

# THE FISCAL EFFECTS OF THE PUBLIC OPTION

TOM CHURCH, DANIEL L. HEIL AND LANHEE J. CHEN, PH.D.

WITH SUPPORT FROM THE PARTNERSHIP FOR AMERICA'S HEALTH CARE FUTURE

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## Abstract

Supporters of a federal public option contend that a government-run health plan will reduce federal deficits. These projected deficit savings are predicated on two major, but unrealistic, assumptions. First, public option proposals assume that the government will reimburse hospitals and providers at rates lower than paid by private insurers. Second, the proposals require plan premiums to fully cover plan costs. But the historical evidence demonstrates that Congress has generally been unwilling to maintain similar program rules in the face of strong political pressures. If Congress follows its past behavior, a public option could add over \$700 billion to the 10-year federal deficit, with dramatically larger losses in subsequent years. Furthermore, to avoid large increases in deficits, a politically realistic public option could require tax increases on most Americans, including middle-income families.

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## Introduction

There are renewed efforts underway for significantly expanding the federal government's role in health care among the non-elderly. Concerns about cost and access continue despite the federal insurance subsidies and state-run exchanges created by the Affordable Care Act (ACA). Proposals range from single-payer healthcare plans like Medicare for All to more targeted expansions such as a Medicare Buy-In or a federally-run public option.

The political will to adopt any of these proposals depends in part on their fiscal effects. A public option is viewed as a more politically viable approach because it has been scored as deficit reducing. However, a public option would disrupt the market for private health insurance and have significant financial consequences for hospitals and providers. Nevertheless, in a time of record-high deficits and healthcare costs, the public option appears to be a free lunch for policymakers, apparently allowing them to reduce government borrowing while lowering the cost of coverage.

The optimistic deficit effects are predicated on two major, but flawed, assumptions. First, public option proposals assume the government will negotiate hospital and provider reimbursement rates similar to Medicare's fee schedules and far below what private insurers pay. Second, public option proposals generally require that their premiums cover 100 percent of all provided benefits and administrative costs (called actuarially fair premiums).

The history of federal healthcare legislation provides ample reason to be skeptical of these assumptions. The federal government has repeatedly shielded enrollees from increases in healthcare costs. Congress has instead acquiesced to political pressure from enrollees and interest groups to increase premium subsidies. Likewise, Congress has shown an unwillingness to maintain low provider reimbursement rates. If premiums do not rise to cover program costs or reimbursement rates are raised in order to appease providers, the result will be a costly subsidy paid by taxpayers who were promised a self-sufficient government program.

This paper explores the fiscal consequences if Congress does what it has historically done with respect to premiums charged to enrollees and reimbursement rates paid to providers. Using past legislative increases as case studies, we describe how political pressure is likely to lead to large implicit subsidies ultimately paid by taxpayers. We then estimate the potential effects on spending, revenue, and the federal debt if premiums

fall below actuarially fair levels and reimbursements to providers are higher than initially promised. Using historically realistic assumptions, we estimate a politically realistic public option would increase federal deficits by \$700 billion over 10 years, with dramatically larger losses in subsequent years. To avoid large increases in deficits, this public option would likely require tax increases on middle-income families.

The major sections of the paper are discussed below. Part I explains the public option and discusses recent federal public option proposals and their cost estimates. Part II looks at various case studies that illustrate the political challenges and legislative responses that may occur after the enactment of a federal public option. Part III explains the data and methodology used to create a microsimulation of the likely budget effects of a public option. Part IV provides cost estimates under various premium and reimbursement rate assumptions. Part V explores the long-term debt effects if public option premiums do not remain actuarially fair and reimbursement rates rise to private levels. We also consider possible tax financing options to avoid increased borrowing. Part VI concludes.

## 1. Past Public Option Proposals and Their Cost Estimates

At the federal level, the public option is a government-run health insurance plan that would be available on the Affordable Care Act's (ACA) marketplace exchanges and compete directly with other qualified health plan options. By charging actuarially fair premiums, reimbursing providers at low rates, and increasing competition among insurance providers, the public option promises lower premiums and reduced systemwide health insurance costs.

Several federal public option plans have been proposed and evaluated since 2009. While their details vary, all of the proposals would create a federally administered insurance plan where the government would set premiums and directly set reimbursements rates for hospitals and providers. Public option proposals generally require the plan charge actuarially fair premiums that would cover 100 percent of benefits and administrative costs. These premiums, however, are expected to be lower than private insurance premiums due to administrative cost savings and lower reimbursement rates for physicians and hospitals relative to private insurance plans. In some cases, the proposals would explicitly set reimbursements rates at or near Medicare levels.

Previous estimates have assumed that the lower premiums would have multiple effects on the federal budget. First, they would result in reductions to ACA benchmark-plan

premiums, resulting in lower ACA premium subsidies. Second, tax revenue would rise from increases in taxable compensation for workers with employer-sponsored insurance (ESI) who opt for the less-expensive public option plans. These expected budget effects depend heavily on assumptions about reimbursement rates. Reimbursement rate assumptions of past public option proposals, however, have varied greatly, leading to differences in estimated outcomes. We discuss these cost estimates below.

## Previous Public Option Cost Estimates

Early versions of the Affordable Care Act included a public option that would be available on its marketplace exchanges. In a July 2009 score of the ACA, the Congressional Budget Office (CBO) analyzed a public option that would reimburse hospitals at Medicare rates and physicians at Medicare rates plus 5 percent.<sup>2</sup> It assumed reimbursement rates would rise according to an index of physicians' costs, faster than limits set by Medicare's Sustainable Growth Rate formula. CBO estimated that the premiums for the public option would be about 10 percent cheaper than the premiums of private plans. The difference was explained by the net effect of payment rates to providers, administrative costs, management to control spending totals, and the risk pool that would enroll. The lower premiums were expected to attract one third of the new enrollees in the health exchanges, or between 9 to 10 million people. While it did not include a separate estimate of the public option's effects on the deficit, it is likely that a disaggregated analysis would have led to deficit reduction over ten years due to low reimbursement rates and actuarially fair premiums.

In the months following the summer 2009 CBO score, hospitals and providers communicated their concerns about the ACA's aggressive reimbursement rate assumptions. By October, the bill's authors had removed the requirement that public option reimbursement rates would be close to Medicare levels. Instead, "the public plan would negotiate payment rates with all providers and suppliers of health care goods and services."<sup>3</sup> In light of these changes, CBO found that premiums for the public option would no longer necessarily be lower than private plans. Estimated enrollment fell to 6 million people. And even though administrative expenses would be smaller than comparable private plans, CBO expected that the federal government would not engage in stringent management techniques to restrain costs and would thus attract a less healthy risk pool.

In November 2009, CBO further modified its October estimate by assuming that not

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<sup>2</sup> Elmendorf (July 2009).

<sup>3</sup> Elmendorf (October 2009).

all states would offer a public option on their healthcare exchanges. Total estimated enrollees fell to 3 to 4 million individuals, or about 1 in 8 of those purchasing coverage through exchanges. With these changes, CBO estimated the public option would reduce the deficit by \$3 billion over seven years, on a balance of \$131 billion in benefit outlays and \$134 billion in collected premiums.<sup>4</sup>

It was at this point that former Senator Joseph Lieberman (I-CT) threatened to filibuster the ACA if the public option continued to be included.<sup>5</sup> The public option was soon removed from the bill.

In contrast with the autumn 2009 analysis, a 2011 CBO public option analysis returned to the assumption that hospital and physician reimbursement rates would be close to Medicare levels.<sup>6</sup> Premiums for the public plan were estimated to be 5 to 7 percent lower than comparable private plans on the exchanges, and an estimated 13 of the 38 million individuals estimated to be on exchanges would sign up for the public option. CBO assumed that some employers would stop offering health insurance due to the new availability of a cheap individual public option, and some employers would forgo purchasing existing private insurance options in favor of the public option for their employees. The resulting reduction in tax-exempt premium contributions would increase total taxable compensation, resulting in higher payroll and income taxes. Ultimately, the 2011 score found that this version of the public option would lower deficits by \$88 billion over eight years of operation.<sup>7</sup>

In a subsequent 2013 report of options to reduce spending and the debt, CBO again scored a public option as deficit reducing.<sup>8</sup> In contrast to the 2011 report, CBO made more favorable assumptions about the number of people who would drop employer-sponsored coverage for the public option and reduced its estimates about the number of employers applying for ACA tax credits that offset the cost of providing health insurance to their employees. Premiums were estimated to be 7 to 8 percent lower than existing private options and CBO estimated that about 35 percent of individuals on the exchanges would purchase a public option. As a result, their eight-year deficit-reduction score increased to \$158 billion from \$88 billion.

The above scores show how assumptions about provider reimbursement rates can greatly affect estimated take-up rates and cost estimates of public option plans. When

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<sup>4</sup> Elmendorf (November 2009).

<sup>5</sup> Halpin and Harbage (2010).

<sup>6</sup> Congressional Budget Office (March 2011).

<sup>7</sup> CBO estimated that the public option would begin two years after the report and it only provides ten-year cost estimates.

<sup>8</sup> Congressional Budget Office (November 2013).

provider reimbursement rates are close to Medicare levels, take-up among enrollees is high and federal spending falls due to lower required federal subsidies. When provider reimbursement rates are close to levels paid by private insurers, estimated cost savings do not materialize because enrollment is low and premium subsidies don't fall.

Importantly, the above estimates assume public option premiums remain actuarially fair. Consequently, changes in assumed reimbursement rates affect the magnitude but not the direction of the deficit effects. Even in an extreme scenario where public option premiums are set above private levels and take-up rates plummet, there would be little effect to the federal budget beyond administrative start-up costs. Nevertheless, maintaining actuarially fair premiums and low reimbursements rates is far from a guarantee. In fact, an historical analysis demonstrates that the federal government's commitment to similar assumptions in other healthcare programs wavered once political pressures grew too strong.

## 2. The Historical Experience of Premiums and Reimbursement Rates

The public option promises to lower federal deficits by charging actuarially fair premiums that are lower than private insurance plan premiums. These savings could be large if the government is able to secure low provider reimbursement rates similar to rates paid by Medicare. The history of other federal healthcare programs, however, indicates that the government is unlikely to charge actuarially fair premiums for long, or maintain low provider reimbursement rates.

In this section, we explore case studies that illustrate the political challenges and the likely congressional response a public option would face if it were enacted. First, we explore the legislative changes to Medicare Part B premiums that ultimately increased the federal government's Part B costs by about 50 percent. We then examine the brief history of the Medicare Catastrophic Coverage Act, where Congress last attempted a major healthcare expansion that was intended to be fully self-financing. Next, we explain Congress' frequent votes to protect Medicare providers from required cuts under Medicare's Sustainable Growth Rate. We then discuss recent legislation that increased federal Medicaid spending to raise physician reimbursement rates. Finally, we review recent state experiences with public option plans.

## Medicare Part B Premiums

The historical experience of premiums and cost-sharing in Medicare Part B illustrates the inevitable pressure faced by Congress to maintain low premiums.

Medicare Parts A and B were created in 1965. Part A provided hospital insurance and was financed through payroll taxes and limited cost-sharing agreements. Part B, called Supplementary Medical Insurance (SMI), filled the gap left by employer-sponsored insurance among retirees and was financed by enrollee-paid premiums and federal contributions.<sup>9</sup>

As written into law, premiums were set at a rate that covered half of actuarial costs and rose with the growth in program expenditures. Premiums began at \$3 per month—or \$23.50 in today’s dollars.<sup>10</sup> Medicare’s creators were initially worried about convincing eligible beneficiaries to enroll. Wilbur Cohen, the former secretary of the Department of Health, Education, and Welfare (HEW) and one of the architects of Medicare, “felt such a subsidy would be necessary to make a voluntary plan accepted by low-income retired people.”<sup>11</sup> Since beneficiaries were of retirement age and employer contributions could not be counted on to help finance benefits, “the only remaining course of action [was] for the government to participate in financing.”<sup>12</sup>

While increases to payroll tax rates and covered earnings to pay for Part A were built into law, it was assumed that expenditures for Part B would always be split equally between enrollees and the federal government. This fifty-fifty split promised to limit federal expenditures and encourage price-conscious behavior by enrollees. When medical costs rose, so too would premiums to cover higher expected benefits. From 1966 to 1968, premiums were indeed increased by 33 percent, from \$3 per month to \$4 per month.

Premiums were first held below actuarially fair values starting in 1969, just three years after the program began. (More specifically, regulations promulgated in December 1968 took effect in July 1969). Using his administrative authority, then-Secretary Cohen kept premiums at \$4 per month instead of \$4.50, as estimated by the Social Security Administration. He justified holding premiums below cost increases for two reasons. The first was that he believed Medicare beneficiaries could not afford the cost increases. The second was that physician costs had been rising too rapidly and he was attempting to maintain them at their then-current level.<sup>13</sup>

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<sup>9</sup> Social Security Amendments of 1965. Pub. L. 89-97, 79 Stat. 286.

<sup>10</sup> BLS Inflation Calculator, October 2019. \$23.20 in 2018 dollars, CPI-U.

<sup>11</sup> Cohen (1985).

<sup>12</sup> Myers (1994).

<sup>13</sup> Myers (1994).



But premiums could not be kept constant for long, since lower contributions meant lower reimbursements to healthcare providers. The very next year (under a different president), premiums were raised 32.5 percent. Political pressure to prevent further premium increases—or eliminate them altogether—materialized immediately. In 1970, Senator Fred Harris protested that the Part B premium had increased almost 80 percent in four years. “For those living on Social Security,” he objected, “this increase is almost prohibitive and it should be eliminated if the aim of the Medicare [sic] is to be realized.”<sup>14</sup>

Writing in 1970, the former Chief Actuary of the Social Security Administration Robert Meyers observed that some people were suggesting “that the entire increase should be borne by the federal government and that the original \$3 premium rate for the enrollee should be maintained.” Others, he noted, were suggesting “that the federal government should bear the entire cost.” He noted confidently that “neither of the foregoing suggestions has been advocated with any significant likelihood of success.”<sup>15</sup> But, succeed they did.

Just two years later, Congress officially ended the fifty-fifty split in the 1972 Social Security Amendments. Instead of keeping pace with healthcare costs, premiums would only be allowed to rise by the percentage increase of cost-of-living adjustments (COLAs) to Social Security benefits.<sup>16</sup> Since Medicare premiums are generally deducted from Social Security checks, the change ensured no Medicare recipient on Social Security would experience a nominal decline in their monthly check. And since healthcare expenditures grew much more rapidly than the price inflation that dictated COLA amounts, the federal government’s outlays quickly expanded.

Under the new formula, the federal government’s share of Part B expenditures rose from 50 percent to 75 percent. If the fifty-fifty split had been maintained, the federal government would have spent \$132.1 billion on Part B expenditures between 1973 and 1982 (adjusted to 2018 dollars). Instead, it spent \$183.8 billion, an increase of 39 percent. Over the following ten years it spent 55 percent more than scheduled on Part B, contributing \$498.8 billion instead of \$320.8 billion in real terms.<sup>17</sup>

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<sup>14</sup> Congressional Record. Senate. December 16, 1970. S 20340.

<sup>15</sup> Myers (1994).

<sup>16</sup> 1972 Amendments. <https://www.ssa.gov/history/1972amend.html>.

<sup>17</sup> Authors’ calculations. For actual figures, use 1992 SMI Medicare Trustees Report, Table I.C.1.

TABLE 1. Enrollee and government share of Part B expenditures

FISCAL YEAR	Premiums as a % of Total Part B Income	Government Contributions as a % of Total Income	Interest and Other Income as a % of Total Income
1967	50.4%	48.5%	1.2%
1968	51.6%	46.9%	1.6%
1969	47.3%	51.5%	1.3%
1970	49.9%	49.5%	0.6%
1971	49.8%	49.5%	0.7%
1972	49.0%	49.9%	1.1%
1973	49.2%	49.3%	1.6%
1974	44.7%	53.3%	2.0%
1975	43.7%	53.9%	2.4%
1976	39.1%	58.9%	2.1%
1977	29.7%	68.4%	1.9%
1978	26.9%	70.6%	2.5%
1979	26.8%	69.5%	3.7%
1980	28.5%	67.5%	4.0%
1981	26.7%	70.3%	3.0%
1982	21.7%	75.6%	2.7%

Premiums were 40 percent below their originally scheduled level just five years after the 1972 Social Security Amendments. Once the federal government's share reached 75 percent of Part B expenditures, premiums stabilized at a discount of 50 percent below what they were originally scheduled to be charged. Crucially, however, medical expenditures continued to rise year after year, meaning that while premiums remained about half of what they should have been charged to maintain the original formulation, the cost of the federal subsidy continued to grow each year.

During the 1980s, Congress regularly raised premiums to keep the federal share of Part B expenditures at 75 percent. In 1990, Congress set specific dollar increases in premiums for 1991 to 1995. These dollar increases in premiums proved larger than necessary to cover 25 percent of program costs. Finally, the Balanced Budget Act of 1997 (BBA) permanently set premiums for Medicare beneficiaries at 25 percent of Part B costs.<sup>18</sup>

<sup>18</sup> Congressional Research Service (April 2019).

TABLE 2. Percent premiums were held below original formation of Medicare Part B<sup>19</sup>

YEAR	%	YEAR	%
1973	-4.8%	1983	-55.6%
1974	-10.4%	1984	-53.5%
1975	-16.0%	1985	-53.0%
1976	-29.8%	1986	-51.4%
1977	-41.1%	1987	-52.2%
1978	-43.6%	1988	-49.9%
1979	-41.9%	1989	-43.1%
1980	-42.5%	1990	-49.0%
1981	-50.4%	1991	-51.8%
1982	-53.7%	1992	-49.2%

Even after the BBA, Medicare Part B premiums haven't always risen with Part B costs. The "hold harmless provision" of the Social Security Act prevents Social Security beneficiaries from having their benefit checks ever fall in nominal value. Social Security beneficiaries are "held harmless" if a Medicare Part B premium increase would reduce the value of their Social Security check (which automatically deducts Part B premiums).<sup>20</sup> In that case, premiums are reduced on a temporary basis until Social Security COLAs catch up, further increasing short-term federal expenditures.

Congress's 1972 decision to keep Part B premiums from rising faster than inflation resulted in billions of dollars in additional Medicare spending over the last half century. By 1997, the change in the rules along with related debt servicing payments accounted for approximately 7.7 percent of federal debt held by the public.<sup>21</sup>

## The 1988 Medicare Catastrophic Coverage Act

The experience of premiums charged under Medicare Part B illustrates what happens when Congress does not charge actuarially fair premiums. In contrast, the 1988 Medicare Catastrophic Coverage Act reveals the political dangers of maintaining actuarially fair premiums.

The brief history of the Medicare Catastrophic Coverage Act of 1988 (MCCA) illustrates how any premium increases—even if intended to finance new benefits—are met with considerable political opposition. The Medicare Catastrophic Coverage Act of 1988 eliminated Part A copayments for extended hospital stays, added an out-of-pocket

<sup>19</sup> Authors' calculations derived from 1992 SMI Medicare Trustees Report, Table I.C.1.

<sup>20</sup> Peris (2018).

<sup>21</sup> Authors' calculations.

cap on Part B expenses, and created a prescription drug plan. Financing came from an income-based “supplemental premium,” an across-the-board increase in Part B premiums (about a 14 percent increase), and a new premium for prescription drug benefits (set at \$1.94 a month beginning in 1991).

When the White House agreed to support and develop the legislation, “it did so with a number of stringent constraints attached—namely, that the new benefits must be self-financed by the beneficiaries and that the financing must come from premiums rather than taxes.”<sup>22</sup> Not only would beneficiaries be required to finance the entirety of new benefits (a first for Medicare), but they would pay higher premiums over time if costs exceeded expectations.

Opposition to the MCCA’s premium increases began immediately. Critically, CBO and others failed to include in their models the fact that a significant portion of Medicare enrollees already had supplemental insurance to cover gaps left by Medicare and were generally happy with their existing coverage. These individuals were being charged additional premiums for benefits they already had or did not need. Coupled with early estimates that premiums would have to be higher than anticipated, opposition to the MCCA increased.<sup>23</sup>

Despite growing political pressure, “[t]here was little serious discussion of adding additional revenue sources: the original agreement to stick with a self-financed benefit package remained intact.”<sup>24</sup> But the political pressure grew stronger. Somewhat famously, the final nail in the coffin came in late summer 1989 when House Ways and Means Committee Chairman Dan Rostenkowski was protested and mobbed by angry senior citizens, requiring him to flee in his car to get away. Shortly after, the Deficit Reduction Act of 1989 repealed most of the MCCA—just sixteen months after its initial passage into law.

## Medicare’s Sustainable Growth Rate

The Sustainable Growth Rate formula (often shortened to “SGR”) and its predecessors are clear demonstrations of the inability of the federal government to maintain initially promised cuts to reimbursement rates for healthcare providers. The SGR was enacted in 1997 in response to multiple failed attempts to restrain payments to Medicare physicians. It attempted to restrain Medicare fees and limit the volume of services provided by setting a global spending target that triggered automatic cuts when overall expenditures grew too quickly.

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<sup>22</sup> Moon (1990).

<sup>23</sup> For more, see Cogan (2017).

<sup>24</sup> Moon (1990).

When Medicare was created, payments to physicians rose rapidly due to increases in both charges and volume. In 1972, Congress attempted to restrain spending by limiting the growth in fees for physician procedures to increases in the newly created Medicare Economic Index (MEI). But payments continued to rise because physicians responded to limits on charges by increasing volume. Volume continued to rise further when Congress froze increases to allowable fees in the mid-1980s.<sup>25</sup>

In an attempt to handle the increased volume, Congress created the precursor to the SGR, called the Volume Performance Standard (VPS) in 1989. It calculated annual fee updates for physicians based on the volume of services provided by all physicians in the system.<sup>26</sup> It neither provided incentives for individual providers or consumers to change their behavior, nor did it penalize individual physicians for increasing volume or intensity. Not surprisingly, the VPS did not contain cost growth in an appreciable manner, leading Congress to replace it with the SGR formula in 1997.

Under the SGR, the fee schedule for physician services would be cut if total physical expenditures exceeded a specified target. The expenditure target was a function of the change in Medicare fee-for service beneficiaries, the growth rate in real GDP per capita, and any expected expenditures changes from Medicare policy changes. By building automatic cuts into law, it was thought that the SGR would succeed where previous efforts had failed. Furthermore, the SGR's design was such that its expected long-term cumulative cost would be close to zero, "because allowing the SGR formula to be implemented would lead to recapturing the additional spending that occurred during the period when the SGR was overridden."<sup>27</sup>

Spending targets were indeed met in the first few years because the initial targets included per capita GDP growth as part of their index, and economic growth was rapid in the late 1990s.<sup>28</sup> But in fiscal years 2000 and 2001, Medicare payments to physicians rose 5.5 percent and 5.0 percent, respectively, forcing the SGR to kick in the following year in order to rein in total spending.

In FY 2002, payments to physicians in Medicare were cut 4.8 percent. The following year, the SGR mandated another cut equaling 4.4 percent. Physicians objected and lobbied Congress. As a result, Congress enacted special legislation to increase total payments to physicians by 1.7 percent. Since the SGR formula was not changed, the special legislation meant that in subsequent years the scheduled cuts would have to be even larger.

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<sup>25</sup> Crippen (2002).

<sup>26</sup> Rice and Bernstein (1990).

<sup>27</sup> Congressional Budget Office (July 2012).

<sup>28</sup> Congress later changed the formula to a ten-year moving average of per capita GDP, in order to prevent outlier years from mandating drastic swings in reimbursement rates.

From FY 2003 to FY 2015, the SGR formula required Congress to cut payments to physicians every single year. Instead, Congress passed temporary “doc fixes” that raised payments in eight of thirteen years, and kept them constant the other five years. In 2007, CBO estimated that replacing the SGR formula with an inflation index would cost \$200 billion over ten years.<sup>29</sup> By FY 2015, the cut required by law totaled 21.2 percent.

TABLE 3. Physician reimbursement changes: Actual versus required under SGR<sup>30</sup>

Fiscal Year	Actual	Required	Fiscal Year	Actual	Required
1998	2.3%	2.3%	2007	0.0%	-5.0%
1999	2.3%	2.3%	2008	0.5%	-10.1%
2000	5.5%	5.5%	2009	1.1%	-10.6%
2001	5.0%	5.0%	2010	2.2%	-21.3%
2002	-4.8%	-4.8%	2011	0.0%	-24.9%
2003	1.7%	-4.4%	2012	0.0%	-27.4%
2004	1.5%	-4.5%	2013	0.0%	-26.5%
2005	1.5%	-3.3%	2014	0.5%	-20.1%
2006	0.2%	-4.4%	2015	0.0%	-21.2%

From 1997 to 2005, the physician fee schedule grew 65 percent. Per-beneficiary spending in the rest of Medicare (but excluding Medicare Advantage) grew by about 35 percent over the same time period.<sup>31</sup>

It should be noted that one of the reasons expenditures grew so rapidly in the late 1990s and early 2000s was the inclusion of the cost of physician-provided prescription drugs. Once Congress exempted them from the SGR formula in 2009, the difference in actual versus target expenditures fell by a considerable amount. Yet while it is true that the early SGR cuts were overstated, the other lesson is that it took Congress twelve years to correct a structural problem with reimbursement schedules.

The SGR was finally repealed by the Medicare Access and CHIP Reauthorization Act of 2015 (MACRA) and a new physician reimbursement schedule was prescribed by law.<sup>32</sup> It remains to be seen what will occur in FY 2020 and beyond. The 2019 Medicare Trustees’ Report notes several issues with future projections. Notably, “[t]hese rate updates could be an issue in years when levels of inflation are high and would be problematic when the cumulative gap between the price updates and physician costs becomes large.” It also warns that due to “uncertain long-range adequacy of physician payments...actual future

<sup>29</sup> Congressional Budget Office (June 2007).

<sup>30</sup> Hahn (2014).

<sup>31</sup> Congressional Budget Office (June 2007).

<sup>32</sup> Medicare Access and CHIP Reauthorization Act of 2015 (MACRA; P.L. 114-10).

Medicare expenditures could exceed the intermediate projections shown in this report, possibly by large amounts.”<sup>33</sup>

## Medicaid FMAPs and Reimbursement Rates

Federal contributions to states for Medicaid funding follow the same pattern as Medicare. Congress has regularly opted to increase federal spending to shield states from increased financial burdens.

The federal government’s share of total Medicaid expenses is determined by a state’s federal medical assistance percentage (FMAP). Generally, a state’s FMAP is a function of the state’s per capita income relative to the US average. FMAPs have a floor of 50 percent, ensuring no state pays for more than half of Medicaid spending. The federal government offers higher FMAPs for recipients of the Children’s Health Insurance Program (CHIP) and for adults who qualify for Medicaid through the Affordable Care Act’s (ACA) Medicaid expansion.

Over the last two decades, Congress has enacted several temporary changes to state FMAPs that have increased federal spending.<sup>34</sup> Many of these were attempts to provide fiscal relief to states.<sup>35</sup> Most recently, however, the federal government temporarily increased FMAP rates to raise payments to primary care providers. The ACA’s “fee bump” mandated states raise their Medicaid reimbursement rates in 2013 and 2014 for primary care providers to match Medicare rates. In 2013 and 2014, states received a 100 percent reimbursement rate for expenditures related to this requirement.<sup>36</sup> The fee bump was intended to address a shortage of primary care physicians in state Medicaid programs, which has been attributed to low reimbursement rates relative to Medicare and private insurance. The fee bump added \$7.1 billion in federal Medicaid spending in FY 2013 and FY 2014.<sup>37</sup>

The fee bump is particularly analogous to the likely fiscal challenges that would face a public option. In response to concerns regarding unsustainably low reimbursement rates, Congress opted to increase federal outlays to shield recipients—in this case, states—from bearing the costs associated with the increased rates.

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<sup>33</sup> Centers for Medicare & Medicaid Services (2019).

<sup>34</sup> Even earlier, disproportionate share payments were used as a way to circumvent the FMAP requirements.

<sup>35</sup> For example, the American Recovery and Reinvestment Act of 2009 (ARRA) included three different provisions designed to increase FMAPs. First, a “hold-harmless” provision prevented any FMAPs from falling from FY2008 through March 2011. Second, the ARRA increased FMAPs by 6.2 percent through December 2010. Finally, the Act offered a further increase to FMAPs for states with large increases in unemployment rates. P.L. 111-22. Available at <https://www.congress.gov/111/plaws/publ226/PLAW-111publ226.pdf>.

<sup>36</sup> The amount available for the 100 percent matching rate was determined by the difference between Medicare and Medicaid reimbursements rates on July 1, 2009. See Mitchell (2018) for more details.

<sup>37</sup> Medicaid and CHIP Payment and Access Commission (MACPAC) (2015).

## The Public Option in Washington State

The difficulty of reimbursing healthcare providers at Medicare-level rates is also exemplified in recent states' efforts to create a public option.

Washington passed legislation in 2019 that establishes a public option in 2021.<sup>38</sup> Its experience in passing a public option reinforces our skepticism at being able to set initial reimbursement rates at Medicare-level rates. Early in its development, its creators attempted to set reimbursement rates at Medicare levels. But providers and other parties ultimately pushed back, resulting in a cap at 160 percent of Medicare rates and a floor of 135 percent of Medicare rates for primary care providers.<sup>39</sup> In Washington, reimbursement rates for individual market plans are currently around 175 percent of Medicare rates.<sup>40</sup> The premiums charged will be actuarially fair and are estimated to be between 5 to 10 percent cheaper than other options on the exchanges. The cap on reimbursement rates is allowed to be raised in one of two situations. The first is if the insurance companies administering the public option are unable to create an adequate network of enrollees due to low reimbursement rates. The second is if the insurers are able to offer premiums that are 10 percent lower than the previous year.

One minor difference between the federal public option and Washington's version is that the state isn't administering the program by itself. Instead, it will set the rules and contract with private health insurers, making it more of a state-sponsored plan. As a result, it is unclear how much in administrative savings, if any, will materialize.

Proponents of the public option in Washington learned firsthand how difficult it is to achieve savings through aggressively low reimbursement rates. The state senator who sponsored the bill remarked, "When I see candidates talking about the public option, I don't think they're grasping the level of opposition they're going to face."<sup>41</sup>

## The Public Option in Colorado

On November 15, 2019, Colorado released a report of the design and feasibility of a state public option, as directed by earlier legislation.<sup>42</sup> The state would set the parameters of the public option while private companies offer and operate state-approved plans.<sup>43</sup> Much like Washington's public option, this arrangement seems unlikely to deliver significant administrative savings.

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<sup>38</sup> State of Washington (2019). SB 5526.

<sup>39</sup> Drug benefits received no cap.

<sup>40</sup> Pradhan and Goldberg (2019).

<sup>41</sup> Kliff (2019).

<sup>42</sup> State of Colorado (2019). HB 19-1004.

<sup>43</sup> It estimates it would save enrollees 10 percent on its premiums. At first it would only be open to individual purchasers of health insurance, but would then expand to businesses with under 100 employees.



Colorado’s public option specifically attempts to avoid financial risk by setting premiums at actuarially fair rates. The proposal states, “The public option will not put the State budget at risk.”<sup>44</sup> Some have referred to this design as a “state option” instead of a “public option,” in an attempt to promise taxpayers will not be required to subsidize the plan.<sup>45</sup>

In its initial planning, the state had hoped to set reimbursement rates between 175 percent and 225 percent of Medicare levels, lower than the 269 percent that private insurers are estimated to pay in Colorado.<sup>46</sup> But in the updated official report, proposed reimbursement rates would be set on a hospital-to-hospital basis, depending on patient mix and geographic location, allowing for the possibility of a higher rate. No official reimbursement rate has yet been estimated.

Early reactions from hospitals have not been favorable. The Colorado Hospital Association’s chief strategy officer remarked, “The proposal, in its current state, is not acceptable.”<sup>47</sup> Other interest groups have questioned the ability to ensure premiums remain affordable, especially if they remain at actuarially fair levels.<sup>48</sup>

### 3. Analyzing the Public Option with Various Assumptions

The legislative histories of Medicare, Medicaid, and recent state public option efforts raise questions regarding whether Congress can maintain actuarially fair premiums and low reimbursement rates. As discussed in section I, CBO’s previous cost estimates show how different reimbursement rate assumptions materially affect the magnitude of the projected deficit reductions. These estimates, however, all assume that plan premiums remain actuarially fair. But rather than reducing the deficit, a public option could quickly add to the federal debt if future Congresses follow the legislative behavior of their predecessors.

We provide estimates of the budget effects of a public option plan under alternative premium and reimbursement rate assumptions in the following section. In this section, we introduce the model used to estimate the budget effects. We then explain the

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<sup>44</sup> Colorado Department of Regulatory Agencies and the Department of Health Care Policy & Financing (2019).

<sup>45</sup> Ingold (October 2019).

<sup>46</sup> Ingold (October 2019).

<sup>47</sup> Ingold (November 2019).

<sup>48</sup> Bell (2019).

assumptions made in the model to produce the different cost estimates. Finally, we explain the various calculations made to estimate the aggregate budget effects.

## Methodology and Data Sources

We construct a microsimulation to estimate how different assumptions concerning premiums and reimbursement rates affect revenue and outlay projections through 2049. We include 30-year cost estimates of these proposals to capture the growing impact that premium-setting assumptions have on program costs. We estimate the impact these assumptions have on ACA subsidies, tax expenditures related to employer-sponsored insurance, and the implicit subsidy funded by taxpayers that would occur if premiums fall below actual costs.

Our model uses microdata projections for future healthcare spending, individual and group insurance premiums, and insurance enrollment.<sup>49</sup> These projections attempt to match the statistics and data available in CBO's public reports on future healthcare projections. Its construction closely follows CBO's methodology in creating the datasets used for their Health Insurance Simulation Model (HISIM2).<sup>50</sup>

We limit public option enrollment to non-seniors (under age 65) who have individual or group health insurance. Medicaid recipients and the uninsured are omitted from the analysis. Depending on plan rules and the premiums offered, participation among either group is possible. Even with actuarially fair premiums, including the uninsured would lead to increased ACA premium subsidies through increased participation in the exchanges (so-called woodwork effects).

The microsimulation determines who will participate in the public plan by comparing a respondent's imputed private insurance premium to their assigned public option premium. Generally, a respondent chooses the plan that offers the lowest premium. Beyond premium differences, we assume a respondent's private plan option and their public option plan are identical (e.g., no difference in cost-sharing rules, identical provider networks). In addition, we assume there are no costs or other frictions that limit switching from one plan to the other. Finally, we assume there are no changes in utilization rates for public option participants and that the public option has no effect on private plan premiums or medical price inflation.

Those with individual coverage (purchased on or off the ACA Marketplace Exchanges) choose the public option if the public premium is cheaper than their private alternative.

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<sup>49</sup> The microdata projections come from the Collection of Health Expenditures and Insurance data (CHEI). CHEI contains 30-year projections of healthcare related variables based on public surveys and CBO reports. For more details see Church and Heil (2019).

<sup>50</sup> Banthin et al. (2019).

The decision for those with employer-sponsored insurance (ESI) coverage is more complex. Our model allows for public option enrollment to be limited to those with individual coverage, expanded to include employees at small firms (fewer than 50 employees), or expanded to include employees at all firms regardless of their size. Those with ESI coverage will switch if the public option is cheaper than their employer plan and their employer is permitted to enroll its employees. Employees at firms that are not permitted to offer their employees a public option plan may still enroll in the public option plan. In those cases, an employee only selects the public plan if the public premium is less than the post-tax value of the employee-share of the private premium.<sup>51</sup>

Actuarially fair premiums are calculated by the mean expected health spending of previous-year enrollees.<sup>52</sup> The expected healthcare spending is divided into four categories: hospital, provider, other personal healthcare, and administrative costs. Disaggregating total spending allows us to adjust expected healthcare premiums to reflect assumed differences in reimbursement rates. Administrative costs for public plans are assumed to be 8.5 percent of total health expenditures.<sup>53</sup> After accounting for the difference in reimbursement rates, we assume expected health spending for those enrolled in the public option will rise at the same rate as private insurance projections.<sup>54</sup> This is consistent with our above assumptions that there is no change in utilization rates among plan participants and that there is no effect on private plan premiums.

We then adjust actuarially fair premiums to reflect state-level variations in expected health spending. We also adjust premiums by age to the extent allowed by ACA community rating rules. Finally, we adjust premiums to match the estimated actuarial value of the respondent's private insurance plan offering. This ensures the only difference between the plans is the premium charged.

In all of our estimates below, we assume the public option will begin in 2020 and initially feature actuarially fair premiums and reimbursement rates for hospitals and providers that match estimated Medicare rates.<sup>55</sup> We assume other personal healthcare spending

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<sup>51</sup> The post-tax value is calculated by the employee share of the ESI premium multiplied by the employee's marginal tax rate (including personal income taxes, payroll taxes, and state taxes). The decision to forego ESI coverage is specific to the employee, not the firm. While our model does not directly model firm behavior, some firms that are not allowed to directly participate in the public option may choose to offer incentives for their employees to forego ESI coverage.

<sup>52</sup> We estimate hypothetical enrollment in the year before the public option begins by repeatedly estimating actuarially fair premiums until enrollment stabilizes.

<sup>53</sup> This is the midpoint between Medicare's reported administrative costs (4 percent) and average private insurance administrative costs (13 percent). We discuss this assumption and alternative assumptions in the technical appendix.

<sup>54</sup> Depending on the projected year, we use either estimates derived from National Health Expenditure projections or CBO's projections.

<sup>55</sup> We assume hospital reimbursement rates will be 62 percent of private rates. Provider rates are set at 75 percent of private-level rates. We discuss the assumed rates in the technical appendix.

will be reimbursed at the same level as private insurance. Finally, we assume that small firms will always be allowed to enroll their employees in public option plans.

## Modeling Options

We estimate the budget effects of a public option under several different assumptions. Our estimates vary along three dimensions.

First, we choose one of three premium-setting rules that begin in the second year (2021): (1) actuarially fair premiums, (2) wage-indexed premiums that grow at the average wage growth, and (3) price-indexed premiums that grow at the rate of the consumer price index (CPI-U).<sup>56</sup> Using actuarially fair premiums is, of course, consistent with how public option proposals are generally written and scored. Wage-indexed premiums would ensure average premiums do not grow as a share of average income. Price-indexed premiums are analogous to Congress' decision to limit growth in Medicare Part B premiums in the 1972 Social Security Amendments.

Second, we choose one of the two reimbursement rate assumptions: (1) maintain estimated Medicare rates for hospitals and providers or (2) reimbursement rates begin at Medicare levels but rise to private levels in five years. As shown with CBO scores, maintaining Medicare rates yields larger savings. The latter option, however, is consistent with Congress' behavior when the SGR was in effect, where it allowed physician reimbursement rates to rise well-above the SGR caps.<sup>57</sup>

Finally, we examine how cost estimates change if large employers are permitted to offer their employees the public option. Large firms employed nearly 75 percent of private-sector workers in 2017.<sup>58</sup> Consequently, allowing these firms to offer public option plans to their employees results in much higher public option enrollment and increases the magnitude of the budget effects.

## Budget Calculations

Individual or family level variables that affect the federal budget are calculated after estimating enrollment under the various scenarios. We then calculate aggregate changes in federal outlays, revenues, and deficits.

Declines in premiums paid by employees with ESI coverage will increase taxable compensation and ultimately raise federal revenue. Among firms that may enroll their

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<sup>56</sup> We use CBO's 2019 Long-Term Budget Outlook for wage and inflation projections (CBO, June 2019).

<sup>57</sup> We review alternative rate-setting options in the technical appendix.

<sup>58</sup> Medical Expenditure Panel Survey Insurance Component (2018).

employees in the public option, we assume any premium reductions immediately increase the employee's taxable compensation. We calculate the revenue effects using an estimate of the employee's total federal marginal tax rate.<sup>59</sup>

ACA subsidies are also affected if public option premiums are lower than private sector alternatives. This is true whether or not an exchange participant enrolls in the public option because the premium subsidy is generally determined by family income and the second-cheapest ACA silver plan offered to a recipient. Thus, if public option premiums are lower than an exchange participant's second-cheapest silver plan, premium subsidies will fall. This will lower ACA exchange outlays and slightly increase tax revenue for subsidized recipients with positive tax liabilities, after accounting for the premium credits.

In scenarios where premiums fall below actuarially fair levels, we calculate the difference between what the respondent would pay if average premiums remain actuarially fair and what they actually pay. We refer to this as an "implicit subsidy." The implicit subsidies are counted as outlays in our budget analysis.

## 4. Cost Estimates Under Various Scenarios

We present data from the various scenarios below. We begin with estimates that maintain actuarially fair premiums. These are generally similar to how Congress and other third-party scorers have estimated the public option. We then relax the actuarially fair assumptions so that premiums rise by wage or price growth. The historical experiences examined above demonstrate that Congress is likely to keep premium growth artificially low. Throughout, we discuss various reimbursement rate assumptions that raise payments to levels comparable with private insurers.

### Cost Estimates with Actuarially Fair Premiums

Table 4 presents the 10-year (2020 to 2029) budget effects of public options with actuarially fair premiums under different reimbursement rate assumptions. Our discussion mainly focuses on the cost estimates that include large firms, but we also include cost estimates limiting enrollment to individual and small-group markets.

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<sup>59</sup> See Church and Heil (2019) for how federal marginal tax rates are determined.

TABLE 4. 10-year nominal effects of public option with actuarially fair premiums

Large-Group Plans Allowed		
	Reimbursement Rate Assumptions	
	Baseline: Remain at Medicare levels	Grow to private levels in 5 years
Enrollment in 2025	107,922,891	79,397,133
Revenue (\$B)	\$649	\$438
Outlay (\$B)	-\$120	-\$85
Deficit (+)/Surplus (-) (\$B)	-\$769	-\$523
Individual and Small-Group Plans Only		
	Reimbursement Rate Assumptions	
	Baseline: Remain at Medicare levels	Grow to private levels in 5 years
Enrollment in 2025	20,422,981	13,495,507
Revenue (\$B)	\$63	\$51
Outlay (\$B)	-\$90	-\$58
Deficit (+)/Surplus (-) (\$B)	-\$153	-\$109

A public option available only in the individual and small-group markets reduces primary deficits (i.e. excluding interest payments) by \$153 billion over the first ten years. Direct comparisons to CBO's prior scores are imperfect because there have been changes in health spending, tax rates, and expected exchange enrollment since CBO's last score in 2013. Nevertheless, the estimates are similar to CBO's deficit-reducing estimate of \$158 billion over eight years.<sup>60</sup>

Permitting large firms to participate in the public option increases the size of the deficit reduction. This is primarily due to the additional revenue from increasing the number of enrollees who have ESI coverage. In addition, expanding eligibility to large-sized firms results in a healthier risk pool, lowering actuarially fair premiums. This increases revenue, as taxable compensation rises more and also lowers ACA outlays. Overall, 10-year deficits fall by \$769 billion with revenues rising by \$649 billion and ACA premium outlays falling by \$120 billion. The public option would cover 107.9 million individuals in 2026—or about 39 percent of all non-seniors. The large enrollment figures are consistent with earlier non-government cost estimates that assumed large firms would have access.<sup>61</sup>

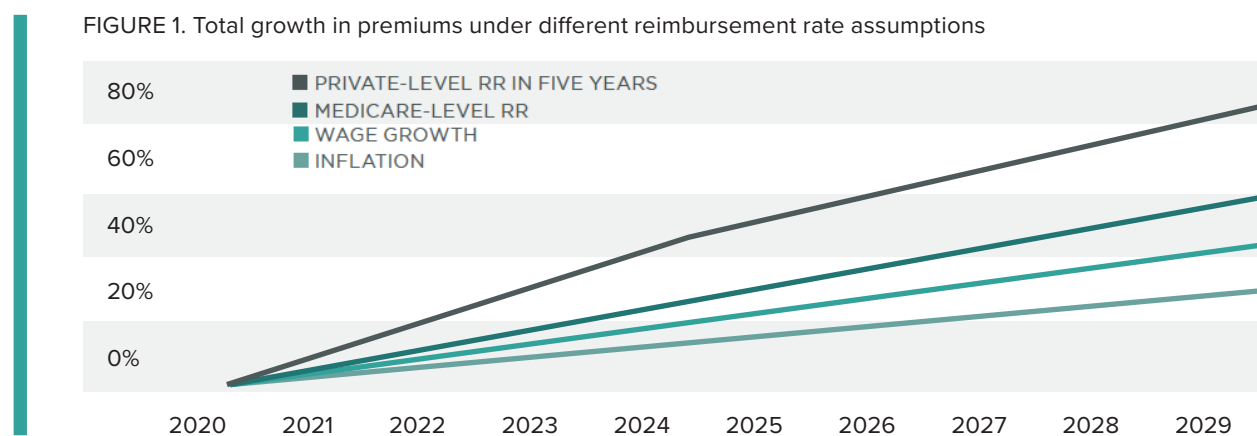
The large enrollment, combined with Medicare rates, would have a substantial effect on the healthcare market. Hospitals and physicians would experience massive declines in revenue that would dwarf the statutory SGR cuts that Congress found politically

<sup>60</sup> Congressional Budget Office (November 2013).

<sup>61</sup> Parente and Tomai (2009). Lewin Group (September 2009).

impossible to maintain. If Congress succumbs to similar political pressure and raises reimbursements rates to shield hospitals and physicians, the predicted cost savings in the baseline model would be cut by one-third. Nevertheless, as demonstrated with CBO’s previous scores, maintaining actuarially fair premiums ensures public option proposals do not increase the deficit.

Significant premium increases would be needed to maintain actuarially fair premiums if reimbursement rates rise after the enactment of a public option. Figure 1 compares the growth rate in nominal premiums if reimbursement rates stay at Medicare levels or grow to private levels over five years. These rates are compared to total wage and inflation growth over the next decade. As seen in figure 1, actuarially fair premiums would have to rise by 76 percent over the next decade if the government is unable to maintain Medicare-level reimbursement rates. The premium increases would have a substantial effect on enrollment. As shown in table 4 above, 2026 enrollment in the public option is about 25 percent lower when reimbursement rates rise to private levels.



Even if Medicare-level reimbursement rates were maintained, actuarially fair premiums would still rise by 51 percent over the next decade—34 percent faster than the growth in wages and over twice the projected growth rate in inflation.

Would policymakers permit premiums to rise significantly faster than wages or prices? Like Medicare Part B premiums, politicians would have strong political motivations to keep premiums low. With over 100 million enrolled, about one in three Americans would benefit from limited premium growth. In contrast, Congress’s 1972 decision to price index Part B premiums only benefited about 10 percent of the US population.

Maintaining actuarially fair premiums would be particularly challenging if low reimbursement rates proved unsustainable. Rates could rise under stiff political pressure from medical providers or because the government finds it impossible to find enough

providers willing to accept the low rates. Under public option rules, any reimbursement rate increase must be fully passed on to recipients. As shown in figure 1, the growth in premiums over 10 years would double that of wages if reimbursement rates rose to private levels within five years. Politically, these increases would be easily attacked as an income transfer from enrollees to the healthcare industry. Thus, if reimbursement rates must rise, the most likely outcome is that Congress shields enrollees from the cost increases, ending the actuarially fair assumption and begetting an expensive new government program.

Below, we consider the budget effects of a more realistic set of scenarios: where Congress succumbs to these strong political pressures and chooses to shield enrollees from scheduled premium hikes.

### Cost Estimates with Wage-Indexed Premiums

Table 5 presents the 10-year budget effects of public options where premiums are limited to the growth in wages. Table 6 then presents the nominal budget effects over the next 30 years. These estimates assume the public option will be available in the large-group market. Excluding large firms reduces the magnitude of the estimates but does not affect their direction.

TABLE 5. 10-year nominal effects of public option with wage-indexed premiums

	Reimbursement Rate Assumptions	
	Remain at Medicare levels	Grow to private levels in 5 years
Enrollment in 2025	115,199,625	115,199,625
Revenue (\$B)	\$739	\$739
Outlay (\$B)	\$170	\$1,088
Deficit (+)/Surplus (-) (\$B)	-\$570	\$348

Notes: Assumes large-group plans are permitted to participate.

TABLE 6. 30-year nominal effects of public option with wage-indexed premiums

	Reimbursement Rate Assumptions	
	Remain at Medicare levels	Grow to private levels in 5 years
Revenue (\$B)	\$6,230	\$6,230
Outlay (\$B)	\$6,723	\$13,728
Deficit (+)/Surplus (-) (\$B)	\$493	\$7,498

Notes: Assumes large-group plans are permitted to participate.

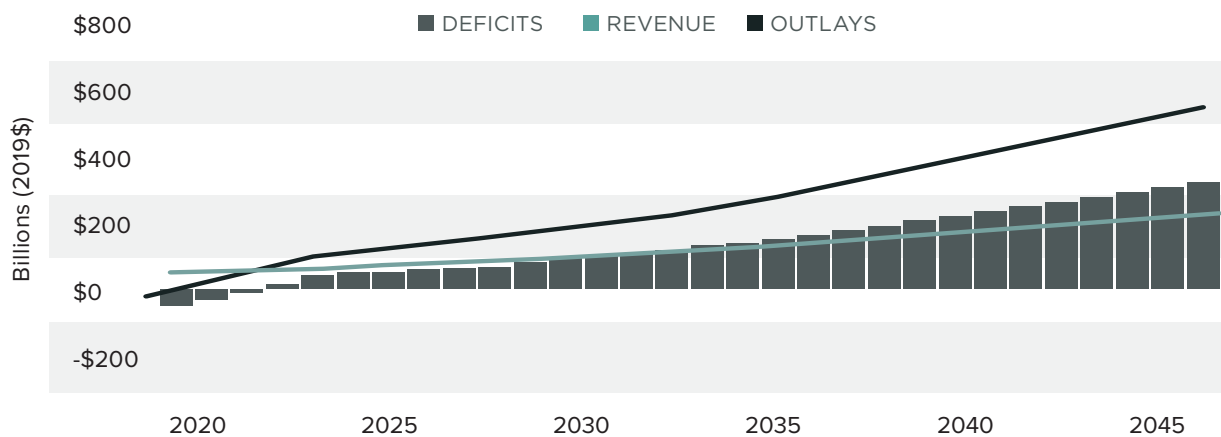
If reimbursement rates remain at Medicare-levels, the public option remains deficit reducing during the first decade. In contrast, if reimbursement rates rise to private levels, the public option increases 10-year deficits by \$348 billion.



Over the next 30 years, however, a public option with wage-indexed premiums would grow deficits under all reimbursement rate scenarios. The budget effects grow larger after the first decade as the gap between actual premiums and actuarially fair premiums widens.

The effects are particularly large if reimbursements rates rise to private levels. By 2049, the implicit subsidy (the difference between average actuarially fair premiums and actual premiums charged) would be \$3,938 per enrollee (2019 dollars). As the public option becomes relatively more generous, enrollment would balloon. Under this scenario, 53 percent of non-seniors would choose the public option by 2049. Figure 2 shows the revenue, outlay, and deficit effects. Revenue rises considerably from increases in taxable compensation due to declines in ESI premiums, but these increases are far smaller than the increase in the implicit subsidy. Adjusted for inflation, the public option would add nearly \$600 billion to annual outlays and increase non-interest deficits by \$348 billion in 2049 (2019 dollars).

FIGURE 2. Budget effects of public option with wage-indexed premiums and reimbursement rates rising to private-level rates in five years (2019 \$)



### Cost Estimates with Price-Indexed Premiums

Finally, we consider the budget effects if premiums are indexed to inflation rather than wages. This scenario would provide the greatest financial support for low-income Americans purchasing the public option. It is also consistent with the 1972 Social Security Amendments change to Medicare Part B premiums, which limited premium growth to the annual Social Security benefit COLA update. Tables 7 and 8 present 10-year and 30-year nominal budget effects.

TABLE 7. 10-year nominal effects of public option with price-indexed premiums

	Reimbursement Rate Assumptions	
	Remain at Medicare levels	Grow to private levels in 5 years
Enrollment in 2025	123,800,476	123,800,476
Revenue (\$B)	\$859	\$859
Outlay (\$B)	\$575	\$1,577
Deficit (+)/Surplus (-) (\$B)	-\$284	\$718

Notes: Assumes large-group plans are permitted to participate.

TABLE 8. 30-year nominal effects of public option with wage-indexed premiums

	Reimbursement Rate Assumptions	
	Remain at Medicare levels	Grow to private levels in 5 years
Revenue (\$B)	\$8,543	\$8,543
Outlay (\$B)	\$14,932	\$23,084
Deficit (+)/Surplus (-) (\$B)	\$6,389	\$14,541

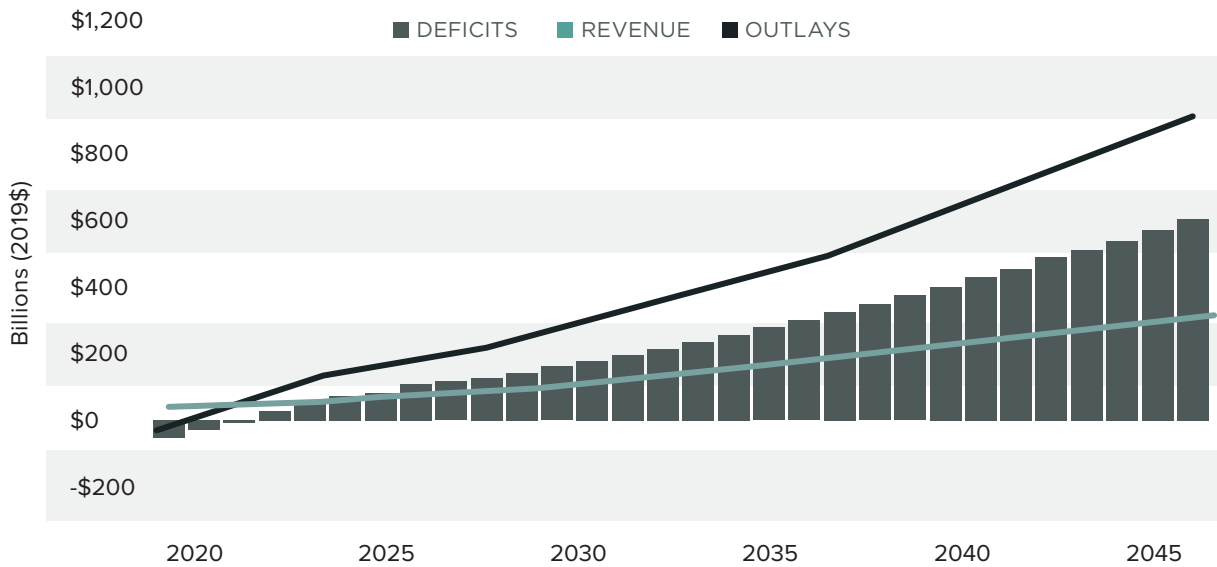
Notes: Assumes large-group plans are permitted to participate.

As shown in table 7, if Medicare-level reimbursement rates are maintained, price-indexed premiums reduce 10-year deficits by \$284 billion. Increasing reimbursement rates, however, would mean 10-year nominal deficits would grow by \$718 billion and 30-year nominal deficits would balloon by over \$14.5 trillion.

Similar to the wage-indexed cost estimates, capping premiums at inflation leads to a large increase in long-term deficits under any reimbursement rate assumption. Even if reimbursement rates remain at Medicare levels, the public option with price-indexed premiums begins to increase primary deficits by 2028. By 2049, a price-indexed public option with Medicare-level reimbursement rates would add \$390 billion (2019 dollars) to the annual federal deficit.

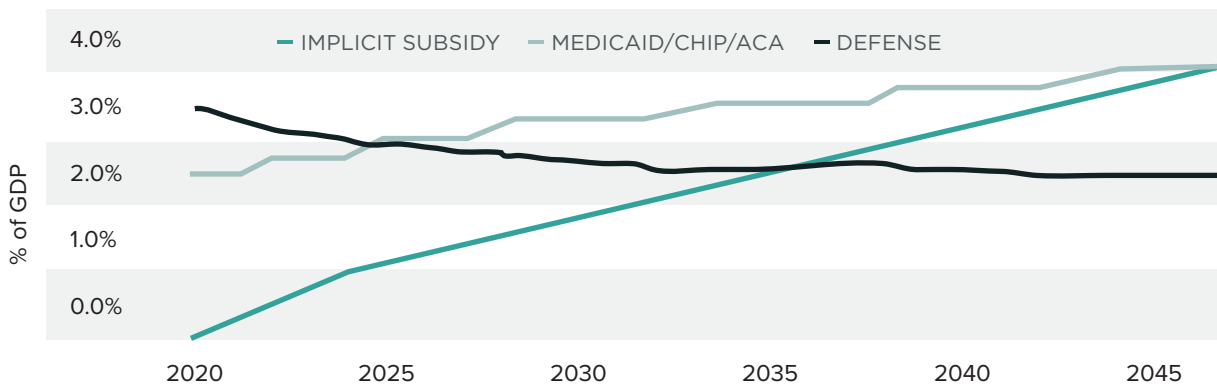
With private-level reimbursement rates and price-indexed premiums, the public option's deficit effects exceed \$100 billion annually by 2027 with federal spending rising by more than \$200 billion (2019 dollars). Figure 3 shows the 30-year budget effects of the public option with these assumptions. By 2049, the average implicit subsidy would grow to \$6,088 in 2019 dollars. Enrollment in the public option would reach 59 percent of non-seniors.

FIGURE 3. Budget effects of public option with price-indexed premiums and reimbursement rates rising to private-level rates in five years (2019 \$)



In terms of spending, the implicit subsidy for a price-indexed public option with private-level reimbursement rates would eventually become the third largest line item on the federal budget. Figure 4 compares the aggregate implicit subsidy and projections for major federal programs. By 2042, the implicit subsidy would exceed total projected outlays on defense spending. By 2049, it would match combined spending on Medicaid, the Children’s Health Insurance Program, and ACA subsidies. Only outlays for Medicare and Social Security would then exceed total spending from the implicit subsidies.

FIGURE 4. Public option implicit subsidy versus other federal programs



Notes: Assumes public option available in individual, small-group, and large-group markets with price-indexed premiums and private-level reimbursements rate beginning in 2025. We assume defense spending is one half of non-defense discretionary spending. Budget projections are from CBO’s 2019 Long-Term Budget Outlook.

The wide range in possible budget outcomes from a public option reflects the inherent uncertainty of future congressional action. A public option that maintains actuarially fair premiums and aggressively low reimbursement rates could yield significant deficit reductions, particularly if it were available to all employers. Maintaining these assumptions would mean significant disruptions to the healthcare market and would require increases in public option premiums that would outpace enrollees’ wage growth.

Past congressional behavior suggests these assumptions are unrealistic, and that lawmakers would eventually succumb to inevitable political pressures to shift the financial burden from enrollees to the government.

These changes could begin with temporary congressional actions that provide one-time relief from premium increases or low provider reimbursement rates. An economic downturn or an unforeseen spike in healthcare prices may lead Congress to override scheduled premium increases. A provider shortage or significant losses in the healthcare industry could lead to temporary increases in reimbursement rates. As seen in the early Part B premium experience and the legislative overrides to the SGR, temporary changes make it politically difficult to return to initially agreed upon program rules. Instead, one-time changes are often forerunners to permanent changes that dramatically increase program costs.

A public option with price-indexed premiums and private-level reimbursements rates would represent a significant departure from today's public option proposals. Nevertheless, price-indexed Part B premiums were a significant departure from Medicare's initial financing rules. Thus, while the alternative public option's assumptions depart from the language in existing proposals, they represent a probable scenario that would come with significant fiscal consequences. We explore these consequences below.

## 5. Fiscal Consequences Under A Politically Realistic Public Option

A public option that features price-indexed premiums and reimburses physicians and hospitals at private-level rates would represent a sizeable increase in federal borrowing or require significant tax increases. In this section, we first consider the debt effects if public option deficits are not offset by other spending reductions or tax increases.<sup>62</sup> We then discuss tax financing options that could offset the budget effects of the public option.

### Debt Effects

Primary deficits (i.e. excluding interest payments) are currently at 2.0 percent of GDP and are projected to grow to 3.0 percent of GDP by 2049.<sup>63</sup> Projected increases in primary

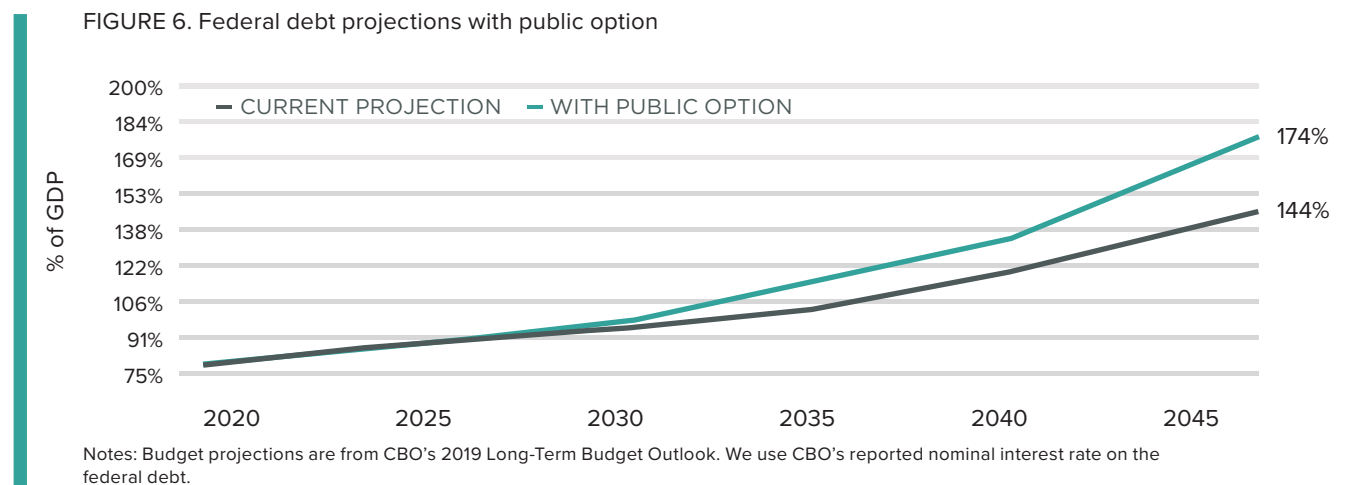
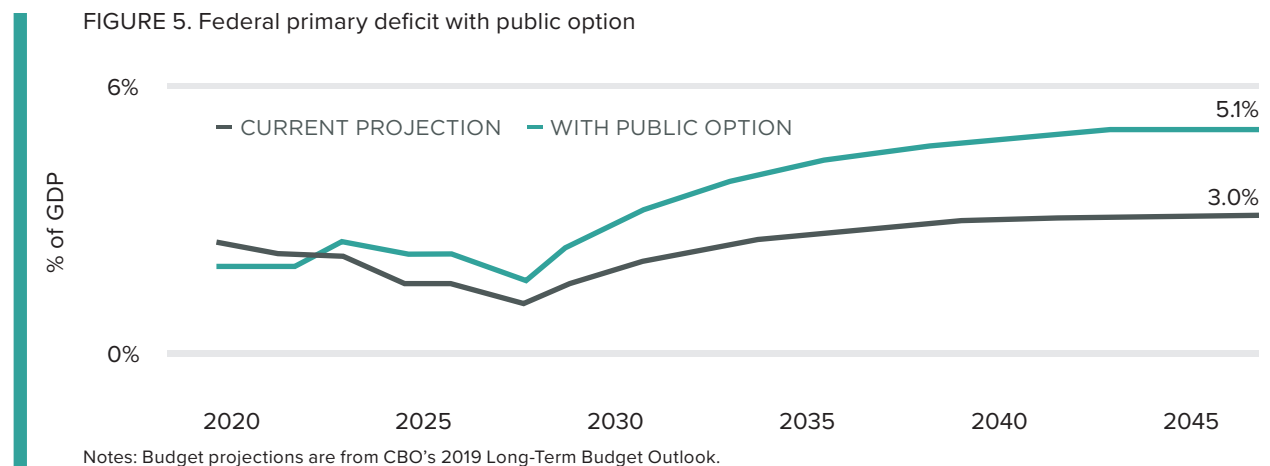
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<sup>62</sup> There is a small discrepancy between our cost estimates, which are based on calendar-year projections and official projections, which are based on the federal fiscal year.

<sup>63</sup> We use CBO's 2019 Long-Term Budget Outlook for the baseline debt and deficit projections (CBO, June 2019).

deficits and interest spending will raise the federal debt above 100 percent of GDP by 2034. The federal debt will reach 143 percent of GDP by 2049. A debt-financed public option will further add to this borrowing.

Figures 5 and 6 show the deficit and debt effects from a deficit-financed public option.



By 2049, the public option financed with additional borrowing would increase primary deficits by 69 percent (from 3.0 percent to 5.1 percent). The 2049 debt level would rise by 21.1 percent. In comparison, in 1997–30 years after Medicare began—the legislative changes that effectively price-indexed Part B premiums accounted for about 8 percent of the federal debt.

## Tax Financing Options

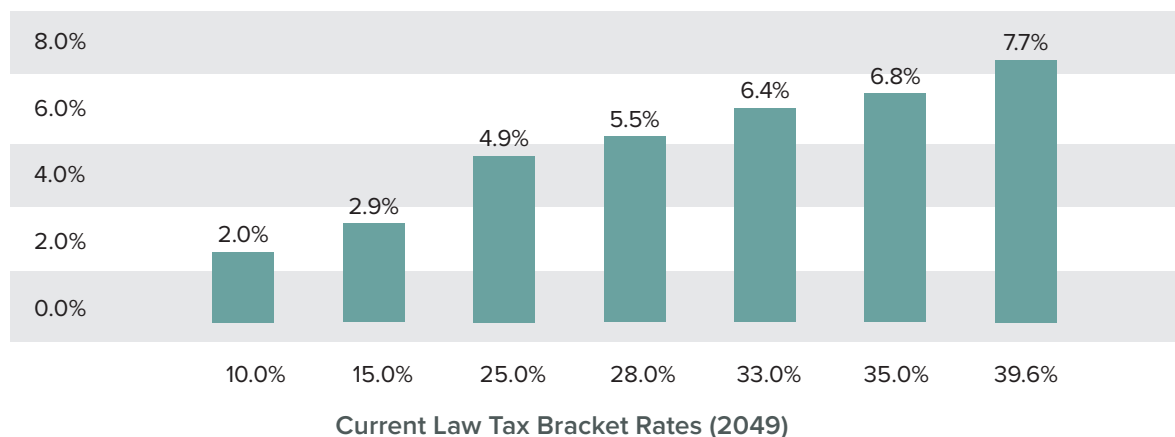
To avoid increased borrowing, Congress could choose to raise taxes. Below, we consider various tax increases with different distributional effects that could raise sufficient

revenue to offset the spending increases.<sup>64</sup>

Congress could attempt to finance the politically realistic public option by increasing only the top marginal income tax rate. The top rate would be increased annually to raise sufficient revenue to keep the public option from adding to annual deficits. Currently, the top rate is at 37 percent. It is scheduled to rise to 39.6 percent in 2026 when the temporary provisions in the Tax Cuts and Jobs Act expire. Without accounting for changes in behavior from higher marginal tax rates, the top rate would need to rise to 51 percent in 2029 to pay for the public option. By 2049, the top tax rate would need to be set at 73 percent—an 84% increase in the tax rate.<sup>65</sup> Such large rate increases would undoubtedly have noteworthy economic effects that would mean revenue will fall short of our static estimates. It is thus unlikely Congress could limit the tax increase to the top tax bracket.

Alternatively, an across-the-board increase in tax rates would allow for less aggressive increases to top income tax rates, while still ensuring the tax hike is progressive. By 2049, personal income tax rates would need to grow by 19.5 percent to offset the public option’s new spending. Figure 7 shows how this would affect tax rates. The 2049 bottom tax bracket would need to rise 2 percentage points (from 10 percent to 12 percent). Perhaps more significantly, middle-income taxpayers would see tax hikes to pay for the public option. In 2049, taxpayers in the 28 percent tax bracket would see their marginal tax rate increase by 5.5 percentage points, while those in the 33 percent bracket would see their marginal tax rate rise to over 39 percent. While upper-income taxpayers would not see their tax rates rise as dramatically as the option presented above, the top tax rate under this scenario would still need to be over 47 percent.

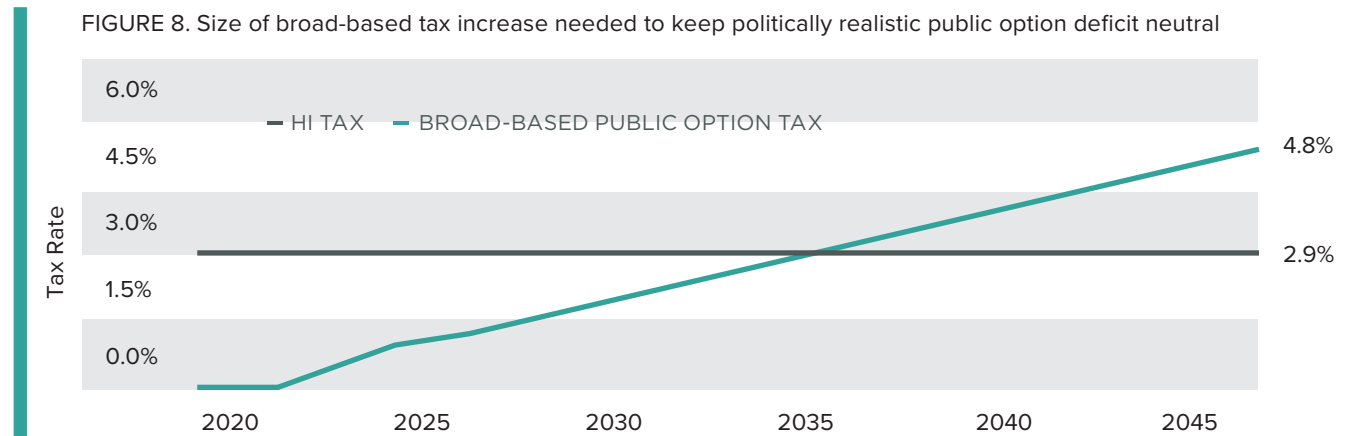
FIGURE 7. Percentage point increase in tax rate by tax bracket needed to finance public option



<sup>64</sup> Our tax estimates assume no economic effects from higher rates (i.e. these are static scores).

<sup>65</sup> CBO’s 2019 Long-Term Budget Outlook estimates that in 2049, 11 percent of total adjusted gross incomes (AGI) will be taxed at the top rate (CBO, June 2019, Figure 1-14). Using the historical average of total AGI as a share of nominal GDP, we estimate total AGI in 2049 will be \$37.9 trillion. We make similar calculations for our 2029 estimate.

Finally, Congress could enact a broad-based tax similar to Medicare’s Hospital Insurance payroll tax. This tax would be levied on all wage and salary income. The tax would begin in 2023 (the first year a politically realistic public option would increase deficits). Figure 8 shows the annual tax rate necessary to avoid increasing the deficit. The rate would rise annually, exceeding the combined employer and employer HI tax rate of 2.9 percent in 2039 and reaching 4.8 percent in 2049. The new tax would increase average marginal tax rates by nearly 15 percent in 2049.<sup>66</sup>



## 6. Conclusion

A public option would significantly disrupt the healthcare market. Widespread enrollment would pose significant challenges to private insurers and healthcare providers, compromising access to care. Nevertheless, the public option remains politically popular because it is widely accepted that it would offer lower premiums and reduce federal borrowing. Indeed, past CBO cost estimates predict that a public option would improve the federal budget outlook.

Importantly, however, CBO scores legislation based on a bill’s proposed rules and legislative assumptions, not the historical likelihood of maintaining these assumptions. History suggests policymakers should be skeptical of cost estimates that rely on assumed low reimbursement rates and actuarially fair premiums. Political pressures upended similar financing assumptions in Medicare Part B and spelled the end of the Medicare Catastrophic Coverage Act. And provider objections to low reimbursement rates have regularly led to federal spending increases in Medicare and Medicaid.

If these historical experiences are repeated with a public option, the fiscal consequences could be significant. The fiscal risks are particularly large if public option proponents pursue a version that allows large-group participation and assumes reimbursement

<sup>66</sup> Current CBO projections estimate the average marginal rate on labor in 2049 will be 32 percent (CBO, June 2019).

rates close to Medicare levels. Under this scenario, enrollment would quickly exceed 100 million. Congress would have effectively created a large interest group—comprising about 30 percent of the US population—that would benefit from premium relief.

As the above cost estimates show, a politically realistic public option would add over \$700 billion to 10-year deficits. By 2049, the plan would increase long-run debt projections by 30 percent of GDP or require tax increases equal to nearly 20 percent of projected income tax revenue. These tax increases may affect even middle-income taxpayers, raising their marginal income tax rates by several percentage points. The plan's implicit subsidies would become the third largest line item on the federal budget, behind only Medicare and Social Security.

Importantly, the cost estimates presented above do not account for other effects of a public option. We assume no changes in healthcare utilization from the public option. In reality, the public option would likely increase utilization (and program costs) for several reasons. First, lower reimbursement rates and likely cost-sharing rules in public option plans would increase demand for healthcare services. Second, as noted in CBO's public option scores, the government is less likely than the private sector to implement stringent cost-management procedures to limit utilization. The cost estimates also neglect likely enrollment increases by the uninsured. This could further increase federal costs, as a portion of the uninsured would likely qualify for ACA premium subsidies. We also assume that healthcare price inflation is unaffected by the public option. Proponents of a public option contend that competitive pressures could reduce healthcare spending in other private plans. Further research is needed to explore these effects, and how they interact with the historically realistic assumptions.



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## Technical Appendix

In the paper, we present cost estimates for a federal public option under various premium and reimbursement rate assumptions. This appendix provides an explanation of the data used and an expanded discussion of major assumptions used in the above cost estimates.

### Data

The microsimulation uses healthcare projections from the Collection of Health Expenditures and Insurance data (CHEI).<sup>67</sup> These data attempt to match statistics and data available in CBO's public reports on future healthcare projections. Its creation closely follows CBO's methodology in creating the datasets used for their Health Insurance Simulation Model (HISIM2).<sup>68</sup> The data are primarily from the 2018 Current Population Survey, corresponding to 2017 income and health insurance status. Healthcare spending variables are imputed using the Medical Expenditure Panel Survey Household Component (MEPS-HC). Firm size and group premium estimates are imputed using summary reports from the Medical Expenditure Panel Survey Insurance Component (MEPS-IC).

### Reimbursement Rate Assumptions

In estimating expected health spending by a public option enrollee, we divide health spending into four spending categories: hospital, providers, other personal health care, and administrative costs. The CHEI data contain imputed values for each category using data from MEPS-HC respondents with private insurance. These values are then adjusted by the assumed reimbursement rate for each spending category.

The reimbursement rates are calculated as a share of private insurance. Baseline reimbursement rates are intended to match Medicare's reimbursement rates. CMS estimates that in 2014, Medicare payment rates for inpatient hospital services were 62 percent.<sup>69</sup> Medicare payments for physician services were 75%. We assume other spending for personal healthcare would be unchanged from private levels.

We then adjust the baseline reimbursement rates to estimate the budget effects if reimbursement rates rise. In the paper, we consider the effects of a linear increase from Medicare-levels to private levels over 5 years. Nevertheless, we modeled several different reimbursement rate increases:

1. Permanent Medicare reimbursement rates
2. A linear increase to private levels over 5 years
3. An immediate increase to private levels in the second year of the public option
4. A linear increase to private levels over 10 years
5. A five-year linear increase from Medicare levels to 90% of private levels.

The effects of options 1 and 2 are presented in the paper. As expected, the alternative reimbursement rate assumptions materially affect the 10-year cost estimates. Option 3 increases the deficits more than the five-year scenario presented in the paper, while options 4 and 5 decrease deficits by more. After 10 years, options 3 and 4 have nearly identical effects to the option 2 estimates presented in the paper. Since option 5 maintains lower reimbursements beyond 10-years, the deficit effects are improved. Nevertheless, any of the alternative reimbursement rate assumptions would eventually mean growing deficits if premiums are wage-indexed or price-indexed. Table A1 provides 10-year estimates for the next three decades under each reimbursement rate scenario and premium-setting option.

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<sup>67</sup> See Church and Heil (2019) for a complete overview of the CHEI data.

<sup>68</sup> Banthin, Jessica, et al. (2019).

<sup>69</sup> Shatto (2018).

TABLE A1. 10-year deficit effects under different reimbursement rate and premium-setting assumptions (\$ Billions)

2020 to 2029 Deficit Effects (Deficit + / Surplus -)			
	Actuarially Fair Premiums	Wage-Indexed Premiums	Price-Indexed Premiums
1. Medicare reimbursement rates	-\$769	-\$570	-\$284
2. Private-level reimbursement rates in 5 years	-\$523	\$348	\$718
3. Private-level reimbursement rates in 2 years	-\$488	\$490	\$865
4. Private-level reimbursement rates in 10 years	-\$592	\$68	\$416
5. 90% of private-level reimbursement rates in 5 years	-\$593	\$57	\$400
2030 to 2039 Deficit Effects (Deficit + / Surplus -)			
	Actuarially Fair Premiums	Wage-Indexed Premiums	Price-Indexed Premiums
1. Medicare reimbursement rates	-\$1,366	-\$163	\$1,363
2. Private-level reimbursement rates in 5 years	-\$828	\$1,995	\$3,862
3. Private-level reimbursement rates in 2 years	-\$827	\$1,995	\$3,862
4. Private-level reimbursement rates in 10 years	-\$828	\$1,995	\$3,862
5. 90% of private-level reimbursement rates in 5 years	-\$981	\$1,310	\$3,069
2040 to 2049 Deficit Effects (Deficit + / Surplus -)			
	Actuarially Fair Premiums	Wage-Indexed Premiums	Price-Indexed Premiums
1. Medicare reimbursement rates	-\$2,346	\$1,225	\$5,310
2. Private-level reimbursement rates in 5 years	-\$1,422	\$5,155	\$9,962
3. Private-level reimbursement rates in 2 years	-\$1,424	\$5,155	\$9,962
4. Private-level reimbursement rates in 10 years	-\$1,422	\$5,155	\$9,962
5. 90% of private-level reimbursement rates in 5 years	-\$1,688	\$3,908	\$8,487

Notes: Assumes large-group plans are permitted to participate.

### **Administrative Cost-Sharing Assumption**

Administrative costs in the public option are assumed to be a constant percentage of total expected healthcare costs. In the paper, we assume the public option's administrative cost share will be equal to 8.5 percent, which is the midpoint between estimated administrative cost sharing rates in Medicare and for private insurers.

In their Medicare for All score, the Center for Health and Economy states that "According to data provided by the Centers for Medicare and Medicaid Service, the administrative costs for Medicare accounts for 4 percent of beneficiary cost sharing while administrative costs for private health insurance is around 13 percent of cost sharing."<sup>70</sup> These estimates are similar to various government reports. In a 2016 report, for instance, CBO estimated private insurers administrative costs at 13.5 percent of premiums.<sup>71</sup>

A public option is expected to have lower administrative costs than private plans. The government would not need to return a profit to shareholders or pay federal or state taxes. Further, the government plan may benefit from increased economies of scale. The public option, however, is unlikely to experience administrative costs as low as Medicare. Medicare's low administrative cost-sharing rate is partially a consequence of higher per enrollee healthcare spending. Since public option enrollees will have lower average health spending, fixed administrative costs will likely account for a larger share of total expenditures in the public option. In addition, while Medicare premiums are largely collected through the Social Security program, the public option would require an alternative process for collecting premiums. Finally, enrollment in the public option would likely have higher turnover rates than Medicare, resulting in higher enrollment costs.

We perform several sensitivity checks to determine the importance of our administrative rate assumption on the cost estimates. Table A2 reports the change in the 10-year deficit estimates if administrative costs were 6% of total expenses as opposed to the 8.5% assumed in the paper. As expected, public options with lower administrative costs lead to larger deficit savings. In the baseline estimate (actuarially fair premiums and Medicare reimbursement rates), the lower administrative cost assumption increased the first decade 10-year savings by \$56 billion. Nevertheless, changing the administrative cost-sharing assumption does not materially affect the direction of the cost estimates.

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<sup>70</sup> Center for Health and Economy (2016).

<sup>71</sup> Congressional Budget Office (2016). Appendix.

TABLE A2. Change in 10-year deficit effect from lower administrative cost-sharing assumption (6%) (\$ Billions)

Change in 2020 to 2029 Deficit Effects (Deficit + / Surplus -)			
	Actuarially Fair Premiums	Wage-Indexed Premiums	Price-Indexed Premiums
Medicare reimbursement rates	-\$56	-\$59	-\$62
Private-level reimbursement rates in 5 years	-\$47	-\$52	-\$60
Change in 2030 to 2039 Deficit Effects (Deficit + / Surplus -)			
	Actuarially Fair Premiums	Wage-Indexed Premiums	Price-Indexed Premiums
Medicare reimbursement rates	-\$102	-\$111	-\$146
Private-level reimbursement rates in 5 years	-\$80	-\$110	-\$168
Change in 2040 to 2049 Deficit Effects (Deficit + / Surplus -)			
	Actuarially Fair Premiums	Wage-Indexed Premiums	Wage-Indexed Premiums
Medicare reimbursement rates	-\$173	-\$220	-\$330
Private-level reimbursement rates in 5 years	-\$148	-\$243	-\$398

Notes: Assumes large-group plans are permitted to participate.