

Faulty



Assumptions

On Surpluses, Deficits
and Democracy

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Earthquakes happen with little warning. So we are lucky that policymakers in cities built on geologic faults understand the consequences well enough to make at least modest preparations to cope with the inevitable.

Would that equally candid appraisals characterized the U.S. government's fiscal prognoses. In fact, the government has done little to prepare us for the tidal wave of government pension and health obligations that will hit us over the next three decades, as some 78 million baby boomers retire. When that demographic tsunami reaches its peak, we'll have twice as many old people as we have today, and they will depend on only 15 percent more young workers for economic support. The country will look as old as present-day Florida and, barring major changes in immigration policy or fertility, will stay that way for the rest of the century.

Imagine if the demographic wave were to hit today. Our only recourse would be massive tax increases and benefit cuts that would drastically lower all Americans' living standards. Happily, we have a few years left to reinforce the fiscal foundations, but the emphasis here is on "few." The oldest baby boomers will start collecting Social Security benefits in just seven years and Medicare benefits in just 10.

Unfortunately, the assumptions adopted by the government to make budget projections highlight the rosier and most improbable outcomes. By focusing on near-term surpluses in cash flow, such projections distract from what's beyond the horizon and lull the public into complacency. Worse yet, the projections will probably induce lawmakers to change fiscal policies in ways that prevent much of the anticipated "surpluses" from materializing.

Three key federal agencies have provided optimistic "baseline" scenarios about our near-term fiscal future: the Congressional Budget Office, the Social Security Administration and the Health Care Financing Agency. The CBO, for example, is required by the Deficit Control Act of 1985 to make 10-year projections of federal surpluses under assumptions about federal discretionary spending that knowledgeable members of

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Congress privately admit are untenable. Moreover, the legal obligation to project out for only 10 years hides the huge Social Security and Medicare obligations lurking in the decades beyond.

The SSA and HCFA don't do much better. In particular, their (admittedly longer-term) projections are based on life-expectancy assumptions that the SSA's own technical panel strongly rejected just last year.

In sum, conventional accounting methods adopted by the three agencies make it impossible to produce a meaningful assessment of our long-term fiscal position. We believe that our alternative – generational accounting – is far more revealing. Under realistic assumptions about the future course of federal discretionary spending, Washington is likely to create fiscal imbalances that would require future Americans to sacrifice an extra two-fifths of their lifetime earnings.

Defining the problem is, alas, easier than conjuring a solution. Closing the fiscal gap through major income tax increases or significant cuts in Medicare and Social Security benefits would require sacrifices that no current politician appears willing to contemplate. And there's no particular reason to believe that's about to change. Indeed, our collective unwillingness to focus on long-term fiscal challenges seems hard-wired in the political system.

THE CBO'S \$5 TRILLION SURPLUS

How can one be so grim about the government's long-term financial prospects when the Congressional Budget Office expects the cumulative budget surpluses between now

and 2010 to total \$5.7 trillion? The CBO's projection is predicated on spending assumptions that no one in Congress takes seriously and upon which no responsible adult would risk his child's future.

Consider CBO's mandated projection in which federal discretionary spending – pretty much everything save the big retirement programs – remains fixed in current dollars through 2010. Under that scenario, discretionary spending would fall by one-third as a share of GDP. The fate of government isn't much different under CBO's other two scenarios – one in which spending is capped through 2002 and then grows with inflation, the other in which spending grows with inflation starting immediately. Under the cap scenario, discretionary spending in this prosperous society falls by 27 percent as a fraction of GDP. Under the inflationary-growth scenario, spending is still relatively anemic, falling by 16 percent as a fraction of GDP.

To be sure, the bean counters at CBO are upfront about the assumptions underlying the projections. But the public isn't reading the fine print; nor for that matter is the press. So the CBO has reinforced the belief that we are facing huge surpluses and that we can afford major tax cuts or spending increases. The counterpart of this, of course, is that the CBO's projections have convinced the public that there is no need to raise taxes, trim benefits or limit discretionary spending.

How much of the frozen scenario's \$5.7 trillion 10-year unified budget surplus disappears if federal spending simply holds its own as a share of GDP? A whopping \$2.1 trillion. Of the remaining \$3.6 trillion, \$2.4 trillion is "off budget" and supposed to be spent on Social Security and Medicare benefits. So what's left is only \$1.2 trillion – a hefty sum, but a far cry from the amount needed to cover the massive future deficits in Social Security

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and Medicare, let alone those from the rest of the government's operations.

To understand the magnitude of the tax increases or expenditure cuts needed to achieve generational balance – that is, the amount needed to clean up all the net fiscal obligations of current generations – consider the long-term financing shortfall in the Social Security and Medicare programs. Lest you think we're stacking the deck, we analyze the shortfall under the assumption that all off-budget surpluses will be strictly allocated to pay benefits to those programs' beneficiaries.

SOCIAL SECURITY'S RED INK

By now, most Americans surely realize that Social Security and Medicare face significant financing problems down the road. What they don't know is that these problems – more specifically, the actuarial deficits – are three times larger than the trustees of the Social Security and Medicare programs acknowledge in their annual reports.

Consider Social Security's old-age pension and disability program first. According to unpublished estimates by Social Security's actuaries, covering the full benefits now promised would require an *immediate and permanent* 4.7 percentage point increase in the program's 12.4 percent payroll tax rate. This number is more than twice the size of the 1.86 percentage-point Old-Age, Survivors and Disability Insurance (OASDI) trust funds tax

increase that the 2000 Social Security's Trustees' Report says is needed. And even it might not be enough; the figure assumes that Congress will be able to keep its hands out of the proverbial cookie jar for the next decade, dedicating all interim surpluses from the payroll tax to paying future benefits.

The multitrillion-dollar discrepancy between our number and the one trumpeted by the trustees is a consequence of the way they truncate the horizon of the financing projection. The Trustees' Report looks out only 75 years, whereas we consider the indefinite future. While 75 years may seem long enough, it stops the clock when there is little doubt that deficits will be exploding.

One consequence of the trustees' 75-year horizon is that the Social Security deficit is a moving target. Successive 75-year projections are guaranteed to look worse and worse over the coming few decades because each year that passes means that a high-deficit year in the eighth decade of the century will replace a surplus (or low-deficit) year in the first decade. As a result, the 75-year projection that we make, say, in the year 2020 will show a much larger financing shortfall unless taxes are raised or benefits are cut.

This is not a new problem. Recall that, back in 1983, a committee appointed by Congress and the President, and chaired by Alan Greenspan, was charged with saving Social Security for the foreseeable future. Congress



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subsequently passed a series of tax increases and benefit trims recommended by the commission that at the time were widely touted as a permanent fix. But the fact that Social Security is again hip-deep in red ink should not be a surprise. The mere passage of time and the resulting inclusion of 17 additional years of very large annual deficits guaranteed that the 1983 fix would not hold.

Even the aforementioned 4.7 percentage point increase in the payroll tax – a 38 percent rise – would probably not eliminate Social Security’s true actuarial deficit. The 38 percent figure is computed using the actuaries’ intermediate economic and demographic assumptions. But the word “intermediate” should not be confused with “most likely.”

The Social Security Advisory Board’s 1999 Technical Panel recommended changes in the assumed rates of longevity improvement, wage growth and interest rates. The most important of these changes involved projections of lifespan; the panel thought it prudent to increase life expectancy by four years more than the current, too-conservative estimates. In advocating this monumental increase – four years in which seniors draw pensions from the system – the Technical Panel pointed out that the actuaries were currently assuming it would take Americans another 50 years to reach the life expectancy already enjoyed in Japan.

The trustees paid some attention to the Technical Panel’s recommendation. But not much. They chose to increase their life expectancy assumption by only one year. For they, too, are under political pressure to ignore the bad news as long as possible.

Indeed, overly optimistic Social Security forecasting is nothing new. Just one-third of the actuarial deficit incurred since the Greenspan Commission balanced the 75-year bud-

get was due to the inevitable replacement of surplus years with deficit years in the forecast horizon. The remaining two-thirds is divided roughly evenly between overoptimistic economic and demographic assumptions and methodological mistakes in forecasting.

All told, the 1999 Technical Panel’s recommended assumptions would raise the Old-Age, Survivors and Disability Insurance tax increase needed to achieve true long-run solvency from 4.7 to almost 6 percentage points. *And in light of the current 12.4 percent tax rate, this translates into close to a 50 percent tax rise.* Stated differently, assuming it can tap its current trust fund assets, Social Security is short 40 percent of the funds it needs to deliver promised benefits.

MEDICARE’S RED INK

The payroll tax rate for Medicare hospital insurance (known as the HI, or Part A, program) is 2.9 percent. In contrast to the pension and disability tax, the Medicare tax is levied on all wage and salary earnings, not simply earnings up to a fairly modest Congressionally mandated ceiling. Medicare Part B, the Supplemental Medical Insurance program, currently accounts for two-fifths of total Medicare expenditure. This program is 25 percent financed by participant premium payments and 75 percent financed from general tax revenues.

Like the Social Security trustees, the Medicare trustees use a projection horizon truncated at 75 years; they also use the same lifespan assumptions. Yet even with this built-in bias in favor of optimism, the trustees calculate that eliminating the HI program’s 75-year deficit would require an immediate and permanent 1.46 percentage point increase in the HI payroll tax rate. For reasons that aren’t clear, Medicare’s trustees do not specify the income tax increase needed to eliminate the

75-year Medicare Part B financing gap.

In a recent analysis, the economists David Cutler of Harvard and Louise Sheiner of the Federal Reserve added a little realism to the estimates. They extended the Medicare trustees' projection beyond the 75-year horizon, and they measured the future costs of the 75 percent of the Medicare Part B program not covered by Medicare participant premiums. Taking both into account, Cutler and Sheiner

future expenditures today than they were in 1997 means three things. First, they are anchoring much of what they expect Medicare to spend in future years to what was spent in the last couple of years. Second, in extrapolating the recent slower growth of Medicare spending to the distant future, the trustees were paying little attention to the fact that Medicare growth has slowed in the past in response to new cost-containment policies,

The inclusion of 17 additional years of annual deficits guaranteed that the 1983 fix would not hold.

estimated that it would take an immediate and permanent 4.1 percentage point increase in the Medicare tax rate to achieve true long-run fiscal solvency in Medicare – *a near tripling of the current tax rate.*

Medicare's Newfound Optimism

By the way, this distressing finding incorporates what many observers believe to be overly optimistic long-term Medicare projections. In their 1997 report, the Medicare trustees estimated that spending on the program in 2030, when those in the middle of the baby boom are in the middle of their old age, would equal 7.1 percent of GDP. Two years later, they reckoned that 2030 spending would total only 4.9 percent of GDP. The 2.2 percent of GDP discrepancy between these numbers is enormous when you consider that Medicare expenditures are currently 2.6 percent of GDP. The trustee's newfound optimism is greater the further out one looks. For 2070, the trustees assume away an amount of Medicare spending that, when scaled by GDP, exceeds the current program!

The fact that the Medicare trustees are making vastly different projections about

only to speed up thereafter. Third, Medicare spending projections are highly volatile, and there is no guarantee that the much higher future costs projected in 1997 won't become the estimates of choice once more.

The Double Whammy

The current Social Security plus Medicare payroll tax rate is 15.3 percent. If one adds to this the 6.0 and 4.1 percentage point immediate and permanent tax increases needed to secure Social Security's and Medicare's finances indefinitely, one arrives at a payroll tax rate of 25.4 percent. A total of 18.4 percentage points of this 25.4 percent tax rate would be applied only to OASDI-covered earnings; the remaining 7 percentage points would be applied to all earnings.

While the government's share of the additional costs of Medicare Part B could be paid out of general revenues, the numbers illustrate the magnitude of the fiscal burden facing tomorrow's workers from the Social Security System as currently constituted. One should also bear in mind that a 10 percentage-point tax increase would suffice only to correct the system's long-term imbalances if it

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were implemented immediately. Delay means an even higher tax increase in the future if benefits are to be paid in full.

U.S. GENERATIONAL ACCOUNTS

To get some perspective on how these great shifts will affect Americans, it's necessary to step back a little. Table 1 reports generational accounts – future taxes owed and future benefits promised for individual age cohorts

interest rate on long-term inflation-indexed U.S. government bonds; the productivity growth rate is the one currently being projected by the CBO. The numbers here are for 1998, but are based on the CBO projections available as of January 2000.

Tables 1a and 1b show the level and composition of what different age groups will give the government over the rest of their lifetimes and what they will get back. As an example, consider the \$112,300 account of 25-year-old women in 1998. This amount represents the present value of the net tax payments – all taxes paid, less all government transfers received – that a 25-year-old woman could expect to pay over the rest of her life. The figure is an average. It takes into account that some members of this cohort will pay more, others less.

Note that the generational accounts for both men and women peak at age 25 and become negative for women at age 50 and for men after age 60. The accounts for those younger than 25 are smaller because they have a longer time to wait to reach their peak tax-paying years. The accounts are also

smaller for those over 25 because they are closer to retirement, when they will receive the bulk of their transfers.

The Generational Imbalance in U.S. Fiscal Policy

Given the assumed trajectory of discretionary spending and the net taxes those now alive are slated to pay, how big is the tab left for future

TABLE 1A: THE GENERATIONAL ACCOUNTS FOR MEN (PRESENT VALUES IN THOUSANDS OF 1998 DOLLARS)

AGE IN 1998	NET TAX PAYMENT	TAX PAYMENTS				TRANSFER RECEIPTS			
		LABOR INCOME TAXES	CAPITAL INCOME TAXES	PAYROLL TAXES	EXCISE TAXES	OASDI	MEDICARE	MEDICAID	WELFARE
0	249.7	128.3	61.8	107.3	93.4	45.2	24.0	58.1	13.7
5	256.4	136.3	66.0	114.1	97.4	48.0	35.9	58.9	14.6
10	272.3	147.1	71.8	123.1	102.1	51.7	44.2	60.2	15.8
15	291.4	158.4	77.9	132.8	105.9	55.4	50.5	60.6	17.1
20	318.7	171.2	85.4	143.8	107.5	59.0	51.9	59.9	18.3
25	327.3	174.5	91.6	145.7	102.4	61.2	52.5	55.2	17.8
30	313.7	167.8	98.2	138.1	95.9	64.6	55.2	49.9	16.5
35	279.2	153.9	104.5	124.3	89.4	69.4	63.7	45.0	14.9
40	241.4	137.1	110.0	108.9	83.2	76.4	67.4	40.4	13.5
45	194.2	116.1	113.0	91.2	75.5	85.5	67.9	35.9	12.3
50	129.7	93.0	112.4	71.8	65.6	95.6	75.4	31.0	11.1
55	66.2	65.5	108.4	50.4	56.0	108.1	69.7	26.3	10.0
60	-5.8	38.0	100.5	29.1	46.4	123.1	66.1	21.8	9.0
65	-77.5	16.6	89.5	12.7	37.2	138.5	69.3	17.7	8.0
70	-91.0	6.8	76.3	5.1	28.4	129.7	56.2	14.8	7.0
75	-75.1	3.3	61.3	2.4	20.8	106.5	38.2	12.5	5.7
80	-56.3	1.4	46.1	1.2	14.6	85.7	20.2	9.7	4.0
85	-42.4	0.5	33.0	0.5	10.1	67.0	9.0	8.0	2.6
90	-25.6	0.4	28.5	0.4	7.9	51.7	3.1	6.0	2.0

LIFETIME NET TAX RATE ON FUTURE GENERATIONS: 32.3%
LIFETIME NET TAX RATE ON NEWBORNS: 22.8%

Note: Table assumes a 4 percent real discount rate and 2.2 percent growth rate.

– assuming that all tax and entitlement programs remain in place and that discretionary federal spending grows with the economy. The accounts are constructed measuring “present values” of future obligations and liabilities using a 4 percent real discount rate and assuming a 2.2 percent rate of growth of labor productivity (and thus wages). This discount rate is roughly the current prevailing

generations? A stunning 32.3 cents out of every dollar earned. To put it another way, future generations will be obliged to pay net taxes – taxes less transfers from the government – equal to 32.3 of their incomes. Or think of it this way: future generations will have to sacrifice one-third of their incomes to cover government bills left unpaid by previous generations.

In considering this generational imbalance, bear in mind that the lifetime net tax rate facing future generations under current policy assumes that *all* future generations pay this same rate. If, instead, one were to make the more realistic assumption that public policy is not about to change and that generations born, say, over the next decade will be treated the same as current newborns, the net tax rate for generations born after 2010 would be even higher than 32.3 percent.

Policies to Achieve Generational Balance

Table 2 considers five alternative policies to achieve generational balance – that is, policies to equalize the lifetime net tax rates of newborns and future generations.

One is an immediate and permanent across-the-board increase in federal personal and corporate income taxes – a tax increase of 31.3 percent. Given the CBO’s projection of \$1.198 trillion in income tax revenue for 2000, such a tax increase would mean an additional \$375 billion in revenues this year. This, in turn, would mean a \$375 billion larg-

er surplus. Since the 2000 fiscal year surplus totaled roughly \$230 billion, achieving generational balance means running a surplus that is 2.6 times larger than we are now running. Hence, the current surplus is far too small compared with what is needed to achieve generational balance.

An alternative to raising just federal income taxes is to raise all federal, state and local taxes. In this case, an across-the-board tax increase of 12 percent could deliver gener-

TABLE 1B: THE GENERATIONAL ACCOUNTS FOR WOMEN (PRESENT VALUES IN THOUSANDS OF 1998 DOLLARS)

AGE IN 1998	NET TAX PAYMENT	TAX PAYMENTS				TRANSFER RECEIPTS			
		LABOR INCOME TAXES	CAPITAL INCOME TAXES	PAYROLL TAXES	EXCISE TAXES	OASDI	MEDICARE	MEDICAID	WELFARE
0	109.6	67.8	21.6	64.1	89.0	42.3	24.6	44.0	22.0
5	104.6	72.1	23.0	68.2	92.7	45.0	38.3	44.7	23.4
10	104.6	77.9	25.1	73.7	97.0	48.7	48.8	46.1	25.6
15	105.4	84.1	27.2	79.6	99.9	52.4	57.9	46.9	28.2
20	113.7	91.0	29.8	86.2	100.9	56.4	61.1	46.9	29.9
25	112.3	91.5	31.8	86.4	96.6	58.9	63.7	45.2	26.2
30	95.6	85.1	33.9	79.9	91.2	61.9	68.0	43.2	21.3
35	65.6	75.6	35.9	70.8	85.7	65.7	78.6	41.1	17.0
40	37.9	66.0	37.9	62.0	79.7	71.4	83.7	39.3	13.3
45	7.9	55.4	39.2	52.1	72.7	78.8	84.7	37.6	10.4
50	-37.7	42.2	39.6	39.6	64.4	87.7	94.1	33.5	8.2
55	-73.9	28.3	39.1	26.6	55.2	99.0	87.5	29.8	6.8
60	-115.0	15.6	37.4	14.7	46.0	112.7	84.0	26.2	5.8
65	-157.6	6.6	34.6	6.1	36.9	124.6	89.3	22.6	5.2
70	-155.9	2.5	30.8	2.2	28.7	116.8	78.7	20.0	4.6
75	-131.8	0.9	26.3	0.9	21.3	100.0	59.6	17.9	3.8
80	-99.2	0.3	21.5	0.3	15.3	82.1	36.9	14.5	3.1
85	-70.5	0.2	16.9	0.1	11.1	63.4	20.6	12.5	2.4
90	-44.4	0.1	14.1	0.1	8.3	47.3	9.0	8.9	1.8

Note: Table assumes a 4 percent real discount rate and 2.2 percent growth rate.

TABLE 2 ALTERNATIVE POLICIES TO ACHIEVE GENERATIONAL BALANCE*

POLICY	IMMEDIATE AND PERMANENT CHANGE IN POLICY INSTRUMENT	EQUALIZED LIFETIME NET TAX RATE
Raise All Taxes	12.0%	27.5%
Raise Fed. Inc. Taxes	31.3%	27.3%
Cut All Transfers	21.9%	26.5%
Cut All Govt. Purchases	21.0%	22.8%
Cut Federal Purchases	66.3%	22.8%

* Generational imbalance is the percentage difference in lifetime net tax rates of newborns and future generations.

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ational balance. Putting transfer payments and other government purchases on the table would offer additional options. A 21.9 percent reduction in all Social Security, Medicare, Medicaid, food stamps, unemployment insurance benefits, welfare benefits, housing support and other transfer payments also would get the budget to generational balance. Two final options: an immediate and permanent cut of 21 percent in purchases from all levels of government or a 66.3 percent cut in federal purchases.

Balance achieved through cuts in general spending (as opposed to transfer programs) would mean that the net tax rate on future generations' income would be the same 22.8 percent share of lifetime earnings that today's newborns are expected to pay under current policy. In contrast, either raising taxes or cutting transfers would mean higher lifetime net tax rates for those now alive.

As Table 2 indicates, these alternative policies would leave newborns and all future generations paying roughly 27 cents out of every dollar earned in net taxes. This net tax rate is over 4 cents more per dollar earned than newborns are now forced to pay. Thus, the benefit of closing the gap today by raising the net tax rate of those currently alive is a reduction in the net tax rate facing future generations by 5 to 6 cents per dollar earned.

Will the Economy Save Us?

One response to this news is that it ignores the economy's growth potential. In particular, it ignores the possibility that an aging society will have more capital per worker, because the number of elderly wealth holders will rise relative to the number of young workers. More capital per worker means higher labor productivity, higher real wages as well as the lower return to capital that worries Wall

Street. It also means a larger payroll tax base, which would reduce the payroll tax needed to balance generational accounts.

But such capital deepening – good news for payroll tax revenues – is not a foregone conclusion. Higher payroll tax revenues means that workers will have less after-tax income from which to save, and they would thus arrive at retirement with less wealth in the form of productive capital than would otherwise be the case.

Laurence Kotlikoff's current research with Kent Smetters of the University of Pennsylvania and Jan Walliser of the IMF studies these two conflicting forces by the means of computer simulations. The model suggests that the interaction of capital accumulation and productivity will do nothing to alleviate our short- and medium-term fiscal problems. And over the longer term, it will actually exacerbate our fiscal difficulties.

Capital "deepening" and its beneficial effect on real wages do not, on balance, materialize over the next three decades, and thereafter the picture gets worse. Capital per worker actually falls, which depresses real wages by 9 percent. For Wall Street, this bad news about wages is good news about the return on capital, which stays fixed over the next three decades and then increases slightly.

The current budget surpluses are good news – but not nearly good enough. Washington is still assuming away fiscal problems rather than disclosing and solving them. Without changes, our children are likely to face lifetime net tax rates that are two-fifths larger than those we face.

A variety of steps, all painful, would restore generational balance. But even in the best of worlds, getting from here to there would be difficult. And the difficult will remain impossible until Washington offers an honest assessment of the problem. **M**