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SECOND THOUGHTS

The Distributional Effects of the Affordable Care Act's Cadillac Tax by Worker Income

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As a result of section 9001 of the 2010 [Patient Protection and Affordable Care Act](#) (ACA), a new excise tax on high-cost employer-sponsored health coverage will be introduced on January 1, 2018. Often referred to as the "Cadillac tax" in the media and health policy literature, this provision will introduce a 40 percent excise tax on health benefits that exceed a \$10,200 threshold for single coverage and a \$27,500 threshold for family coverage, annually. While the Cadillac tax is expected to affect only about 16 percent of employment-based health plans in 2018, the thresholds will increase with the Consumer Price Index; historically, this index has increased more slowly than the growth in health care spending, so that the Cadillac tax is expected to affect about half of employment-based health plans (which reflect actual health care spending) by 2025 [1].

The primary motivation behind this Cadillac tax provision is to mitigate the inefficiency associated with the tax exclusion for [employment-based insurance](#). Health benefits provided by an employer are not subject to income or payroll taxes, which makes receiving additional compensation from an employer in the form of generous health benefits more attractive to employees than higher cash wages [2]. This increased generosity of health benefits (in the form of lower deductibles or copayments, coverage of additional services or clinicians, or both) can, in turn, lead to the overconsumption of low-value medical care, in which case the underlying costs of that care exceed its beneficial effects on health [3]. Just as an excise tax on cigarettes aims to reduce smoking, the Cadillac tax aims to get employees to switch to less generous coverage to avoid paying the tax.

Another political motivation behind the Cadillac tax provision appears to have been mitigating the inequitable way the employment-based tax exclusion affects those with varying levels of income. For instance, during the lead-up to the passage of the ACA, President Obama's senior advisor, David Axelrod, said, "this was an intriguing idea to put an excise tax on high-end health care policies like the ones that the executives at Goldman Sachs have" [4]. Because employer-sponsored plans are exempt from payroll and income taxes, the benefit of the current exclusion is indeed relatively larger for higher-income people (who have high marginal tax rates) and relatively smaller for lower-income people (who have low marginal tax rates). However, as we illustrate with

the numerical examples below, the Cadillac tax does not mitigate this inequity; it actually exacerbates it.

A Simple Numerical Example of the Tax Subsidy and the Effect of the Cadillac Tax

To illustrate these issues, we present a set of simple numerical examples for three different representative health plans prior to the implementation of the Cadillac tax and show the premiums and tax exclusions for a low-wage worker and a high-wage worker. We then show how the Cadillac tax is likely to affect the most generous of these three health plans.

The three different representative health plans, called silver, gold, and platinum in the ACA's individual health insurance exchanges, have actuarial values—the percent of total health care spending that a plan covers—of 70 percent, 80 percent, and 90 percent, respectively. In 2010, about 23 percent of group plans had an actuarial value of 90 percent or higher, about 41 percent of group plans had an actuarial value between 80 and 90 percent, and about 28 percent of group plans had an actuarial value between 70 and 80 percent [5]. We start by assuming that the premium is \$10,000 for a single-coverage plan with an 80 percent actuarial value and that administrative costs are 10 percent of the premium without incorporating the Cadillac tax. We also adjust the total health care spending amounts (the sum of insurance benefits and out-of-pocket payments) for the three plans to be consistent with the RAND Health Insurance Experiment's -0.2 estimate of the price elasticity of demand for health care (i.e., that a 10 percent increase in the price of health care results in a 2 percent decrease in spending on health care) [3].

Table 1 displays the three plans' costs, benefits, and tax exclusions, before and after the implementation of the Cadillac tax, for low- and high-income workers. (The effect on Plan 3 of implementing the Cadillac tax is discussed further below.)

The net enrollee costs (the premium plus the out-of-pocket costs minus the tax exclusion) are shown for a low-income worker (with a 10 percent federal marginal income tax rate) and a high-income worker (with a 28 percent federal marginal income tax rate). Both of these workers also face federal payroll taxes on the employee and the employer of 7.65 percent each and a state income tax, which we assume equals one-fourth of the federal income tax. The resulting combined marginal tax rate is 26 percent for this low-income worker and 47 percent for this high-income worker.

Table 1. Costs, tax exclusions, and benefits by health plan and income

	Plan 1: 70% AV before and after CT	Plan 2: 80% AV before and after CT	Plan 3: 90% AV before CT	Plan 3: 87% AV after CT
Low-Income Worker^a				
Premium ^b	\$7,875	\$10,000	\$12,375	\$12,810
Cadillac Tax	n/a	n/a	n/a	\$1,044
Administrative Costs	\$788	\$1,000	\$1,238	\$1,177
Benefits Paid	\$7,088	\$9,000	\$11,138	\$10,589
Out-of-Pocket Costs	\$3,038	\$2,250	\$1,238	\$1,529
Total Health Care Spending ^c	\$10,125	\$11,250	\$12,375	\$12,119
Tax Exclusion ^d	-\$2,034	-\$2,582	-\$3,196	-\$3,308
Net Enrollee Cost ^e	\$8,879	\$9,668	\$10,417	\$11,031
High-Income Worker^f				
Premium ^b	\$7,875	\$10,000	\$12,375	\$12,810
Cadillac Tax	n/a	n/a	n/a	\$1,044
Administrative Costs	\$788	\$1,000	\$1,238	\$1,177
Benefits Paid	\$7,088	\$9,000	\$11,138	\$10,589
Out-of-Pocket Costs	\$3,038	\$2,250	\$1,238	\$1,529
Total Health Care Spending ^c	\$10,125	\$11,250	\$12,375	\$12,119
Tax Exclusion ^d	-\$3,680	-\$4,673	-\$5,782	-\$5,986
Net Enrollee Cost ^e	\$7,233	\$7,577	\$7,830	\$8,354

Notes: AV stands for actuarial value; CT stands for Cadillac tax.

^a Assumes a 10 percent federal marginal income tax rate to give a 26 percent combined marginal tax rate.

^b Includes both the employer and employee contributions to the premium.

^c Equals the sum of the benefits paid plus out-of-pocket costs.

^d Incorporates federal and state marginal income tax rates (the latter assumed to be one-fourth of the former) and a 7.65 percent federal payroll tax on each of employees and employers.

^e Equals the premium plus the out-of-pocket costs minus the tax exclusion.

^f Assumes a 28 percent federal marginal income tax rate to give a 47 percent combined marginal tax rate.

Inefficiency. The main takeaway regarding the inefficiency of the current employment-based tax exclusion is that it provides employees an incentive to obtain relatively generous plans that can lead to overconsumption of low-value, i.e., inefficient, care. Here's how: the magnitude of the tax exclusion increases as the actuarial value (and hence the premium) increases. As can be seen in table 1, the tax exclusion for the low-wage worker is \$2,034 for plan 1's 70 percent actuarial value, but a higher \$2,582 for

plan 2's 80 percent actuarial value, and an even higher \$3,196 for plan 3's 90 percent actuarial value.

Inequity. The main takeaway regarding the inequity of the current employment-based tax exclusion is that the magnitude of the tax exclusion (holding the actuarial value of the plan constant) increases as one's combined marginal tax rate increases. For instance, the tax exclusion for plan 1 is \$2,034 for a low-wage worker but a higher \$3,680 for a high-wage worker. Similarly, the tax exclusion for plan 3 is \$3,196 for a low-wage worker but a higher \$5,792 for a high-wage worker. The net tax benefit (the initial tax exclusion before implementation of the Cadillac tax) for plans 1, 2, and 3 is shown graphically in figure 1, which also includes the tax exclusion amounts for the 15 percent and 25 percent federal marginal income tax rate brackets. Figure 1 also shows plan 3's net tax benefit (the tax exclusion minus the Cadillac tax) after the Cadillac tax's implementation.

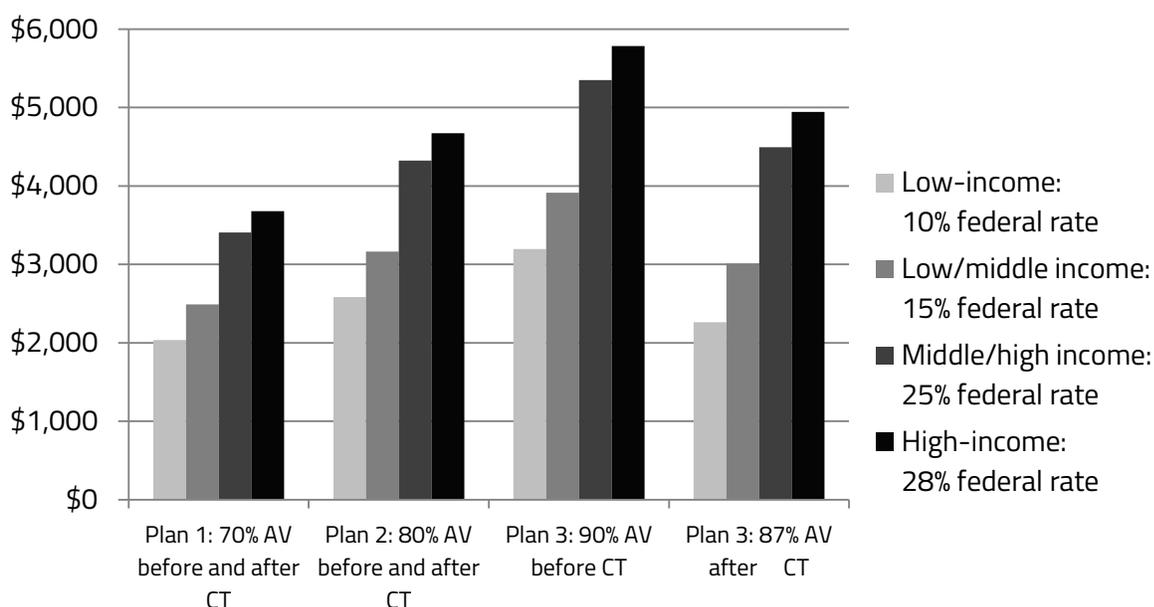


Figure 1. Net tax benefit by health plan and by income.

Notes: AV stands for actuarial value; CT stands for Cadillac tax.

So what is the effect of implementing the Cadillac tax? Plan 1's premium (\$7,875) and plan 2's premium (\$10,000) are under the Cadillac tax threshold of \$10,200 for single coverage and are thus unaffected. Because plan 3's premium of \$12,375 (prior to implementing the Cadillac tax) is over the \$10,200 threshold and thus subject to an additional tax payment, people are expected to switch to lower-cost plans to reduce (but not necessarily eliminate) the Cadillac tax paid. Based on a synthesis of the relevant economic literature, the Congressional Budget Office assumes that a 10 percent increase in the price of health insurance results in a 7 percent decrease in spending on health

insurance [6]. As shown in the final two columns of table 1, this causes the benefits paid to decrease from \$11,138 prior to implementation of the Cadillac tax to \$10,589 following it.

The resulting decrease in the actuarial value from 90 percent to 87 percent following the implementation of the Cadillac tax is the intended effect of mitigating the inefficiency (i.e., the overuse of low-value care) associated with the employment-based tax exclusion. However, it only narrowly targets this inefficiency, because plan 2's tax exclusion is still larger than plan 1's tax exclusion (for both high-income and low-income workers) and thus maintains the bias towards plan 2's 80 percent actuarial value over plan 1's 70 percent actuarial value. Over time, though, the indexing of the Cadillac tax thresholds with the Consumer Price Index will mean that plans with increasingly lower actuarial values will be affected.

Finally, consider the differential effects of implementing the Cadillac tax on low-income and high-income workers. The decrease in the net tax benefit (i.e., the tax exclusion on the new, higher premium minus the Cadillac tax) is ultimately 11 percent less for the high-income worker than for the low-income worker: for the low-income worker, the net tax benefit decreases from \$3,196 (i.e., the initial tax exclusion on the 90 percent actuarial value premium before the implementation of the Cadillac tax) to \$2,264 (i.e., the \$3,308 tax exclusion on the new, higher premium minus the \$1,044 Cadillac tax; \$1,044 is 40 percent of the amount by which the \$12,810 premium exceeds the \$10,200 threshold), for a decrease in the net tax benefit of \$932. For the high-income worker, the net tax benefit decreases from \$5,782 (i.e., the initial tax exclusion) to \$4,942 (i.e., the \$5,986 tax exclusion on the new premium minus the \$1,044 Cadillac tax), for a decrease in the net tax benefit of \$841. These amounts for plan 3's decrease in the net tax benefit are shown graphically on the left-hand side of figure 2, where the value of \$906 for the 15 percent tax bracket and the value of \$856 for the 25 percent tax bracket are added.

A similar regressive (i.e., less favorable for those with lower incomes) effect of the Cadillac tax implementation can be observed by examining the increase in the net cost (the premium plus the out-of-pocket costs minus the tax exclusion), shown graphically on the right-hand side of figure 2. For a low-income person in the 10 percent tax bracket, the net cost of plan 3 increases by \$614. For a high-income person in the 28 percent tax bracket, the net cost of plan 3 increases by \$523—15 percent less than \$614.

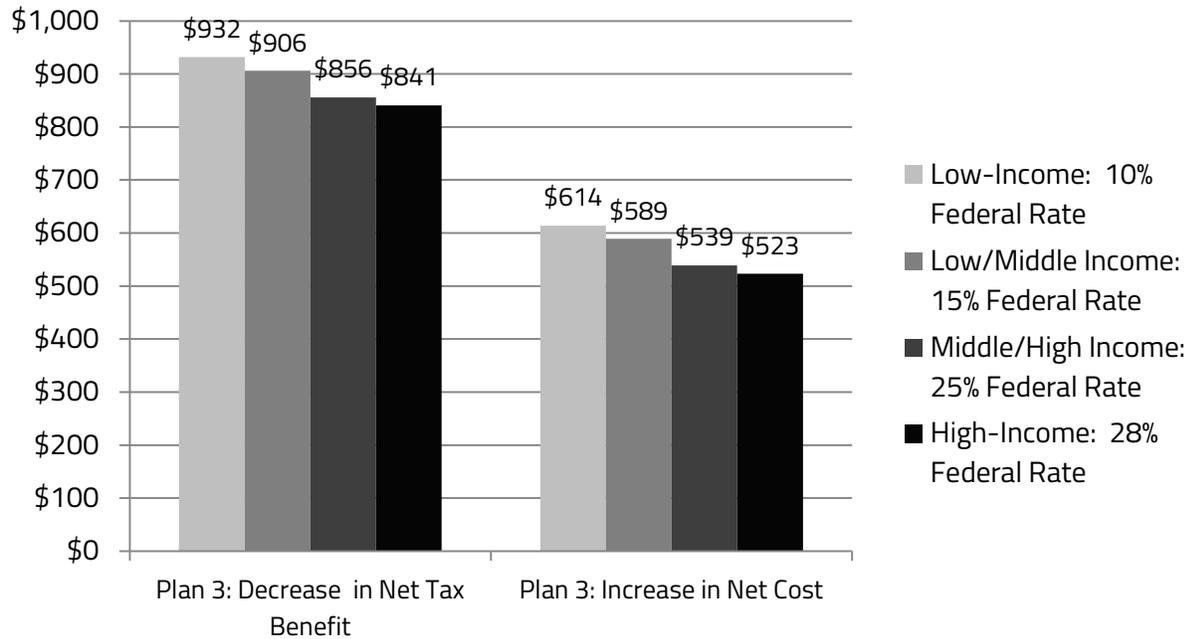


Figure 2. Changes in net tax benefit and net cost from implementing the Cadillac tax by income.

Discussion

Our analysis of plan 3, with its 90 percent actuarial value, demonstrates that the Cadillac tax can be viewed as a regressive policy, in that it results in a larger decrease in the net tax benefit for low-income workers than for high-income workers and a larger increase in net cost for low-income workers than for high-income workers.

One caveat is that this conclusion holds for high-income and low-income workers who are both in the same initial plan (i.e., plan 3 and its 90 percent actuarial value, in this example). Under certain circumstances, the aggregate effect of the policy change might not be regressive—if, initially, high-income people were disproportionately in plans with higher actuarial values and low-income people were disproportionately in plans with lower actuarial values, individual high-income workers would have smaller losses than their low-income counterparts under the Cadillac tax, but, since there are more insured higher-income workers than lower-income insured workers, the total amount of those losses could be equal to or more than the total amount of losses affecting lower-income workers. However, this seems unlikely: while higher-income workers are more likely to be insured than lower-income workers [7], we are not aware of any evidence to indicate that higher-income workers with insurance have more generous benefits than insured lower-income workers. For instance, according to group insurance data from the 1997 and 1999 Community Tracking Study's Household Survey, income was an insignificant predictor for a plan's overall cost sharing [7].

For people in a given plan affected by the Cadillac tax, the magnitude of the excise tax added to the premium is the same for low-income workers and high-income workers. But because the employment-based tax exclusion works as a subsidy covering a percentage of one's premium, including any Cadillac tax paid, the low-income workers receive a relatively smaller subsidy to offset a portion of the Cadillac tax while the high-income workers receive a relatively larger subsidy to offset a portion of the Cadillac tax. All this adds up to a regressive effect.

One potential remedy for this inequity would be to transform the Cadillac tax into a cap on the employment-based exclusion at, for example, the seventy-fifth percentile or median premium. While this apparently has the political disadvantage of making the subsidy more transparent (as opposed to the Cadillac tax, which looks like a tax on insurers rather than an indirect tax on middle-class workers), it would partially address the inefficiency of plans over the cap and not introduce any new inequity by income. Another potential remedy would be to scrap the Cadillac tax and transform the employment-based tax exclusion into a universal (or perhaps progressive) refundable tax credit, but the extent of redistribution from high-income workers to low-income workers might be politically untenable.

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