MACROECONOMIC ANALYSIS OF H.R. 5376, THE "BUILD BACK BETTER ACT," AS PASSED BY THE HOUSE OF REPRESENTATIVES, ON NOVEMBER 19, 2021

Prepared by the Staff
of the
JOINT COMMITTEE ON TAXATION

December 8, 2021

INTRODUCTION

This document, prepared by the staff of the Joint Committee on Taxation ("Joint Committee staff"), provides an analysis of the macroeconomic effects of the revenue provisions in H.R. 5376, the "Build Back Better Act" as passed by the House of Representatives, on November 19, 2021. The basis for this analysis is the projected change in tax revenues as estimated by the Joint Committee staff, and does not include all projected changes to the budget.[1]

[1] For projected changes to the budget see Congressional Budget Office, *Summary of Cost Estimate for H.R. 5376, the Build Back Better Act*, November 18, 2021 at www.cbo.gov.

MACROECONOMIC ANALYSIS OF H.R. 5376

This report provides an analysis of the macroeconomic effects of provisions to reform the Internal Revenue Code ("Code"). Specifically, the provisions analyzed here are summarized in JCX-46-21, *Estimated Budget Effects of the Revenue Provisions of Title XIII – Committee on Ways and Means, of H.R. 5376, the "Build Back Better Act," as passed by the House of Representatives*.

The Joint Committee staff estimates that these provisions would decrease the average annual growth rate of output (as measured by real Gross Domestic Product ("GDP")) by 0.02 percentage points, from 1.82 percent in the present-law baseline to 1.80 percent, over the 2022-2031 budget window. That decrease in growth rate would decrease revenues by about $39 billion, relative to the conventional estimate of a revenue gain of $946 billion over that period, shown in JCX-46-21 referred to above. As a result of the revenue provisions of the bill and the macroeconomic response, cumulative Federal deficits are expected to fall by about $907 billion by the end of the budget window, relative to baseline.

This estimate of revenue feedback effects was produced using three of the Joint Committee staff's macroeconomic models to simulate the macroeconomic effects of the proposal: (1) the Macroeconomic Equilibrium Growth Model (MEG)[2]; (2) the Overlapping Generations Model ("OLG")[3]; and (3) the Dynamic Stochastic General Equilibrium Model ("DSGE")[4]. A brief description of the models appears in the Appendix to this document. This analysis is presented relative to the 2021 economic and receipts baseline ("present law") published by the Congressional Budget Office ("CBO") in July, 2021.[5]

H.R. 5376 ("the bill") includes both changes to Federal outlays and revenues that the CBO projects would together increase the budget deficit by $367 billion over the 10-year budget window before accounting for macroeconomic effects. However, this analysis does not consider the spending provisions estimated by the CBO. This analysis considers only the tax revenue

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[2] A detailed description of the MEG model 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 Proposes Tax Legislation to Comply with House Rule XIII3(h)(2)* (JCX-105-03), December 22, 2003.

[3] A detailed description of the OLG model may be found in "Macroeconomic Implications of Modeling the Internal Revenue Code in a Heterogeneous-Agent Framework," *Economic Modelling,* vol. 87, April 2020, pp. 72-91, in Rachel Moore and Brandon Pecoraro, "A Tale of Two Bases: Progressive Income Taxation of Capital and Labor Income," *Public Finance Review,* vol. 49, no. 3, May 2021, pp. 335-391, and in Joint Committee on Taxation, *An Overview of a New Overlapping Generations Model with an Example Application in Policy Analysis* (JCX-22R-20), October 22, 2020.

[4] A description of an earlier version of the DSGE model may be found in: *Joint Committee on Taxation, Background Information about the Dynamic Stochastic General Equilibrium Model Used by the staff of the Joint Committee on Taxation in the Macroeconomic Analysis of Tax Policy,* JCX-52-06, December 14, 2006. An updated document, which describes modeling improvements, is forthcoming.

[5] Congressional Budget Office, *An Update to the Budget and Economic Outlook: 2021 to 2031,* July 1, 2021.

provisions of the bill, which are projected to increase revenue by $946 billion over the budget window before accounting for macroeconomic effects. Within each model used for this analysis, spending is held constant at baseline levels. Changes to Federal revenues result in changes to the path of Federal debt. Because this analysis does not include the effects of the spending provisions, no conclusion can be drawn about the effects of the whole bill, either in the short or the long run.

Proposal

The tax revenue provisions of H.R. 5376 are organized under four subtitles, each of which are briefly described in this section.[6] The first two subtitles include business credits for certain investment and production activities. Provisions in the third subtitle modify individual credits and taxable income. The final subtitle generally increases taxes on corporations and high-income individuals.

The first subtitle includes a modification and expansion of the low-income housing credit, creates a new "Neighborhood Homes" tax credit, and creates credits for business development in tribal areas and U.S. possessions. The second subtitle includes provisions that create new "green energy" credits, and modifies and extends existing credits, for the production and use of renewable or "clean" energy resources, and for construction or rehabilitation of residential and commercial structures for energy efficiency and conservation. It also creates credits for new and used electric vehicle and bicycle purchases, both for individual and commercial use.

The third subtitle temporarily extends the American Rescue Plan modifications to the child tax credit ("CTC") through 2022, which include an increase in the age limit and in the credit amount to $3,000 for qualifying children ($3,600 for those under the age of six). The CTC is additionally modified to be fully refundable without an earned income requirement. The temporary changes to the earned income tax credit ("EITC") from the American Rescue Plan are extended through 2022, which include an increase in the credit amount for childless households in 2022. This subtitle also creates a permanent credit for health insurance costs and creates and modifies credits for various educational and training programs. Finally, the modification to the limitation on the State and local tax deduction generates opposing effects over the budget window. Since the present law limitation of $10,000 sunsets after 2025, the increase in the limitation to $80,000 for 2022-25 reduces revenue while the new limitation of $80,000 for years 2026-2030, and temporary limitation of $10,000 for 2031, increase revenue. There is no limitation for years after 2031.

The last subtitle increases taxes on corporations by introducing an alternative minimum tax of 15 percent on book income for corporations with adjusted financial statement income in excess of $1 billion, and an excise tax of one percent on stock repurchases. In addition, it limits the deduction for interest expense for corporations reporting more than $12 million in interest expenses annually. It modifies the limitation on the deduction for excessive employee

[6] See Joint Committee on Taxation, Estimated Budget Effects of the Revenue Provisions of Title XIII – Committee on Ways and Means, of H.R. 5376, the "Build Back Better Act," As Passed by the House of Representatives, (JCX-46-21), November 19, 2021 for a complete list of provisions.

remuneration by expanding the number of applicable employees. This bill also raises taxes on foreign source and export income by decreasing the allowable deduction for foreign-derived intangible income ("FDII") and global intangible low-taxed income ("GILTI") for years 2022-25.[7] Additionally, it modifies the types of taxpayers and payments subject to the base erosion and anti-abuse tax ("BEAT").

Individual taxes are increased in the last subtitle through a broadening of the base for the net investment income tax ("NIIT"), and the introduction of a surtax of five percent on adjusted gross income ("AGI") in excess of $10 million with an additional surtax of three percent on AGI in excess of $25 million. Limitations on excess business losses of noncorporate taxpayers, which are set to expire after 2027 under present law, are made permanent. Taxes on high-income households also increase by modifying retirement account rules. This subtitle also imposes contribution limits and increases the required minimum distribution for taxpayers with large retirement account balances starting in 2029.

Overall, the net effect of the changes for calendar year 2022 is to reduce average tax rates for households across all income categories but the very top (households with over a million dollars in taxable income).[8] For households with expanded income below $50,000, average tax rates are projected to remain lower than under present law throughout the budget window, but not as low as in 2022, because the expansion of certain individual tax credits are temporary.[9] By the end of the budget window average tax rates are projected to increase for every income category besides households earning less than $20,000. The amount of the increase generally rises with income. While the average tax rate for households earning between $20,000 and $75,000 is projected to increase by about 0.1 percentage points in 2031, it is projected to increase by 6.4 percentage points for households earning over $1,000,000.

The limitation on the State and local tax deduction ("SALT") changes incentives over the budget window. Under present law the $10,000 limitation sunsets after 2025, so the increase in the limitation from $10,000 to $80,000 for 2022-25 decreases the effective marginal rate for many households, while the introduction of a limitation of $80,000 for 2026-30 increases the effective marginal rate for a smaller number of households. The introduction of a temporary $10,000 limitation in 2031 increases the marginal rate further, and for a greater number of

[7] These provisions accelerate the changes that under current law are in effect for years beginning after December 31, 2025.

[8] See Joint Committee on Taxation, *Distributional Effects of the Revenue Provisions of Title XIII – Committee on Ways and Means, of H.R. 5376, The "Build Back Better Act," As Passed by the House of Representatives* (JCX-47R-21), November 23, 2020. The income concept used to place tax returns into income categories is adjusted gross income (AGI) plus: [1] tax-exempt interest, [2] employer contributions for health plans and life insurance, [3] employer share of FICA tax, [4] workers' compensation, [5] nontaxable Social Security benefits, [6] insurance value of Medicare benefits, [7] alternative minimum tax preference items, [8] individual share of business taxes, and [9] excluded income of U.S. citizens living abroad. Categories are measured at 2021 levels.

[9] Average tax rate changes use expanded economic income and include all changes to income from the bill except the following: Subtitle E: Part 3 and Part 4 items 2 and 3; Subtitle F: Part 3 items 1, 2, and 4, Part 4 items 1, 6, and 7, and Part 6; Subtitle G: Part 2 item 2, Part 3, Part 4, and Part 5 items 2 and 3; Subtitle H: Part 3, Part 4, and Part 5 items 2-4, 6, 8, 9, and 12.

households. Consequently, the effective marginal tax rate on wage income for high-income households falls by 0.5 percentage points on average for years before 2026, increases by 0.3 percentage points on average through 2030, and temporarily increases by about one percentage point in 2031.[10]

The effective marginal tax rate on wage income for lower-income households with earnings below $50,000 increases by about two percentage points in 2022, about one percentage point for calendar years 2023-25, and by a negligible amount thereafter. This is attributable to the one-year expansion of the EITC which increases effective marginal tax rates in the phase-out region, the one-year increase in the amount of the CTC, and the removal of the phase-in for the refundable portion of the CTC. The current law credit amount falls from $2,000 to $1,000 after 2025, dampening the effect of the full refundability after 2025.

The aggregate effective marginal tax rates on capital income, which are income-weighted across all taxpayers, increase throughout the budget window primarily because of the effect that the modifications to the net investment income tax and introduction of the AGI surtax have on high-income households. The effective marginal tax rates on business income and dividends are estimated to increase relative to present law by about 1.1 and 1.4 percentage points, respectively, averaged over the budget window. The increase is larger for interest income and capital gains, for which the effective marginal tax rates over the budget window are estimated to be 2.4 and 3.1 percentage points larger on average.

[10] In the MEG and DSGE models, the high-income threshold is $49,272 in 2022. At this income level earned income credits under present law are fully phased out.

EFFECTS ON ECONOMIC ACTIVITY AND REVENUES

The estimates of the effect of this proposal on economic activity and revenues were produced using a weighted average of those effects generated by the Joint Committee staff's OLG, MEG, and DSGE models. As described in the Appendix, each model provides a somewhat different perspective on savings/investment and labor supply responses. In the MEG model households have myopic foresight and expect current policy to extend into the future, so are surprised when credits expire and rates change. This dampens intertemporal substitution of saving and labor supply, especially relative to the perfect foresight OLG model. The DSGE model simulates both savers and non-savers which dampens savings/investment responses relative to OLG, in which all households can potentially save. It also adds imperfect foresight to the analysis, an assumption sitting between the perfect foresight assumption of the OLG model and the myopic foresight in the MEG model.

To determine weighted average effects, the OLG model was assigned a weight of 0.35, the MEG model a weight of 0.35, and the DSGE model a weight of 0.30. The DSGE model was assigned a smaller weight for this analysis because the current version of the model does not include a housing sector and is a closed economy. In the OLG and MEG models, households shift investment from productive capital to housing capital in response to the increases in capital income taxes. Without this avenue to mitigate increases in taxation of capital income, savings and capital fall by relatively more, and consumption falls by relatively less, in the DSGE model.

The effects on aggregates discussed below are also summarized in Table 1, at the end of the section.

Effects on output

The Joint Committee staff estimates that the revenue provisions of the proposal decrease the level of GDP relative to the baseline forecast, by about 0.1 percent on average throughout the 10-year budget window. In general, tax policy can affect the size of the economy by changing incentives for firms to invest and for individuals to supply labor, as well as by affecting aggregate demand. Changes in tax policy can alter the after-tax rate of return to these activities - either directly by changing the portion of the gross rate of return that is paid in taxes, or indirectly, through changes to households' saving and firms' hiring behavior. And aggregate demand can be affected as changes to tax policy affect taxpayers' tax liability and thus after-tax income. For this proposal, the projected decrease in GDP results primarily from a reduction in business investment in response to a decrease in the after-tax rate of return to capital. While the decrease in output relative to baseline is negligible for the first half of the budget window, increasing tax rates over the period slows GDP growth, and GDP is expected to be around 0.1 percent lower than baseline for the latter half of the budget window.

Effects on capital stock

The revenue provisions of the bill result in changes to the taxation of business capital income that decrease the after-tax rate of return to investment and cause a reduction in the rate of business capital accumulation. Relative to the present-law baseline, the stock of business capital is projected to decrease by about 0.2 percent and 0.4 percent over the first and second halves of

the budget window, averaging to a decrease of 0.3 percent over the entire period. While the modifications to energy credits contained in the bill increase the after-tax rate of return to certain investments, [11] these effects are offset in the aggregate by the creation of a new corporate alternative minimum tax and AGI surtax, as well as modifications to the net investment income tax and multinational income treatment.

Effects on labor supply

The revenue provisions of the bill result in changes to the taxation of labor income that have offsetting incentives on aggregate labor supply. The temporary expansion of the earned income tax credit increases returns to labor for some, but it increases the effective marginal rate for those in the phaseout region, giving different incentives to different taxpayers. The modification to the deductibility of State and local taxes increases the return to labor for higher income taxpayers through the first half of the budget window. Conversely, the elimination of the earnings requirement for full refundability of the child tax credit decrease the rate of return to labor at the lower end of the income distribution. The creation of a new surcharge on high-income individuals, and the new limitation on the SALT deduction in the second half of the window, decrease the rate of return to labor for higher-income individuals. Despite the positive labor supply incentives being concentrated in the first half of the budget window, effective labor supply is projected to approximately remain unchanged relative to the present-law baseline for the first half of the budget window. With labor supply incentives dissipating for higher income households in the second half of the budget window, labor supply falls relative to baseline by 0.1 percent, resulting in a negligible 10-year average difference.

Effects on consumption

The expansion of credits for lower-income households in 2022 generates a large, but temporary increase in consumption, followed by moderate increases that decline over the budget window. For higher-income households the initial increase in consumption is due to the lower after-tax return to savings. As average tax rates increase over time, the negative income effect causes households to increasingly reduce consumption. The net effect is that consumption is projected to increase over baseline by 0.2 percent on average in the first half of the budget window, and fall by 0.1 percent on average in the second half. The 10-year average effect is negligible.

Long-run economic effects

While the conventional revenue estimate is expected to remain positive beyond the budget window, the uncertainty in the extent to which crowding in of private investment incentives could eventually offset the short-run effects noted above is too great to enable a prediction on the sign of the macroeconomic aggregates in the second and third decades after enactment and beyond.

[11] The energy credits in this bill provide incentives for new investment, but target a relatively small portion of aggregate investment, and also cause the shifting of investment and production between sectors.

Moreover, since the spending portion of the bill has not been modeled, even if the effects of the revenue side on the long run were known with certainty, they might be more-than offset by the effects of the spending side.

Budgetary effects

The reduced growth estimated as a result of the factors discussed above is projected to reduce the conventionally estimated revenue gains from the revenue provisions of the bill by about $39 billion over the 2022-2031 budget period. Details of the estimate appear in Table 2, following.

Table 1. Percent Change in Economic Outcomes Relative to Present Law

	2022-26	2026-31	2022-31
Output	[1]	-0.1%	-0.1%
Business Capital	-0.2%	-0.4%	-0.3%
Labor	[2]	-0.1%	[1]
Consumption	0.2%	-0.1%	[2]

[1] Negative, but not significantly different from zero.
[2] Positive, but not significantly different than zero.

Table 2. Projected Budgetary Effects of the Proposal

Fiscal Year, billions of dollars	2022-26	2026-31	2022-31
Conventional Revenue Estimate	-26.6	972.7	946.0
Macroeconomic Revenue Feedback	17.1	-56.0	-38.9
Total Change to Revenue	**-9.5**	**916.6**	**907.1**

NOTE: Details may not add to totals due to rounding.

APPENDIX: DATA, MODELS, AND ASSUMPTIONS USED IN THE ANALYSIS

The Joint Committee staff analyzed the proposal using the Joint Committee staff MEG, DSGE, and OLG models. While the models are based on economic data from the National Income and Product Accounts, taxable income in the models is adjusted to reflect taxable income as measured and reported on tax returns. All three models start with the standard, neoclassical production framework in which the amount of output is determined by the quantity of labor and capital used by firms, and the productivity of those factors of production. Both individuals and firms are assumed to make decisions based on observed characteristics of the economy, including wages, prices, interest rates, tax rates, and government spending levels. In particular, labor supply is determined by individuals' preferences, expectations, and after-tax returns to working, which depend on wage (payroll) rates as well as average and marginal tax rates. Similarly, the capital stock is determined by investors' expectations (or knowledge if perfect foresight) of after-tax returns to capital, which depend on anticipated gross receipts, costs of factor inputs, and tax rates that affect those factors. The underlying structure of the MEG model relies more on reduced form behavioral response equations, while the OLG and DSGE models are built on theoretical microeconomic foundations.

The degree to which the Joint Committee staff relies more heavily on the results of one model versus the others depends on the specifics of the proposal being analyzed and the strengths of each model. The MEG model, which does not require a fiscal balance assumption, is better suited to analyze proposals that produce large, conventionally estimated deficits or surpluses. This model aggregates four separate types of labor, using separate marginal and average tax rates for all major individual and business income tax sources. The availability of investment capital to firms is determined by individuals' savings response to changes in the after-tax rate of return on investment as well as by foreign capital flows. Also in the MEG model, monetary policy conducted by the Federal Reserve Board is explicitly modeled, with delayed price adjustments to changes in economic conditions allowing for the economy to be temporarily out of equilibrium in response to fiscal and monetary policy. The myopic expectation framework in the MEG model represents the extreme case of the degree of foresight individuals have about future economic conditions, in which individuals assume in each period that current economic conditions will persist permanently.

At the other end of the foresight spectrum, in the OLG model, individuals are assumed to make consumption, labor supply, and residential decisions to maximize their expected lifetime well-being given the resources they can foresee will be available to them. They are assumed to have complete information, or "perfect foresight," about economic conditions, such as wages, prices, interest rates, tax policy, and government spending, while they have uncertainty over their length of life. The OLG model represents a class of models with "micro-foundations" and life-cycle effects modeled separately for 66 "generations," each with two household types (married or single), eight labor productivity types, and 40 wealth endowment types. Individuals in each household optimally choose their labor supply from a discrete set of options—not in the workforce, part time, or full time. For married households, that labor supply decision is made jointly by primary and secondary earners. This indivisible labor assumption implies that the aggregate labor supply elasticity is endogenous and depends on the distribution of reservation

wages[12] across households. Tax liability on household income is determined by an internal tax calculator that incorporates key aspects of income tax law under present law and the proposed legislation. The OLG model includes a more differentiated business sector than the other two models, with distinct corporate and non-corporate entities that produce output at profit maximizing levels using labor, private capital and public capital. Firms' investment decisions respond to the effects that tax policy have on the projected future value of the firm; changes in marginal tax rates on firm profits, and changes in the value of deductions and credits for investment affect this valuation. The OLG model is a large open-economy model where foreign entities purchase a portion of new debt issued by the Federal government, thereby reducing the crowding-out effect relative to that of a closed-economy model. Although debt may be held abroad, there is no additional income or investment shifting beyond what is estimated conventionally.

The DSGE model has a stochastic feature that allows for some analysis of the effects of uncertainty about future fiscal policy on the modeling outcome, representing a less extreme foresight assumption than either of the other models. Each period decision-makers in the DSGE model are able to foresee the consequences of the new policy with certainty for the following two years. Thereafter, they expect policy to gradually return to baseline rates. As the uncertainty about future fiscal conditions is allowed to persist over a limited period of time, the DSGE model is closer to the OLG model than to the MEG model on this spectrum. In the DSGE model there are two types of individuals who make decisions about labor supply, "savers" and "non-savers," only one of whom has the liquidity to make investment decisions. As in the OLG model, these two types of individuals make consumption and labor supply decisions to maximize their discounted present value of lifetime well-being. The savers supply investment capital to the economy, and receive income from investment returns. The non-savers are liquidity constrained, and are unable to invest. As with the MEG model, the DSGE model incorporates a monetary policy reaction function, which responds to deviations in output and inflation from their long-run values. Unlike MEG and OLG, the DSGE model features nominal rigidities in prices and wages, each leading to a respective forward looking Philips curve relating current price and wage inflation to their expectations as well as the wedge between marginal cost and benefit created by nominal rigidities. These features allow for a more staggered response in price and wage adjustment to changes in policy as prices and wages cannot fully adjust immediately in response to policy changes.

In the OLG model (and to some degree in DSGE), the ability of individuals to foresee changes in fiscal conditions means that the decision-makers in the models will be unable to make optimal economic decisions if they can foresee a permanently unstable economic future, thus preventing the models from "solving" - or completing their simulations. This problem arises in a situation where deficits or surpluses are expected to increase faster than the rate of growth of GDP, which is a characteristic under present law as well as the proposal analyzed here. Thus, it is necessary to make counter-factual "fiscal balance" assumptions about the expected path of debt for these models. In the MEG model, however, individuals are assumed not to foresee that eventually the growing government debt-to-GDP ratio under present law will become so large that it becomes unsustainable, and the model can generate forecasts up until that point. In the

[12] A reservation wage is the lowest after-tax wage at which an individual is willing to work.

DSGE model decision-makers assume that the debt level will start to return to its steady state value after nine years.

For models that require a fiscal balance assumption, imposing the fiscal balance assumption outside the budget window can have effects inside the window, because model agents can foresee that it will occur. This "anticipation effect" is stronger the closer in time it is to agents' decision making. In recent years, developmental work on the OLG model has allowed the fiscal balance assumption to be made 20 or 30 years after the budget window, thus reducing the effect of this assumption on behavior inside the budget window.[13]

The estimate of the impact of the growth effects from this proposal on its budget effects was produced using an average of those effects generated by the MEG, OLG, and DSGE models with 35-35-30 weights. As described above, each model provides a somewhat different perspective on savings/investment and labor responses. The MEG model allows simulation of the proposal as drafted, with no offsetting fiscal balance assumption. The OLG model provides detailed focus on household heterogeneity. The DSGE model captures the variation in behavioral responses by savers and non-savers. It also adds imperfect foresight to the analysis, an assumption sitting between the perfect foresight assumption of the OLG model and the myopic foresight in the MEG model. However, it is a closed economy and it lacks a housing sector, which households in the other two models use to partially avoid the increase in capital income taxation, which lead the staff to choose the slightly lower weight on DSGE projections for this analysis.

Each major tax bill potentially presents a unique combination of changes in the definition of the taxable base for different sources of income, as well as changes in tax rates on different sources of income. Because the Joint Committee staff uses these models to facilitate analysis of tax policy, and to estimate the revenue consequences of the macroeconomic effects of tax policy, the staff has devoted a considerable amount of time and attention to modeling the specific types of income flows affected by proposals, to the extent allowed by other sets of assumptions within each macroeconomic model. Information about the effects of the proposal on average tax rates and effective marginal tax rates on each source of income, and on after-tax returns to capital and labor, is obtained from various Joint Committee staff tax models[14] (used in the production of conventional revenue estimates) to characterize the effects of the revenue provisions of the bill within the each of the models.

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[13] See Rachel Moore and Brandon Pecoraro, "Dynamic Scoring: An Assessment of Fiscal Closing Assumptions," *Public Finance Review,* vol. 48, no. 3, April 2020, pp. 340-353.

[14] Descriptions of the Joint Committee staff's 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 3. Key Parameters in the MEG Model			
Household		Income	Substitution
Labor Supply Elasticities			
Low income primary		-0.1	0.2
Other primary		-0.1	0.1
Low income secondary		-0.3	0.8
Other secondary		-0.2	0.6
Wage-weighted population average		-0.1	0.2
Annual rate of time preference	0.015		
Intertemporal elasticity of substitution	0.350		
Production			
Business Capital share	0.412		

Table 4. Key Parameters in the OLG Model	
Household	
Annual rate of time preference	0.063
Aggregate labor share of time endowment	0.310
Intratemporal elasticity of substitution (consumption and housing)	0.487
Production	
Private Capital share	0.320
Public Capital share	0.115

Table 5. Key Parameters in the DSGE Model		
Household		
	Annual rate of time preference	0.015
	Intertemporal elasticity of substitution	0.500
	Frisch elasticity of labor supply	0.400
	Fraction of non-Ricardians	0.350
Production		
	Capital share	0.30
	Intermediate firm markup	0.125