

FUTURE PUBLIC DEBT ACCUMULATION AND SAVING IN THE UNITED STATES

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Introduction

After a brief period of surpluses,¹ large federal deficits have reemerged in the United States. Cyclical improvement in the economy and tax revenues may lead to some shrinkage of the deficit, and a period of resumption in the decline in the ratio of federal debt to GDP (Figure 1 shows the latest CBO projections of the federal balance and the ratio of debt to GDP assuming the maintenance of current policies). Nonetheless, at some point within in the next generation deficits are likely to swell again as the number of people eligible for the old-age retirement and health care (Medicare) programs increase sharply, and the debt to GDP ratio could well reach very high levels by the middle of the century, assuming maintenance of current policies (Figure 2).

The inevitable increase in the number of retirees and the increased demand for medical care coming with an aging population will likely put upward pressure on consumption, and downward pressure on saving and capital formation. Partly as an artifact of demographic trends and the mechanics of the old-age entitlement programs, the future is likely to see a negative correlation between public debt growth on the one hand and national saving and capital formation on the other. Of course, there could also be a similar connection arising from a behavioral connection between a larger stock of outstanding debt and higher levels of consumption by the nonbeneficiary population.

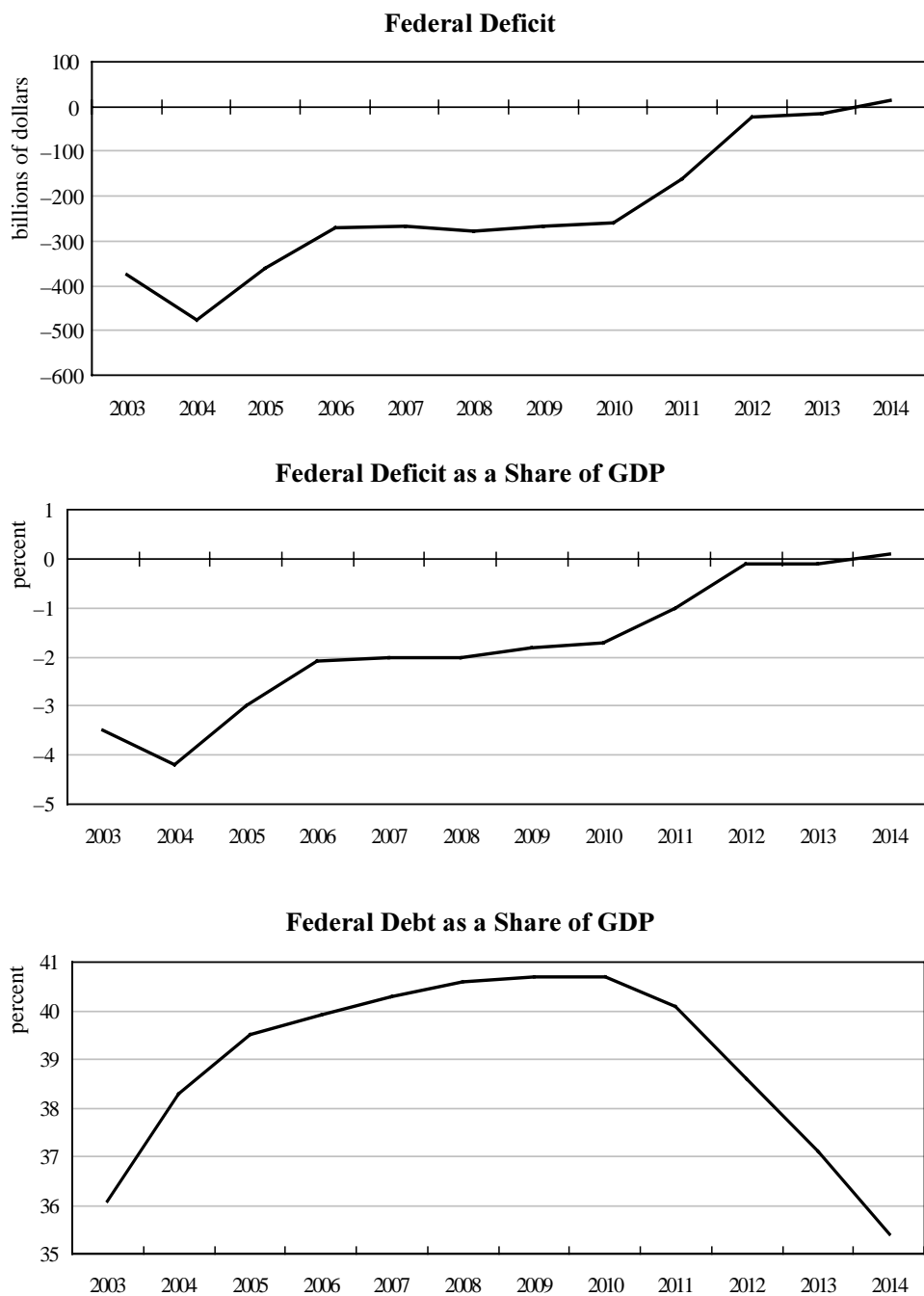
Is there evidence of a connection between the prospect of future rapid debt growth arising from entitlement payments and higher current levels of consumption (and reductions in saving and capital formation)? This connection might arise if people anticipate receiving future benefits in excess of the taxes they have paid, and expect to pay, to finance their individual benefits. If this connection exists, the current structure of federal taxes and benefits tends to reduce the future potential of the economy – and it is this future potential that will be called on to provide for the benefits of that day.

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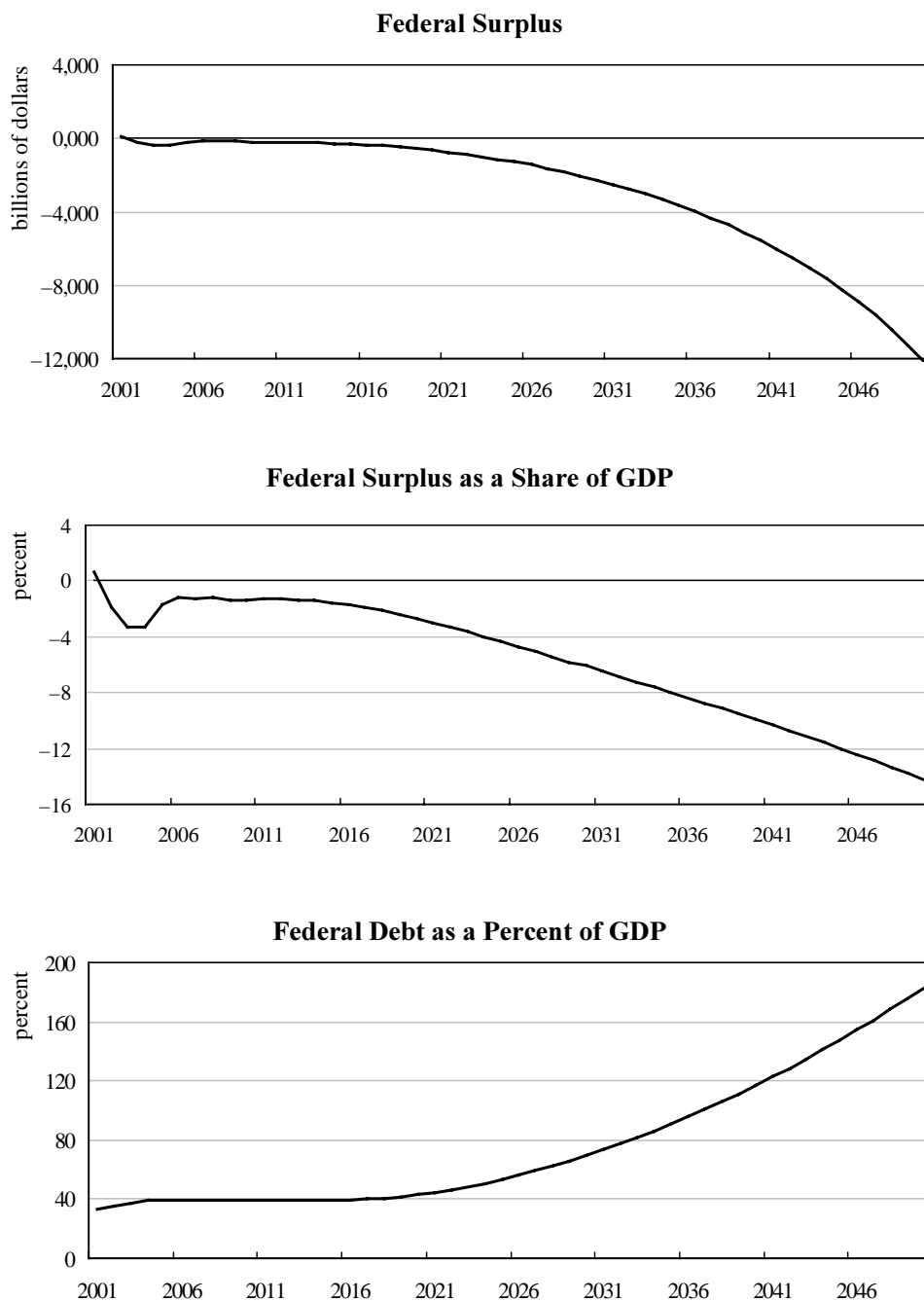
¹ Which seemed large enough and likely to persist long enough to raise a reasonably well-founded forecasts that the federal debt would be retired, raising some concerns about the operations of financial markets and the technical operations of monetary policy. See Federal Reserve Bank of New York (2000).

Figure 1



Source: CBO (2004).

Figure 2



Source: CBO (2004).

This paper will first review some of the evidence supporting the projections of very large future deficits in the United States. Given no change in current policies, large deficits are very likely to become quite persistent, mainly as the result of the Medicare program. The next issue addressed is the question of whether these very reasonable projections imply that the programs are currently eroding saving and capital formation. The evidence for this is weak. This result may bear on the desirability of different types of reforms of the entitlement programs.

1. Entitlement programs and the long-term U.S. fiscal outlook

Deficit forecasts, especially over a longer horizon, are always highly uncertain, resting on many details of the economic and policy outlook.² However, in qualitative terms the future U.S. deficit expansion does not look to be reversible without some significant adjustments in federal finances, or some unforeseen changes in the structure of the economy. The projected rise in the deficit is primarily the result of the current structure of federal entitlement programs. Existing public retirement and medical care programs in the United States do not appear to be sustainable given their current financing and benefit structures. This quite noncontroversial point is a simple reflection of the ongoing and projected demographic transition – the rise in the ratio of beneficiaries to the taxed working population – the extrapolation of the long-standing increase in the relative cost of medical care, and the specifics of the benefits and financing of the programs. It may be possible that in the United States, at least, the old-age benefit program of the Social Security System could be sustained with relatively modest changes (cuts in benefits, increases in taxes, changes in the ages of retirement). The federal medical programs (Medicare, the program for retirees, and Medicaid, the program for the indigent) are another matter, and cannot be continued with anything like their current benefit and funding structure, unless one anticipates very dramatic changes in the cost of providing medical care.

The generational accounting literature in the United States computes the sizes of the changes needed to put these programs on a longer-lived sustainable basis, under a number of assumptions, and reporting the size of the adjustment a number of ways: the dollar size of the present value of the imbalances, the size of the ongoing fiscal changes required to restore balance as a share of the tax base, that number reallocated among various generations of worker-beneficiaries, etc. These differing ways to report the imbalances may create different impressions as to the magnitude of the changes necessary to create self-financing programs. For instance, Gokhale and Smetters (2003) report that a plausible estimate of the present value of the real imbalance of the Social Security, Medicare, and Medicaid programs in 2002 was roughly \$45 trillion. That number approximates current World Product. It is also

² All references to deficits and surpluses apply to the national income and product accounts concept, which includes the “off-budget” balances of social insurance funds. All references to debt apply to the explicit debt held by the public.

about equal to the aggregate net worth of the U.S. population. However, some perspective is gained when we find they also compute that the present value of real U.S. GDP in that year – the ultimate source of the resources for these programs – was around \$680 trillion. Thus, the present value of the imbalance was then about 6½ per cent of the present value of GDP. The enactment of a fiscal program of this magnitude would be enormous (it would be equal to more than one-third of current federal taxes, more narrowly it is about equal to the current value of the payroll taxes used to fund these programs) but is comprehensible.

Of course, the estimated imbalance rests on many assumptions, and altering the assumptions can make large changes to the estimate. Gokhale and Smetters report a range for the fiscal imbalance from \$29 to \$64 trillion. While much of the variation is due to differing discount rate and GDP growth assumptions, and thus should have limited impact upon the imbalance relative to the present value of future output,³ the wide range suggests that there is much uncertainty about the current fiscal imbalance. Of course, even the “smallest” of these figures is impressively large, and as the authors note, without changes in the programs these gaps grow annually. Thus, these figures, computed for 2002, could be boosted by some trillions of dollars, simply as a reflection of the passage of time without reforms. The recent enactment of the Medicare prescription drug benefit would raise the imbalance even more.

The Gokhale and Smetters computations also highlight an important aspect of the fiscal imbalance in the United States. The longer-term fiscal imbalance is primarily the result of entitlement spending programs. Last year claims were made that the federal government would reap a substantial revenue windfall, offsetting much of the fiscal imbalance, as tax-deferred savings were redeemed by the retiring baby-boom generation, and their estates were liquidated. The entitlement programs then could be made more viable by shifting income and estate tax revenue toward their funding. While the programs would still be “unsustainable” based on their traditional funding sources, their finances might be greatly improved by the more-or-less technical shift of government funding. If this prospect was real, then making permanent the currently scheduled-to-expire cuts in federal income tax rates and the elimination of the estate tax would have larger consequences for the longer-term fiscal imbalance. However, further study has suggested that the potential revenue windfall was much smaller than first thought (Mandel, 2003). The

³ For instance, the imbalance increases for a lower discount rate, but so would the present value of GDP. The imbalance increases for a higher rate of overall growth in per capita GDP, due to the authors’ assumption of a fixed difference in the growth rate of medical sector productivity relative to the rest of the economy. At a higher overall growth rate, the present value of costs in the medical sector rise, thus raising the medical deficit. Gordon (2003) notes how dramatically changes in assumptions can shift projections of the accumulated growth of real output over long horizons – at the 1.8 per cent growth rate assumed by the Board of Trustees of the Social Security System real output will increase 3½ times in seventy-five years, while there would a 20-fold increase if growth averaged 4 per cent. While an increase in the growth assumption would not greatly change the ratio of the old-age imbalance to the present value of GDP, it would greatly improve the primary balance excluding entitlements. This latter improvement could be sufficient such that consolidation of the old-age program with other government operations could ensure its sustainability.

Congressional Budget Office has estimated that allowing the 2001 and 2003 tax cuts to expired as scheduled under current law, but not altering the basic trajectory of entitlements, would result in deficits between 10 and 20 per cent of GDP by mid-century. These would be about half those that could occur if the cuts were made permanent, but still very large by any other standard.⁴ Thus, it seems to be the case that restoring the 2000 tax structure would not radically transform the longer-term fiscal imbalance.

It is hard to escape the conclusion that in the long run the current fiscal structure of the U.S. government will come under major strains. Any near-term cyclical improvement in the deficit will in no great time be swamped by more rapid growth of old-age entitlement programs. The ultimate size of the needed adjustments will only grow with time.

2. Questions raised by projections of large future deficits

There is no disputing the logic that current programs create the strong likelihood of very large future U.S. deficits. Do these programs also inhibit saving and capital formation, and thus the level of potential output in the long run? Would significant changes in the future path of entitlement programs work to raise saving and capital formation and help to supply the resources demanded by the programs?

What are the connections between consumer behavior and the entitlement programs? Does the current working population regard unfunded retirement income and health benefits as a form of wealth? If so, the entitlement programs have and are depressing saving and capital formation. Yet, the late Herbert Stein famously noted that “if something cannot go on forever, it will stop.”⁵ The computations of the fiscal imbalance by Gokhale and Smetters imply that at some point an enormous share of all economic activity in the United States would be devoted to providing medical services financed by the Medicare program.⁶ The fiscal imbalance computations suggest either that the basic structure of health care will change (reducing the shift of resources and spending to this sector) or the federal commitment to funding health care will be diminished. Do consumers currently expect such changes?

Another set of issues involves the design of policies to address the fiscal imbalance arising from entitlement programs. The future entitlement outlays are payments largely earmarked for the future retired population, and presumably will

⁴ See the comparison in CBO (2003) of Scenarios 2 and 4, which assume that the tax cuts expire, with scenario 1, which basically assumes they are maintained.

⁵ Thanks to David Lebow for this definitive statement of “Stein’s Law,” which may be found at <http://slate.msn.com/id/2561>.

⁶ Gokhale and Smetters assume that the differential growth of real Medicare spending (relative to per capita GDP) will cease by 2100. If this does not occur, while the present value assumptions may not change greatly, the shift of resources to the sector will continue. They report their results in real terms; given an additional assumption of continuing increases in the relative price of medical care it could be that Medicare spending would account for the majority of nominal GDP by the second half of this century.

be used (specifically, in the case of Medicare) for consumer spending by this group. Ideally, addressing the fiscal imbalance today would involve more than formally balancing the government's books, and would correct any distortions to future demands arising from the structure of the programs,⁷ thus helping to provide the resources to satisfy these demands.

3. Saving, wealth accumulation, and the entitlement programs

One would wish to examine the saving behavior of differing cohorts of Americans, and how this behavior has responded to changes in longer-term government programs. While such data do not exist in precisely the form that would be desired, some insight can be gained by looking at the results of the Federal Reserve's Survey of Consumer Finances. Every few years the Board staff collects data on the distribution of asset holdings and debt segmented by demographic variables and income. Figures 3 and 4 show the ratios of wealth to income for recent sample years, segmented by major age groups, reported for overall net worth, and for net worth excluding direct and indirect (mutual funds) holding of equities (the data for 1983 are taken from Avery *et al.*, 1984a and 1984b). The rationale for looking at wealth formation excluding the stock market is twofold: first of all, changes in wealth for even moderately long frequencies such as those between these surveys are dominated by stock market fluctuations,⁸ and their inclusion may impede our ability to discern the connection between changes in wealth accumulation and changes in basic saving and spending patterns. Second, shifts in the stock market, while they can dramatically change the value of wealth and may affect ultimate saving and spending decisions,⁹ do not typically reflect changes in saving and changes in the underlying capital stock, and are probably not a good proxy for the changes in the physical resource base.¹⁰

The data shown are quite limited. On the whole, there do not seem to be any noticeable trends – the overall ratio of financial wealth to income has generally risen, due to the secular rise in the stock market. Removing equity holdings leaves

⁷ As the text notes, there inevitably will be structural changes in the economy that will arrest the shift of resources to medical care. Noting this is not a policy proposal, but it is clear that much of the fiscal imbalance is the result of the assumption that the current economics of medical care continues. An important issue is the extent to which the incentives in current programs accentuate the ongoing increase in relative prices and demand for medical care. Peach (1995) discusses some of the basic issues in the economics of health care in the United States.

⁸ Ludvigson and Steindel (1999) show how this effect works in the aggregate data for periods as long as a decade.

⁹ Ludvigson and Steindel (1999), Ludvigson, Steindel and Lettau (2002), Ludvigson and Lettau (2004), dispute some of the traditional views of the mechanisms connecting stock market fluctuations and consumption but not the basic notion that there is a linkage.

¹⁰ This may seem to be a truism. Of course, in the simplest macroeconomic growth models the value of wealth is the value of the capital stock, and fluctuations in wealth will equal fluctuations in the productivity of that stock. Harris and Steindel (1991) contains a very crude test of this hypothesis; perhaps not surprisingly it fails.

Figure 3



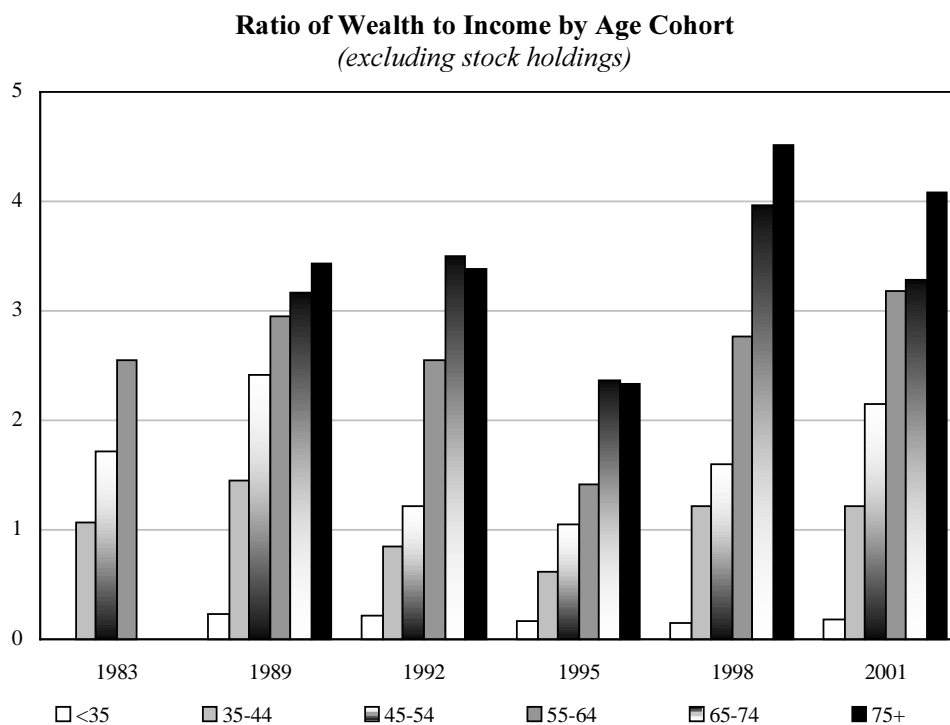
Source: Federal Reserve Board and author's calculations.

flat trends, save perhaps for an increase in wealth among the elderly. There's no obvious sign here that changes in expectations of entitlement benefits have affected wealth accumulation across generations (for instance, middle-aged people today have wealth holdings relative to income that are similar to those of middle-aged people in the Eighties). But since we don't have a clear counterfactual hypothesis (perhaps middle-aged people today would, in the absence of the entitlement programs, have much higher wealth than those in the Eighties) there's little to be drawn from this.¹¹

An alternative way to examine the effects of the entitlement programs on saving and thus capital formation is to use the aggregate time series data. The early attempts to do so on the basis of traditional time-series consumption function have been largely abandoned. These efforts basically treated measures of the aggregate fiscal imbalance as the equivalent of privately held wealth. They foundered on the

¹¹ Gokhale, Kotlikoff and Sabelhaus (1996) document a sharp increase in consumption of the elderly relative to other groups from the early Sixties to the early Nineties. As they note, this shift is likely reflective of the large expansion of the entitlement programs. The extension of this analysis to national saving and consumption trends and the identification of a causal link from the programs is less clear-cut, as was noted by discussants.

Figure 4



Source: Federal Reserve Board and author's calculations.

sheer difficulty on making an unambiguous measure of the imbalance, coupled with the growing professional skepticism that such functions really could measure the underlying parameters of consumer behavior.¹² Even beyond the problems raised by looking at aggregate time-series regressions for behavioral parameters, there is the conceptual difficulty raised by viewing any form of government liability as a form of private wealth. The literature stemming from Barro (1974) notes that the creation of a government liability necessarily results from some changes in current taxes or spending (with behavioral implications reflecting the changes in incentives and the nature of that spending) and likely creates changes in expectations of the future

¹² The early estimates of Feldstein (1974) and Munnell (1973) were marred by computational problems, as pointed out by Leimer and Lesnoy (1978). However, Feldstein (1996) has argued that reconstruction of these models based on later vintages of the data support some of the initial findings, while acknowledging the skepticism about such results in the light of more modern analysis. To be precise, the early work treated as wealth estimates of the portion of the fiscal imbalance arising purely from the old-age portion of the Social Security program that could be credited to the population working at any point in time. The Gokhale and Smetters concept is larger, both because it incorporates all federal programs and because it takes into account benefits granted to and taxes collected from future generations.

paths of taxes or spending. At the ultimate extreme, when all government spending and taxes are in the form of lump-sum transfers and taxes, consumers face infinite horizons, and expect all debt to be redeemed; government spending and taxes will be completely irrelevant to national saving and capital formation.

The literature that treated traditional government debt as something more than simply a lump sum form of financial wealth held by the population was not able to develop reliable alternative indexes of the fiscal stance, which is a complex blend of current and expected tax and spending policies.¹³ The problems would be compounded when one treats the implicit liabilities raised by entitlement schemes funded by future taxes on nonbeneficiaries. At any point in time, one can use the current law and assumptions on the evolution of major economic variables relevant to the programs (interest rates, real wage growth, relative prices of medical care, etc.), as well as projections of demographic change, and arrive at estimates of the overall fiscal imbalance and its distribution by cohort. However, the evolution of these aggregates over time depends not only on the evolution of the economic driving variables and changes in demographics but also on legislated changes in the programs. This is utterly different than for explicit government debt, where the only forces changing the real value of a household's holdings are time, interest rates, and inflation.¹⁴

If households anticipate future changes in entitlement programs, they are not likely to regard the share of the fiscal balance credited to them at any point in time as "wealth" in the same sense as explicit assets. Movements in this type of wealth will have less impact on spending than other forms of wealth. In the language of Ludvigson and Steindel (1999), a large fraction of the changes in this wealth may be transitory, and will be ignored in making saving and spending decisions. If the wealth, and its changes, has limited effect on saving and spending, then its near-term evolution will have limited effect on saving and capital formation. In principle, delaying the necessary reforms of entitlement programs will not hamper the growth of economic resources needed to produce the consumption associated with the programs – since households may not have reduced saving, nor may capital formation have been hampered, by the growth of the fiscal imbalance associated with the programs.¹⁵

¹³ Kormendi (1983) produced evidence suggesting that consumers differentiate between transfer payments, government consumption expenditures, and government investment expenditures. However, these results were not based on a fully articulated specification of consumer behavior and should not be viewed as structural. Blanchard (1985) developed a theoretical measure of the fiscal stance incorporating expectations of future policy changes, but unambiguous computation of this measure would be quite difficult (the fiscal balance measures in the generational accounting literature might be viewed as a special case of this sort of measure using the strong assumption that current policies continue indefinitely).

¹⁴ Of course, inflation and interest rates are affected by government policy changes. However, changes in these variables do not, as a first approximation, move the real value of government debt in a dramatically different fashion than other components of the household balance sheet. Changes in entitlement programs affect the fiscal imbalance in a dramatically different fashion than any explicit component of wealth.

¹⁵ This is comparable to the arguments raised regarding the effects of tax changes raised in Steindel (2002).

It would be a very formidable task, both on theoretical and empirical grounds, to measure the effect of government entitlement programs on aggregate consumption and saving, and there is no recent literature addressing this topic in the U.S. There is some modest evidence that the time path of this fiscal imbalance as computed by extrapolating current program parameters is not a good measure of the consumption incentive experienced by the population. In 1972 and 1983 there were very substantive changes made in the old-age benefit portion of the Social Security program. In 1972, the basic benefit was increased by 20 per cent, and a price indexing formula was introduced that had the effect of raising nominal benefits faster than the price level. In 1977 the flaw in the indexing formula was corrected,¹⁶ and in 1983 a more fundamental retrenchment was made in the program, including increases in the minimum age to receive the full benefit, increases in the discount on the benefits for early retirement, and a schedule of future increases in the payroll tax rate. From the point of view of the fiscal imbalance, or from that of generational accounting, these were significant events. The 1972 change greatly increased the future unfunded liabilities of the government, while the 1983 change reduced those liabilities. The data on the current balance (tax receipts less benefits) of the old-age program, and the time path of the explicit trust fund used to pay the benefits, give some idea of the significance of these moves (Figure 5).

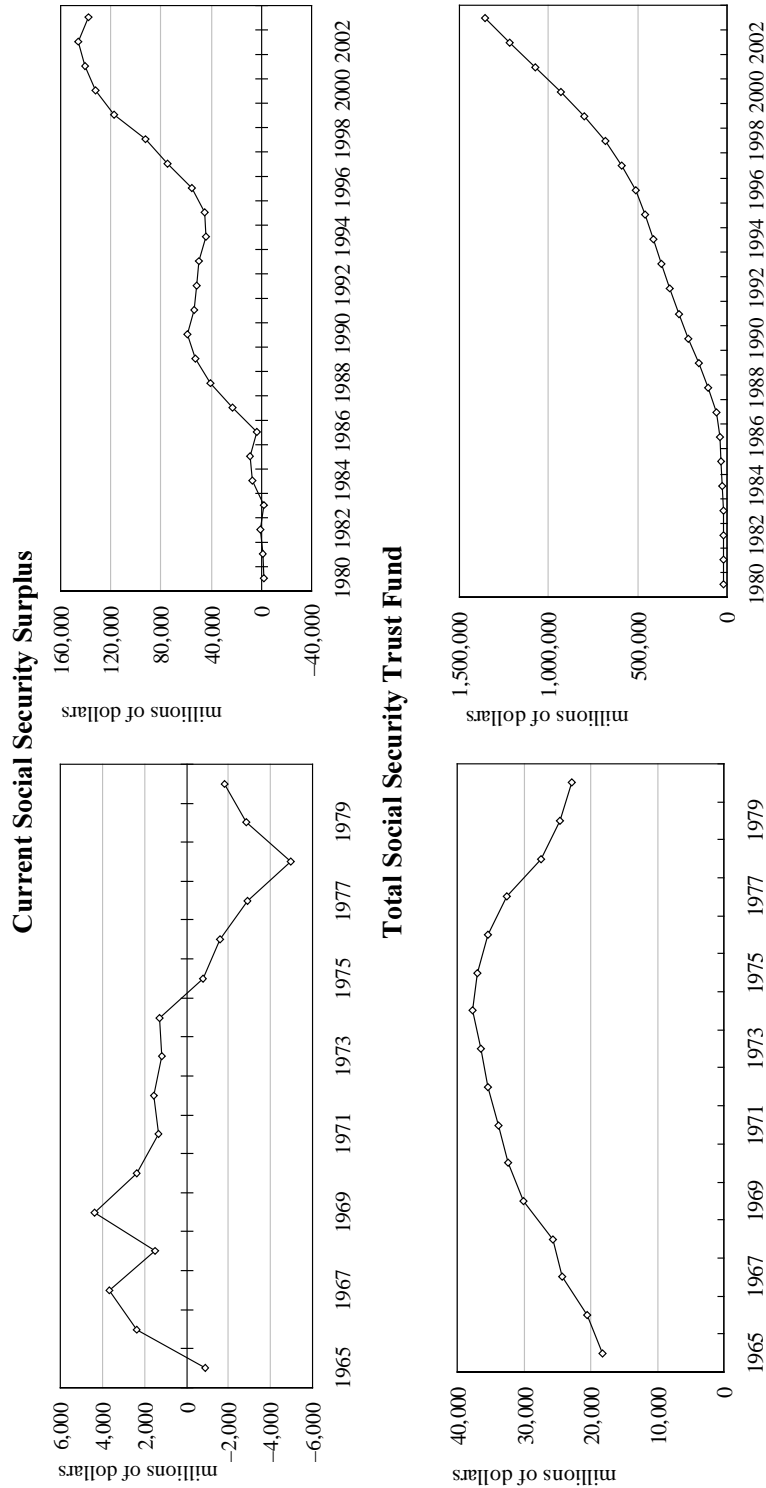
If consumers were to take into account something like the fiscal imbalance computed from current law in making spending and saving decisions, then the 1972 change would probably have spurred spending and reduced saving from current income, while the 1983 change would have had the opposite effect. Of course, many factors can affect aggregate spending and saving decisions. Still, one may have observed some change in the pattern of spending and saving around those periods.

The raw data on consumer spending growth, consumer spending as a share of GDP, the personal saving rate, the private sector investment rate (private investment as a share of GDP), and the national saving rate (gross saving as a share of GDP) do not suggest that there was any radical change in behavior around these times in the hypothesized manner (Figure 6). Saving and investment rates did not ratchet down, nor did the consumption rate ratchet up, around 1972, nor did the reverse happen around 1983. It seems to be the case that even fairly large long-run changes in entitlement programs have little impact on behavior at the time of enactment. One possibility, which I have alluded to in other work (Peach and Steindel, 2001, Steindel, 2002) is that households may not regard “structural” changes in entitlement programs as all that permanent. Changes are often made in these programs. For instance, shortly after the 1972 changes in Social Security, many analysts started to note the diminished sustainability created in the program and likely need for a retrenchment in the near term to avoid exhaustion of the trust fund – and as soon as 1977 the indexing formula was changed. Workers would have been somewhat foolish to ignore such widespread warnings and made their longer-term saving

¹⁶ Explanations of the flaw may be found in the 1978 *Economic Report of the President* and in Roberts (1983).

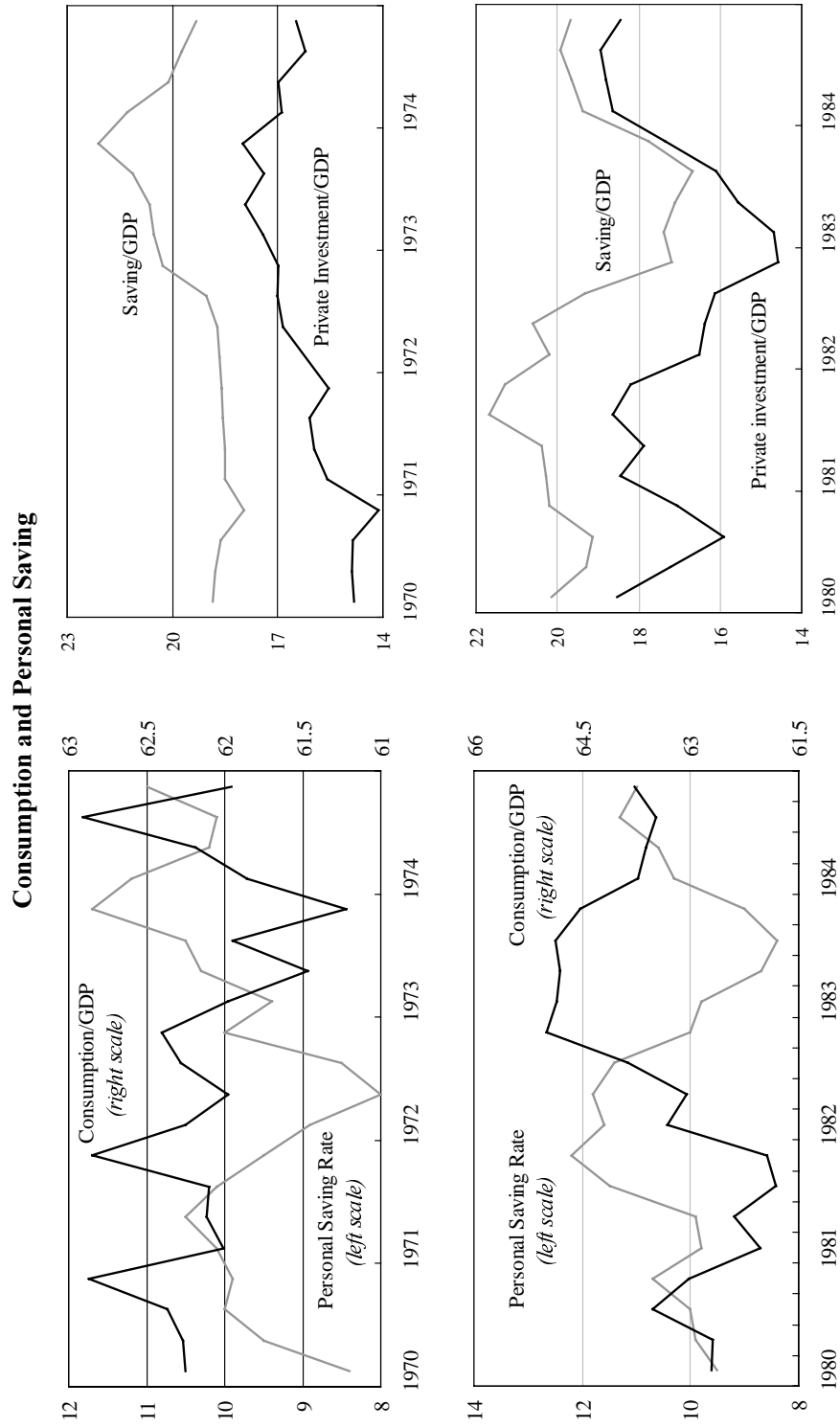
Figure 5

Financial Situation of Social Security
(millions of US dollars)



Source: Social Security Administration.

Figure 6



Source: Bureau of Economic Analysis.

decisions on the basis of maintenance of the existing program.¹⁷ Under this line of reasoning, the 1983 change was merely a long-expected correction and should not have provoked any behavioral response.

The skepticism here expressed about the saving and capital formation effects of unfunded government liabilities seems to be in contrast to the results of Laubach (2003), who finds that forecasts of increased future deficits put upward pressure on long-term interest rates – exactly what one would expect to find if saving is reduced by the prospect of entitlement benefits not funded by the current working population.¹⁸ There does not seem to be any real contrast. Laubach's work looks at the effect of forecasts of deficits five years into the future – a horizon in which one can make reasonably firm projections of the trajectory of fiscal policy. The problems addressed in the generational accounting and fiscal imbalance literature apply to deficits that may arise a longer time into the future, assuming the maintenance of current policies over that period. Thus, the downward pressure on saving and capital formation, and the upward pressure on interest rates, arising from unfunded entitlements, is still something to be seen in the future.

4. How should entitlement programs be reformed?

A lack of obvious meaningful response to past substantive changes in Social Security could be an important element in thinking about the timing of changes that will be needed in federal entitlements. The ultimate economic rationale for reform in the shape of straightforward corrections to the fiscal imbalance (through the form of tax increases or benefit reductions) is that the “sacrifice” necessary to ensure sustainability is smaller (expressed as a share of income) the sooner it is done. That is true in a sheer accounting sense. A small change in taxes or spending today, from the point of view of balancing the government's books, lessens the need for a larger change tomorrow. However, from an economic point of view, if today's change does not result in the creation of any new resources available to produce goods in the future it does not address the fundamental problem.¹⁹ This argument applies with

¹⁷ A commonplace in the U.S. is the widespread saying that “I don't expect Social Security to be around when I retire.” Analysts confronting such skepticism (for instance, Diamond, 2004), note that the erosion of that trust fund is likely to be gradual, and that the fund could well remain positive – allowing maintenance of the current schedule of taxes and benefits – through the life of the current working population. Even if the fund approaches exhaustion, the programmatic changes necessary to keep the program intact would be reasonably modest. Nonetheless, the saying probably does encompass reasonable skepticism that the program is sustainable under all circumstances and that retrenchment is likely in the future.

¹⁸ Some years ago rather similar results were found by Palash and Steindel (1986), using a much less sophisticated modeling strategy. The 2003 *Economic Report of the President* argues that there is most a very small interest rate effect from a near-term change in the deficit, but Laubach's estimates are taken from changes in a longer-term outlook. Gale and Orszag (2003) survey the literature on this subject and find that anticipated deficits do raise interest rates.

¹⁹ Indeed, the case might be made that it is not particularly advantageous to save today to provide for an explicit consumption need far into the future. Today's saving will produce capital that will require future resources to be maintained or replaced until that need ultimately arises and, in the event, may not be
(continues)

particular force when we note that the lion's share of the fiscal imbalance results from future medical costs. The extraordinary growth in government medical care expenses currently being seen reflects growth in real demands, in large part reflecting demographic needs and perhaps the general nature of medical care as a superior good,²⁰ compounded by the secular increase in the relative price of medical care. What possible investments could be made today to counteract such forces? The policy issue for entitlement problems may well be not the existence of these forces – a society can always find a means to finance goods and services it is willing and able to make²¹ – but whether or not the current structure of the tax and benefit programs alters private demands and the price structure in undesirable ways. U.S. medical programs may subsidize “overconsumption” of real medical services (and/or drive up their relative prices) through the general policy of third-party payments and access by demand, coupled with a general societal thrust to allow wide access to very costly cutting-edge treatments. Microeconomic reforms might be able to contribute to reductions in the rapid growth of spending without fundamental changes in the basic medical safety net provided to the elderly and indigent.

The previous discussion may seem Panglossian. It could suggest that the unfavorable trajectories for the long-term finances of these programs do not imply a need for immediate major reforms, if the nature of the ultimate reforms does not necessarily involve commitment of funds of the magnitude suggested by the fiscal imbalance computations. A valid criticism of this line of reasoning is that it could encourage complacency about future government obligations. The ultimate changes to entitlements may not be made until the programs are at the verge of collapse, and hasty decisions made in a time of crisis could inflict unanticipated serious damage on people (aside from straining political systems). However, levying significant tax increases (or simply reducing benefits) to cover future costs of these programs also imposes costs, and if there is no significant increase in capital formation the benefits are unclear.

Nothing has been so far said about reforms of the entitlement programs reflecting changes in their investment policies, or in assigning current workers individual accounts that may be invested according to certain criteria (with the government guaranteeing some minimum benefit). Broadening the portfolio of the trust funds to assets other than government debt (most notably, corporate equities) might raise their income, and improve the formal accounting sustainability of the current benefit and tax structure. However, such a change would seem unlikely to make a material difference in the overall path of saving and capital formation, on usual Modigliani-Miller grounds: households can always incorporate government portfolio choices made on their behalf in making their saving and asset choice

suitable for meeting those needs. A large investment in horse breeding farms in the 1890s would not have done particular good in meeting today's transportation needs.

²⁰ Nakamura (1997) argued that the strong growth of real medical care in the Seventies and Eighties was a signal that productivity and real income growth was being understated.

²¹ “A nation can finance anything it can produce.” Kindleberger (1973), p. 286.

decisions.²² Alternately, the privatization of the entitlement programs – having benefits for a worker paid out of fund invested in her behalf and at her direction – has considerable attractions from the point of view of microeconomic efficiency.²³ But the introduction of such a program leaves society with the choice of cutting transfers to current beneficiaries or finding a new major revenue source. Privatization prevents future growth of the fiscal imbalance from the entitlement programs, but does not directly reduce the fiscal imbalance, unless the process results in additional output and tax revenue.

5. Conclusion

The United States has entitlement programs that appear to be “unsustainable” in the sense that they are likely at some point to exhaust the trust funds from which benefits are paid. This may be no more than a mere forecast that at some point in the future either the programs will self-terminate or laws will be changed.

Full assessment of potential changes in the programs should involve more than computation of the adjustment needed to eliminate the agreed-upon “imbalances”. Of course, estimates of these “current-law” imbalances are always uncertain, but the issue goes beyond recognition of this reality. A key issue would appear to be whether the current structure of the entitlement programs reduces the economy’s ability to deal with the imbalances, most importantly by depressing saving and capital formation.²⁴ At least in the case of the old-age portion of the Social Security program, there is no real evidence that such is the case, at least to any marked degree. Given the frequency and size of past changes in this program, people do not seem to be saving and consuming on the basis of an indefinite increase in the program in its current form. This suggests that reform measures need not be large in the near-term, and perhaps could avoid making major changes to current benefits or those anticipated by the older part of the working population (as suggested by Diamond and Orszag, 2003).²⁵

Medicare, and government medical programs in general, raise issues that go far beyond the mere funding of the benefits. Recent trends in the growth of real

²² Of course, as in the traditional Modigliani-Miller result for corporate financing decisions, the extreme frictionless result would be modified by taking into account considerations such as taxes on investment income, and infra-marginal portfolio choices (for many, if not most households, their share of the trust funds is much larger than financial net worth; thus the households might not be able to “undo” the trust funds’ portfolio choice). Feldstein and Samwick (2000) argued that diverting payroll tax revenues into private accounts would boost output enough so that existing benefits could be maintained without increasing the government’s overall tax take.

²³ Though some commentators have noted that such a change might greatly increase the administrative costs of the systems.

²⁴ Elmendorf and Sheiner (2000) describe some of the issues connecting national saving, demographic change, and entitlement programs. They argue that the optimal path for the economy may be for saving increases, and perhaps programmatic adjustments, to occur in the future.

²⁵ Büttler (1999) uses a simulation model to study the effect of the timing of future reforms in old-age pension systems.

medical consumption and increases in the relative price of medical are not sustainable for the economy as a whole, much less for the financing of a program. Extrapolation of these trends could result in the lion's share of current dollar U.S. GDP devoted to this one sector in a few generations. It would be simply impossible to come up with any mechanism to "fund" the needs emerging from such trends, even if one could imagine a proper set of investment instruments. The policy issue for Medicare reform may be whether the current program impedes or hinders these basic changes. Projections of massive future increases in U.S. federal debt might be viewed as more a symptom of the possible unsustainability of the current health care system, as opposed to a financing problem that can be addressed by itself through a pure fiscal fiscal consolidation.

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