No. 10-66 November 2010

WORKING PAPER

THE TRUTH ABOUT ENTITLEMENTS

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The ideas presented in this research are the author's and do not represent official positions of the Mercatus Center at George Mason University.

Introduction

Does the United States really have to restructure the entitlement programs that affect seniors? Some would argue that Social Security is sound.¹ Some would suggest that greater taxes on the highest earners would be a solution.² Some would say that Medicare's problems can be solved with painless reforms to control costs. Some would suggest that we have room to raise overall taxes to levels seen in European countries. Some would say that high economic growth is likely to eliminate the problem. This paper looks at the feasibility of these alternatives to scaling back spending promised for seniors.

We start with the projections made by the Congressional Budget Office in the alternative fiscal scenario of its Long-term Budget Outlook, issued in June of 2010.³ These are shown in table 1.

| Category | 2014 | 2020 | 2035 |
|--------------------------------|------|------|------|
| Social Security | 4.8 | 5.2 | 6.2 |
| Medicare and Medicaid | 5.7 | 7.2 | 10.9 |
| Other Non-Interest Spending | 10 | 9.7 | 9.3 |
| Total Primary Spending | 20.5 | 22.1 | 26.4 |
| Revenues | 18.7 | 19.3 | 19.3 |
| Primary Surplus | -1.8 | -2.8 | -7.1 |

Table 1. Spending and Revenues as a Percent of GDP, CBO alternative scenario

The table looks at spending and revenue as a share of GDP, ignoring the cost of interest payments. We start in 2014, when the effects of the current economic downturn will have largely faded, according to the projection. The budget will still have a primary deficit of 1.8 percent of GDP in that year. Over the next two decades, this deficit is projected to widen to 7.1 percent of GDP. However, there is a significant risk that a deficit of this size, combined with the soaring interest costs along this path, could cause a loss of confidence in U.S. fiscal solvency.⁴

Other estimates are more pessimistic. For example, the Concord Coalition projects what it calls a "plausible baseline" that in 2020 the overall budget deficit will be 9.1 percent of GDP in 2020, of which interest costs will be 5.2 percent. Thus, the primary deficit in the Concord Coalition's "plausible baseline" is 3.9 percent of GDP in 2020, compared with 2.8 percent in the CBO's "alternative fiscal scenario."⁵

¹ For example, on August 13, 2010, Kathy Ruffing and Paul N. Van de Water of the Center on Budget and Policy Priorities wrote, "Because Social Security's finances are fairly predictable, it is not difficult to craft revenue and benefit proposals that would place the program on a sound long-term footing.

² See Ruffing and Van de Water.

³ The CBO report can be found at http://www.cbo.gov/doc.cfm?index=11579. It contains an "extended baseline scenario," which interprets current law. However, I have used figures from what the CBO calls its "alternative fiscal scenario." As the CBO describes it, this scenario "incorporates several changes to current law that are widely expected to occur or that would modify some provisions of law that might be difficult to sustain for a long period."

⁴ See Arnold Kling, "Guessing the Trigger Point for a U.S. Debt Crisis," August 24, 2010. http://mercatus.org/publication/guessing-trigger-point-us-debt-crisis

^{5 &}quot;The Concord Coalition Plausible Baseline," http://www.concordcoalition.org/concord-coalition-plausible-baseline

In the CBO alternative fiscal scenario, the increase from a primary deficit of 1.8 percent to 7.1 percent of GDP means that the primary deficit deteriorates by 5.3 percent of GDP over the next 20 years. Social Security spending accounts for more than 25 percent of this deterioration, as Social Security outlays are projected to climb from 4.8 percent of GDP to 6.2 percent of GDP, an increase of 1.4 percentage points in the share of GDP that Social Security will absorb. The remaining increase in the primary deficit is more than accounted for by Medicare and Medicaid, as other primary spending actually is projected to edge down while overall revenues edge up.

Myth 1: Social Security faces little or no difficulty

Social Security has been running surpluses for the last quarter-century, banking those surpluses in a special account, the so-called trust fund. The program won't have to turn to Congress for help or cut benefits until or unless the trust fund is exhausted, which the program's actuaries don't expect to happen until 2037—and there's a significant chance, according to their estimates, that that day will never come.

—Paul Krugman, "Attacking Social Security" New York Times, Aug. 15, 2010⁶

The idea that Social Security has been "banking" assets is a myth. It presents a misleading picture of the way that Social Security and it ignores demographic reality.

In its long-term budget outlook, the Congressional Budget Office writes,

The retirement of the baby-boom generation (the large group of people born between 1946 and 1964) portends a long-lasting shift in the age profile of the U.S. population. That shift will substantially alter the balance between the population's working-age and retirement-age segments. The share of people age 65 or older is projected to grow from 13 percent in 2008 to 20 percent in 2035, while the share of people ages 20 to 64 is expected to fall from 60 percent to 55 percent. In later decades, the aging of the population will continue—but at a slower rate—because of increasing life expectancy.

For Social Security, aging of the population will drive the growth of spending as a share of GDP. Benefits are based on an individual's earnings and are indexed to wage growth, implying that program spending as a share of GDP is not very sensitive to overall economic growth. CBO projects that the number of workers per Social Security beneficiary will decline significantly over the next three decades: from about 3.1 in 2008 to 2.0 in 2035. Unless immigration, fertility, or mortality rates are markedly different than assumed in these projections, that number will continue to drift downward slightly after 2035.

Social Security is a transfer system that is used to fund retirement. In that regard, it differs from a saving system used to fund retirement. Saving generates capital assets that can be used to support future consumption. On the other hand, a transfer system creates obligations for one group of citizens (in this case, young workers) to transfer income to another group (seniors).

⁶ http://www.nytimes.com/2010/08/16/opinion/16krugman.html?_r=1. In fact, Krugman somewhat misrepresents the Social Security Trustees Report. The report looks at a variety of scenarios, and it estimates (figure II.D.7 of the report) that there is a 95 percent probability that the trust fund will be exhausted between 2029 and 2055. See http://www.ssa.gov/OACT/TR/2010/index.html

To see this difference, imagine a simple economy in which people harvest fruit and plant fruit trees. If I want to save for retirement, I forego some fruit consumption in order to plant fruit trees that will mature when I reach the age at which I want to retire.

A saving system could be either individual or collective. In a collective version, the government could tax me today, use the revenue to fund the planting of fruit trees, and then use the fruit from the mature trees to pay me during retirement. This would be a government-administered saving system.

However, the government has another option, which uses transfers instead of real savings. The government can tax me today and transfer those revenues to people who currently are retired. In turn, the government issues promises to me to tax the next generation of workers and transfer revenue from those taxes to me when I retire. This latter option is a transfer system, rather than a saving system. It does not involve planting any additional fruit trees.

The difference between a saving system and a transfer system is particularly acute when generations differ in terms of cohort size, as when the United States experienced the Baby Boom from 1946 to 1964. If the Boomers had planted more fruit trees when they were between age 30 and 60, then there would be more fruit available when they retired. Instead, if they rely on a transfer scheme, then they have done nothing to increase the amount of fruit available when they are old. At that point, the only way that they can have the fruit that was promised them is by receiving a large transfer of fruit from the next generation. The next generation will have to get by with less to eat.

In our actual economy, when the Baby Boomers retire, there are two possibilities for distributing the output that will be produced at that time. One possibility is that the Social Security benefits provided to the Baby Boomer generation will be scaled back. The other possibility is that the next generation will consume less in order to provide the Boomer generation with its promised benefits. Because Social Security is not a saving system and has accumulated no productive assets, there is no more output in the economy. The available output will have to go to either the retired or the non-retired, and if the promises to the retired are kept, that means less for the non-retired.

This reality is disguised by what is called "trust-fund accounting" for Social Security. Paul Krugman and others argue that there is enough money in the Social Security trust fund to keep paying benefits at least until 2037. If the trust fund consisted of fruit trees or other productive assets, that would be meaningful. However, the trust fund is simply a measure of the accumulated promises given to workers by the Social Security system in exchange for the taxes paid by those workers to fund the benefits of those already retired. The trust fund contains only government bonds, which are not productive assets.

When the pension plan of XYZ corporation holds assets, those assets are securities issued by other entities. What if those assets instead consisted of debt issued by XYZ corporation? In that case, if XYZ corporation went bankrupt, those assets could not be sold for their face value, and the pension could not pay its benefits.

The Social Security trust fund, which holds government obligations, is in the same situation as a corporate pension with assets consisting of the bonds of that corporation. If the United States faced a fiscal crisis, in which investors were unwilling to lend to the government without charging an enormous risk premium, the bonds in the trust fund could not be sold to private investors to raise cash, other than at a steep discount. Thus, the trust fund does not protect Social Security recipients from a fiscal crisis.

We saw that along the "alternative fiscal scenario" of the Congressional Budget Office, Social Security outlays will rise from 4.8 percent of GDP in 2014 to 6.2 percent of GDP in 2035. As a matter of simple arithmetic, the burden of Social Security as a percent of GDP will increase by 1.4 percentage points over the next two decades. These additional outlays will not be paid by any trust fund. They will be paid either by increased taxes or by additional borrowing. Those who pay the taxes or fund the borrowing will have less available to consume.

At 6 percent of GDP, projected outlays for Social Security are too large to ignore. If promises to future retirees are not scaled back, then that will impose a greater burden elsewhere for preventing a fiscal crisis. In any event, tax revenues will have to rise, health-care spending will have to be curtailed, and other categories of government spending will have to be limited. These adjustments will have to be especially severe if Social Security cutbacks are taken off the table.

Myth 2: Increasing taxes on high earners would solve the problem.

The top 1 percent of taxpaying units in the United States each earned at least \$368,238 in 2008, for a total of \$1.73 trillion.⁷ This represents 12.1 percent of GDP in that year.⁸ The average effective tax rate at the top 1 percent for the individual income tax under current law is 17.9 percent.⁹ Multiplying the share of GDP by the effective tax rate yields 2.2 percent of GDP as the personal income taxes currently paid by the top 1 percent of taxpaying units.

Raising the effective tax rate on high earners would require enormous increases in marginal tax rates. In a paper prepared for a conference in January of 2010, Rosanne Altshuler, *et al*, calculate the required increase in marginal rates in order to raise revenue by about 4 percent of GDP.¹⁰ Restricting tax increases to single households with earnings over \$200,000 or more and couples with earnings over \$250,000, they find that "the top rates would leap by 160 percent, lifting the top rate to nearly 91 percent."

Raising the marginal tax rate by such a magnitude would likely cause a shift in the way income is earned. A higher marginal tax rate would increase the tax advantage of capital gains over ordinary income. It would increase the incentive for high-earning individuals to defer the realization of capital gains in order to postpone having to pay taxes on those gains. An increase in the marginal tax rate also would increase the incentive to use deferred compensation (shifting income to after a worker retires, in order to reduce the tax rate applied to that income) and other means for high earners to smooth their reported incomes. Finally, a high marginal tax rate would induce some individuals to retire early or

⁷ This figure is derived from information available on the web site of Emanuel Saez (http://elsa.berkeley.edu/~saez/). Under the heading of "Income and Wealth Inequality," Saez makes available for download updated tables derived from IRS information. I accessed this data on September 1, 2010, and used Table 0, "Thresholds and average income of top groups in 2008," including realized capital gains. For the top four income categories, I multiplied the number of families times the average income. I added these together to obtain the total of \$1.73 trillion.

⁸ GDP for 2008 was \$14.3691 trillion according to the Department of Commerce Bureau of Economic Analyis web site, accessed on September 1, 2010.

⁹ This estimate comes from the Tax Policy Center of the Urban Institute and the Brookings Institution. "Average Effective Tax Rates Under Current Law, By Cash Income Percentile, 2009" August 24, 2009. http://www.taxpolicycenter.org/numbers/displayatab.cfm?DocID=2432

¹⁰ Rosanne Altshuler, Katherine Lim, and Roberton Williams, "Desperately Seeking Revenue," Urban Institute and Brookings Institution Tax Policy Center, <u>http://www.taxpolicycenter.org/UploadedPDF/412018_seeking_revenue.pdf</u>. The authors target a deficit of 2 percent of GDP, starting from a baseline "alternative deficit" in their table 1 of about 6 percent of GDP.

otherwise take more of their income in the form of leisure.

Structural changes to the tax code might curb the ability of high earners to take income in forms that reduce or defer taxes. For example, capital gains could be taxed at the same rate as ordinary income, and unrealized gains could be taxed. Such structural changes might allow the government to capture a larger share of the income of high earners with less draconian increases in marginal tax rates. However, they would exacerbate the adverse effects of income taxation on the incentive to engage in productive work, undertake capital investment, and launch risky new enterprises. From the standpoint of revenue collected, the adverse effects on economic growth would cancel a large proportion—perhaps even more than 100 percent—of the intended increase.

To look at this another way, even a 50 percent increase in the effective tax rate on the highest earners, assuming that it could be obtained while holding their earnings constant, would yield an increase in revenue of less than 1.1 percent of GDP. While 1.1 percent of GDP would be a significant gain in revenues, it still would fall far short of what would be needed to close the fiscal gap, which we have seen is projected to reach 7.2 percent of GDP in 2035, not including interest cost.

Altshuler and her co-authors at the Tax Policy Center reach a similar conclusion. After examining a variety of options for raising revenue, they conclude, "None of the options we have examined would provide a realistic approach to reducing the deficit over the coming decade . . . Reducing the federal budget deficit to a level that is sustainable over the long run will likely require either more comprehensive tax reform or tapping a new source of revenue, such as a value-added tax. Any move in that direction would require a thorough analysis of potential distributional and efficiency consequences."¹¹

Myth 3: Health care cost control is the answer

Medicare spending has been rising at a faster than the rate of general inflation and the increase in the eligible population. Budget experts have coined the term "excess cost growth" to describe this phenomenon. To a layman, "excess cost growth" sounds like an increase in waste and overcharging by health care providers. In fact, the main reason that health care spending is rising as a share of GDP is the increased utilization of capital-intensive services. Modern medicine incorporates both more physical capital (such as CT and MRI scanners) and more human capital, in the form of specialists as well as highly-trained allied health professionals.¹²

Economic historian Robert Fogel has examined the long-term trends in health care and economic growth. He points to many measures that demonstrate dramatic improvements in longevity and in the health status of the elderly. Furthermore, Fogel finds strong evidence that health care is a superior good, meaning that as income rises, it is natural for the share of health care spending to rise also. He estimates that the long-term income elasticity of health care expenditures is 1.6, meaning that for every 1 percent increase in income, there is a 1.6 percent increase in spending on health care. He points out that in the United States from 1875 to 1995, the share of income devoted to health care increased from 1 percent to 9 percent, while the share devoted to food plummeted from 59 percent to 5 percent and the share devoted to clothing shrank from 12 percent to 2 percent.¹³

¹¹ *Ibid*

¹² See Arnold Kling, *Crisis of Abundance: Rethinking How We Pay for Health Care*, Cato Institute, 2006. For a similar diagnosis with a non-market-oriented prescription, see Daniel Callahan, *Taming the Beloved Beast: How Medical Technology Costs are Destroying our Health Care System*, Princeton University Press, 2009.

¹³ Robert Fogel, The Escape from Hunger and Premature Death, 1700-2100. Cambridge University Press, 2004, p. 89

Fogel's work suggests that "excess cost growth" is not a short-term aberration that can be corrected by policy intervention. Instead, as economic performance improves, people find that they become relatively satiated with other goods, and they increase the value that they place on their health. Thus, the increase in health care as a share of GDP is a fairly inevitable long-term trend. Confirmation for this view can be found in other nations, where health care spending also has been increasing as a share of GDP, albeit from a smaller base.

If there were pure waste in the health care system that could easily be identified and corrected, then we could obtain the same medical procedures at lower cost. Similarly, if health care providers were overcharging for services, then price controls could reduce health care spending without anyone having to cut down on utilization. However, even if such savings could be realized, they would represent a one-time gain in efficiency, not an alteration in the trend rate of growth.

Legislators can have naive views of what constitutes waste in the health care system. For example, the latest health care law mandates that insurance companies must pay a minimum percent (80 or 85 percent, depending on the type of insurance) of premium revenues in reimbursement to health care providers. The thinking is that revenue that does not go to health care providers represents unnecessary overhead or excess profits. However, some of the cost of providing health insurance involves customer service. Consumers often need to speak with representatives of their insurance companies in order to understand their coverage and follow through on claims. Some of the lower overhead in Medicare reflects the fact that its customer-service phones are under-staffed. The result is that costs are shifted to consumers, who have a much more difficult time reaching a Medicare representative than the representative of a private health insurance company.

Much of the near-term savings on health care spending envisioned in the new health care law comes from reducing Medicare's reimbursement rates to health care providers. However, a number of experts, including Medicare's Chief Actuary and the Congressional Budget Office, have expressed skepticism about the viability of these cutbacks in payments to doctors, hospitals, and other health care service providers.¹⁴

Another approach to increasing the pure efficiency of the health care system, which would allow the same services to be provided at lower cost, is to improve the use of technology. The new health care law envisions wider use of electronic medical records, which many experts believe would make our health care system more efficient. However, in the realm of business, the use of information technology *per se* is not a cost saver. The key is to redesign business processes to take advantage of information technology¹⁵. The current fragmentation of our health care system may make it difficult to

¹⁴ In fact, the chief actuary of Medicare, Richard D. Foster, in his "Statement of Actuarial Opinion" on the Medicare Trustees' Report (http://www.cms.gov/ReportsTrustFunds/downloads/tr2010.pdf), said that "While the Part B projections in this report are reasonable in their portrayal of future costs under current law, they are not reasonable as an indication of actual future costs." He went on to recommend instead the alternative scenario (http://www.cms.gov/ActuarialStudies/Downloads/2010TRAlternativeScenario.pdf). The latter concludes, "The immediate physician fee reductions required under current law are clearly unworkable and are almost certain to be overridden by Congress. The productivity adjustments will affect other Medicare price levels much more gradually, but there is a strong likelihood that, without very substantial and transformational changes in health care practices, payment rates would become inadequate in the long range. As a result, the projections shown in the 2010 Trustees Report for current law should not be interpreted as our best expectation of actual Medicare financial operations in the future but rather as illustrations of the very favorable impact of permanently slower growth in health care costs, if such slower growth can be achieved."

¹⁵ See Michael Hammer and James Champy, Reengineering the Corporation: A Manifesto for Business Revolution.

take advantage of electronic medical records.¹⁶

A more promising approach to saving on the health care budget is to reduce the utilization of services that have high costs but low benefits. Many studies suggest that regions with high utilization rates of medical services do not enjoy better health outcomes.¹⁷ Medicare regions differ by 30 percent in terms of spending for patients with certain conditions, and yet outcomes are similar. These differences are accounted for by variation in the utilization of services, not by differences in what health care providers charge for services.

These studies of spending variation offer a tantalizing possibility. If we could identify and change medical utilization practices so that the entire country behaved like the lowest-spending regions, then that would provide substantial savings with which to reduce the budget deficit.

However, the identification of wasteful medical procedures is not as simple as it sounds. It is rare for doctors to prescribe procedures that have absolutely no benefit whatsoever. Instead, the issue is one of relative cost-effectiveness: some procedures offer benefits that are low in relation to their cost.

The issue is further complicated by uncertainty. Many medical procedures do not have predictable outcomes. A cancer therapy that works on one patient may fail on another. One patient may benefit substantially from knee-replacement surgery, while another patient is left unable to walk.

The uncertainty is compounded in the case of diagnostic procedures. With a diagnostic screening protocol, such as mammograms to screen for breast cancer or colonoscopies to screen for colon cancer, most of the people who undertake the screening will not have better outcomes, because they were disease-free to begin with. Using these protocols, the cost per life saved may be inordinately high in some populations. This issue flared up during the debate over health care reform, when a task force looking into breast cancer screening released a report recommending against routine mammograms for women under the age of fifty.

It may be true that from the perspective of a central planner, the cost per life saved is very high for some cancer-screening protocols. However, that is not necessarily convincing for people who are aware of cases where these protocols have detected cancer. For example, there are many women under the age of fifty who have learned of breast cancer from mammograms. Therefore, proposed cutbacks in screening protocols will face strong political opposition.

The controversy over the breast cancer screening recommendations points to another issue. Even if experts identify medical procedures with particularly high costs and low benefits, there remains the question of how to change the behavior of doctors and patients. As long as government programs will reimburse consumers for the cost of a procedure, the incentive to undergo that procedure will not change. On the other hand, if the government considers a policy of declining reimbursement for a particular procedure, it will face political opposition from patients and health care providers who are adversely affected by such a policy.

Harper Business, 1993.

¹⁶ See Arnold Kling and Michael F. Cannon, "Does the Doctor Need a Boss?" Cato Briefing Paper, January 13, 2009. http://www.cato.org/pub_display.php?pub_id=9878. See also, Jonathan Levin, "Why Hasn't IT Transformed Health Care? And will it?" reprinted at the Technology/Academics/Policy blog, http://www.techpolicy.com/Blog/September-2010/Jonathan-Levin-Asks--Why-Hasn%E2%80%99t-IT-Transformed-U-S.aspx

¹⁷ See Shannon Brownlee, *Overtreated: Why too Much Medicine is Making us Sicker and Poorer.*, Bloomsbury USA, 2008.

Ultimately, there are three ways that the government can influence the utilization of medical procedures that are reimbursed under Medicare and Medicaid. One way is by fiat, through the refusal to pay claims for certain procedures. This approach creates consumer dissatisfaction and incurs political opposition. For an insurance company, denial of coverage for a procedure that might provide benefits creates intense customer dissatisfaction. Public hostility toward managed care flared up in the 1990s, in part because of concerns that providers were withholding valuable treatments. It is by no means certain that the government will have better luck than private firms in convincing people that denial of coverage for treatment is in their overall best interest.

The second way to influence utilization would be to change the incentives of patients. Among health care economists, the term "cost sharing" is frequently used to refer to systems in which patients pay for a larger share of the cost of the medical procedures that they elect to undergo. This can be done by changing the structure of health insurance. Higher deductibles and higher co-payments in exchange for lower premiums would be one approach. A more radical idea would be for consumers to be given flat reimbursements based on the diagnosis of their medical condition. An insurance adjuster would set the reimbursement amount, just as many car insurance companies today will send a consumer a check based on the estimated cost of the damage caused by an accident. Thus, if you were diagnosed with a hip injury, the insurance company would send you a check for the amount needed to cover what it deems to be the most appropriate treatment. If you were to choose a less expensive treatment, then you would pocket the different. If you were to choose a more expensive treatment, then you would pay the difference.

The third way to influence utilization would be to change the incentives of health care providers. This is the promise of "paying for quality." The idea is for government to articulate standards for medical practice and to reward doctors more highly if they meet those standards. A challenge with this approach is that these sorts of systems are easily gamed, particularly since they rely on self-reporting by health care providers. When such a system was implemented in the UK a few years ago, payments to physicians shot up, as doctors reported high compliance rates with the standards. However, studies showed very little change in actual behavior.

In fact, "paying for quality" is unlikely to work as well in practice as it might in theory. The design and implementation of "pay for performance" systems in business is an art, rather than a science. In evaluating middle managers, large corporations do not rely on simple rules administered from remote locations. Instead, a manager's performance is usually evaluated by an immediate supervisor who is in a position to directly observe the manager's conduct. The manager's decision-making environment is too complex to be assessed from afar. Similarly, one would expect that a doctor's decision-making environment also is very complex, and simple rules designed and administered off site would likely turn out to be crude and ineffective in identifying and truly rewarding better performance.

The track record of government reforms in reducing costs tends to be worse in practice than what is promised in theory. For example, the Massachusetts health care reform, which included a health insurance mandate and other features included in the recent national health care legislation, was touted as a way to reduce costs. Supporters claimed that with more of the population carrying health insurance, visits to emergency rooms would go down. They also claimed that the mandate would reduce adverse selection and thereby lower insurance costs. In fact, the results were quite the opposite. Emergency room visits increased, health insurance premiums skyrocketed, and thousands of Massachusetts residents evidently chose to game the system by obtaining insurance policies when sick and canceling them when healthy.

This track record promised savings that failed to materialize provides grounds for skepticism about the cost savings that are assumed under the latest health care legislation. It would have been better to pay for the additional health insurance subsidies contained in the legislation with higher taxes or reduced spending elsewhere. Treating promised savings as a reliable source of revenue is highly imprudent, given past experience.

Even if reductions in the growth of Medicare spending do materialize, they are needed to moderate future Medicare deficits. Instead, assigning these savings to pay for health-insurance subsidies means that even more savings must be found in the future to bring Medicare spending and revenues into balance.

Myth 4: European economies demonstrate the feasibility of higher levels of taxation

Taking into account all levels of government, the ratio of taxes to GDP in the United States in 2007, prior to the onset of the latest recession was 28.3 percent.¹⁸ In western European countries in 2007, the ratio ranged from 28.9 percent in Switzerland to 48.7 percent in Denmark. Among the larger western European countries, the ratio was 36.2 percent in Germany, 43.5 percent in France, and 36.1 percent in the U.K.

If it were purely a matter of arithmetic, if the United States could increase its ratio of taxes-to-GDP to British levels, then it would eliminate its primary deficit in 2035. That deficit is projected in the CBO alternative fiscal scenario to be 7.1 percent of GDP, and the British taxation rate is 7.8 percentage points higher than the American.

Taking economic behavior into account, increasing taxes is not so easy. Higher tax rates affect employment and output. Consider the following data, from 2007.¹⁹

| Country | GDP per capita | GDP per hour | Hours worked per capita |
|---------|----------------|--------------|-------------------------|
| U.S. | \$43,250 | \$49.67 | 871 |
| France | \$30,667 | \$48.99 | 626 |
| Germany | \$33,184 | \$47.89 | 693 |
| U.K. | \$34,209 | \$42.85 | 798 |

What this table shows is that productivity, as measured by output per hour, is not much higher in the United States than in the large European countries. The higher level of GDP per capita in the U.S. comes largely from more hours worked per capita. If hours worked per person in the U.S. were to fall to European levels as the result of higher tax rates, then the reduction in GDP would counteract the rise in tax rates, leading to little or no increase in government revenue.

The difference between hours worked per person in the U.S. and hours worked per person in European countries is an important issue. If the difference reflects cultural preferences for leisure relative to

¹⁸ See OECD tax database, table 0.1

http://www.oecd.org/document/60/0,3343,en_2649_34533_1942460_1_1_1_1,00.html

¹⁹ Source: U.S. Bureau of Labor Statistics, "International comparisons of GDP per capita and per employed person, 17 countries, 1960-2008. July 28, 2009. http://www.bls.gov/fls/flsgdp.pdf

work, then perhaps the American labor force would continue to work longer hours even at higher levels of taxation. This would make higher taxes an effective means for reducing or eliminating the U.S. primary budget deficit. On the other hand, if the difference reflects the response to the disincentives created by higher taxation, then raising tax rates would do little or nothing to erase the primary deficit.

Edward Prescott investigated this issue in a paper for the Federal Reserve Bank of Minneapolis.²⁰ He wrote,

Americans now work 50 percent more than do the Germans, French, and Italians. This was not the case in the early 1970s, when the Western Europeans worked more than Americans. This article examines the role of taxes in accounting for the differences in labor supply across time and across countries; in particular, the effective marginal tax rate on labor income. The population of countries considered is the G-7 countries, which are major advanced industrial countries. The surprising finding is that this marginal tax rate accounts for the predominance of differences at points in time and the large change in relative labor supply over time.

Prescott calculates the total incentive effect of all taxes on market labor. For example, a sales tax or value-added tax (VAT) will tend to discourage market labor and instead encourage activities such as leisure or housework that generate untaxed consumer benefits. After estimating tax rates and making assumptions about labor supply elasticities, Prescott calculates that

the low labor supplies in Germany, France, and Italy are due to high tax rates. If someone in these countries works more and produces 100 additional euros of output, that individual gets to consume only 40 euros of additional consumption and pays directly or indirectly 60 euros in taxes.

Prescott points out that his analysis implies that the welfare losses from high marginal tax rates are high. As he puts it,

If France were to reduce its effective tax rate on labor income from 60 percent to the U.S. 40 percent rate, the welfare of the French people would increase by 19 percent in terms of lifetime consumption equivalents.

This follows from Prescott's assumption that labor supply responds strongly to tax rates. This is a controversial assumption. In general, microeconomic studies find that the elasticity of labor supply is relatively low, perhaps just 0.1, which would mean that a 10 percent decrease in the net wage rate would reduce labor supply by only 1 percent. If this is correct, then the welfare loss from higher taxes is much lower than Prescott would estimate, for the textbook reason that there is very little deadweight loss²¹ when a tax is imposed on a market with inelastic supply or demand.

Prescott would argue that the high estimate for labor supply is necessary to explain many macroeconomic phenomena, including the differences in hours worked in European countries compared with the United States. Fiorito and Zanella offer an explanation for the macroeconomic perspective of an elasticity of labor supply closer to 1 (which would mean that a 10 percent decrease in

²⁰ Edward Prescott, "Why Do Americans Work So Much More than Europeans?" Federal Reserve Bank of Minneapolis *Quarterly Review*, July 2004.

²¹ A tax redistributes some income from producers and consumers to the government. However, in addition, some economic activity is reduced in response to the tax. It is this net loss of economic activity that economists refer to as deadweight loss.

the net wage rate would reduce labor supply by 10 percent).²²

Richard Rogerson, author of a new book on the issue of labor supply elasticity, recently pointed out that in other countries the tax on labor increased significantly in the past 40 years and labor supply decreased dramatically relative to the United States.²³ His data show that from 1960 to 2000, the average effective tax rate on labor income rose only 6.5 percent in the United States, while it climbed by an average of 16.5 percent in OECD countries overall, with increases in other countries ranging from 10.3 percent in the U.K. to 27.5 percent in Sweden.

Over that same period, hours worked rose 10 percent in the United States, but hours worked fell by an average of 19 percent in the OECD countries overall, with Canada the only other OECD country showing an increase in hours worked between 1960 and 2000. Germany, France, and the U.K. experienced decreases in hours worked of roughly 30 percent over this time period.

Rogerson points out,

In 1960, hours of work were actually higher in Germany, France, and Belgium than they were in Canada, the United States, and Australia. That is, 50 years ago the relative work levels of these countries were reversed. This evidence seems inconsistent with the view that Europeans work less because they either value leisure more or do not care so much about consumption.

Further evidence that lower European work hours do not reflect a preference for leisure can be seen in studies of cross-country differences in the allocation of time. These show that Europeans spend most of their additional non-work hours doing housework or other non-market forms of labor, rather than engaged in leisure. Rogerson cites a number of these studies. Several of these show that Europeans spend 15 to 20 percent more time than Americans engaged in home production, meaning work around the house. At least one study shows that after subtracting time spent on home production, Americans actually have more leisure time than do Germans.²⁴

These studies raise doubts about whether European levels of taxation would serve to increase tax revenue for the U.S. government. Instead, Americans might respond to higher taxes on market activities by spending more time mowing our own lawns, cooking our own meals, fixing our own cars, doing our own household repairs, and so on. Such a shift would lower economic well-being without solving the problem of the budget deficit.

Myth 5: The United States will simply grow its way out of its debt

In the context of the debate over short-term economic stimulus, some advocates argued that the United States can run a large short-term deficit without difficulty. This is because long-term growth can dilute the cost of temporary deficits.

The arithmetic of this argument is correct. A deficit of 10 percent of GDP today, if soon reversed, can

²² Riccardo Fiorito and Giulio Zanella, "Labor Supply Elasticities: Can Micro be Misleading for Macro?" working paper uploaded to Social Science Research Network, August 2009. http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1417369

²³ Richard Rogerson, "Labor Pains," *The American*, July 20, 2010. http://www.american.com/archive/2010/july/laborpains The article is adapted from Rogerson, *The Impact of Taxes on Labor Supply*, AEI Press, 2010.

²⁴ Ronald Schettkat, "Differences in U.S.-German Time-Allocation: Why Do Americans Work Longer Hours Than Germans?" Institute for the Study of Labor Discussion Paper 697, January 2003.

be swallowed up over subsequent decades by economic growth. The long-term costs of a deficit can be mitigated by economic growth, so that if near-term deficits truly are temporary and clearly offer benefits, they may be justified.

During the Second World War, the United States ran large budget deficits, with the ratio of government debt to GDP climbing just over 100 percent, compared with less than 60 percent recently. After World War II, the ratio of debt to GDP fell for a number of reasons. Economic growth was one factor. However, as I have shown elsewhere, large primary budget surpluses and low real interest rates played a major role.²⁵

However, there are few similarities between the current situation and the aftermath of the Second World War. In 1945, victory in the war removed the main driver of spending and deficits. Today, the main driver is growth in entitlement spending. The largest budgetary pressures are ahead of us, not behind us.

A normal amount of economic growth is built into the Congressional Budget Office projections used to formulate its long-term outlook. Even so, the ratio of debt to projected GDP keeps rising. It would take a *surprisingly high* rate of economic growth to cause the ratio of debt to GDP to stabilize or to decline.

Economic growth is approximately the sum of the growth in the labor force and the growth in productivity. Growth in the labor force is unlikely to diverge from projections because the demographic variables are unlikely to change. The outlook for the labor force in the next 20 years can be inferred pretty accurately from the age distribution of the population today.

Productivity growth is more uncertain. The Congressional Budget Office projection assumes average labor productivity increases of 1.6 percent per year. Over the past 50 years, we have experienced both stronger and weaker periods of productivity growth.

For the future, Jagadeesh Gokhale has suggested a reason for pessimism. He argues that the relatively high rates of population growth among lower-income groups suggests a slow rate of productivity growth, due to what he calls "declining labor quality."²⁶

On the other hand, others see grounds for optimism. For example, entrepreneur and futurist Ray Kurzweil foresees rapid economic growth, resulting from improvements in artificial intelligence, biotechnology, and nanotechnology.²⁷

If the optimistic scenarios pan out, then the United States will enjoy a productivity dividend in the coming decades. Such a dividend would ease the budget issue considerably, because it would increase the rate at which revenues grow in comparison with spending on Medicare and other programs. However, it seems more prudent to take a more cautious outlook in setting long-term budget policy. It probably would be better to scale back promised benefits to today's workers and have them save more than is necessary for retirement than to make the opposite mistake, promising them retirement benefits and then subsequently reneging on those promises due to a budget crisis.

²⁵ Arnold Kling, "Why our Current Budget Situation is a Crisis," The American, May 4, 2010. http://www.american.com/archive/2010/may/why-our-current-budget-situation-is-a-crisis

²⁶ Jagadeesh Gokhale, Social Security: A Fresh Look at Policy Alternatives, University of Chicago Press, 2010, p. 29.

²⁷ Ray Kurzweil, The Singularity is Near. Viking Adult, 2005.

Conclusion

Most Americans would be happier if the outlook for the budget could be taken care of without having to make major changes to entitlement programs. Certainly, politicians would have it easier if this were the case.

Unfortunately, arithmetic and prudence imply a need to tackle entitlements. What this paper has shown is that various alternative solutions to the budget problem are largely myths.

Social Security is not protected by its trust fund. The trust fund contains no real assets. It is simply an accounting device that indicates the promises that have been made to current workers to provide benefits to them in retirement. There is no way to avoid having Social Security absorb a large share of the budget during the years when the Baby Boomers are collecting benefits.

Raising taxes on high earners (those in the top 1 percent of the income distribution) is not a reliable way to deal with the budget deficit. Increasing the effective tax rate requires much more than just raising marginal rates because individuals have the opportunity to shift income into forms that are taxed at lower rates. Structural reforms to the tax system could reduce the ability of high earners to shelter income, but only with adverse effects on capital accumulation, entrepreneurship, and risk-taking. In any case, even doubling the effective tax rate on high earners would not make the budget problem disappear.

Health care spending is rising as a share of GDP. This is true all over the world, reflecting the high income elasticity of the demand for health care. As people get wealthier, they are willing to spend more to remain healthier. Certainly, greater efficiency in health care management and delivery is both desirable and possible. However, the potential for pure efficiency gains is limited, and it will not solve the problem of ever-increasing Medicare spending. The only way to address Medicare specifically and health care spending more generally is to change the way that Americans make choices about the utilization of medical services. This will require either a stronger move toward government rationing or a shift toward more consumer sharing of the costs and responsibility for decisions about which procedures to undertake and which procedures to forgo.

Broad-based tax increases, bringing rates in line with those seen in Europe, will only solve the budget problem if there is minimal response of labor supply. However, there is notable evidence that higher taxes produce significant long-run reductions in hours spent engaging in market work, with households substituting home production for taxable labor. Higher tax rates could result in a large loss in consumer well-being with little or no increase in government revenues.

Finally, it is true that we faced a higher ratio of debt to GDP at the end of the Second World War. However, our current position does not resemble that of 1945, when we could look forward to sharp declines in government spending and large primary surpluses. Instead, the outlook over the next two decades is for increased spending and ever-widening primary deficits. Certainly, if productivity growth greatly exceeds the 1.6 percent per year embedded in current projections, the prospects for the budget would be brighter. However, it is most prudent to align our promised entitlement benefits to realistic projections, not to optimistic hopes.

Today, the American people must face up to significant structural changes in entitlement programs that reduce promised benefits. We have exhausted the alternatives.