

**THE INCOME AND PAYROLL TAX OFFSET
TO CHANGES IN PAYROLL TAX REVENUES**

Prepared by the Staff
of the
JOINT COMMITTEE ON TAXATION



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INTRODUCTION AND SUMMARY

This document¹ describes the economic modeling that the staff of the Joint Committee on Taxation (“Joint Committee staff”) undertakes to assess the revenue effects of the income and payroll tax offset that arises from changes in Federal payroll taxes.²

A revenue estimate by the Joint Committee staff compares estimated future Federal receipts expected to result from the enactment of a proposed change to the Internal Revenue Code against estimated future Federal receipts under present law. The Joint Committee staff estimates use the Congressional Budget Office (“CBO”) 10-year macroeconomic revenue baseline as a starting point for estimates. Under relevant budget rules, the Joint Committee staff estimates compare estimated receipts over the 10-year budget period to estimated baseline receipts.

In preparing every revenue estimate, the Joint Committee staff employs an interdisciplinary approach, with input from staff economists, attorneys, and accountants in order to identify economic incentives faced by taxpayers as a result of the proposed change in law. The Joint Committee staff then considers taxpayers’ likely behavioral responses to the new tax environment in light of those incentives. This exercise of predicting behavioral responses to new tax legislation is often the most challenging and time-consuming aspect of preparing a revenue estimate.

In addition to considering economic incentives, the Joint Committee staff refines the CBO revenue baseline to create a more detailed revenue baseline for the present-law tax provision in question. The baseline estimates of both the CBO and the Joint Committee staff reflect long-term economic, social, and population trends, to the extent those trends will affect tax revenues.

In estimating the effects of changes in payroll taxes, the Joint Committee staff generally assumes that the net effect on Federal receipts is different than the amount implied by applying changes directly to present law wages and salaries. For example, if the present-law old age, survivors, and disability insurance (“OASDI”) contribution base were increased from its present level of \$118,500 to \$200,000, the Joint Committee staff would not merely calculate the amount of present law wages earned between the two income levels and multiply that difference by the present-law 12.4 percent tax rate. Rather, the Joint Committee staff would make several potential adjustments to reflect taxpayer behavior. One component of this difference is a

¹ This document may be cited as follows: Joint Committee on Taxation, *The Income and Payroll Tax Offset to Changes in Payroll Tax Revenues* (JCX-89-16), November 18, 2016. This document can be found on the Joint Committee on Taxation website at www.jct.gov.

² The Joint Committee staff welcomes comments from interested readers who have studied the effects of payroll taxes on employee compensation and employer profit.

standard adjustment often referred to as the tax offset. This document describes an updated method for applying income and payroll tax offsets to changes in payroll tax revenues.³

³ The income and payroll tax offset to changes in *payroll* tax revenues discussed in this document should not be confused with the income and payroll tax offsets to changes in *excise* tax revenue, which is described in Joint Committee on Taxation, *The Income and Payroll Tax Offset to Changes in Excise Tax Revenues* (JCX-59-11), December 23, 2011.

I. MODELING APPROACH

Payroll taxes include taxes imposed by the Federal Insurance Contributions Act (“FICA”) and the Self-Employment Contributions Act (“SECA”). Employers generally are required to pay half of the FICA tax. FICA imposes tax on employers based on the amount of wages paid to an employee during the year. The tax is composed of two parts: (1) the OASDI tax equal to 6.2 percent of covered wages up to the taxable wage base (\$118,500 in 2016); and (2) the Medicare hospital insurance (“HI”) tax amount equal to 1.45 percent of covered wages.⁴ In addition to the tax on employers, each employee is subject to FICA taxes equal to the amount of tax imposed on the employer. As a parallel to FICA taxes, SECA imposes taxes on the net income from self-employment of self-employed individuals. The rate of the OASDI portion of SECA taxes is equal to the combined employee and employer OASDI tax rates and applies to self-employment income up to the taxable wage base. Similarly, the rate of the HI portion is the same as the combined employer and employee HI rates. There is no cap on the amount of self-employment income to which the HI rate applies.⁵

The employee portion of the HI tax is increased by an additional tax of 0.9 percent on wages received in excess of a specific threshold amount. However, unlike the general 1.45 percent HI tax on wages, this additional tax is on the combined wages of the employee and the employee’s spouse, in the case of a joint return. The threshold amount is \$250,000 in the case of a joint return, \$125,000 in the case of a married individual filing a separate return, and \$200,000 in any other case (unmarried individual, head of household or surviving spouse).⁶ The same additional HI tax applies to the HI portion of SECA tax on self-employment income in excess of the threshold amount.

Payroll taxes are levied on virtually all earned income, and it is assumed that an employee’s total compensation includes the employer’s share of payroll taxes. Economic theory suggests that a given employee’s total compensation is determined by how much that employee contributes to revenues earned by his employer. Economists call this the employee’s marginal product of labor. An employee’s marginal product of labor is not affected by changes in payroll tax law. Employers generally are indifferent between providing employees compensation in cash or non-cash benefits. What matters to the employer is his or her total cost of providing compensation, regardless of the form of that compensation. Therefore, it is generally assumed that any change in employer payroll tax liabilities will be offset by changes in other forms of compensation. That is, an increase in employer payroll taxes will generally result in an

⁴ Since 1994, the HI payroll tax has not been subject to a wage cap.

⁵ For purposes of computing net earnings from self-employment, taxpayers are permitted a deduction equal to the product of the taxpayer’s earnings (determined without regard to this deduction) and one-half of the sum of the rates for OASDI (12.4 percent) and HI (2.9 percent), *i.e.*, 7.65 percent of net earnings. This deduction reflects the fact that the FICA rates apply to an employee’s wages, which do not include FICA taxes paid by the employer, whereas a self-employed individual’s net earnings are economically equivalent to an employee’s wages plus the employer share of FICA taxes. An income tax deduction in the amount of one-half of SECA taxes is also permitted, reflecting the fact that employees do not pay income taxes on FICA taxes paid by their employer.

⁶ These threshold amounts are not indexed for inflation.

equivalent decrease in employee wages and benefits such that total compensation remains unchanged.⁷ This decrease in wages and benefits results in a corresponding decrease in income and payroll tax receipts.

It is important to note that the payroll tax offset consists solely of the revenue effects arising from employers adjusting compensation in response to their changing payroll tax liability. There is no similar effect from policy changes to the employee portion of the payroll tax, SECA taxes, or the 0.9 percent additional Medicare tax.⁸ The difference is because the employer portion of payroll taxes is outside an individual's statutory tax base, but the employee portion of payroll taxes, SECA and the 0.9 percent additional Medicare tax are in an individual's statutory tax base. If all payroll taxes were borne statutorily by employees then there would be no need for this modeling offset.

The Joint Committee staff has historically applied a 10-percent offset to estimated changes in payroll tax revenues.⁹ While this approach has provided a reasonable approximation of the total revenue effects arising from employers adjusting compensation in response to their changing payroll tax liability, it can lead to inconsistent results in analyzing proposals that

⁷ Empirical economic analysis documents the tradeoff between cash compensation and non-cash compensation. For example, Katherine Baicker and Amitabh Chandra found that for a typical employee a one dollar increase in employer-provided health coverage results in a one dollar decline in wages. See, Katherine Baicker and Amitabh Chandra, "The Labor Market Effects of Rising Health Insurance Premiums," *Journal of Labor Economics*, vol. 24, no. 3, July 2006, pp. 609-634. Likewise, working with data from the Consumer Expenditure Survey, Richard Miller found that workers forgo in wages the health costs that their employers pay on their behalf. See, Richard D. Miller Jr., "Estimating the Compensating Differential for Employer-Provided Health Insurance," *International Journal of Health Care Finance and Economics*, vol. 4, no. 1, March 2004, pp. 27-41. Louise Sheiner found that older workers were compensated less in higher health care cost cities, indicating that they paid for their more expensive benefits through relatively lower wages. See, Louise Sheiner, "Health Care Costs, Wages, and Aging," *Federal Reserve Board of Governors*, April 1999, available at <http://www.federalreserve.gov/pubs/FEDS/1999/199919/199919pap.pdf>. Randall Eberts and Joe Stone found that for New York City teacher compensation, a one dollar increase in health benefits lead to an 83 cent decrease in wages. See, Randall W. Eberts and Joe A. Stone, "Wages, Fringe Benefits, and Working Conditions: An Analysis of Compensating Differentials," *Southern Economic Journal*, vol. 52, no. 1, July 1985, pp. 274-280. Analysts have also reasoned that over the last 30 years the rapid increase in health insurance premiums per employee has contributed to the measured stagnation in cash wages. See, Ezekiel J. Emanuel and Victor Fuchs, "Who Really Pays For Health Care? The Myth of 'Shared Responsibility'," *Journal of the American Medical Association*, vol. 299, no. 9, March 5, 2008, pp. 1057-1059.

The CBO also assumes that changes to payroll taxes paid by employers affect cash wages, such that total compensation is held constant. Congressional Budget Office, *Social Security Policy Options, 2015*, December 2015.

⁸ Payroll taxes paid into the OASDI Trust Funds are reported as "off budget" receipts. Generally, all other receipts as reported as "on budget" receipts. Estimated revenues that are reported as on-budget revenues may change due to the part of self-employment taxes that is deductible for purposes of the individual income tax.

⁹ Joint Committee on Taxation, *Overview of Revenue Estimating Procedures and Methodologies Used by the Staff of the Joint Committee on Taxation (JCX-1-05)*, February 2, 2005. In practice, the Joint Committee staff has adjusted offsets to changes in payroll taxes to account for this on a case-by-case basis. This document describes a standard approach.

differentially affect people in different parts of the income distribution. Also, legislated changes in payroll and individual income tax rates are not reflected in a fixed offset.

The new offset method addresses these issues by calculating proposal-specific offsets that reflect the application of the proposal to the differing OASDI and HI tax bases. For most payroll tax proposals, this will be implemented by using the Joint Committee staff's microsimulation individual tax model.¹⁰ First, present law tax liabilities are estimated. Next, wages in the model are adjusted based on the extent to which the proposal affects employer payroll tax liabilities. These adjusted wages are then used to estimate tax liabilities under the proposal. The difference between income and payroll tax liabilities under present law, and under the proposal, forms the basis of estimated revenue effects. Some proposals to change payroll taxes may not be estimated using the Joint Committee staff's individual tax model. In these cases, tax offsets can be estimated using observations in the Joint Committee staff's individual tax model with similar characteristics to those affected by the proposal.

¹⁰ See Joint Committee on Taxation, *Estimating Changes in the Federal Individual Income Tax: Description of the Individual Tax Model* (JCX-75-15), April 23, 2015.

II. CALCULATING AFTER-OFFSET WAGES

Background and key assumptions

For the OASDI portion of the payroll tax, employers and employees each pay a tax of 6.2 percent on wages, as defined for FICA purposes, up to an annual limit.¹¹ For wages in 2016, the taxable wage base is \$118,500 and the taxable wage base adjusts each year by the national average wage index. For the HI portion of the tax, employers and employees each pay a tax of 1.45 percent on all wages.¹² Similarly, SECA taxes consist of OASDI and HI taxes, but the taxable net earnings consist of self-employment earnings minus a deduction equal to half of total SECA taxes that would be due without regard to the taxable maximum. With current payroll tax rates this means net earnings consist of self-employment earnings times 92.35 percent (100 percent minus 7.65 percent). The same taxable wage base maximum applies to this taxable net earnings amount.

Changes in employer payroll taxes can be expected to affect some combination of taxable wages and nontaxable benefits. For example, if employer payroll taxes were increased, then employers would generally attempt to leave total employee compensation (cash wages, other benefits, and payroll taxes paid) unchanged. Consequently, the burden of the payroll tax increase is borne by employees through a reduction in cash wages or other benefits. Some employees may prefer that the resulting decrease in cash wages or other benefits be drawn from their employer provided nontaxable benefits, in order to maximize their remaining taxable wages. Other employees may prefer that all of the decrease in cash wages or other benefits be drawn from taxable wages, in order to minimize the tax impact of the payroll tax increase. Absent other strong evidence on the likely composition of such an adjustment, the Joint Committee staff assumes that the current ratio of taxable wages and nontaxable compensation represents taxpayers' optimal choices, and allocates compensation adjustments proportionally. That is to say, the Joint Committee staff assumes that the ratio of taxable wages to other benefits will be the same after a payroll tax policy change as it was prior to the policy change.

The Joint Committee staff assumes that total compensation is unchanged, even in the short run, by a policy change that affects the employer's payroll tax liabilities. The Joint Committee staff uses this assumption to estimate adjusted taxable wages after a proposed change in employer payroll taxes. Total compensation is comprised of FICA wages (including fully taxable wages and salaries plus an employee's elected deferred compensation amount, *e.g.*, section 401(k) contributions), employer payroll taxes, and nontaxable benefits.

To summarize, the Joint Committee staff uses two assumptions for policy changes that affect employer payroll tax liabilities:

¹¹ Employer provided health benefits are generally excluded from FICA wages.

¹² As noted on page 3, above, in addition, taxpayers with wages and self-employment income over certain thresholds pay the 0.9 percent Additional Medicare Tax. Because employers are not liable for this surtax, this portion of the HI tax is not assumed to have a tax offset.

- (Assumption 1) Total compensation is unaltered, and
- (Assumption 2) The ratio of nontaxable compensation to taxable compensation is unaltered for purposes of estimating how compensation changes in response to the policy.

There are two primary cases to consider in modeling due to the presence of the OASDI contribution base. The “grossed up OASDI contribution base” refers to the OASDI contribution base plus the employer’s additional 7.65 percent in payroll taxes paid. The first modeling case applies to an employee when total compensation excluding nontaxable benefits is less than this grossed up contribution base.

CASE ONE: Total compensation excluding nontaxable benefits is less than or equal to the grossed up OASDI contribution base

In equation (1), below, total compensation is expressed as the sum of its components with the variables in the equation defined as follows:

- TotComp = total compensation;
- Wages = fully taxable wages or salary plus employee elected deferred compensation;
- NTB = nontaxable benefits;
- OASDI = employer tax rate for OASDI; and
- HI = employer tax rate for HI.

$$(1) \quad TotComp = Wages + OASDI \cdot Wages + HI \cdot Wages + NTB$$

Equation (2) simplifies equation (1)

$$(2) \quad TotComp = Wages \cdot (1 + OASDI + HI) + NTB$$

All Joint Committee staff estimates compare estimated outcomes after a policy change to estimated outcomes under the baseline. To clearly show the Joint Committee staff’s modeling of this taxable compensation issue, the algebraic variables defined above are labeled with subscripts to indicate when reference is being made to baseline outcomes or outcomes that would result from the proposed policy.

- $Wages_{base}$ = fully taxable wages or salary plus employee elected deferred compensation under baseline law;
- $Wages_{policy}$ = fully taxable wages or salary plus employee elected deferred compensation after the policy change;
- NTB_{base} = nontaxable benefits under baseline law;
- NTB_{policy} = nontaxable benefit after the policy change;

- OASDI_{base} = employer tax rate for OASDI under baseline law;
- OASDI_{policy} = employer tax rate for OASDI after the policy change;
- HI_{base} = employer tax rate for HI under baseline law; and
- HI_{policy} = employer tax rate for HI after the policy change.

Below, equation (2) is rewritten for baseline law and for the policy change.

$$(2\text{-base}) \quad TotComp_{base} = Wages_{base} \cdot (1 + HI_{base} + OASDI_{base}) + NTB_{base}$$

$$(2\text{-policy}) \quad TotComp_{policy} = Wages_{policy} \cdot (1 + HI_{policy} + OASDI_{policy}) + NTB_{policy}$$

In terms of algebra, the two key modeling assumptions described above are:

$$(\text{Assumption 1}) \quad TotComp_{base} = TotComp_{policy}$$

$$(\text{Assumption 2}) \quad \frac{NTB_{base}}{Wages_{base}} = \frac{NTB_{policy}}{Wages_{policy}}$$

These two assumptions permit equation (2-policy) to be rewritten as:

$$(3) \quad TotComp_{base} = Wages_{policy} \cdot \left(1 + HI_{policy} + OASDI_{policy} + \frac{NTB_{base}}{Wages_{base}}\right)$$

Solving for taxable wages under the policy proposal, yields equation (4), below.

$$(4) \quad Wages_{policy} = \frac{TotComp_{base}}{1 + HI_{policy} + OASDI_{policy} + \frac{NTB_{base}}{Wages_{base}}}$$

CASE TWO: Total compensation excluding nontaxable benefits is greater than the grossed up OASDI contribution base

In this case, the modeling assumptions of unchanging total compensation and an unchanging ratio of nontaxable to taxable compensation remain the same. However, account needs to be made for the fact that the employer’s OASDI payroll tax contributions will not increase for taxable compensation greater than the OASDI contribution base. Define the algebraic variable:

$$TaxMax = OASDI \text{ contribution base.}$$

The equations below express an employee’s total compensation in terms of his or her taxable compensation, nontaxable benefits, and employer payroll tax payments.

$$(5\text{-base}) \quad TotComp_{base} = Wages_{base} \cdot (1 + HI_{base}) + TaxMax \cdot OASDI_{base} + NTB_{base}$$

$$(5\text{-policy}) \text{ TotComp}_{policy} = \text{Wages}_{policy} \cdot (1 + HI_{policy}) + \text{TaxMax} \cdot \text{OASDI}_{policy} + \text{NTB}_{policy}$$

The modeling assumptions regarding total compensation and the ratio of taxable wages to other benefits, Assumptions (1) and (2) above, permit equation (5-policy) to be rewritten as:

$$(6) \text{ TotComp}_{base} = \text{Wages}_{policy} \cdot (1 + HI) + \text{TaxMax} \cdot \text{OASDI}_{policy} + \text{Wages}_{policy} \cdot \frac{\text{NTB}_{base}}{\text{Wages}_{base}}$$

Solving for taxable wages under the proposal yields equation (7) below.

$$(7) \text{ Wages}_{policy} = \frac{\text{TotComp}_{base} - \text{TaxMax}_{policy} \cdot \text{OASDI}_{policy}}{1 + HI_{policy} + \frac{\text{NTB}_{base}}{\text{Wages}_{base}}}$$

Summary of Cases One and Two

The algebra of each case reflects the Joint Committee staff calculation of a behavioral adjustment by employees and employers in response to a policy change that affects the employer's payroll tax liability. The key assumption is that while the composition of compensation subject to the income and payroll taxes changes in response to such a policy change, total compensation remains constant. The two cases describe the assumptions and model framework the Joint Committee staff uses to estimate expected behavioral changes.

III. INDIVIDUAL TAXPAYER EXAMPLES

The examples in this section illustrate how the payroll tax offset applies at several levels of wages. Table 1, below, shows how these after-offset wage equations would apply to three single filers with various wage levels when OASDI tax rates are increased one percentage point (half a percentage point on the employer and half a percentage point on the employee).

Example One – \$10,000 wages

In the first example, an individual with \$10,000 in wages and with no nontaxable benefits would have a total offset of 12 percent. This is because such an individual would have total compensation of \$10,765, which includes the 7.65 percent employer portion of payroll taxes (6.20 percent OASDI rate and 1.45 percent HI rate). When the employer portion of the payroll tax is increased by half a percentage point, the employer reduces the employee’s wages to \$9,954 in order to keep total compensation unchanged. This results from equation (4) on page 8.¹³ The decrease in wages reduces the OASDI tax change from a pre-offset \$100 tax increase to an after-offset \$94 tax increase, a difference of \$6. Also, the HI liability decreases by \$1 and the individual income tax liability decreases by \$5. The total change in Federal revenues due to the offset is \$12, or 12 percent of the \$100 pre-offset payroll tax increase. About half of the total offset is due to decreases in off-budget revenues (OASDI) and half is from decreases in on-budget revenues (HI and individual income taxes).

Example Two – \$200,000 wages

In the second example, an individual with \$200,000 in wages and \$10,000 of nontaxable benefits would have a total offset of 15 percent. When the employer portion of the payroll tax is increased by half a percentage point, the employer reduces the employee’s wages to \$199,443 in order to keep total compensation unchanged. This results from equation (7) on page 9.¹⁴ The HI tax decreases by \$16 and the individual income tax decreases by \$156. The total decrease in Federal revenues attributable to the offset is \$172, or 15 percent of the \$1,185 pre-offset payroll tax increase. The higher offset percentage in this example is due to the higher individual income marginal tax rate. The entire offset is on-budget. The off-budget offset is zero because wages are greater than the OASDI contribution base. Consequently, the wage reduction has no effect on OASDI taxes.

¹³ As nontaxable benefits are zero in this example,

$$\begin{aligned} Wages_{policy} &= TotComp_{base} / \left(1 + HI_{policy} + OASDI_{policy} + \frac{NTB_{base}}{Wages_{base}} \right) \\ &= \$10,765 / (1 + 0.0145 + 0.0670 + 0) = \$9,954. \end{aligned}$$

¹⁴ As nontaxable benefits are positive in this example,

$$Wages_{policy} = \frac{TotComp_{base} - TaxMax_{policy} \cdot OASDI_{policy}}{1 + HI_{policy} + \frac{NTB_{base}}{Wages_{base}}} = \frac{\$220,247 - \$118,500 \cdot 0.067}{1 + 0.0145 + \frac{\$10,000}{\$200,000}} = \$199,443.$$

Example Three – \$1,000,000 wages

In the third example, an individual with \$1,000,000 in wages and \$20,000 of nontaxable benefits would have a total offset of 21 percent. When the employer portion of the payroll tax is increased by half a percentage point, the employer reduces the employee's wages to \$999,427 in order to keep total compensation unchanged. The HI tax decreases by \$22 and the individual income tax decreases by \$227. The total decrease in Federal revenues attributable to the offset is \$249, or 21 percent of the \$1,185 pre-offset payroll tax increase. The higher offset percentage in this example is due to the higher individual income tax marginal rate and the 0.9 percent additional Medicare Tax that is applicable on wages in excess of \$200,000 for single individuals (\$250,000 for taxpayers who file married, joint returns). There is also no off-budget offset because the after-offset wages are above the OASDI contribution base.

Table 1.—Examples of Income and Payroll Tax Offsets to Changes in Payroll Tax Revenues, Increase OASDI Tax Rate 1 Percentage Point (Split Evenly Between Employer and Employee)

	<u>\$10,000 Wages</u>		<u>\$200,000 Wages</u>		<u>\$1,000,000 Wages</u>	
	Current	Increase OASDI rate	Current	Increase OASDI rate	Current	Increase OASDI rate
Employer/Employee HI Tax Rate	1.45%	1.45%	1.45%	1.45%	1.45%	1.45%
HI Surtax Rate (employee tax)	---	---	---	---	0.90%	0.90%
HI Surtax Income Threshold (single filer)	---	---	---	---	200,000	200,000
Employer OASDI Tax Rate (below tax max)	6.20%	6.70%	6.20%	6.70%	6.20%	6.70%
Employee OASDI Tax Rate (below tax max)	6.20%	6.70%	6.20%	6.70%	6.20%	6.70%
Taxable Maximum for OASDI	118,500	118,500	118,500	118,500	118,500	118,500
Total Comp. (wages & non-tax benefits)	10,765	10,765	220,247	220,247	1,041,847	1,041,847
Nontaxable Benefits	0	0	10,000	9,972	20,000	19,989
Wages Paid (after employer payroll tax)	10,000	9,954	200,000	199,443	1,000,000	999,427
Employer OASDI Tax	620	667	7,347	7,940	7,347	7,940
Employee OASDI Tax	620	667	7,347	7,940	7,347	7,940
Total OASDI Tax	1,240	1,334	14,694	15,879	14,694	15,879
OASDI Tax Change (off-budget)		94		1,185		1,185
Employer HI Tax	145	144	2,900	2,892	14,500	14,492
Employee HI Tax	145	144	2,900	2,892	21,700	21,687
Total HI Tax	290	289	5,800	5,784	36,200	36,178
HI Tax Change (on-budget)		-1		-16		-22
Individual Income Marginal Tax Rate	10%		28%		39.6%	
Individual Income Tax Base Change		-46		-557		-573
Individual Income Tax Change (on-budget)		-5		-156		-227
OASDI Tax Change (off-budget)		94		1,185		1,185
HI Tax Change (on-budget)		-1		-16		-22
Individual Income Tax Change (on-budget)		-5		-156		-227
Total Tax Change		88		1,013		936
Pre-Offset Payroll Tax Change (off-budget)		100		1,185		1,185
Total Offset (dollars)		-12		-172		-249
off-budget		-6		0		0
on-budget		-6		-172		-249
Total Offset (percentage pre-offset tax change)		12%		15%		21%
off-budget		6%		0%		0%
on-budget		6%		15%		21%

Assumptions: These hypothetical taxpayers are assumed to be single filers with no dependents who claim the standard deduction. They have no income other than the wages and nontaxable benefits shown above.

IV. EXAMPLES OF HYPOTHETICAL PROPOSALS

To estimate changes in payroll tax revenues, Joint Committee staff generally relies on the Joint Committee Individual Tax Model (“ITM”).¹⁵ The ITM is a microsimulation model that computes changes in tax liabilities under various proposals. For the sample of taxpayers that is the basis of the model, the ITM can calculate the payroll tax offset for each individual case, such as those cases described in the previous section (see Table 1), and aggregate the results.

The Joint Committee staff estimates different offset values for each year of the budget period to reflect changes in tax rates that may be part of baseline law and to be consistent with the projected distribution of labor compensation for each year of the budget period. In 2016, the ITM estimates that the baseline ratio of nontaxable benefits to wages averages 17 percent overall, while it is 21 percent for workers with wages below the present law OASDI contribution base and 10 percent for those with wages above the present law OASDI contribution base.

Table 2, below, presents tax liability changes calculated from the ITM for a number of payroll tax proposals for calendar year 2016.¹⁶ The first proposal, increasing the OASDI rate by one percentage point (split evenly between employers and employees), is estimated to increase tax liabilities \$64.7 billion before accounting for the offset. A small on-budget loss is partly attributable to an increase in the deductible part of self-employment taxes for purposes of individual income taxes. When the offset is applied, the estimated tax liability change of the proposal is \$55.4 billion. The offset reduces the preliminary estimate by 14.3 percent, of which 5.2 percent is an off-budget effect and nine percent is on-budget.¹⁷

The second proposal would increase the 2.9 percent HI tax rate by one percentage point (split evenly between employers and employees). This is estimated to increase tax liabilities \$81.6 billion before accounting for the offset. A small off-budget loss is attributable to an increase in the deduction for purposes of estimating the SECA tax base (that is, the 0.9235 factor would fall to 0.9135). When the offset is applied, the estimated tax liability change of the proposal is \$70.2 billion. The offset reduces the preliminary estimate by 14 percent, of which three percent is an off-budget effect and 11 percent is on-budget.

The third proposal would increase the OASDI contribution base to \$200,000. This is estimated to increase tax liabilities \$59.2 billion before accounting for the offset. When the offset is applied, the estimated tax liability change of the proposal is \$50.6 billion. The offset reduces the preliminary estimate by 14.5 percent, of which 2.5 percent is an off-budget effect and 12.0 percent is on-budget.

¹⁵ See Joint Committee on Taxation, *Estimating Changes in the Federal Individual Income Tax: Description of the Individual Tax Model* (JCX-75-15), April 23, 2015.

¹⁶ These calculated tax liability changes differ from revenue estimates, as they do not present changes on a fiscal year basis and do not take into account possible behavioral effects other than the payroll tax offset.

¹⁷ Values may not add to the total due to rounding. See Table 2.

Table 2.—Calculated 2016 Tax Liability Changes With and Without Offsets for Various Proposals

	Increase OASDI Tax Rate 1 percentage point (split)			Increase HI Tax Rate 1 percentage point (split)			Increase OASDI Contribution Base (maximum = \$200,000)		
	Tax Liability Changes		Percentage Offset	Tax Liability Changes		Percentage Offset	Tax Liability Changes		Percentage Offset
	Without Offset	With Offset		Without Offset	With Offset		Without Offset	With Offset	
Total Tax Change	64,700	55,400	14.3%	81,600	70,200	14.0%	59,200	50,600	14.5%
Off-Budget Change	65,000	61,600	5.2%	-200	-2,600	3.0%	60,200	58,700	2.5%
On-Budget Change	-300	-6,200	9.0%	81,700	72,800	11.0%	-1,000	-8,100	12.0%

Notes: Tax liability changes are calculated with the Joint Committee Individual Tax Model for calendar year 2016 and in millions of nominal dollars. Percent offsets are differences between with offset tax liability changes and pre-offset tax changes divided by pre-offset total tax liability changes. Values may not add to totals due to rounding. These calculated tax liability changes differ from revenue estimates, as they do not present changes on a fiscal year basis and do not take into account possible behavioral effects other than the payroll tax offset.

Source: Joint Committee Individual Tax Model.