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INTERNAL REAL RATES OF RETURN UNDER THE OASDI PROGRAM FOR HYPOTHETICAL WORKERS

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Introduction

This note presents analysis of theoretical internal real rates of return for hypothetical workers with various earnings patterns and levels under the Old-Age, Survivors, and Disability Insurance (OASDI) program. The internal real rate of return (referred to as the internal rate of return) is the real interest rate (effective real annual yield) for which the present value of expected payroll taxes (contributions)[1] is equal to the present value of expected benefits for an individual or cohort of workers. Therefore, internal rates of return attempt to answer the question: If an individual or group of workers with selected characteristics were to invest the contributions made by them and their employers, what real annual yield would be required to finance the expected future benefits for them and their dependents?[2]

The real return on any benefit plan is affected by the level of administrative expenses incurred in operating the plan. In this aspect, the OASDI program is exceptionally efficient, with current administrative expenses of well less than 1 percent of total program cost.

While internal rates of return reflect the value of expected benefits, they do not reflect the additional "peace of mind" value of reducing the financial risk to individuals for extreme outcomes, such as death or disability at very young ages or survival to very old ages. In addition, OASDI internal rates of return are not truly comparable with similar rates from private-sector plans, because many features of OASDI benefits are not typically available in private-sector plans. Two such features are annual cost-of-living adjustments and benefits for life in the event of disability. However, internal rate of return analysis does indicate the relative value of benefits that the OASDI program provides across generations and types of workers.

It has long been known that workers with higher earnings tend to have greater life expectancy than lower-earning workers, something that offsets, to some degree, the progressive nature of retirement benefits on a lifetime basis. In addition, workers with higher earnings tend to have lower levels of disability incidence than lower-earning workers, which would tend to add to the progressivity of the OASDI program as a whole.

To better reflect these differences by earnings level, the 2024 edition of this note introduced adjustments for different mortality and disability incidence by career earnings levels of workers. These adjustments address concerns long expressed about whether the effect of the progressive monthly benefit formula favoring lower paid workers is offset by their shorter expected lifespan. The analysis presented in the 2024 edition of this note showed that the difference in lifespan by earnings level is roughly offset in most cases by the difference in disability incidence by earnings level, clarifying that the OASDI program as a whole provides higher internal rates of return for lower earners over their lifetime than for higher earners, as intended.

All estimates presented in this note use the methods and assumptions from the intermediate alternative of the 2025 Trustees Report.[3] Tables 1 through 6 present internal rates of return for hypothetical workers who differ by year of birth, earnings level, and family grouping. Tables 1 and 4 show the internal rates of return for the ***Current Law Scheduled*** scenario, which uses contributions and benefits scheduled under current law. Because projected scheduled income will not fully finance scheduled benefits for the OASDI program after 2033 under current law, we include the two additional scenarios described below.

- ***Increased Payroll Tax*** - Increase payroll tax rates above those scheduled in current law for each year

[1] Payroll taxes include any amounts transferred from the General Fund of the Treasury to substitute for employee/employer contributions, such as the 2 percent employee payroll tax reduction in 2011 and 2012 under Public Laws 111-312, 112-78, and 112-96.

[2] Because the OASI and DI Trust Funds receive transfers from the General Fund of the Treasury equal to a portion of taxes on benefits, internal rates of return that ignore these transfers may arguably be overstated. Due to the difficulty of determining the level of income tax on benefits, this factor is not addressed in this note.

[3] The estimates presented in this note do not reflect the effects of Public Law 119-21, the "One Big Beautiful Bill Act" (OBBBA), which the President signed into law after the release of the 2025 Trustees Report. Readers of this note should interpret the term "current law" to mean the Social Security law that was in effect prior to implementation of OBBBA.

after 2033, such that total program income finances fully the benefits scheduled in current law for each year. Tables 2 and 5 present the internal rates of return for this scenario.

- ***Payable Benefits*** - Reduce benefits below those scheduled in current law by a specified percentage for each year after 2033, such that current-law program income is sufficient to pay the resulting benefits. Tables 3 and 6 present the internal rates of return for this scenario.

This note presents hypothetical workers with four different levels of *scaled* pre-retirement earnings patterns.[4] A worker with a scaled earnings pattern has earnings that vary with age as a percentage of the national average wage index (AWI). The scaled worker enters the labor force at age 21 and retires at age 65. The scaled earnings level at each age reflects both the average earnings level of workers at that age and the percentage of individuals at that age who work. In addition to the scaled workers, this note presents a hypothetical steady maximum worker who has earnings at or above the OASDI contribution and benefit base for each year from age 22 to retirement at age 65.

Actuarial Services (formerly the Office of the Chief Actuary) has been producing theoretical internal rates of return for a number of years, including for recurring Actuarial Note Number 2024.5[5] and for the 1994-96 Advisory Council Report on Social Security.[6] We based the analyses in the 1994-96 Advisory Council report on hypothetical workers with *steady* earnings patterns, that is, workers with earnings that are a constant percentage of the AWI for each year of work. Actuarial Services first introduced non-steady hypothetical workers, referred to as scaled workers, in Actuarial Note Number 144 in 2001.[7] Other authors have addressed alternative approaches to considering non-steady earnings histories, and we recognize that a broader set of earnings patterns may provide additional insights into the distributions of benefits payable and internal rates of return under the OASDI program. However, for the sake of practicality, we limit the number of cases considered in this note.

[4]Additional details on developing scaled earnings patterns appear in recurring Actuarial Note Number 2025.3 at http://www.ssa.gov/OACT/NOTES/ran3/an2025-3.pdf.

[5]See http://www.ssa.gov/OACT/NOTES/ran5/an2024-5.pdf.

[6]The final report is located at http://www.ssa.gov/history/reports/adcouncil/report/toc.htm.

[7]See http://www.ssa.gov/OACT/NOTES/note2000s/note144.html.

Methodology and Assumptions

As stated in the previous section, this note presents theoretical internal rates of return for three hypothetical scenarios for the future of the OASDI program: *Current Law Scheduled, Increased Payroll Tax,* and *Payable Benefits.* The *Current Law Scheduled* scenario uses the taxes and benefits specified in current law, even though projected program income and trust fund reserves under current law are inadequate to pay all benefits through the 75-year projection period.

The *Increased Payroll Tax* scenario raises payroll tax rates, beginning with the year of trust fund reserve depletion, to finance scheduled benefits fully in every year. The payroll tax rate increases from the current law amount of 12.4 percent to 13.93 percent for 2034 and 15.41 percent for 2035. The payroll tax rate continues to increase generally year-by-year, reaching 17.23 percent for 2099. Under this scenario, the payroll tax rate increases further after 2099 due to continuing increases in life expectancy.

Under the third scenario, *Payable Benefits*, payroll tax rates hold constant as specified in current law, while benefits decrease for each year after trust fund reserve depletion, so that benefits paid equal taxes received for the trust funds as a whole. The reductions from scheduled benefit levels are assumed to apply proportionally to all types of benefits paid during the year. The intermediate projections of the 2025 Trustees Report show that program income does not fully finance scheduled benefits in 2034 and later. Thus, for the *Payable Benefits* scenario, annual benefit reductions begin in 2034 and generally increase each year thereafter. Projected program income, using current-law tax rates, combined with remaining reserves at the beginning of 2034, would be sufficient to pay 90.2 percent of scheduled benefits in 2034, 80.7 percent of scheduled benefits in 2035, and 71.9 percent of scheduled benefits in 2099. Under this scenario, annual reductions in benefits continue to grow after 2099 due to continuing increases in life expectancy.

The four earnings patterns for the hypothetical scaled workers reflect very low, low, medium, and high career-average levels of pre-retirement earnings patterns starting at age 21. Actuarial Services sets the career-average level of earnings for these workers at a specified percent of the AWI. For the scaled medium earner, the career-average level of earnings is approximately equal to the AWI. For the scaled very low, low, and high earners, the career-average level of earnings is

approximately equal to 25, 45, and 160 percent of the AWI, respectively.

Table A (on the following page) compares overall earnings for these hypothetical workers to those of actual retiring workers. We use the Average Indexed Monthly Earnings[8] (AIME), which is based on a worker's earnings, as a measure of overall earnings. We develop the distribution of actual workers retiring from 2019 to 2024 from a one–percent sample of Social Security administrative records.

This note groups the hypothetical workers into four categories: single men, single women, one-earner couples where only the husband is employed, and two-earner couples. The note presents the single-earner and one-earner couple examples for the four earnings patterns listed above as well as for the hypothetical steady maximum worker. In addition, the note presents the two-earner couples at seven earnings combinations as follows:

1) Husband high, wife high;
2) Husband high, wife medium;
3) Husband medium, wife medium;
4) Husband medium, wife low;
5) Husband low, wife low;
6) Husband low, wife very low; and
7) Husband very low, wife very low.

Of course, there are many other types of couples and earnings patterns that could be presented, including same-sex couples and couples where the wife is the sole or higher earner. The examples presented in this note are intended to illustrate a broad, but not complete, range of possibilities.

We assume that each scaled worker is born on January 2 and starts working on their 21*st* birthday.[9] The wife and husband of each couple have the same date of birth. Each marriage occurs on the joint 22*nd* birthday of the wife and husband and continues for life. Assuming that marriages are life-long means that the calculated internal rates of return do not reflect the effects of divorce and of remarriage after death and divorce. However, because each individual may receive a total benefit equal only to the highest of any spouse, widow(er), or worker benefit that may be available, this omission does not significantly affect our results. We assume that the couples have two children, one on the joint 27th birthday of the wife and husband, and the other on the joint 29th birthday of the wife and husband. We consider all types of retirement, disability, and survivor benefits, except for benefits to student children, disabled-adult children, and parents based on caring for a disabled-adult child. Omission of these benefits results in a very small understatement of the theoretical internal rate of return.

We assume that all nondisabled, surviving workers retire at age 65. We assume no mortality for children through age 18 in this analysis.

Based on the 2025 Trustees Report baseline assumptions, we apply adjustment factors to reflect the different levels of mortality and disability incidence experienced by workers at different earnings levels.

In general, workers with higher earnings tend to have lower mortality and live longer than workers with average or lower earnings. Adjusting for this variation by earnings level increases expected retirement benefits and thus the internal rate of return for higher earners. Higher earners also tend to have lower rates of disability incidence than workers with average or lower earnings. Therefore, an adjustment for both differential mortality and differential disability incidence by earnings level yields offsetting effects on the expected amount of lifetime Social Security benefits for these higher earners. The net effect of these adjustments varies across earnings levels, sex, and marital status.

[8]See http://www.ssa.gov/OACT/COLA/Benefits.html for more details on how to calculate the AIME.

[9]We assume that the maximum steady worker is born on January 2 and starts working on their 22nd birthday.

Table A. Distribution of AIMEs of Actual Workers Retiring in Years 2019 to 2024, Relative to AIMEs for Hypothetical Workers Retiring in 2019 to 2024

Hypothetical worker[1] (Career-average earnings)[2]	Percent with AIME less than AIME for hypothetical case			Percent with AIME closest to AIME for hypothetical case[3]		
	All men	All women	Total, all workers	All men	All women	Total, all workers
Very Low ($16,556)	8.3	15.3	11.8	12.7	23.5	18.2
Low ($29,800)	17.1	31.6	24.4	16.9	29.4	23.2
Medium ($66,223)	44.2	70.2	57.4	30.3	30.2	30.3
High ($105,957)	73.0	90.7	81.9	26.4	13.5	19.9
Maximum ($163,970)	100.0	100.0	100.0	13.6	3.4	8.5

[1] See text for definitions of hypothetical workers.

[2] Career-average earnings of hypothetical workers retiring at age 62 in 2024. Earnings are wage indexed to 2023 in this calculation.

[3] Rounded values do not necessarily sum to 100 percent. The percentage of workers with AIME values closest to that of the hypothetical maximum worker is expected to decline in future years. This is due to a significant increase in OASDI taxable earnings, relative to the AWI, in 1981 and a smaller increase in 1990.

Note: Worker distributions include individuals who are dually entitled, or may become dually entitled to a higher benefit in the future, based on another worker's account. A significant proportion of entitled female workers, especially those with lower earnings, will receive higher benefits as aged spouse or aged widow beneficiaries. If such dually entitled workers were excluded from this analysis, the distributions would be skewed more toward the higher-level hypothetical workers.

Conversely, lower earners generally have higher mortality and higher disability incidence. As a result, lower earners have relatively more expected years of disability benefits and fewer years of expected retirement benefits compared to those with average and high earnings. In addition, due to higher mortality and disability incidence, lower earners also tend to work and pay taxes on earnings for fewer years, which further affects their internal rates of return.

Both sets of adjustment factors (differential mortality and differential disability incidence) use data from the Social Security Administration's (SSA) Numerical Identification System (Numident) and select data from SSA's 2023 Continuous Work History Sample (CWHS). The differential mortality adjustment factors also use data from Actuarial Study Number 129, "Mortality by Career-Average Earnings Level."[10]

Analysis of Results

Tables 1 through 6 present the estimated internal rates of return. The tables facilitate comparison of rates of return across different family groups, different years of birth, and different career-average levels of earnings.

Tables 1 through 6 present results for single men, single women, one-earner couples, and two-earner couples under the following three OASDI program scenarios:

- *Current Law Scheduled,*
- *Increased Payroll Tax,* and
- *Payable Benefits.*

For each sex, family grouping, and year-of-birth cohort, the internal rates of return generally decrease as earnings increase. This decrease occurs because the benefit formula provides a monthly benefit that replaces a higher proportion of career-average earnings for beneficiaries with lower earnings. The advantage for lower earners from the benefit formula is affected by the net implications of their lower life expectancy and higher likelihood of becoming disabled. Women have lower mortality than men, resulting in higher likelihood of surviving to retirement age, longer life after retirement, and therefore higher internal rates of return, than for men with the same earnings levels. The one-earner couples have the highest rates of return because of the auxiliary spouse, child, and widow(er) benefits payable based on one earnings record.

In tables 1, 2, and 3, where both spouses have the same earnings, the rate of return for the two-earner couples is closer to, and sometimes higher than, the rate of return for single women because of the inclusion of child benefits not reflected for single cases. In tables 4, 5, and 6, where spouses have different earnings levels, the two-earner rate of return is closer to the rate of return for single women at the wife's earnings level, because of the inclusion of child and surviving spouse benefits. For the cases presented in this note, the lower earner's (wife's) retired worker benefit is always more than half of her husband's, so no aged spouse's benefit is payable.

[10] This study is available at https://www.ssa.gov/oact/NOTES/pdf_studies/study129.pdf.

This note does not include cases where a single individual has children. We believe that the internal rate of return for such cases will fall between those for the single worker and one-earner couple.

Based on the rising tax rates for the OASDI program (combined employer and employee tax rates increased from 2 percent in 1941 to 12.4 percent starting in 1990), and the declining relative value of benefits due to increases in the normal retirement age (NRA), one might expect that internal rates of return would decline steadily for later years of birth. In fact, almost all of the combinations of sex, family groupings, and earnings levels show substantial decreases in real rates of return from the first to the fourth year-of-birth cohorts (1920 to 1943).

For the *Current Law Scheduled* scenario (tables 1 and 4), we first consider all hypothetical workers except for the steady maximum worker. For single men and single women, internal rates of return generally increase from the 1943 to the 2004 cohort, as improvements in mortality (which generally increase rates of return) more than offset tax rate and NRA increases (which would by itself decrease rates of return between the 1943 and 1964 cohorts). For one-earner couples, internal rates of return generally decrease from the 1943 to the 1964 cohort because of reductions in the disability family maximum, and because improved mortality also leads to reduced survivor auxiliary benefits. For one-earner couples, rates of return generally remain steady from the 1964 to the 2004 cohort. For two-earner couples, rates of return decrease somewhat from the 1943 to the 1964 cohort, and then generally increase through the 2004 cohort. For the two-earner couples, the offsetting effects of reduced auxiliary benefits due to lower mortality and the reduced family maximum are not as large as for one-earner couples.

For steady maximum earners, internal rates of return are also affected by relative historical increases in the taxable maximum. Internal rates of return for steady maximum earners decrease for all family types from the 1943 to the 1964 cohort. By the 1964 cohort (age 20 in 1984), relative increases in the taxable maximum are largely phased in and internal rates of return mostly increase from the 1964 to the 2004 cohort for all family types, consistent with the patterns for other hypothetical workers.

For the *Increased Payroll Tax* scenario (tables 2 and 5) payroll tax rates increase from those scheduled in current law beginning in 2034. Internal rates of return for the first seven year-of-birth cohorts (the 1920 through 1964 cohorts) are the same as for the *Current Law Scheduled* scenario for all family groupings and earnings levels, because each of these year-of-birth cohorts reaches age 65 prior to 2034 and is not affected by the tax increase. Internal rates of return decrease for the 1973 and later cohorts relative to the *Current Law Scheduled* scenario. Within the *Increased Payroll Tax* scenario, after the 1973 birth cohort, rates of return decrease for all family groupings due to increasing tax rates.

For the *Payable Benefits* scenario (tables 3 and 6), benefits decrease from those scheduled in current law beginning in 2034. For the 1920 through 1937 birth cohorts, only retired beneficiaries at very advanced ages are affected and there is little significant change from the *Current Law Scheduled* scenario. Beginning with the 1943 cohort, internal rates of return decrease relative to the *Current Law Scheduled* scenario. Within the *Payable Benefits* scenario, from the 1943 to the 1973 cohort, rates of return generally decrease for all categories, with benefit reductions offsetting improvements in mortality. For maximum earners in these cohorts, rates of return also decrease due to the increasing relative level of the taxable maximum. Rates of return generally decrease from the 1973 to the 1997 birth cohort, as the percentage of scheduled benefits that are payable continues to decline. After the 1997 birth cohort, rates of return fluctuate, with increases in life expectancy offsetting relatively small declines in benefit payable percentages.

Conclusion

This note presents estimates of internal real rates of return over time for various illustrative demographic groups and earnings levels. These hypothetical examples provide useful insight into how individual and cohort internal rates of return vary across generations, and within generations by sex, earnings level and pattern, and family grouping.

Based on the provisions for benefits in the Social Security Act that have evolved since 1935, a primary goal of the OASDI program is to provide monthly benefit levels with a balance between equity (higher benefits for higher earners/contributors) and adequacy (replacement of a larger portion of pre-retirement earnings for lower earners). The program's goal is not to provide similar lifetime benefits or internal rates of return across earnings levels, family groupings, or generations. The results presented in this note illustrate the degree to which the program generally provides a higher internal rate of return for lower earners and earners with family members than it does for higher earners and workers who have not married.

Table 1. Internal Real Rates of Return for Hypothetical Workers with Various Earnings Levels

OASDI Program—***Current Law Scheduled Scenario***

(Percent)

Earnings level	Year of birth	Year attains age 65	Single man	Single woman	One-earner couple	Two-earner couple
	1920	1985	4.65	6.32	13.08	8.76
	1930	1995	4.16	5.25	9.54	6.48
	1937	2002	4.58	5.20	9.44	6.56
	1943	2008	4.62	5.18	9.00	6.31
	1949	2014	4.73	5.29	8.58	6.08
Very Low	1955	2020	4.66	5.43	8.18	5.93
	1964	2029	4.67	5.55	7.82	5.89
	1973	2038	4.74	5.70	7.66	5.86
	1985	2050	4.86	5.67	7.94	6.02
	1997	2062	4.94	5.67	7.87	6.03
	2004	2069	4.99	5.70	7.82	6.03
	1920	1985	4.35	5.44	9.13	5.96
	1930	1995	3.33	4.08	6.98	4.39
	1937	2002	3.37	3.91	6.51	4.22
	1943	2008	3.30	3.78	6.18	4.04
	1949	2014	3.38	3.81	6.08	4.01
Low	1955	2020	3.41	3.92	6.03	4.04
	1964	2029	3.34	3.87	5.79	3.97
	1973	2038	3.43	4.01	5.77	4.03
	1985	2050	3.61	4.08	5.94	4.17
	1997	2062	3.69	4.09	5.94	4.21
	2004	2069	3.74	4.11	5.92	4.23
	1920	1985	2.85	3.84	6.46	3.79
	1930	1995	2.14	2.87	5.07	2.83
	1937	2002	2.16	2.73	4.73	2.72
	1943	2008	2.04	2.56	4.44	2.53
	1949	2014	2.05	2.53	4.36	2.49
Medium	1955	2020	2.07	2.60	4.34	2.52
	1964	2029	1.95	2.45	4.10	2.39
	1973	2038	2.11	2.61	4.19	2.52
	1985	2050	2.30	2.72	4.34	2.68
	1997	2062	2.37	2.74	4.34	2.72
	2004	2069	2.42	2.76	4.34	2.74
	1920	1985	2.87	3.68	5.79	3.48
	1930	1995	1.92	2.55	4.39	2.39
	1937	2002	1.72	2.24	3.92	2.11
	1943	2008	1.49	1.98	3.57	1.84
	1949	2014	1.47	1.93	3.49	1.79
High	1955	2020	1.50	1.98	3.50	1.83
	1964	2029	1.33	1.80	3.25	1.66
	1973	2038	1.52	1.96	3.38	1.82
	1985	2050	1.69	2.08	3.51	1.97
	1997	2062	1.74	2.09	3.51	1.99
	2004	2069	1.78	2.11	3.51	2.02
	1920	1985	3.09	3.64	5.59	3.48
	1930	1995	1.94	2.40	4.18	2.25
	1937	2002	1.62	2.01	3.65	1.87
	1943	2008	1.22	1.59	3.13	1.45
	1949	2014	1.01	1.37	2.85	1.23
Maximum	1955	2020	0.90	1.26	2.67	1.12
	1964	2029	0.64	0.98	2.32	0.85
	1973	2038	0.81	1.13	2.45	1.01
	1985	2050	0.95	1.24	2.56	1.13
	1997	2062	0.99	1.26	2.57	1.16
	2004	2069	1.01	1.27	2.56	1.18

Note: Based on the intermediate assumptions of the 2025 Trustees Report.

Table 2. Internal Real Rates of Return for Hypothetical Workers with Various Earnings Levels

OASDI Program—***Increased Payroll Tax Scenario***

(Percent)

Earnings level	Year of birth	Year attains age 65	Single man	Single woman	One-earner couple	Two-earner couple
	1920	1985	4.65	6.32	13.08	8.76
	1930	1995	4.16	5.25	9.54	6.48
	1937	2002	4.58	5.20	9.44	6.56
	1943	2008	4.62	5.18	9.00	6.31
	1949	2014	4.73	5.29	8.58	6.08
Very Low	1955	2020	4.66	5.43	8.18	5.93
	1964	2029	4.67	5.55	7.82	5.89
	1973	2038	4.72	5.68	7.65	5.84
	1985	2050	4.65	5.49	7.80	5.82
	1997	2062	4.39	5.17	7.39	5.44
	2004	2069	4.19	4.94	7.02	5.14
	1920	1985	4.35	5.44	9.13	5.96
	1930	1995	3.33	4.08	6.98	4.39
	1937	2002	3.37	3.91	6.51	4.22
	1943	2008	3.30	3.78	6.18	4.04
	1949	2014	3.38	3.81	6.08	4.01
Low	1955	2020	3.41	3.92	6.03	4.04
	1964	2029	3.34	3.87	5.79	3.97
	1973	2038	3.41	3.98	5.75	4.00
	1985	2050	3.38	3.86	5.77	3.94
	1997	2062	3.13	3.56	5.46	3.64
	2004	2069	2.96	3.38	5.20	3.43
	1920	1985	2.85	3.84	6.46	3.79
	1930	1995	2.14	2.87	5.07	2.83
	1937	2002	2.16	2.73	4.73	2.72
	1943	2008	2.04	2.56	4.44	2.53
	1949	2014	2.05	2.53	4.36	2.49
Medium	1955	2020	2.07	2.60	4.34	2.52
	1964	2029	1.95	2.45	4.10	2.39
	1973	2038	2.07	2.57	4.16	2.49
	1985	2050	2.03	2.47	4.14	2.41
	1997	2062	1.79	2.20	3.85	2.14
	2004	2069	1.66	2.05	3.65	1.99
	1920	1985	2.87	3.68	5.79	3.48
	1930	1995	1.92	2.55	4.39	2.39
	1937	2002	1.72	2.24	3.92	2.11
	1943	2008	1.49	1.98	3.57	1.84
	1949	2014	1.47	1.93	3.49	1.79
High	1955	2020	1.50	1.98	3.50	1.83
	1964	2029	1.33	1.80	3.25	1.66
	1973	2038	1.48	1.92	3.35	1.78
	1985	2050	1.40	1.81	3.29	1.68
	1997	2062	1.16	1.55	3.02	1.43
	2004	2069	1.04	1.41	2.84	1.29
	1920	1985	3.09	3.64	5.59	3.48
	1930	1995	1.94	2.40	4.18	2.25
	1937	2002	1.62	2.01	3.65	1.87
	1943	2008	1.22	1.59	3.13	1.45
	1949	2014	1.01	1.37	2.85	1.23
Maximum	1955	2020	0.90	1.26	2.67	1.12
	1964	2029	0.64	0.98	2.32	0.85
	1973	2038	0.75	1.07	2.41	0.95
	1985	2050	0.67	0.97	2.34	0.86
	1997	2062	0.46	0.76	2.12	0.64
	2004	2069	0.34	0.63	1.97	0.52

Note: Based on the intermediate assumptions of the 2025 Trustees Report.

Table 3. Internal Real Rates of Return for Hypothetical Workers with Various Earnings Levels

OASDI Program—***Payable Benefits Scenario***

(Percent)

Earnings level	Year of birth	Year attains age 65	Single man	Single woman	One-earner couple	Two-earner couple
	1920	1985	4.65	6.32	13.08	8.76
	1930	1995	4.16	5.25	9.54	6.48
	1937	2002	4.58	5.20	9.44	6.56
	1943	2008	4.62	5.17	9.00	6.31
	1949	2014	4.70	5.25	8.56	6.05
Very Low	1955	2020	4.56	5.32	8.11	5.83
	1964	2029	4.35	5.23	7.56	5.60
	1973	2038	4.09	5.06	7.08	5.31
	1985	2050	3.90	4.74	7.18	5.15
	1997	2062	3.73	4.50	6.71	4.78
	2004	2069	3.68	4.43	6.47	4.64
	1920	1985	4.35	5.44	9.13	5.96
	1930	1995	3.33	4.08	6.98	4.39
	1937	2002	3.37	3.91	6.51	4.22
	1943	2008	3.29	3.76	6.17	4.02
	1949	2014	3.34	3.75	6.04	3.96
Low	1955	2020	3.29	3.76	5.92	3.90
	1964	2029	2.96	3.45	5.44	3.58
	1973	2038	2.71	3.29	5.12	3.38
	1985	2050	2.64	3.13	5.12	3.28
	1997	2062	2.52	2.98	4.87	3.09
	2004	2069	2.51	2.94	4.76	3.04
	1920	1985	2.85	3.84	6.46	3.79
	1930	1995	2.14	2.87	5.07	2.83
	1937	2002	2.16	2.73	4.73	2.72
	1943	2008	2.02	2.53	4.42	2.51
	1949	2014	1.98	2.44	4.29	2.41
Medium	1955	2020	1.89	2.38	4.18	2.32
	1964	2029	1.47	1.95	3.66	1.91
	1973	2038	1.32	1.83	3.48	1.80
	1985	2050	1.33	1.78	3.48	1.77
	1997	2062	1.25	1.67	3.33	1.66
	2004	2069	1.26	1.66	3.27	1.65
	1920	1985	2.87	3.68	5.79	3.48
	1930	1995	1.92	2.55	4.39	2.39
	1937	2002	1.72	2.23	3.91	2.10
	1943	2008	1.47	1.94	3.54	1.81
	1949	2014	1.37	1.81	3.40	1.69
High	1955	2020	1.28	1.74	3.29	1.59
	1964	2029	0.80	1.26	2.76	1.13
	1973	2038	0.71	1.17	2.64	1.07
	1985	2050	0.73	1.15	2.64	1.05
	1997	2062	0.66	1.05	2.51	0.97
	2004	2069	0.67	1.05	2.48	0.97
	1920	1985	3.09	3.64	5.59	3.48
	1930	1995	1.94	2.39	4.18	2.25
	1937	2002	1.61	1.99	3.64	1.86
	1943	2008	1.17	1.52	3.09	1.40
	1949	2014	0.88	1.22	2.72	1.09
Maximum	1955	2020	0.64	0.97	2.43	0.85
	1964	2029	0.08	0.42	1.81	0.30
	1973	2038	0.03	0.36	1.71	0.26
	1985	2050	0.04	0.35	1.71	0.25
	1997	2062	-0.02	0.28	1.62	0.19
	2004	2069	-0.01	0.28	1.60	0.19

Note: Based on the intermediate assumptions of the 2025 Trustees Report.

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Table 4. Internal Real Rates of Return for Hypothetical Two-Earner Couples with Selected Earnings Levels

OASDI Program—***Current Law Scheduled Scenario***

(Percent)

Year of birth	Year attains age 65	H: very low W: very low	H: low W: very low	H: low W: low	H: med W: low	H: med W: med	H: high W: med	H: high W: high
1920	1985	8.76	7.14	5.96	4.80	3.79	3.71	3.48
1930	1995	6.48	5.36	4.39	3.69	2.83	2.69	2.39
1937	2002	6.56	5.19	4.22	3.51	2.72	2.46	2.11
1943	2008	6.31	4.99	4.04	3.31	2.53	2.22	1.84
1949	2014	6.08	4.94	4.01	3.29	2.49	2.19	1.79
1955	2020	5.93	4.92	4.04	3.30	2.52	2.21	1.83
1964	2029	5.89	4.85	3.97	3.16	2.39	2.04	1.66
1973	2038	5.86	4.87	4.03	3.27	2.52	2.20	1.82
1985	2050	6.02	5.01	4.17	3.41	2.68	2.34	1.97
1997	2062	6.03	5.05	4.21	3.43	2.72	2.37	1.99
2004	2069	6.03	5.06	4.23	3.45	2.74	2.39	2.02

Note: Based on the intermediate assumptions of the 2025 Trustees Report.

Table 5. Internal Real Rates of Return for Hypothetical Two-Earner Couples with Selected Earnings Levels

OASDI Program—***Increased Payroll Tax Scenario***

(Percent)

Year of birth	Year attains age 65	H: very low W: very low	H: low W: very low	H: low W: low	H: med W: low	H: med W: med	H: high W: med	H: high W: high
1920	1985	8.76	7.14	5.96	4.80	3.79	3.71	3.48
1930	1995	6.48	5.36	4.39	3.69	2.83	2.69	2.39
1937	2002	6.56	5.19	4.22	3.51	2.72	2.46	2.11
1943	2008	6.31	4.99	4.04	3.31	2.53	2.22	1.84
1949	2014	6.08	4.94	4.01	3.29	2.49	2.19	1.79
1955	2020	5.93	4.92	4.04	3.30	2.52	2.21	1.83
1964	2029	5.89	4.85	3.97	3.16	2.39	2.04	1.66
1973	2038	5.84	4.85	4.00	3.23	2.49	2.16	1.78
1985	2050	5.82	4.80	3.94	3.16	2.41	2.07	1.68
1997	2062	5.44	4.48	3.64	2.88	2.14	1.81	1.43
2004	2069	5.14	4.24	3.43	2.70	1.99	1.66	1.29

Note: Based on the intermediate assumptions of the 2025 Trustees Report.

Table 6. Internal Real Rates of Return for Hypothetical Two-Earner Couples with Selected Earnings Levels

OASDI Program—***Payable Benefits Scenario***

(Percent)

Year of birth	Year attains age 65	H: very low W: very low	H: low W: very low	H: low W: low	H: med W: low	H: med W: med	H: high W: med	H: high W: high
1920	1985	8.76	7.14	5.96	4.80	3.79	3.71	3.48
1930	1995	6.48	5.36	4.39	3.69	2.83	2.69	2.39
1937	2002	6.56	5.18	4.22	3.50	2.72	2.45	2.10
1943	2008	6.31	4.98	4.02	3.29	2.51	2.20	1.81
1949	2014	6.05	4.90	3.96	3.21	2.41	2.09	1.69
1955	2020	5.83	4.80	3.90	3.12	2.32	1.99	1.59
1964	2029	5.60	4.51	3.58	2.71	1.91	1.53	1.13
1973	2038	5.31	4.29	3.38	2.59	1.80	1.46	1.07
1985	2050	5.15	4.14	3.28	2.52	1.77	1.43	1.05
1997	2062	4.78	3.90	3.09	2.37	1.66	1.34	0.97
2004	2069	4.64	3.81	3.04	2.34	1.65	1.33	0.97

Note: Based on the intermediate assumptions of the 2025 Trustees Report.