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AN ANALYSIS OF SENATOR BERNIE SANDERS'S TAX AND TRANSFER PROPOSALS

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ABSTRACT

Presidential candidate Bernie Sanders proposes significant tax increases that would raise \$15.3 trillion over the next decade. All income groups would pay more tax, but most new revenue would come from high-income households and particularly those with very high incomes. Sanders would also implement new government benefits—notably government-financed single-payer health care, long-term services and supports, tuition-free public colleges and universities, and family leave benefits—and expand Social Security benefits. The Tax Policy Center finds the new government benefits would more than offset new taxes for 95 percent of households, but the combined tax and transfer plan would increase federal budget deficits by more than \$18 trillion over the next decade.

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In March, the Tax Policy Center estimated that presidential candidate Senator Bernie Sanders's tax plan would increase tax revenue by \$15.3 trillion over the next decade (Sammartino et al. 2016). All income groups would pay some additional tax, but most new revenue would come from high-income households. But taxes are only part of the story. Along with an expansion of Social Security benefits, Senator Sanders proposes a number of new government benefits, including single-payer health care, long-term services and supports, free public college tuition, and paid family leave. Those proposals affect the distribution of winners and losers and the federal budget deficit. For most households, additional government benefits would more than offset the tax increases. But the additional revenue would fall far short of paying for the new spending programs. Without more revenue, the Sanders plan would increase federal deficits by more than \$18 trillion over the next decade.

This analysis estimates the effect of the Sanders tax and transfer proposals by combining results from separate Urban Institute models. We use the Urban-Brookings Tax Policy Center Microsimulation Model (TPC model), the same model used to simulate the Sanders tax proposals, to simulate family leave benefits and the net benefit of proposed free tuition at public institutions. We incorporate results from the Urban Institute Health Policy Center's Health Insurance Policy Simulation Model (HIPSM) for his single-payer health care plan and estimates from the Urban Institute Income and Benefits Policy Center's Dynamic Simulation of Income Model (DYNASIM3) for his long-term services and supports and Social Security plans. We do not model other spending proposals, such as increased investment in infrastructure or the youth jobs program, because it is difficult to quantify their benefit to families. Because we combine results from separate models relying on different underlying data sources, these results are less precise than if they had come from a unified model of taxes and spending.¹

The combination of the Sanders tax and transfer proposals would increase average household income, net of taxes paid and transfers received, by nearly \$4,300 in 2017. Households in the bottom 95 percent of the income distribution would, on average, receive a net benefit while the highest-income households would pay more in new taxes than they would receive in additional government transfers. The combined plan would increase annual federal budget deficits by \$1.8 trillion over the next 10 years.

PROPOSALS

Senator Sanders has proposed expanding social insurance programs, increasing government investment in physical and human capital, and aggressively addressing climate change. He would pay for those and other programs by raising taxes on individuals and businesses. This analysis focuses on changes to taxes and social insurance programs.

Taxes

Senator Sanders would increase federal income, payroll, business, and estate taxes significantly and impose new excise taxes on financial transactions and carbon. In March, the Tax Policy Center estimated that those changes would boost federal revenue by \$15.3 trillion between 2016 and 2026 (Sammartino et al. 2016). The plan would increase tax burdens for households at all income levels, but the increase would be much larger both in absolute dollars and as a share of after-tax income for the highest-income households.²

Single-Payer Health Care

Senator Sanders proposes a single-payer health care system that would replace the existing employer-based health insurance system as well as Medicare, Medicaid, and the programs established under the Affordable Care Act.³ The new benefit would be comprehensive and eliminate individual cost-sharing. It would be significantly more generous than current-law Medicare or typical private insurance. Holahan et al. (2016) estimate that the new program would increase total public and private spending on health care, other than long-term services and supports, by \$5.5 trillion over 10 years. However, federal spending on acute care would rise by \$29 trillion as it would replace virtually all private spending—employer-sponsored health insurance, private nongroup coverage, and net premiums paid for insurance purchased under the Affordable Care Act—as well as state spending on Medicaid. Although the details and total cost of the Sanders health care plan are uncertain (Holahan et al. 2016) its cost would significantly exceed the revenues raised by his tax plan.

Long-Term Services and Supports

Senator Sanders would also provide comprehensive coverage for long-term services and supports (LTSS).⁴ This would replace both Medicaid LTSS spending and some portion of private spending on LTSS and informal caregiving by family members. The DYNASIM3 model estimates that the Sanders proposal would increase total spending (federal, state, and private) on LTSS by over \$1 trillion. However, federal spending on LTSS would increase by \$2.9 trillion over the next 10 years because it would supplant state and private spending (Holahan et al. 2016).

Eliminate Undergraduate Tuition at Public Colleges and Universities

Senator Sanders proposes to eliminate tuition for undergraduates at public colleges and universities, with the federal government paying 67 percent of the cost for states choosing to eliminate tuition.⁵ We estimate that federal spending under the program, net of reductions in education tax credits, would increase by \$807 billion over 10 years. This estimate relies on three important assumptions: (1) college attendance would not increase, (2) students would not switch from private to public colleges, and (3) public colleges and universities would not increase tuition. The estimated cost thus reflects only a reallocation of spending from private sources to public

ones. Federal costs could be significantly higher if those assumptions do not hold. On the other hand, we assume that all states would choose to participate in the matching-grant program and waive tuition. As the recent expansion of Medicaid under the Affordable Care Act suggests, this may not be the case.

Family and Medical Leave

The Sanders proposal includes up to 12 weeks of partial earnings replacement for workers who take time off for their own serious health condition; the birth or adoption of a child; or a serious health condition for a child, parent, or spouse/domestic partner. Workers would need to be eligible under the Social Security disability program with a history of work in the 12 months prior to taking leave. The benefit would replace two-thirds of earnings up to a maximum of \$4,000 per month.⁶ Assuming all eligible single adults and lower-earning spouses and half of eligible higher-earning spouses would participate, we estimate program spending at \$270 billion over 10 years.⁷

Expand Social Security

Senator Sanders proposes to increase Social Security benefits several ways.⁸ He would immediately increase the annual cost-of-living adjustment and raise the minimum benefit for new retirees to as much as 125 percent of the federal poverty level for retirees who worked at least 30 years. Senator Sanders would gradually phase in an additional benefit increase for new retirees, especially those with lower lifetime incomes, starting in 2020.⁹ While most benefit increases would occur outside the 10-year budget window, the Office of the Chief Actuary projects the proposal would increase Social Security benefits by \$188 billion over the next ten years.¹⁰

DISTRIBUTIONAL ANALYSIS

We use the TPC model as the starting point for our distributional analysis and incorporate results from the HIPSM and DYNASIM3 models. We use the TPC model to simulate the change in tax burden under the Sanders plan by quintile of adjusted gross income (AGI) in 2017. We use AGI as opposed to our usual income classifier, expanded cash income, because it measures income before considering taxes and transfers and because it is available in HIPSM and DYNASIM3.¹¹ As described above, we also use the TPC model to simulate the net benefits of free tuition at public colleges and family medical leave.

TABLE 1

Senator Bernie Sanders's Tax and Transfer Proposals

Distribution of change in taxes and transfers by AGI percentile, calendar year 2017



	Average AGI	Average federal tax change ^a	Average federal tax change as % of AGI	Average change in acute health care benefits ^b	Average change in long-term care benefits ^c	Average family leave benefit ^d	Average change in higher education benefits ^e	Average change in Social Security benefits ^f	Average transfer change	Average transfer change as % of AGI	Average change in net transfers ^g	Average change in net transfers as % of AGI
Lowest quintile	3,592	209	5.8	8,677	1,322	7	239	20	10,266	285.8	10,056	279.9
Second quintile	19,550	1,858	9.5	8,670	617	75	395	6	9,763	49.9	7,905	40.4
Middle quintile	41,437	4,450	10.7	12,086	570	156	306	2	13,120	31.7	8,670	20.9
Fourth quintile	78,563	8,528	10.9	16,018	410	214	443	7	17,092	21.8	8,564	10.9
Top quintile	267,160	42,719	16.0	18,106	413	301	974	15	19,807	7.4	-22,912	-8.6
All	63,940	8,964	14.0	11,954	725	130	426	10	13,246	20.7	4,282	6.7
Addendum												
80–90	129,041	14,199	11.0	18,109	417	279	854	16	19,674	15.2	5,476	4.2
90–95	185,008	18,913	10.2	18,453	529	333	1,257	10	20,582	11.1	1,669	0.9
Top 5 percent	656,241	130,275	19.9	17,733	281	314	937	15	19,281	2.9	-110,994	-16.9

Sources: Urban-Brookings Tax Policy Center Microsimulation Model (TPC model), Urban Institute's HIPSM and DYNASIM3 models, and Holahan et al. (2016).

Notes: AGI = adjusted gross income. Baseline is current law. Analysis includes filing and nonfiling units but excludes those that are dependents of other tax units. Tax units with negative adjusted gross income are excluded from their respective income class but are included in the totals. The income percentile classes used in this table are based on the income distribution for the entire population and contain an equal number of people, not tax units. The breaks are (in 2015 dollars): 20% \$10,982; 40% \$27,191; 60% \$55,081; 80% \$102,081; 90% \$150,989; 95% \$213,017.

^a Baseline is current law (including provisions in the Protecting Americans from Tax Hikes Act of 2015 and the Consolidated Appropriations Act of 2016). Proposal includes individual, corporate, payroll, excise, and estate tax provisions in Senator Sanders's tax plan. For details, see Sammartino et al. (2016).

^b Includes change in federal, state, and local government benefits for acute health care. Average acute government health benefits by quintile for non-Medicare population from Urban Institute's HIPSM model adjusted to produce same total spending when applied to TPC model tax units. Total government acute health benefits for the Medicare population from Holahan et al. (2016) distributed to tax units with current-law Medicare enrollees in TPC model.

^c Includes change in federal and state long-term care benefits. Average change in long-term benefits spending by quintile from DYNASIM3 adjusted to produce same total spending when applied to TPC model tax units.

^d Family leave benefit estimated in TPC model based on birth rates from National Vital Statistics and incidence of informal caregiving among adults in the Health and Retirement Study reported in Butrica and Karamcheva (2014).

^e Includes change in federal and state spending on tuition for undergraduates at public universities net of reductions in existing financial aid and education credits. Simulated by TPC model's education module.

^f Average change in Social Security benefits by quintile from DYNASIM3 adjusted to produce same total spending when applied to TPC model tax units. Benefit changes are small in 2017 because the Sanders Social Security plan would phase in over time. If the plan were implemented at 2035 levels in 2017, the average change in Social Security benefits would be \$235.

^g Net transfers is defined as transfer payments made to each tax unit less taxes.

We distribute results from other models and estimates for the change in health, LTSS, and Social Security benefits to households in the TPC model. We apply the average change in government acute health care benefits for the non-Medicare population by AGI quintile, modeled in HIPSM, to tax units in the TPC model. We first adjust the HIPSM averages to produce the same overall spending change when applied to tax units in the TPC model. We then distribute the total change in government acute health care benefits for the current-law Medicare population as estimated by Holahan et al. (2016) to tax units with Medicare enrollees in the TPC model. We apply the average change in LTSS and Social Security benefits by AGI quintile from DYNASIM3 to tax units in the TPC model, adjusting the DYNASIM3 averages to produce the same overall spending in the TPC model.

Unlike our federal cost estimates below, the benefit changes in the distribution table reflect the net effect on households regardless of the source of the new spending. In the distribution table, the single-payer health benefit does not include the portion of the benefit replacing the state portion of Medicaid while our federal cost estimate does. Similarly, the education benefit in the distribution table includes new federal and state spending on tuition net of reductions in existing federal and state financial aid and federal education credits while the cost estimate just includes the federal portions.

Previous TPC analysis (Sammartino et al. 2016) found that Senator Sanders's tax proposals would raise taxes throughout the income distribution, increasing the average tax burden by about \$9,000 in 2017 (table 1).¹² The highest-income households would experience the largest increase both in dollars and as a percentage of income.

Including the new and expanded programs proposed by Senator Sanders changes the story. His plans would increase average transfers by more than \$13,000 in 2017—over 20 percent of AGI. Lower-income households would receive a larger benefit relative to their income even though high-income households would benefit more in absolute dollars. On average, households in the lowest quintile would see their benefits nearly triple as a percentage of AGI, but benefits would increase by less than 3 percent of AGI for those in the top 5 percent.

Benefit increases would, on average, more than offset the increase in taxes for all but the highest-income tax units. Overall, the average net gain (transfers less taxes) would be nearly \$4,300 in 2017. The net effect would be highly progressive: households in the bottom quintile would see an average increase in net transfers of over \$10,000 (280 percent of AGI) and those in the middle quintile would see an average gain of about \$8,500 (21 percent of AGI). In sharp contrast, households in the top 5 percent would be worse off, with the average tax increase exceeding benefit gains by about \$111,000 for a net loss of 17 percent of AGI.

About 90 percent of the increase in transfers would come from the acute health care benefit, which would boost net incomes by an average of about \$12,000. Senator Sanders's plans

for LTSS would account for more than half of the remaining increase. The new acute health care benefits would replace current benefits from Medicare, Medicaid, and ACA subsidies, which disproportionately flow to lower-income households. Because the new program would be more generous than current-law public coverage, families with existing government insurance would still be better off under the Sanders proposal. Average net gain as a percentage of income would be higher for these families than for households in other income groups. The LTSS benefit also declines as a percentage of income as income rises, reflecting lower incomes among the frail and disabled. Both the family leave and education benefits increase with income in dollar terms, though as a percentage of AGI, family leave benefits help the middle quintile the most while education benefits declines with higher income.

The enhanced Social Security benefits would only increase net income by an average of \$10 in 2017 because the Sanders Social Security plan would phase in over time. Each year, retirees would get another year of enhanced cost-of-living adjustments and a new cohort of retirees would receive initial benefits from the enhanced formula. Additionally, much of the enhanced benefit formula would phase in between 2020 and 2035. The Office of the Chief Actuary projects the Sanders plan would increase Social Security benefits 4 percent by 2035 and 7 percent by 2090.¹³ If implemented at 2035 levels today, the plan would, on average, increase net transfers by about \$200 more than the estimate shown in table 1.

EFFECT ON THE DEFICIT

Over the next 10 years, the Sanders plan would increase federal revenues by \$15.3 trillion but also increase federal outlays by \$33.3 trillion, growing the cumulative budget deficit by about \$18 trillion or roughly 7.5 percent of GDP (table 2).

If unfunded, the deficit increase would raise interest payments on the national debt by over \$3 trillion over the next ten years. The dramatic increase in government borrowing would crowd out private investment, raise interest rates, further increase government borrowing costs, and retard economic growth. In combination with the dramatically higher tax rates, which would reduce incentives to work, save, and invest, the negative macroeconomic effects of the plan could be severe (Sammartino et al. 2016). Our estimates do not account for those macroeconomic feedback effects.

TABLE 2

Senator Bernie Sanders's Tax and Transfer Proposals

Impact on tax revenue and outlays, 2017–26



(billions of dollars)	
Change in revenues	
Individual income and payroll tax	13,598
Corporate income tax	1,013
Estate and gift taxes	237
Excise tax revenues	429
Total revenue change	15,278
Change in outlays	
Single-payer acute health care	29,116
Long-term care	2,937
Tuition-free college	807
Family medical leave	270
Expanded Social Security	188
Total change in outlays	33,319
Change in deficit	18,041
Change in net interest	3,298
Change in deficit including net interest	21,339
(as percent of GDP)	
Change in revenues	6.4%
Change in noninterest spending	13.9%
Change in deficit	7.5%
Change in net interest	1.4%
Change in deficit including net interest	8.9%
Memorandum	
Current law revenues	18.2%
Current law noninterest spending	19.1%

Sources: Sammartino et al. (2016), Holahan et al. (2016), Urban-Brookings Tax Policy Center Microsimulation Model, Urban Institute's DYNASIM3 model, and CBO (2015a, 2015b). See letter from the Office of the Chief Actuary to Senator Bernie Sanders, note 10.

Note: Baseline is current law.

CONCLUSION

The Sanders tax plan would increase taxes throughout the income distribution and places most of the new burdens on the highest-income households. Senator Sanders would use this revenue to increase government transfers substantially across the income distribution. Measured as a share of income, that additional support would be most beneficial to low-income households. All groups would receive higher net transfers (transfers less taxes) except for those in the top 5 percent of households. However, the plan would grow federal deficits and the national debt to unprecedented levels. The ultimate distribution of benefits under the plan would depend upon whether the government financed that deficit through tax increases, spending cuts, increased borrowing, or some combination of these options. A plan substantially financed by borrowing could raise interest rates and impose a substantial drag on the economy.

NOTES

¹ For example, the models use different measures of household income and have somewhat different income distributions because, among other reasons, they are based on different samples.

² See the full report, Sammartino et al. (2016), for more details and a complete analysis of the Sanders tax plan.

³ “Medicare for All: Leaving No One Behind,” Bernie 2016, accessed May 4, 2016, <https://berniesanders.com/issues/medicare-for-all/>.

⁴ *Ibid.*

⁵ College for All Act, S. 1373.

⁶ Family and Medical Insurance Leave Act, S. 786.

⁷ We use the TPC model to simulate family leave benefits based on measures of earnings, sex, and age already in the model; birth rates from Vital Statistics; and incidence of informal caregiving among adults in the Health and Retirement Study reported in Butrica and Karamcheva (2014).

⁸ Social Security Expansion Act, S. 731.

⁹ Senator Sanders would increase the cost-of-living adjustment by switching from the Consumer Price Index for all urban consumers to the Consumer Price Index for the elderly. He would increase the special minimum primary insurance amount for workers becoming eligible for benefits after 2017. His proposal would enhance the benefit formula in a progressive manner by phasing in a 15 percent increase in the first primary insurance amount bend point between 2020 and 2035.

¹⁰ Office of the Chief Actuary, letter to Senator Bernie Sanders with revised estimates for the Social Security Expansion Act, February 4, 2016, https://www.ssa.gov/oact/solvency/BSanders_20160204.pdf.

Combined with his proposal to lift the old-age, survivor, and disability insurance (OASDI) payroll tax cap for those with earnings above \$250,000 and introduce a tax on net investment income earmarked for Social Security, the Social Security Administration projects the combined Sanders Social Security plan would delay the exhaustion of OASDI Trust Funds from 2034 to 2074.

¹¹ AGI is an imperfect measure of income before taxes and transfers because it includes taxable Social Security and unemployment benefits.

¹² The table measures LTSS benefits and Social Security on a cash flow basis.

¹³ See letter from the Office of the Chief Actuary to Senator Bernie Sanders, note 10.

REFERENCES

Butrica, Barbara, and Nadia Karamcheva. 2014. *The Impact of Informal Caregiving on Older Adults' Labor Supply and Economic Resources*. Washington, DC: Urban Institute.

CBO (Congressional Budget Office). 2015a. *The Budget and Economic Outlook: 2015 to 2025*. Washington, DC: Congressional Budget Office. <https://www.cbo.gov/sites/default/files/114th-congress-2015-2016/reports/49892-Outlook2015.pdf>.

———. 2015b. *The 2015 Long-Term Budget Outlook*. Washington, DC: Congressional Budget Office. <http://www.cbo.gov/sites/default/files/114th-congress-2015-2016/reports/50250-LongTermBudgetOutlook-3.pdf>.

Holahan, John, Lisa Clemans-Cope, Matthew Buettgens, Melissa Favreault, Linda J. Blumberg, and Siyabonga Ndwandwe. 2016. *The Sanders Single-Payer Plan: The Impact on National Health Expenditures and Federal and Private Spending*. Washington, DC: Urban Institute.

Sammartino, Frank, Len Burman, Jim Nunns, Joseph Rosenberg, and Jeff Rohaly. 2016. *An Analysis of Senator Bernie Sanders's Tax Proposals*. Washington, DC: Tax Policy Center.



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