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DO WE HAVE A RETIREMENT CRISIS IN AMERICA?

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This article summarizes findings on the state of the retirement income security of Americans. Trends in pension coverage and participation are documented, as well as the saving rate and net worth of American households. In addition, the composition of federal government expenditures is discussed, and future trends in social insurance programs are detailed.

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>>> TRENDS IN PENSIONS: PLAN TYPES

Twenty years ago, at the dawn of the 401(k) era, 40 percent of workers who participated in an employer-sponsored pension plan had a defined-benefit (DB) plan only.[1] Forty-five percent of workers who participated in an employer-sponsored pension plan had a DB plan as well as a defined-contribution (DC) plan. A much smaller group, 15 percent of workers, had a DC plan only. For those workers with both a DB and a DC plan, the DB plan was usually the primary plan.

Over the next fifteen years, the picture changed a great deal, as the DC plan became more common and the DB plan's popularity declined. By 1998, 59 percent of workers had a DC plan only. Twenty percent of workers had both DB and DC plans, while 20 percent had a DB plan only. In 1985 there were 170,000 DB plans, but by 1999 there were only 42,000, as thousands of DB plans were terminated every year. By contrast, in 1985 there were 460,000 DC plans, but by 1999 there were 700,000.

>>> TRENDS IN PENSIONS: COVERAGE AND PARTICIPATION

On the other hand, pension plan coverage and participation have stayed fairly constant in the nearly thirty years since the passage of the Employee Retirement Income Security Act (ERISA) in 1974. Sixty-four percent of employees work for an employer or union that sponsors a pension plan. Forty-seven percent of workers participate in a pension plan. The coverage rate for households (rather than just individuals) is substantially higher, however, with approximately 70 percent of households being covered by a pension at some point in time.

In DC plans, total contribution rates, the sum of employee and employer contributions, exhibit little variation by age. Total contribution rates average between 7 and 9 percent. In addition, only 9 percent of employees contribute the maximum allowable by law (Munnell and Sunden, 2002). This suggests that even if contribution limits were raised, it will have little impact on saving rates, and by extension, on national saving.

>>> DRAWBACKS OF THE DC PLAN

A variety of academic studies (Engen, Gale, and Uccello, 1999; Gale and Sabelhaus, 1999; Gale, 1998; Poterba, Venti, and Wise, 2001, 1998, 1994; Samwick and Skinner, forthcoming) suggest that the shift from DB to DC pensions will have a broadly neutral effect on Americans' eventual retirement income. There are, however, several causes for concern. The long bear market that has followed the burst of the stock market bubble has obviously left some retirement portfolios far short of their participants' target levels. For many households, their retirement portfolios now have little to show for years of contributions. For older baby boomers nearing retirement, this may mean delaying it, phasing into it, or somehow adjusting labor supply and household expectations concerning income and the household standard of living in retirement.

DC plans do present some "roadblocks" to encouraging people to maintain their savings. One disadvantage occurs when individuals change jobs and fail to roll the distributed assets into another tax-deferred saving vehicle, and instead "cash out" of the plans. The practice is particularly prevalent among younger individuals and households, who have accumulated little in the plans. Older individuals and households tend to have accumulated more, want to preserve it, and so they will roll the assets over into another tax-deferred saving vehicle when they change jobs. This is not usually an option for a DB plan participant, in that assets remain "frozen" and are not payable as cash. This lack of portability, however, means that a worker who switches jobs and is covered by multiple DB plans would retire with a substantially smaller pension than a similar worker who stayed with the same employer for an entire career. This difference in pension incomes is a fact of DB benefit accumulation rules, which tend to be very heavily back-loaded. The lack of portability is one of the primary features that has spurred the growing popularity of DC plans in the last thirty years.

A larger problem associated with some DC plans is the concentration of employees owning their own employers' stock within the 401(k) plan. The company stock problem is particularly revealing because it illustrates the significant lack of financial knowledge among employees at all levels of many firms. It seems

unlikely that if employees adequately understood the risks they were assuming, they would willingly choose to take on the level of risk associated with high concentrations of any single company stock in their 401(k) portfolios. A partial solution to this might be to restrict company stock to the employer match and ensure that employees have other selections available to them.

The vast majority of DC plans are still in the accumulation stage, since the system as a whole is not yet mature, with 401(k) plans only introduced in 1982. In general, TIAA-CREF represents the only mature system of DC plans with large numbers of participants at every career stage in various employer-sponsored 403(b) DC plans. TIAA-CREF's success in helping individuals achieve a comfortable retirement highlights a significant design flaw in most 401(k) plans, which has not seemed important as long as participants in these plans were solely in the accumulation stage.

This flaw is the lack of an annuity option. Many of the oldest baby boomers will have spent a large fraction of their working lives in 401(k) plans, and they are nearing retirement. In a few short years, they will retire and begin withdrawing from their accumulations in DC plans. And if they don't take any of their income through an annuity option, they will be exposed to longevity risk. The risk of outliving one's retirement income is a very serious public policy issue with the retirement of the baby boom generation just over the horizon.

Finally, people may not be investing their retirement assets appropriately to meet their eventual retirement income goals. There is substantial evidence that many individuals find it difficult to make financial decisions. For members of a household, to try and determine exactly how much they will need to retire comfortably, and then how to invest to achieve that goal, is a considerable challenge. So, confronted with these types of financial decisions, especially in terms of how they should invest, DC plan participants may seek the advice of financial advisors, friends or family members, other financial professionals, or elect default options if they exist. Then, once their initial choices are selected, they go about the rest of their busy lives without ever again giving their DC plan — and their investment strategy — a second thought. In fact, Ameriks and Zeldes (2001) found that inertia is a force much more powerful than people had previously suspected. They studied a sample of TIAA-CREF participants, and over a 10-year period found that nearly half — 47 percent — made no changes to their existing accumulations. Furthermore, they found that 44 percent made no changes to their future contributions, either.

>>> SAVING RATES AND HOUSEHOLD FINANCES

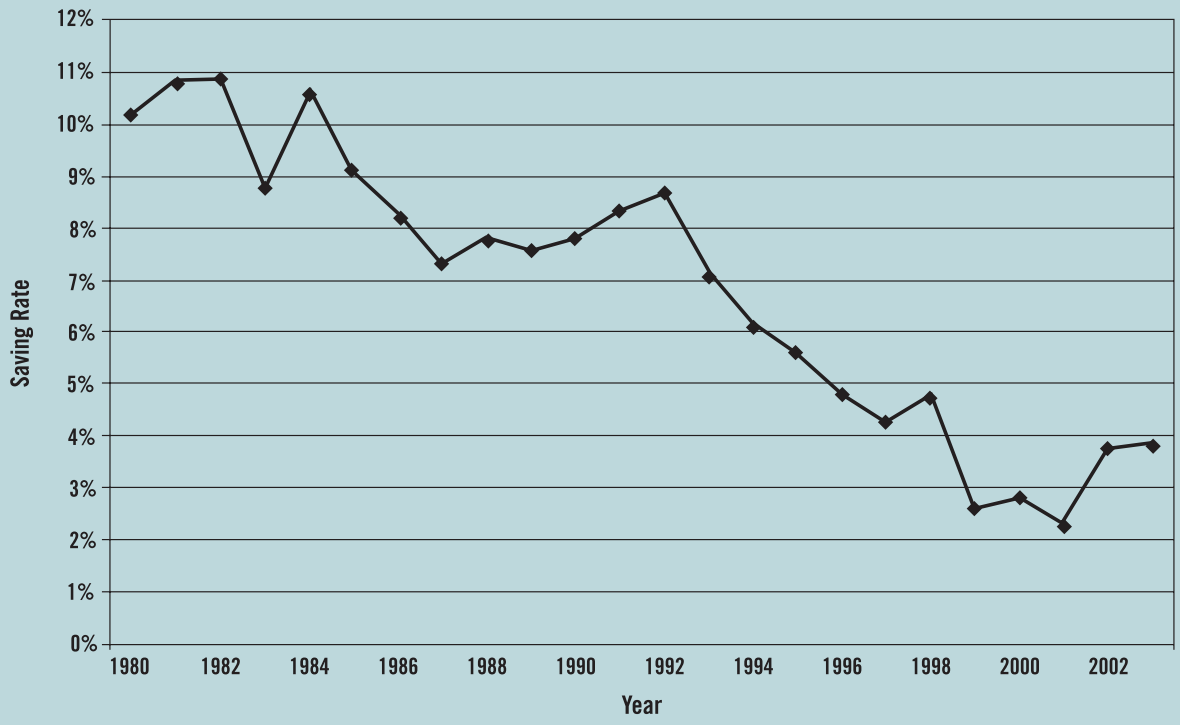
Another difficulty facing future retirees is that most of us simply don't save enough. The household saving rate, as a percentage of disposable income, has exhibited a steady downward trend for two decades. Chart 1 shows that the household saving rate reached its nadir in 2001, bottoming out at 2 percent. The measure of the household saving rate includes saving in retirement accounts, so we can see that in the late 1990s, American households were essentially doing no saving outside of retirement accounts. It is worth noting that this measure of saving also represents rising asset values, and the soaring stock market in the 1990s increased the wealth of American households quite rapidly.

In fact, it is possible to make the argument that household wealth was increasing so rapidly as a result of equity market gains that households reduced their saving because their wealth targets were being met. In other words, the stock market was doing all of their work for them. There's some other evidence to support this, too, because the household saving rate began to increase in the aftermath of the bursting of the stock market bubble in 2000.

Household wealth, like household incomes, generally increases with age. Table 1 shows household net worth by age group, in both median and mean terms. It illustrates that for the youngest households, those under 35 years, median — or midpoint — net worth was very small indeed. The mean — or average — net worth for this age group, at $90,700 (in 2001 dollars), was significant, however.

At all age groups there were significant differences between median and mean levels of household net

Chart 1 Personal Saving as a Percent of Disposable Income: Seasonally Adjusted Average Annual Rate, 1980 to 2003 (Q1)



Source: Federal Reserve Flow of Funds Historical Data

worth. Median household net worth never exceeds $200,000. For example, in the 55 to 64 age group, median net worth is $181,500, while mean net worth is $727,000, a very significant difference. It's important to note that the measure of household net worth includes the value of real estate assets. This implies that the median household has little or no financial assets, and arrives at retirement with no wealth other than that embodied in their house. In other words, the rich get richer over time, but the average household stays pretty much the same.

Table 2 shows the change in family net worth, again by the age of the head of the household, in both median and mean terms, between 1998 and 2001. The table illustrates that all age groups benefited substantially during the time period, both at the median and at the mean. Again, this table shows more appreciation in mean terms than it does in median terms — probably because those families represented at the mean had both real estate and financial assets, both of which enjoyed strong gains during the period.

Table 3 shows the change in family net worth, again by the age of the head of the household, in both median and mean terms, between 1992 and 2001.

>>> WHAT PEOPLE OWN

Table 4 shows the percentage of families holding various types of financial assets, divided again into age groups according to the age of the head of the household. It's worth noting that the percentage of families holding retirement accounts declines sharply among older households, who are less likely to have had a DC plan available to them. In addition, relatively few families own individual bonds directly. By contrast, a larger percentage own savings bonds and CDs. Ownership of life insurance policies with cash value (assuming this

Table 1 Family Net Worth, by Age of Head of Household (Thousands of 2001 Dollars)

Age (years)	Median	Mean
Less than 35	$11.6	$90.7
35-44	77.6	259.5
45-54	132.0	485.6
55-64	181.5	727.0
65-74	176.3	673.8
75 or more	151.4	465.9

Source: 2001 Survey of Consumer Finances

Table 2 Family Net Worth, Percent Change, 1998-2001

Age (years)	Change in Median	Change in Mean
Less than 35	28.9%	37.6%
35-44	22.4	32.3
45-54	25.7	33.9
55-64	42.4	37.1
65-74	20.3	44.7
75 or more	20.5	50.2

Source: Author's calculations based on 1998 and 2001 Survey of Consumer Finances

is not mis-reporting) appears to rise with age, possibly because life insurance can also be used for investment or estate planning purposes.

Table 5 shows the median value of holdings of these types of financial assets for families holding these assets, again by the age of the head of the household. Median accumulations in retirement accounts peak at $60,000 for families in the 65 to 74 age group. For this age group, median accumulations of individual stocks, individual bonds, and mutual funds are somewhat higher. It is important to note that much smaller percentages of families own these assets, however. For example, in the 65 to 74 age group, only 4 percent of families own individual bonds, while their median holdings are in excess of $71,000. As mentioned above, small percentages in other age groups own individual bonds, but the value of the holdings tends to be substantial.

Table 3 Family Net Worth, Percent Change, 1992-2001

Age (years)	Change in Median	Change in Mean
Less than 35	1.8%	61.4%
35-44	40.8	57.5
45-54	36.4	46.4
55-64	28.6	73.9
65-74	44.9	90.0
75 or more	40.8	76.5

Source: Author's calculations based on 1992 and 2001 Survey of Consumer Finances

Table 4 Percent of Families Holding Asset, by Age of Head of Household, 2001

Age (years)	CDs	Savings Bonds	Bonds	Stocks	Mutual Funds	Retirement Accounts	Life Insurance
Less than 35	6.3%	12.7%	1.0%	17.4%	11.5%	45.1%	15.0%
35-44	9.8	22.6	2.1	21.6	17.5	61.4	27.0
45-54	15.2	21.0	2.8	22.0	20.2	63.4	31.1
55-64	14.4	14.3	6.1	26.7	21.3	59.1	35.7
65-74	29.7	11.3	3.9	20.5	19.9	44.0	36.7
75 or more	36.5	12.5	5.7	21.8	19.5	25.7	33.3

Source: 2001 Survey of Consumer Finances

Table 5 Median Value of Holdings for Families Holding Asset, by Age of Household Head (Thousands of 2001 Dollars)

Age (years)	CDs	Savings Bonds	Bonds	Stocks	Mutual Funds	Retirement Accounts	Life Insurance
Less than 35	$4.0	$0.3	$3.0	$5.7	$9.0	$6.6	$10.0
35-44	6.0	1.0	13.6	15.0	17.5	28.5	9.0
45-54	12.0	1.0	60.0	15.0	38.5	48.0	11.0
55-64	19.0	2.5	60.0	37.5	60.0	55.0	10.0
65-74	20.0	2.0	71.4	85.0	70.0	60.0	8.8
75 or more	25.0	3.0	35.0	60.0	70.0	46.0	7.0

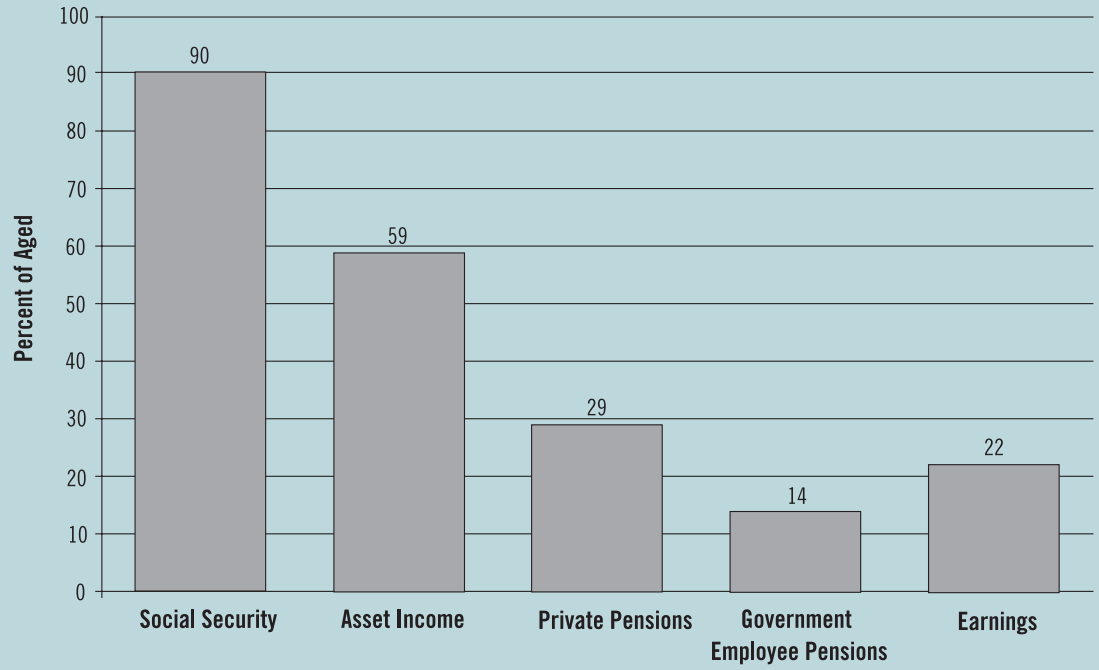
Source: 2001 Survey of Consumer Finances

Conversely, greater percentages of families own savings bonds, but the value of holdings is in the range of $1,000 to $3,000. This may be because savings bonds are often given as a gift. The table indicates that families typically arrive at the age of retirement with modest holdings, at best, of financial assets.

>>> SOURCES OF RETIREMENT INCOME

Chart 2 shows the sources of income — not the amount — for individuals age 65 and older in 2000. While it is not surprising that 90 percent receive Social Security, it's interesting to see that over a fifth receive income from earnings (from which we can assume

Chart 2 Receipt of Income: Percent of the Aged Receiving Income by Source, 2000



Source: Social Security Administration

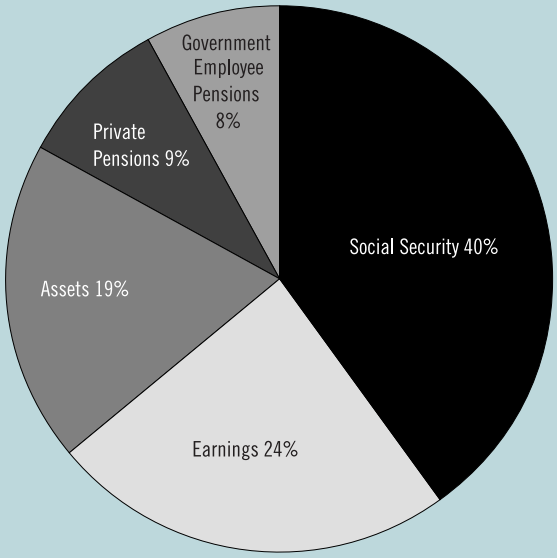
that a good number of retirees still maintain some kind of employment). In addition, half as many receive income from government employee pensions (federal, state, and local) as from private pensions. And nearly 60 percent receive some income from financial assets, although the chart does not indicate the amount of income received from any one source.

Chart 3 reports shares of the aggregate amounts received by individuals age 65 and over in the year 2000, by source. Social Security is by far the most important source of income for the elderly, constituting two-fifths of all income received by those over the age of 65. Earnings are a more important source of income than asset income, and both are much more important sources of income than are pensions. It may be interesting to note that income from government employee pensions is approximately equal to income received from private sector pensions. Total pension income, however, is less than half of that received by the elderly from Social Security.

The importance of Social Security is further demonstrated in Chart 4. The chart shows that for roughly two-thirds of the elderly, Social Security accounts for 50 percent or more of their income. For approximately a third of the elderly, Social Security accounts for 90 percent or more of their income. Finally, for 20 percent of the elderly, Social Security accounts for 100 percent of their income.

More evidence of retirees' dependence on Social Security is shown in Table 6. The table provides poverty status, based on family income with and without Social Security benefits, by various age groups of the elderly, for the year 2000. The table shows that thanks to Social Security, the poverty rate among the elderly (8.5 percent) is actually below the poverty rate within the nation as a whole (11.3 percent. Source: the U.S. Census Bureau). In the absence of Social Security benefits, however, the poverty rate among the elderly would be extremely high. For those over the age of 75, without Social Security benefits, more than half would be in poverty. For the elderly as a whole, without Social Security benefits, 48 percent would be in poverty. This highlights the importance of the program. This also confirms that if there are any fundamental reform ideas for Social Security, we need to keep in mind the potential vulnerability of the elderly in the absence of those benefits.

Chart 3 Shares of Aggregate Income: Aggregate Income by Source, 2000



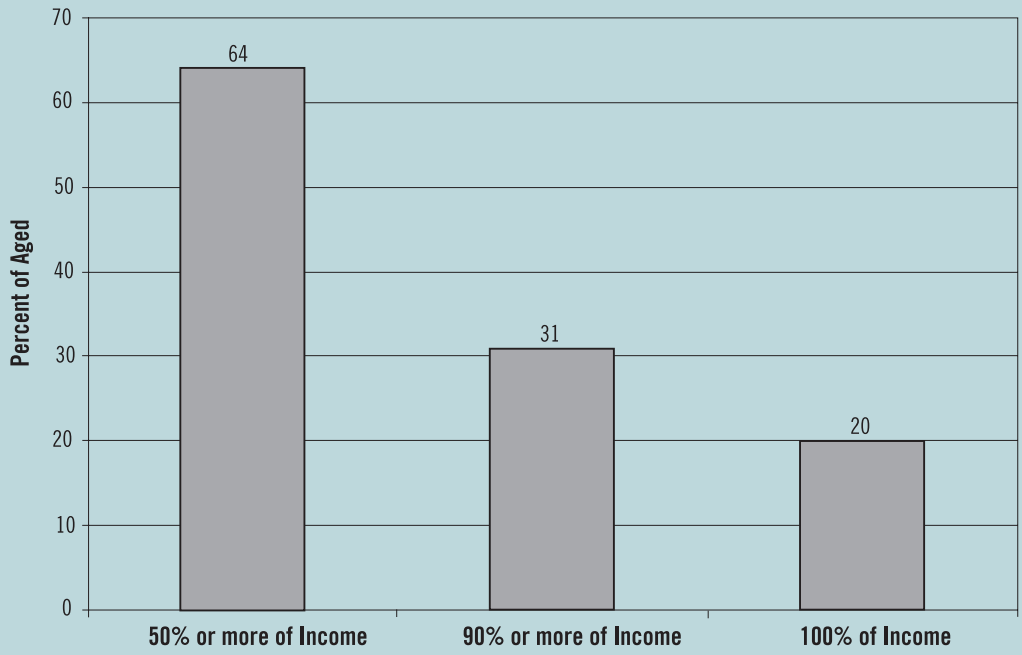
Source: Social Security Administration

Table 6 Poverty Status, Based on Family Income With and Without Social Security Benefits by Age, 2000

Age Group	Percent Below Poverty Line	Percent Below Poverty Line without Social Security
All 65 or older	8.5%	48.1%
65-69	6.6	36.9
70-74	7.9	44.8
75-79	8.6	54.0
80-84	10.0	56.0
85 or older	13.0	62.1

Source: Social Security Administration

Chart 4 Reliance of Social Security: Percent of Aged Receiving Social Security, by Relative Importance of Benefits to Total Income, 2000



Source: Social Security Administration

>>> THE COMING DEMOGRAPHIC TRANSITION AND THE FISCAL STARTING POSITION

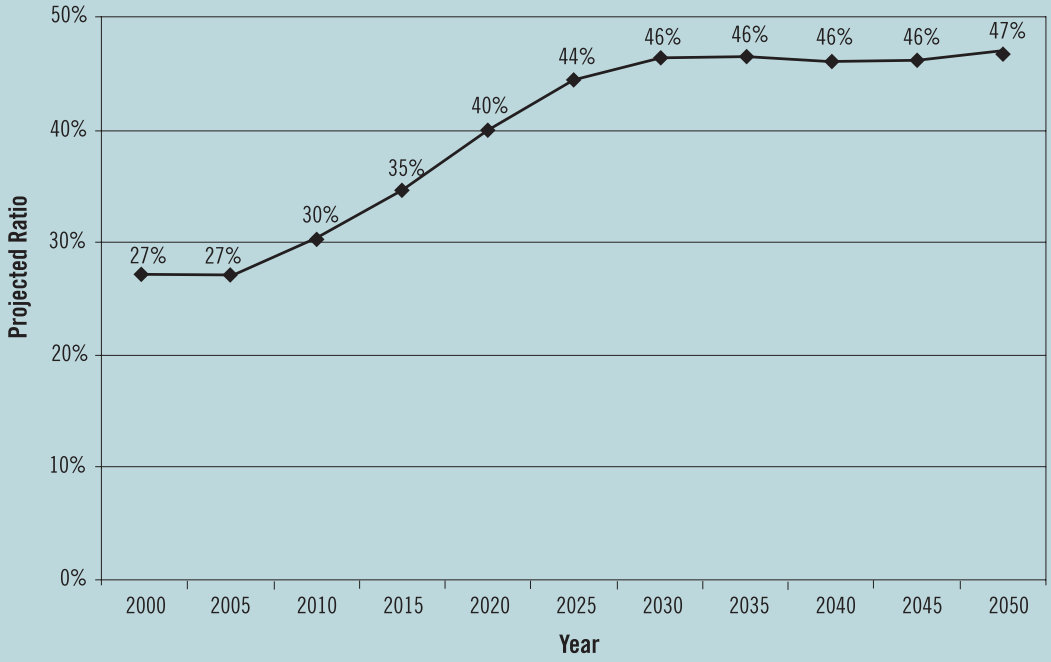
The United States (and the developed world) is enjoying a brief demographic holiday, which unfortunately is just about to end. In this country, the oldest representation in this research is popularly known as the "greatest generation," the men who fought and won World War Two and all of those who supported them back home. The veterans of that war are passing rapidly now: approximately 2,000 die every day. They will be followed by the small group born during the Great Depression, now mostly in retirement. This cohort is unusually small, so the strain on government social insurance programs at the moment is, coincidentally, also unusually small. But the cohort will be followed by the extremely large baby boomer generation. This will make the impact on the public and on government finances all the greater.

>>> THE BABY BOOMER PROBLEM

The definition of the baby boomer generation is generally those men and women born between 1946 and 1964: they number approximately 77 million. The oldest baby boomers reach the age of early eligibility for Social Security in just five years, in 2008. They reach the age of eligibility for Medicare three years after that, in 2011. The speed and scope of this demographic transition can be seen in Chart 5. It shows the elderly dependency ratio: the number of persons 60 and older per person of working age, defined as people between the ages of 15 to 59. The chart clearly illustrates that the elderly dependency ratio climbs rapidly beginning around 2005 and does not level off until about 2025. This means that the passage of the baby boom generation into retirement takes about twenty years, which is consistent with the span of the baby boom itself: about twenty years.

The chart demonstrates another important fact, indicated by the straight line that continues past the year 2025. It indicates that the passage of the baby boom generation into retirement also heralds a permanent

Chart 5 Elderly Dependency Ratio: Number of Persons 60 Years or Older as a Percent of All Persons of Working Age (15 to 59)



Source: Author's calculations based on data from the U.S. Census Bureau

change in the demographic structure of the country. This can be seen in Charts 6 and 7. Chart 6 shows the current demographic structure of the country, with relatively few elderly people, while Chart 7 shows the demographic distribution of the country in the year 2025, after the baby boomers have passed into retirement. The chart shows a flat age distribution until we get to the very old age groups. This is the future — when the baby boomers pass into retirement and in the years afterward, the rest of the country will forever look like Florida.

>>> ECONOMIC REALITIES

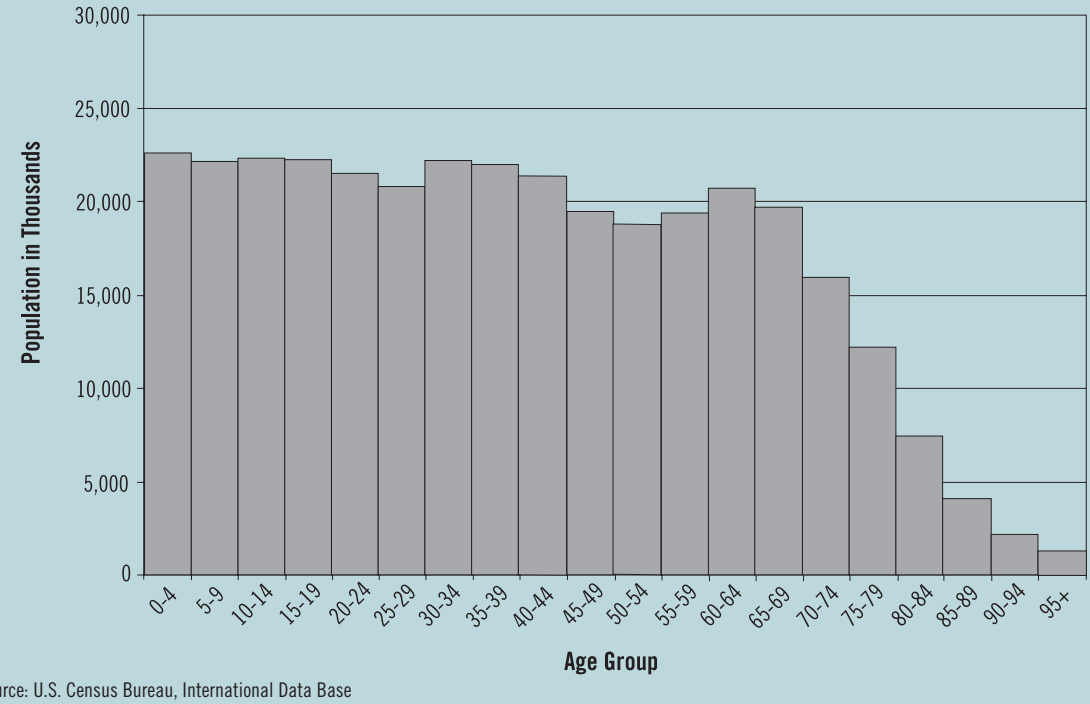
So how will future retirees' retirements be paid for?

Tax cuts, wars, the revenue losses associated with the collapse of the stock market, and a third year of an economy operating below its potential have resulted in a perfect storm of fiscal deterioration. On the revenue side of the ledger, tax receipts have declined for three fiscal years in a row: in fiscal years 2001, 2002, and 2003. The last time that federal revenues declined for three consecutive fiscal years was in the Great Depression. This was partly the result of the recession, but only partly. The successive tax cuts have also significantly contributed to the revenue losses. That the tax cuts have not been effective as policy actions in spurring economic growth or increasing employment is hardly a surprise, since fiscal stimulus was only a byproduct. The main purpose of the tax cuts was to redistribute the tax burden, and in this they have arguably succeeded. The tax cuts have reduced the current tax burden on those occupying the top of the income distribution at the present time. Since spending has not been reduced at the same time — indeed it has risen significantly — the gap between revenues and expenditures has been met by greatly increased borrowing. Hence the tax cuts just represent a tax the nation will pay later. It is clearly the goal of the administration that whoever is occupying the top of the income distribution not pay those taxes when they come due. It remains to be seen how the nation will collect these future taxes.

Chart 6 US Population Age Distribution, Year 2000

Source: U.S. Census Bureau, International Data Base

Chart 7 US Population Age Distribution, Year 2025



Source: U.S. Census Bureau, International Data Base

Let's now take a look at the federal budget.

In cash accounting terms, the unified budget surplus in fiscal 2000 was $236 billion. In fiscal 2003 the latest estimates released by the Office of Management and Budget (OMB) call for a deficit of $455 billion, a deterioration of $691 billion in just three years. In fiscal 2004 the red ink will mount again by at least an additional $100 billion, representing the cost of ongoing military operations in Iraq and Afghanistan and limited funds for development projects in both countries. Estimates of the deficit fall midway between $500 and $600 billion, subject to the usual pressures. The administration has no evident plan to reverse the deterioration before the leading edge of the baby boom reaches retirement.

The rapid deterioration in federal finances is typically reported on a cash accounting basis. On an accrual basis, the fiscal deterioration would be much larger, and is occurring just before the baby boomers retire and begin to put severe stress on federal finances.

Generally Accepted Accounting Principles (GAAP) are prepared on an accrual basis. Under the accrual basis of accounting, transactions are reported when the events giving rise to the transactions occur, as opposed to when cash is paid out or received. By contrast, federal (and state and local) government budgetary reporting is generally on a modified cash basis, where transactions are recorded when cash is received.

There are significant differences between these two approaches with respect to the timing and recognition of revenues and costs. For example, in private sector accounting, GAAP requires recognition of pension liabilities as they are incurred. Under accrual accounting, federal employee pension benefits, as well as military pension and associated health benefits, are recognized in a comparable manner.

In accordance with System of National Accounts (SNA) reporting, however, accrued liabilities in social insurance programs such as Social Security and Medicare are not recognized under accrual accounting. The reason is that these are considered "contingent" liabilities, on a different contractual basis from other pension and health arrangements. Indeed, were the liabilities in the government's various social insurance programs also to be included on an accrual basis, the impact would be of much larger magnitude. It is almost certainly not an understatement to say that the impact would be felt not least at the credit rating agencies.

In terms of everyday political discourse — and for that matter most academic economics discourse as well — the federal budget figure arrived at on a cash basis is the one in daily usage. This is all the more surprising given the well-known weaknesses with cash accounting. No one would run a business on a cash basis, and no one would accept annual or quarterly financial reporting from a firm on a cash basis. Yet the cash definition of the federal government budget surplus or deficit remains a figure of universal (mis) understanding. On an accrual accounting basis, the fiscal deterioration from 2000 to 2002 alone would be close to $900 billion. In other words, the government is generally making commitments without really ensuring how it is going to pay for them.

>>> THE COMPOSITION OF FEDERAL SPENDING: HOW PROGRAMS ARE PAID FOR

Over the last four decades total federal spending has been fairly constant at approximately 20 percent of GDP, fluctuating from highs of 22 percent to lows of 18 percent. The low came in 2000, and it was accompanied by the large surplus of $236 billion (in cash accounting terms). Due to increased state and local government expenditures, total general government spending has risen somewhat in the last few years, but has generally remained stable for roughly the last twenty years, as shown in Table 7.

The *composition* of federal spending has exhibited considerable change over time, however, as shown in Chart 8. For example, Medicare, a product of the Great Society legislative programs, did not exist in 1962. What is most striking in Chart 8 is that in 1962, more than half of federal spending was on defense. In 1962, fully 9.2 percent of GDP was spent on defense. Nondefense discretionary spending was the next largest item in the budget, and amounted to 5.8 percent of GDP. Social Security spending was 2.5 percent of GDP, and net interest expenditures on government debt were 1.2 percent of GDP. Interest expenditures reflected debt that was accumulated to finance World War Two.

Table 7 Total Federal and State Government Spending 1962-2002, in Billions of Dollars

Year	State & Local	Federal	Total	As % of GDP
1962	$38.1	$106.8	$144.9	25.5%
1970	107.5	195.6	303.1	29.9
1980	307.8	590.9	898.7	32.9
1990	660.8	1,253.2	1,914.0	33.4
1995	902.5	1,515.8	2,418.3	33.0
1996	939.0	1,560.5	2,499.5	32.5
1997	980.3	1,601.3	2,581.6	31.5
1998	1,033.7	1,652.6	2,686.3	31.0
1999	1,105.8	1,701.9	2,807.7	30.7
2000	1,196.2	1,788.8	2,985.0	30.7
2001	1,292.6	1,863.9	3,156.5	31.5
2002	1,356.4	2,011.0	3,367.4	32.6

Source: Congressional Budget Office, US Bureau of Economic Analysis

By 1980, defense spending had fallen roughly in half as a share of GDP, to 4.9 percent.

Nondefense discretionary spending had remained relatively constant at 5.2 percent of GDP. Similarly, net interest expenditures were 1.9 percent of GDP. Social Security expenditures had risen considerably, however, to 4.3 percent of GDP. In addition, Medicare and Medicaid expenditures appear for the first time.

By 2000, the composition of federal spending had changed dramatically. The share of GDP devoted to defense had fallen to 3.0 percent, the lowest ever in the post- World War Two period. Similarly, the share of GDP devoted to nondefense discretionary spending had fallen to 3.3 percent of GDP, also the lowest it had been for the period.

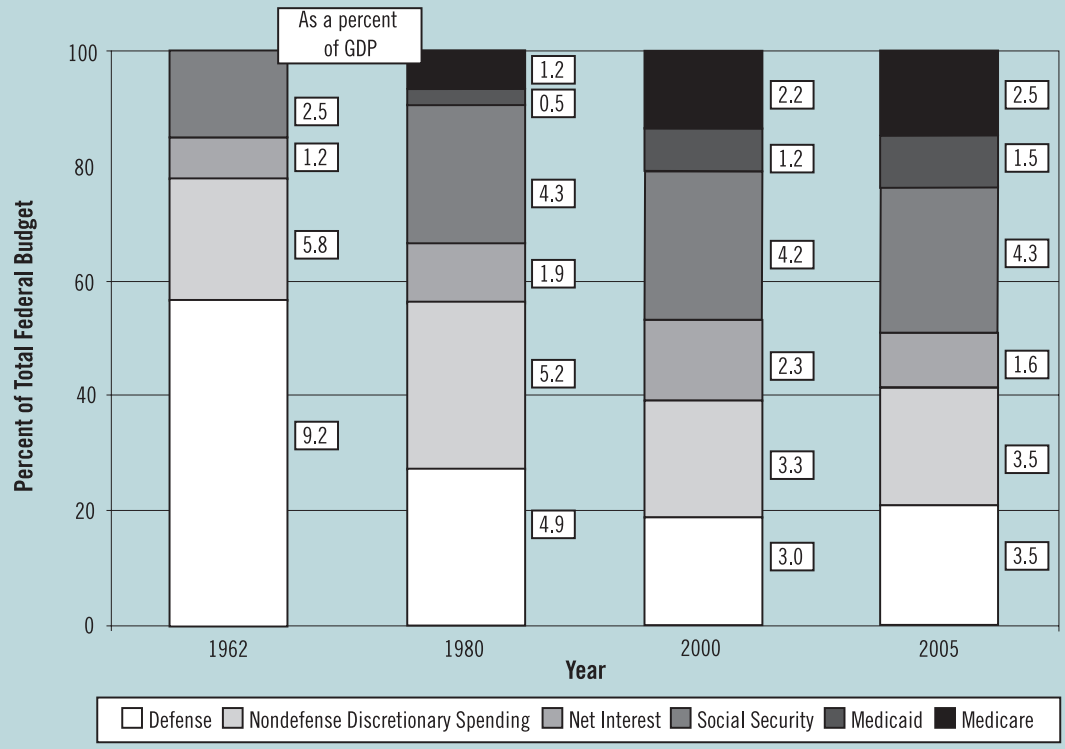
This raises two important issues. The first is that even before September 11, 2001, there was wide agreement that defense spending was too low. In the wake of September 11, 2001, the defense budget has risen somewhat faster than the administration's previous budgets called for, but only marginally.[2] In the 1990s, the defense budget essentially went through a "procurement holiday," a period in which very few major new weapons systems were procured.

As a result of this procurement holiday, the average age of much of this nation's military hardware was very old, which means that maintenance costs were now high and rising in many cases.[3] This situation was exacerbated by the extremely high pace of operations of all of the services. Furthermore, the operations tempo of the services, which increased with the war in Afghanistan, grew dramatically again with the war in Iraq and the subsequent occupation of that country.

There can be a wide range of disagreement over the eventual costs of operations in Afghanistan and Iraq, as well as the duration of military operations in those countries. There can be no disagreement, however, that the long downward trajectory of military spending, as a share of GDP, has come to an end, at least for the rest of this decade. However, this doesn't imply that defense expenditures as a share of GDP will rise to anything approaching the levels seen in the 1950s or early 1960s.

From 1962 to 1980 nondefense discretionary spending was roughly constant. In 1980 the share was 5.2 percent of GDP. By 2000, the share had fallen significantly, however, to 3.3 percent of GDP. It is important to note that nondefense discretionary spending consists of everything else — other than the Defense

Chart 8 Federal Outlays as a Percent of Total Budget: 1962 to 2005



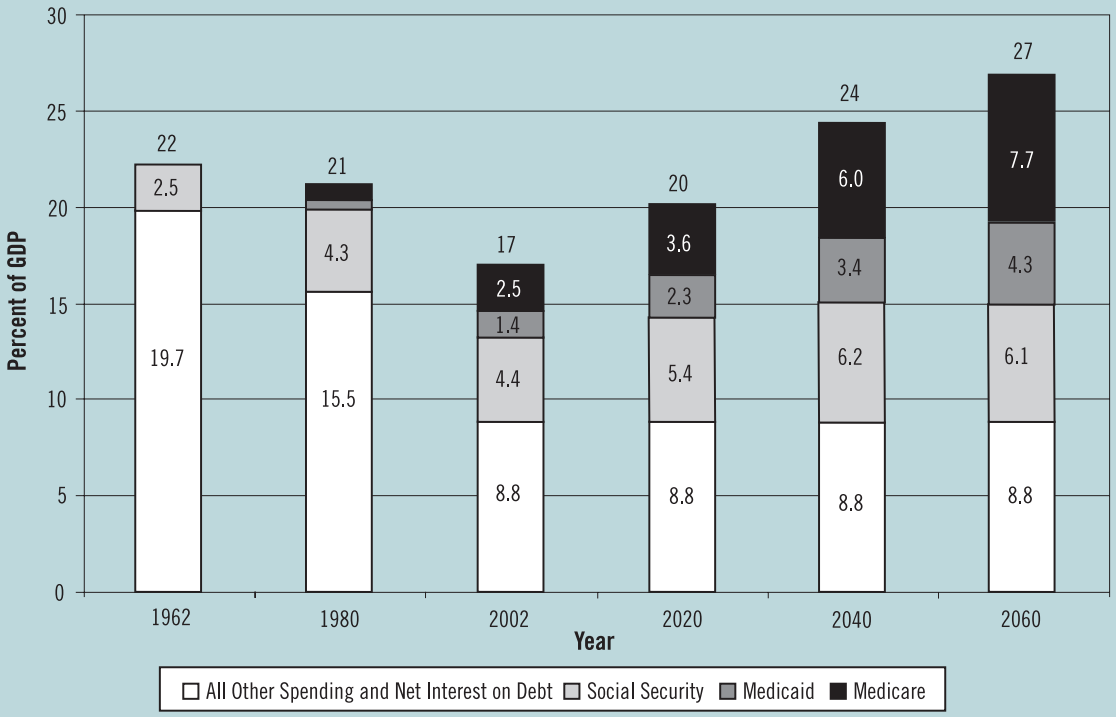
Source: Author's calculations based on data from Congressional Budget Office

Department, Social Security, Medicare, Medicaid, and net interest payments — the government does. In fact, it includes everything from the FBI to the State Department to the Interior Department and the Environmental Protection Agency and the Food and Drug Agency and dozens of other cabinet departments and independent agencies.

The point to be learned here about federal spending is that the American public has, in effect, demanded that their federal government remain a constant size. In order for that to be the case, some things must shrink in order to allow others to grow. Over time, first defense spending, then nondefense discretionary spending, has been compressed so that the social insurance programs of Social Security, Medicare, and Medicaid could grow while total federal expenditures remained fairly consistent as a share of GDP. From 1980 to 2000 Social Security expenditures have remained roughly constant as a share of GDP, 4.3 percent and 4.2 percent, respectively. This reflects the demographic golden age mentioned earlier. During the same period, Medicare expenditures have risen from 1.2 to 2.2 percent of GDP and Medicaid expenditures from 0.5 to 1.2 percent of GDP. This reflects the more rapid rise in health care costs generally, and is a harbinger of what is expected to happen to these programs when the baby boomers retire.

Just as the decline in defense spending has come to an end, it is unlikely that nondefense discretionary spending can be compressed further as a share of GDP. One reason is that in the budgetary years immediately after 2000, nondefense discretionary spending has increased at rates far in excess of inflation. From 1995 to 2000, nondefense discretionary spending as a share of GDP has fallen from 3.7 percent of GDP in 1995 to 3.3 percent in 2000. However, in 2002, it rose to 3.7 percent of GDP. For the period 2001 to 2005, it is estimated that nondefense discretionary spending will rise at an annual rate of 6.7 percent, or 8.1 percent as a share of GDP.

Chart 9 Federal Outlays as a Percent of GDP: Congressional Budget Office Historical Data and Projections, 1962 - 2060



Source: Congressional Budget Office

Another reason nondefense spending can't really be compressed is increased spending for homeland security, although at the present time it does not appear that these expenditures will constitute a noticeable percentage of GDP in future years.

>>> DEMOGRAPHICS AND FEDERAL EXPENDITURES

The looming retirement of the baby boomers will put pressure on federal spending through three primary channels: Social Security, Medicare, and Medicaid. Medicaid expenditures are shared with the states, and states enjoy wide latitude in eligibility rules for Medicaid recipients. Demands on the Medicaid program in particular will come from expenses for nursing home care, which are very expensive even outside major metropolitan areas.

Chart 9 shows a projection of possible federal expenditures using historical data from 1962 projected forward to 2060 using Congressional Budget Office (CBO) projections of possible growth rates in Social Security, Medicare, and Medicaid spending. In the chart, all other federal expenditures are held constant at their 2002 levels as a share of GDP. This means that defense expenditures, which are scheduled to increase as a share of GDP, are held constant for purposes of this projection. In addition, nondefense discretionary expenditures, currently on an increasing trajectory as a share of GDP, are also held constant as a share of GDP. Net interest expenditures, which will begin increasing shortly as a share of GDP, are also held constant in this projection.

Over the next several decades, Social Security spending, on a current law basis, is scheduled to increase by approximately two percentage points of GDP, from just over 4 percent in 2002 to just over 6 percent of GDP by 2040. Projections for future Social Security expenditures are generally considered to have as small an error surrounding them as any long-term projec-

tion can have. Projections for future Medicare and Medicaid expenditures, however, are generally considered to have a much greater range of uncertainty surrounding them. There are several reasons for this, one of the most important being the influence of new technologies on the rate of increase of prices of health care and medical goods and services.

The CBO produces median projections for Medicare and (federal) Medicaid expenditures, as well as lower and upper bound projections, for the next several decades. In 2002, Medicare expenditures were $254 billion, 2.5 percent of GDP. The median CBO projection for Medicare expenditures in 2020, 2040, and 2060, respectively, are 4, 6, and 8 percent of GDP. In 2002, federal Medicaid expenditures were $148 billion, 1 percent of GDP. Expenditures by the states were an additional $268 billion, nearly 3 percent of GDP. Similar CBO median projections for federal Medicaid expenditures in 2020, 2040, and 2060, respectively, are 2, 3, and 4 percent of GDP.

Projections for comparable state expenditures do not exist, and state Medicaid expenditures are subject to changes in eligibility conditions. Nonetheless, it is clear that the retirement of the baby boom generation will also place a burden on state government finances.

Chart 9 clearly shows that the retirement of the baby boomers will place unprecedented demands on federal finances. From 2002 to 2040, spending on social insurance programs will nearly more than double, growing from 8 to 15 percent of GDP. From 2002 to 2060, spending on social insurance programs will grow from 8 to 18 percent of GDP. In other words, by 2060 the median projections call for spending on these three programs alone to be greater as a share of GDP than total federal spending is currently. Under the median projections, by 2060, the only way in which the size of the federal government can be maintained at its current state is if everything else is eliminated. Everything. Furthermore, if the rest of the federal government is somehow maintained at its current size, then federal expenditures will reach an unprecedented 27 percent of GDP by 2060, greater than a quarter of national output.

The magnitude of the increases in the three social insurance programs clearly shows that the nation faces a future health care problem. In relative terms, and despite all of the public discourse concerning the future Social Security "crisis," Social Security itself is not endangered. Over the next several decades, under current law and using the median projections, Social Security spending as a share of GDP looks set to rise by roughly two percentage points. Although it's true that under current financing arrangements for this program, this is unsustainable, it's also true that there are a variety of known reform options that can place the program on a sustainable financial basis for the long term. Some reform options might be objected to by those of a liberal political persuasion, while others may be opposed by those of a conservative political bent. A variety of policy options to reform the program do exist, however.

No such menu of reasonable reform options exists in the case of Medicare and Medicaid.

Economic growth will not solve the problem. Technological progress, as we know it, will not solve the problem. Private sector solutions, as we know them, will not entirely solve the problem. This is not to say, however, that we will not find solutions tomorrow, or the day after. Furthermore, given the cost projections, and the unsustainability implied by the projections, there is a strong tendency to believe simply that if something can't go on forever — well, then, it can't.

>>> CONCLUDING REMARKS

Pension coverage and participation rates have been stubbornly stable for thirty years, ever since the passage of ERISA. The United States seems to be divided dramatically in two — a country where half of households do at least some saving for retirement, and half do none whatsoever. Policy actions to raise pension coverage and participation rates, as well as household saving rates, have so far met with little success. That does not necessarily mean that we should abandon all hope. Efforts to expand pension coverage among small employers would be welcome, as well as a better understanding of what works and what doesn't in terms of getting people to save.

In cash accounting terms, the extent of fiscal deterioration between fiscal year 2000 and fiscal year 2003 is bad enough. In accrual terms, it is staggering. Projections for the next few years do not take into account proper

accrual accounting, or the need to fix the alternative minimum tax, or the cost of operations and reconstruction in Afghanistan and Iraq. Empire or nation building is an expensive business, and it is being undertaken on the verge of the retirement of the largest generation in the nation's history. Furthermore, given the tax measures instituted, revenues will not recover nearly as rapidly as during the last cyclical upturn.

The overall size of the federal government in terms of its share of GDP has been roughly steady for many decades. The composition of federal spending has changed dramatically over time, however. Federal government spending on defense has shrunk steadily over the last four decades. In addition, federal nondefense discretionary spending has shrunk considerably in the last two decades. Meanwhile, spending on social insurance programs has grown. The long trend for defense spending to fall has been halted, and defense spending as a share of GDP is now on a modest upward path. Similarly, nondefense discretionary spending is no longer on a downward trend. Spending on social insurance programs continues to grow. This implies that the long period during which the federal government remained in a steady state may be coming to an end.

This is also in marked contrast to actions taken on the revenue side. When the baby boomers retire, roughly half of all households will do so with essentially no financial assets. They will rely almost entirely on Social Security. They will also be very sensitive to any changes in Medicare, and for the poorer among them, Medicaid. Medicare spending, under current law and median projections, will grow much more rapidly than will Social Security spending in coming decades. If a prescription drug benefit is added to Medicare — depending on the design of the benefit — it will probably exacerbate this growth trend. And if these programs are maintained in their current form, federal government spending and hence either federal government taxation or borrowing will have to be raised sharply in order to pay for them.

The political economy of the situation will be further complicated by the voting power of the baby boomers. When they reach retirement age, they will be in the age group with the highest propensity to vote. This will have an impact not only on the willingness of politicians to consider reform of social insurance programs, but also on such things as how taxes are collected from this cohort. For example, the baby boomers may exert political pressure for favorable tax treatment of distributions from 401(k) and other DC pension plans. In addition, local school districts may face resistance to new funding initiatives that retired baby boomers do not see as directly benefiting them or their grown children. And at the state government level, expect constant struggles about how to finance the ever-growing share that Medicaid is expected to take of state government budgets.

In sum, for decades the size of the federal government has been kept constant by reshuffling its component parts. The period of reshuffling and shrinking some parts has already come to an end. Indeed, defense spending and nondefense discretionary spending have begun rising (rapidly) off their Clinton-era lows and federal government expenditures have increased sharply as a share of GDP in the last several years. This trend looks set to continue. Hence federal expenditures in fact anticipated the retirement of the baby boom by about eight years and began rising around the end of the millennium. When the baby boom begins to retire in large numbers federal expenditures will greatly accelerate. Administration policy has acted to worsen the structural mismatch between revenues and expenditures.

There appears to be only one way in which a major increase in share of federal expenditures as a percentage of GDP can be avoided: major cuts in social insurance programs. The obvious political candidate for the axe is Medicaid. Whether or not this comes to pass remains to be seen. Even postulating a scenario where Medicaid were somehow completely eliminated, the fiscal problems are not consequently solved. This is partly because Medicaid is the smallest of the social insurance programs and partly because eliminating Medicaid is not the same thing as eliminating the problems Medicaid exists to solve. In particular, Medicaid pays for a substantial proportion of long-term care expenditures, and the long-term care problem clearly becomes more acute as the baby boom moves through retirement.

The political economy of decades of a federal government of roughly the same size as a share of GDP

implies that there may be strong resistance to significant tax increases as a means of financing the growth of the government going forward. For a few years, at least, the public seems willing to tolerate large amounts of borrowing to finance a growing federal government. It is not clear how long the public's tolerance for this will last. At the state level, where every state except for Vermont is required to balance their budget every year, states have shown a strong preference for spending cuts, accounting gimmicks, sin taxes, and assorted user fees instead of increasing income or sales taxes (although some have done so). States have also preferred to pass the buck down to local governments, forcing them to raise property taxes.

It is certainly conceivable that whatever solution is found to the problem of financing the nation's social insurance programs in coming decades includes reductions in the projected rate of increase in expenditures in these programs. This implies that individuals and households may receive less of these services in retirement than their parents currently do, for example. This further implies that individuals currently working need to take greater responsibility for their own financial security in retirement. This includes their health care security. From a policy standpoint the gaping hole in the 401(k) system — the widespread lack of an annuity option —needs to be addressed before the baby boomers start retiring and become exposed to longevity risk. Public education programs may have some impact in getting the half of the nation that saves to do more for their own financial security. It is not clear, however, what if anything can be done to get the other half to save for their own retirement. This implies that half of the nation will continue to rely almost entirely on social insurance programs for their financial well being in retirement. Suggested reforms to these programs need to be cognizant of this stubborn reality.

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ENDNOTES

[1] This statistic and the ones that follow are from the Employee Benefit Research Institute (EBRI).

[2] This does not count the cost of supplemental budgets to pay for the wars in Afghanistan and in Iraq.

[3] For example, virtually all of the Air Force tanker fleet consists of aircraft older than the pilots who fly them.

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