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FEDERAL DEBT: WHAT MATTERS AND WHY

by Peter Orszag and Robert Greenstein¹

The Clinton Administration's proposal to dedicate a portion of the projected unified budget surplus to Social Security and Medicare has generated a confusing debate over its impact on the federal debt.

- President Clinton noted in his State of the Union address that, "If we set aside 60 percent of the surplus for Social Security and 16 percent for Medicare, over the next 15 years, that saving will achieve the lowest level of publicly-held debt since right before World War I, in 1917."
- Representative Bill Archer, in a Congressional hearing February 11, stated that "the Administration's proposal increases the total Federal debt by \$1.2 trillion between 1999 and 2004 and it increases the debt held by the government by \$1.5 trillion over the same period."

An interested observer would understandably be perplexed by these apparently contradictory statements. The purpose of this short paper is to examine different measures of "federal debt" and to clarify the effects of the Administration's proposal on them.

The two most commonly used measures of federal debt are:

- **Debt held by the public.** Debt held by the public reflects the government's borrowing from the private sector (i.e., from banks, pension plans, private bondholders, foreign investors, and others).²

Changes in debt held by the public have important economic implications. These changes can affect national saving, private-sector investment, interest rates, and economic growth.

- **Gross Federal debt.** Gross Federal debt includes debt held by the public *plus* debt that various parts of the government hold. In other words, it includes debt that one part of government owes to another part. For example, Social Security surpluses are currently used to help finance other parts of the government; in exchange, the Social Security trust fund is given an IOU from the rest of the government. Such IOUs, held as Treasury bonds, increase the gross Federal debt but do not affect the debt the government owes to outside entities (i.e., the debt held by the public). The majority of debt that one part of the federal government owes to another part is debt the Social Security and Medicare trust funds hold in the form of Treasury bonds that reflect the recent surpluses in these programs.

Debt that the Treasury issues and other parts of the government hold does *not* directly affect national saving and investment. Since this debt reflects money the Treasury has borrowed from other parts of the government rather than from private credit markets, it does not directly place upward pressure on interest rates or affect the amount of private capital available for business investment.³

Government-held debt does not have the economic effects that “publicly held debt” has.

- Another common term is “debt subject to limit.” This refers to the debt that is subject to the debt ceiling, or debt limit, established by statute. “Debt subject to limit” is essentially the same as the gross Federal debt.⁴

The two principal definitions of Federal debt thus are quite different from each other. Most economists and fiscal analysts agree that debt held by the public is the much more meaningful and important measure. David Walker, the Comptroller General of the United States (i.e., the head of the General Accounting Office), explained in Senate Finance Committee testimony on February 9, 1999 that “Debt held by the public and debt held by trust funds represent very different concepts. Debt held by the public approximates the Federal government’s competition with other sectors in the credit markets. This affects interest rates and private capital accumulation. Further, interest on debt held by the public is a current burden on taxpayers. In contrast, debt held by the trust funds performs an accounting function....[it does not] have any of the economic effect of borrowing from the public. It is not a current transaction of the government with the public; it does not compete with private sector funds in the credit market.”⁵

The difference in the economic effects of these two kinds of debt can be seen by examining what happens in the economy when each kind of debt increases. When debt held by the public rises, the government must compete with private borrowers to a greater degree for the capital (or saving) from which one can borrow. That dissipates the amount of capital available that private borrowers can invest in the private economy. With the government soaking up more of the capital available, less remains for investment in new plants and equipment and start-up businesses. Stated another way, some of the money that otherwise would be available for

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private investment is used instead to purchase the increased volume of bonds the Treasury is issuing.

Increased government borrowing from entities outside government (i.e., increases in debt held by the public) discourages private investment in part through higher interest rates. Since the increase in government borrowing results in more competition for the capital available in private credit markets, the amount that lenders can charge to lend funds — i.e., interest rates — can rise. Higher interest rates make it more costly to buy a home or car and discourage business investment.

Conversely, when debt held by the public *decreases*, the government is borrowing less in private credit markets, leaving more capital for private investment. By boosting private investment, this creates a basis for higher levels of productivity and hence a larger economy in the future. (The economy should have more modern and efficient plants and equipment as a result of the increased investment.)

By contrast, changes in the amount of debt the trust funds hold (i.e., the amount of Treasury bonds they hold) do *not* have direct economic implications, as the Comptroller General’s testimony explained. Rep. Archer also has noted this distinction. In his recent statement, he acknowledged that debt held by the public is the “debt that hurts the economy by crowding out private savings,” whereas debts owed one part of the government to another “do not hurt the economy nor do they crowd out private savings.”⁶

There also is one other important difference between debt held by the public and debt held by the trust funds. Interest payments on debt held by the public are a government expenditure. In fiscal

year 1998, they consumed \$230 billion, or about one dollar in every seven in the federal budget. By contrast, interest payments on debt held by the trust funds are *not* an expenditure — they are simply a transfer of funds from one part of the government to another. (The actual expenditure occurs when Social Security and Medicare pay benefits, not when an intra-government fund transfer is made.) Reducing or eliminating debt held by the public thus cuts government costs; under the Administration’s proposal, for example, federal expenditures for interest payments on the debt held by the public would drop from 14 percent of the budget in 1998 to just two percent by 2014. Increases or decreases in the debt held by the trust funds have no similar effect — they do not raise or lower government expenditures.

Trends in Federal Debt and the Administration’s Proposal

Table 1 shows both debt held by the public and gross Federal debt as percentages of the Gross Domestic Product, the basic measure of the size of the economy. As the table shows, under the Administration’s proposal, debt held by the public would fall from 44 percent of GDP in 1998 to 30 percent in 2004. It would continue to decline thereafter, reaching seven percent of GDP by 2014, its lowest level since 1917. This reduction would occur because budget surpluses would

While gross Federal debt would increase in dollar terms under the Administration’s proposal, it would decline as a percentage of GDP between 1998 and 2004.

largely be saved and used to pay down debt held by the public. This reflects the primary economic benefit of the Administration’s approach.

Despite the decline in publicly held debt under this proposal, gross Federal debt would rise in nominal dollars (see Table 2) because of the additional debt issued to the Social Security and Medicare trust funds. Under the Administration’s plan, for every dollar of publicly held debt retired, a dollar of additional Treasury bonds would be deposited in the Social Security or Medicare trust funds.

The additional debt that would be issued to the trust funds in the form of these Treasury bonds would *not* increase the costs of these programs. The costs of the programs are the costs of providing Social Security and Medicare benefits; those costs are not raised by providing more Treasury bonds to the trust funds. Rather, the issuance of additional debt to the trust funds would help narrow the gap that already exists

CBO Director Dismisses Concerns on Gross Federal Debt

In testimony before the Senate Budget Committee on February 23, CBO director Dan Crippen responded to concerns that the Administration’s proposal would result in an increase in gross federal debt. Crippen stated:

“Some observers have worried that the proposed general revenue payments, plus interest, would substantially increase gross federal debt and debt subject to statutory limit. That concern, however, is misplaced. The increase in the amount of debt held by the Social Security trust funds would be merely a bookkeeping transaction and would not represent an increase in the net liabilities of the federal government. The government’s liability for Social Security and Medicare is the obligation to pay future benefits, and, as stated above, those benefits — and therefore the government’s liability — would be unaffected by the proposed payments of general revenues and unaffected by any “balance” in the trust fund.”

Understanding Federal Debt Through an Analogy to a Family

An analogy to a family may be helpful in understanding the differences between debt held by the public and gross Federal debt and how the Administration's proposal would affect them. As with any analogy, this one does not capture every facet of reality but should be helpful.

Consider a family of four that has a mortgage on its house and includes a child who will be unable to work when he or she grows up because of a serious disability. Other family members have promised to subsidize the child's income when the child becomes an adult.

In our analogy, debt held by the public corresponds to the family's mortgage; it reflects the debt that is owed to someone outside the family. The gross Federal debt corresponds to the family's mortgage *plus* any legally binding promises that family members have made to the child who will be unable to work in the future.

The family's overall economic well-being (i.e., its total spendable income and wealth) is affected by the size of its mortgage but *not* by how much one member of the family has pledged to another. Internal debts affect the *distribution* of the family's resources among the various family members but not the financial position of the family as a whole. Only the mortgage owed to the bank affects the family's financial well-being as a whole.

This analogy can be used to help understand the Administration's proposal to dedicate a portion of the projected unified budget surpluses to Social Security and Medicare. Assume the family has made promises to the child who will not be able to work but these promises have not been placed in a document that would make them a legally binding obligation. These promises would not be included in the family's equivalent of gross Federal debt. Assume also that a member of the family receives a large, unexpected pay raise. The family member receiving the raise announces she will use the additional income to pay off part of the mortgage. She also announces she will turn into a legal commitment a part of the promise the family has made to help support the child who will be unable to work. She decides that for each dollar of the mortgage she pays off, she will sign a legally binding IOU for \$1 to the child.

The family's analogue to debt held by the public — its mortgage — would decline. At the same time, the family's *total* debt, including both its mortgage and the legal commitments to the child who will be unable to work, would not fall; the family's total debt would remain unchanged. Even though its total debt would not change, however, the family would clearly be better off. Moreover, while the family's financial commitment to the child who will not be able to work would be recognized in a more formal manner, the commitment to the child would not necessarily be any larger than it was before (although the child would have more assurance that the commitment would be fully honored).

between the future costs of honoring the benefit commitments these programs have made and the revenues the trust funds are scheduled to receive to meet those costs.

Stated another way, the additional debt that would be issued to the trust funds would reduce

the unfunded liability in these programs. The Administration's proposal would make *explicit*, in form of additional debt the trust funds would hold, a part of the *implicit* debt the government faces as a result of these unfunded liabilities. Since these unfunded liabilities are not included in the measure of gross Federal debt, however,

Table 1

Federal Debt As A Percentage of GDP Under the Administration's Proposal			
	Debt held by the public	+ Debt held by government accounts (trust funds)	= Gross Federal debt
1960	45.7%	10.4%	56.1%
1970	28.1%	9.7%	37.8%
1980	26.1%	7.3%	33.4%
1990	42.4%	14.0%	56.4%
1993	50.2%	17.0%	67.2%
1998	44.3%	20.9%	65.2%
2004	30.4%	32.2%	62.7%

Source: Office of Management and Budget, *FY 2000 Budget, Historical Tables*, Tables 7.1 and 10.1; *FY 2000 Budget*, Table S-14, and authors' calculations

converting part of the unfunded liabilities into funded liabilities through the issuance of more Treasury bonds to the trust funds causes the gross Federal debt measure to rise.

It should be noted that while gross Federal debt would increase in dollar terms, it would *decline* as a percentage of GDP between 1998 and 2004 (see Table 1). Under the Administration's proposal, gross Federal debt would fall from 65.2 percent of GDP in 1998 to 62.7 percent in 2004. Most economists believe that variables like debt are best evaluated relative to the size of the economy, not in absolute dollar terms. On that basis, gross Federal debt would decrease.

The increase in gross Federal debt is thus not meaningful economically for two reasons. First, and more important, gross Federal debt does not affect economic performance; debt held by the public does. Second, the dollar increase in gross Federal debt is misleading; relative to GDP, gross Federal debt declines between 1998 and 2004.

Because the President's approach would lead to a large reduction in publicly held debt without raising Social Security and Medicare costs, it would result in a healthier long-term fiscal outlook than an approach that left publicly held debt at relatively high levels. If the nation can largely or entirely eliminate the publicly held debt over the next two decades, we will enter the baby-boom retirement period free of substantial annual costs for interest payments on the publicly held debt. Indeed, Social Security costs over the next several decades (including the period of the baby boomers' retirement), measured as a share of GDP, are projected to be *at or below* today's expenditures levels for Social Security and interest payments. In fiscal year 1999, Social Security and interest costs are projected to equal 7.4 percent of GDP; if the publicly held debt is essentially eliminated, as would occur in about 2018 under the Administration's plan, combined Social Security and interest costs should remain below 7.4 percent of GDP for several decades. Stated another way, elimination of the debt held

Table 2

Federal Debt in 1998 and 2004 Under the Baseline and Under the President's Proposal (in billions of dollars)			
	1998	2004	
		Baseline	President's proposal
Debt held by the public	\$3,719.9	\$2,926.4	\$3,289.6
Debt held by government accounts	\$1,758.8	\$2,947.9	\$3,486.3
Gross Federal debt	\$5,478.7	\$5,874.4	\$6,776.0
Debt subject to limit	\$5,439.4	\$5,841.6	\$6,743.2

Source: Office of Management and Budget, *FY 2000 Budget, Historical Tables*, Table 7.1; *FY 2000 Budget*, Table S-14; and *FY 2000 Budget, Analytical Perspectives*, Table 12-5.

by the public would produce large interest savings that could create room in the budget for anticipated increases in Social Security benefit costs during the next few decades.

The Question of Which Baseline to Use

Comparing debt projections under the Administration's plan to the historical record shows the plan would result in a sharp drop in debt held by the public. Some analysts, however, compare the debt projections not to the historical record but to a budget baseline that assumes the unified budget surplus will be used solely to reduce debt held by the public. Such a baseline assumes that none of the surplus will be used for tax cuts, for increasing discretionary spending above the current discretionary spending caps, or for expansion of any entitlement programs. This baseline also assumes that none of the surplus is used to make additional transfers to the Social Security and Medicare trust funds. Debt held by the public would fall by more — and gross Federal debt would rise by less — under such a baseline than under the President's proposal. (It may be noted that even under such a baseline, gross Federal debt rises; see Table 2.⁷)

Gross Federal debt would be higher under the Administration's proposal than under such a baseline for two reasons. The primary reason is that under the Administration plan, additional debt would be issued to the Social Security and Medicare trust funds. The other reason is that under this plan, a modest share of the projected surpluses would be used to boost discretionary spending and provide tax cuts in the form of universal savings accounts, rather than to pay down the publicly held debt. As a result, debt held by the public would be somewhat higher under the Administration's proposal than under this baseline.

It should be noted that *any proposal to use the unified budget surplus for new spending or tax cuts would raise gross Federal debt as compared to this baseline*. Such plans would raise the gross Federal debt compared to this baseline because those plans would use part of the surplus for tax cuts or new spending rather than for retiring debt held by the public. As explained above, the Administration's proposal would itself raise the gross Federal debt, but it would do so primarily because it would increase debt held by the trust

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funds, rather than debt held by the public. (Recall that gross Federal debt is the sum of debt held by the public and debt held by the trust funds.) Thus, two different policies that generate increases of equivalent size in the gross Federal debt can have very different economic effects if one policy raises the gross debt because it swells debt held by the public while the other policy raises the gross debt because it increases debt held by the trust funds.

Conclusion

Debt held by the public affects saving and investment. Relative to current levels, the Administration proposal would lead to a substantial reduction in debt held by the public, boosting saving and spurring investment. Federal Reserve chairman Alan Greenspan and various other economists have lauded these aspects of the Administration plan.⁸

The Administration's proposal would make explicit a part of the government's existing, but implicit, obligation to Social Security and Medicare. It would do so by issuing more Treasury bonds to the Social Security and Medicare trust funds. As a result, gross Federal debt in dollar terms would rise even though debt held by the public would fall sharply. Nevertheless, gross Federal debt would fall as a percentage of GDP, and its increase in dollar terms would be economically benign; it would not reduce saving and investment. Nor would it increase the costs of paying future Social Security

and Medicare benefits. Alternative proposals to use budget surpluses for tax cuts or spending increases also would raise gross Federal debt but could do so in an economically injurious manner if the proposals significantly raised the publicly held debt.

Notes:

1. Peter Orszag is President of Sebago Associates, Inc., an economics consulting firm, and lecturer in economics at the University of California at Berkeley. He previously was special assistant to the President for economic policy and senior economist on the Council of Economic Advisers. Robert Greenstein is executive director of the Center on Budget and Policy Priorities.
2. Debt held by the public includes debt held by the Federal Reserve Banks. In 1998, debt held by the public amounted to \$3,719.9 billion. The Federal Reserve Banks held \$458.1 billion of that total. Many economists believe the Federal Reserve Banks should be included as part of the government and remove the portion held by the Federal Reserve Banks from debt held by the public.
3. The surpluses in specific government programs, reflected in trust funds for those programs, may have indirect effects on national saving and interest rates if they cause policymakers to change their behavior. For example, if a larger trust fund induced policymakers to raise spending or cut taxes (i.e., to run smaller budget surpluses) to a greater degree than they otherwise would, the debt held by the trust funds would have indirect effects on national saving and investment. Even such indirect effects, however, would manifest themselves through changes in debt held by the public.
4. At the end of 1998, gross Federal debt amounted to \$5,478.7 billion. Debt subject to the statutory limit amounted to \$5,439.4 billion. This small difference — a difference of less than one percent — arises because of debts issued by the Federal Financing Bank that are included in gross Federal debt but not in the debt subject to limit, debt issued

by federal agencies that is included in the debt limit but not in the gross Federal debt, and differences in the treatment of discounts and premiums on bonds when issued. The statutory maximum on the debt subject to limit was raised to \$5,950.0 billion on August 5, 1997.

5. David Walker, "What the President's Proposal Does and Does Not Do," Testimony before the Committee on Finance, U.S. Senate, February 9, 1999, page 4. For a similar statement by Robert Eisner, former president of the American Economic Association, see Eisner, *the Misunderstood Economy: What counts and How to Count It*, Harvard Business School Press, 1994, p. 92.
6. Chairman Bill Archer, Opening Remarks, Hearing on Social Security, Committee on Ways and Means, U.S. House of Representatives, February 11, 1999.
7. The increase in gross Federal debt under the baseline reflects a variety of accounting issues. Perhaps most important, the Federal Credit Reform Act of 1990 changed the budgetary rules governing direct loans and loan guarantees. Under the new rules, only the estimated subsidy cost of a direct loan is scored as an expenditure. But the government must finance the full value of the loan. Therefore, the unified budget surplus (which reflects only the subsidy cost of a direct loan) is larger than the reduction in debt held by the public (which reflects the full value of the direct loan). Similarly, the on-budget surplus does not exactly match the change in gross Federal debt. Other accounting discrepancies have similar effects.
8. In testimony before the House Ways and Means Committee on January 20, Greenspan stated: "The advantages that I perceive that would accrue to this economy from a significant decline in the outstanding debt to the public and its virtuous cycle on the total budget process is a value which I think for exceeds anything else we could do with the money."

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