1. Federal Budget Developments in the United States

Except for a mild recession during 1991, the United States has enjoyed almost two decades of prosperity (see Figure 1). The growth phase that ended in March 2001 was the longest economic expansion recorded during the postwar period.

Some economists trace the origins of this remarkable two-decade-long performance to the fiscal-policy approach charted during the first

Fig. 1

Real Annual GDP Growth in the United States (1982-2001)

(percent)


* Federal Reserve Bank of Cleveland. This paper draws heavily on Gokhale (2001) and on the author’s comments on Bohn (2002).

The opinions expressed herein are those of the author and not necessarily of the Federal Reserve Bank of Cleveland or of the Federal Reserve System.
Reagan Administration. The hallmark of this approach was to move away from using fiscal policy as a tool for aggregate demand management. Instead, fiscal policy was employed to construct the overall economic environment within which the private sector could thrive. This approach intended to boost economic growth by deregulating key sectors, providing tax incentives to households and businesses, reforming welfare programs, fostering competition through free trade, and keeping public expenditures and the size of government encroachment on the economy under check by constraining revenues.

The attempt to impose fiscal discipline by constraining federal revenues did not work as expected. The economic record of the 1980s and early 1990s was tarnished due to persistent and rising budget deficits and debt (see Figure 2). The record deficits prompted Congress to adopt budget procedures to curb federal outlays beginning with the Balanced Budget and Emergency Deficit Control Act of 1985 and the Budget Enforcement Act of 1990.

**Fig. 2**

**U.S. Federal Surplus/Deficit (−)**  
*(percent of GDP)*

![Graph showing U.S. Federal Surplus/Deficit (−) (percent of GDP) from 1982 to 2000.](image)

In retrospect, the fiscal control mechanism introduced in 1985 successfully reduced nondefense spending as a share of GDP. The Budget Enforcement Act imposed stringent caps on discretionary spending and “pay-as-you-go” financing restrictions on entitlement outlays. However, the decline in federal defense spending after the collapse of the Soviet Union in 1990 provided a reprieve, rendering additional retrenchment in nondefense spending unnecessary for adhering to predetermined spending caps. Indeed, nondefense spending continued to grow with GDP during the 1990s (see Figure 3).

Spending controls imposed throughout the 1990s constituted one of the factors that transformed the federal budget from generating deficits to surpluses. The other was a “revenue surprise” experienced during the late 1990s (see Figure 4). Federal revenues trended upward after 1995 due to greater personal tax payments, which arose from larger capital gains realizations, rising taxable withdrawals from maturing IRA and 401(k) plans, and steep increases in the personal incomes of those subject to the

**Fig. 3**

**U.S. Federal Discretionary Outlays**

*(percent of GDP)*

![Graph showing U.S. Federal Discretionary Outlays from 1982 to 2000. The graph displays the percentage of GDP for total and defense discretionary outlays.](source: Congressional Budget Office.)
highest income tax brackets. As a result, worries about escalating deficits and debt have been supplanted by concerns over large accumulating surpluses.

2. Federal Budget Projections

Official federal budget projections in January 2001 suggested that the 10-year (2002-2011) cumulative surplus would amass to $5.6 trillion.\(^1\) A large portion of the total – $3.1 trillion – arose in the “on-budget” account and prompted the passage of a tax cut (Economic Growth and Tax Relief Reconciliation Act of 2001). The tax cut and spending legislation enacted in 2001 is expected to reduce the cumulative surplus by $2.4 trillion. The post-September 11 fight against terrorism, a reevaluation of

\(^1\) Unless otherwise noted, budget projections cited are from the Congressional Budget Office of the United States.
health and domestic security needs and more recently, a stimulus package to assist the unemployed and provide corporate tax relief will further reduce the size of the cumulative surplus. Moreover, the recession of 2001 eliminated almost $1 trillion of the cumulative surplus via lower projected revenues, and unanticipated changes in the budget outlook have reduced the surplus by another $600 billion. As a result, the projected 10-year federal surplus has fallen to just $1.6 trillion (see Figure 5).²

The outlook for federal debt has correspondingly worsened during the last year. In January 2001, official projections reported a balance of “uncommitted” funds with the Treasury of just over $3 trillion.³ Today’s

³ These refer to the surplus of revenues over outlays accumulating with the federal government after debt held by the public has been paid down as much as possible. The term “uncommitted funds” is used because no legislation has yet been enacted directing the disposition of a cash surplus with the Treasury.
10-year projection places this number at zero. Instead, debt held by the public is now projected to remain above $1.2 trillion through 2012.

The current budget outlook probably postpones but does not entirely eliminate the need to think about how to deal with a potential cash accumulation with the federal government. First, budget projections are inherently uncertain. Recent data show that unlike earlier recessions, productivity remained high during the 2001 recession (see Figure 6). The U.S. economy has become more flexible in reacting to demand-driven recessionary episodes. The application of information technology has enabled businesses to forecast demand more accurately and to adjust production and inventory levels much quicker than earlier. If productivity-driven economic growth rebounds quickly and defense- and security-related outlays remain modest, we may yet see a rebound in projected surpluses and a reemergence of uncommitted funds accumulating with the Treasury.

Taking a longer-term view, however, irrespective of the size of short-term surpluses, population aging and pay-as-you-go Social Security and Medicare programs will combine to generate an inexorable force

Fig. 6

Annual Labor Productivity Growth During U.S. Recessions (percent)

Source: Calculations based on Non-Farm Business Sector Output per Hour: Bureau of Labor Statistics.
pushing the U.S. federal government back into a severe budget crunch. As in Europe, long-term projections for the United States indicate that retirement and health outlays on the elderly will grow rapidly and remain high as the population grows older and a relative shortfall of working-aged people persists throughout this century. According to a recent estimate, if the share of government outlays in GDP remains the same as today, the fraction of outlays made up by Social Security, Medicare, and federal Medicaid will shoot up from 40 percent to 83 percent (see Figure 7).

If both tax hikes and Social Security benefit cuts are politically infeasible, growing entitlement outlays will squeeze spending on other programs unless the economy’s income-generating capacity can be boosted sufficiently. The latter requires that both public and private sectors save and invest as much as possible today. Some recent studies indicate that given current levels of saving and wealth, a fiscal squeeze will become unavoidable even under the most optimistic assumptions about productivity growth.\(^4\)

**Fig. 7**

**Projected Shares of U.S. Social Security, Medicare, and Federal Medicaid in Total Federal Expenditures**

(percent)

Source: Congressional Budget Office.

\(^4\) See Kotlikoff, Smetters and Walliser (2001).
3. Fiscal Policy Objectives and Institutional Arrangements

3.1 The “Problem” of Large Surpluses

The prospect of large surpluses in the short term and deficits over the long haul poses a difficult dilemma for policymakers. Under the current institutional set-up, federal surpluses trigger debt pay-downs. If the surpluses turn out to be so large that debt is eliminated and a sizable cash reserve accumulates with the government, the funds will have to be invested in private assets.

The disposition of these funds presents several problems simultaneously and requires careful consideration. The objective is to avoid dissipating the surplus via tax cuts and spending increases to mitigate the long-term budget crunch. However, investing surplus assets in privately issued securities could impose large deadweight losses on the economy. In addition, if the assets accumulate with the Fed (as would happen under status quo policies) it may jeopardize the independence of the Fed and destroy the integrity of fiscal policymaking. In other words, we need a policy framework that will preserve the surpluses but avoid the undesirable consequences of large a accumulation with the federal government.

Current projections indicate that agency debt (debt owed by the Treasury to other federal agencies such as the Social Security Trust Fund [SSTF]) as a share of GDP will grow larger while debt held by the public (DHBP) as share of GDP will grow smaller over time (see Figure 8). As noted earlier, this process may accelerate if the U.S. economy recovers quickly and growth is stronger than anticipated. Debt reduction to the point where the Treasury market no longer remains liquid will force a change in monetary policy procedures.

Fed holdings of Treasury securities amount to about 5.5 percent of GDP today, and Fed procedures call for limiting its portfolio of such securities to about a third of outstanding federal debt – to prevent the Fed’s trades from unduly distorting Treasury securities’ pricing in the market. This suggests that when debt held by the public approaches 16 percent of GDP, the Fed may have to conduct open market operations by with alternative, non-Treasury securities.

Some economists have argued that a dearth of treasury securities that forces the Fed to enter non-Treasury asset markets presents two
disadvantages. First, it compels the Fed into deciding which other sectors and markets should receive an infusion of public resources – a decision that properly belongs in the sphere of fiscal policy and over which Congress and the Administration should have full jurisdiction, responsibility, and accountability. Second, Fed trading in non-Treasury assets may compromise its political independence and destroy the integrity of monetary policy. Hence, these economists conclude that the Treasury should continue to issue Treasury securities despite the accrual of large federal surpluses in order to preserve current monetary policy procedures, protect the Fed’s independence, and maintain the federal government’s authority over fiscal policy.\(^5\)

\(^5\) See Broaddus and Goodfriend (2000).
3.2 Deadweight Losses

Maintaining, perhaps even increasing, the amount of debt issue at a time of accruing surpluses implies still larger cash accumulations with the Treasury. This cash will have to be invested in private assets to avoid draining the economy’s money supply – and this raises the issue of deadweight losses.

Direct investment undertaken by the government in privately issued securities is generally economically inefficient because it is likely to be based on bureaucratic and political preferences rather than on market price signals. Moreover, the prospect of the government directly investing in private assets is likely to create incentives for private firms to lobby for federal investments. Such efforts will most likely be wasted because lobbying firms will mostly neutralize other firms’ lobbying efforts, leaving the distribution of government investment little different than if no firm lobbied.

Some have argued that if such federal investments were restricted to safe private securities – fixed income corporate bonds, index mutual funds and so on – deadweight losses would be minimized. However, others suggest that such investment policies are unlikely to be adopted because the temptation for political intervention in the allocation of these funds would be irresistible.

3.3 Options Based on Social Security Reforms

3.3.1 Trust Fund Investments in Private Assets

Most of the projected surplus will accumulate on the so-called “off-budget” account (mainly Social Security). Given that Social Security is currently required to invest its surplus in Treasury securities, some economists propose that the Social Security Trust Fund (SSTF), rather than the Fed or the Treasury, be charged with investing the surpluses in private assets. Proponents of this view suggest that because it is an independent entity, the SSTF may be less susceptible to political and lobbying pressures when undertaking investments in private assets. Moreover, investments in private assets by the SSTF will help individuals (mainly poorer households) who predominantly depend on Social Security for retirement support and who do not benefit from stock ownership because of their low personal savings.
An additional argument in favor of the SSTF (rather than other federal agencies) investing federal net surpluses in private assets is that this will create a better system of sharing aggregate economic risks across generations – something that the current Social Security system achieves only imperfectly. Under this system, if the SSTF’s investments in private assets do well, retirement benefits can be maintained and the gains shared with young and future generations via lower payroll taxes. If the SSTF’s private investments do badly and the SSTF is in danger of running out of funds, payroll taxes could be increased to maintain benefits, sharing the losses with younger and future generations. Investing the surpluses in private assets via the SSTF also solves the problem of Treasury market liquidity as Social Security surpluses will no longer be used to redeem federal debt held by the public.

3.3.2 Replacing Social Security IOUs with Marketable Bonds in Individual Accounts

An alternative to investing the surpluses via the SSTF is to issue marketable debt and use this to seed individual retirement accounts owned and controlled by workers. Indeed, the existing nonmarketable Treasury IOUs held in the SSTF (as well future issues of such IOUs) could also be included in such a conversion. It is well known that the Treasury securities held in the Trust Fund are not really assets in the sense of income generating capital investments. They simply represent a claim on future workers’ earnings. If and when they are to be redeemed (and, under current projections, they will have to be redeemed in another 10-15 years, when baby-boomers begin retiring in large numbers) taxes on future workers will have to be hiked or federal spending slashed to generate the cash to do so. Hence, these securities are best viewed as future liabilities of the federal government rather than assets of the SSTF. If they are converted to marketable securities and used to seed private Social Security accounts, those who receive them would be free to readjust their portfolios by trading the marketable Treasuries for private stocks and bonds. Workers would be able to diversify their retirement portfolios according to their own preferences toward market risks and returns.

---

6 See Bohn (2001).
7 See Feldstein (1996).
8 Implementing such a reform does not necessarily imply that the benefits of annuitizing retirement wealth – as under the current Social Security system – will necessarily be lost. The government (continues)
It should be noted that this solution completely bypasses the issue of deadweight losses. First, individual decisions about which assets to invest in will be based on private preferences given technology-driven risks and returns across different sectors and securities. Second, there will be little incentive for private firms to lobby for such investments (any more than they do now) because investment decisions will be made by millions of workers. In addition to avoiding deadweight losses, this approach preserves sufficient marketable Treasury debt circulating in the economy, thereby preserving the integrity of monetary and fiscal policymaking. Indeed, it may improve the operation and government accountability for fiscal policy by removing Social Security surpluses from the orbit of fiscal policymaking.

Finally, although it achieves the diversification of individual retirement portfolios across marketable assets, establishing individual Social Security accounts in this manner means that the surpluses cannot be used by the government to actively manage intergenerational risk sharing as described earlier. As discussed below, this may actually be a good thing.

4. **Objectives and Policy Options: A Discussion of Tradeoffs**

The federal government must consider four (overall) objectives if surpluses prove large enough to require federal investments in private assets: (1) preserving sufficient Treasury market debt to ensure a liquid market and maintain the integrity of monetary policy, (2) minimizing deadweight losses from private sector lobbying and inefficient resource allocation by the government, (3) enabling a better diversification of retirement portfolios across marketable securities, and (4) improving intergenerational risk sharing. The discussion above suggests that four different regimes (institutional arrangements) that may be employed to invest the accumulating surpluses in privately issued securities: these are (1) the Federal Reserve, (2) the Treasury, (3) the SSTF, or (4) private individuals via an individual Social-Security accounts system. Table 1 could easily mandate the annuitization of (a certain fraction of) savings. This is likely to spur the development of deeper annuity markets and products, reduce problems of adverse selection in such markets, and reduce further the already low and declining load charges for such products. See Brown, Mitchell, Poterba, and Warshawsky (2001).

---

9 This discussion borrows heavily from Bohn’s (2002) analysis of fiscal options in an era of disappearing federal debt. However, the conclusions and policy recommendations provided here are quite different.
Table 1

Fiscal Arrangements and Policy Goals

<table>
<thead>
<tr>
<th>Policy Goal → Policy Choice ↓</th>
<th>Liquid Treasury Market</th>
<th>Minimize Deadweight Loss</th>
<th>Diversify Retirement Portfolio</th>
<th>Intergenerational Risk Sharing</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Assets with Federal Reserve (Status Quo)</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>2 Assets with U.S. Treasury</td>
<td>O</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>3 Assets with SSTF</td>
<td>O</td>
<td>X</td>
<td>o</td>
<td>O</td>
</tr>
<tr>
<td>4 Swap Marketable for Non-Marketable Bonds in SSTF</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>X</td>
</tr>
</tbody>
</table>

SSTF = Social Security Trust Fund.
X=Goal not achieved; O=goal achieved; o=Goal partially achieved.
* = Treasuries accumulate outside of SS according to private preferences.

illustrates the trade-offs between the objectives achievable under different policies.

Bohn (2002) correctly points out that none of the arrangements achieves all of the objectives. In this discussion it is assumed that deadweight losses cannot be avoided if surplus federal assets are invested by any of the three government agencies because their investment decisions will not follow private preferences and market signals. Moreover, even though the two non-Treasury agencies may be initially inured from political influence, it remains unclear whether that situation will prevail indefinitely.

Since not all of the objectives can be achieved simultaneously, which of them should be sacrificed? The table indicates that the first two
choices are strictly worse than choices 3 and 4. Each of the latter two choices achieves three of the four objectives, but policy 3 achieves the objective of portfolio diversification only partially. The choice, then, lies between sacrificing intergenerational risk sharing (by adopting policy 4) and accepting deadweight losses and only partial retirement portfolio diversification (by adopting policy 3).

In evaluating the choice between policies 3 and 4, one needs to consider the considerable difficulty attached to correctly formulating and implementing a state-contingent payroll tax policy (in the manner described earlier) to achieve a better intergenerational distribution of aggregate economic risks. Remember that payroll taxes must be adjusted in response to the performance of the SSFT invested in privately issued securities. That is, tax policy must react to asset valuation shocks. However, identifying such shocks from among the many different ones affecting the economy may prove too hard. For example, a negative asset-valuation shock may induce or reinforce declines in investment leading to lower labor productivity. Alternatively, if the multi-factor productivity (that affects the returns to both capital and labor) falls but is misidentified as an asset valuation shock, raising payroll taxes (to maintain Social Security benefits) when earnings are low is unlikely to be politically palatable.

Moreover, failure to correctly implement such a state-contingent payroll tax policy may make this policy itself a source of additional uncertainty rather than a means of countering fundamental aggregate economic risks. Another consideration is that moving to a new regime with state-contingent payroll taxation (if implemented correctly) will make current generations better off. If as a consequence these generations save less, capital formation may be reduced, impoverishing future generations. In other words, introducing intergenerational risk sharing via a state-contingent tax policy is unlikely to be a Pareto-superior policy.

A final consideration is that the government already employs general tax-transfer policies to spread risks across different generations by incurring budget deficits and surpluses. A special institutional arrangement

---

10 Investing surplus assets in private securities via the Social Security Trust Fund implies a partial diversification because it is accomplished centrally rather than separately according to each Social Security beneficiaries’ preference. Moreover, beneficiaries do not necessarily receive the full benefits of such diversification because the Social Security benefit formula modifies the payoffs received upon retirement based on beneficiaries’ demographic and economic characteristics.
via trust-fund-managed investments in private assets may not confer benefits that, at the margin, exceed the negative consequences of political influence on the trust fund’s investments.

These arguments suggest that policy 4, which achieves all objectives except intergenerational risk sharing, may be preferable to policy 3. Disposing of the accumulating surpluses via an individual accounts type Social Security reform will also confer other advantages: Retirement assets will become bequeathable and prevent future generations from being disenfranchised of their inheritances. A recent study shows that this could improve wealth inequality among retirees and improve mobility across the wealth distribution. In addition, converting Social Security’s implicit liabilities into explicit ones will lend greater visibility to future federal expenditure commitments, perhaps inducing greater fiscal discipline. Finally, today’s workers may better appreciate the shortfalls in their retirement reserves and increase their personal saving.

5. Conclusion

The two-decade old consensus on achieving economic progress by limiting the scope and size of government has generated stellar results. High output growth during the late 1990s has placed U.S. federal finances on track to accumulating sizable budget surpluses. The prospect of accumulating large surpluses, although dimmed by the recession of 2001 and the terrorism-related surge in spending, may reemerge if rapid economic growth resumes and defense- and domestic-security-related outlays remain modest. In view of the steep projected increase in future entitlement spending, it is important to conserve and invest as much of the surpluses as possible. However, the disposition of surplus Treasury assets presents institutional and policy concerns, and the environment within which to accomplish this needs careful assessment.

An evaluation of the trade-off between alternative objectives and the costs of achieving them suggests that it may be best to use the surpluses to initiate an individual-accounts-type Social Security reform whereby workers own and control their retirement portfolios. This approach confers several benefits. It avoids deadweight losses from private lobbying, preserves a liquid Treasury market, avoids inefficient investment of federal surpluses, improves the diversification of retirement funds across marketable assets, and eliminates certain undesirable features of the current
Social Security system such as the inability to bequeath retirement assets. It also avoids the pitfalls inherent in trying to implement intergenerational risk via direct SSTF investments in private securities and manipulation of payroll tax rates in response to the fund’s market performance.
REFERENCES


