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SIMPLE SOLUTIONS FOR THE LONG-TERM BUDGET CHALLENGE

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The United States long-term fiscal outlook is considered by many experts to be unsustainable. Growth in entitlements, particularly Medicare, Medicaid, and Social Security, threatens to create an ever-increasing gap between revenues and expenditures.

In this paper, I will use as the baseline the budget projections made by a nonpartisan organization called the Committee on the Fiscal Future of the United States, in its report, *Choosing the Nation's Fiscal Future*[1]. The report starts with a baseline projection from the Congressional Budget Office based on current law, but the committee modifies this baseline to take into account what the group sees as a more realistic outlook for near-term policy.

The baseline projections can be summarized in the table below:

Revenues and Expenditures as a Share of GDP

Year	Revenues	Social Security	Medicare and Medicaid	Other Noninterest Spending	Net Interest	Deficit	Debt Held by Public
2005	17.6	4.2	3.9	10.6	1.5	2.6	37.5
2010	16	4.8	5.1	13.5	1.2	8.5	60.9
2015	18.3	4.8	5.4	9.3	2.8	4	70.4
2020	18.3	5.3	6.4	8.5	3.6	5.5	78.8
2030	18.7	6	8.7	8.5	4.8	9.4	117.6
2040	19.1	5.9	10.9	8.5	7.4	13.7	180.2
2050	19.6	5.7	12.6	8.4	10.8	17.9	259.2
2060	20.3	5.8	14.2	8.4	14.7	22.9	351.7
2070	20.9	6	16	8.4	19.4	28.8	460.4
2080	21.6	6.2	17.9	8.4	24.9	35.9	590.5

The figures for 2010 are distorted by the deep recession, which causes nearly all of the ratios to GDP to be unusually high. A better estimate of where we are today would be the average of 2005 and 2015. Using that average, tax revenues are about 18.0 percent of GDP, Social Security is about 4.5 percent of GDP, Medicare and Medicaid are about 4.7 percent of GDP, and the total of Social Security, Medicare, and Medicaid is about 9.2 percent of GDP.

The proposals in this paper will be designed to keep the total of Social Security, Medicare, and Medicaid below 10 percent of GDP in 2020 and 2030. Assuming that revenues and other spending follow the projected path, holding Social Security, Medicare, and Medicaid at 10 percent of GDP should be sufficient to stabilize the fiscal outlook.

1 See http://www.nap.edu/catalog.php?record_id=12808. Some material, including the baseline assumptions, is available only at the website and not in the printed report.

If no policy changes are made, the projections beyond 2030 are not really plausible, because by then the financial position of the U.S. government will have become unstable. With government debt in excess of 100 percent of GDP and more than six times government revenues, the risk premium that investors charge the Treasury could become significant. Reinhart and Rogoff present a table with the ratio of total public debt to revenue at the time of default for thirteen historical episodes. In ten out of the thirteen, the default took place at a debt-to-revenue ratio of less than six[2].

Reinhart and Rogoff also point out that government fiscal positions tend to be highly opaque, for political reasons. This is as true of the United States today as it has been of other countries in the past. We have no standard measures of the potential liabilities of the United States government for losses on mortgages due to default, losses on mortgage securities due to interest-rate fluctuations, potential losses of the Pension Benefit Guarantee Corporation, and so on. If anything, the medium-term fiscal outlook of the Committee on the Fiscal Future that I am taking as a baseline is probably too optimistic.

By the time that the United States reaches the fiscal position that is projected for 2030, investors would be unlikely to view U.S. debt as risk-free. Instead, investors would be building a substantial default premium into their pricing of U.S. government securities. (Because the U.S. could attempt to inflate away some of its debt, the "default premium" could be an inflation premium.) If the default premium were enough to raise interest rates by five percentage points, then the additional interest would raise the deficit by nearly another 6 percent of GDP, which would worsen the fiscal outlook even more, leading to a higher risk premium, and so on. This is a scenario for a fiscal death spiral, or a "sudden stop," as it is known in the academic literature on currency crises and sovereign debt crises. As the name "sudden stop" implies, the loss of investor confidence forces the government to take draconian measures in a hurry in order to bring its budget closer to balance. In February of 2010, Greece appeared to be suffering from a fiscal death spiral, requiring some combination of international assistance and domestic belt-tightening. As of this writing, that situation had not been resolved.

It is not possible to predict the exact time and conditions under which a fiscal death spiral would take place. If investors are willing to tolerate an unusually high ratio of public debt to revenue, the death spiral might not occur until some time after 2030. On the other hand, if investor doubts develop at lower ratios of public debt to revenue, or if the medium-term fiscal outlook is already much worse than portrayed in the baseline projection of the Committee on the Fiscal Future, then the death spiral could occur sooner.

A fiscal death spiral could be avoided without changing the path of government spending, provided that the United States enjoys what might be termed a revenue growth windfall. Faster growth in tax revenues could come from faster-than-anticipated productivity growth, which would raise GDP and revenues. Alternatively, a revenue growth windfall could come from a combination of tax reforms and rate increases that raises the ratio of revenue to GDP without significantly retarding GDP growth.

If a revenue growth windfall materializes, then there will be time to undo the spending cuts recommended in this paper. The proposed cuts are to future entitlement spending, not to the amounts owed to current or near-term future beneficiaries. However, to preserve our fiscal future, prudence would seem to require that we assume no revenue growth windfall, rather than act as if one can be expected.

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2 Carmen M. Reinhart and Kenneth S. Rogoff, *This Time is Different: Eight Centuries of Financial Folly*. Princeton, NJ: Princeton University Press, 2009. p. 120, table 8.1

The dire future fiscal position comes largely from promises being made to people who will be eligible for Social Security and Medicare in 2020 or later. Fixing the fiscal outlook is as simple as scaling back those promises to more realistic levels. Scaling back our promises does not necessarily harm anyone. If the promises are excessive (as they will prove to be if we undergo a fiscal death spiral), then those promises will be broken. In fact, it is likely to be better for today's young and middle-aged workers if they are given realistic promises of future benefits rather than to have them make plans based on unrealistic promises on which the government has to renege.

If no revenue windfall emerges, future beneficiaries will be better off with a scaled-back set of promises for Social Security and Medicare. On the other hand, once we make a realistic set of promises, if a revenue growth windfall does emerge, Congress will have the option of voting for more generous benefits.

Although the proposed cuts here are to future promises, there is an urgency to taking steps today. In fact, it would have been better to have taken steps five or ten years ago, when only people under the age of 50 need to have been affected. Today, the cuts will have to affect people who today are aged 55, a mere 10 years away from attaining eligibility for Medicare and 11 years away from attaining eligibility for standard Social Security benefits. If we wait longer, we will be affecting people even closer to retirement age. If we wait too long, a financial death spiral will affect people already into retirement.

The focus of this paper will be on cutting promises to future recipients of Medicare and Social Security. Although Medicaid expenditures are growing at a disturbing pace, cuts in Medicaid would not fit into the spirit of this paper. The goal here is to enable people to plan and adapt to cuts in promised future benefits. People today cannot plan for cuts in Medicaid in the future. Those who are now on Medicaid do not have the wealth to save up for future expenses. Those who are not now on Medicaid probably will be surprised if they require Medicaid at some future date, and thus they are not likely to factor future Medicaid cuts into their current decisions.

Social Security

The main reason that Social Security is rising as a share of GDP is that the age of eligibility for benefits has remained close to what it was when the program was first enacted, even though health and longevity have improved. Someone who reached the age of 65 around 1940 had an average remaining life expectancy of 12.8 years. By 2004, this had increased to 18.7 years.[3]

My proposal is to increase the age of eligibility for Social Security by enough to restore the life expectancy of a Social Security recipient to 13 years, as it was around the time that the program was enacted. The goal would be to complete this restoration for those who will be 65 in 2032. By then, life expectancy at 65 is likely to have increased by another 2 years, to 20.7 years, because it has been going up at a rate of about 1 year per decade. That means that in 2032, the age of eligibility for Social Security ought to be 73, which would leave a life expectancy at eligibility of 12.7 years.

Currently, people who would reach age 65 in 2020 would be eligible for normal Social Security benefits at age 66 and two months, with the normal retirement age gradually rising to 67 for those

3 Elizabeth Arias, *United States Life Tables, 2004*, Center for Disease Control National Vital Statistics Reports, Volume 56, number 9, December 28, 2007. http://www.cdc.gov/nchs/data/nvsr/nvsr56/nvsr56_09.pdf

reaching age 65 in 2025.[4] I would instead propose raising the normal retirement age to 67 for those reaching 65 in January of 2020 (born in January 1955), and then increasing the retirement age by one month every two months thereafter. Thus, someone reaching age 65 in January of 2021 (born in January 1956) would have an age of eligibility of 67-1/2, someone reaching age 65 in January of 2022 (born in January 1957) would have an age of eligibility of 68, and so on, with the eligibility age reaching 73 for those reaching 65 in 2032 (born in 1967). At that point, the rate of increase in the normal retirement age could be slowed to about one month per year, assuming that longevity at 65 continues to increase at the average rate of the past six decades.

The intent is not to keep people working and paying taxes until age 73. In fact, my proposal assumes no additional revenue from payroll taxes, and this assumption could be "hard-coded" by exempting workers between age 67 and 73 from the payroll tax.

Indeed, it would be best not to refer to the age of eligibility for normal Social Security benefits as the retirement age. People can retire whenever they choose. What is called the Normal Retirement Age should be called the Normal Benefits Age.

I estimate that these changes would have the following impact on the ratio of Social Security benefits to GDP[5]:

Year	Baseline Forecast	Proposal
2020	5.3 percent of GDP	5.1 percent
2030	5.6 percent	4.2 percent

Medicare

Medicare is affected by the same demographic issue as Social Security. However, an additional driver of Medicare spending is the fact that spending on medical services is rising relative to GDP. This means that open-ended reimbursement for medical services cannot possibly be reconciled with a fixed budget. Eventually, fee-for-service reimbursement must break down.

There are two approaches for keeping Medicare within a fixed budget. One approach would set the budget and have medical procedures rationed by government officials. Another approach would be to convert Medicare to a voucher system, in which individuals would have to make their own decisions about which medical procedures to undertake and how to pay for them. My proposal is based on the latter approach.

A voucher system raises concerns about individuals who would experience ailments that require expensive treatment. Accordingly, the proposal here supplements a voucher with catastrophic health insurance, provided by government and hence financed by taxpayers. Thus, the new Medicare would consist of a voucher supplemented by catastrophic health insurance.

4 http://www.socialsecurity.gov/retire2/agereduction.htm

5 The proposal here would increase the retirement age farther and faster than any proposal that has been analyzed by the Social Security actuaries. Accordingly, my estimate of the effect on expenditures is based on a back-of-the-envelope analysis. This is explained in the appendix.

Because of the rapid increases projected in the elderly population, the amount available for the voucher portion of the new Medicare would decrease sharply between now and 2030. Thus, people who are in their forties (and younger) today should be warned of a need to save more in order to pay for a large share of their health expenses after they reach age 65. Recently, total spending (not annual spending) between age 65 and the end of life has averaged about $100,000 per person. A prudent individual would want to save at least that much by age 65, and even more under the assumption that medical care is going to continue to become more specialized and capital intensive.

The goal is to keep Medicare at the same ratio of GDP that it was in 2007, about 3.3 percent. Suppose that Medicare stays at 3.2 percent of GDP, and Social Security is at 4.2 percent of GDP in 2030. If we want the total of Social Security, Medicare, and Medicaid to stay at 10 percent of GDP or less, then this leaves room for Medicaid to reach 2.6 percent of GDP, which is about 50 percent higher than it has been recently. The goal is summarized in the following table.

Year	Social Security	Medicare	Medicaid*
2020	5.1 percent of GDP	3.2 percent	1.7 percent
2030	4.2 percent	3.2 percent	2.6 percent

*The percent of GDP for Medicaid is calculated as the remainder of 10 percent of GDP minus spending on Social Security and Medicare. The goal is to keep the total of the three programs at 10 percent of GDP.

Arithmetically, the proposal here will fix the Medicare budget at 2007 levels, with an adjustment for overall nominal GDP growth. That is, if the Medicare budget were $100 in 2007 and nominal GDP grew 50 percent by 2030, then in 2030 the Medicare budget would be $150.

For this purpose, Medicare's budget will be fixed by eliminating any direct reimbursement for medical services. Instead, Medicare benefits will consist of a fixed voucher plus catastrophic insurance. It is expected that the voucher will be used to purchase additional insurance. It is also expected that individuals will pay for some of their health expenses and some of their insurance premiums out of personal savings.

Assuming that health spending rises faster than GDP, fixing the Medicare budget will gradually shift more and more of the cost of medical care onto individuals. This in turn will likely cause a slowdown in health care spending growth. As individuals share more of the cost of medical treatment, they will make the necessary decisions to forego some medical procedures that they would undertake if those procedures were paid for by third parties.

The formula for catastrophic insurance will be as follows. Medicare will pay 20 percent of all individual annual health care expenses above $30,000, plus 30 percent of all expenses above $50,000, plus 30 percent of all expenses above $100,000. So, if I incur expenses of $120,000, then Medicare will pay $18,000 plus $21,000 plus $6000, or $45,000. The remaining $75,000 would come from my own insurance or out of my pocket.

This extreme catastrophic insurance is not a substitute for personal private health insurance. Instead, it is intended to take on the extreme risks, so that the private health insurance market is able to function. In that regard, it is similar to the idea of "catastrophic reinsurance" proposed by Stuart Altman, an

adviser to the 2004 Presidential campaign of John Kerry.[6] The thinking is that in the absence of catastrophic reinsurance, concerns about the most costly patients could cause the health insurance market to break down, with health insurance companies engaged in a destructive competition to avoid serving the most high-risk individuals. Instead, with government absorbing a large chunk of the costs of high-risk individuals, the hope is that the market for private health insurance will function so that seniors can use their own savings plus vouchers to buy private health insurance.

The government-run catastrophic insurance that I am proposing here serves two purposes. First, it redistributes wealth from the healthy to the very sickest in the population. Second, it acts as a form of reinsurance for private health insurance companies, making it less likely that the private market will break down due to adverse selection. With government catastrophic insurance in place, private insurance companies will have less incentive to screen out applicants with poor health prospects.

Another way to think of my proposed benefits schedule for this catastrophic health insurance is that it would pay 20 percent of marginal expenses between $30,000 and $50,000, 50 percent of marginal expenses between $50,000 and $100,000, and 80 percent of marginal expenses over $100,000. The intent of a graduated schedule of benefits is to try to minimize "kinks" where there is a sudden drop in the marginal cost to the consumer of obtaining additional medical services. Of course, consumers' purchase of private health insurance likely would change their personal marginal cost calculations.

With the approach proposed here, the private marginal cost (the marginal cost borne either by consumers or private health insurance) is still 20 percent for expenses above $100,000. It is 50 percent for expenses between $50,000 and $100,000, and it is 80 percent for expenses between $30,000 and $50,000. My thinking is that this schedule of private marginal cost is such that consumers would be careful in their choice of medical procedures. As of now, Medicare beneficiaries can treat nearly all procedures as if they were nearly free at the margin. That would be far from the case under the catastrophic insurance proposed here.

As GDP increases, the break points of catastrophic health insurance would increase. If GDP is higher by 50 percent, then catastrophic insurance would kick in only for expenses of $36,000 or higher, rather than for expenses of $30,000 or higher.

The other component of Medicare would be a fixed-dollar voucher. For seniors aged 65–74, the voucher would be $4,300. For seniors aged 75 and higher, the voucher would be $7,000. If this plan were implemented in 2015, these figures would be adjusted upward by the ratio of nominal GDP in 2015 to nominal GDP in 2007.

Between now and 2030, the number of people over age 65 will nearly double. This makes it unlikely that the the United States will be able to sustain the level of benefits promised under current law.

Under the proposal here, as the U.S. population ages, the spending on catastrophic coverage will go up, and the amount available for vouchers will decline, particularly on a per capita basis. By 2020, this plan will allow vouchers of $6,000 for seniors aged 75 and up, with only $2110 for seniors aged 65–74. By 2030, the voucher for seniors aged 75 and up would be $5,000, and the voucher for seniors aged 65–74 would be just $700.[7] Keep in mind that these figures would go up by the ratio of nominal GDP

6 "Kerry Plan Could Cut Insurance Premiums," *The Washington Post*, June 5, 2004. http://www.washingtonpost.com/wp-dyn/articles/A16748-2004Jun4.html.

7 See the calculations in the appendix.

in those years to nominal GDP today. The net result is that by 2030 seniors would have to fund much of their health expenses, including health insurance, out of their personal savings.

Several trends should enable seniors aged 65–74 to pay for more of their own health expenses in 2020 and 2030. First, wealth is increasing, which allows people to save more. Second, health is improving, which means that more people could work longer if they chose to do so. Third, improved health means less need for expensive medical services between the ages of 65 and 74.

Seniors could use vouchers for any combination of the following: to purchase additional health insurance; to pay for medical expenses out of pocket; or to fund health savings accounts. Under this plan, When I reach 65, I will be looking for a catastrophic insurance policy that covers the expenses that Medicare catastrophic insurance does not cover over $20,000 (in 2007 terms). In any given year, I will be prepared to pay expenses up to $20,000 out of savings.

To prepare seniors for the transition to this plan, it probably ought not to take effect until 2015. Beyond that, the longer we wait to implement the plan, the more drastic will be the cut in benefits when the transition takes place, because under the current system Medicare spending is likely to continue to grow faster than GDP. Once the plan is in place, seniors are likely to take a more restrained approach to health care spending. To the extent that they do so, the plan may reduce Medicare spending by more than what is assumed in my computations. That in turn could create room to make the parameters of the plan more generous.

Under this combination of catastrophic insurance and vouchers, the overall benefits are not generous. In 2030, the number of people aged 65 and older will be almost double what it is today. That means that to hold Medicare spending constant, we would have to nearly cut benefits in half relative to today. To ease the pain of these cuts (and keep in mind that, absent a revenue windfall, severe cuts are almost inevitable), the redesign of Medicare ought to be thought through to try to anticipate and avoid gaps and inequities. Perhaps the vouchers should be means tested. Perhaps the catastrophic insurance component should be based on multi-year medical expenses, to avoid inequities between someone whose health expenses are bunched in one year and someone else with equally large or larger expenses spread out over more than one year.

Had this plan been in place in 2007, then total Medicare spending would have been the same. However, the distribution would have been different. People aged 75 and people with catastrophic expenses would have received a somewhat larger share of benefits. People under age 75 without catastrophic expenses would have received a somewhat smaller share of benefits.

By 2030, it is almost as if the age of eligibility for Medicare has been raised to 75. Those aged 65–74 would receive only catastrophic coverage plus a voucher of just $700 per person. Medicare would be paying for only about 10 percent of health expenses in this age group, compared with over 60 percent today.

Today, about two-thirds of the health care spending of people over age 65 is paid for by Medicare, with most of the rest paid for out of pocket or by supplemental private insurance. Under the proposals here, by 2030 Medicare would be paying for much less. That means that people who are in their forties and early fifties today will face three choices:

- consume less now, in order to save for future medical expenses
- consume less of other goods and services as seniors, in order to pay for medical expenses

- spend less on medical services in their old age

These may not be the choices that they would prefer, but at least they represent choices. If we attempt to follow current policy, and a crisis ensues, then by the time today's 40- and 50-year-olds reach age 65, the only will option will be to spend less on medical services in their old age, with the spending restrictions imposed by draconian government rationing.

Appendix

This appendix explains the calculations for what the proposed changes would save as a percent of GDP.

A. Social Security

In 2020, the proposed retirement age of 67 would subtract 10 months of benefits from current law, out of an average expectancy of about 20 years, for a reduction of roughly 4 percent. The baseline calls for Social Security expenditures of 5.3 percent of GDP in 2020, so a 4 percent reduction would cause that to fall to about 5.1 percent of GDP.

In 2030, the proposed retirement age of 72 would subtract 5 years of benefits from current law, out of an average expectancy of 21 years, or roughly a 24 percent reduction. The baseline calls for 5.6 percent of GDP, so that a 24 percent reduction would cause that to fall to 4.2 percent of GDP.

B. Medicare

The calculations for Medicare are based on the Medical Expenditure Panel Survey (MEPS), provided by the Agency for Healthcare Research and Quality.[8] As of this writing, the latest year of data available from the MEPS was 2007.

The MEPS is survey of nearly 30,000 consumers, which the researchers then extrapolate to the entire U.S. population. The extrapolated totals do not necessarily match the totals in the U.S. Budget or the National income Accounts.

The MEPS data extrapolations show that in 2007, Medicare paid $106 billion to cover medical expenses for seniors aged 65–74 (out of total medical spending of $166 billion in that age group) and $130 billion to cover expenses for seniors aged 75 and above (out ot total medical spending of $196 billion in that age group). Call this total Medicare spending $235 billion. We want to replace this with catastrophic insurance and vouchers that would total $235 billion.

The proposed catastrophic insurance pays for 20 percent of all individual annual health care expenses above $30,000, plus 30 percent of all expenses above $50,000, plus 30 percent of all expenses above $100,000. The MEPS data yields the following table regarding high-expenditure seniors. Note that this is their total spending, which includes more than what was paid for by Medicare.

8 http://www.meps.ahrq.gov/mepsweb/

Age Category	Expenditure Category	Population in Category	Total Spending*	Percent Paid by Catastrophic	Total Paid by Catastrophic
65–74	$30,000–$50,000	753813	$28.38 billion	20 percent of spending over $30,000	$1.15 billion
65–74	$50,000–$100,000	324809	$21.45 billion	$4000 + 50 percent of spending over $50,000	$3.9 billion
65–74	Over $100,000	116122	$15.70 billion	$29,000 + 80 percent of spending over $100,000	$6.64 billion
75 and older	$30,000–$50,000	996987	$37.69 billion	20 percent of spending over $30,000	$1.55 billion
75 and older	$50,000–$100,000	463806	$30.20 billion	$4000 + 50 percent of spending over $50,000	5.36 billion
75 and older	Over $100,000	69946	$8.39 billion	$29,000 + 80 percent of spending over $100,000	3.14 billion

*Note: for the category age 65–74, total spending of $28.38 billion includes all spending. The first $30,000 of spending from each person is exempt from coverage by the catastrophic insurance proposal. Multiplying $30,000 by 753,813 people in this category means that $22.6 billion in spending by this group is exempt from coverage. Similar calculations apply to other categories.

Next, assume that there is a $7000 voucher for everyone aged 75 and older, a total population in 2007 of 18.67 million, for a total expenditure of $130.7 billion. With total catastrophic expenditures of $21.7 billion and a total budget of $235 billion, that leaves $77.4 billion to give in vouchers to people aged 65-74. Divided by a population in that age group of 19.3 million, the average voucher can be $4,300.

How would seniors aged 65–74 fare with a voucher of $4,300? In 2007, of the 19.3 million people in that age category, 9.0 million had less than $3,000 in medical expenses, and another 3.2 million had between $3,000 and $5,000 in medical expenses. By covering expenses up to $5000 out of pocket, seniors in this age bracket could use the entire $4300 voucher to obtain catastrophic coverage that fills in much of the gap left by the government catastrophic insurance proposed here.

By 2020 and 2030, however, the per capita vouchers would have to be greatly reduced. That is because the population of seniors will be much higher by then, and a $235 billion budget will not go as far. The table below shows how a hypothetical budget of $235 billion might be distributed among a much larger population of seniors.[9]

	2007	2020	2030
Population, age 65–74	19.3 million	32.3 million	38.8 million
Population, age 75+	18.6 million	22.5 million	33.3 million
Catastrophic Insurance Spending, 65–74	$11.69 billion	$19.56 billion	$23.5 billion
Catastrophic Insurance Spending, 75+	$10.05 billion	$12.16 billion	$17.99 billion
Voucher, 65–74	$4,300.00	$2,110.00	$700.00
Voucher Spending 65–74	$83.1 billion	$68.3 billion	$27.0 billion
Voucher, 75+	$7,000.00	$6,000.00	$5,000.00
Voucher Spending, 75+	$130.2 billion	$135.0 billion	$166.5 billion

9 Population projections were taken from the Census Bureau International Data Base, http://www.census.gov/ipc/www/idb/informationGateway.php, accessed in February 2010 with data updated in December of 2009. See the release notes at http://www.census.gov/ipc/www/idb/idbr2009b.php.