The Stealth Budget: Unfunded Liabilities of the Federal Government

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The federal budget is important. It is the basis for planning government programs, it is a significant element in plans of individuals in the private sector, and it is the starting point for assessing the federal government's current impact on macroeconomic conditions. Past budgets are used to study significant economic questions, such as the extent to which federal fiscal actions affect aggregate output, prices, and interest rates.

The traditional statement of the federal budget provides important information about current receipts and expenditures, but is nevertheless incomplete. Actions have been taken that will require spending in the future; provision for that future spending does not, however, appear in the budget accounts. As a result, stated federal spending does not reveal the total resource demands placed on the private economy and stated federal debt does not reveal the full tax burden that taxpayers will face in the future. In other words, a stealth budget that is unseen by most observers will generate future taxing and spending.[1]

The stealth budget is not trivial. The programs discussed in this paper had unfunded liabilities in 1989 in excess of $4 trillion. To put that number in perspective, the conventionally stated gross federal debt in that year was less than $3 trillion.

Although the conventional federal budget omits important information when unfunded liabilities are present, there is a straightforward alternative that would produce a more revealing budget: explicitly state the present value of expected future spending when a program is created. In addition, each future budget could restate that amount due to either the passage of time or legislative revisions.

The next section of this paper will discuss some of the federal programs that have created unfunded liabilities. The focus will be on only those programs (1) that promise specific benefits to specific persons and thus resemble private contracts,[2] or (2) for which current or past actions make future action unavoidable. Deposit insurance, for example, promises an exact benefit to particular deposit holders; and the creation of nuclear waste as a byproduct of weapons production makes disposal or treatment essential. Other federal spending programs that predictably pay benefits but are not embodied in current legislation will not be considered. For example, if a drought reduces crop yields it is virtually certain that Congress will enact a payment scheme; the exact payments to particular individuals, however, are impossible to guess.

SPECIFIC PROGRAMS

Many programs that create unfunded liabilities will be discussed in this section. Each will be briefly

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[1] The traditional source for fiscal information is *The Budget of the United States* that is prepared by the Office of Management and Budget (OMB) for each fiscal year. Its presentation of future liabilities has improved in recent years. The 1991 and 1992 Budget each contain a section that is analogous to the footnotes in a corporate annual report; that section discusses many, but not all, of the unfunded liabilities discussed in this paper. The content of that section has also changed between the two years, and has changed from similar information presented in the *Special Analyses* book in the set of budget documents for prior years. There is no summary table that has been consistently presented over time that would facilitate discussion of the future resource demands that the federal government has committed to placing on persons and firms in the future.

[2] Legislated promises are of course not exactly equivalent to private contracts. An individual may not voluntarily agree to participate in a program such as Social Security but may still be compelled to participate. Also, if the government later reneges on its promises, there is often no legal recourse for the individual.

described. In cases where the present value of unfunded liabilities can be at least roughly estimated, an estimate will appear in Table 1 and the methodology will be briefly explained. Each entry will be a present value of expected future real payments by the government, net of expected future real receipts, as of the end of the government's 1989 fiscal year.[3] In other cases the source of possible taxpayer liability will be mentioned in Table 2.

To understand most of the programs listed it is important to distinguish between fiscal actions and financial intermediation. Any program that is in essence a combination of taxing and spending is a fiscal program. Many federal fiscal programs are obscured by being described in the language of insurance or banking. For example, a bona fide insurance company will attempt to set premiums on an actuarial basis and will hold sufficient reserves to pay expected future claims. A fiscal program masquerading as an insurance program will set low premiums that have little relation to risk and are insufficient to cover the expected value of future payments. Similarly, a commercial lender will attempt to charge sufficient interest or other fees to compensate for any credit risk; a disguised fiscal program will lend at low rates to poor risks.

Why is the language so obscure? The Appendix to this paper presents some elements of political economy that help explain the incentives for elected officials to use language that fails to reveal the full cost of many programs.

[3] *Present value* is the value of a future stream of cash flows adjusted for the time value of money. For example, a single payment P received in N years over which the market rate of interest is R would have a present value $P(1+R)^{-N}$. For a series of payments the individual items can simply be added together. To adjust for inflation it is often helpful to express the cash flow in constant dollars, or in *real* terms; a series of real cash flows is properly adjusted by using a *real interest rate*, which is the difference between a market rate of interest and expected inflation. In this paper a real rate of 4 percent is used in several calculations, reflecting a market rate of 8 percent and expected inflation of 4 percent. Those values are approximately correct for September 1989, the particular point in time that is used for the calculations. Uncertainty is addressed by looking at *expected* cash flows. An expected value is the product of the value if some event occurs times the probability of that event occurring; those products are then calculated and added over all possible events. For example, if you receive a dollar if a coin flip is heads and a dime if it is tails, the expected value of a coin flip is 55 cents.

By using these definitions, one can compute values that make sense when they are added together. The entries in Table 1 are all present values of expected real cash flows.

Towe (1990) has a good discussion that relates present values of expected cash flows to government budgets, particularly his section on the "actuarial balance" of particular programs.

Deposit Insurance

Deposit insurance has become a well-known example of the type of program that can create future liabilities. It was first offered by the federal government in the 1930s and is now raising the level of federal spending. In some years the insurance system was labled "off-budget" and therefore was not included in spending and deficit calculations. In other years cash payments and expenditures were included in the budget, but no mention was made of rapidly growing future taxpayer liabilities for deposits in insolvent institutions. When major changes in the law raised the expected value of future payments to insured depositors, such as the 1980 increase in the amount of deposits covered, those higher payments did not raise stated spending or debt. Even today the budgeted liability understates the likely total taxpayer expenditure.

Deposits up to $100,000 at banks, savings and loan associations, and credit unions are explicitly insured by federal agencies. In addition, the Federal Deposit Insurance Corporation (FDIC) has treated large banks as "too big to fail" and has extended de facto insurance to uninsured depositors and other creditors.[4] Prior to 1989 legislation (the Financial Institutions Reform, Recovery, and Enforcement Act, or FIRREA) depositors at savings and loan associations were insured by the Federal Savings and Loan Insurance Corporation (FSLIC); they are now insured by the FDIC's new Savings Association Insurance Fund. Bank depositors who were insured by the FDIC are now covered by the FDIC's Bank Insurance Fund. Credit union depositors are insured by the National Credit Union Association's Share Insurance Fund.

Savings and Loan Associations The FIRREA acknowledged a liability of $115 billion over three years, to be paid by taxpayers and by higher insurance fees. Many assumptions behind that number were too optimistic, however. The Secretary of the Treasury (Brady 1990) has estimated that costs will be between $90 billion and $130 billion, in addition to funds already spent.

The way that such a large liability was accrued is instructive and will briefly be described below.[5] FSLIC insurance was established in 1934; it allowed

[4] Todd and Thompson (1990) describe the logic and evolution of the idea that some banks are too big to fail.

[5] For more complete discussions, see Benston and Kaufman (1990) or Dotsey and Kuprianov (1990).

savings and loan associations to substantially increase their leverage, thereby increasing their returns but also increasing the risk that they would not be able to make promised payments to depositors and other creditors. Holding short-term liabilities and long-term assets with fixed returns, the industry was especially vulnerable to interest rate risk. In the 1970s nominal interest rates rose sharply and reduced asset values and the net worth of the industry; the market value of many associations became negative. The political system responded perversely. First, the problem was denied—accounting procedures were altered to obscure the losses that had already occurred. Second, the problem was worsened—the Monetary Control Act in 1980 raised the amount of insurance coverage from $40,000 per account to $100,000, thereby making it easier for insolvent institutions to raise funds. By 1982 much of the savings and loan industry was economically insolvent.[6] A policy of regulatory forbearance kept insolvent institutions from being closed. They were instead allowed to make risky loans funded by insured deposits. Many of the risky loans failed and thus further raised the taxpayer burden that is now being recognized.

The entry in Table 1 for unfunded savings and loan insurance is $130 billion. It represents the upper bound of the Treasury Secretary's admitted range, which was stated in 1989 dollars. The upper bound is used since all previous official estimates have substantially understated the cost of deposit insurance for savings and loan associations. That estimate is consistent with others prepared by independent analysts; one range was given as $86.5 billion to $136.4 billion (Brumbaugh, Carron, and Litan, 1989). Confusing the issue are competing estimates that add in future nominal interest costs that would result from borrowing the funds to be spent. Those estimates are difficult to interpret and are ignored in this paper.

The official estimates may still be conservative. The perverse incentives created by deposit insurance still exist. Also, the solvency of existing thrift institutions is often overstated by conventional accounting procedures. Until those factors change it is likely that some thrifts will create additional liabilities for Savings Association Insurance Fund and the taxpayer. In addition, the official estimates assume that the assets of failed associations will be sold in a prompt and efficient manner. Kane (1991a), however, estimates that the disposal agency, the Resolution Trust Corporation, cost taxpayers $40 billion in its first year of operation by mismanaging the assets of failed savings and loan associations, with additional costs likely in the future.

Table 1

Unfunded Liabilities of the Federal Government

Billions of 1989 Dollars

Program	Estimated Amount
Savings and loan deposit insurance	130
Social Security	
Retirement and disability benefits	1,052
Health benefits	1,412
Railroad retirement	30
Federal employee retirement and disability benefits	
Civil service	643
Military	513
Medical benefits	279
Pension Benefit Guarantee Fund	16
Crop insurance	25
Flood insurance	5
Defense nuclear waste disposal	68
Loans and loan guarantees by government agencies	77
Total	4,250

Note: The sources of the estimates are described in the text. Each estimate is the present value at the end of the government's 1989 fiscal year of expected real future spending net of any offsetting receipts.

Banks The banking industry shares some important similarities with the savings and loan industry several years ago.

(1) Deposit insurance has given banks the incentive to lower their holdings of capital.

(2) Poorly capitalized banks are allowed to stay in business. One study found 30 banks without any capital on a risk-adjusted basis in mid-1989, and another 31 with capital below 3 percent of deposits (Brumbaugh and Litan, 1990). That study was based on conventional accounting data.

[6] *Economically insolvent* means that the market value of liabilities, including deposits, is greater than the market value of assets such as loans. It is possible for an institution to be solvent according to an accounting system, but to be economically insolvent. This could occur if loans are assigned higher values than realistic estimates of future cash flows, or if assets such as goodwill are given positive values on the balance sheet but not in the market. According to Benston and Kaufman (1990), "By 1982 some two-thirds of the [savings-and-loan] industry was economically insolvent, with aggregate negative net worth of about $100 billion."

(3) Banks state assets and liabilities at book value rather than market value. Many banks have thereby overstated asset values. Loans to impoverished third-world governments, for example, are routinely traded in private markets at lower values than are recognized by some large banks.

(4) Barriers to branching result in loan portfolios that are not regionally diversified and are therefore vulnerable to localized shocks to the economy. Just as banks and savings and loans in Texas in the mid-1980s were vulnerable to the weak regional economy, banks in the Northeast are now feeling effects of a regional economic downturn.

(5) The FDIC is paying more to close insolvent banks than it is receiving in premiums. In 1990 the bank insurance fund lost $3.5 billion, in 1989 it lost $2.0 million, and in 1988 it lost $4.2 billion.[7]

The parallels with the thrift industry are not exact. Many observers (for example, *The Economist* [1991] and analysts quoted in Rehm [1991b]) believe that on average banks are more profitable, better capitalized, better managed, and better regulated than were savings and loan associations in the 1970s and 1980s.

Without detailed knowledge of the market value of individual banks' assets and liabilities, it is impossible to estimate losses the FDIC will incur. It is therefore impossible to estimate the expected loss to taxpayers due to insurance of bank deposits and other liabilities. One estimate, Kane (1991b), puts the cost to taxpayers at roughly $40 billion. A more optimistic view has been stated by the head of the FDIC, in essence that the present value of future bank premiums for deposit insurance is large enough to close insolvent banks, pay liability holders, and rebuild the Bank Insurance Fund. This view is also held by Ely (quoted in Kleege [1991]) who stated "Losses of this amount [$20 to $40 billion to close insolvent banks in the near future] . . . can be fully paid by the banking industry."

No estimate of taxpayer liability is therefore made. Instead, the face value of insurance provided banks is entered in Table 2, consisting of the deposits of the banking system at the end of 1989.[8]

Credit Unions Credit unions also offer insured deposits. According to one study,[9] although 86 insolvent credit unions are being allowed to remain open, another 122 have very low capital, and another 294 have substandard capital, their insurance fund is unlikely to require taxpayer assistance. Table 1 therefore contains no entry for credit unions. Their total deposits are listed in Table 2 as an insured liability of the government.

Social Security

In 1935 the Social Security system was founded as a mandatory old-age pension plan with benefits loosely based on prior taxable earnings. Benefits, the tax base, and tax rates have been substantially increased over time. The most notable increase in benefits occurred when health insurance was introduced in 1965. The system has always had unfunded liabilities. At times the payroll tax collections were so far below benefit levels that the necessity for major change was obvious. The last such occurrence was in 1983, when Congress cut projected future benefits and substantially raised taxes. The system is now enjoying record annual surpluses of cash receipts over expenditures.

Despite its apparent prosperity, many estimates show substantial future liabilities for the system. The trust fund for hospital insurance is projected to be exhausted by 2006.[10] At that point, current taxes will not pay current benefits and there will be no cushion to draw on. And as the baby boom generation begins to receive retirement benefits, the retirement and disability funds will also decline and eventually become exhausted.

The 1992 Budget contains a range of estimates for the present value of future liabilities for the Old Age and Survivors Insurance and the Disability Insurance Funds. Using a midrange set of actuarial assumptions,

[7] These historical figures describing the Bank Insurance Fund are from the Budget for 1991 and 1992 (1991, Section Two, p. 1115, and 1992, Part Four, p. 1105).

[8] On the one hand, deposits over $100,000 in banks that are not too big to fail are incorrectly included in that entry. On the other hand, some nondeposit debt of banks that are too big to fail is implicitly insured and is incorrectly excluded from that entry. The entry in Table 2 is therefore at best an approximation.

[9] The study by James R. Barth and R. Dan Brumbaugh is discussed in Rehm (1991a).

[10] The source for this estimate and most others in this section is the 1992 Budget, Part II, Chapter VIIIb. A fuller explanation of the programs is given by Aaron, Bosworth, and Burtless (1989).

the funds will become insolvent in the year 2043. Over the next 75 years the present value of that deficit is $1,174 billion. The entry in Table 1, $1,052 billion, is that value augmented for losses more than 75 years out, restated as a present value in 1989.

The Federal Hospital Insurance Trust Fund pays certain medical expenses of elderly Americans. Despite increases in the payroll tax rate and the tax base, spending is growing faster than revenues due to a growing elderly population and rapid growth in the cost of providing medical care. One Treasury projection put the expected future deficit for this program at $312 billion in 1989. Another medical care program, Supplemental Medical Insurance, is funded primarily by general revenues. Spending for that program was $33 billion in 1990 and has been growing rapidly. Assuming that spending growth for that program is only one percent higher than inflation, the present value of spending for Supplemental Medical Insurance is $1.1 trillion. The combined amount for health insurance is $1,412 billion and is entered in Table 1.

Another unfunded liability is a retirement pension program for railroad employees. With three retirees receiving benefits for every employee currently paying taxes, benefit payments are much larger than receipts. The Railroad Retirement Board has received congressional assistance five times in the last 16 years. The 1992 Budget contains an estimate of the unfunded liability of $34 billion. That value, restated for 1989, is listed in Table 1.

Estimates of future Social Security taxes and spending are very sensitive to economic and demographic assumptions such as population and productivity growth, health-care expenses, interest rates, and life expectancy. Any estimated liabilities are thus extremely imprecise. Perhaps more important is the possibility of major changes in the programs. If the economic assumptions are not terribly inaccurate, the growing size of future deficits may lead to substantial changes in taxes, benefits, and even the structure of the medical care industry.

Federal Employee Retirement Benefits

Federal employees are promised retirement and disability benefits, as are many private sector workers. Unlike private firms, the government does not fully accrue reserves to pay those benefits for workers hired before 1985. Also, in some ways the benefits are more generous than those of most private firms. For example, many federal pensions are fully indexed for inflation. The effect is that the cost of federal programs is understated as the full personnel costs are not recognized.

Table 1 contains an entry of $643 billion for civilian employee retirement and disability benefits, which is taken from the 1992 Budget. That amount represents the excess of the present value of expected plan benefits over net assets available for benefits. The funding of retirement benefits for military personnel differs in several details from the civilian program. The 1992 Budget, nonetheless, estimates an unfunded deficit of $513 billion for pre-1985 service. That value is also listed in Table 1.

Federal retirees also receive subsidized health insurance. Agencies' budgets include payments for persons who have already retired but make no provision for future payments for current employees. An admittedly rough estimate of the present value of that amount is $155 billion, the midpoint of a range given in the 1992 Budget. No estimate is made in that document for health benefits for retired military personnel, which include essentially free care in many cases at military facilities. Table 1 presents a rough estimate that the unfunded liability for health care for military retirees has the same proportion to unfunded civilian health care as the unfunded military retirement program has to the civilian retirement program.

Insurance of Private Pensions

The Pension Benefit Guaranty Corporation (PBGC) insures defined benefit pension payments promised by private firms to their workers. In 1989 almost 40 million persons were insured, with promised benefits near $750 billion. Although most defined benefit plans were clearly solvent, some were obviously underfunded.

Before legislation passed in 1987 took effect, a flat premium per covered worker was charged. Premiums now vary according to book values of plan assets and liabilities, but are not completely set on an actuarial basis. Based on plans already terminated the PBGC has a deficit of more than $1 billion; the effect of future pension plan terminations has been projected by many observers to greatly exceed future premium payments at current levels.

Hirtle and Estrella (1990) have simulated pension plan behavior by using Compustat data for 1,512 firms that employ almost 20 million workers. They estimated that plans of those firms would generate

future liabilities for the PBGC over the next hundred years with a present value of $27 billion; future premiums, however, would have a present value of $12 billion. Future plan terminations, therefore, have a present value of $15 billion.

That estimate may be conservative. First, it does not cover all insured workers. Hirtle and Estrella point out that as many as 31 million workers may be covered. Second, their simulations do not allow for formation of new firms with defined benefit pension plans that may become insolvent in the future. Third, their dynamic models do not allow for strategic behavior in response to incentives. For example, a firm near insolvency has the incentive to undertake risky behavior. If the risks pay off, managers and equity owners will receive a large return. If the risks fail, creditors, including the PBGC, will bear most of the loss. All three effects would make the PBGC's unfunded liability even greater.

Another possibility is raised by the voluntary termination of defined benefit pension plans, with accrued benefits replaced with annuities issued by insurance companies that may have low quality assets. Although the PBGC does not recognize an obligation to insure such benefits, others believe that a legal or political obligation does exist; in that case the PBGC has stated that such an obligation would add "tens of billions" to the liabilities already insured (Rose and Wessel, 1990). That amount is not included in the tables.

The total unfunded liability of the PBGC for single-employer defined benefit pension plans can therefore be estimated as $16 billion. The largest part is the estimate of Hirtle and Estrella for the unfunded cost of future plan terminations, $15 billion. Adding $1 billion for the deficit from past terminations yields a $16 billion estimate.

Other Insurance Programs[11]

The government has several other programs that are described in the language of insurance. Each promises payments if certain events occur, collects periodic receipts, and may subject taxpayers to future payments if receipts fail to cover expenditures. Some of the programs include flood insurance for owners of buildings in flood-prone areas, crop insurance, war-risk insurance for airplane and ship owners, political-risk insurance for certain foreign investment projects owned by U.S. corporations, and eight life insurance programs for military veterans.

The actuarial soundness of the programs can be hard to assess. Crop insurance has recently been subsidized at the rate of roughly one billion dollars per year. The program's managers are attempting to lower the federal subsidy as a fraction of receipts but are also attempting to raise the fraction of crops that are insured. The two changes would tend to have offsetting effects on total federal spending. The estimate in Table 1 therefore ignores those changes and is simply the present value of current average subsidy payments.

The entry in Table 1 also contains an amount for flood insurance. That estimate was prepared by the agency running the program, and is the amount that would be needed to satisfy policyholder claims in nine out of ten decades. For the other insurance programs mentioned above there is no estimate in Table 1. Instead the face value of the programs is included in Table 2.

Nuclear Waste from Weapons Production[12]

The Department of Energy is responsible for 280 facilities in the nuclear weapons production program. Many of the facilities were built in the 1940s or 1950s and are obsolete. Unavoidable future costs have thus been created; some examples follow. Two facilities have nearly 100 million gallons of high-level wastes in "temporary" storage containers awaiting permanent storage. Leaks in those containers have been a continuing problem, making the necessity for a permanent storage method clear. In addition to leaks of high-level wastes, low-level waste has been put directly into the ground. Substantial soil and groundwater contamination has thus occurred at several sites and needs to be cleaned up. Also, an older nuclear reactor has been taken out of service to avoid substantial safety expenditures; its dismantling is another unfunded liability.

It is not clear what disposal and cleanup methods will eventually be used. As the Secretary of Energy put it, "Today's technology is not sufficiently mature or cost-effective to assure meeting either the Department's goals or the efficient use of public resources" (Department of Energy, 1989). As a result, any estimated cost is highly uncertain. In 1988 congressional testimony, one Energy Department employee

[11] This section is based primarily on the 1992 Budget, Part Two, Chapter VIIIa.

[12] This section is based on Alvarez and Makhijani (1988), United States General Accounting Office (1988), and United States Department of Energy (1989).

put the cost at $100 billion. The General Accounting Office later gave a range of $100-$130 billion. Apparently, neither is a present value, but instead represents spending over a lengthy period. To state the numbers in the same form as the rest of the paper, it is assumed that outlays of $5 billion per year (1989 dollars) for 20 years will dispose of existing nuclear waste and put abandoned production sites in conformity with civilian environmental standards. The present value is $68 billion. It should be emphasized that it is a very imprecise estimate.

Loans and Loan Guarantees[13]

Many government agencies have made loans to individuals and firms; the outstanding volume in 1989 was $207 billion. Programs with more than $10 billion of outstanding debt include foreign military sales, agricultural credit insurance, rural housing insurance, agricultural export credit, and rural electric and telephone utilities. There are also a host of smaller loan programs.

The outstanding volume of direct loans has been declining, but has been more than replaced by loan guarantees. Federal agencies guaranteed $588 billion of primary credit (that is, net of secondary loan pools) at the end of 1989. Programs generating more than $10 billion of loan guarantees include student loans, loans to small businesses, and housing loans from the Federal Housing Administration (FHA), the Government National Mortgage Association, and the Veterans Administration (VA).

Government loans and loan guarantees enable recipients to obtain credit on better terms than would be available in private markets. Some favored parties include poor credit risks and other borrowers who commit less collateral for government credit than would be required by private creditors. Government lending to such parties creates an obvious credit risk for taxpayers. The failure to provide adequate loan loss reserves for outstanding loans certainly creates an unfunded liability.

An example of a lending agency creating an unfunded liability is the Farmers Home Administration (FmHA). The agency lends to farmers unable to obtain credit from normal commercial lenders. According to one report,[14] many of the borrowers lose money due to poor farming practices, such as inadequate care of livestock and crops, or planting on poor land. After defaulting on an FmHA loan, such a borrower is then able to obtain new loans from the same agency. According to the 1991 Budget, the FmHA credit fund had therefore reached a negative net worth of $28 billion.

The 1992 Budget contains estimates for the value of expected losses on loans and loan guarantees made in 1990 and before. For direct loans the expected loss rate is 23.4 percent of the amount of outstanding loans. For loan guarantees the expected loss rate is 4.8 percent. Each loss rate is then applied to the volume of outstanding loans at the end of 1989 and the figure entered in Table 1.

Those figures do not include many activities of government-sponsored enterprises (GSEs), which had lent $763 billion through 1989.[15] GSEs are organizations that have federal charters and some degree of private ownership mixed with some degree of government control. Prominent GSEs include the Federal National Mortgage Association, the Federal Home Loan Banks, the Federal Home Loan Mortgage Corporation, the Student Loan Marketing Association, the Farm Credit Banks, and the Federal Agricultural Mortgage Corporation. Debt issued by a GSE does not have explicit backing by the government but is widely believed to have an implicit guarantee. Evidence of this implicit guarantee can be seen in credit markets, where GSE debt carries a higher interest rate than comparable Treasury debt, but a lower rate than the safest corporate debt.

As with any financial intermediary, a GSE is subject to credit and interest rate risk. The 1992 Budget judges those risks to the taxpayers from current operations to be small. No attempt is therefore made to estimate any taxpayer liability that might occur due to GSE activity; the amount of their lending is listed in Table 2.

There remains the risk that a GSE could change its management strategy in ways that increase risks to the taxpayer. That potential has led to proposals to lessen or eliminate that risk. They include full privatization, increased capital requirements, or the mandatory issuance by GSEs of subordinated debt that is explicitly not guaranteed.

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[13] This section and the next two sections are primarily based on the *Special Analyses* documents (1989 and 1990), General Accounting Office (1989), and the 1992 Budget.

[14] The General Accounting Office report is cited in Bovard (1988).

[15] A good explanation of the structure of GSEs and the evaluation of their financial risk is given by the Congressional Budget Office (1991).

Table 2

Sources of Possible Liabilities of the Federal Government

Billions of 1989 Dollars

Program	Insured Amount
Insurance of bank deposits	2,175
Insurance of credit union deposits	164
War-risk insurance	239
Veterans life insurance	27
Political-risk insurance of direct investments abroad	9
Lending of government-sponsored enterprises	763
Total	3,377

Note: Each insured amount is a value subject to implicit or explicit government insurance at the end of the 1989 fiscal year. No estimate of expected taxpayer liability is calculated.

CONCLUSION

The stealth budget is enormous. As indicated in Table 1, estimates of unfunded liabilities in a few areas of the federal budget exceeded $4 trillion. Such disparate areas as civil service retirement benefits, deposit insurance for thrift accounts, and disposal of defense-related nuclear waste will contribute to future spending. To put that number in perspective, total federal spending in 1989 was $1.1 trillion and gross federal debt at the end of the 1989 fiscal year was $2.9 trillion.

The $4 trillion estimate is most likely to err on the low side. Several federal insurance programs may produce losses, but the amount is difficult to quantify. The face value of that insurance approached $3.4 trillion.

The stealth budget should concern macroeconomists. The extent to which federal debt affects consumer spending has been the focus of many empirical papers, with conflicting evidence produced.[16] The existence of $4 trillion of unfunded liabilities suggests substantial measurement error in conventional time series of federal spending, debt, and deficits. In general, any conventional measurement of the wealth or income effect of fiscal actions is likely to be misspecified.

The stealth budget should also concern supporters of balanced-budget or other spending-limit legislation. Current examples of such proposals would not constrain unfunded liabilities. As a result, attempts to limit stated spending may simply change the form of spending. For example, a loan guarantee to an insolvent borrower could easily replace a direct subsidy.

Finally, the stealth budget should concern anyone who believes that better information leads to better public policy choices. The magnitude of unfunded liabilities suggests that many decisions by voters and by their elected representatives have been made without a full understanding of either the government's current fiscal position or of the full costs of programs under consideration.

While the estimates in this paper show that substantial unfunded liabilities do exist, the numerical total should be recognized as crude at best. Better estimates for many programs could be produced by the agencies themselves. Their specialists with full knowledge of the programs and with informed access to relevant data, subject to comprehensive review by interested persons outside the agencies, could reveal a wealth of information. Those estimates could then be presented in a consistent format over time to allow easy access to the estimates by nonspecialists. Unfortunately, as the Appendix suggests, the very incentives to create unfunded liabilities are also incentives to obscure their costs.

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[16] A survey of some recent papers is Barth et al. (1991).

APPENDIX

The Political Economy of Unfunded Liabilities

Why does the government have unfunded liabilities? An observer with little information might guess that simple historical accident could explain their existence. Another guess might be that poor management of basically sound programs has allowed some unfunded liabilities to emerge. In either case, a little tinkering would fix the system, eliminate unfunded liabilities, and make the budget more transparent.

The point of this section is to argue that the existence of unfunded liabilities is not accidental. Instead, the American political system has characteristics that produce incentives for politicians—that is, elected officials and their senior-appointed subordinates—to deliberately fail to fund or to fully reveal liabilities that result from current programs. To motivate this interpretation, some key features of a model of political activity will be briefly described below. A fuller discussion of most of these elements can be found in Downs (1957).

Rationally Ignorant Voters

Voters acquire information as long as the marginal benefit of doing so exceeds the marginal cost. A major benefit of voting could occur if a particular voter happened to cast the deciding ballot in an election. The expected value of voting for that reason, however, is very low since the probability that a national election would be decided by a single vote is extremely low. Other benefits of an individual vote, such as expressing an opinion or promoting good citizenship, can also be small. As a result, the marginal benefit of acquiring information is typically very small and voters accordingly acquire little information on candidates and issues.

Vote-Maximizing Politicians

If a politician does not maximize the number of votes received, he or she can be replaced by one who does. It is therefore assumed that all politicians are vote maximizers. A corollary is that politicians are primarily motivated by the prospect of holding office, rather than by ideology.

Interest Groups

Interest groups can lower voter costs of acquiring information on a small subset of issues, can inform politicians on voter attitudes, and can acquire and distribute resources in political campaigns. Interest groups are often formed around issues that affect voter incomes and wealth, although other types of interest groups are also possible.

A political system that contains the above elements can be expected to behave in a predictable manner. A few predictions are given below.

Politicians Respond to Interest Groups

A small tax on all taxpayers may not affect many votes. If all the funds are distributed to a small number of voters represented by a single interest group, however, voting behavior of that group's members may well be changed. If the presence or absence of that program makes a large difference to the wealth of the interest group's members, many (who are rationally ignorant on other issues) will choose to vote for the candidate most strongly supporting that program.

Hidden Costs

A politician can gain support by transferring wealth to members of interest groups. To the extent that the resulting costs can be hidden from any voters who pay them, the politician can benefit from a spending program without suffering adverse consequences from the resulting taxes.

Optimal Ambiguity by Politicians

In order to appeal to a wide range of voters, vote-maximizing politicians will often "becloud their policies in a fog of ambiguity" (Downs, p. 136). By not stating positions clearly, a politician can attempt to appeal to a large fraction of the electorate. In contrast, a clear statement on a controversial issue can often alienate a group of voters.

Public Interest Rhetoric

Voters observing a politician funding interest groups may conclude that his or her actions are likely to be costly. Politicians will therefore attempt to justify their actions as pursuing the public interest whether or not that interpretation is valid. Separating the actual effects from stated purposes of complex programs can be so difficult that many rationally ignorant voters will not bother to try.

Logrolling

Suppose that a local spending program enriches only one interest group in a single congressional district. The representative of that district may support similar programs in other districts in exchange for additional support for the local program. Although the support of other programs will raise taxes for constituents, the support of the local interest group may still provide more votes than are lost by the tax increase. A result is that a program benefiting only a few can obtain broad legislative support.

Summary

These elements can explain the workings of a political system, with the explanation emphasizing the incentives that lead voters and politicians to choose specific actions. Are these predicted actions actually observed? While it is beyond the scope of this article to survey a vast literature, it is appropriate to note that many writers have produced empirical evidence that supports key predictions of the theory sketched above. Representative articles include Peltzman (1984), Snyder (1990), and Grier and Munger (1991). Although the model is not a complete description of the political system in its full complexity, it is sufficient to reveal important incentives for politicians to create unfunded liabilities.

Deposit insurance is perhaps the best known example of a program that creates unfunded liabilities. It lowers the funding cost of insured financial intermediaries by reducing the risk of loss to a depositor below that of alternatives lacking federal insurance such as money market funds. To the extent that premiums paid by a depository institution fail to cover expected future losses, that institution receives a subsidy. Since calculating expected future losses from such a complex program is difficult, politicians have been able to give valuable benefits to customers and owners of many financial institutions without losing votes for increasing either taxes or the reported federal debt. Other programs that generate unfunded liabilities similarly hide the full costs to current and future taxpayers.

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