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Means-Testing Federal Health Entitlement Benefits

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Abstract

In recent years, federal legislation has linked the price paid for health insurance benefits to measures of current income. Under the Patient Protection and Affordable Care Act of 2010, individuals and families with income as high as 400% of the federal poverty level are eligible for subsidies that limit their health insurance premiums to no more than 9.5% of their income. Under the Medicare Modernization Act of 2003, higher-income beneficiaries face income-related premiums over three times the standard premium for Part B coverage. For workers at or near retirement age, means-testing based on current income provides an incentive for early retirement, dissaving, and income manipulation, raising concerns about the efficiency of such means-testing. Further, current income is subject to short-term fluctuations, making it a noisy predictor of ability to pay. Using the Health and Retirement Study and linked Social Security earnings histories, it is shown that a measure of lifetime income compares favorably to current income as a basis for means-testing. It offers less short-term variation in premiums while improving incentives for pre-retirement work and saving.

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I. Introduction

Decades of rising health care costs and the persistent gaps in coverage, in the form of both persons lacking formal health insurance and in uncovered services for those with insurance, has motivated greater involvement of the federal government in health care markets during the past decade. In 2003, the Medicare Modernization Act (MMA) expanded Medicare to include coverage for prescription drugs through a new Part D. In 2010, the Affordable Care Act (ACA) expanded Medicaid and established a system of health care exchanges to help enable those without insurance through their employers to purchase it in a group market.[1]

The involvement of the federal government by itself does not necessarily reduce health care costs, and filling the gaps in coverage almost certainly requires greater expenditures. As the federal government has stepped up its role, policy makers have sought mechanisms to cover these increased costs. One mechanism common to both the MMA and the ACA was to tie the costs paid by health insurance beneficiaries more formally to their income. The MMA for the first time established an income-related monthly adjustment amount (IRMAA) to the monthly premium for Medicare Part B, the Supplemental Medicare Insurance (SMI) program. The IRMAA went into effect in 2007. The ACA extended IRMAAs to the prescription drug coverage provided by Medicare Part D. The ACA also included a formal system of premium support for individuals and families with income up to 400 percent of the federal poverty level who purchase their health insurance through exchanges. The premium support becomes operational in 2014 and limits the amount that an individual or family would have to pay for an insurance premium to 9.5 percent of their income or less.

In both of these examples, policy makers have chosen to implement means-testing by linking individual premiums to measures of current income. There are several concerns about current income as a measure of ability to pay that are overcome by the use of lifetime earnings. First, lifetime income

[1] The Affordable Care Act here refers to both The Patient Protection and Affordable Care Act and the Health Care Reconciliation Act of 2010.

can be a more *accurate* measure of each person's ability to pay than is income in a single year. Since income may be temporarily high or low in a given year, a better measure of ability to pay can be obtained by averaging several years of income. Second, lifetime income is based on past labor income rather than current investment earnings and is therefore less susceptible to *manipulation*. Third, the use of lifetime income avoids penalizing people who *save* during their working years. A tax on asset income during retirement is analogous to a tax on saving before retirement. Fourth, the imposition of higher premiums for higher current income penalizes those who continue to *work*, either after they become eligible for Medicare in the case of the MMA or before they are eligible for Medicare in the case of the ACA.

This paper considers an alternative measure of "ability to pay" in the form of average lifetime earnings derived from Social Security and Medicare earnings histories as a means of determining eligibility for premium subsidies under ACA or income-related premiums under the MMA.[2] Just as Social Security benefits are based on a measure of Average Indexed Monthly Earnings (AIME), eligibility for premium subsidies or the IRMAAs for Medicare Part B and Part D premiums could be based on an analogous concept of lifetime earnings subject to Medicare tax, described below as Medicare Average Earnings (MAE).[3]

The analysis in this paper compares the impact of means-testing on current income to means-testing on lifetime income using the Health and Retirement Study (HRS), a longitudinal panel study that surveys a representative sample of more than 26,000 Americans over the age of 50 every two years. Launched in 1992 and updated through 2010, the detailed household data in the HRS provide accurate measures of current income as well as numerous other demographic and socioeconomic characteristics to serve as control variables. Most importantly, the household respondents can be linked to their Social

[2] See Steuerle (1997) for an early discussion of using lifetime earnings as the basis for means-testing Medicare benefits.

[3] AIME is the average of an individual's highest 35 years of annual earnings subject to Social Security tax, with each year indexed for the growth in economy-wide covered wages until the year the worker reaches 60 years of age.

Security earnings records, which provide the data necessary to compute alternative measures of lifetime income like MAE for comparison with current income.

The remainder of the paper is organized as follows. Section II describes the income-related premium schedules for health insurance under the MMA and ACA, highlighting the implicit marginal tax rates on current income embodied in them. Section III discusses the conceptual differences along efficiency and equity dimensions of means-testing based on current rather than lifetime income. Section IV gives an overview of the HRS data and linked earnings records used in the analysis and outlines the calculation of MAE.

The analysis of means-testing in the MMA is in Section V. The main result is that in general, based on reported household income, there is considerable time-series variation in the level of the income-related premium for those who pay it. More importantly, there is little systematic difference in lifetime income across the households who pay very different income-related premiums. The income-related premium for Medicare Parts B and D can be expected to function very much like a tax on capital.

The analysis of means-testing in the ACA is presented in Section VI, focusing on individuals age 50 – 62 who are nearing retirement but not eligible for Medicare. For those who are uninsured, nearly 75 percent have incomes low enough to qualify for a premium subsidy. As with the MMA, there is considerable time-series variation in the premium subsidy, due to fluctuations in reported annual income. This variation is largely eliminated by using MAE as the basis for means-testing. For example, for individuals working in consecutive surveys, median changes in MAE are only 3.1 percent, with 90 percent of changes less than 11 percentage points over the two years. Further, preliminary tabulations indicate that for workers who have employer-based health insurance as employees but not retirees and who have household income above 400 percent of the Federal Poverty Level while working, up to 60 percent – approximately 3.2 million workers per year – would qualify for a premium subsidy if they retired.

II. Income-Related Premiums in the MMA and the ACA

The measure of current income used for means-testing in both the MMA and the ACA is based on a taxpayer's adjusted gross income, as defined on the federal income tax return. Current income is equal to the taxpayer's "modified adjusted gross income" (MAGI), which adds back to adjusted gross income the interest on non-taxable bonds and excluded foreign income.[4] It is a comprehensive measure of annual income, in that income from all sources –whether earned through employment or self-employment, received from assets, or withdrawn from pension plans – is included.

Medicare Part B and Part D Premiums

Prior to the passage of the MMA in 2003, all beneficiaries enrolled in Medicare Part B were generally required to pay a monthly premium that would cover 25 percent of the average annual expenditures per beneficiary. The MMA kept that target for the lowest income beneficiaries but introduced four additional premium amounts that would cover, respectively, 35, 50, 65, or 80 percent of program costs. The income-related premiums went into effect in 2007, and both the thresholds and premiums grew substantially until 2011 before premium amounts were lowered in 2012. The ACA introduced an income-related premium for Medicare Part D, covering prescription drugs, using the same income thresholds as the income-related premium for Part B. This new income-related premium went into effect in 2011.

The income-related premium schedules for 2012 for a single beneficiary are shown in Table 1. The rows of the table distinguish the different ranges of income for a single taxpayer (the income ranges for married taxpayers filing jointly are simply double those presented here). The Social Security

[4] See Kaiser Family Foundation (2011) for further discussion of the income measures used for determining eligibility.

Administration each year uses the income reported on the prior year's tax return (i.e. pertaining to income received two years prior) to determine income-related premium amounts.

As shown in the table, individuals with annual income of $85,000 or less will face no IRMAA and will thus pay the standard premium of $99.90 per month or $1,198.80 per year for Part B. They will pay only what their Part D premium specifies for drug coverage. Individuals with annual income between $85,000 and $107,000 will pay a combined IRMAA of $51.60 for their coverage. Dividing the annual increment of $619.20 by the interval size of $22,000 yields an implicit marginal tax rate of 2.8% over the whole interval. (The implicit marginal tax rate is higher over any subset of the interval and dramatically higher on the first dollars over the threshold.) Analogous calculations are presented in the last column of the subsequent two rows. For individuals with income over $214,000, the combined IRMAAs are $3,434.40, but the implicit marginal tax rate is zero since the premium no longer increases with higher income.

When introduced in the MMA, the income thresholds were to be indexed to inflation to prevent a growing share of the beneficiary population from having to pay the IRMAA. However, the ACA included a provision to freeze the thresholds in nominal terms until 2019. Projections by Kaiser Family Foundation (2012a) suggest that the share of Medicare beneficiaries required to pay the income-related Part B premium will rise from 5.1 percent in 2012 to 9.7 percent in 2019 and that the share paying the Part D premium will rise from 3 percent in 2012 to 8 percent in 2019.

Health Insurance Exchange Subsidies

The ACA established for the first time a formal system of premium support for individuals who purchase their health insurance through newly established state-level health insurance exchanges. The premium support functions as a limit on the amount that an individual or family would have to pay for an insurance premium as a percentage of their annual income. The insurance plan to which the

premium support applies is one that would cover approximately 70 percent of expected health costs.[5] The income levels that determine eligibility for the premium subsidies are based on multiples of the federal poverty level (FPL).[6]

Table 2 shows the relationships between income levels and the health insurance premiums. In 2012, the FPLs are $11,170 for an individual, $15,130 for a couple, and $23,050 for a family of 4. The third column in the table calculates the implicit marginal tax on income in moving through each interval. For example, a single individual with income at 150% of the FPL ($16,755) would pay a premium of 4% of his income or $670.20. If his income increased to 200% of the FPL ($22,340), his premium would increase to 6.3% of his income or $1,407.42. The increase in the premium is $737.22, which is 13.2% of the $5,585 increase in income. Critically, a couple (individual) with income up to $60,520 ($44,680) will pay no more than $5,749.40 ($4,244.60) for the premium.

The implicit marginal tax rates in Table 2 range from 9.5 to 16.8 percent for households with incomes between 133 and 400 percent of the FPL. For workers, these marginal tax rates exist on top of the marginal tax rates due to the payroll tax, federal and state income tax, and other programs that may provide marginal incentives to earn income. They also understate the impact of ACA on marginal tax rates due to two other provisions in the law. The first provision increases cost sharing for those with incomes less than 250 percent of the FPL. This enables low-income households to purchase more generous plans with the premiums specified in Table 2. The actuarial value of the plan is 94 percent for incomes up to 150 percent of the FPL, 87 percent for incomes between 150 and 200 percent of the FPL, and 73 percent for incomes between 200 and 250 percent of the FPL. The second provision lowers the out of pocket maximums for those with incomes less than 400 percent of FPL, with the reductions equal

[5] The Congressional Budget Office estimated that premium subsidies and related costs will exceed $100 billion within a few years of their initial implementation. See Table 2 in Elmendorf (2011).

[6] The FPLs discussed here are the poverty guidelines used by the Department of Health and Human Services to determine program eligibility. These guidelines are a simplified version of the poverty thresholds used by the Census Bureau to measure the extent of poverty. See http://aspe.hhs.gov/poverty/12poverty.shtml for the full table of poverty levels by family size and background on their construction and updating.

to two thirds for those with incomes under 200 percent of the FPL, one half for those with incomes between 200 and 300 percent of the FPL, and one third for those with incomes between 300 and 400 percent of the FPL. The declines in actuarial value and out of pocket maximums as income rises will raise the implicit marginal tax rate by an amount that depends on the cost of the plan.[7]

III. Means-Testing on Lifetime Rather than Current Income

The implicit marginal tax rates shown in Tables 1 and 2 suggest that there may be disincentives to earning or receiving income when a household is or could be eligible for federal health entitlement benefits. It is also possible that current income – or income in any single year – is a noisy or malleable measure of a household's ability to pay for health insurance. This section defines the measure of lifetime earnings and compares it conceptually to the measure of current income used for eligibility based on both efficiency and equity considerations.

Defining Medicare Average Earnings

Lifetime earnings are already used to calculate Social Security benefits. Social Security benefits are based on the Average Indexed Monthly Earnings (AIME), which is the average of an individual's highest 35 years of annual earnings subject to Social Security tax, with each year indexed for the growth in economy-wide covered wages until the year the worker reaches 60 years of age. The linking of health insurance or Medicare premiums to income could be based on an analogous concept of lifetime earnings subject to Medicare tax, which could be termed the Medicare Average Earnings (MAE). The tax base for Medicare differs from that of Social Security. It includes some employment not covered by Social Security, particularly some state and local government jobs. Also, the maximum taxable earnings subject to the Medicare tax was eliminated in 1994. It was equal to the Social Security maximum prior

[7] See Kaiser Family Foundation (2012b) for further discussion.

to 1991 and exceeded the Social Security maximum from 1991 to 1993. As a starting point, the MAE could be the AIME, with earnings defined as those subject to the Medicare tax rather than only those subject to the Social Security tax. The MAE could be pooled across spouses for couples, matching this feature of current income for married couples who file a joint return.

Computing the MAE is administratively straightforward, as it uses data already available in Social Security records rather than IRS data, as is needed for means-testing based on current income. It requires essentially no more information than what is provided in the annual letters that the Social Security Administration has sent out to covered workers or what would be required in the event that a worker started to receive disability benefits from Social Security.

Accuracy of MAE versus Current Income

Lifetime income can be a more accurate measure of each person's ability to pay than is income in a single year. Ability to pay is inherently difficult to measure and must be inferred from an individual's income. Since income may be temporarily high or low in a given year, a better measure of ability to pay can be obtained by averaging several years of income. This is true regardless of how income is defined—whether from income tax filings or Social Security earnings records.

For example, in an analysis of data from the Survey of Income and Program Participation (SIPP), the Kaiser Family Foundation (2011) showed that "[o]ver one-quarter (28%) of adults with income between 139% to 400% of poverty based on current income—the range for which tax credits for Exchange coverage are provided—would fall into a higher or lower income category based on prior tax income." This result pertains only to changes in eligibility for the exchange subsidies (as opposed to being on Medicaid or ineligible for the subsidies). There are additional variations in the amount of the subsidy indicated in Table 2 above for individuals and families whose income fluctuates between 133% and 400% of the FPL.

By contrast, the impact of a single year of earnings on the MAE when the individual has been employed for, say, 30 years is only 1/30th as large. Using MAE provides both predictability and, in some dimensions, fairness because it amortizes any impact of fluctuations in income over the whole lifetime. The downside to using MAE, with regard to equity, is that a person's income may unexpectedly fall and remain low, causing health insurance premiums to rise as a share of income. The strict link to current income would provide more insurance against this contingency.

Ability to Manipulate MAE versus Current Income

Lifetime income is based on past labor income rather than current investment earnings and is therefore less susceptible to manipulation. For example, income during retirement is to a large extent pension benefits or capital income from investments in stocks and bonds. Under proposals that means-test based on current income, Medicare beneficiaries and premium subsidy recipients would have an incentive to switch their portfolios from taxable bonds to stocks, since the latter generate capital gains that are taxed only when the stocks are sold. Within their stock portfolios, beneficiaries would have an incentive to switch from high-dividend to low-dividend stocks. As another example, using current income, beneficiaries would have an incentive to concentrate retirement-plan withdrawals or stock sales in a single year, rather than over multiple years, in order to avoid the higher cost-sharing or lower benefits due to higher income in some years. These manipulations, which would lower economic efficiency, can be avoided to a large extent by using Medicare Average Earnings instead of current income.

Incentives for Saving under MAE versus Current Income

The use of lifetime income avoids penalizing people who save during their working years. The income that beneficiaries receive from pensions and investments during retirement is attributable to

their decisions to save rather than spend their earnings before retirement. A tax on asset income during retirement is analogous to a tax on saving before retirement. Consider two individuals with identical lifetime earnings (and thus identical MAE's), but suppose that one individual contributed to a 401(k) plan while working while the other did not. Raising the first person's health insurance premiums because retirement income is available from assets or a pension provides a disincentive to save for retirement.

Incentives for Continued Work under MAE versus Current Income

The imposition of higher premiums for higher current income penalizes those who continue to work, either after they become eligible for Medicare in the case of the MMA or before they are eligible for Medicare in the case of the ACA. In the case of the MMA, Medicare beneficiaries would already have a full career of work incorporated into the calculation of their MAE. Adding another year of earnings above the MAE would only increase the MAE by, say, $1/40^{th}$ of the difference between the earnings and the MAE. Thus, the use of MAE encourages beneficiaries to continue to work. In contrast, linking Medicare Part B premiums to current income means that beneficiaries who continue to work could face much higher premiums. Given that Medicare beneficiaries have discretion over how much they work and earn, the disincentives inherent in means-testing on current income rather than MAE are likely to reduce the labor force activity of beneficiaries.

In the case of the ACA, the potential disincentives to work may be quite severe. As French and Jones (2011) have shown using HRS data, the potential change in health insurance coverage at retirement is a strong predictor of retirement behavior.[8] The greatest job exit rates for workers whose health insurance status will not change due to retirement is at age 62, but for those who would lose health insurance at age 62, the greatest labor force exit rates are at age 65, when they become eligible

[8]See, in particular, Figure 2 on page 710 of French and Jones (2011).

for Medicare. The ACA will change retirement behavior in part because it fills in a missing market for group health insurance, regardless of how it is funded. These incentives are not present if the premiums are based on MAE, since the impact of retiring lowers the MAE by only 1/N times the reduction in current income, where N is the number of years worked.

Differences in Coverage in MAE versus Current Earnings

As in the case of Social Security benefits, MAE considers only income derived from labor market activities, whereas the measure of current income used in means-testing includes income from both real and financial assets. In the discussion of efficiency considerations above, the exclusion of asset income was a plus for MAE, since the receipt of asset income is often due to choices on realizing or reporting or longer-term decisions on saving. However, the receipt of asset income could also represent windfall returns or inherited wealth, both of which may be unrelated to the recipient's decisions and thus good candidates for an implicit tax.

IV. Data

The data used to analyze means-testing of health entitlement benefits are all derived from the household respondents to the Health and Retirement Study linked to their Social Security earnings records.[9] The HRS sample is broadly representative of the population over age 50, with the original HRS cohort (born 1931 – 1941) and the AHEAD cohort (born 1923 and earlier) from the initial surveys in 1992 and 1993 having been supplemented over time with cohorts representing the Children of the Depression (1924 – 1930), the War Babies (1942 – 1947), and the Early Baby Boomers (1948 – 1953) as

[9]The household data are from the RAND HRS Data, Version L, an easy to use longitudinal data set based on the HRS data. It was developed at RAND with funding from the National Institute on Aging and the Social Security Administration. See Rand Center for the Study of Aging (2011) for documentation.

the study continued with biennial surveys through 2010. The original cohort had 12,652 respondents in the 1992 survey. The full panel from 1992 to 2010 contains 180,600 respondent-year observations.

The use of the HRS data linked to earnings records makes it possible to compute the MAE for this sample of households near or in retirement. Approximately half of the respondent-year observations in the full panel can be linked to a Social Security earnings record. The earnings record for each respondent has two parts. The first is a summary earnings file, which gives Social Security earnings adjusted for the taxable maximum for each year between 1951 and 2007. The second is a detailed earnings file, which gives information from the respondent's W-2 forms for each year between 1980 and 2008. The latter allows a computation of MAE that includes income above the Social Security Maximum Taxable Earnings when the latter was raised and then eliminated for the Medicare portion of the payroll tax.

For each respondent-year, the MAE is the calculated as the average of all earnings subject to the Medicare payroll from that year back to either 1951 or the year the respondent turned 22, whichever is later. As in the calculation of the AIME for Social Security benefits, each year of earnings is revalued to the year of the calculation using the growth in the national average wage index. In the analysis of the MMA, in which all respondents are over age 65, the MAE used is the one for the year the respondent turned age 65. In the analysis of the ACA, in which all respondents are under age 65, the MAE used is the MAE for the respondent-year in question.

V. Analysis of Means-Testing in the MMA

When the MMA was passed, the intent was that approximately 5 percent of beneficiaries be subject to the income-related Part B premium each year. Table 3 shows the percentages of Medicare beneficiaries in each premium category in the HRS, identified as in Table 1 by the expected share of Part B expenditures that the premium is set to cover. The first survey year included is 1996, when the oldest

of the HRS original cohort (born in 1931) would become age-eligible for Medicare. The measure of income used to determine the income-related premium is total household income, which is the closest counterpart to Modified AGI in the HRS. For income years prior to the first published income thresholds (based on 2005 income tax returns), the thresholds are determined by adjusting for price inflation between 2005 and the income year in question using the CPI-U series. The table shows that, in most years, only 5 percent of the population represented by the HRS sample would have paid income-related premiums, as intended by the law.

Because each subsequent year's Part B premium is based on a new year's income tax return, there is no guarantee that a household will remain in the same premium category over time. Table 4 shows the transition matrix between premium categories in adjacent waves (i.e. two-year intervals). Because Table 3 showed that about 95 percent of respondents are in the first category in each year, it is not surprising that the probability of staying in that category two year later is 97 percent. The other 3 percent have increases in premiums that range from 40 percent (i.e. 35/25 – 1) to over 200 percent (i.e. 80/25 – 1). For the premium categories in which an income-related premium is being charged, the probabilities of staying in the same category are much lower, ranging from 10.30 to 26.64 percent. The most likely outcome in all cases is that those paying an income-related premium will not be paying that income-related premium in two years, with even 42.26 of those in the highest premium category falling to the lowest category.

There are several factors that may be generating the variation in premium categories across adjacent waves shown in Table 4. The first is measurement error, in that the HRS is using a survey instrument to obtain annual income data rather than the administrative data found on the actual tax return. Measurement error will tend to increase the biennial variation relative to what beneficiaries actually experience. The second is major life events, such as full retirement, widowhood, or re-

marriage, which change annual income and thus, in a system of means-testing based on current income, also change the respondent's premium category.

The third is the nature of the income received by those on Medicare, who are disproportionately retired and thus receive income from assets that were accumulated during the life-cycle saving phase of their working lives. Households have considerable discretion over the timing of their receipt of income from assets. They can choose the amount that they withdraw out of defined contribution pension plans and individual retirement plans and Keogh plans. They can choose whether to invest in interest-paying bonds or dividend-paying stocks. They can decide when to realize capital gains and offset gains with losses to minimize their taxable income.

Table 5 provides a first look at the importance of income from assets – or capital income – by premium category over the sample waves from 1996 – 2010. For each year and category, the share of capital income in total household income is reported. Capital income includes income from interest, dividends, capital gains, pensions, annuities, retirement accounts, trusts, rents, self-employment, and businesses. The shares are shown separately for (currently) unmarried women, unmarried men, and married couples. The key result is that for all groups in years, capital income makes up more than a third (though less than a half) of aggregate income even for the lowest premium category. Capital income is higher for the higher income categories than for this lowest category, with the shares peaking at 70 – 80 percent in most years with the next-to-highest premium category.

Given the importance of capital income in the aggregate, we can expect that as more Medicare beneficiaries begin to experience these income-related premiums and the disincentives they provide, it is possible that they use the flexible timing of capital income to avoid the higher premiums in some years. Medicare Average Earnings, as defined above, are not subject to these concerns. MAE is determined when a beneficiary becomes eligible for Medicare and does not need to be changed in

subsequent years. It can be changed when household composition changes by adding or subtracting the MAE for an entering or departing household member.

Table 6 provides summary statistics for the distribution of MAE by premium category and gender/marital status group. Because the values of MAE are in nominal dollars, only the last three waves of data from 2006 – 2010 are shown in the table.[10] There are two important results in the table. First, the 10th percentiles of the distributions for unmarried women are all extremely low, indicating that a sizable fraction of women in these cohorts have spent very little time in the workforce. Although the full marital history is not available in the earnings records linked to the HRS, this information is available to the Social Security Administration and could be used to construct a family-based MAE (as is done for currently married couples in the bottom panel of the table).[11] Because labor force participation and earnings were higher for men in these cohorts, the 10th percentile of the MAE distribution is less anomalous for men.

Second, as shown in the first column, average MAE is lower in the first premium category that does not pay an income-related Part B premium than in the other four categories that do. This is true for all three groups shown. For all three groups, there is at least a $10,000 average difference between the MAE of the lowest premium category and the MAE of the next premium category. However, in general, and considering not just the mean but the 10th, 50th, and 90th percentiles of the MAE distribution, there is little systematic difference between MAEs across the top four premium categories. In many cases, the summary statistic for MAE is lower in higher premium categories.

Table 7 shows, via linear regressions, that these differences are not statistically significant. Each column presents a regression of MAE on indicator variables for the 4 premium categories that pay the income-related premium. Also included are time trends (year minus 2000) and birth year trends (birth

[10] The conclusions from the table are similar if the full panel is used. In the regressions in Table 7, the full panel is used and a time trend is used to control for changes in prices over time.

[11] Some of the marital history is available in the linked earnings histories when the marriage was observed during the HRS panel. Future versions of the paper will incorporate that information to the extent possible.

year minus 1930). There are six regressions, one for each gender/marital status group in each of the full panel and just the years 2006 – 2010. The tests for the joint significance of the 4 premium category variables have p-values over 0.4 in the samples of unmarried men and unmarried women. For the married couples, the test has a p-value of 0.12 in the most recent years and 0.02 in the full sample. However, even in the latter case in which the difference is statistically significant, the increase in average MAE with income is not monotonic.

These results show that it is possible to double current income (e.g. from $107,000 to $214,000 in Table 1) without providing much difference, if any, in MAE. As shown in Table 5, capital income plays an important role, and a larger role at higher income levels, in determining total household income. The desirability of using current rather than lifetime income as the basis for income-related premiums depends, for both equity and efficiency reasons, on the extent to which disparities in capital income are due to factors over which the individual has control. Venti and Wise (2001) investigate this issue in the context of whether it is choice or chance that determines wealth dispersion at retirement. Controlling for lifetime income, they show that little of the variation in wealth at retirement (which forms the basis for capital income in retirement) can be ascribed to "chance differences in individual circumstances largely outside the control of individuals that might limit the resources from which saving might plausibly be made." They also exclude differences in investment choices as an important determinant, leaving savings decisions as the key explanatory factor. Thus, relative to basing income-related premiums on a measure of lifetime income like MAE, the policy of using of current income for means-testing suggests a disincentive for saving, the magnitude of which awaits further study beyond the first five years of its implementation.

VI. Analysis of Means-Testing in the ACA

An important method of achieving nearly universal health insurance coverage through the Affordable Care Act was to provide premium subsidies to individuals and families with incomes below 400 percent of the federal poverty level (FPL) as defined by the Department of Health and Human Services each year. Table 8 uses the HRS to track the percentage of the population between 50 and 62 who will be eligible for premium subsidies (or expanded Medicaid coverage for those with very low income) from 2002 – 2010.[12] The columns refer to different sample groups, depending on whether the respondent is working or not and separating out those who are uninsured from the full sample.

Across all respondents, about 41 percent were in households below 400 percent of their FPL from 2002 – 2008, before a noticeable jump in 2010 that is likely due to the impact of the Great Recession. Over those years, about 31 percent of working respondents, and about 64 percent of non-working respondents, were below this threshold. Focusing next on just those who are currently without insurance from any source, nearly 75 percent are below 400 percent of the FPL, with about two thirds of working respondents and over 80 percent of non-working respondents having income below the threshold. These high percentages suggest that, at least among those 50 – 62 without insurance, three out of four will have enhanced opportunities to obtain coverage in any given year.

Since the determination of the premium subsidy is made on an annual basis using current income, there is the potential for the amount of the premium subsidy to change over time as annual income changes. Table 9 presents two transition matrices using the FPL multiple categories for uninsured respondents who do not change their work status across consecutive waves of the HRS.

[12] The table uses the Census Bureau definition of the FPL, with the HRS determination of a respondent's FPL based on household composition. Applying the HHS definition using reported number of persons in the household yields a cross-sectional correlation between the FPLs of 0.959. Some of the variation is due to geographic and demographic factors that affect the Census Bureau's definition, but other variation may be due to less precision in the author's determination of household size relative to the HRS investigators. On average, the HHS definition and my classification scheme yield FPLs that are about 4 percent higher. Since this will result in greater numbers of respondents classified as eligible for subsidies (about 3 – 5 percentage points in most of the entries in Table 8), the Census Bureau definitions are used to provide a more conservative estimate.

Changes in premium categories are thus not due to changes in working status but only to changes in income conditional on working status.

The top panel shows the results for respondents who are not working for pay in both the current and next survey year. At the extremes, three quarters of those in the lowest FPL category remain in that category, and 53.40 percent of those who do not qualify for premium subsidies in the current survey year do not qualify for them in the next survey year. In the intermediate categories, about 30 – 50 percent of those receiving some subsidy in the current year will have sufficiently low income in the next survey year to qualify for the maximum premium. Upward income changes are not as likely, but 13 – 26 percent of those with 200 – 400 percent of the FPL in the current survey year would lose it in the next survey year, even without starting to work for pay.

The bottom panel shows the results for respondents who are working for pay in both the current and next survey year. With continued employment, the likelihoods of falling into the lowest FPL categories are lower than for those not working but still about 20 percent or more for those with income less than 300 percent of the FPL. Upward mobility out of the premium subsidy ranges is comparable to the respondents who were not working. For those in the intermediate categories, the distribution of premium subsidy categories in the next survey year is very evenly distributed. For example, for those with incomes between 250 – 300 percent of the FPL, there is a roughly one in five chance of winding up below 150 percent, between 150 – 250 percent, between 250 – 300 percent, between 300 – 400 percent, and above 400 percent of the FPL in the next survey year.

Current income changes will change premium subsidies according to the schedule shown in Table 2. The implicit marginal tax rates shown in the last column of that Table indicate that, via this schedule, the premium changes are analogous to marginal tax rates of about 15 percent. In part, this is insurance against income shocks, but administratively, it will generate changes in premium amounts with high frequency even for those who do not change working status, given the transition matrices

shown in Table 9. Basing premium subsidies on a measure of lifetime income like MAE would generate less variation in premium subsidies. Moving across any one of the FPL categories in Table 9 (beyond 150 percent) is equivalent to an income change of between 20 and 33 percent. Table 9 shows that moves across multiple categories were not uncommon – for low-income respondents, there is considerable variation in current income over a two year period.

Table 10 summarizes the distribution of changes in MAE between consecutive survey years for the same groups shown in Table 9. Each cell contains a mean or percentile of the distribution of changes in ln(MAE). They are analogous to the two-year percentage change in MAE in nominal terms. For those not working in either survey year, the median such change is 2.8 percent, with little variation in this median by FPL categories. The 10^{th} and 90^{th} percentiles are about -1.7 percent and 4.0 percent, respectively, indicating a very narrow distribution of changes.[13] For those working in both survey years, median changes are slightly higher at 3.1 percent, and changes at the 90^{th} percentile are around 11 percent for the full sample. The distribution of changes in income is narrow in general because each incremental year of earnings can only change the average by a factor of 1/N, where N is the number of years since age 21. For this sample, that is a minimum of 30. Thus, premium subsidies based on MAE can be expected to change less from year to year than those based on current income.[14]

The comparisons in Tables 9 and 10 specifically hold working status constant across the two survey waves when measuring variation in premium categories and income. Because the income thresholds for premium categories do not depend on working status, a change in working status that lowers income will also increase the premium subsidy. Beyond the effects on the intensive margin for earning income, the implicit marginal tax rates shown in Table 2 may encourage reductions in income along the extensive margin by providing an incentive to retire early. This incentive is present for all

[13] The exception is in the lowest premium category, in which large percentage changes can occur from small dollar changes in MAE.

[14] Table 10 uses only the changes in the respondent's MAE over the two years. Results based on changes in a couple's combined MAE are similar to those presented.

workers who currently pay for their health insurance in some way – anyone can retire, lowering income, and thus qualify for subsidies if total income is below 400 percent of the FPL (or a larger subsidy to the extent that total income slips further below this threshold). However, the incentive will be particularly acute for those who currently receive health insurance from a source that will not continue to provide insurance if they retire.

Table 11 shows the distribution of workers age 50 – 62 in the HRS from 2002 – 2008 across FPL categories and the source of their health insurance. Overall, 11 percent of these workers have no health insurance, and 25 percent have health insurance through a source other than their own or a past employer. The remaining workers have health insurance through a current or past employer. About 29 percent of the sample has health insurance that will still be available if they retire, while the other 35 percent does not. It is this last group that is particularly exposed to the new incentive to retire early, since early retirement will now no longer lessen access to group health insurance.[15] More than a quarter of the workers face this problem of "job lock" in all FPL categories about 150 percent. The public policy concern is not the removal of job lock, which can have positive impacts on welfare, but doing so with subsidies from the federal government that do not condition on working status.

Measuring the extent to which job lock is attenuated by the ACA awaits the implementation of the key provisions of the law in 2014. A first look is shown in Table 12, which compares the distribution of workers with current but not retiree health insurance from their employers while working to a hypothetical distribution in which their earnings have been set to zero. All of the workers whose current income places them below 400 percent of FPL will qualify for a premium subsidy upon retirement, since their income will go down. The diagonal elements of the matrix show that fewer than 20 percent of workers in each of the FPL categories with incomes below 400 percent of the poverty level

[15] Nyce et al. (2011) use employee-level data from a sample of large firms to show that employees under the age of 65 have substantially higher turnover rates at firms that offer subsidized retiree health coverage than at firms that do not. Turnover rates are also higher among employees who face higher subsidy rates.

would remain in the same FPL category, suggesting that most will get a larger subsidy. For workers currently above the 400 percent of FPL level, about 40 percent will remain ineligible for a subsidy even if their household income falls by the full amount of their current earnings. For the other 60 percent of this group, their retirement will make them newly eligible for premium subsidies, unless they receive pension, capital or other income (e.g. a part time job) that lifts them back above the 400 percent level. Using sample weights, this group aggregates to 3.2 million workers per year on average across the four survey years from 2002 – 2008.

VII. Conclusions

Policy makers must balance equity and efficiency considerations when designing social insurance programs. Both the Medicare Modernization Act of 2003 and the Affordable Care Act of 2010 introduced means-testing of federal health entitlement benefits based on measures of current income. Current income has several disadvantages as a basis for entitlements: it provides incentives to reduce saving and work to lower income, it provides incentives to manipulate income, and it is a noisy measure of ability to pay. This paper provides a first analysis of the extent to which the provisions of the laws have introduced these disadvantages relative to means-testing based on Medicare Average Earnings, a measure of lifetime income based on Social Security earnings records.

Although the income-related premiums at present cover only 5 percent of the beneficiary population, the use of current income for means-testing introduces considerable short-term variation in the level of the premium *for those who pay it*. At a point in time, large cross-sectional differences in the dollar value of premiums among those who pay them are not systematically related to lifetime earnings. The income-related premium as currently implemented is thus very much a tax on saving and capital income.

The ACA also introduces substantial variation in premium amounts relative to income due to short-term variations in current income. This is true even for those who don't change whether they are working for pay or not between surveys. By comparison, the distribution of annual changes to MAE among workers nearing retirement age is narrowly distributed, since the impact of any one year of earnings is averaged out by decades of prior indexed earnings. The income thresholds for premium subsidies under the ACA also do not condition on whether the individual is working or not, providing an incentive for early retirement. While this applies to all workers nearing retirement age, it is particularly acute for workers who have employee health insurance but not retiree health insurance from their employers. Preliminary tabulations suggest that as many as 3.2 million workers in this situation who do not qualify for a premium subsidy while working would qualify for one if they retired.

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Table 1: Medicare Part B and D Income-Related Monthly Adjustment Amounts in 2012

Income Range (Annual, Single)	Share of Expenditures Covered	Medicare Part B IRMAA	Medicare Part D IRMAA	Implicit Tax Rate (Over the Income Range)
$85,000 or less	25%	0.00	0.00	
$85,001 - $107,000	35%	40.00	11.60	2.8%
$107,001 - $160,000	50%	99.90	29.90	1.8%
$160,001 - $214,000	65%	159.80	48.10	1.7%
Over $214,000	80%	219.80	66.40	

Source: Social Security Administration Publication No. 05-10536, available at http://www.socialsecurity.gov/pubs/10536.html.

Notes: The base premium for 2012 is $99.90 per month. For those filing jointly, the income ranges are multiplied by a factor of 2, while the per-beneficiary premiums (and thus the implicit tax rate) remain the same. For those who are married filing separately, the base premium and the first income threshold is the same. However, the $159.80 IRMAA applies between $85,000 and $129,000 and the $219.80 IRMAA applies above $129,000.

Table 2: Health Insurance Premiums as a Share of Income under ACA Premium Subsidies

Multiple of the Federal Poverty Level	Premium as a Share of Income	Implicit Tax Rate (Over the FPL Interval)
Up to 133%	2%	3.0%
133 – 150%	3 – 4%	11.8%
150 – 200%	4 – 6.3%	13.2%
200 – 250%	6.3 – 8.05%	15.1%
250 – 300%	8.05 – 9.5%	16.8%
300 – 400%	9.5%	9.5%

Source: http://www.healthcare.gov/law/resources/authorities/section/1001-tax-credits.pdf.

Note: See text for calculations of the implicit marginal tax rates.

Table 3: Distribution of Medicare Part B Premium Categories by Year

	Expected Share of Medicare Part B Expenditures Covered by Premium				
Survey Year	25%	35%	50%	65%	80%
1996	95.89	1.40	1.29	0.79	0.64
1998	96.07	1.58	1.30	0.45	0.59
2000	95.26	1.61	1.80	0.52	0.81
2002	95.85	1.49	1.40	0.54	0.73
2004	95.28	1.59	1.52	0.68	0.94
2006	95.25	1.52	1.82	0.66	0.75
2008	93.96	2.08	2.16	0.83	0.97
2010	93.85	2.21	1.91	1.06	0.98

Source: Author's tabulations from the Health and Retirement Study, 1996 – 2010. The sample includes all respondents who are receiving health insurance through Medicare in the survey year. Observations are weighted by respondent weights.

Notes: The survey year refers to the year in which data are collected. Income generally pertains to the year prior to the survey year. Since premiums are based on income reported two years ago, the premium schedule applied is the typically the one for the year after the survey year. The column headings, 25% - 80%, refer to the share of per capita expenditures that the premium is expected to cover. They correspond to the rows of Table 1. For income years prior to 2005 (i.e. premium years prior to 2007), income has been indexed via the CPI-U to 2005 dollars and then compared to the thresholds for income earned in 2005.

Table 4: Transition Matrix Between Medicare Part B Premium Categories, 2006 – 2010

Premium Category in Current Year	Premium Category in the Next Survey Wave (2 year interval)				
	25%	35%	50%	65%	80%
25%	96.99	1.18	1.02	0.36	0.45
35%	63.51	16.04	10.86	6.33	3.25
50%	57.29	6.42	18.87	10.77	6.65
65%	47.79	14.58	14.64	10.30	12.68
80%	42.26	7.53	11.64	11.93	26.64

Source: Author's tabulations from the Health and Retirement Study, 2006 – 2010. The sample includes all respondents who are receiving health insurance through Medicare in the survey year. Observations are weighted using respondent weights.

Notes: The survey year refers to the year in which data are collected. Income generally pertains to the year prior to the survey year. Since premiums are based on income reported two years ago, the premium schedule applied is the typically the one for the year after the survey year. The row and column headings, 25% - 80%, refer to the share of per capita expenditures that the premium is expected to cover. They correspond to the rows of Table 1. Data for the transitions observed between 2006 – 2008 and 2008 – 2010 have been pooled.

Table 5: Share of Income Due to Capital by Medicare Part B Premium Categories and Year

	Expected Share of Medicare Part B Expenditures Covered by Premium					
Survey Year	25%	35%	50%	65%	80%	Total
			Unmarried Women			
1996	38.0	69.7	73.4	81.4	73.4	46.0
1998	37.2	64.4	74.0	46.4	55.4	42.2
2000	38.3	58.9	57.7	63.6	48.7	42.2
2002	34.9	59.2	52.5	61.6	90.5	40.5
2004	34.2	57.5	47.6	61.1	55.9	38.2
2006	33.1	59.6	56.6	55.2	51.0	38.8
2008	35.1	50.4	41.0	53.9	54.1	38.8
2010	33.3	48.8	55.5	53.6	36.3	36.2
			Unmarried Men			
1996	46.1	52.8	61.2	59.1	78.3	55.1
1998	40.8	43.5	71.1	42.2	65.7	47.3
2000	40.6	54.5	58.0	81.1	72.2	51.4
2002	40.9	60.3	64.5	63.9	66.7	49.7
2004	35.0	55.6	57.5	70.5	70.1	47.5
2006	37.7	53.6	63.1	71.3	68.1	48.1
2008	33.5	54.7	43.7	80.2	75.1	44.6
2010	34.6	49.7	52.6	61.6	72.4	43.0
			Married Couples			
1996	44.1	67.1	63.4	71.3	73.9	49.6
1998	44.0	58.2	64.6	58.8	86.0	50.5
2000	43.9	56.4	59.5	73.3	60.5	48.2
2002	40.8	48.6	53.9	68.6	57.0	44.3
2004	38.2	51.0	60.5	49.9	65.1	43.9
2006	37.7	49.9	58.9	62.2	47.1	41.7
2008	38.2	47.1	57.2	59.6	67.6	44.6
2010	32.9	51.3	44.4	51.0	40.6	36.9

Source: Author's tabulations from the Health and Retirement Study, 1996 – 2010. The sample includes all respondents who are receiving health insurance through Medicare in the survey year. Observations are weighted by respondent weights.

Notes: The survey year refers to the year in which data are collected. Income generally pertains to the year prior to the survey year. Since premiums are based on income reported two years ago, the premium schedule applied is the typically the one for the year after the survey year. The column headings, 25% - 80%, refer to the share of per capita expenditures that the premium is expected to cover. They correspond to the rows of Table 1. For income years prior to 2005 (i.e. premium years prior to 2007), income has been indexed via the CPI-U to 2005 dollars and then compared to the thresholds for income earned in 2005.

Table 6: Medicare Average Earnings (MAE) by Medicare Part B Premium Categories, 2006 - 2010

Premium Category	Mean	10th Percentile	Median	90th Percentile
		Unmarried Women		
25%	9,223	158	6,237	22,671
35%	19,804	270	10,260	48,205
50%	18,953	730	15,101	40,646
65%	18,657	1,057	10,601	54,691
80%	18,003	1,387	15,787	35,926
All	9,639	161	6,428	23,668
		Unmarried Men		
25%	23,006	5,947	21,595	40,435
35%	35,704	10,243	35,407	55,664
50%	37,947	8,294	35,407	70,887
65%	35,083	10,135	32,885	68,485
80%	33,895	13,223	28,856	57,053
All	24,176	6,072	22,164	43,571
		Married Couples		
25%	35,134	10,510	33,698	59,880
35%	47,887	18,413	41,448	85,498
50%	55,158	24,738	47,461	110,315
65%	54,142	18,413	46,147	93,647
80%	64,736	9,739	54,691	134,714
All	36,396	10,900	34,169	62,223

Source: Author's tabulations from the Health and Retirement Study, 2006 – 2010. The sample includes all respondents who are receiving health insurance through Medicare in the survey year. Observations are weighted using respondent weights.

Notes: The survey year refers to the year in which data are collected. Income generally pertains to the year prior to the survey year. Since premiums are based on income reported two years ago, the premium schedule applied is the typically the one for the year after the survey year. The row headings, 25% - 80%, refer to the share of per capita expenditures that the Medicare Part B premium is expected to cover. They correspond to the rows of Table 1. MAE refers to Medicare Average Earnings, as defined in the text.

Table 7: Linear Regressions of Medicare Average Earnings on Medicare Part B Premium Categories

	Survey Years 2006 – 2010			All Survey Years		
	Unmarried Women	Unmarried Men	Married Couples	Unmarried Women	Unmarried Men	Married Couples
Constant	9966.82	20498.57	30253.75	9226.14	19103.04	26477.42
	(460.80)	(1208.67)	(849.29)	(181.44)	(419.63)	(217.89)
Category 2	9300.97	9954.42	10524.54	6762.64	6855.67	7801.94
	(3151.51)	(2521.07)	(2638.16)	(1644.20)	(1617.85)	(1475.86)
Category 3	8244.68	12074.55	16903.71	5245.59	8235.66	12315.17
	(1695.84)	(3192.65)	(3103.83)	(1078.73)	(2013.40)	(1748.65)
Category 4	7465.76	11510.44	16729.65	4775.40	8441.83	10907.52
	(3977.85)	(4998.47)	(4643.43)	(2040.68)	(2947.56)	(2718.68)
Category 5	6231.84	9979.36	26126.92	4243.68	12204.94	18773.44
	(2322.90)	(4615.89)	(7535.32)	(1502.61)	(3504.76)	(4275.28)
Year Trend	-84.42	239.75	3.36	18.23	438.25	716.11
	(55.48)	(156.96)	(102.36)	(14.92)	(43.97)	(30.25)
Birth Year Trend	483.66	754.42	1188.58	371.07	569.78	785.40
	(24.99)	(62.24)	(58.44)	(13.95)	(36.23)	(29.50)
Observations	7,138	2,266	15,794	19,699	6,189	45,564
Unique HH	3,266	1,131	3,969	5,113	1,990	6,593
F-test (p-value)	0.86	0.94	0.12	0.71	0.42	0.02

Source: Health and Retirement Study, 1992 – 2010. The sample includes all respondents who are receiving health insurance through Medicare in the survey year. Observations are weighted using respondent weights.

Notes: The survey year refers to the year in which data are collected. Income generally pertains to the year prior to the survey year. Since premiums are based on income reported two years ago, the premium schedule applied is the typically the one for the year after the survey year. The premium category variables are indicator variables that correspond to the rows of Table 1. Observations is the number of HRS respondents in the estimation sample. Unique HH is the number of distinct households represented in that estimation sample. Standard errors are clustered at the household level. The F-test is for the joint significance of the premium category variables for Categories 2-5 (relative to the omitted Category 1).

Table 8: Percentage At or Below 400% of the Federal Poverty Level, 2002 – 2010

	Full Sample			Uninsured Respondents		
Survey Year	All	Working	Not Working	All	Working	Not Working
2002	41.12	31.31	60.49	76.23	72.45	82.38
2004	40.02	31.14	62.75	73.04	67.73	83.37
2006	41.78	31.48	67.02	75.33	68.21	87.22
2008	41.88	31.70	64.82	73.39	67.98	82.96
2010	46.09	33.89	69.19	71.69	67.94	78.58

Source: Health and Retirement Study, 2002 – 2010. The sample includes all respondents who are age 50 – 62 in the survey year. Observations are weighted using respondent weights.

Notes: Respondents must report that they are "working for pay" to be classified as working. The Federal Poverty Levels are based on Census definitions and HRS determinations.

Table 9: FPL Transitions for Those Without Coverage Who Do Not Change Work Status, 2002 – 2010

Multiple of FPL in Survey Year	Multiple of Federal Poverty Level in Next Survey Year						
	Under 133%	133 – 150%	150 – 200%	200 – 250%	250 – 300%	300 – 400%	Over 400%
	Respondents who are not working in consecutive survey years						
Under 133%	74.67	3.95	7.15	2.89	2.82	3.38	5.14
133 – 150%	49.11	5.26	9.94	5.50	7.45	16.20	6.54
150 – 200%	53.35	0.00	32.71	8.43	1.58	3.93	0.00
200 – 250%	31.67	9.64	23.15	4.64	2.18	2.45	26.27
250 – 300%	35.82	3.15	5.03	16.59	15.47	11.42	12.52
300 – 400%	44.14	0.00	4.02	8.75	3.59	15.86	23.64
Over 400%	23.71	1.40	4.86	1.61	4.52	10.50	53.40
	Respondents who are working in consecutive survey years						
Under 133%	49.07	5.63	13.97	10.62	7.16	2.85	10.71
133 – 150%	29.47	8.23	14.19	27.96	11.59	2.40	6.17
150 – 200%	18.06	13.20	23.36	16.66	15.92	11.60	1.20
200 – 250%	19.23	18.08	10.75	16.45	3.53	13.30	18.66
250 – 300%	18.62	0.50	16.65	4.20	20.00	20.00	20.02
300 – 400%	7.74	0.52	9.89	12.69	15.29	33.15	20.70
Over 400%	9.03	0.72	5.16	7.43	8.26	12.21	57.19

Source: Health and Retirement Study, 2002 – 2010. The sample includes all respondents who are age 50 – 62 in the survey year. Observations are weighted using respondent weights.

Notes: Respondents must report that they are "working for pay" to be classified as working. The Federal Poverty Levels are based on Census definitions and HRS determinations.

Table 10: Change in Medicare Average Earnings (MAE) by FPL Multiple Categories, 2002 - 2010

Multiple of FPL	Mean	10th Percentile	Median	90th Percentile
	Uninsured Respondents who are not working in consecutive survey years			
Under 133%	0.114	-0.018	0.028	0.039
133 – 150%	0.023	-0.015	0.031	0.034
150 – 200%	0.027	-0.005	0.032	0.041
200 – 250%	0.024	-0.023	0.032	0.070
250 – 300%	0.047	-0.015	0.036	0.044
300 – 400%	0.029	-0.017	0.028	0.062
Over 400%	0.007	-0.021	0.000	0.031
All	0.072	-0.017	0.028	0.040
	Uninsured Respondents who are working in consecutive survey years			
Under 133%	0.113	0.000	0.029	0.133
133 – 150%	0.050	-0.020	0.029	0.239
150 – 200%	0.050	-0.019	0.034	0.108
200 – 250%	0.072	-0.018	0.037	0.189
250 – 300%	0.064	0.018	0.032	0.103
300 – 400%	0.049	0.017	0.037	0.109
Over 400%	0.043	-0.017	0.030	0.115
All	0.065	-0.003	0.031	0.117

Source: Health and Retirement Study, 2002 – 2010. The sample includes all respondents who are age 50 – 62 in the survey year. Observations are weighted using respondent weights.

Notes: Respondents must report that they are "working for pay" to be classified as working. The Federal Poverty Levels are based on Census definitions and HRS determinations. MAE refers to Medicare Average Earnings, as defined in the text. The cells of the table are changes in the logarithm of MAE between the survey years. They are analogous to 2-year percent changes in nominal dollars.

Table 11: Health Insurance Status by Federal Poverty Level Multiples for Workers, 2002 – 2008

Multiple of Federal Poverty Level in Survey Year	Percentage of the Sample in this FPL Multiple Group	Health Insurance Status			
		Uninsured	Insured, Not by current or past Employer	Insured by Employer, Covered in Retirement	Insured by Employer, Not Covered in Retirement
Under 133%	5.22	44.35	21.36	2.62	2.95
133 – 150%	1.22	39.70	23.63	21.82	14.85
150 – 200%	3.91	28.92	20.60	22.16	28.31
200 – 250%	5.20	22.51	18.72	26.43	32.33
250 – 300%	5.27	20.49	19.74	26.53	33.24
300 – 400%	11.21	11.97	21.71	30.25	36.07
Over 400%	67.96	5.10	27.08	30.22	37.60
All	100.00	10.99	25.06	28.59	35.36

Source: Health and Retirement Study, 2002 – 2008. The sample includes all respondents who are age 50 – 62 in the survey year. Observations are weighted using respondent weights.

Notes: The Federal Poverty Levels are based on Census definitions and HRS determinations.

Table 12: Impact of Full Retirement on FPL Multiple for Workers with Employer Coverage but No Retiree Coverage, 2002 – 2008

Multiple of FPL in Survey Year	Multiple of Federal Poverty Level with Earnings Set to Zero						
	Under 133%	133 – 150%	150 – 200%	200 – 250%	250 – 300%	300 – 400%	Over 400%
Under 133%	100.00						
133 – 150%	82.96	17.04					
150 – 200%	85.36	1.18	13.46				
200 – 250%	84.50	3.63	5.48	6.38			
250 – 300%	81.56	1.80	7.85	0.84	7.96		
300 – 400%	65.00	4.92	10.69	8.16	5.02	6.20	
Over 400%	28.32	2.05	6.49	7.89	6.33	9.71	39.21

Source: Health and Retirement Study, 2002 – 2008. The sample includes all respondents who are age 50 – 62 in the survey year. Observations are weighted using respondent weights.

Notes: Respondents must report that they are "working for pay" to be classified as working. The Federal Poverty Levels are based on Census definitions and HRS determinations.