
Can IRAs Cure the Low National Savings Rate?

By C. Alan Garner

Many Americans believe the low national savings rate is a serious economic problem. Because savings, and in turn investment, are key determinants of real income growth and future living standards, economists and fiscal policymakers have proposed various policy changes as possible cures for the low national savings rate. A popular proposal has been to encourage greater participation in Individual Retirement Accounts (IRAs), which provide a tax-advantaged account for retirement savings. Last year, for example, the Bush administration proposed a new "flexible" IRA, and Senators Bentsen and Roth introduced a bill liberalizing IRA eligibility and creating a new kind of IRA. Legislation based on the Bentsen-Roth plan was passed by Congress late in 1992, but was not signed into law.

Discussion of IRAs has temporarily waned as the Clinton administration focuses on such issues as long-term deficit reduction, health care costs, and infrastructure investment. Nevertheless, in coming years, proposals for expanding IRA participation are likely to reappear. IRA reform remains popular with many fiscal policymakers

anxious to raise the national savings rate. And IRAs are politically appealing as a form of middle-class tax relief.

There is disagreement, however, about whether increased IRA participation would actually raise national savings. National savings is the sum of government savings and private savings. Increased IRA participation would reduce government savings by decreasing tax revenues and raising the budget deficit. Nevertheless, higher IRA contributions could increase national savings if private savings were to rise by more than the decline in government savings. However, economic studies reach differing conclusions about whether, and how much, IRAs increase private savings.

This article argues that changing the tax laws to encourage greater IRA participation would not be a reliable way to boost the nation's savings. The first section explains why the low savings rate is a source of concern and briefly describes how IRAs work. The second section shows that IRAs were not successful in raising the national savings rate in 1982-86, the period of broadest IRA participation. Finally, the third section identifies three basic problems that kept IRAs from being an effective savings incentive in the 1980s and shows why recent reform proposals would not solve these problems.

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NATIONAL SAVINGS AND IRAs

Many Americans are concerned about future U.S. living standards because of the sluggish growth of productivity and real output over the last two decades.¹ Workers often feel uneasy about their own living standards in retirement and about the economic prospects for their children and grandchildren. Recent debate about future living standards has centered on the low U.S. savings rate and policy options, such as IRAs, for raising the savings rate.

The low savings rate

The national savings rate has been low in recent years compared with both past U.S. savings rates and savings rates in other industrial countries. For example, the national savings rate averaged 2.4 percent of net national product over the last five years, which was well below the average 8.8 percent rate in the 1960s. International statistics also suggest that the savings rate is far lower in the United States than in other industrial countries, such as Canada, Germany, and Japan.²

A low national savings rate may hurt future living standards by reducing domestic investment and productivity growth. If an economy is closed to international capital flows, domestic investment and savings are closely related because capital formation requires that real output be shifted away from consumer goods into new plant and equipment. A low savings rate would thus reduce the quantity of capital available for workers to use in the production process. A lower level of capital per worker would make workers less productive and cause firms to pay lower real wages than if the savings rate were higher.

But a low savings rate may hurt future living standards even if the economy is open to international capital flows. Because companies in an open economy can borrow abroad, they may be able to finance the same capital stock as if the

savings rate were higher, and thus worker productivity and real wages may also be the same. Nevertheless, future generations will have to consume a smaller share of the net national product because of higher interest and dividend payments to foreigners. Thus, a low national savings rate may hurt future living standards by increasing U.S. indebtedness to foreigners.³

How IRAs work

Because of such concerns about future living standards, expanded IRA programs have been advocated as a possible cure for the low savings rate. An IRA is a tax-advantaged account designed to encourage retirement savings. Many taxpayers can receive tax benefits by deducting part or all of their IRA contribution from their taxable income during the year in which the contribution is made. Under current tax laws, this deduction is gradually eliminated for high-income taxpayers with a pension plan.⁴ All IRA contributors can benefit, however, by deferring taxes on their earnings until the funds are withdrawn from the IRA. An IRA may have an additional tax benefit if the household's income tax rate drops in retirement, allowing withdrawals to be taxed at a lower rate than during the household's working years.

Nevertheless, many households do not contribute to an IRA because IRA balances are illiquid, meaning the funds cannot be converted into cash without a large loss in value. A taxpayer who withdraws funds from an IRA before reaching 59-1/2 years of age must, by law, pay a 10 percent withdrawal penalty in addition to the deferred income tax. The withdrawal penalty is designed to encourage taxpayers to use IRAs solely for retirement savings. A taxpayer may therefore be unwilling to put funds into an IRA if those funds might be needed in the near future. However, an IRA may not be illiquid for older households because the law allows a taxpayer over 59-1/2 years of age to withdraw funds from an IRA without penalty.

Table 1
Participation in the IRA Program, 1979-89

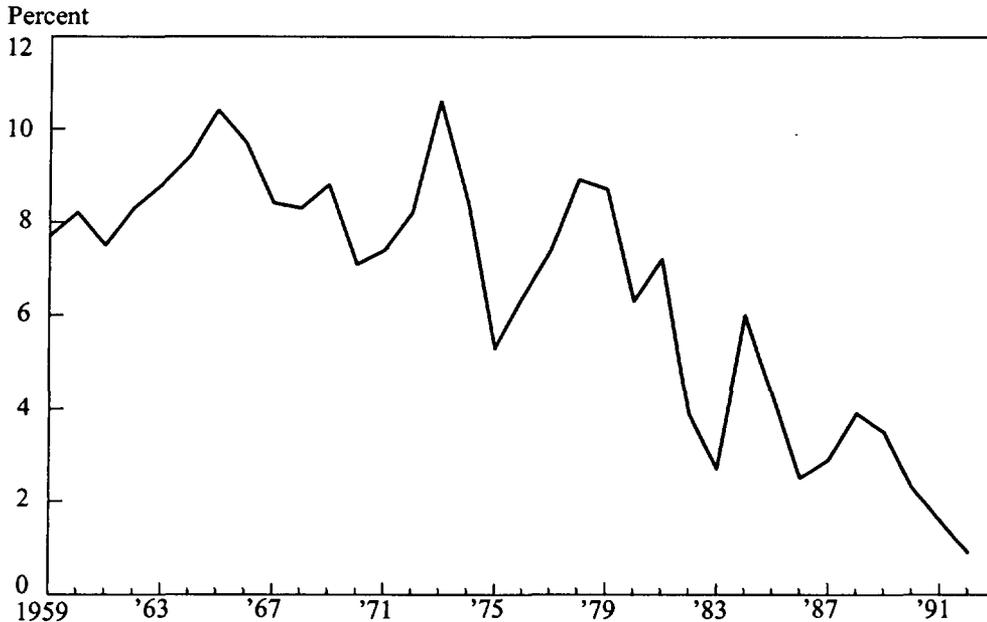
Year	Number of returns claiming IRA deduction (millions)	Amount of IRA deductions claimed (billions)
1979	2.5	\$3.2
1980	2.6	3.4
1981	3.4	4.8
1982	12.0	28.3
1983	13.6	32.1
1984	15.2	35.4
1985	16.2	38.2
1986	15.5	37.8
1987	7.3	14.1
1988	6.4	11.9
1989	5.8	10.8

Sources: Joint Tax Committee, U.S. Congress; and Internal Revenue Service, U.S. Department of the Treasury.

The amount of IRA contributions rose sharply in the first half of the 1980s in response to changing eligibility requirements. The IRA was originally created in 1974 to encourage retirement savings by workers without a pension plan. The eligibility requirements were liberalized by the Economic Recovery Tax Act of 1981, which increased the deduction limit for IRA contributions and opened the program to workers with a pension plan. As Table 1 shows, the number of tax returns claiming IRA deductions grew dramatically from 3.4 million in 1981 to 16.2 million in 1985. The dollar amount of IRA contributions also grew rapidly from \$4.8 billion in 1981 to \$38.2 billion in 1985.⁵

But contributions to IRAs dropped sharply after the passage of the Tax Reform Act in 1986. The requirements for making deductible IRA contributions were tightened as part of a general philosophy of broadening the tax base to permit lower income tax rates. In particular, tax reform reduced the appeal of IRAs by decreasing or eliminating the IRA deduction for higher income workers with a pension plan. The cut in personal income tax rates also lowered the tax benefits from contributing to an IRA. Table 1 shows that the number of tax returns claiming IRA deductions and the dollar amount of IRA contributions dropped sharply in 1987, and both have remained lower in recent years.

Chart 1

National Savings Rate

Source: Bureau of Economic Analysis.

DID IRAs RAISE NATIONAL SAVINGS IN THE 1980s?

Two kinds of empirical evidence are available to see whether expanded IRA eligibility in 1982-86 raised the national savings rate. Aggregate evidence shows changes over time in the savings rate for the entire economy. Cross-section evidence looks at the effects of IRA participation on saving by individual households at a given point in time. Neither kind of evidence provides much support for the view that IRAs raised the national savings rate.

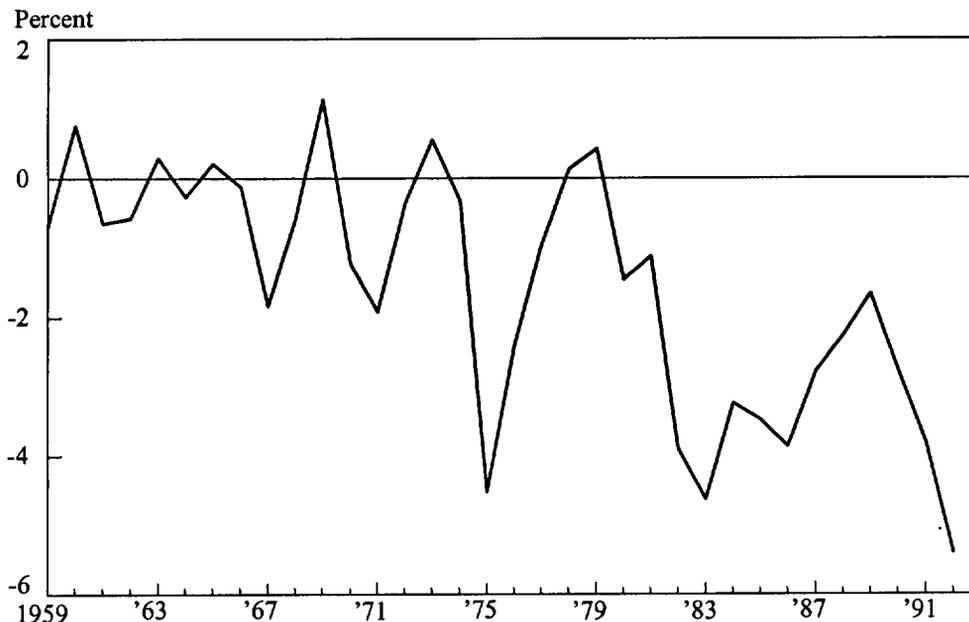
Aggregate evidence

Widespread availability of IRAs in 1982-86

did not halt a persistent downward trend in the national savings rate. Chart 1 shows the national savings rate, defined as national savings divided by the net national product.⁶ Although national savings fluctuated substantially from year to year, the national savings rate fell from 7.2 percent in 1981 to 2.5 percent in 1986, the final year of broad IRA participation. National savings has remained low since 1986, falling to 0.9 percent of the net national product in 1992.

The decline in the national savings rate in the 1980s partly reflected greater dissaving by the government sector, which includes the federal government and state and local governments. Although increased IRA participation in 1982-86 reduced tax revenues, the large decline of government savings was primarily caused by other factors.

Chart 2

Government Savings Rate

Source: Bureau of Economic Analysis.

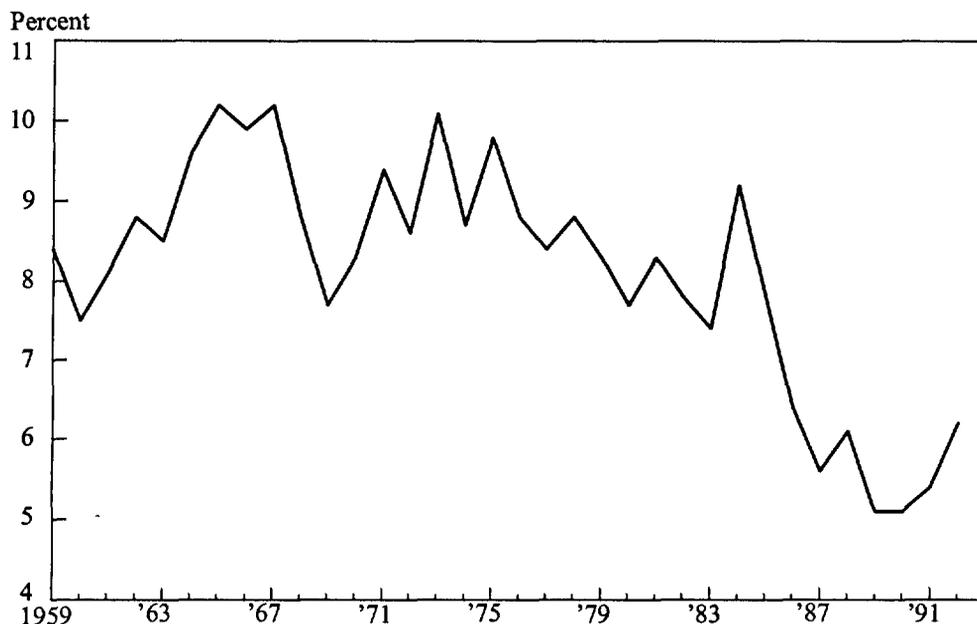
Chart 2 shows the government savings rate, defined as the government sector's budget surplus or deficit divided by the net national product. The government savings rate fell from 0.4 percent in 1979 to -4.6 percent in 1983 as government deficits mounted because of large federal tax cuts and the effects of back-to-back recessions on government revenues. The government savings rate gradually improved to -1.7 percent in 1989, but then dropped sharply to -5.4 percent in 1992, again reflecting the effects of sluggish economic growth on government revenues.

Increased IRA participation in 1982-86, however, might be expected to have more of an effect on private savings, savings by businesses and households.⁷ Yet Chart 3 shows the private savings rate declined from 8.3 percent of the net national product in 1981 to 6.4 percent in 1986. After the

passage of the Tax Reform Act, the private savings rate continued declining to 5.1 percent in 1990 before recovering slightly in 1991 and 1992. Even with this small recovery, the private savings rate remains low by postwar standards.

Aggregate savings rates, thus, do not provide any evidence that IRAs raised the national savings rate in 1982-86. But proponents of expanded IRA programs still believe that IRAs raised both national and private savings. The downward trend in the national savings rate does not, in their view, settle the issue of whether IRAs were an effective savings incentive because national savings might have been even lower without broad IRA eligibility. Indeed, proponents emphasize that the low point in the private savings rate occurred after IRA eligibility was restricted by tax reform.

Chart 3

Private Savings Rate

Source: Bureau of Economic Analysis.

Cross-section evidence

Because of the differing interpretations of aggregate savings trends, recent empirical research on IRAs relies heavily on cross-section evidence showing differences in savings behavior across a large number of households at a given point in time. Information on these households is typically drawn from federal tax returns or surveys of consumer spending and finances from the early to mid-1980s. The empirical results apply most directly to personal savings, a major component of private savings, but such results are then used with other assumptions to estimate the impact of IRAs on the national savings rate.

Cross-section studies by Venti and Wise (1990, 1992) suggest that raising the limit on IRA

contributions would substantially increase the national savings rate. Their 1990 study, for example, concludes that about one-third of the increase in IRA contributions would come from personal tax savings, which decrease the government savings rate, but the remaining two-thirds of the contributions would come from higher personal savings. The increase in personal savings would therefore be larger than the decrease in government savings, raising the national savings rate. Venti and Wise also investigate whether IRA contributors switched funds from existing non-IRA financial assets into IRAs to reduce their tax payments. Such asset switching would reduce government tax revenues without raising personal savings. But Venti and Wise find virtually no switching of savings from non-IRA financial assets into IRAs.

Several economists are critical of the empirical studies by Venti and Wise. For example, Deaton argues that the large savings effect of IRAs in the Venti and Wise studies may be due to statistical problems in working with cross-section data. And Gravelle argues that their results depend heavily on an arbitrary theoretical structure that is inconsistent with conventional economic theory.

Other critics argue that the statistical results of Venti and Wise cannot distinguish between their theory and an alternative in which IRAs have no effect on the savings rate (Gale and Scholz; Joines and Manegold). Venti and Wise's major finding is that IRA contributors had higher than average levels of personal savings. This finding is consistent with the view that IRAs stimulate savings, but it is also consistent with an alternative view that people with a strong desire to save are likely to save more in all forms, including IRAs. Critics contend that Venti and Wise do not control adequately for differing desires to save across households. As a result, the positive association between being an IRA contributor and having a high savings rate does not show whether being an IRA contributor causes a high savings rate or being a heavy saver causes IRA contributions.

Gale and Scholz conclude that increasing the IRA contribution limit would have a much less positive effect on the national savings rate. They find that many IRA contributors had reached the stage in life where they needed to save heavily for retirement. For such savers, IRAs were an attractive way to save but largely captured savings that would have occurred anyway. Gale and Scholz estimate that an increase of \$100 in the IRA contribution limit would raise national savings by only \$2, assuming the tax deduction for the new IRA contribution is entirely saved. But national savings would actually decrease by \$14 if half of the tax deduction were consumed. Thus, Gale and Scholz cannot rule out the possibility that expanded IRA contributions would lower the national savings rate by increasing private savings less than the decrease in government savings.

Joines and Manegold also find that expanding IRA eligibility in 1982-86 did not produce a large increase in the national savings rate. An important feature of this study is that Joines and Manegold follow the behavior of a group of households over time. Because IRA eligibility requirements for many households varied in response to the 1981 change in federal tax law, Joines and Manegold can infer the effect of IRAs on personal savings from actual behavior rather than relying on theoretical assumptions. This study provides evidence of substantial shifting by IRA contributors from their existing financial assets into IRAs. Joines and Manegold conclude that any increase in national savings is likely to be much smaller than estimated by Venti and Wise. Moreover, like Gale and Scholz, they cannot rule out the possibility that increased IRA contributions might lower the national savings rate.

Summary of 1980s evidence

The empirical evidence from the 1980s gives little reason to believe that expanding IRA programs would raise the national savings rate. Increased IRA participation in 1982-86 did not halt the downward trend in the aggregate savings rate. Moreover, although cross-section studies reach differing conclusions, the studies with the best research methods conclude that IRAs provided a weak incentive for higher savings in the 1980s, and may have even reduced national savings.

WOULD IRAs RAISE NATIONAL SAVINGS IN THE 1990s?

Recent proposals to expand IRA participation are somewhat different from the IRA programs of the 1980s. Thus, the past failure of IRAs to raise the national savings rate does not automatically imply that current proposals would be unsuccessful.

ful in the 1990s. To assess recent IRA reform proposals, this section begins by diagnosing why IRAs failed to raise the national savings rate in the past. Then, it argues that the proposed changes in the IRA program would not correct past problems that made IRAs an ineffective savings incentive.

Why were IRAs unsuccessful in the 1980s?

Economic theory suggests three major reasons why the IRA program did not increase the national savings rate in the 1980s.

Insensitivity to the rate of return. The first reason IRAs were unsuccessful in the 1980s is that private savings may be relatively insensitive to changes in the expected rate of return on the taxpayer's investments. Economic theory does not clearly predict whether the higher after-tax return on an IRA would raise or lower the private savings rate. A theoretical argument, called the substitution effect, implies the savings rate would increase because households would save more now to attain a higher future level of consumption. But another theoretical argument, the income effect, may work in the opposite direction. According to this effect, the tax savings from an IRA would increase the household's lifetime spendable income, allowing it to save less both now and in the future. The change in the private savings rate would therefore depend on which theoretical effect predominated.⁸

Target saving provides the clearest case where an increase in the after-tax return on savings could actually reduce the savings rate. A target-saving household wishes to accumulate a specific dollar amount by some future date. For example, suppose a household wishes to save a lump sum now that will grow to \$1,000 in ten years. If the after-tax rate of return were 3 percent, the household would have to save \$744 now to have \$1,000 in ten years. But if an IRA raised the after-tax rate of return to 5 percent, the household would only need to save about \$614. A target-saving house-

hold might therefore reduce its current savings rate if opening an IRA raised the after-tax rate of return.

Some empirical studies also find that the private savings rate is relatively insensitive to changes in the after-tax rate of return. A prominent study by Boskin suggests that an increase in the rate of return causes a large improvement in the savings rate. But a reexamination of the issue by Friend and Hasbrouck finds little support for the belief that higher after-tax rates of return stimulate savings. A recent study by Hall also detects little or no relationship for the U.S. economy between the expected return on savings and the total amount saved.⁹

Weak marginal incentives. The second reason IRAs were unsuccessful in the 1980s is that IRAs may not have increased the after-tax rate of return that many taxpayers earned on an additional dollar of savings. Economic theory applies to marginal spending and saving decisions—decisions to spend or save an additional dollar of income. But some households may have contributed as much as possible to an IRA and then saved even more in non-IRA financial assets. For such contributors, the tax benefits from the IRA were exhausted, and the decision to spend or save an additional dollar of income depended on the lower after-tax rate of return earned at the household's regular tax rate.

Many IRA contributors in 1982-86 probably experienced weak marginal savings incentives because of their favorable financial situations. Table 2 shows that many IRA contributors were higher income households who had reached the stage in life where they needed to save for retirement. These households also had larger net worths and greater holdings of non-IRA financial assets than households without IRAs, suggesting that many IRA contributors were already saving heavily. Moreover, a large proportion of IRA participants exhausted the tax savings available from an IRA because they contributed up to the \$2,000 limit. Thus, participation in the IRA program did

Table 2

Characteristics of Households With and Without IRAs, 1986

Characteristics	Households Without IRAs	Households With IRAs
Median age (years)	49	50
Median three-year income	\$47,000	\$105,000
Median non-IRA financial assets	\$3,000	\$21,695
Median net worth	\$25,470	\$107,946

Source: William G. Gale and John Karl Scholz, "IRAs and Household Saving."

not increase the amount saved by many households because the IRA did not boost the expected return on an additional dollar of savings.

Asset switching. The third reason that IRAs were unsuccessful in the 1980s is that the IRA program reduced government savings by causing many households to switch some of their existing funds out of taxable non-IRA financial assets into IRAs to reduce their tax bills.¹⁰ But how much of their savings were households willing to switch into tax-advantaged IRAs?

From a theoretical standpoint, the amount of asset switching depended on whether contributors viewed IRAs and non-IRA financial assets as close substitutes. Proponents of IRAs often assume that such assets are not close substitutes because of the early withdrawal penalty on IRAs. In this view, households must keep some of their savings in non-IRA financial assets for short-term needs or to be prepared for emergencies. Households would not put such short-term savings into an IRA because of the withdrawal penalty. By this reasoning, the large IRA contributions in 1982-86

must have been new retirement savings rather than assets switched from existing non-IRA balances.

Critics of IRAs respond that a large amount of asset switching probably occurred in 1982-86 because IRAs and non-IRA financial assets were good substitutes for many contributors. The withdrawal penalty was irrelevant for IRA contributors over 59-1/2 years of age. The penalty would also not have been very important for contributors nearing 59-1/2 years of age because such contributors could get their funds back without penalty after a short wait. Moreover, Table 2 showed that many contributors had substantial non-IRA financial assets, some of which were probably being held for retirement. Regardless of age, many taxpayers were probably willing to substitute retirement savings in IRAs for retirement savings in non-IRA financial assets as long as they continued to hold enough non-IRA assets to meet unexpected needs. Such theoretical arguments are consistent with the findings of Joines and Manegold that a large amount of asset switching occurred in the 1980s.

Reform options

Various fiscal policymakers have recently proposed reforms to expand IRA participation and raise the national savings rate. The Bush administration, for example, proposed a new kind of IRA—the Flexible Individual Retirement Account (FIRA)—that would be less of a retirement savings program than the current IRA. In this proposal, taxpayers would receive no initial deduction for their FIRA contributions of up to \$2,500 per year. But regardless of the taxpayer's age, there would also be no tax or penalty on withdrawals after seven years.¹¹ As a result, FIRAs might be useful in saving for intermediate-term financial goals, such as a child's college education or the downpayment on a house.

In the other leading IRA proposal of recent years, Senators Bentsen and Roth advocated restoring the 1982-86 eligibility requirements for IRAs as well as creating a new kind of IRA. The Bentsen-Roth proposal would allow all taxpayers, regardless of income or pension coverage, to contribute up to \$2,000 to a conventional IRA. This proposal would also create a new kind of IRA, similar to the Bush administration's FIRA, with no initial tax deduction for contributions but also no tax on the investment earnings when the funds are withdrawn. Under either option, funds could be withdrawn without penalty for such specific purposes as buying a first home or paying college expenses.

Although efforts to broaden IRA participation have subsided recently, IRAs remain popular with many fiscal policymakers as well as many taxpayers. The chances are good therefore that bills seeking to reform the IRA program will be debated again in the future. But because future reform proposals may differ from the Bush administration and Bentsen-Roth proposals, this section identifies five options that could be combined in various ways in future reform proposals.

Option 1: Raise the income ceiling. A possible IRA reform option is to allow higher income tax-

payers with pension plans to make deductible IRA contributions, while keeping current dollar limits on the amount of the contribution. Such a reform would simply move the IRA program back to the eligibility requirements that existed before 1987. Raising the income ceiling for deductible contributions might be expected to increase the amount of IRA contributions because many contributors in 1982-86 were higher income taxpayers.

But even if the amount of IRA contributions were to increase sharply, this reform option would not necessarily raise the national savings rate. As the previous section showed, IRAs were apparently unsuccessful in raising the national savings rate in the 1980s despite a large increase in the number of contributors. And the problems of weak marginal savings incentives and asset switching are likely to be more severe for higher income contributors than for the average household. Thus, an increase in the income ceiling might cause additional asset switching and channel savings that would have occurred anyway into tax-advantaged IRAs, both of which would reduce government savings.

Raising the income ceiling for deductible IRAs also might not stimulate as large an increase in IRA contributions as occurred in 1982-86. The tax advantages from an IRA are now less than in 1982-86 because personal income tax rates are lower.¹² In addition, taxpayers make greater use of another tax-advantaged savings program, the 401(k) plan, available through many employers. Like an IRA, such plans allow the contributor to defer tax payments on some current income, as well as investment earnings, until the funds are withdrawn at retirement. But such plans may be more attractive than IRAs because of their higher contribution limits and, often, matching contributions by the employer. Any household that does not take full advantage of its tax-deferred 401(k) plan would not experience greater savings incentives under this reform option.¹³

Option 2: Raise the contribution limit. A sec-

ond reform option is to raise, or remove entirely, the dollar limit on IRA contributions. Many high-income households and households with a strong taste for saving experience weak marginal savings incentives when contributions are limited to \$2,000 because they are already saving above this level. Raising or removing the dollar limit would encourage such households to save more because they could earn a higher after-tax return on an additional dollar of savings. But this increase in the after-tax return might not stimulate much, if any, additional savings if the private savings rate is relatively insensitive to the rate of return. The increase in private savings might even be too small to offset the decline in government savings, reducing the national savings rate.

The first two IRA options also may have political disadvantages. Both options would give additional tax benefits primarily to households with above-average levels of income and wealth. Yet President Clinton proposes higher income tax rates for those at the very top of the income distribution. Providing new tax benefits for higher income taxpayers through either option might be seen as inconsistent with the new administration's tax objectives, and probably would provoke complaints from political groups that are concerned about the income distribution.

Option 3: Allow penalty-free withdrawals. A third reform option is to make IRAs more attractive to the typical saver by allowing penalty-free withdrawals for certain reasons, such as buying a first home or paying college expenses. Such a reform would make IRAs somewhat more liquid and thus more appealing to younger taxpayers and middle-income households that may feel uncomfortable about tying up their savings until retirement. Adopting this reform option might therefore result in a substantial new flow of funds into IRAs.

But this reform option might not raise the national savings rate. The movement of funds into such IRAs might largely represent asset switching from existing non-IRA financial assets, where households presumably are putting their current

savings for homebuying or a college education. This reform option also might increase the relevance of the target saving example because households probably have a better idea of the target sum needed for college tuition or the downpayment on a home than about the amount needed for retirement. By offering a higher after-tax rate for achieving these savings goals, this reform option might cause households to save less for such non-retirement objectives.

Option 4: Create a "back-loaded" IRA. A fourth reform option is to create a "back-loaded" IRA, meaning an IRA where the initial contributions are not deductible but IRA distributions are also not taxed. The back-loaded IRA might require the taxpayer to keep funds in the IRA for a certain number of years before gaining any tax benefits, as in the Bush administration's proposed FIRA. A back-loaded IRA might even require that the funds be left in the account until 59-1/2 years of age, similar to the current IRA.¹⁴

But a back-loaded IRA does not solve the economic problems of the conventional IRA. The back-loaded IRA does not, for example, cure the low sensitivity of national savings to changes in the after-tax rate of return, nor does it increase the marginal incentive to save for households that are already saving above the IRA contribution limit. Moreover, if the immediate tax deduction is an important savings incentive—as proponents of the current IRA maintain—the back-loaded IRA might provide less incentive to save than the present IRA.

The back-loaded IRA also creates a political danger of worsening the government budget deficit over the long run. Little government revenue would be lost in the short run because the back-loaded IRA gives no immediate deduction for IRA contributions. Such a feature might be attractive to politicians wishing to provide middle-income tax relief in a time of large government budget deficits. But if taxpayers were to shift funds from taxable assets into a new back-loaded IRA, government revenue losses would gradually increase

as investment earnings accrued without being taxed. Because such revenue losses are not immediately apparent, fiscal policymakers might be tempted to give away a large amount of future tax revenue, worsening the government savings rate in the years ahead.

Option 5: Create a Premium Savings Account.

A fifth reform option is the Premium Savings Account (PSA), a new approach designed to provide better marginal savings incentives than the current IRA. Bernheim and Scholz propose that each taxpayer would have to save some fixed "floor" amount, based on the taxpayer's income, before being allowed to contribute to a PSA. For each dollar of savings above the floor amount, the taxpayer could contribute one dollar to the PSA up to some "ceiling" amount, also based on the taxpayer's income. For example, a single taxpayer with an income of \$60,000 might have a floor of \$6,000 and a ceiling of \$8,000. By saving \$7,500 in a given year, the taxpayer could thus contribute \$1,500 to a PSA.¹⁵ Properly constructed, this system of floors and ceilings could maximize the number of households in each income class that would experience an increased marginal incentive to save.

But the effectiveness of a PSA program also remains uncertain. Although the PSA would provide stronger marginal savings incentives than the current IRA, the PSA still might have little effect if the private savings rate is insensitive to the after-tax rate of return. As a result, government savings still might decline by more than the increase in private savings and thus worsen the national savings rate. In addition, the PSA would pose administrative challenges because such a system would require a measure of savings that is not available from current tax returns. And it is unclear that economists understand consumer behavior well enough to design an effective schedule of ceilings and floors for the PSA.

The Premium Savings Account is therefore an intriguing proposal that—properly constructed—might provide better marginal savings incentives

than the other reform options. As such, the PSA clearly deserves further research and evaluation. But at this point, economists cannot be sure how such a system should be designed or whether it would really increase the national savings rate.

CONCLUSION

Because of the mixed results from past research, economists cannot say with certainty whether a broader IRA program could raise the national savings rate in the 1990s. But the national savings rate declined in the mid-1980s despite a substantial flow of funds into IRAs. Cross-section evidence also suggests that IRAs did not stimulate much new savings in 1982-86, the period of broadest IRA eligibility. IRAs were unsuccessful in the 1980s for three main reasons—the low sensitivity of savings to the after-tax rate of return, weak marginal savings incentives, and asset switching into IRAs from taxable financial assets. Although some of the reform options in the preceding section might stimulate more savings than the current IRA, none solves all of the economic problems that made IRAs ineffective in the 1980s. As a result, the reform options do not offer a reliable cure for the low national savings rate.

But this conclusion does not mean that fiscal policymakers can do nothing about the low national savings rate. Although policymakers may have weak tools for influencing the private savings rate, they have substantial influence over the government savings rate. As the second section showed, a decline in government savings is a major reason for the low national savings rate. Fiscal policymakers may not be able to eliminate fluctuations in government revenues caused by the business cycle, but they can improve the government balance sheet by reducing the budget deficit over time. The resulting increase in government savings should raise the national savings rate and ultimately improve U.S. living standards.

ENDNOTES

¹ Productivity growth slowed from an average of 2.4 percent annually in the 1960s to 1.3 percent in the 1970s and only 0.8 percent in the 1980s. Likewise, the growth of real net national product per person slowed from 2.7 percent annually in the 1960s to 1.7 percent in the 1970s and 1.3 percent in the 1980s.

² Net national product is gross national product minus a capital consumption allowance. The Joint Committee on Taxation of the U.S. Congress reports that the U.S. savings rate averaged 3.6 percent of gross domestic product in the 1980s. In contrast, the average savings rate in the 1980s was 8.4 percent in Canada, 10.2 percent in Germany, and 17.8 percent in Japan.

³ Even in an open economy, a low national savings rate may lower the domestic capital stock. For a large country such as the United States, a low savings rate may raise the real interest rate in world capital markets, thus depressing real investment spending. Moreover, some empirical evidence suggests that world capital markets are not fully integrated. Feldstein and Horioka find that, looking across a sample of industrial countries, a low domestic savings rate is associated with low domestic investment. Thus, even though the U.S. economy is open to international capital flows, the low savings rate may explain part of the slowing in productivity growth and real output growth in the last two decades.

⁴ The maximum individual contribution to an IRA is the lesser of \$2,000 or the individual's compensation. Taxpayers who are not covered by a pension plan may deduct their entire IRA contribution. For taxpayers covered by a pension plan, the deduction is gradually eliminated as adjusted gross income rises from \$40,000 to \$50,000 for families and from \$25,000 to \$35,000 for single persons. A taxpayer also may contribute up to \$250 to the IRA of a nonworking spouse. Deductible contributions are taxed when the funds are withdrawn from the IRA, but withdrawals of nondeductible contributions are not taxed.

⁵ Most taxpayers did not contribute to an IRA even during the period of broadest eligibility requirements. Only about 16 percent of all federal tax returns claimed an IRA deduction at the height of the program in 1985, and less than 6 percent of tax returns claimed an IRA deduction in 1989.

⁶ Although the measures of the savings rate in this section are widely used to discuss trends in savings, many economists believe these savings rates are subject to measurement errors. For example, these savings rates do not include capital gains or losses on household financial assets, even though such gains or losses could dramatically change house-

hold wealth. These savings rates also treat the purchase of a durable good, such as a car or refrigerator, as a form of consumption. Many economists argue that such purchases are really a form of savings because a durable good provides services to a household for several years rather than being consumed all at once. Bovenberg and Evans examine these issues in greater detail, however, and conclude that the decline in the savings rate cannot be attributed solely to measurement errors.

⁷ Private savings is personal savings plus undistributed corporate profits. Personal savings is simply disposable income, household income after tax payments, minus personal consumption expenditures. Undistributed corporate profits include inventory valuation and capital consumption adjustments. The private savings rate is private savings divided by the net national product.

⁸ Some proponents of IRAs argue that conventional economic theory does not capture the full savings incentive from IRAs because such theory ignores important behavioral effects (Shefrin and Thaler; Thaler). For example, Venti and Wise (1992) hypothesize that widespread promotion of IRAs by financial institutions in the early 1980s caused households to pay more attention to their retirement needs, stimulating a greater increase in savings than conventional theory suggests. But fiscal policymakers should not, at present, place much confidence in behavioral analyses of IRAs. Such theories are relatively new and untested, unlike conventional theory which has been applied usefully to many policy issues. Behavioral theories of savings do not yet provide a reliable basis for analyzing the effect of IRAs on private savings.

⁹ Bosworth and Bovenberg provide brief surveys of empirical research on the sensitivity of private savings to the after-tax rate of return. The wide range of estimates prompts both authors to conclude that no consensus exists on the magnitude of this effect. But the high degree of uncertainty is another reason why expanded IRA eligibility is not a reliable way to raise the national savings rate. Fiscal policymakers should concentrate on policy actions where the effects on private behavior can be anticipated with greater certainty.

¹⁰ Feldstein argues that previous analyses of IRAs overstated their adverse effect on government tax revenues by ignoring a positive effect on corporate tax payments. If IRAs raise the savings rate, a higher stock of corporate capital will lead to larger profits and higher corporate tax receipts. Thus, Feldstein asserts that the revenue loss from IRAs is much smaller than was previously estimated, and may even be a revenue gain over some time horizons. But Feldstein's arguments hold only if IRAs raise the national savings rate

because savings must first increase to produce a larger stock of corporate capital. As this article shows, such a positive effect of IRAs on national savings is very much open to dispute.

¹¹ In the Bush administration's proposal, the flexible IRA would be available to single persons earning up to \$60,000 per year and married couples earning up to \$120,000. Withdrawals of investment earnings within three years of the initial contribution would face both income taxation and a 10 percent penalty. Withdrawals of earnings between three and seven years after the contribution would be taxed at the regular income tax rate but would not face an additional penalty.

¹² The Clinton administration has, however, proposed an increase in the top personal income tax rate from 31 percent to 36 percent. In addition, people with taxable incomes over \$250,000 would face an additional 10 percent surtax, resulting in an effective income tax rate of about 40 percent. But personal income tax rates would generally remain lower than in the early 1980s.

¹³ For some higher income taxpayers with pension coverage, the availability of both deductible IRAs and 401(k) plans might increase the marginal incentive to save. Suppose the taxpayer currently has an income level too high to make deductible IRA contributions. Also suppose the taxpayer wants to save \$6,000 but can only contribute \$5,000 to a 401(k) plan because of rules restricting contributions by highly compensated employees. Earnings on the last \$1,000 of savings would, thus, be taxed at the regular income tax rate.

If the taxpayer becomes eligible for a deductible IRA with a maximum contribution of \$2,000, earnings on the last \$1,000 of savings could be sheltered from taxes until retirement. As a result, the after-tax return on an additional dollar of savings increases, which might induce the taxpayer to save somewhat more than \$1,000 outside the 401(k) plan.

Some higher income taxpayers may, therefore, experience a stronger incentive to save if both 401(k) plans and deductible IRAs are available. But there still might not be enough new private savings to offset the loss in government savings from this reform option. Moreover, higher income taxpayers without a pension plan would not experience any increase in their savings incentives because such taxpayers can already make deductible IRA contributions.

¹⁴ In this case, the back-loaded IRA and the current IRA would offer the same expected after-tax returns to the saver over the life of the investment. This equivalence requires that the marginal income tax rate be the same at the time of the contribution and at the time of withdrawal. Ozanne examines cases where the marginal tax rate varies over time and argues that a back-loaded IRA may provide stronger incentives than the conventional IRA for nonretirement saving, such as saving for the downpayment on a home.

¹⁵ The maximum contribution to the PSA for this taxpayer in any given year would be \$2,000, which could be made only if the taxpayer saved \$8,000 or more. A single taxpayer with a smaller income would face lower floor and ceiling amounts. For example, a taxpayer with an income of \$50,000 might have a floor of \$2,700 and a ceiling of \$4,700.

REFERENCES

- Bentsen, Lloyd, and Bill Roth. 1992. "The IRA: Saving Grace," *The Washington Post*, July 30.
- Bernheim, B. Douglas, and John Karl Scholz. 1992. "Private Saving and Public Policy," in James M. Poterba, ed., *Tax Policy and the Economy*. National Bureau of Economic Research Conference Report, November 17.
- Boskin, Michael J. 1978. "Taxation, Saving, and the Rate of Interest," *Journal of Political Economy*, part 2, April.
- Bosworth, Barry P. 1984. *Tax Incentives and Economic Growth*. Washington: Brookings Institution.
- Bovenberg, A. Lans. 1989. "Tax Policy and National Saving in the United States: A Survey," *National Tax Journal*, June.
- _____, and Owen Evans. 1990. "National and Personal Saving in the United States: Measurement and Analysis of Recent Trends," *IMF Staff Papers*, September.
- Deaton, Angus. 1987. "Comment," in Martin Feldstein, ed., *The Effects of Taxation on Capital Accumulation*. National Bureau of Economic Research. Chicago: University of Chicago Press.
- Feldstein, Martin. 1992. "The Effects of Tax-Based Saving Incentives on Government Revenue and National Saving," National Bureau of Economic Research working paper no. 4021, March.
- _____, and Charles Horioka. 1980. "Domestic Saving and International Capital Flows," *The Economic Journal*, June.
- Friend, Irwin, and Joel Hasbrouck. 1983. "Saving and After-Tax Rates of Return," *The Review of Economics and Statistics*, November.
- Gale, William G., and John Karl Scholz. 1992. "IRAs and Household Saving," unpublished manuscript, July.
- Gravelle, Jane G. 1991. "Do Individual Retirement Accounts Increase Savings?" *Journal of Economic Perspectives*, Spring.

- Hall, Robert E. 1988. "Intertemporal Substitution in Consumption," *Journal of Political Economy*, April.
- Joines, Douglas H., and James G. Manegold. 1991. "IRAs and Saving: Evidence from a Panel of Taxpayers," Federal Reserve Bank of Kansas City, Research Working Paper no. 91-05, October.
- Ozanne, Larry J. 1992. "Past Experience and Current Proposals for IRAs," in Marvin H. Koters, ed., *Personal Saving, Consumption, and Tax Policy*. Washington: AEI Press.
- Shefrin, Hersh M., and Richard H. Thaler. 1988. "The Behavioral Life-Cycle Hypothesis," *Economic Inquiry*, October.
- Thaler, Richard H. 1990. "Anomalies: Savings, Fungibility, and Mental Accounts," *Journal of Economic Perspectives*, Winter.
- U.S. Congress, Joint Committee on Taxation. 1991. *Description and Analysis of S. 612 (Savings and Investment Incentive Act of 1991)*, Staff Report. Washington: U.S. Government Printing Office.
- U.S. Department of the Treasury, Internal Revenue Service. 1992. *Individual Income Tax Returns 1989*. Washington: U.S. Government Printing Office.
- Venti, Steven F., and David A. Wise. 1992. "Government Policy and Personal Retirement Saving," in James M. Poterba, ed., *Tax Policy and the Economy*, vol. 6. National Bureau of Economic Research. Cambridge, Mass.: MIT Press.
- _____. 1990. "Have IRAs Increased U.S. Saving?: Evidence from Consumer Expenditure Surveys," *Quarterly Journal of Economics*, August.

