the uninsured nonbeneficiaries were receiving spouse or survivor benefits and were, therefore, covered by the retirement earnings test. The group listed in table B.1 in appendix B as beneficiaries are primary, or retired worker, beneficiaries. Persons in the uninsured nonbeneficiary group who are not currently auxiliary beneficiaries may become eligible for Social Security benefits at some later time, either through earning enough quarters of coverage by their own work effort or through auxiliary benefits as a spouse or survivor of an insured worker. Table B.1 shows the distribution of our CWHS sample based on receipt or nonreceipt of retired worker benefits.

One expected effect from the removal of the earnings test on 70- and 71-year-olds is that the percent of this age group who were beneficiaries would increase and the percent who were insured nonbeneficiaries would fall. The rationale for this expectation is that some of the insured nonbeneficiaries were not receiving benefits because their earnings were so large that they would lose most or all of their benefits if they applied for benefits and continued to work. The elimination of the earnings

test removed this disincentive to apply for Social Security benefits. The data in table B.1 suggest that this expected effect did not occur. The percentage of 70- and 71-year-olds who were beneficiaries fell during the 1982 to 1985 period and the percentage who were insured nonbeneficiaries increased, just the opposite of what was expected. Even when the base is beneficiaries and insured nonbeneficiaries only, the data do not support this hypothesis.[9] Eliminating the earnings test apparently did not cause many eligible 70- and 71-year-old nonbeneficiaries to become beneficiaries.

CWHS Labor Force Participation

The CWHS has data on level of covered earnings for each year during the 1970-85 period. If a person had earnings for the calendar year, then we counted him as being in the labor force at some point during the year. As reported in appendix B, the CWHS labor force participation measure differs somewhat from the BLS measure. Because the CWHS labor force participation rate measures the number of people with earnings during the year, it is probably a preferable measure from our point of view. The BLS rate measures the average percentage of people in the labor force during the year, not the percentage with any earnings.

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9. We ran regressions on the percent of beneficiaries in the population of beneficiaries and insured nonbeneficiaries using the standard set of independent variables as regressors. The coefficients for the RETDUM variables for both men and women were small and insignificant.

Nonetheless, we expect the estimated effects of removing the earnings test for 70- and 71-year-olds using CWHS data to be similar to results using BLS labor force participation rates as the dependent variable.

The data in chart 2, based on the data in table B.2, show little or no effect from removing the earnings test on the percentage of 70- and 71-year-olds with earnings. The percentage of women in this age group with earnings in 1984-85 increased from the 1982-83 levels, but not above the levels for 1979-81. It is possible that the increase after 1983 is due more to the economic rebound from the early 1980's recession than to the elimination of the earnings test.

We reran the regression models for the three 2-year age groups and for the combined model for each sex using the percentage of the CWHS sample population with earnings as the dependent variable. The independent variables and their values remained the same. The results, presented in tables 3 and 4, do not support the hypothesis that eliminating the earnings test increased the percentage of 70- and 71-year-olds with earnings. None of the coefficients on the RETDUM variables in any of the models for either the 2-year age groups or the combined group for either sex is statistically different from zero. The t-statistics are, in fact, quite small.

These results for the 70- and 71-year-old men are at odds with the results we obtained in the BLS analysis. While the regression coefficients for women differ from those we got in the BLS analysis, the qualitative results were the same--there was no indication that removing the earnings test affected the LFPR of women aged 70 and 71. Because the CWHS analysis is based on a period that is 2 years shorter than that for the BLS analysis, we dropped the last 2 years of data and reran the BLS regressions. The results for both men and women were similar to our earlier BLS findings. We conclude that differences in our results are due to differences in the data sources for the two dependent variables.

We conclude that the CWHS data do not support the hypothesis that removing the earnings test has encouraged 70- and 71-year-olds to return to, or stay in, the labor force. These data do not support our findings for 70- and 71-year-old men using the BLS data. They do support the results obtained for women in that age group using the BLS LFPR data. We look next at what information the CWHS provides on the earnings of this age group and how these earnings changed after the earnings test was removed.

CWHS Earnings Patterns

The big advantage of the CWHS is its earnings data which allow us to examine the effects of removing the earnings test on

earnings patterns. Table B.2 shows, for persons with earnings, the distribution of earnings above and below the earnings test thresholds. We would expect that not being constrained by the earnings test would cause a greater portion of persons with earnings to have earnings above the earnings test threshold. There is no evidence that this occurred for 70- and 71-year-old men and only marginal evidence that it occurred for women in that age group. Calculations from table B.2 show that in the 2 years after the earnings test was removed, the percentage of 70- and 71-year-old earners with earnings above the earnings test threshold fell by 10 percent for men (from 33.8 percentage points to 30.3 percentage points) and increased by 1 percent for women (from 22.3 percentage points to 22.6 percentage points) compared with the 2 years before the earnings test removal. The percentage of earners with earnings above the threshold increased for both men and women in 1985, but this was a full 2 years after the test had been removed.

We ran regressions (not shown) using the percentage of these earners with earnings above the earnings test threshold as the dependent variable and our standard set of independent variables. For both men and women, the RETDUM variable was not significantly different from zero.

The CWHS not only allows us to determine if an individual had covered earnings in particular years, it allows us to determine whether or not these earnings grew faster than the

increase in the earnings test threshold. In table 5 we present data on how earnings levels change between age 69 and age 70. Earnings for each age are shown either as $0 earnings, as earnings at or BELOW the earnings test threshold, or as earnings ABOVE the threshold. Thus "$0-Below" in the "Earnings Levels" column refers to those persons who had no earnings at age 69 and earnings that were equal to or below the earnings test threshold at age 70.

One important point shown in table 5 is that even at older ages retirement is not a one way street. We know that there is a net withdrawal from the labor force at age 70, but often forget that this net flow is made up of people entering the workplace as well as people leaving it. Over the 1970-85 period, from 2 to 4 percent of the men and 1 to 2 percent of the women not working at age 69 returned to the labor force and reported earnings at age 70.

If removing the earnings test affected the level of earnings of 70-year-olds, then we should note several properties in these data after 1982. First, if 70-year-olds reenter the labor market because their earnings are no longer subject to the earnings test, then we should see an increase in the percentage with no earnings at age 69 and earnings above the earnings test threshold at age 70. We would not expect to see an increase in the percent of people moving from $0 earnings at age 69 to an earnings level below the earnings threshold at age 70. Second, if workers

remain in the labor force because there is no earnings test, then we should see a decrease in the percentage with earnings above the threshold withdrawing from the labor force. Third, some workers who earned below the earnings test earnings threshold at age 69 should increase their earnings beyond the threshold at age 70. Finally, there should be a decrease in the percent who lower their earnings from above the threshold at age 69 to below the threshold at age 70.

The data show some of the expected features. First, the percentage of both men and women who returned to the labor force increased after the earnings test was removed. However, the increase was for people who earned below the earnings test threshold, not above it as we would expect. Because they were able to earn below the threshold without penalty even in the presence of the earnings test, it seems difficult to accept the assumption that the removal of the earnings test caused this observed increase in older persons returning to the labor market. One can argue, we suppose, that the earnings test provides a psychological impediment to working and that people will stay out of the labor market in its presence even though they would earn below the earnings threshold. One can also argue that the economic recovery is what drew these older low earners back into the work force. Second, the percentage withdrawing from the labor force from above the earnings threshold seems to have declined for men but not for women. Third, the percentage who had earnings below the earnings test threshold at age 69 and

earnings above it at age 70 increased, especially for men. In fact, for men this was the most consistent post-earnings test elimination change and the second largest. (The largest change was for men returning to the labor force but with earnings below the earnings test threshold that applied to 65- to 69-year-olds.) Fourth, there had perhaps been a slight decline in the percent moving from above the threshold at age 69 to below it at age 70.

While casual observation of table 5 seems to support the expected effects of removing the earnings test for 70- and 71-year-olds, the expected shifts did not often begin in 1983 when the earnings test was eliminated. They often seem to be delayed a year to 1984 and then fell back toward the original trend line in 1985. This pattern suggests a couple of possibilities. First, removing the earnings test may have some immediate effects which dissipate rapidly. Second, because the data series ends in 1985, we really do not have enough observations after the removal of the earnings test to judge accurately how it affected earnings and labor force behavior. Because the data in table 5 jump around so much after 1982, it is desirable to have more data to determine whether removal of the earnings test caused a shift in the various trends.

We performed regressions using various rows of table 5 as the dependent variables and our standard set of independent variables as regressors. While the results are not shown in this paper, the only RETDUM coefficient that was significantly

different from zero at the 5 percent level was for the group of men who increased their earnings from below the earnings test threshold at age 69 to above it at age 70 (coefficient = 0.65 and t-statistic = 2.23). The lack of significant coefficients on the RETDUM variable for all women and most men in these equations is an indication that removing the earnings test generally has not had a significant effect on the labor market behavior of 70-year-olds. This is especially true for movement into or out of the labor force.

Table 6 shows the distribution of earnings and the mean earnings level for 70- and 71-year-olds from 1970 to 1985. It also shows the mean earnings for persons with earnings and the ratio of this last measure to the national average annual wage level.[10] If one expects the elimination of the earnings test to cause aggregate earnings to increase, then this increase should be seen in both mean earning levels and the earnings distribution of persons affected. The ratio of earnings of 70- and 71-year-old workers should increase, in this case, relative to overall earnings because the earnings of 70- and 71-year-olds would no longer be constrained by the earnings test.

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10. National average wage levels are taken from table I on page 29 of the 1987 Annual Statistical Supplement to the Social Security Bulletin.

The mean earnings for all men and for working men decreased slightly in 1983, remained fairly constant in 1984, and increased dramatically (by 25 percent for workers) in 1985.[11] The mean earnings for women remained relatively constant through 1984 and then increased, although not so dramatically (15 percent for workers), in 1985. Because the increase in mean earnings can also be the result of productivity increases or of improvements in the state of the economy, one cannot state that the increase is due solely to the elimination of the retirement earnings test. We ran a regression on the mean earnings of all men and women in this age group and of all working men and women using a trend term, an unemployment term, and a earnings test elimination dummy variable as regressors. The dummy variable was never significant indicating no causal effect of eliminating the earnings test on mean earnings levels.

The ratio of mean earnings for workers to the average national wage did not increase immediately after the earnings test was eliminated as we would expect. It did increase for both men and women in 1985. For men, it declined in 1983 and again in 1984. For women, it was constant in 1983 and 1984. We ran regressions for the ratios using the three independent variables listed in the previous paragraph. Neither of the RETDUM

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11. The large increase in mean earnings for 1985 appears to have been caused more from low earners withdrawing from the labor force than from an increase in the percent of this age group with high earnings.

coefficients was significant indicating the removal of the earnings test did not affect the mean earnings of working 70- and 71-year-olds relative to the mean earnings of all workers.

The distribution of earnings in table 6 contains some interesting information, but it does not indicate a movement to higher earnings after the earnings test was eliminated for this 2-year age group. In 1982, 4.4 percent of the men and 1.3 percent of the women had earnings over $10,000. These percentages fell in 1983 for both men and women and rebounded in 1984, but not past the 1982 levels. In 1985 the percentages increased to 4.9 for men and 2.0 for women. These patterns are not consistent with our expectations of the effects of eliminating the earnings test.

What is interesting about the earnings distributions is how earnings tend to cluster in the ranges where the earnings test earnings threshold (noted in the table by the letter "E") is.[12] Over time, this clustering has become less pronounced. This is due to the increasing portion of 70- and 71-year-olds who are not working and to the increase in the threshold levels. Some workers may not be able to immediately adjust their earnings to the higher threshold and others may be comfortable with their

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12. Clustering in the area of the maximum taxable earnings level (noted by the letter "M") is expected because before 1978 earnings in excess of the maximum taxable earnings level were not always reported and in later years the maximum level is contained in the upper earnings bracket.

current earnings amounts. One point to note is that even after the earnings test was removed for 70- and 71-year-olds in 1983, there continued to be a clustering with earnings in the range that contained the earnings test threshold applying to 65- to 69-year-olds. This could result from an inability to adjust earnings upwards as suggested previously or perhaps to ignorance by 70- and 71-year-olds that they were no longer covered by the earnings test.

After looking at the CWHS data on 70- and 71-year-olds, we conclude that the data do not support the hypothesis that removing the earnings test has an immediate effect on either the percentage of this group with earnings or on their average earnings level. Over 90 percent of persons not working at age 69 who returned to the labor force at age 70 had earnings that were below the threshold that would have applied to them if the earnings test had not been removed in 1983. Removing the earnings test increased the percentage of 70-year-old men whose earnings increased from below the earnings test threshold at age 69 to above it at age 70. However, this group was always a small proportion of 70-year-old men--never as many as 2 percent of them.

Average earnings increased in 1985, 2 years after the earnings test was removed, but it is unclear whether this was caused by the elimination of the earnings test or some other forces such as the economic recovery. Because 1985 is the last

year of data currently available, we are not able to determine whether this increase in mean earnings is an isolated event or the beginning of a longer term increase in mean earnings. We must have more years of data to determine which is the case.

Conclusions and Implications for 65- to 69-Year-Olds

This analysis of BLS and CWHS data suggests that removing the retirement earnings test for 70- and 71-year-olds has neither increased the percentage of this group in the labor force nor their average earnings. Average earnings of this group have increased somewhat, but we found no evidence that this increase was caused by the removal of the earnings test. The analysis of the CWHS data show no effects of removing the earnings test on the percentage of this age group with reported earnings, although we found evidence that when the earnings test was removed there was an increase in the percentage of 70-year-olds who had earnings below the earnings test threshold at age 69 and earnings above the threshold at age 70. The analysis of the BLS data give a marginal indication of a small increase in the LFPR for men but no indication of an increase for women.

We remind the reader that economic theory predicts a change in hours worked and earnings from removing the earnings test but not much of an effect on labor force participation rates. If there is an increase in LFPRs, it is likely to come, especially

in the long run, from persons who delay their withdrawal from the labor force, not from entrants or reentrants into the labor force. In the short run, there may be some reentrants, but we would not expect many people to withdraw from the labor force when the earnings test applied to them, and then reenter the labor market once it no longer applied.

If the results of our analysis of 70- and 71-year-olds were applied directly to 65- to 69-year-olds, we would expect relatively small effects on the labor market behavior of persons aged 65-69 once they were removed from earnings test coverage. However, there are reasons to assume that there will be larger effects of eliminating the earnings test for 65- to 69-year-olds than there were for 70- and 71-year-olds. First, the 65- to 69-year-olds who do not work will have a more recent attachment to the labor force than do 70- and 71-year-olds who do not work. They will not have become as accustomed to retirement and may be lured more easily back to the labor market. (Recall, however, that economic theory does not suggest eliminating the earnings test will motivate many persons to return to the labor force. Theoretically this motivation should only occur if there are severe constraints on the minimum number of hours a person can work at his or her normal wage rate.) Second, the younger group should be, on average, in better health which implies that they will be better able and perhaps more willing to remain in the labor force.

Third, we expect that a smaller percentage of 65- to 69-year-old workers will have reduced their hours of work to ensure that their earnings remain below the threshold and that persons who have reduced their hours will not be as settled into their new routines as 70- and 71-year-olds were. These younger workers should be able to more easily increase their hours of work than the older workers. Fourth, other studies suggest that the income effect of removing the earnings test strengthens with age. If this is the case, then the substitution effect should be relatively stronger for persons aged 65-69. This implies the younger group should experience a greater increase in hours worked and earnings than 70- and 71-year-olds if the earnings test is eliminated for them. Fifth, if employees and employers make special provisions to ensure that the earnings of workers covered by the earnings test do not exceed the earnings test threshold, then we predict that a smaller percentage of 65- to 69-year-old workers will be covered by such provisions than 70-and 71-year-old workers. Fewer of them should be subject to these provisions if the earnings test is lifted.

If we assume that eliminating the earnings test would increase LFPRs in line with our marginal findings from the BLS portion of our analysis (2.1 percentage point increase in LFPR of men and no increase in LFPR of women), then we can make an estimate of how many additional workers aged 65-69 would have been in the labor force in 1987 if the earnings test did not apply to them in that year. We interpret these coefficients in

two ways. Both yield the same results for 70- and 71-year-olds but will give different results for 65- to 69-year-olds.

One way to interpret the coefficients is that the labor force participation rates of men will increase by 2.1 percentage points, while that for women will not increase. Using this interpretation, 92,600 more men aged 65-69 and no additional women would have been in the labor force in 1987 in the absence of the earnings test. Alternatively, we can view these coefficients as implying that the LFPR of 70- and 71-year-old men was 14.9 percent higher than it otherwise would have been in the presence of the earnings test (2.1 / (16.2-2.1)). Applying this percent to the number of working 65-69 year old men suggests that there would have been 170,000 more men in the labor force in 1987.

More important than any increase in the number of 65- to 69-year-old workers that might occur because of the earnings test elimination is the effect on the total earnings of this group. The BLS data we used did not contain earnings, so we could not use these data to address this issue. Our analysis of the CWHS found no effect on the earnings of 70- and 71-year-olds from eliminating the earnings test. There was an increase in the earnings of this age group in 1985, 2 years after the earnings test was removed from them, but we are unable to determine whether this increase is permanent. It is unlikely that it was

caused by the earnings test removal. Because the CWHS data end in 1985, we are unable to adequately assess the implications of this 1985 earnings increase.

Chart 1.--BLS LFPRs

By sex and selected 2-year age groups

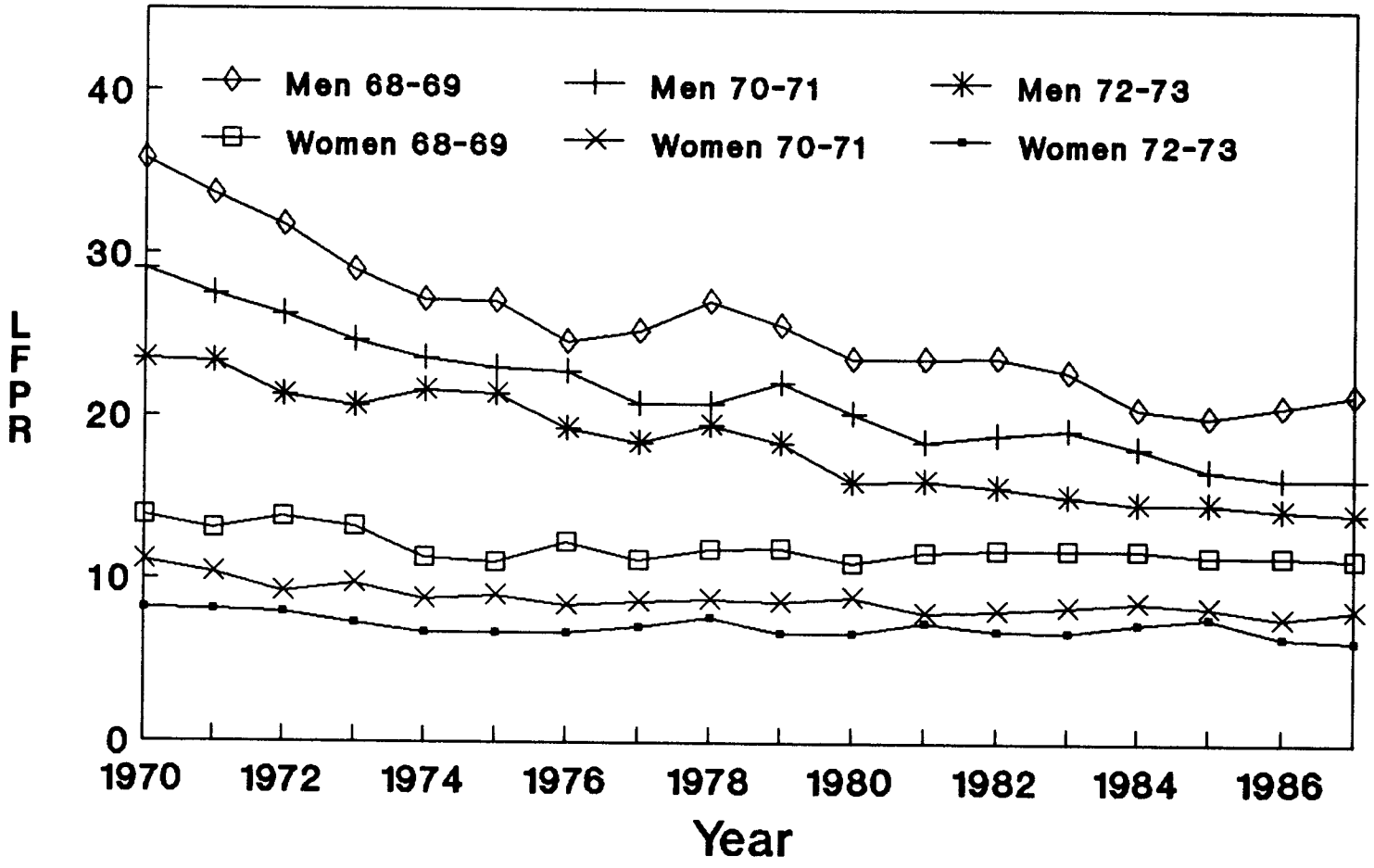

Chart 2.--CWHS LFPRs

By sex and selected 2-year age groups

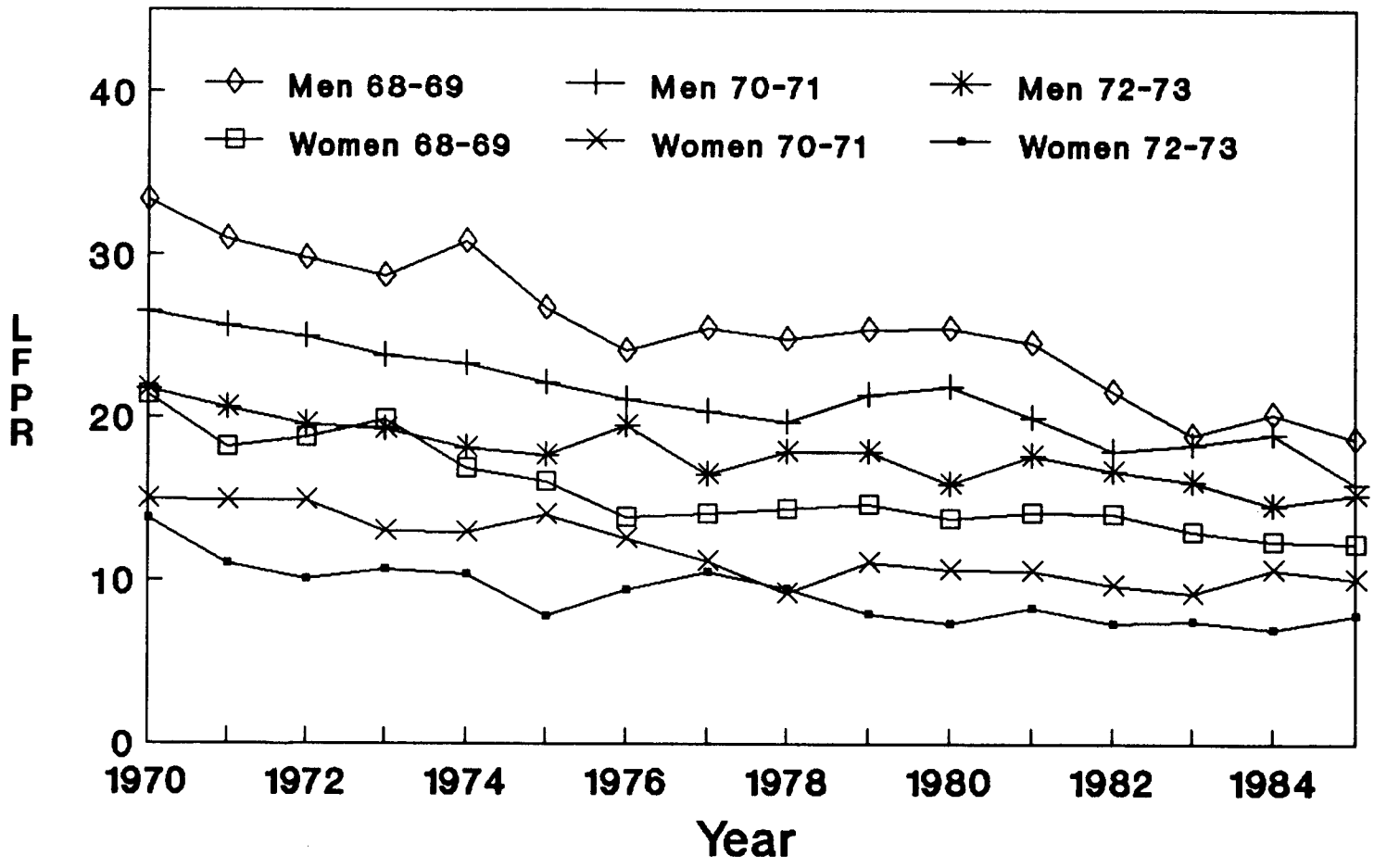

Table 1.--Determinants of BLS labor force participation rates of older men, by age

Variable	Age 68-69	70-71	72-73	68-73
Constant	44.69** (6.41)	39.25** (5.72)	36.85** (4.39)	44.16** (11.53)
AGE70	---	---	---	-5.39** (-5.97)
AGE72	---	---	---	-9.73** (-10.80)
UNEMP	0.22 (0.53)	0.20 (1.02)	0.00 (0.02)	0.12 (0.82)
REPRATE	-0.45 (-1.48)	-0.44 (-1.57)	-0.48 (-1.46)	-0.41* (-2.64)
TREND68	-0.50 (-1.88)	---	---	-0.52** (-3.30)
TREND70	---	-0.42 (-1.70)	---	-0.44** (-2.84)
TREND72	---	---	-0.19 (-0.67)	-0.28 (-1.93)
RETDUM68	1.22 (0.87)	---	---	1.19 (1.27)
RETDUM70	---	2.18* (2.73)	---	2.08* (2.18)
RETDUM72	---	---	0.49 (0.79)	0.60 (0.65)
$\bar{R}^2$	.8645	.9545	.9480	.9497

* Significantly different from zero at the 0.05 level.
** Significantly different from zero at the 0.01 level.
t-statistics are in parentheses.

Table 2.--Determinants of BLS labor force participation rates of older women, by age

Variable	Age 68-69	70-71	72-73	68-73
Constant	15.49** (5.07)	19.20** (8.25)	9.47* (2.72)	16.89** (9.62)
AGE70	---	---	---	-3.12** (-7.32)
AGE72	---	---	---	-5.57** (-13.10)
UNEMP	-0.16 (-0.73)	0.06 (0.58)	-0.04 (-0.24)	-0.05 (-0.57)
REPRATE	-0.05 (-0.27)	-0.43** (-3.43)	-0.04 (-0.24)	-0.14 (-1.51)
TREND68	-0.13 (-1.27)	---	---	-0.09 (-1.34)
TREND70	---	0.12 (1.35)	---	-0.08 (-1.08)
TREND72	---	---	-0.04 (-0.31)	0.02 (0.29)
RETDUM68	0.79 (1.31)	---	---	0.73 (1.61)
RETDUM70	---	0.22 (0.69)	---	0.57 (1.26)
RETDUM72	---	---	0.32 (0.58)	0.12 (0.26)
$\bar{R}^2$	.4607	.8521	.1768	.9425

* Significantly different from zero at the 0.05 level.
** Significantly different from zero at the 0.01 level.
t-statistics are in parentheses.

Table 3.--Determinants of CWHS labor force participation rates of older men, by age

Variable	Age 68-69	70-71	72-73	68-73
Constant	25.75* (2.67)	28.96* (2.89)	34.34** (3.12)	34.36** (5.95)
AGE70	---	---	---	-6.12** (-6.32)
AGE72	---	---	---	-11.57** (-11.83)
UNEMP	-0.71 (-2.00)	-0.11 (-0.36)	0.17 (0.76)	-0.18 (-1.10)
REPRATE	0.37 (0.93)	-0.08 (-0.20)	-0.53 (-1.24)	-0.04 (-0.17)
TREND68	-0.99* (-2.52)	---	---	-0.68** (-2.79)
TREND70	---	-0.49 (-1.31)	---	-0.51* (-2.23)
TREND72	---	---	0.09 (0.23)	-0.27 (-1.28)
RETDUM68	-1.86 (-1.57)	---	---	-1.60 (-1.56)
RETDUM70	---	0.39 (0.33)	---	0.32 (0.29)
RETDUM72	---	---	-0.18 (-0.21)	-0.22 (-0.21)
$\bar{R}^2$	.9067	.8455	.7688	.9330

* Significantly different from zero at the 0.05 level.
** Significantly different from zero at the 0.01 level.
t-statistics are in parentheses.

Table 4.--Determinants of CWHS labor force participation rates of older women, by age

Variable	Age			
	68-69	70-71	72-73	68-73
Constant	27.28** (3.34)	12.47 (1.61)	28.17** (3.97)	27.07** (5.93)
AGE70	---	---	---	-4.78** (-5.56)
AGE72	---	---	---	-8.08** (-9.42)
UNEMP	-0.45 (-1.17)	0.08 (0.24)	-0.14 (-0.48)	-0.16 (-0.85)
REPRATE	-0.19 (-0.45)	0.12 (0.30)	-0.70 (-1.94)	-0.27 (-1.15)
TREND68	-0.38 (-1.36)	---	---	-0.37* (-2.25)
TREND70	---	-0.57 (-1.96)	---	-0.23 (-1.30)
TREND72	---	---	0.20 (0.72)	-0.14 (-0.75)
RETDUM68	0.54 (0.51)	---	---	0.67 (0.73)
RETDUM70	---	1.61 (1.68)	---	0.96 (1.03)
RETDUM72	---	---	-0.39 (-0.41)	0.35 (0.36)
$\bar{R}^2$	.8180	.7707	.7657	.9087

* Significantly different from zero at the 0.05 level.
** Significantly different from zero at the 0.01 level.
t-statistics are in parentheses.

Table 5a.--Change in earnings level from age 69 to age 70, for men, 1970-85

Earnings Levels		Age 70 in--														
		1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
Men																
Number (000s)		606	652	625	659	716	696	750	804	751	800	772	769	828	840	894
Age 69--Age 70																
$0	$0	63.2	68.9	68.0	69.7	71.9	70.5	74.3	74.8	72.7	73.5	74.0	76.2	74.8	77.7	79.6
$0	Below	2.3	2.1	2.1	1.4	1.3	1.9	1.5	1.1	1.9	2.4	1.3	0.8	1.7	3.4	1.6
$0	Above	0.5	0.5	0.2	0.3	0.1	0.3	0.4	0.1	0.3	0.4	0.1	0.4	0.1	0.2	0.1
Below	$0	5.2	4.0	4.5	4.7	4.5	3.4	3.3	3.7	3.6	3.8	4.9	4.2	3.9	2.7	3.0
Below	Below	11.6	8.9	9.9	9.1	10.5	10.2	9.6	10.4	11.9	11.3	10.1	9.5	12.0	8.5	6.3
Below	Above	0.5	1.2	1.0	0.8	0.6	0.9	0.5	0.5	0.9	1.0	0.2	0.3	1.0	1.7	1.7
Above	$0	1.8	1.5	2.1	1.2	1.3	2.3	1.2	1.1	0.7	0.5	1.0	1.4	0.6	0.8	1.3
Above	Below	2.6	2.1	3.5	1.5	2.5	2.3	2.3	2.4	1.1	1.8	1.4	1.8	1.4	1.3	1.6
Above	Above	12.4	10.7	8.8	11.4	7.4	8.2	6.9	5.8	7.1	5.5	6.9	5.5	4.6	3.7	4.8

$0 indicates no earnings at the specific age.
Below indicates earnings that are at or below the earnings test earnings threshold for the year.
Above indicates earnings that are above the earnings test earnings threshold for the year.

Source: Ten percent extract file from the Continuous Work History Sample

Table 5b.--Change in earnings level from age 69 to age 70, for women, 1970-85

Earnings Levels		Age 70 in--														
		1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
Women																
Number (000s)		566	618	654	640	735	699	732	788	809	844	819	942	911	994	953
Age 69--Age 70																
$0	$0	78.3	80.6	82.6	78.9	83.3	82.4	86.9	85.7	84.2	85.4	84.7	87.5	84.9	86.3	86.5
$0	Below	1.2	0.5	0.6	0.9	1.1	2.0	0.5	0.6	1.6	1.1	0.7	0.8	0.9	1.6	1.2
$0	Above	0.2	0.2	0.2	0.2	0.1	0.0	0.0	0.1	0.1	0.0	0.0	0.1	0.0	0.1	0.2
Below	$0	4.2	2.8	3.5	4.5	2.0	3.6	2.0	3.8	2.7	2.5	3.2	3.5	3.0	2.1	2.8
Below	Below	7.6	7.4	8.3	9.1	7.8	7.0	5.5	4.9	7.5	7.0	7.3	4.9	7.7	5.7	6.2
Below	Above	0.5	1.1	0.2	0.2	0.7	0.4	0.3	0.4	0.6	0.5	0.5	0.3	0.3	0.8	0.6
Above	$0	0.9	1.1	0.8	0.9	0.4	1.3	0.4	0.4	0.9	0.4	0.0	0.2	0.7	0.1	0.4
Above	Below	1.1	1.9	1.4	1.4	1.4	0.9	0.8	0.9	0.9	1.3	1.5	0.5	0.9	0.8	0.2
Above	Above	6.0	4.4	2.6	3.9	3.3	2.4	3.6	3.2	1.5	1.9	2.1	2.2	1.8	2.4	1.9

$0 indicates no earnings at the specific age.
Below indicates earnings that are at or below the earnings test earnings threshold for the year.
Above indicates earnings that are above the earnings test earnings threshold for the year.

Source: Ten percent extract file from the Continuous Work History Sample

Table 6a.--Distribution of earnings and mean earnings of workers and all men aged 70 and 71, 1970-85

Earnings Levels	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
Men Number (000s)	1263	1263	1240	1244	1262	1355	1383	1418	1531	1524	1522	1543	1514	1577	1653	1717
$0	73.5	74.4	75.0	76.2	76.7	77.9	78.9	79.6	80.3	78.6	78.1	80.0	82.0	81.7	81.0	84.1
$1-$1000	7.1	7.8	6.1	6.7	4.4	4.1	3.7	3.7	3.5	3.2	3.2	2.4	2.2	3.4	3.1	2.0
$1001-$2000	9.4E	8.5E	8.8E	6.1	5.1	5.4	4.3	3.6	4.0	3.0	2.8	2.5	2.1	1.8	2.5	1.8
$2001-$3000	1.7	1.5	1.7	3.5E	4.9E	5.4E	5.6E	6.1E	3.2	3.3	2.8	2.3	2.0	1.8	1.6	1.4
$3001-$4000	1.0	0.6	0.8	0.4	1.3	1.0	1.0	1.3	3.4E	2.8	2.6	2.3	1.8	1.8	1.9	1.3
$4001-$5000	1.4	1.0	0.6	0.7	0.6	0.8	0.6	0.6	0.8	2.9E	3.5E	2.3	1.4	1.6	1.5	1.0
$5001-$6000	1.0	1.2	1.1	0.5	0.6	0.5	0.9	0.6	0.4	0.7	1.0	2.7E	2.0E	1.5	1.3	0.7
$6001-$8000	4.2M	4.8M	1.5	0.9	1.0	0.9	0.9	0.6	0.5	1.0	1.2	0.8	1.3	2.0E	2.4E	1.6E
$8001-$10000	0.2	0.1	4.0M	1.0	1.0	0.7	0.6	0.5	0.4	0.7	0.6	0.3	0.7	0.8	0.7	1.2
$10001-$20000	0.2	0.2	0.3	3.7M	4.0M	3.5M	3.4M	3.5M	3.4M	2.0	1.7	2.1	1.8	1.5	2.0	2.3
$20001 or more	---	---	---	0.1	0.3	0.2	0.2	0.0	0.1	1.8M	2.5M	2.5M	2.6M	2.2M	2.0M	2.6M
Mean--All men ($)	746	721	832	857	1067	994	970	938	980	1272	1467	1550	1514	1465	1550	1641
Mean--Workers ($)	2815	2816	3328	3601	4579	4498	4597	4598	4975	5944	6699	7750	8411	8005	8158	10321
Ratio *	45.5	43.3	46.6	47.5	57.0	52.1	49.8	47.0	47.1	51.8	53.5	56.3	57.9	52.5	50.6	61.4

E indicates the earnings test earnings threshold falls in this interval.
M indicates the maximum taxable earnings threshold falls in this interval.
* Ratio is the ratio of mean earnings of workers to the national average wage level.

Source: Ten percent extract file from the Continuous Work History Sample

Table 6b.--Distribution of earnings and mean earnings of workers and all women aged 70 and 71, 1970-85

Earnings Levels	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
Women Number (000s)	1105	1122	1172	1263	1283	1368	1422	1418	1515	1585	1645	1647	1748	1842	1896	1944
$0	85.0	85.1	85.1	87.0	87.1	86.0	87.4	88.8	90.8	88.9	89.3	89.4	90.3	90.8	89.3	89.9
$1-$1000	5.4	6.1	5.0	4.6	4.6	3.5	4.0	3.9	1.8	2.3	2.9	1.6	2.3	1.6	2.5	1.9
$1001-$2000	5.4E	4.1E	5.4E	4.0	3.2	3.8	2.7	2.0	1.1	2.0	1.7	1.8	1.3	1.1	0.8	1.0
$2001-$3000	1.5	1.2	0.9	1.7E	2.7E	3.2E	3.6E	2.5E	1.7	2.1	1.2	1.8	1.3	1.2	1.1	1.4
$3001-$4000	0.5	1.1	0.5	0.3	0.5	1.1	0.7	0.8	1.5E	1.2	1.0	1.3	0.9	0.8	1.3	1.1
$4001-$5000	0.6	0.4	0.4	0.5	0.2	0.7	0.3	0.2	0.6	1.4E	1.8E	1.1	0.9	1.2	1.2	0.6
$5001-$6000	0.5	0.3	0.4	0.2	0.4	0.2	0.1	0.1	0.3	0.5	0.5	1.3E	0.7E	0.8	0.8	1.0
$6001-$8000	1.0M	1.5M	0.7	0.3	0.6	0.7	0.7	0.3	0.7	0.4	0.5	0.7	0.7	1.0E	1.1E	0.6E
$8001-$10000	0.4	0.2	1.4M	0.7	0.2	0.3	0.1	0.3	0.5	0.4	0.1	0.2	0.3	0.4	0.6	0.6
$10001-$20000	---	---	0.3	0.7M	0.5M	0.5M	0.5M	1.1M	1.0M	0.7	0.6	0.5	1.1	0.8	0.9	1.5
$20001 or more	---	---	---	---	---	---	---	---	---	0.1M	0.1M	0.2M	0.2M	0.3M	0.4M	0.5M
Mean--All ($)	298	318	381	323	305	369	303	338	402	405	391	532	454	460	556	599
Mean--Workers ($)	1987	2134	2257	2485	2364	2636	2405	3128	4370	3649	3654	5019	4680	5000	5196	5931
Ratio *	32.1	32.8	35.8	32.8	29.0	30.5	26.1	30.9	41.4	31.8	29.2	36.4	32.2	32.8	32.2	35.3

E indicates the earnings test earnings threshold falls in this interval.
M indicates the maximum taxable earnings threshold falls in this interval.
* Ratio is the ratio of mean earnings of workers to the national average wage level.

Source: Ten percent extract file from the Continuous Work History Sample

Appendix A: BLS and regression data

Data used in the regression analysis is presented in table A. The labor force participation rates used in tables 1 and 2 are constructed from unpublished BLS data giving the 12-month averages for the civilian noninstitutionalized population and the civilian labor force. These data are derived from the monthly Current Population Survey (CPS) which samples approximately 50,000 United States households. The civilian noninstitutional population comprises all persons aged 16 and older who are not members of the Armed Forces and who are not inmates of penal or mental institutions, sanitariums, or homes for the aged, infirm, or needy. The labor force consists of all employed (defined on the CPS as working for pay any time during the week which includes the 12th day of the month, working unpaid for 15 hours or more in a family-operated enterprise, or temporarily absent from work because of illness, vacation, industrial dispute, or similar reasons) and unemployed persons (persons who did not work during the survey week but who were available for work and who had looked for work within the preceding four weeks, and persons who did not look for work either because they were on layoff or because they were waiting to start new jobs within the next 30 days). Labor force participation rates were computed by dividing the number of people in the labor force by the number of people in the civilian noninstitutional population for the appropriate sex/age group.

The TREND variable starts with a value of 1 in 1970 and is incremented by 1 for each additional year.

The RETDUM variable takes on a value of 0 for those years in which 70- and 71-year-olds were covered by the retirement earnings test (1970-82) and a value of 1 for those years they were not covered by it (1983-87).

The unemployment variables are the unemployment rates for male and female civilian workers. Data for 1970-86 were taken from the 1987 Economic Report of the President, table B-35 and the values for 1987 were taken from table 1 of the May 1988 Monthly Labor Review.

The data for the pseudo replacement rates were constructed as follows. Average monthly benefit amounts were constructed for each sex/2-year-age group using data from table 70 in the 1987 Social Security Bulletin, Annual Statistical Supplement and related tables in earlier Supplements. These average monthly benefits were multiplied by 12 to get an estimate of average annual benefits and divided by the national average wage level for the appropriate year. National average wage levels for all years except 1987 are found in table I of the 1987 Supplement. The average wage for 1987 was taken from an Office of the Actuary estimate.

Data for average monthly benefit amounts for 1981 and 1987 were not available and had to be estimated. Monthly benefits for 1981 were estimated by computing the average real growth in benefits (average increase in benefits after the cost of living adjustments (COLAs) were removed) for the periods 1978-80 and 1982-84. As a test, we then used these average real growth rates to predict 1982 average monthly benefits. We multiplied the 1980 average monthly benefit by the average real growth for the 1978-80 period, by the average real growth for the 1982-84 period, and by the COLAs for 1981 and 1982. We obtained good estimates for 68- and 69-year-old and 70- and 71-year-old men and for 70- and 71-year-old and 72- and 73-year-old women. The estimated benefit levels for 72- and 73-year-old men and 68- and 69-year-old women were too high, but were very close to the actual levels when the average real growth rates were halved. The 1981 average monthly benefit levels were estimated by multiplying the appropriate 1980 average benefit level by average real growth rate in benefits over the 1978-80 period (half this rate for the older men and younger women) and by the 11.2 percent COLA.

A similar procedure was used in estimating average monthly benefit levels for 1987. The average real growth in benefits over the 1984-86 period was computed for the various groups. Those for 68- and 69-year-old men and women were negative and because we did not want to assume this negative growth rate would continue, we assumed a zero real growth rate for these two

groups. We multiplied the average benefit levels for 1986 by these average real growth rates and again by the 1.3 percent COLA effective for December 1986 to arrive at the estimated average monthly benefits for 1987.

Table A.--Data used in the BLS labor force participation rate (LFPR) regressions

Year	LFPR						TREND	RET-DUM	UN-EMPM	UN-EMPW	REPRATE					
	Men			Women							Men			Women		
	68-69	70-71	72-73	68-69	70-71	72-73					68-69	70-71	72-73	68-69	70-71	72-73
1970	35.8	29.1	23.5	13.9	11.1	8.2	1	0	4.4	5.9	26.0	25.8	26.8	20.7	20.8	21.0
1971	33.7	27.5	23.4	13.1	10.4	8.1	2	0	5.3	6.9	27.9	27.5	28.1	22.2	22.2	22.5
1972	31.8	26.3	21.3	13.8	9.2	8.0	3	0	5.0	6.6	31.4	30.9	31.0	25.0	25.0	25.2
1973	29.0	24.7	20.7	13.2	9.7	7.3	4	0	4.2	6.0	30.1	29.7	29.7	24.4	24.5	24.7
1974	27.2	23.6	21.6	11.3	8.8	6.7	5	0	4.9	6.7	32.2	31.9	31.8	26.2	26.3	26.5
1975	27.1	23.0	21.4	11.0	9.0	6.7	6	0	7.9	9.3	33.1	33.0	32.6	26.8	27.0	27.1
1976	24.6	22.8	19.3	12.3	8.4	6.7	7	0	7.1	8.6	33.5	33.2	33.3	27.1	27.4	27.5
1977	25.3	20.8	18.4	11.2	8.6	7.1	8	0	6.3	8.2	34.1	33.9	33.9	27.4	27.8	28.0
1978	27.1	20.8	19.5	11.8	8.8	7.7	9	0	5.3	7.2	34.2	33.9	34.1	27.2	27.8	28.1
1979	25.6	22.1	18.4	11.9	8.6	6.7	10	0	5.1	6.8	35.3	34.7	34.9	27.7	28.4	28.8
1980	23.6	20.2	16.0	11.0	8.9	6.7	11	0	6.9	7.4	38.0	36.8	37.1	29.2	29.9	30.5
1981	23.6	18.5	16.1	11.7	8.0	7.4	12	0	7.4	7.9	39.4*	37.7*	37.9*	29.7*	30.5*	31.1*
1982	23.7	18.9	15.7	11.8	8.1	6.9	13	0	9.9	9.4	41.7	40.2	39.2	30.8	31.3	31.9
1983	22.8	19.2	15.1	11.8	8.3	6.8	14	1	9.9	9.2	42.6	41.8	39.8	31.2	31.6	31.9
1984	20.5	18.1	14.7	11.8	8.6	7.3	15	1	7.4	7.6	43.0	42.3	40.3	31.3	31.5	31.6
1985	20.0	16.7	14.7	11.5	8.3	7.7	16	1	7.0	7.4	42.2	43.0	41.3	30.7	31.9	31.7
1986	20.7	16.2	14.3	11.5	7.7	6.5	17	1	6.9	7.1	39.9	43.3	41.9	29.3	32.0	31.8
1987	21.4	16.2	14.1	11.3	8.2	6.3	18	1	6.2	6.2	39.2*	43.4*	42.1*	28.8*	31.8*	31.4*

* Data are estimated

Appendix B: CWHS data

The Continuous Work History Sample (CWHS) is a Social Security Administration data file developed from data in administrative files. It contains information on approximately 1 percent of all persons issued a Social Security number (SSN). There are two CWHS data files, an active file and an inactive file. To be in the active file, some activity such as earnings or benefit payments must have been recorded after the SSN was obtained. We used the active file.

The active CWHS file contains data on approximately 2.4 million persons. For this study, we selected a 10 percent sample of CWHS persons born from 1895 to 1920 who were alive at age 65 or in 1970, whichever was later. These are persons who were aged 65 to 75 during the period from 1970 to 1985, the most recent year for which data are available. There are 42,231 persons in our sample representing a population approximately 1,000 times as large. Our sample selection procedure was to take every tenth person who met the birth year and longevity requirements listed above, beginning with the fifth such case found (the starting case was randomly selected). Because the CWHS is a random sample of the population, this sample should also be a random sample.

The data selected from the CWHS for use in this study include: year of birth; data necessary to compute year of death;

sex; benefit status codes for 1957-85; insured status codes for 1969-85; 1985 primary insurance amounts; some data on disability insurance beneficiary status; first and current last year employed; years of coverage 1951-85; and data on self-employment income and total taxable earnings from 1970-85 and, after 1977, total compensation.

The age variable is computed by subtracting the year of birth from the year in question (1970-85). Thus age is the person's age at the end of the year. The earnings variables show levels of earnings during the calendar year in question. This can present some interpretation problems. For example, in our tables a person with earnings at age 70 in 1980 could have earned his or her earnings either before or after his or her 70th birthday. The data are not detailed enough to allow us to determine which was the case. We decided to use the person's age at the end of the year as his or her age because the earnings test does not apply starting in the month he or she turns age 70. Because only the annual test applied in 1983 (the year the retirement earnings test was lifted for 70- and 71-year-olds) and later, many persons with earnings at age 69 in the year they turned age 70 would not have been affected by the earnings test.

By combining data on beneficiary status and insured status, we were able to separate the sample population into beneficiaries, insured nonbeneficiaries, uninsured nonbeneficiaries, and the dead for each year in the 1970-85

period. The dead have been removed from the totals in the tables in the paper.

Table B.1 gives some of the data from the CWHS including the basic counts (excluding persons who died) and the percent in each beneficiary/insured status category. The beneficiary group represents retired workers and dually entitled beneficiaries only. Other spouse and survivor beneficiaries are included in the two nonbeneficiary groups.

Table B.2 shows the percent of this CWHS population with earnings and the subgroups with earnings below and above the retirement earnings test threshold. Note that the percent with earnings can be interpreted as a labor force participation rate (LFPR), but it is different from the BLS LFPR data for several reasons. First, BLS classifies a person as in the labor force if he or she is working or looking for work during a given week in the month. In the CWHS, we classify a person as in the labor force if he or she has reported earnings in a given year. A person could be unemployed for the entire year and be counted as in the labor force by the BLS, but he or she would not be counted as in the labor force on the CWHS. Second, a person could work at a noncovered job. He would be counted as employed in the BLS data, but not in the CWHS. Third, the BLS data is based on the civilian noninstitutionalized population. The CWHS data does not exclude the institutionalized population so the population bases

for the two data series are different. Thus, both the numerators and denominators of the two "Labor Force Participation Rate" series differ which explains why the rates themselves differ.

Table B.1a.--Number and percent distribution by beneficiary status for men, by age, 1970-85

Age	Year															
	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
Men							Number (in thousands)									
65-69	3611	3715	3837	4033	4104	4202	4286	4280	4278	4379	4492	4592	4680	4784	4882	5070
70-71	1263	1263	1240	1244	1262	1355	1383	1418	1531	1524	1522	1543	1514	1577	1653	1717
72-75	2019	2027	2092	2124	2182	2210	2201	2348	2363	2447	2572	2610	2692	2696	2676	2793
							Beneficiaries									
65-69	74.3	73.9	75.3	75.5	76.9	77.1	77.8	77.8	76.6	75.7	75.3	74.7	74.1	74.2	73.6	72.5
70-71	82.2	82.4	84.4	82.9	82.1	81.8	82.7	85.0	84.1	83.6	83.5	82.7	81.8	80.9	81.0	79.1
72-75	82.5	82.2	81.9	81.9	82.4	81.5	81.9	81.2	81.2	82.0	82.0	82.9	82.2	81.5	80.9	80.3
							Insured Nonbeneficiaries									
65-69	11.7	12.6	11.4	11.2	9.8	9.9	9.2	8.5	9.5	10.0	9.5	9.6	9.7	9.3	9.2	10.5
70-71	3.7	2.6	2.5	3.0	3.1	3.1	3.0	3.0	2.4	2.2	2.7	3.0	2.8	2.6	3.4	3.7
72-75	4.3	4.2	3.8	3.1	3.0	2.9	2.8	3.1	3.2	3.2	2.8	2.6	2.6	2.6	2.8	2.8
							Uninsured Nonbeneficiaries									
65-69	14.0	13.5	13.3	13.3	13.3	13.0	13.1	13.8	13.9	14.3	15.2	15.8	16.2	16.5	17.2	17.0
70-71	14.1	15.0	13.1	14.1	14.8	15.1	14.3	11.9	13.5	14.2	13.8	14.3	15.4	16.5	15.5	17.2
72-75	13.3	13.6	14.2	15.0	14.6	15.6	15.3	15.7	15.6	14.8	15.2	14.5	15.2	15.9	16.3	16.9

Source: Ten percent extract file from the Current Work History Sample

Table B.1b.--Number and percent distribution by beneficiary status for women, by age, 1970-85

Age	Year															
	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
Women							Number (in thousands)									
65-69	3338	3489	3594	3723	3903	4027	4172	4395	4511	4686	4794	4958	5089	5258	5351	5524
70-71	1105	1122	1172	1263	1283	1368	1422	1418	1515	1585	1645	1647	1748	1842	1896	1944
72-75	1780	1891	1975	2060	2151	2258	2336	2489	2565	2654	2794	2877	3010	3102	3238	3336
							Beneficiaries									
65-69	55.8	55.9	55.7	54.9	55.4	56.2	57.5	57.5	56.7	56.8	55.8	54.5	53.8	53.3	52.6	51.2
70-71	59.4	58.6	61.2	63.4	62.0	60.7	60.3	59.4	58.4	57.9	60.2	61.9	60.1	58.3	57.8	57.2
72-75	63.7	62.4	60.8	59.0	59.5	60.4	61.3	61.4	60.2	59.5	58.4	58.3	58.7	59.4	59.2	59.1
							Insured Nonbeneficiaries									
65-69	12.2	12.5	11.7	12.1	11.5	11.3	10.5	10.7	11.6	11.1	11.3	11.9	11.8	11.8	12.2	13.2
70-71	8.0	7.9	8.0	6.3	6.9	6.8	7.5	7.5	8.1	9.1	7.5	7.3	8.5	9.1	9.0	8.4
72-75	9.1	8.6	7.9	8.7	7.9	7.4	7.3	6.6	7.5	7.3	8.0	8.4	8.2	8.3	8.2	8.5
							Uninsured Nonbeneficiaries									
65-69	31.9	31.7	32.6	33.0	33.1	32.4	32.0	31.9	31.7	32.2	32.8	33.6	34.4	34.9	35.2	35.6
70-71	32.7	33.4	30.8	30.3	31.1	32.5	32.2	33.1	33.5	33.0	32.2	30.8	31.5	32.6	33.3	34.4
72-75	27.2	29.0	31.2	32.3	32.7	32.3	31.4	32.0	32.4	33.2	33.5	33.2	33.1	32.2	32.6	32.5

Source: Ten percent extract file from the Current Work History Sample

Table B.2a.--Percent of the population with covered earnings and level of earnings for men, by age, 1970-85

Sex and Age	Year															
	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
Men	Percent with Covered Earnings															
65-69	40.3	38.7	38.1	36.7	34.7	32.9	31.8	31.1	31.3	31.2	30.5	28.5	25.9	24.1	24.5	24.9
68-69	33.4	31.0	29.8	28.7	30.8	26.7	24.1	25.5	24.8	25.4	25.5	24.6	21.6	18.9	20.2	18.7
70-71	26.5	25.6	25.0	23.8	23.3	22.1	21.1	20.4	19.7	21.4	21.9	20.0	18.0	18.3	19.0	15.9
72-73	21.8	20.6	19.6	19.3	18.1	17.7	19.5	16.5	17.9	17.9	15.9	17.7	16.7	16.1	14.6	15.3
72-75	18.9	18.5	18.5	18.3	16.5	16.3	17.5	16.0	16.8	16.4	14.8	15.3	14.2	14.3	13.9	14.0
	Percent with Earnings below the Earnings Test Threshold															
65-69	15.6	14.5	14.9	15.4	16.1	14.6	15.1	15.2	16.4	16.5	16.1	15.5	14.4	13.0	13.3	13.3
70-71	14.9	14.6	13.3	14.1	12.7	13.1	12.4	13.4	13.9	14.2	14.8	13.4	11.6	12.6	13.3	9.6
72-75	9.4	8.8	8.5	9.0	8.3	7.5	9.0	8.1	9.6	10.0	9.0	9.8	9.1	9.4	9.6	9.0
	Percent with Earnings above the Earnings Test Threshold															
65-69	24.7	24.2	23.2	21.3	18.6	18.3	16.7	15.9	14.9	14.8	14.3	13.0	11.6	11.2	11.2	11.6
70-71	11.6	11.0	11.7	9.7	10.6	9.0	8.7	7.0	5.8	7.2	7.0	6.5	6.3	5.6	5.7	6.3
72-75	9.6	9.7	10.0	9.2	8.1	8.8	8.5	7.9	7.2	6.4	5.8	5.5	5.1	4.9	4.3	5.0

Source: Ten percent extract file from the Continuous Work History Sample

Table B.2b.--Percent of the population with covered earnings and level of earnings for women, by age, 1970-85

Sex and Age	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
								Year								
Women								Percent with Covered Earnings								
65-69	25.7	23.8	23.3	24.1	21.3	19.9	19.0	18.5	18.3	17.9	18.4	18.0	17.4	16.5	16.0	16.1
68-69	21.4	18.2	18.8	19.9	16.9	16.1	13.9	14.1	14.4	14.7	13.8	14.2	14.1	13.0	12.4	12.3
70-71	15.0	14.9	14.9	13.0	12.9	14.0	12.6	11.2	9.2	11.1	10.7	10.6	9.7	9.2	10.7	10.1
72-73	13.8	11.0	10.1	10.7	10.4	7.8	9.4	10.5	9.5	8.0	7.4	8.3	7.4	7.5	7.0	7.9
72-75	12.0	10.4	9.4	9.4	9.0	8.1	8.3	8.6	8.0	7.9	7.7	7.2	6.6	6.7	6.5	6.8
								Percent with Earnings Below the Earnings Test Threshold								
65-69	14.0	12.3	12.3	13.8	12.3	11.8	11.5	11.9	12.1	11.5	11.9	11.7	11.2	10.8	10.8	10.8
70-71	10.2	9.2	9.4	9.7	9.8	10.1	9.7	8.4	6.0	8.6	8.6	8.4	7.3	7.3	8.2	7.4
72-75	6.8	5.7	10.2	5.7	5.9	5.4	5.5	6.1	5.8	6.0	5.8	5.7	5.1	5.5	5.2	5.4
								Percent with Earnings Above the Earnings Test Threshold								
65-69	11.7	11.5	11.1	10.3	9.0	8.1	7.5	6.6	6.1	6.4	6.5	6.3	6.2	5.7	5.2	5.3
70-71	4.8	5.7	5.5	3.2	3.0	3.9	2.9	2.8	3.2	2.5	2.1	2.1	2.4	2.0	2.5	2.7
72-75	5.2	4.7	4.1	3.7	3.1	2.7	2.9	2.5	2.1	2.7	1.9	1.5	1.5	1.2	1.3	1.4

Source: Ten percent extract file from the Continuous Work History Sample