

An Alternative Way to Provide OASDI Payroll Tax Relief

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In considering the payroll tax reforms, I also analyzed an approach that would exempt some initial amount of labor income from the employee side of the OASDI tax. In contrast to reforms which cut the OASDI tax rate, exempting some initial amount of earnings from the OASDI tax produces a more progressive result. That's because the exempt amount would represent a larger share of the earnings and total income of lower-income households than higher-income households.

For this analysis, I start by exempting the first \$5,000 of labor earnings from the employee side of OASDI taxes. Related options include exempting the first \$5,000 of labor earnings from both the employee and employer sides of the tax, which would spur employment and double the revenue costs, or exempting the first \$7,500 or \$10,000 of earnings from the employee side of the payroll tax. For all such reforms, we also would adjust the exempt amount each year for inflation, using the average 2.53 percent inflation rate for the years 1990 to 2016. I found,

- Exempting the initial \$5,000 in labor income would save a typical household in the middle of the income distribution an average of \$532 per-year from 2019 to 2028. Similarly, a \$7,500 exemption would save that household an average of \$798 per-year, and a \$10,000 exemption would save them an average of \$1,064 per-year.

Further, based on my previous analysis of five possible new taxes,

- We could finance the \$5,000 exemption by applying the 0.1 percent tax to financial transactions or by raising the corporate income tax rate to 30 percent. We could finance the \$7,500 exemption by enacting a \$25 per-ton tax on greenhouse gas emissions or by raising the corporate tax rate to 32 percent. Finally, we could finance a \$10,000 exemption by taxing capital income at the same tax rate as labor income or by a combination of the 0.1 percent financial transaction tax and a 30 percent corporate tax rate.

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To calculate the benefits per-household by income, I start by calculating the benefits per-worker, again with the exemption increasing with average inflation of 2.53 percent per-year (Table1, below). The tax benefits per-worker from a \$5,000 exemption range from \$310 in 2019 to \$388 per-worker in 2028. Similarly, the per-worker benefits of a \$7,500 exemption rise from \$465 to \$582, and those benefits under a \$10,000 exemption rise from \$620 to \$776.

Table1: Exempt Amount and Savings Per-Worker, 2019-2028

	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Exempt	\$5,000	\$5,127	\$5,236	\$5,389	\$5,526	\$5,665	\$5,809	\$5,956	\$6,106	\$6,261
Savings	\$310	\$318	\$326	\$334	\$343	\$351	\$360	\$369	\$379	\$388
Exempt	\$7,500	\$7,690	\$7,884	\$8,084	\$8,288	\$8,498	\$8,713	\$8,933	\$9,159	\$9,391
Savings	\$465	\$477	\$489	\$501	\$514	\$527	\$540	\$554	\$568	\$582
Exempt	\$10,000	\$10,253	\$10,512	\$10,778	\$11,051	\$11,331	\$11,617	\$11,911	\$12,213	\$12,522
Savings	\$620	\$636	\$652	\$668	\$686	\$702	\$720	\$738	\$758	\$776

The savings *per-household*, as compared to per-worker, depend on the average number of workers per-household in each income group. The supplementary data to the CBO report on [The Distribution of Household Income, 2016](#) include data on the total number of people, households, adults, children and the elderly in each income quintile, for each year from 1990 to 2016. To estimate the number of workers per-household, I divided the number of adults in each income quintile by the number of households in that quintile for each year from 1990 to 2016, and then I averaged the results for each income quintile. (See Table 2 below) Based on those data, the average household has an estimated 1.42 to 1.75 working adults:

Table 2: Average Number of Workers Per-Household, by Income Quintiles, 1990-2016:

All	Income Quintile					
	1%-20%	21%-40%	41%-60%	61-80%	81%-90%	91%-95%
1.56	1.46	1.42	1.53	1.65	1.75	1.75

Using these results and the payroll tax savings per-worker from Table 1, I can calculate the savings per-household in each income quintile per-year from 2019 to 2028. The average annual benefits from 2019 to 2028 under an exemption from the employee side of OASDI taxes for the first \$5,000 in labor earnings range from \$493 to \$608 per-household, based on income group. (Table 3, below) The average household in the middle of the income distribution would save an average of \$532 per-year

Table 3: Savings Per-Household from Exempting \$5,000 in Labor Income from OASDI Taxes for Employees, by Income Quintile, 2019-2028

Year	All	Income Quintile					
		1%-20%	21%-40%	41%-60%	61%-80%	81%-90%	91%-95%
2019	\$483	\$452	\$440	\$474	\$511	\$542	\$542
2020	\$495	\$463	\$451	\$487	\$524	\$556	\$556
2021	\$508	\$475	\$462	\$499	\$537	\$570	\$570
2022	\$520	\$487	\$474	\$511	\$550	\$584	\$584
2023	\$534	\$500	\$486	\$525	\$565	\$600	\$600
2024	\$547	\$511	\$498	\$537	\$578	\$614	\$614
2025	\$561	\$525	\$510	\$551	\$593	\$629	\$629
2026	\$575	\$538	\$523	\$565	\$608	\$645	\$645
2027	\$590	\$552	\$537	\$580	\$625	\$662	\$662
2028	\$605	\$565	\$550	\$594	\$639	\$678	\$678
Total	\$5,419	\$5,067	\$4,932	\$5,321	\$5,732	\$6,080	\$6,080
Average	\$542	\$507	\$493	\$532	\$573	\$608	\$608

Similarly, the average annual savings over this period from exempting the first \$7,500 of labor income from the employee side of OASDI taxes range from \$740 to \$912 per-household, based on household income. See Table 4, below.

Table 4: Savings Per-Household from Exempting \$7,500 in Labor Income from OASDI Taxes for Employees, by Income Quintile, 2019-2028

Year	All	Income Quintile					
		1%-20%	21%-40%	41%-60%	61%-80%	81%-90%	91%-95%
2019	\$725	\$678	\$660	\$711	\$767	\$813	\$813
2020	\$743	\$695	\$677	\$731	\$786	\$834	\$834
2021	\$762	\$713	\$693	\$749	\$806	\$855	\$855
2022	\$780	\$731	\$711	\$767	\$825	\$876	\$876
2023	\$801	\$750	\$729	\$788	\$848	\$900	\$900
2024	\$821	\$767	\$747	\$806	\$867	\$921	\$921
2025	\$842	\$788	\$765	\$827	\$890	\$944	\$944
2026	\$863	\$807	\$785	\$848	\$912	\$968	\$968
2027	\$885	\$828	\$806	\$870	\$938	\$993	\$993
2028	\$908	\$848	\$825	\$891	\$959	\$1,017	\$1,017
Total	\$8,129	\$7,601	\$7,398	\$7,982	\$8,598	\$9,120	\$9,120
Average	\$813	\$761	\$740	\$798	\$860	\$912	\$912

Finally, the average annual savings from exempting the first \$10,000 in labor income from the employee side of the OASDI tax would range from \$1,014 to \$1,216 per-household over the decade from 2019 to 2028, depending on income quintile.

Table 5: Savings Per-Household from Exempting \$10,000 in Labor Income from OASDI Taxes for Employees, by Income Quintile, 2019-2028

Year	All	Income Quintile					
		1%-20%	21%-40%	41%-60%	61%-80%	81%-90%	91%-95%
2019	\$966	\$904	\$880	\$948	\$1,022	\$1,084	\$1,084
2020	\$990	\$926	\$902	\$974	\$1,048	\$1,112	\$1,112
2021	\$1,016	\$950	\$924	\$998	\$1,074	\$1,140	\$1,140
2022	\$1,040	\$974	\$948	\$1,022	\$1,100	\$1,168	\$1,168
2023	\$1,068	\$1,000	\$972	\$1,050	\$1,130	\$1,200	\$1,200
2024	\$1,094	\$1,022	\$996	\$1,074	\$1,156	\$1,228	\$1,228
2025	\$1,122	\$1,050	\$1,020	\$1,102	\$1,186	\$1,258	\$1,258
2026	\$1,150	\$1,076	\$1,046	\$1,130	\$1,216	\$1,290	\$1,290
2027	\$1,180	\$1,104	\$1,074	\$1,160	\$1,250	\$1,324	\$1,324
2028	\$1,210	\$1,130	\$1,100	\$1,188	\$1,278	\$1,356	\$1,356
Total	\$10,838	\$10,134	\$9,864	\$10,642	\$11,464	\$12,160	\$12,160
Average	\$1,084	\$1,014	\$986	\$1,064	\$1,146	\$1,216	\$1,216

Next, I analyzed the distributional effect of this change in payroll taxes by calculating for each income group the average savings per-household as a percentage of their labor income and their total income. As expected, this analysis shows that exempting some level of initial earnings from the employee side of the payroll tax produces more progressive results than cutting the payroll tax rate. In contrast to the distributional impact of cutting the payroll tax rate, the benefits from exempting initial income as a share of a household's income are greater for lower-income

households than middle-income households, and greater for middle-income households than high-income households. (Table 6, below) For example, the household saving from exempting \$7,500 per-worker from the employee’s OASDI tax would be equivalent to 5.0 percent of labor income and 2.8 percent of total income for low-income households, compared to 1.6 percent and 0.9 percent for middle-income households and 0.6 percent and 0.3 percent for high-income households.

Table 6: Average Annual Savings as a Percentage of Labor Income and Total Income by Exempting \$5,000, \$7,500 and \$10,000 in Labor Income from OASDI Taxes for Employees, Per-Household, by Income Level, 2019-2028

	All	Income Quintile					
		1%-20%	21%-40%	41%-60%	61%-80%	81%-90%	91%-95%
<i>\$5,000 Exemption</i>							
Labor Income	0.73%	3.34%	1.62%	1.05%	0.70%	0.49%	0.41%
Total Income	0.39%	1.9%	0.84%	0.57%	0.40%	0.30%	0.21%
<i>\$7,500 Exemption</i>							
Labor Income	1.10%	5.01%	2.43%	1.58%	1.05%	0.74%	0.62%
Total Income	0.58%	2.78%	1.27%	0.86%	0.60%	0.45%	0.31%
<i>\$10,000 Exemption</i>							
Labor Income	1.46%	6.67%	3.24%	2.10%	1.40%	0.98%	0.82%
Total Income	0.78%	3.8%	1.68%	1.14%	0.80%	0.60%	0.42%

Finally, I calculated the revenue cost of these initial exemptions. Drawing on [data](#) and [analysis](#) from the Tax Policy Center operated by the Urban Institute and the Brookings Institution, I found that exempting the initial \$5,000 in earnings by all employees from the employee side of the OASDI tax would reduce payroll tax revenues by \$721.1 billion over the decade from 2019 to 2028, or an average of \$72.1 billion per-year (Table 7, below). Similarly, the \$7,500 exemption would reduce OASDI revenues by \$1,081.6 billion over the 10 years of \$108.2 billion per-year, and the \$10,000 exemption would cost \$1,442.1 billion over the decade or \$144.2 billion per-year.

Table 7: Revenue Cost of Exempting \$5,000, \$7,500 or \$10,000 in Labor Income From OASDI Taxes for Employees, 2019-2028 (\$ billions)

2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	Total
<i>\$5,000 Exemption</i>										
-\$62.2	-\$64.2	-\$66.3	-\$68.5	-\$70.7	-\$73.0	-\$75.3	-\$77.7	-\$80.3	-\$82.8	-\$721.1
<i>\$7,500 Exemption</i>										
-\$93.4	-\$96.4	-\$99.5	-\$102.7	-\$106.0	-\$109.4	-\$113.0	-\$116.6	-\$120.4	-\$124.3	-\$1,081.6
<i>\$10,000 Exemption</i>										
-\$124.5	-\$128.5	-\$132.6	-\$136.9	-\$141.3	-\$145.9	-\$150.6	-\$155.5	-\$160.5	-\$165.7	-\$1,442.1

Based on these calculations and our previous analysis of the revenues that could be raised through five new taxes, we could finance these exemptions in a number of ways:

- The \$721.1 billion 10-year cost of exempting each worker’s initial \$5,000 in labor earnings from the employee side of the OASDI tax could be funded by applying a 0.1 percent tax to

financial transactions (\$776.7 billion over 2019 to 2028) or by raising the corporate income tax rate to 30 percent (\$886.7 billion over those years).

- The \$1,081.6 billion 10-year cost of exempting each worker's initial \$7,500 in labor earnings from the employee's payroll tax could be funded by the \$25 per-ton climate tax on greenhouse gas emissions (\$1,098.5 billion over the 10 years) or by adjusting the proposed increase in the corporate tax rate to 32 percent instead of 30 percent (\$1,083.7 billion over those years).
- Finally, the \$1,442.1 billion 10-year cost of exempting each worker's initial \$10,000 in labor income from employee OASDI taxes could be financed by taxing capital income at the same rate as labor income (\$1,531.4 billion over 2019 to 2028) or by the combination of the 0.1 percent financial transaction tax and a 30 percent corporate tax rate (\$1,663.4 billion over those years).