

**A REPORT TO THE CONGRESSIONAL BUDGET OFFICE
OF THE MACROECONOMIC EFFECTS OF THE
“TAX RELIEF EXTENSION ACT OF 2015,”
AS ORDERED TO BE REPORTED
BY THE SENATE COMMITTEE ON FINANCE**

Prepared by the Staff
of the
JOINT COMMITTEE ON TAXATION



August 4, 2015
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INTRODUCTION

Pursuant to the Concurrent Resolution on the Budget for Fiscal Year 2016, section 3112, the staff of the Joint Committee on Taxation (“Joint Committee staff”) has estimated the budgetary effects of changes in economic output, employment, and capital stock resulting from the “Tax Relief Extension Act of 2015.” The estimate of the macroeconomic revenue feedback effects of this legislation and the following supplementary analysis were produced using the Joint Committee staff’s Macroeconomic Equilibrium Growth model to simulate the macroeconomic effects of the bill.¹

¹ This document may be cited as follows: Joint Committee on Taxation, *A Report to the Congressional Budget Office of the Macroeconomic Effects of the “Tax Relief Extension Act of 2015,” as ordered to be Reported by the Senate Committee on Finance (JCX-107-15)*, August 4, 2015. This document can also be found on the Joint Committee on Taxation website at www.jct.gov

I. OVERVIEW

The following discussion analyzes the macroeconomic effects of the bill. This analysis is presented relative to the 2015 economic and receipts baseline (“present law”), published by the Congressional Budget Office (“CBO”) in January, 2015.²

The bill provides for the temporary extension of a number of provisions in the Internal Revenue Code that provide favorable tax treatment for certain activities of businesses and individuals. The provisions in the bill affecting taxation of personal income are relatively small and projected to have little effect on incentives to supply labor to the economy. The provisions affecting businesses, especially the extension of 50 percent expensing, are expected to have a more significant, although temporary, impact on the after-tax cost of capital. Thus, the primary effect of the bill on the economy is expected to be an initial increase in the stock of business capital of about 0.3 percent in the first half of the budget period, resulting in an increase in production, output, and receipts by about 0.1 percent during that period. After the expiration of these provisions, the growth of capital is expected to decrease gradually, reversing these effects. These changes in investment are projected to be mirrored by small changes in hours worked and wages. The gradual decline in investment in the later period is primarily caused by the loss of the tax incentives, and partially by the effects of the increase in the deficit on costs of private sector borrowing. Because the size of these effects depends on how strongly investors respond to the incentives, and to a lesser extent for this proposal, on the actions of the Federal Reserve Board, the exact magnitude of these effects is subject to some uncertainty.

² Congressional Budget Office, *The Budget and Economic Outlook: Fiscal Years 2015-2025*, January 26, 2015.

II. BUDGETARY EFFECTS

Fiscal Years 2016-2025

The growth generated by the increase in capital stock at the beginning of the budget period is projected to increase revenues relative to present law by about \$17.2 billion over the 2016-2025 budget period. By the end of this period, as the capital stock returns to pre-policy levels, this revenue feedback effect is diminished. At the same time, a small increase in interest rates generated by the increase in Federal debt is expected to increase the cost of Federal debt service by about \$6.8 billion over the budget window. Because the bill is projected to have a negligible effect on employment and consumption, it is projected to have a negligible effect on other outlays. Overall, the budgetary effects of changes in economic growth are projected to reduce the deficit by \$10.4 billion during the budget window. Details of the estimate appear on Table 1, below.

Second and Third Decade Effects

In the second and third decade after enactment, because the bill is expected to result in an increase in Federal debt, it is expected to make private borrowing more expensive, thus slightly lowering the capital stock relative to present law and reducing economic growth and associated revenues relative to present law. The expected increase in debt generated by the proposal is quite small relative to the overall size of the economy; therefore the long run effect is expected to be small.

TABLE 1.
ESTIMATED BUDGET EFFECTS OF
THE "TAX RELIEF EXTENSION ACT OF 2015,"
AS ORDERED REPORTED BY THE COMMITTEE ON FINANCE ON JULY 21, 2015

Fiscal Years 2016 - 2025

[Millions of Dollars]

| Provision | Effective | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2016-20 | 2016-25 |
|--|-----------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|------|------|---------|---------|
| I. Extension of Provisions That Expired in 2014 | | | | | | | | | | | | | |
| A. Individual Tax Extenders | | | | | | | | | | | | | |
| 1. Modification of above-the-line deduction of up to \$250 for teacher classroom expenses (sunset 12/31/16)..... | tyba 12/31/14 | -269 | -188 | --- | --- | --- | --- | --- | --- | --- | --- | -457 | -457 |
| 2. Modification of discharge of indebtedness on principal residence excluded from gross income of individuals (sunset 12/31/16)..... | doia 12/31/14 | -3,341 | -1,832 | --- | --- | --- | --- | --- | --- | --- | --- | -5,173 | -5,173 |
| 3. Parity for exclusion from income for employer-provided mass transit and parking benefits; treat bicycle-sharing programs as transportation fringes (sunset 12/31/16) [1]..... | ma 12/31/14 | -154 | -34 | --- | --- | --- | --- | --- | --- | --- | --- | -188 | -188 |
| 4. Mortgage insurance premiums treated as qualified residence interest (sunset 12/31/16)..... | apoa 12/31/14 | -1,314 | -1,004 | --- | --- | --- | --- | --- | --- | --- | --- | -2,318 | -2,318 |
| 5. Deduction for State and local general sales taxes (sunset 12/31/16)..... | tyba 12/31/14 | -3,489 | -2,967 | -240 | --- | --- | --- | --- | --- | --- | --- | -6,696 | -6,696 |
| 6. Contributions of capital gain real property made for conservation purposes (sunset 12/31/16)..... | cmi tyba 12/31/14 | -75 | -53 | -12 | -2 | -6 | -18 | -25 | -21 | -18 | -49 | -147 | -280 |
| 7. Above-the-line deduction for qualified tuition and related expenses (sunset 12/31/16)..... | tyba 12/31/14 | -360 | -248 | --- | --- | --- | --- | --- | --- | --- | --- | -608 | -608 |
| 8. Tax-free distributions from IRAs to certain public charities for individuals age 70-1/2 or older, not to exceed \$100,000 per taxpayer per year (sunset 12/31/16)..... | dmi tyba 12/31/14 | -846 | -488 | -54 | -58 | -61 | -64 | -67 | -71 | -74 | -77 | -1,506 | -1,860 |
| B. Business Tax Extenders | | | | | | | | | | | | | |
| 1. Modification of the research credit (sunset 12/31/16)..... | apoa 12/31/14 & cdf tyba 12/31/14 | -8,473 | -3,653 | -2,218 | -1,968 | -1,718 | -1,467 | -1,217 | -1,046 | -684 | -180 | -18,029 | -22,623 |
| 2. Modification of temporary minimum LIHTC rate for non-Federally subsidized new buildings (9%) and existing buildings (4%) (sunset 12/31/16)..... | 1/1/15 | [2] | [2] | -1 | -3 | -2 | [2] | --- | --- | --- | --- | -5 | -5 |
| 3. Military housing allowance exclusion for determining area median gross income (sunset 12/31/16)..... | ido/a 1/1/15 | -1 | -2 | -4 | -5 | -6 | -6 | -5 | -5 | -4 | -4 | -18 | -42 |
| 4. Indian employment tax credit (sunset 12/31/16)..... | tyba 12/31/14 | -74 | -40 | -11 | -1 | --- | --- | --- | --- | --- | --- | -126 | -126 |
| 5. Modification of the new markets tax credit (sunset 12/31/16)..... | cyba 12/31/14 | -6 | -32 | -104 | -197 | -256 | -292 | -323 | -333 | -311 | -224 | -594 | -2,076 |

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| Provision | Effective | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2016-20 | 2016-25 |
|---|------------------------|---------|--------|--------|--------|--------|-------|-------|-------|-------|------|---------|---------|
| 6. Modification of railroad track maintenance credit (sunset 12/31/16)..... | epoii tyba 12/31/14 | -292 | -141 | [2] | --- | --- | --- | --- | --- | --- | --- | -433 | -433 |
| 7. Mine rescue team training credit (sunset 12/31/16)..... | tyba 12/31/14 | -2 | -1 | [2] | [2] | [2] | [2] | --- | --- | --- | --- | -4 | -4 |
| 8. Modification of employer wage credit for activated military reservists (sunset 12/31/16)..... | pma 12/31/14 | -54 | -113 | -79 | -12 | --- | --- | --- | --- | --- | --- | -258 | -258 |
| 9. Modification of work opportunity tax credit (sunset 12/31/16)..... | iwbwfta 12/31/14 | -1,431 | -906 | -356 | -153 | -109 | -96 | -47 | -33 | -15 | -2 | -2,954 | -3,147 |
| 10. Modification of qualified zone academy bonds (sunset 12/31/16)..... | oia 12/31/14 | -1 | -6 | -16 | -29 | -36 | -36 | -35 | -34 | -33 | -32 | -89 | -258 |
| 11. Classification of certain race horses as 3-year property (sunset 12/31/16)..... | ppisa 12/31/14 | -95 | -72 | -14 | 26 | 39 | 44 | 39 | 22 | 6 | --- | -116 | -5 |
| 12. 15-year straight-line cost recovery for qualified leasehold improvements, qualified restaurant buildings and improvements, and qualified retail improvements (sunset 12/31/16) [3]..... | ppisa 12/31/14 | -350 | -495 | -562 | -553 | -533 | -509 | -504 | -502 | -486 | -434 | -2,493 | -4,928 |
| 13. 7-year recovery period for motorsports entertainment complexes (sunset 12/31/16) [4]..... | ppisa 12/31/14 | -20 | -24 | -20 | -13 | -9 | -8 | -6 | -2 | 3 | 5 | -86 | -95 |
| 14. Modification of accelerated depreciation for business property on an Indian reservation (sunset 12/31/16)..... | ppisa 12/31/14 | -199 | -133 | -32 | 29 | 62 | 70 | 47 | 17 | -4 | -8 | -273 | -151 |
| 15. Bonus depreciation: | | | | | | | | | | | | | |
| a. Additional first-year depreciation for 50% of basis of qualified property (sunset 12/31/16) [5]..... | ppisa 12/31/14 ityeasd | -90,449 | 3,162 | 30,862 | 19,994 | 14,563 | 9,619 | 5,115 | 2,427 | 1,057 | 608 | -21,868 | -3,042 |
| b. Election to accelerate AMT credit in lieu of bonus depreciation (sunset 12/31/16)..... | ppisa 12/31/14 ityeasd | -107 | -66 | -54 | -63 | -68 | -63 | -51 | -32 | -15 | -7 | -360 | -529 |
| 16. Enhanced charitable deduction for contributions of food inventory (sunset 12/31/16)..... | cma 12/31/14 | -156 | -106 | --- | --- | --- | --- | --- | --- | --- | --- | -262 | -262 |
| 17. Modification to increased expensing limitations and treatment of certain real property as section 179 property (sunset 12/31/16)..... | tyba 12/31/14 | -22,740 | -1,291 | 7,592 | 4,806 | 3,477 | 2,346 | 1,270 | 615 | 284 | 165 | -8,156 | -3,476 |
| 18. Election to expense mine safety equipment (sunset 12/31/16)..... | ppisa 12/31/14 | -24 | 1 | 6 | 5 | 4 | 3 | 3 | 1 | [6] | --- | -8 | --- |
| 19. Special expensing rules for certain film and television productions and live theatrical productions (sunset 12/31/16)..... | pca 12/31/14 | -428 | -63 | 138 | 105 | 60 | 43 | 36 | 30 | 26 | 26 | -189 | -28 |
| 20. Deduction allowable with respect to income attributable to domestic production activities in Puerto Rico (sunset 12/31/16)..... | tyba 12/31/14 | -154 | -80 | --- | --- | --- | --- | --- | --- | --- | --- | -234 | -234 |
| 21. Modification of tax treatment of certain payments under existing arrangements to controlling exempt organizations (sunset 12/31/16)..... | proaa 12/31/14 | -30 | -4 | --- | --- | --- | --- | --- | --- | --- | --- | -34 | -34 |
| 22. Treatment of certain dividends of RICs (sunset 12/31/16)..... | [7] | -176 | -32 | --- | --- | --- | --- | --- | --- | --- | --- | -208 | -208 |
| 23. Treatment of RICs as "qualified investment entities" under section 897 (FIRPTA) (sunset 12/31/16)..... | 1/1/15 | -86 | -16 | --- | --- | --- | --- | --- | --- | --- | --- | -102 | -102 |

| Provision | Effective | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2016-20 | 2016-25 |
|--|---------------------------------|--------|--------|------|------|--------|--------|--------|--------|--------|--------|---------|---------|
| 24. Exception under subpart F for active financing income (sunset 12/31/16)..... | [8] | -9,975 | -3,475 | --- | --- | --- | --- | --- | --- | --- | --- | -13,450 | -13,450 |
| 25. Look-through treatment of payments between related CFCs under foreign personal holding company income rules (sunset 12/31/16)..... | [8] | -2,296 | -428 | --- | --- | --- | --- | --- | --- | --- | --- | -2,724 | -2,724 |
| 26. Exclusion of 100 percent of gain on certain small business stock (sunset 12/31/16)..... | saa 12/31/14 | 17 | 13 | --- | --- | -232 | -1,563 | -1,403 | --- | --- | --- | -202 | -3,167 |
| 27. Basis adjustment to stock of S corporations making charitable contributions of property (sunset 12/31/16)..... | cmi tyba 12/31/14 | -73 | -27 | -2 | --- | --- | --- | --- | --- | --- | --- | -102 | -102 |
| 28. Reduction in S corporation recognition period for built-in gains tax (sunset 12/31/16)..... | tyba 12/31/14 | -285 | -129 | -2 | -2 | -1 | --- | --- | --- | --- | --- | -419 | -419 |
| 29. Modification of empowerment zone tax incentives (sunset 12/31/16)..... | pa 12/31/14 & [9] | -379 | -154 | -26 | -17 | -13 | -13 | -13 | -12 | -9 | -10 | -590 | -647 |
| 30. Temporary increase in limit on cover over of rum excise tax revenues (from \$10.50 to \$13.25 per proof gallon) to Puerto Rico and the Virgin Islands (sunset 12/31/16) [10] [11]..... | abiUSa 12/31/14 | -308 | -28 | --- | --- | --- | --- | --- | --- | --- | --- | -336 | -336 |
| 31. American Samoa economic development credit (sunset 12/31/16)..... | tyba 12/31/14 | -28 | -5 | --- | --- | --- | --- | --- | --- | --- | --- | -33 | -33 |
| C. Energy Tax Extenders | | | | | | | | | | | | | |
| 1. Modification of credit for section 25C nonbusiness energy property (sunset 12/31/16)..... | ppisa 12/31/14 | -835 | -552 | --- | --- | --- | --- | --- | --- | --- | --- | -1,387 | -1,387 |
| 2. Alternative motor vehicle credit for qualified fuel cell motor vehicles (sunset 12/31/16)..... | ppa 12/31/14 | -5 | -1 | --- | --- | --- | --- | --- | --- | --- | --- | -6 | -6 |
| 3. Credit for alternative fuel vehicle refueling property (sunset 12/31/16)..... | ppisa 12/31/14 | -81 | -24 | -7 | -4 | -2 | 1 | 1 | 1 | 1 | 1 | -118 | -112 |
| 4. Second generation biofuel producer credit (sunset 12/31/16)..... | fpa 12/31/14 | -30 | -15 | --- | --- | --- | --- | --- | --- | --- | --- | -45 | -45 |
| 5. Incentives for biodiesel and renewable diesel - extension of present-law income tax credits, excise tax credit, and outlay payments (sunset 12/31/15), and transition to a producer credit (sunset 12/31/16)..... | fsoua 12/31/14 & fsoua 12/31/15 | -2,142 | -330 | --- | --- | --- | --- | --- | --- | --- | --- | -2,473 | -2,473 |
| 6. Credit for the production of Indian coal (sunset 12/31/16)..... | cpa 12/31/14 | -39 | -17 | -9 | -6 | -3 | -1 | --- | --- | --- | --- | -74 | -75 |
| 7. Beginning-of-construction date for renewable power facilities eligible to claim the electricity production credit or investment credit in lieu of the production credit (sunset 12/31/16)..... | 1/1/15 | --- | -109 | -456 | -899 | -1,200 | -1,393 | -1,521 | -1,601 | -1,639 | -1,674 | -2,663 | -10,492 |
| 8. Credit for construction of energy-efficient new homes (sunset 12/31/16)..... | haa 12/31/14 | -361 | -139 | -68 | -60 | -52 | -45 | -28 | -7 | --- | --- | -680 | -760 |
| 9. Special allowance for second generation biofuel plant property (sunset 12/31/16)..... | ppisa 12/31/14 | -6 | -1 | 2 | 1 | 1 | 1 | 1 | [6] | [6] | [6] | -2 | [2] |
| 10. Modification of energy efficient commercial buildings deduction (sunset 12/31/16)..... | ppisa 12/31/14 | -295 | -58 | 7 | 7 | 6 | 5 | 4 | 3 | 3 | 2 | -333 | -315 |

| Provision | Effective | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2016-20 | 2016-25 |
|--|-------------------|--------------------------------------|----------------|---------------|---------------|---------------|--------------|--------------|--------------|---------------|---------------|-----------------|----------------|
| 11. Special rule for sales or dispositions to implement Federal Energy Regulatory Commission ("FERC") or State electric restructuring policy for qualified electric utilities (sunset 12/31/16)..... | da 12/31/14 | -597 | -48 | 110 | 110 | 110 | 110 | 110 | 75 | 20 | --- | -315 | --- |
| 12. Excise tax credits and outlay payments for alternative fuel, and excise tax credits for alternative fuel mixtures (sunset 12/31/16)..... | fsoua 12/31/14 | -794 | -124 | --- | --- | --- | --- | --- | --- | --- | --- | -918 | -918 |
| Total of Extension of Provisions That Expired in 2014..... | | -153,708 | -16,578 | 34,369 | 21,038 | 14,015 | 6,668 | 1,380 | -508 | -1,893 | -1,894 | -100,863 | -97,109 |
| II. Extension of Provision That Expired in 2013 | | | | | | | | | | | | | |
| 1. Credit for two-wheeled plug-in electric vehicles (sunset 12/31/16)..... | vaa 12/31/14 | -3 | -1 | [2] | [2] | --- | --- | --- | --- | --- | --- | -4 | -4 |
| Total of Extension of Provision That Expired in 2013..... | | -3 | -1 | [2] | [2] | --- | --- | --- | --- | --- | --- | -4 | -4 |
| III. Revenue Raising Provisions | | | | | | | | | | | | | |
| 1. Exclusion from gross income of certain clean coal power grants..... | pri tyba 12/31/11 | -148 | -28 | 8 | 41 | 47 | 34 | 24 | 17 | 8 | 2 | -79 | 6 |
| 2. Treatment of certain persons as employers with respect to motion picture projects..... | rpa 12/31/15 | 10 | 7 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 26 | 45 |
| 3. Equalization of excise tax and similar modification of the alternative fuel credit for liquefied petroleum gas and liquefied natural gas [12]..... | fsoua 12/31/14 | 100 | 17 | --- | --- | --- | --- | --- | --- | --- | --- | 117 | 117 |
| 4. Additional information on returns relating to mortgage interest [13]..... | rasda 12/31/16 | ----- <i>Present Law</i> ----- | | | | | | | | | | | |
| Total of Revenue Raising Provisions..... | | -38 | -4 | 11 | 44 | 50 | 38 | 28 | 21 | 12 | 6 | 64 | 168 |
| Sense of the Senate To Express Support for Comprehensive Tax Reform..... | DOE | ----- <i>No Revenue Effect</i> ----- | | | | | | | | | | | |
| Total Revenue Effect..... | | -153,749 | -16,583 | 34,380 | 21,082 | 14,065 | 6,706 | 1,408 | -487 | -1,881 | -1,888 | -100,803 | -96,945 |
| Additional Effects Resulting from Macroeconomic Analysis [14] [15]..... | | -123 | 890 | 1,171 | 1,016 | 1,115 | 1,293 | 1,408 | 1,314 | 1,208 | 1,095 | 4,068 | 10,386 |
| NET TOTAL | | -153,872 | -15,693 | 35,551 | 22,098 | 15,180 | 7,999 | 2,816 | 826 | -673 | -793 | -96,735 | -86,558 |

Joint Committee on Taxation

NOTE: Details may not add to totals due to rounding. The date of enactment is assumed to be October 1, 2015.

[Legend and Footnotes for Table 1 appear on the following page]

Legend and Footnotes for Table 1:

Legend for "Effective" column:

abiUSa = articles brought into the United States after
 apoa = amounts paid or accrued after
 apoia = amounts paid or incurred after
 cdf = credits determined for
 cma = contributions made after
 cmi = contributions made in
 cpa = coal produced after
 cyba = calendar years beginning after
 da = dispositions after
 dmi = distributions made in
 doia = discharge of indebtedness after

epoi = expenses paid or incurred in
 fpa = fuel produced after
 fsoua = fuel sold or used after
 haa = homes acquired after
 ido/a = income determinations on or after
 ityeasd = in taxable years ending after such date
 iwbftea = individuals who begin work for the employer after
 ma = months after
 oia = obligations issued after
 pa = periods after
 pca = productions commencing after

pma = payments made after
 ppa = property purchased after
 ppisa = property placed in service after
 pri = payments received in
 proaa = payments received or accrued after
 rasda = returns and statements due after
 rpa = remuneration paid after
 saa = stock acquired after
 tyba = taxable years beginning after
 vaa = vehicles acquired after

| | | | | | | | | | | | | |
|---|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|----------------|----------------|
| [1] Estimate includes the following effects: | <u>2016</u> | <u>2017</u> | <u>2018</u> | <u>2019</u> | <u>2020</u> | <u>2021</u> | <u>2022</u> | <u>2023</u> | <u>2024</u> | <u>2025</u> | <u>2016-20</u> | <u>2016-25</u> |
| Total Revenue Effects..... | -154 | -34 | --- | --- | --- | --- | --- | --- | --- | --- | -188 | -188 |
| On-budget effects..... | -101 | -22 | --- | --- | --- | --- | --- | --- | --- | --- | -123 | -123 |
| ∞ Off-budget effects..... | -53 | -12 | --- | --- | --- | --- | --- | --- | --- | --- | -65 | -65 |
| [2] Loss of less than \$500,000. | | | | | | | | | | | | |
| [3] Estimate includes interaction with section 179 and bonus depreciation. | | | | | | | | | | | | |
| [4] Estimate includes interaction with bonus depreciation. | | | | | | | | | | | | |
| [5] Estimate includes interaction with section 179. | | | | | | | | | | | | |
| [6] Gain of less than \$500,000. | | | | | | | | | | | | |
| [7] Effective for dividends paid with respect to any taxable year of regulated investment companies beginning after December 31, 2014. | | | | | | | | | | | | |
| [8] Effective for taxable years of foreign corporations beginning after December 31, 2014, and for taxable years of U.S. shareholders with or within which such taxable years of such foreign corporations end. | | | | | | | | | | | | |
| [9] Effective for bonds issued before, on, or after the date of enactment and not redeemed before the date of enactment. | | | | | | | | | | | | |
| [10] Estimate provided by the Congressional Budget Office. | | | | | | | | | | | | |
| [11] Estimate includes the following outlay effects: | <u>2016</u> | <u>2017</u> | <u>2018</u> | <u>2019</u> | <u>2020</u> | <u>2021</u> | <u>2022</u> | <u>2023</u> | <u>2024</u> | <u>2025</u> | <u>2016-20</u> | <u>2016-25</u> |
| Increase in limit on cover over of rum excise tax revenues to Puerto Rico and the Virgin Islands [10]..... | 308 | 28 | --- | --- | --- | --- | --- | --- | --- | --- | 336 | 336 |
| [12] After the provision was considered by the Senate Committee on Finance, a significant portion of this provision, as it relates to the changes in the Internal Revenue Code section 4041 tax, was included in H.R. 3236, the "Surface Transportation and Veterans Health Care Choice Improvement Act of 2015," which was passed by the House of Representatives on July 29, 2015, and the Senate on July 30, 2015, and signed into law on July 31, 2015. | | | | | | | | | | | | |
| [13] After the provision was considered by the Senate Committee on Finance, this provision was included in H.R. 3236, the "Surface Transportation and Veterans Health Care Choice Improvement Act of 2015," which was passed by the House of Representatives on July 29, 2015, and the Senate on July 30, 2015, and signed into law on July 31, 2015. | | | | | | | | | | | | |
| [14] Estimate includes the following effects on outlays due to increased interest rates on the Federal debt..... | <u>2016</u> | <u>2017</u> | <u>2018</u> | <u>2019</u> | <u>2020</u> | <u>2021</u> | <u>2022</u> | <u>2023</u> | <u>2024</u> | <u>2025</u> | <u>2016-20</u> | <u>2016-25</u> |
| | 1,839 | 1,390 | 1,019 | 749 | 566 | 441 | 336 | 238 | 147 | 60 | 5,564 | 6,786 |
| [15] Estimate includes the following off-budget effects..... | <u>2016</u> | <u>2017</u> | <u>2018</u> | <u>2019</u> | <u>2020</u> | <u>2021</u> | <u>2022</u> | <u>2023</u> | <u>2024</u> | <u>2025</u> | <u>2016-20</u> | <u>2016-25</u> |
| | 1,675 | 1,510 | 433 | -7 | -37 | -45 | -62 | -85 | -133 | -191 | 3,575 | 3,059 |

III. DATA, MODELS, AND ASSUMPTIONS USED IN THE ANALYSIS

The Joint Committee staff analyzed the proposal using the staff’s Macroeconomic Equilibrium Growth Model (“MEG”)³. While the model is based on economic data from the National Income and Product Accounts, taxable income is adjusted to reflect taxable income as measured by reporting on tax returns. The MEG model is based on the standard, neoclassical assumption that the amount of output is determined by the availability of labor and capital, and in the long run demand for labor and capital equals the amount supplied by households. Individuals are assumed to make decisions based on observed characteristics of the economy, including wages, prices, interest rates, tax rates, and government spending levels. Individuals in the MEG model do not anticipate future changes in the economy or government finances; thus, this type of model is often referred to as a “myopic” behavior model.

Monetary policy conducted by the Federal Reserve Board is explicitly modeled, with lagged price adjustments allowing for the economy to be temporarily out of equilibrium in response to fiscal and monetary policy changes. Under an “Aggressive Fed” policy, it is assumed that the Federal Reserve Board would work to counteract any demand incentives resulting from fiscal policy. “Neutral Fed” simulations assume that the Federal Reserve Board targets a fixed monetary growth rate, and does not try to counteract fiscal policy. The policy is only in effect during 2015 and 2016, a period in which the Federal Reserve Board is not expected to counteract expansionary fiscal policy; thus the macroeconomic revenue effects provided in the estimate were generated using the “Neutral Fed” simulation.

Labor supply decisions are modeled separately for four groups: low income primary earners, low income secondary earners, other primary earners, and other secondary earners. Firms make investment decisions based on an expected after-tax rate of return. The simulation used for this estimate includes the high substitution elasticity parameters for labor supply.

Information about the effects of the proposal on individual and business average and effective marginal tax rates, and on after-tax returns to capital and labor is obtained from various Joint Committee staff tax models⁴ (used in the production of conventional revenue estimates) to characterize the effects of the bill within the MEG model. Changes in deductions, credits and exclusions can impact effective marginal tax rates as well as average tax rates. Table 2 provides a summary of key behavioral parameters in the MEG model.

³ A detailed description of the MEG model and its behavioral parameters may be found in: Joint Committee on Taxation, *Macroeconomic Analysis of Various Proposals to Provide \$500 Billion in Tax Relief*, (JCX-4-05), March 1, 2005, and Joint Committee on Taxation, *Overview of the Work of the Staff of the Joint Committee on Taxation to Model the Macroeconomic Effects of Proposed Tax Legislation to Comply with House Rule XIII.3(h)(2)*, (JCX-105-03), December 22, 2003.

⁴ Descriptions of the Joint Committee staff conventional estimating models may be found in JCX-46-11, *Testimony of the Staff of the Joint Committee on Taxation before the House Committee on Ways and Means Regarding Economic Modeling*, September 21, 2011, JCX-75-15, *Estimating Changes in the Federal Individual Income Tax: Description of the Individual Tax Model*, April 24, 2015, and other documents at www.jct.gov under “Estimating Methodology.”

Table 2.–Key Parameter Assumptions in the MEG Model

| Labor supply elasticities in disaggregated labor supply | Income | High Elasticity Substitution | Low Elasticity Substitution |
|--|---------------|-------------------------------------|------------------------------------|
| Low income primary | -0.1 | 0.2 | 0.15 |
| Other primary | -0.1 | 0.1 | 0.1 |
| Low income secondary | -0.3 | 0.8 | 0.4 |
| Other secondary | -0.2 | 0.6 | 0.3 |
| Wage-weighted population average with baseline rates | -0.1 | 0.2 | 0.1 |
| Savings/consumption parameters | | | |
| Rate of time preference | | 0.015 | |
| Intertemporal elasticity of substitution | | 0.35 | |
| Derived long-run savings elasticity to the after tax rate of return on capital | | 0.25 | |