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Answers to Questions for the Record Following a Hearing on *The Budget and Economic Outlook: 2018 to 2028* Conducted by the Senate Budget Committee

On April 11, 2018, the Senate Committee on the Budget convened a hearing at which Keith Hall, Director of the Congressional Budget Office, testified about The Budget and Economic Outlook: 2018 to 2028.[1] *After the hearing, Chairman Enzi, Ranking Member Sanders, and other members of the Committee submitted questions for the record. This document provides CBO's answers. It is available at* www.cbo.gov/publication/53800.

Chairman Enzi

Question. Following our last hearing in January, I submitted a question for the record where I requested that you provide an update on your analysis of the impacts on health insurance coverage as a result of the elimination of the individual mandate penalties. In response to my question, Dr. Hall, you stated that since that provision was enacted into law, CBO would describe any changes in the analytic methods used to estimate the individual mandate in its baseline projections this spring. I did not see a discussion of these changes in CBO's report. Does the new report include a description of changes to CBO's methodology for estimating the impact of the individual mandate on coverage? If not, please provide.

Answer. The baseline projections incorporate revised methods for estimating the effects of eliminating the penalties associated with the individual mandate. The revised methods yielded a smaller effect on health insurance coverage than CBO and the staff of the Joint Committee on Taxation (JCT) had previously estimated. (These methods and the projections of health insurance coverage themselves will be described in a forthcoming CBO report.) Relative to the estimated effect of the 2017 tax act (Public Law 115-97), the updated methodology used for the baseline projections has reduced the effect of eliminating the mandate penalties by about one-third.[2]

The updated methodology was developed after reassessing the decline in the number of uninsured people since 2012 and the reasons for that decline. CBO and JCT have long attributed only part of the decline to financial factors—specifically, the expansion of Medicaid coverage and subsidies for insurance obtained through the marketplaces. The agencies have attributed the rest of the decline to nonfinancial factors, including the simplification of procedures

1. See testimony of Keith Hall, Director, Congressional Budget Office, before the Senate Committee on the Budget, *The Budget and Economic Outlook: 2018 to 2028* (April 11, 2018), www.cbo.gov/publication/53721.

2. For more information on the agencies' prior estimate, see Congressional Budget Office, *Repealing the Individual Health Insurance Mandate: An Updated Estimate* (November 2017), www.cbo.gov/publication/53300.

for participating in Medicaid, the existence of the marketplaces, outreach and advertising, and market rules (such as the exclusion of coverage for preexisting medical conditions). Other nonfinancial factors are related to the individual mandate, such as changes in people's tendency to comply with laws, people's attitudes about health insurance, and people's greater responsiveness to penalties than to subsidies.[3] CBO and JCT revised their methodology for estimating the effects of eliminating the mandate penalty in three ways:

- The total effect of all nonfinancial factors is smaller;
- The nonfinancial factors besides those associated with the mandate explain a greater share of the total effect of all nonfinancial factors; and
- The effects of nonfinancial factors associated with the individual mandate persist more over the coming decade now that the mandate has been in place for four years, and they do not dissipate as much when the mandate penalty is eliminated.

Each of those revisions reduced the agencies' estimates of the effects of eliminating the mandate penalty. Those revisions were based in part on CBO's own analysis of changes over time in the number of uninsured people using data from the National Health Interview Survey (NHIS). CBO and JCT now use the NHIS as their primary benchmark for that number; previously, they relied more heavily on estimates from the Medical Expenditure Panel Survey—Household Component.[4] The revisions also incorporated information from analysts at other organizations.[5]

Question. It has come to my attention that shortly after passage of the Bipartisan Budget Act of 2018 CBO realized its estimate of a provision related to the Medicare Part D 'donut hole' was incorrect. Where is the correction featured in the new report? Please describe the budgetary effects of this provision of law as now incorporated in the most recent baseline.

Answer. Section 53116 of the Bipartisan Budget Act of 2018 (P.L. 115-123) requires manufacturers of brand-name prescription drugs to provide a 70 percent discount to certain beneficiaries of Medicare Part D for brand-name prescription drugs purchased while those

3. For additional information, see Alexandra Minicozzi, Unit Chief, Health Insurance Modeling Unit, Congressional Budget Office, "Modeling the Effects of the Individual Mandate on Health Insurance Coverage" (presentation at a meeting of CBO's Panel of Health Advisers, Washington, D.C., September 15, 2017), www.cbo.gov/publication/53105.

4. CBO now uses the NHIS as the benchmark because the NHIS has a larger sample size and is available more quickly. Also, the question asked in the survey about insurance status at a point in time has a shorter recall period and can be used to estimate averages during the year that more closely correspond to the concept of average enrollment underlying CBO's projections.

5. See Ashley Kirzinger and others, "Kaiser Health Tracking Poll–March 2018: Non-Group Enrollees," *Kaiser Family Foundation* (April 3, 2018), https://tinyurl.com/y9osz5pm; John Hsu and others, "Eliminating the Individual Mandate Penalty in California: Harmful But Non-Fatal Changes in Enrollment and Premiums," *Health Affairs Blog* (March 1, 2018), https://tinyurl.com/ybmbbob9; S&P Global Ratings, "U.S. Tax Reform: Repeal of the Health Insurance Mandate Will Save Less Than Expected, and Will Not Support the Current Insurance Market" (November 16, 2017); Paul Spitalnic, *Estimated Financial Effect of the "American Health Care Act of 2017"* (Centers for Medicare & Medicaid Services, Office of the Actuary, June 13, 2017), https://go.usa.gov/xQWfR; and Linda J. Blumberg, Matthew Buettgens, and John Holahan, *Implications of Partial Repeal of the ACA Through Reconciliation* (Urban Institute, December 2016), https://tinyurl.com/yb4oe4y9.

beneficiaries are in the coverage gap (also known as the "doughnut hole"). The coverage gap refers to a range of spending for prescription drugs in which Part D beneficiaries who were not enrolled in the low-income-subsidy program were responsible for paying 100 percent of the cost of their prescriptions when the Part D benefit was originally implemented.

When the legislation was being considered, CBO estimated that provision would reduce net Medicare spending for Part D by $7.7 billion over the 2018–2027 period.[6] CBO subsequently learned of a relevant analysis by the Centers for Medicare & Medicaid Services and incorporated that analysis in its projections for the April 2018 Medicare baseline. The current baseline incorporates an estimate that, compared with prior law, section 53116 will reduce net Medicare spending for Part D by $11.8 billion over the 2018–2027 period.

CBO describes changes in its projections between the June 2017 and April 2018 baselines in Appendix A of *The Budget and Economic Outlook: 2018 to 2028*. Those changes are categorized as legislative, economic, or technical. The $4 billion change in the projected effect of section 53116 is included in the $186 billion reduction in projected Medicare spending stemming from technical factors; it accounts for about 2 percent of that reduction.

Ranking Member Sanders

Question. There is robust economic literature, from the OECD and elsewhere, depicting a causal relationship between widening economic inequality and slower economic growth. It is a simple fact that the Republican tax cut bill will increase income inequality: As mentioned in today's hearing, in 2027, 83 percent of the benefits of the Republican tax cut will go to the top 1 percent of income earners and 60 percent of the benefits will go to the top 0.1 percent, according to the Tax Policy Center.[7] In general, do CBO's macroeconomic models account for slower growth due to widening inequality? Does this version of CBO's *Outlook* incorporate the widening income inequality that will result from the Republican tax cut bill into its projection of economic growth? If so, how?

Answer. The distribution of income across households is an important consideration in CBO's analyses of the economic effects of fiscal policies in the short run. For example, in CBO's assessment, increases in disposable income boost purchases more for lower-income households than for higher-income households. That is because, at least in part, a larger share of people in lower-income households are liquidity-constrained (in other words, unable to make purchases because of a lack of cash).

CBO's models incorporate the effects of trends in income inequality through their reliance on estimates of trends in the economy during recent decades, when such inequality has been increasing, but they do not include a channel of influence through which specific changes

6. In the table that CBO produced before enactment, that effect was combined with estimated savings for section 53113 (which modified payment rules for biosimilar drugs), resulting in a combined estimate of $10.1 billion in federal savings over the 2019–2027 period. See Congressional Budget Office, *Estimated Direct Spending and Revenue Effects of Division E of Senate Amendment 1930, the Bipartisan Budget Act of 2018* (February 2018), www.cbo.gov/publication/53557.

7. See Urban-Brookings Tax Policy Center, *Distributional Analysis of the Conference Agreement for the Tax Cuts and Jobs Act* (December 18, 2017), https://tinyurl.com/y86ve723.

in inequality of after-tax income affect economic growth in the long run. Despite a large body of academic papers examining the effect of income inequality on the economy, there is not yet a consensus in CBO's view as to a clear causal link from inequality to growth rates within the U.S. economy. Some studies find that higher inequality is associated with higher growth in the short term. Studies by the International Monetary Fund and the Organisation for Economic Co-operation and Development, among others, find a statistical link between higher inequality and lower growth based on comparisons across a wide spectrum of countries. No studies establish a robust, causal link from inequality to long-run growth rates that is applicable to the U.S. economy.

Nonetheless, some traditional economic insights remain part of the debate.

- Inequality may provide important incentives for investment in skills and knowledge or for entrepreneurship and innovation.
- Efforts to reduce inequality that distort market incentives may slow economic growth.
- Inequality of income is often correlated with underinvestment in human capital. In particular, unequal access to quality education reduces investments in people, from early childhood development through access to higher education, which hinders long-term economic growth.

CBO will continue to monitor new research (in universities, think tanks, and other organizations) that is looking for specific links between inequality and economic growth.

Senator Corker

Question. *The Budget and Economic Outlook* states that $669 billion will be added to the deficit over the next decade because of the increased spending resulting from the Bipartisan Budget Act of 2018 (BBA18) and the Consolidated Appropriations Act of 2018 (Table A-1, page 94). Outside organizations, including the Committee for a Responsible Federal Budget, have estimated that if the temporary provisions in BBA18 were made permanent, it could increase the deficit by $2.1 trillion over ten years, including debt service. What would the impact on the deficit be if the spending levels set by BBA18 were continued through 2027?

Answer. In CBO's baseline projections, future discretionary funding is projected by taking the amounts appropriated for 2018 and adjusting them for inflation for future years. Those amounts are then reduced as required to meet the caps on funding established by the Budget Control Act of 2011 (as amended) for 2019, 2020, and 2021. Beyond 2021, funding is projected to increase with inflation from the 2021 capped amounts.

CBO analyzed an alternative under which funding would be continued at the amounts appropriated for 2018, including adjustments for inflation, with no reductions to comply with the caps set for 2019, 2020, and 2021. Discretionary outlays under that scenario would increase relative to CBO's current baseline by $1.5 trillion over the 2019–2027 period, and additional debt-service costs would be $193 billion.

Senator Harris

Question. As the CBO's *Outlook* notes, health care costs are expected to increase over the coming years as the aging population grows and more eligible individuals enroll in Medicare. The *Outlook* also notes that the repeal of the individual mandate is likely to make it so that younger and healthier people with lower health care costs will have fewer incentives to remain in health care markets. Those who have higher health care costs will be more likely to stay in health care markets, which will increase the cost of health insurance premiums and contribute to the growing cost of health care for Americans. How would getting more Americans enrolled in health insurance plans, as the individual mandate in the Affordable Care Act sought to do, help keep health care costs down over the long term?

Answer. The effects of having more people covered by health insurance on national health expenditures would depend on how that coverage came about. In general, people use more health care when they have insurance, and that use tends to increase expenditures. However, changes that increased coverage could also reduce expenditures if people used their coverage to stay healthy and prevent or delay the onset of some chronic diseases. For example, regular check-ups and prenatal care can reduce expenditures on premature births. Increased coverage could also spur greater competition between insurers, lowering expenditures.

Question. One of the biggest impediments that we face to getting more folks participating in the labor market is housing. Even if an economy is adding jobs, if we don't have stable housing for folks, then we are going to have a hard time getting them in the workforce. It's a big problem in California right now, where people are having to commute from far away from their job in order to find a place where they can affordably live. This problem is playing out in communities across the country and will be an impediment to growing our economy. Has CBO conducted, or would it be able to conduct, an analysis of how policies designed to provide more affordable housing can lead to more robust participation in the workforce?

Answer. CBO has reviewed research on the effects of housing assistance on work.[8] Housing assistance provides recipients with incentives that influence their willingness to work, in terms of both employment and the number of hours worked. Some incentives may discourage work and others may facilitate it. Recent studies of housing assistance indicate that recipients of housing vouchers tend to work less, on net.

One set of incentives tends to reduce the amount of time that people work. Housing assistance allows recipients of such benefits to maintain their standard of living while working less, an incentive known as the income effect. Because an increase in a household's income from working is partially offset by a reduction in the value of their housing benefits, housing assistance may also make spending time on activities other than work more desirable, which is termed the substitution effect. For example, if the monthly labor income of a household increased by $100, its housing benefits would be reduced by $30—the equivalent of a

8. See Congressional Budget Office, *Federal Housing Assistance for Low-Income Households* (September 2015), www.cbo.gov/publication/50782.

30 percent marginal tax on earnings from work.[9] (Other policies might also affect people's effective marginal tax rate.) Because, on net, additional work provides less income than it would have otherwise, households have less incentive to work than they would have if they were not receiving assistance.

In other ways, though, housing assistance may facilitate work. By providing a more stable housing arrangement for people with low income, for example, housing assistance might encourage employment. Assistance might also facilitate work by freeing resources that might otherwise be spent on rent to instead cover child care and transportation expenses. In addition, housing assistance can help people in low-income households move to areas closer to potential employers or to areas where neighbors can provide more contacts to potential employers.

Senator Johnson

Question. CBO writes, "The ACA requires insurers to offer CSRs to eligible people who purchase silver plans through the marketplaces and requires the federal government to reimburse insurers for those costs. CSRs take the form of reduced deductibles, copayments, and other means of cost sharing. Section 257 of the Balanced Budget and Emergency Deficit Control Act of 1985, which specifies rules for constructing the baseline, requires CBO to assume full funding of such entitlement authority." What is the budgetary effect of removing direct payments for CSRs from the baseline for estimating spending on premium tax credit subsidies, as CBO has done? What legal basis did CBO rely on for this change in its baseline? How can this be reconciled with OMB's earlier announced decision to keep CSR payments in its baseline?

Answer. In light of the Administration's change in policy, CBO's baseline projection reflects the manner in which insurers are currently reimbursed for the cost of providing cost-sharing reductions (CSRs) to eligible enrollees. That projection is in compliance with Section 257 of the Balanced Budget and Emergency Deficit Control Act of 1985 because the CSR entitlement is assumed to be fully funded. The obligations stemming from the entitlement are projected to be satisfied by higher premiums and larger premium tax credit subsidies instead of by direct payments (as in previous baselines).

CBO's projections of the federal budget deficit reflect higher premium tax credits and other effects that would not be included if the baseline incorporated the counterfactual assumption that CSRs are funded by appropriations. All else being equal, CBO's baseline treatment shows higher total costs of providing subsidies for insurance purchased through the marketplaces than the Office of Management and Budget's treatment, which continues to assume a direct appropriation for CSRs.

In recent cost estimates for legislation that would appropriate funding for the payment of CSRs, CBO and JCT estimated that the appropriations would not affect direct spending or revenues because such payments were already in CBO's baseline projections.[10] After consulting with the budget committees about the baseline and about cost estimates relative

9. The marginal tax rate is the percentage of an additional dollar of earnings that is paid in taxes or offset by reductions in benefits from government programs. For a detailed discussion of how increases in earnings can cause reductions in assistance (provided through cash and in-kind benefits) to people of reduced means, see Congressional Budget Office, *Effective Marginal Tax Rates for Low- and Moderate-Income Workers* (November 2012), www.cbo.gov/publication/43709.

10. See Congressional Budget Office, cost estimate for the Bipartisan Health Care Stabilization Act of 2018 (March 19, 2018), https://www.cbo.gov/publication/53666.

to that baseline, the agency will continue that practice. For legislation that would change the means of funding the CSR entitlement, CBO will estimate that it would not affect the federal deficit—because the obligations stemming from the entitlement can be fully satisfied through either a direct payment or higher premiums and larger premium tax credit subsidies. However, if legislation was enacted that appropriated funds for direct payments for CSRs, the agency would update its baseline projections to reflect lower premium tax credits and other effects.

Question. Previously, Dr. Hall testified before the House Budget Committee that the CBO had been treating CSR payments as an entitlement, and would continue to do so unless directed otherwise. Was CBO directed to alter its baseline treatment of CSR payments, as CBO has done? If so, by whom?

Answer. CBO continues to treat CSR payments as an entitlement, and they are fully funded by larger premium tax credits. The decision to revise the baseline treatment of their means of financing was made by CBO after consultation with the House and Senate Budget Committees.

Question. What are the components and component spending estimates for the $44 billion net increase in estimated spending for health insurance subsidies and related spending (Table A-1) for coverage purchased through the marketplaces over the 2018–2027 period, in total, and by year?

Answer. The components of the preliminary $44 billion net increase in outlays for health insurance subsidies and related spending resulting from technical changes are provided below (see the table). The estimates are preliminary. CBO will publish estimates incorporating the effects of recently proposed rules affecting health insurance markets and other updates later this spring.

Increases or Decreases (-) in Outlays for Health Insurance Subsidies and Related Spending From Technical Changes Between September 2017 and April 2018

	By Fiscal Year, in Billions of Dollars											
	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2018–2022	2018–2027
Premium Tax Credit Outlays, Cost-Sharing Reductions, and Outlays for the Basic Health Program	-3	-4	-7	3	10	9	8	9	10	13	-1	48
Marketplace Grants to States	*	0	0	0	0	0	0	0	0	0	*	*
Payments for Risk Adjustment	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-2	-5
Payments for Reinsurance	*	*	0	0	0	0	0	0	0	0	*	*
Total, Health Insurance Subsidies and Related Spending	**-2**	**-5**	**-8**	**2**	**9**	**9**	**8**	**8**	**9**	**13**	**-3**	**44**

Components may not add to totals because of rounding; * = between zero and $500 million.

Senator Kaine

Question. In CBO's report, *The Budget and Economic Outlook: Fiscal Years 2018-2028*, CBO writes: "Changes to trade agreements or tariff policies on the part of the United States and its trading partners that impede trade could have significant adverse effects on aggregate economic activity, whereas the removal of trade barriers between the United States and its trading partners could improve aggregate economic conditions." Recently, the Trump Administration announced an intent to implement over the next year anywhere from $50-150 billion in import tariffs on goods ranging from steel and aluminum to intellectual property, which would have an adverse effect on farmers, manufacturers, workers, and consumers. Since the tariffs have been announced after CBO generated its budget and economic outlook, the effect of these trade policies is not reflected in this report. What would be the economic effect of protectionist trade policies, including tariffs, on the following indicators: economic activity (GDP and GNP); inflation; consumer prices; employment; and trade?

Answer. CBO does not have any specific estimates of the economic effects of protectionist trade policies. Those effects can vary widely depending on the specific provisions of each policy, the countries whose imports are affected, and the products that are targeted. Those differences make it difficult to characterize the broad effects of all protectionist trade policies.

In general, however, by reducing competition and domestic productivity, protectionist trade policies probably reduce real (inflation-adjusted) domestic economic output and income in the long run. In addition, higher import tariff rates tend to lessen imports by boosting domestic prices on imported products. Consequently, import tariffs tend to reduce the purchasing power of consumers and businesses. The effect of tariffs on aggregate employment is less certain.

Senator Van Hollen

Question. Table B-2 of CBO's new budget and economic outlook presents estimates for economic effects of the new tax law. This includes estimates for the change in real gross domestic product (GDP) and real gross national product (GNP). Both of these measure our economy, but as you confirmed during the hearing, GNP is better for measuring the income that actually flows to the people of the United States. In Table B-2, CBO's estimate for the increase in GDP is significantly larger than its estimate for the increase in GNP. You confirmed that the reason for this difference is that some of the income from the increased economic activity is flowing to foreigners instead of U.S. residents. When the tax plan is fully implemented in 2028, Table B-2 estimates that GDP will be 0.5% higher as a result of the 2017 tax law, but GNP will only be 0.1% higher. Given these numbers, is it correct that roughly 80% of the income from the increased economic activity associated with the 2017 tax law flows to foreigners in 2028?

Answer. CBO reported in its *Budget and Economic Outlook* that the tax act is estimated to raise real GDP by 0.5 percent and real GNP by 0.1 percent in 2028. Based on those estimates, the increase in net real income accruing to foreign investors and businesses in that year is roughly 80 percent of the increase in GDP, or (1–0.1/0.5)*100.[11]

There are two caveats to that estimate. First, the calculation used the ratio of two numbers that were rounded to a single decimal. Using more precise estimates of the real effects on GDP and GNP, which CBO had not previously published, the increase in net real income accruing to foreign investors and businesses in 2028 is 71 percent of the increase in GDP. Second, that share fluctuates substantially from year to year in CBO's estimates, and 2028 is not representative of the entire period; it averages 43 percent from 2018 to 2028.

In CBO's estimates, the share is higher after 2025 in part because the lower tax rates on individual income expire and the subsequent effects on the supply of labor—and therefore on real GDP—are smaller, but the difference between the effects on GDP and on GNP changes little. CBO has not analyzed the effects of the tax act after 2028.

Senator Warner

Question. In the CBO report, you included an "alternative fiscal scenario." This alternative fiscal scenario assumes that all the tax cuts which expire in the next ten years are extended, ACA tax provisions which have been delayed continue to be delayed, and that discretionary spending grows at the rate of inflation from fiscal year 2018 levels, among other policies currently in place. Under this alternative fiscal scenario, CBO estimates that publicly held debt will be larger than the entire U.S. economy by 2028, as the debt-to-GDP ratio hits 105 percent. In the alternative fiscal scenario, revenues only average 17 percent of GDP over the ten year window, and presumably would climb only marginally higher in the ensuing years. Any reasonable plan to stabilize the debt would necessarily require some additional revenues as part of a larger package, otherwise major programs would face draconian cuts. Should there be no additional increase in revenues, could you please identify: what share of Medicare spending would need to be cut to stabilize the debt starting in 2028 under the alternative fiscal scenario, assuming no other changes in spending; what share of Medicaid spending would need to be cut to stabilize the debt starting in 2028 under the alternative fiscal scenario, assuming no other changes in spending; what share of Social Security spending would need to be cut to stabilize the debt starting in 2028 under the alternative fiscal scenario, assuming no other changes in spending; and what share of discretionary spending would need to be cut to stabilize the debt starting in 2028 under the alternative fiscal scenario, assuming no other changes in spending?

Answer. Because CBO had little time to incorporate the effects of recent legislation into its projections, it has not been feasible to perform the analysis necessary to produce the 30-year budget projections needed to answer those questions. Those extended baseline projections are scheduled to be completed later this year.

11. For additional information, see Congressional Budget Office, letter to the Honorable Chris Van Hollen about the effects of the 2017 tax act on income accruing to foreign investors (April 18, 2018), www.cbo.gov/publication/53772.

Question. CBO estimates that interest expense will be $915 billion in 2028, and will increase from 1.4 percent of GDP in 2017, to 3.1 percent of GDP in 2028. Even this significant growth in interest expense may be an underestimate, as the alternative fiscal scenario would put the total interest in 2028 at $992 billion, above 3.3 percent of GDP. It will have surpassed Medicaid, defense spending, and non-defense discretionary spending, with only Social Security and Medicare costing more than net interest. Assuming the alternative fiscal scenario continues beyond 2028, would you expect interest expense to continue to increase as a percentage-of-GDP in later decades, taking up a larger and larger share of federal expenditures? While interest rates have been relatively stable, significant debt levels make interest rate risk an even greater threat. For fiscal year 2018 and fiscal year 2028, under your traditional projections and the alternative fiscal scenario, what would be the additional interest expense if interest rates were one percentage point higher than what you have projected?

Answer. Interest expenses are expected to continue to increase as a percentage of GDP beyond 2028 under the alternative fiscal scenario, but CBO has not completed those estimates. Because CBO had little time to incorporate the effects of recent legislation into its projections, it has not been feasible to update the analysis of how economic projections might affect budget projections that is needed to answer questions about different interest rates. That update is scheduled to be completed later this year.

Question. The Republican tax bill appears to create a "sugar high," pushing growth into the next few years, with growth in later years falling below prior expectations. Would we expect more consistent, robust, and sustainable growth if the tax bill created lower marginal tax rates, but did so in a revenue-neutral fashion through base broadening, and was fully permanent, rather than having a significant number of expiring provisions due to use of the reconciliation process, allowing passage with only Republican votes?

Answer. All things being equal, permanent tax law changes that did not increase the budget deficit would have larger and more sustained effects than temporary provisions; CBO's projections accounted for the temporary nature of various provisions of the tax act as well as the effects of higher budget deficits. In CBO's projections, the lower individual and corporate tax rates—coupled with special investment provisions (such as bonus depreciation)—generate positive incentives that boost labor supply, investment, and real GDP, with the largest effects occurring by 2022. Over the later years of the projection period (2026 through 2028), the positive effects on labor, investment, and real GDP wane as temporary provisions expire. (The lower individual income tax rates expire at the end of 2025, and the bonus depreciation provision phases out from 2023 to 2026.) Some beneficial effects remain by the end of the projection period from the permanent reduction in the corporate income tax rate. Throughout the projection period, and as described in Appendix B of the *Budget and Economic Outlook*, the positive effects on investment and real GDP are limited by the crowding out of private investment resulting from higher federal budget deficits. A revenue-neutral tax reform that did not boost budget deficits would not have the negative effects from such crowding out.

Question. In the CBO report's discussion of the international tax provisions, specifically the Global Intangible Low-Taxed Income (GILTI) and the Foreign Derived Intangible Income (FDII), it states: "[t]he GILTI and FDII provisions affect corporations' decisions about where to locate tangible assets. By locating more tangible assets abroad, a corporation is able to reduce the amount of foreign income that is categorized as GILTI. Similarly, by locating fewer tangible assets in the United States, a corporation can increase the amount of U.S. income that can be deducted as FDII. *Together, the provisions may increase corporations' incentive to locate tangible assets abroad.* (Like profit shifting, such decisions change the locations of reported profits—but they are not classified as profit shifting, because they involve actual economic activity rather than simply reporting.)" *(emphasis added)* Could you please expand on what the economic effects for the U.S. would be if businesses are incentivized to put more tangible assets abroad?

Answer. On net, in CBO's estimates, the 2017 tax act makes the United States a more attractive location for investment. With respect to the international provisions of the tax act, there is a great deal of uncertainty about how companies will respond. The tax on GILTI and the deduction for FDII provide an additional incentive to locate high-return assets in the United States, but it is possible that, for some companies, those provisions may encourage some new foreign investment in tangible assets. However, the international provisions are only one of many factors that a company must consider when deciding where to locate its investments.

Fiscal policies that encourage U.S. businesses to locate their tangible assets abroad reduce domestic investment, potential output, and demand for labor. The effect of those policies on national income is uncertain. However, those effects are not consistent with CBO's projection of the overall economic effects of the tax act.

Senator Wyden

Question. Box B-1 of the *Outlook* (pg. 109) states that multinational corporations "have held a substantial fraction of their undistributed funds as long-term Treasury securities, CBO estimates." Could CBO provide a point estimate, or range of estimates, for the fraction of MNCs' undistributed funds that have been held in long-term Treasury securities?

Answer. CBO does not have the necessary information to provide a point estimate for the fraction of undistributed funds held as long-term Treasury securities. CBO's estimate that a "substantial fraction" is held as long-term Treasury securities is informed by descriptions contained in the financial statements of companies that held large balances of undistributed foreign earnings and other studies of those companies.[12] For some companies, the descriptions state that some of the undistributed foreign earnings are held in U.S. Treasury securities but do not state exactly how much. For other companies, the descriptions state only that the majority of undistributed foreign earnings are invested in highly rated U.S.

12. See, for example, Senate Committee on Homeland Security and Governmental Affairs, Permanent Subcommittee on Investigations, *Offshore Funds Located Onshore, Majority Staff Report Addendum to Repatriating Offshore Funds: 2004 Tax Windfall for Select Multinationals* (December 14, 2011), https://go.usa.gov/xQWGB; and Liz McCormick and Molly Smith, "Beware the $500 Billion Bond Exodus," *Bloomberg* (January 17, 2018), https://tinyurl.com/ycgfxrtw.

dollar-denominated securities. U.S. Treasury securities make up a substantial fraction—over one-third—of highly rated fixed-income securities denominated in U.S. dollars.[13] The prevalence of those two types of descriptions indicates to CBO that U.S. Treasury securities make up a substantial fraction of the undistributed funds.

Question. In Chapter 4 of the *Outlook* (pg. 89), CBO and JCT estimate that extending the expiring provisions in the 2017 tax act would increase deficits on net by $650 billion over the decade, excluding added debt-service costs. How much would debt-service costs total on this $650 billion deficit increase from extending expiring provisions in the 2017 tax act?

Answer. Under that scenario, additional debt-service costs would total $31 billion over the 2019–2028 period.

Question. In Chapter 3 of the *Outlook*, CBO reduces its projection of individual income tax revenues by $16 billion for 2018 due to "a downward revision to estimates of wages and salaries in that year." How large was this downward revision for 2018 wages and salaries, relative to CBO's June 2017 projection?

Answer. A large downward revision to the historical level of wages and salaries that the Bureau of Economic Analysis (BEA) published after the completion of CBO's June 2017 projection caused BEA's current estimate of wages and salaries for the first half of 2017 to be $206.9 billion (or 2.4 percent) lower than in CBO's June 2017 estimate for the same period.

The implications of last July's downward revision to BEA's historical estimates of wages and salaries carry on into the second half of 2017 and into 2018. As a result, CBO's latest projection of wages and salaries for 2018 is still $153.3 billion (or 1.7 percent) lower than the agency projected in June 2017, even though CBO now anticipates that the tightness of labor markets revealed in recent data on employment and unemployment will result in stronger growth in wages and salaries during 2018.

13. Securities Industry and Financial Markets Association, "US Bond Market Issuance and Outstanding." That calculation is based on $14.5 trillion in U.S. Treasury bonds outstanding and $41 trillion in total U.S. bond market debt outstanding.