

THE POLICY OPTIONS FOR
STIMULATING NATIONAL SAVING

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In discussing the policy options for stimulating national saving, there is an implicit assumption that the current overall rate of saving and prospective trends in that rate are unsatisfactory. The overall rate of national saving for the U.S., as measured by the national income accounts, has averaged an extremely low 2% of the national income in the last three years as compared to the 10% of the late 1970s. The 1970 figure was not too different from the historical norm. Only a small part of this decline in overall saving was attributable to a decrease in the rate of private (or personal and corporate) saving, with virtually all of the decline attributable to the massive increase in the federal government deficit. As a result, private domestic saving may be regarded as largely financing the government's deficit, with domestic investment largely financed by net foreign investment in this country, much of it by short-term funds. This relatively recent development has received substantial attention and obviously raises many potentially serious problems.

The concern about an inadequate rate of national saving, however, predated these government deficits and reflected a feeling that the U.S. rate of private as well as government saving and the associated rate of realized saving or capital formation was responsible at least in large part for lagging increases in national productivity as compared with earlier years or with our major foreign competitors, especially Japan and Germany, where the private saving rates were several times as large. The disparity between the total saving rate of Japan and Germany and that of the U.S. was even greater.

granted a close causal connection between capital formation, especially in plant and equipment, and economic growth, there is no consensus among economic specialists in the productivity area about the closeness of the relationship.¹ My own appraisal, and I think that of most economists, is that capital formation is only one of a number of the ingredients in economic growth but still an important one. Even economists who agree with this appraisal do not necessarily agree with the desirability of government policy measures designed to increase the rates of saving and capital formation over those rates implied by the free play of competitive markets. Again, my own reaction is that if the rates of saving and capital formation can be increased without excessive costs (e.g., by measures which do not place a much greater burden of taxation on low-income groups and do not substantially reduce allocational efficiency), it would be desirable to do so. Of course, where saving and investment can be increased by government measures which eliminate artificial tax or other constraints that encourage consumption at the expense of saving and investment and which do not result in a regressive tax structure, virtually all economists would agree with the desirability of such a change in policy.

The most important step to take to increase the national saving at this time would be to substantially reduce and, if feasible, eliminate the current federal government deficit. Substantial deficits cannot easily be justified in a relatively prosperous peacetime period. To the extent the deficit can be reduced by decreasing government outlays, the national saving will clearly increase. It would be necessary to ensure that reduced government spending does not adversely impact the truly needy, but major cuts in the budget can still be

¹ Marshall E. Blume, Jean Crockett and Irwin Friend, "Stimulation of Capital Formation: Ends and Means," in Towards a New Industrial Policy, Michael L. & Susan M. Wachter (eds.), University of Pennsylvania Press, 1981.

carried out within this constraint. Such reductions in government expenditures might well encompass cuts across the board in defense and non-defense outlays, including a less costly indexing of government and Social Security pension payments and a moderate increase in the Social Security retirement age.

There is not the same degree of agreement on the effect of higher taxes on the national saving even in periods of relative prosperity like the present time. However, it is my judgment and I believe that of most economists that an increase in taxes at this time would not only reduce government dissaving but would also increase the national saving. On the other hand, it should be pointed out that this conclusion is based on the assumption that the increased government revenue is not dissipated in increased outlays. There are economists who argue that even under this assumption the reduction in government dissaving as a result of higher taxes would be offset in its effect on total saving by a reduction in private saving. This argument has little scientific support. It obviously assumes a high -- and in my opinion implausible -- degree of substitutability between government and private (i.e., household and corporate) saving.

Substitutability Between Government and Private Saving

There is a wide difference of opinion among economists on the substitutability between household and corporate saving and between household and government saving. While the rationality and ultra-rationality theories which imply that an additional dollar of corporate or government saving would be offset by a dollar decrease in household saving make considerable theoretical sense for corporate saving at least in the long run, they seem to me to make much less sense for government saving where among other things they assume a strange type of intergenerational tax calculation. My evaluation of the empirical evidence,

based on the available literature -- which includes papers by Feldstein, Feldstein and Shane, David and Scadding, Howrey and Hymans, Tanner, and Blume and Siegel¹ -- is that there is a moderate degree of substitutability between household and corporate saving but at most only a modest degree of substitutability between household and government saving. The published tests which are based on time-series analysis seem to me quite deficient, especially as they apply to the relationship between household and government saving where I am not convinced there is any appreciable substitutability. Time-series analysis of the relationship between household and corporate saving is subject to the usual deficiency of the inadequacy of the number of independent observations for distinguishing among the effects of a large number of relevant serially correlated variables, while once government saving in addition to household and corporate saving is introduced into the usual time-series analysis substantial problems of specification arise. It seems to me essential under these circumstances to carry out cross-section tests both across countries and more important across households where possible.² Both Japan and Germany have for many years had much higher household and private saving-income ratios than the United States and

¹ Martin S. Feldstein, "Tax Incentives, Corporate Saving and Capital Accumulation in the United States," Journal of Public Economics 2 (1973); Martin Feldstein and George Fane, "Taxes, Corporate Dividend Policy and Personal Saving: The British Postwar Experience," Review of Economics and Statistics, November 1973; Paul David and David Scadding, "Private Savings, Ultra-Rationality, Aggregation and Denson's Law," Journal of Political Economy, March/April 1974; Philip Howrey and Saul H. Hymans, "The Measurement and Determination of Loanable Funds Saving," Brookings Papers on Economic Activity 3, 1978; J. Ernest Tanner, "Fiscal Policy and Consumer Behavior," Review of Economics and Statistics, May 1979; and Marshall Blume and Jeremy Siegel, "Personal Saving: Theory and Evidence," in Marshall Sarnat and Giorgio Szego, Saving, Investment and Capital Formation in an Inflationary Economy, Ballinger Publishing Company, 1982.

² A more definitive analysis of the relation between household and corporate saving is possible on the basis of available household survey data, but such an analysis has yet to be carried out.

also a much higher government saving-income ratio.¹ The drastic growth in the U.S. government deficit in recent years has not been offset even in part by a growth in private saving.²

Before leaving this subject of the substitutability between non-household and household saving, special attention should be paid to the effect of the social security system on household saving. It should be pointed out that it is net payments into this system, rather than a net increase in assets, which are reflected in government saving as measured in the U.S. national accounts. As stressed by Feldstein in a number of papers,³ this system which is essentially on a pay-as-you-go basis can be considered a governmentally-imposed scheme of intergenerational transfers which he maintains has had a major effect in reducing household saving. Barro and, more importantly from an empirical viewpoint, Leimer and Lesnoy have demonstrated the great overstatement in

¹ For the six countries for which the data were readily available -- England, France, Germany, Italy, Japan and the United States -- the simple cross-section correlations between the government saving-income and the personal and private saving-income ratios were not significantly different from zero in the two years 1970 and 1980 (and were insignificantly positive in both years). When a cyclical variable -- the rate of change in real gross national product (GNP) to initial GNP -- was added to the regression, the results were not changed.

² For the decade ending in 1984, the correlations between the annual U.S. ratios of personal saving to personal disposable income or private saving to income and government saving (either federal or federal, state and local combined) to revenue were again not significantly different from zero (insignificantly negative for personal saving and insignificantly positive for private saving). The correlation (adjusted for degrees of freedom) between the personal saving-income ratios and the corporate saving-income ratios (adjusted for inventory and depreciation revaluations) was $-.34$. However, when a cyclical variable -- relative change in real GNP -- was added to the regression, the partial correlation between the personal and corporate saving-income ratios also becomes insignificant.

³ E.g., see Martin Feldstein, "Social Security, Induced Retirement and Aggregate Capital Accumulation," Journal of Political Economy, September-December 1974.

Feldstein's estimated effects.¹ A large number of other studies -- some of them time-series, others cross-sectional based on household surveys and still others cross-sectional with countries as the unit of observation -- have obtained conflicting results on whether social security retirement programs have had any effect in reducing household saving.²

Based on all this evidence, especially that supplied by Leimer and Lesnoy, there is no clear evidence that a future claim on social security has any effect in reducing household saving. It is my judgment, but not one based on strong evidence, that there is such an effect but that it is likely to be moderate and nowhere near complete. As a result, a completely funded social security system and one which does not affect other government revenues and outlays (so that a surplus in the social security fund is associated with a corresponding surplus or deficit in the unified budget) should enhance the national saving. In this

¹ Robert Barro, The Impact of Social Security on Private Saving, American Enterprise Institute, 1978; Dean Leimer and Selog Lesnoy, "Social Security and Private Saving," Journal of Political Economy, June 1982. Also see reply by Feldstein in the same issue of the JPE and further comments by Leimer and Lesnoy in "Social Security and Private Saving: An Examination of Feldstein's New Evidence," ORS Working Paper No. 31, October 1983, Social Security Administration, U.S. Department of Health and Human Services, and in "Social Security and Private Saving: Theory and Empirical Evidence," Social Security Bulletin, January 1985.

² E.g., see Blinder, Alan S., Roger Gordon & Donald E. Wise, "Social Security, Bequests, and the Life Cycle Theory of Saving: Cross-Sectional Tests," in The Determinants of National Saving and Wealth, F. Modigliani and R.E. Hemming (eds.), St. Martin's Press, 1983; Diamond, Peter A. & Jerry A. Hausman, "Individual Retirement and Savings Behavior," Journal of Public Economics, February-March 1984; King, M. & L. Dicks-Mireaux, "Asset Holdings and the Life Cycle," Economic Journal 92, 1982; Kopits, George & Padma Gotur, "The Influence of Social Security on Household Saving: A Cross-Country Investigation," International Monetary Fund Staff Papers, March 1980; Koskela, Erkki & Matti Viren, "Social Security and Household Saving in an International Cross Section," American Economic Review, March 1983; Kurz, Mordecai, "The Life-Cycle Hypothesis and the Effects of Social Security and Private Pensions on Family Saving," Institute for Mathematical Studies in the Social Sciences Technical Paper No.335, Stanford University, 1981; Modigliani, Franco & Arlie Sterling, "Determinants of Private Saving with Special Reference to the Role of Social Security - Cross-Country Tests," in The Determinants of National Saving and Wealth, op.cit.

connection, reference should be made to a careful study of the relationship between household saving in Japan and the present value of net benefits for the social security program plus the present value of retirement benefits provided by private employers.¹ No significant relationship was found in this study, which the author points out probably reflects in part substantial random measurement error so that there may well be some negative association between social security and household saving. However, there is no support for the hypothesis of a complete offset.

Effects of Taxation on Saving

The importance of aggregate government expenditures and tax revenues on the determination of total saving has been referred to above. However, we have not yet discussed one of the most controversial areas in appropriate government policy for stimulating total saving via the private and especially the household sectors. The question here is how to structure the tax system so as to encourage private saving for a given level of taxes and federal government expenditures. Because our basic interest is in realized saving and investment, we must give some consideration to the effects of the tax structure on the propensity to invest as well as on the propensity to save.

For a given level of federal government revenues and expenditures, the primary tax mechanisms for affecting the propensity to save are the allocation of total taxes between taxes on capital income (levied directly on individuals or indirectly through corporations) and taxes on labor income.² While we are

¹ Albert Ando, Microeconomic Study of Household Savings Behavior in Japan, 1974-1979; to be published by the Economic Planning Agency, Government of Japan, 1985.

² Additional detail on a number of the subjects discussed in this section appear in Albert Ando, Marshall Blume and Irwin Friend, The Structure and Reform of the U.S. Tax System, to be published by the M.I.T. Press in June 1985.

mainly concerned in this paper with the after-tax interest sensitivity of saving and investment propensities, and ultimately realized saving, we cannot completely ignore the effects of shifting taxes from capital income to labor income (or vice versa) on the incentive to work or on the burden of taxation on different socio-economic groups. Thus, if lower taxes on capital income do as frequently perceived increase realized saving, they might still be undesirable if they depressed work incentives or if they made the tax structure regressive, since the upper income groups receive a very much larger share of capital than of labor income. Some "supply-side" economists might question the implicit assumption that a decrease in tax rates is not likely to increase the demand for and income of both capital and labor sufficiently to offset the adverse effect of lower tax rates on the government deficit, but I know of no evidence, including the recent federal government experiment in supply-side economics, which would support their position.

Before examining the relevant theory and empirical evidence on the effect of capital income taxation on aggregate saving, it should be noted that recent estimates by Joseph Pechman indicate that, as a result of changes in the tax structure over the last decade, capital income is no longer taxed more heavily than labor income.¹ In fact, Pechman's estimates of the current tax burden imply that for most economic groups labor income is somewhat more heavily taxed than capital income -- a finding characterizing marginal as well as average tax rates. These estimates also indicate that combining all forms of taxation, the present tax structure is only moderately progressive and less progressive than it was a decade earlier.

While there is no consensus among economists about the after-tax return elasticities of private or aggregate saving, my own assessment is that neither

¹ Joseph A. Pechman, Who Paid the Taxes, 1966-1985?, Brookings Institution, 1985.

the relevant theory nor the empirical evidence provides much support for the belief that higher after-tax rates of return on assets stimulate the private sector's propensity to save. This assessment is documented in Irwin Friend and Joel Hasbrouck, "Saving and After-Tax Rates of Return," Review of Economics and Statistics, November 1983. The R.E.S. article spells out the deficiencies in other papers which have arrived at a substantially different conclusion.¹ From a theoretical viewpoint, perhaps the main deficiency in the usual modelling of the relation between the after-tax return and saving is the neglect of the crucial role played by uncertainty of resources (human and non-human wealth) and needs in the determination of saving behavior. Uncertainty may well play a more important role in influencing the saving-income ratio than any other economic factor.

There is evidence that a redistribution of after-tax income from the lower to the upper income groups, regardless of the form it takes, would increase the private sector's saving-income ratio at least in the short or intermediate run though not necessarily in the long run (and some proponents of the permanent income and life-cycle consumption theories might even question the shorter-term effects). Thus, it might be possible to stimulate the aggregate propensity to save by shifting the overall burden of taxation (on both labor and capital incomes) from the upper to the lower income groups, but there is no strong evidence that the effect on saving of this regressive shift would be either large or sustained.

¹ There are of course numerous studies which show either small positive or negative after-tax rates of return effects on saving, but these give little indication for useful saving policy. One very recent unpublished analysis made available to me by Lawrence Klein points to a long-run interest rate elasticity of per capita personal consumption expenditures of $-.04$, which though statistically significant is economically inconsequential. It is not clear how this result is affected by the absence of a net worth variable (though the use of a number of lagged income variables may serve as a partial substitute) or by the inclusion of investment in durables as part of consumption.

A shift in taxation from corporations to individuals would probably increase the aggregate propensity to save, at least in the short and intermediate run, in view of the substantially higher propensity to save by corporations than by individuals. A rise in the aggregate saving-income ratio associated with a shift in after-tax income from individuals to corporations would probably be partly offset by a decline in the household saving-income ratio, reflecting lower direct saving by stockholders but, except perhaps in the very long run as higher corporate saving is associated with higher household wealth, it is unlikely that the offset will be anywhere near complete. Yet, it should be noted that the fairly pronounced shift in U.S. taxes over the past decade from capital to labor income, and from corporations to individuals, together with the general decline in the progressiveness of the tax structure, especially for the top income group, was associated with a decline in the ratios to income of personal, private and total saving to some of their lowest levels since the post-World War II adjustment in the late 1940s. This was true in spite of the specific additional saving incentives provided by IRA, Keogh and similar plans.

While the impact of capital income taxes on saving behavior via an after-tax return effect is not entirely clear, even in direction, both theory and empirical evidence seem to indicate a negative impact of the cost of capital on investment. However, for risky investment, the cost of capital is not necessarily positively related, as might be expected, to the level of income taxes. Theoretical considerations do suggest a positive effect of higher corporate income taxes on the cost of capital and hence a negative effect on stock prices and investment.¹ However, this is not necessarily true of higher personal income taxes, at least in the short run, since under certain plausible assump-

¹ Marshall Blume and Irwin Friend, "The Effect of a Reduction in Corporate Taxes on Investment in Riskfree and Risky Assets," Rodney L. White Center for Financial Research Working Paper #3-84, University of Pennsylvania.

tions (including personal tax credits for investment losses) investor risk is decreased more than expected return so that the required rate of return on risky assets may be reduced by higher personal tax rates.¹ On the other hand, both theory and empirical evidence point to a positive relation between the cost of capital and the level of corporate income taxation, and hence a negative relation between the cost of capital and the magnitude of investment tax credits and depreciation deductions. Even here, however, the effectiveness of changes in corporation income taxation on investment would be limited in the long run by the apparent long-run ineffectiveness of such changes on saving incentives.

In connection with the above discussion of the effects of taxation on capital and labor incomes, it may be useful to point out that there does not appear to be a solid basis to the common assertion that the "unsatisfactory" rate of capital formation and economic growth in the U.S. as compared to other Western countries can be mostly attributed to our high taxes on income from capital. The most careful comparative study I have seen in this area concludes, on the basis of an admittedly limited sample of four countries: "Germany has the highest overall effective tax on income from capital and the highest growth rate. The U.S. is second in both categories and Sweden is third. The U.K. has the lowest overall effective tax on income from capital and the lowest growth rate. If we look at growth of nonfinancial corporate capital, results are substantially the same. The U.S. and Sweden are reversed, but Germany is still the highest and Britain is the lowest."² Lower marginal rates of taxation on capital and labor incomes probably do contribute to investment and work incen-

¹ Irwin Friend and Joel Hasbrouck, "Comment on Inflation and the Stock Market," American Economic Review, March 1982.

² Mervyn A. King and Don Fullerton, "The Taxation of Income from Capital: A Comparative Study of the U.S., U.K., Sweden and West Germany - Comparisons of Effective Tax Rates," National Bureau of Economic Research Working Paper No. 1073, February 1983.

tives, but their effectiveness should not be exaggerated.

Combining these different strands of theoretical and empirical evidence relating to the separate effects of capital income taxation (corporate and personal) on saving and investment behavior, my judgment is that a reduction of capital income taxes, especially at the corporate level, would initially stimulate investment over the cycle, but the long run effect on capital formation is likely to be moderate if our assessment of the apparently low after-tax interest elasticity of saving is correct. Maximizing the effect on investment would require strongly regressive changes in the tax structure such as might be effected by the combination of eliminating corporate income taxes and either raising taxes on labor income or substituting flat consumption taxes for progressive income taxes. Such changes would probably raise corporations' propensity to invest both in the short and long run, and stimulate aggregate saving at least in the short and intermediate run, in view of the higher saving propensity of the upper income groups. Thus, it is possible but by no means certain that a significant increase in capital formation could be effected, at least for a number of years, by a substantial increase in the regressiveness of the tax structure.

In the long run, however, the apparently low after-tax interest elasticity of saving would limit any increase in capital formation and hence realized saving which might be associated with a more regressive tax structure or with the substitution of taxes on labor income for taxes on capital income. Moreover, any beneficial effect of such changes in the tax structure on economic growth as a result of the stimulation of investment might be offset at least in part by weakened labor incentives as the lower taxes on capital income are financed by higher taxes on labor income. More important for purposes of this paper, changes in the overall structure of taxes are not likely to greatly affect the aggregate level of realized saving.

It was noted above that the substitution of flat consumption taxes for progressive income taxes might raise saving appreciably, but only at the price of strongly regressive changes in the tax structure. However, the use of progressive consumption taxes supplemented by substantially increased estate taxes could at least in theory take care of the problem of regressivity and might still result in increased saving as compared to the rate under a correspondingly progressive income tax structure. The reason is that there is substantial variation in the propensity to save by households of equivalent means, and consumption taxes channel more of the burden of taxes to households with a relatively low propensity to save. Unfortunately, progressive consumption taxes pose very serious transitional, enforcement and other problems.¹

The fact that there is no convincing evidence pointing to a significant positive after-tax interest elasticity of household or private saving does not mean that policy makers interested in stimulating saving should be indifferent to the structure of taxes. To the extent that taxes do depress saving and labor incentives, it is clearly the marginal rather than the average tax rates which are relevant.

An obvious approach to diminishing the depressive effects on both capital accumulation and labor input of a given total of taxation would be to minimize the marginal rates of taxation paid on income, keeping them consistent with a desired rate of progressivity in the average tax-income ratios. So long as the desired rate of progressivity in average tax rates is not too high, it is quite feasible to have an increase in average tax rates with increasing income levels without imposing extremely high marginal rates at any income level. An approach to this objective is exemplified by the recent Bradley-Gephardt and Kemp-Kasten

¹ There are many equity issues totally apart from regressivity raised by the substitution of consumption for income taxes, including the question of the basis on which the burden of financing public goods (e.g. defense) should be allocated.

tax proposals and, most recently, by the Treasury proposal at the end of 1984.

Another approach to the use of tax policy to stimulate national saving might be to provide tax incentives for private pension and retirement funds since such savings like social security seem to result in a significant net addition to total saving.¹ Thus, in their 1984 paper Diamond and Hausman find that a one percent increase in the expected private pension to permanent income ratio does decrease the personal saving to permanent income ratio, but only by 0.14 of one percent on the average. These same authors find a somewhat higher offset (but still well under half) for social security. More limited and less satisfactory evidence suggests that contributions to IRAs and Keogh plans also increase total household saving rather than simply representing a diversion of saving from one form to another.²

A final approach to the use of tax policy to stimulate national saving would be to eliminate the income tax deduction available for interest paid on credit purchases of consumer goods. Since greater availability of consumer debt stimulates consumer spending, especially on consumer durables, and increased expenditures on consumer durables seem largely to be associated with decreased saving in financial assets rather than decreased consumption of non-durables, a decline in the availability of consumer debt would also be expected to enhance

¹ E.g., see Diamond, Peter & Jerry Hausman, "Individual Retirement and Savings Behavior," Journal of Public Economics, February-March 1984; Kurz, Mordecai, "The Life-Cycle Hypothesis and the Effects of Social Security and Private Pensions on Family Saving," Institute for Mathematics and the Social Science Technical Paper No. 335, Stanford University, 1981; and Ando, Albert, "Microeconomic Study of Household Savings Behavior in Japan, 1974-1979," to be published by the Economic Planning Agency, Government of Japan, 1985.

² R. Glenn Hubbard, "Do IRAs and Keoghs Increase Saving?" National Tax Journal, March 1984. Some of the problems with this analysis are that the variable analyzed is household net worth, which includes capital gains, the results may reflect differences in saving tastes and saving capacity between households with IRAs and Keogh plans and other households, and only three classes are used to draw conclusions about the joint effects of eligibility (for IRAs and Keoghs) and tax bracket on net worth (and inferentially savings).

saving, especially if saving is defined to exclude net investment in consumer durables.¹ The United States seems to be one of the few major countries which permits such favorable tax treatment of the interest paid on consumer debt. Tax deductibility of interest paid on consumer debt is not permitted (or is permitted only to a trivial extent) in Japan, Italy, Germany, France, England or Belgium.² All of these countries had saving ratios significantly higher than those in the U.S., and I suspect the more favorable terms for consumer credit in the U.S. played some role in this result. Consumer credit might also be made less freely available through appropriate actions of the monetary authorities.

The problem is broader than consumer debt. As pointed out by Galper and Steuerle: "If a taxpayer can borrow and deduct the costs of interest while at the same time acquiring an asset yielding income that is partially or fully tax-exempt -- a process that is known as "tax arbitrage" -- the taxpayer may achieve a tax reduction with no increase in net saving whatsoever."³ As Galper and Steuerle further point out: "Tax arbitrage reduces incentives to save -- and incentives to work -- in two ways. First, it permits taxpayers to increase their disposable income without doing any additional saving or productive labor -- and may, therefore, encourage them to devote more time and resources...to non-productive efforts...Second, the loss of tax revenues due to arbitrage by

¹ See Irwin Friend & Robert Jones, "The Concept of Saving," in Consumption and Saving, Volume II, Friend and Jones (eds.), University of Pennsylvania, 1960.

² Since I was not able to obtain such information from readily available literature, I relied on the testimony of academic colleagues from these countries. It might be noted that these countries also seemed to be less permissive in their tax treatment of interest paid on other forms of personal debt, notably home mortgage loans, where caps or other constraints were imposed on the amount of interest paid which was tax deductible.

³ Harry Galper and Eugene Steuerle, "Tax Incentives for Saving," The Brookings Review, Winter 1983.

some taxpayers necessitates increases in revenue collections from other taxpayers. Those in the latter group face higher tax rates on their labor income and on their income from capital -- and, as a result, (may) have somewhat diminished incentives to work and to save."

What Accounts for Major Country Differences in Savings-Income Ratios?

In spite of the absence of much strong support for most non-coercive economic measures which might be taken by the government to substantially increase household or private saving, there are major variations in the savings-income ratios for different countries. It would be useful to know the reasons for these differences which have not been satisfactorily explained in the literature. One explanation sometimes given for the higher savings-income ratios in other countries, especially Japan, is the allegedly higher tax on capital income in the United States, leading to lower after-tax rates of return. This attribution of a much higher household saving rate in Japan than in the U.S. to the differences in their tax burden seems difficult to justify even on the basis of casual empiricism, since the only noteworthy difference in the comparative taxes on individuals in these two countries seems to be their different treatment of capital gains.¹ While the absence of a capital gains tax in Japan might help to explain a relatively greater demand for common stocks, it would not be expected to have a substantial impact on total household saving, and even the effect on net stock accumulation should be limited in view of the relatively moderate effective (as distinguished from nominal) capital gains tax in the U.S.,

¹ According to U.S. Economic Performance in a Global Perspective (New York Stock Exchange, February 1981, p. 24), dividend income was taxed somewhat more in the United States while interest income was taxed somewhat more in Japan during the period covered, which apparently was the late 1970s. It might be noted that the taxation of capital income in the United States has declined somewhat since that time.

estimated in recent years to be about 5%.¹ Moreover, since institutional stock ownership in Japan is said to account for the great bulk of outstanding stock and for a substantially higher proportion of all stocks outstanding than in the United States (where it approximates 50%), it is not clear why the somewhat more favorable capital gains treatment in Japan should have much of an effect on net stock accumulation and even less on total saving by households.

Parenthetically, it should be pointed out that a regression of savings ratios across countries, even if done correctly, may have little connection with the relationship to saving of after-tax return on capital income. Thus, in Japan interest rates paid on bank deposits have historically been below the savings rates available in the United States and below a comparable market rate because of the quasi-monopolistic control of the banking system by a few large institutions.² A similar situation apparently characterizes some of the countries in Europe. Such countries if properly analyzed might point to higher saving rates than in the United States associated with lower after-tax rates of taxation on capital income, though there may be no causal relationship between the two variables in view of significant differences in before-tax risk-adjusted rates of return. There are of course many other institutional differences among countries which may cast serious doubt on any cross-sectional country analyses of saving and after-tax rates of return.

In spite of the difficulties involved and the need for special care in analyzing the saving experience in foreign countries to obtain insights which may

¹ See Irwin Friend and Joel Hasbrouck, "Comment on Inflation and the Stock Market," American Economic Review, March 1982, and Martin Feldstein, "Inflation, Tax Rules and the Stock Market," Journal of Monetary Economics, July 1982.

² I understand that this has begun to change in recent years. For recent interest rates in Japan, see Economic Statistics Monthly, December 1984, Research and Statistic Department, The Bank of Japan, pp. 109 and 110. The lower interest rates in Japan than in the U.S. are of course partly attributable to a lower rate of inflation.

be useful in the United States, I think there is potentially a substantial payoff in analyzing time series data within a number of foreign countries to investigate the apparent effect on saving of major changes in their tax laws. A large number of changes in the tax laws of these countries have taken place in the post-World War II period, many with the avowed purpose or theoretical potential of stimulating saving, but to my knowledge there has been no systematic inquiry into the end results.¹

Improvement in Quality of Saving

Since the main intent in stimulating saving is presumably to increase the nation's productivity and economic growth, it should be pointed out that such an objective would be furthered by appropriate changes in the flow as well as in the total of saving. One tenable approach to this end would be to eliminate or at least greatly reduce the tax preference available for owned homes by equalizing the tax burden as between investment in housing and investment in plant and equipment. Another would be to eliminate or at least greatly reduce the disparities in the taxation of business plant and equipment and in the taxation of investment in different industries, thus contributing to allocational efficiency. Such measures are integral parts of the "flat tax" proposals mentioned earlier in this paper. This is especially true of the Bradley-Gephardt and, to a lesser extent, the Treasury proposals.

At a more general level, both on efficiency and equity grounds, the same tax rates should apply to all sources of economic return, whether the return comes from investment in housing or plant and equipment, from stocks or bonds, from capital gains or ordinary income, from deposits in commercial banks and

¹ A more satisfactory analysis of the relationship of tax policy to saving experience in foreign countries is now under way at the Rodney White Center for Financial Research of the Wharton School, University of Pennsylvania.

other depository institutions or policies in life insurance companies. This does not mean that there may not be products or periods when national policy considerations would lead to differential taxation on different forms of economic activity, e.g. the consumption of cigarettes, liquor or gasoline. However, such exceptions should be kept to a minimum and should require a very strong justification.

One other change in the composition of investment frequently advocated to raise productivity is to increase the proportion of business plant and equipment outlays flowing into risky investment. The rationale for this position is that the expected return on risky investment is higher than that on less risky investment. There is, however, no strong evidence that the return on unseasoned stock is significantly different from the return on seasoned or less risky equities or that any risk premium required by the market on the riskier equities is excessive or high.¹

Summary and Conclusions

This paper indicates that it is extremely difficult to point to measures which can be depended on to significantly increase the national saving or saving-income ratio by raising private saving. Measures frequently advocated for this purpose have no firm support, either theoretical or empirical, backing their alleged effect on saving. They also raise serious problems both of distributional equity and efficiency -- e.g., those rising from the increased burden of taxation on labor income associated with decreased taxation of capital income.

Probably the most important step that could be taken to increase the

¹ Irwin Friend, "Economic and Equity Aspects of Securities Regulation," in Lanzillotti and Peles (eds.), Management under Government Intervention: A View from Mount Scopus, JAI Press, 1984.

national saving would be the immediate enactment of a substantial reduction in the current federal government deficit and eventually the elimination of such deficits in boom periods. Obviously, in a period of cyclical depression, stimulative government policies might be required both to preclude excessive unemployment and underutilization of other economic resources and to avoid the related decline in the national income and national saving.

Another step which the government might take to increase the national saving would be to institute over a suitable period of time a completely funded social security system. The stimulation of private pension or retirement funds might also be justified, assuming that equity among taxpayers is maintained, since such savings like social security seem to result in a significant net addition to total saving.

Since greater availability of consumer debt stimulates consumer spending, especially on consumer durables, and increased expenditures on consumer durables seem largely to be associated with decreased saving in financial assets rather than decreased consumption of non-durables, a decline in the availability of consumer debt would also be expected to enhance saving. This might be accomplished by making consumer credit more costly through elimination of the income tax deductions available for interest paid on credit purchases of consumer goods, or making it less freely available through appropriate actions of the monetary authorities. More broadly, interest deductions on loans should generally be allowed for income tax purposes only to the extent that the returns from the assets financed are included in taxable income.

There is no scientific support for a strong or even a significant negative after-tax interest elasticity of desired or realized saving. Even if such an effect is assumed as a matter of faith, there is no reason to believe that the implied increase in saving incentives, which would be associated with a reduction in taxes on capital income, would not be accompanied by a corresponding

decrease in labor incentives as a result of the higher taxes on labor income required to maintain the same level of total tax income. Moreover, such changes in the tax structure cannot go very far without introducing regressivity into the incidence of taxes.

The fact that there is no convincing evidence supporting a significant deterrent income tax effect on saving does not mean that those interested in saving policy should be indifferent to the structure of taxes. If income taxes do depress saving and labor incentives, it is the marginal rather than the average tax rates which are relevant. An obvious way to cut down any depressive effects on both capital and labor of a given total of taxation would be to minimize the marginal rates, keeping them consistent with a desired rate of progressivity in the average tax-income ratios. Several "flat-tax" proposals of recent years -- including the Bradley-Gephardt, Kemp-Kasten, and the 1984 Treasury proposals -- are substantial improvements in this respect over the present tax structure.

The substitution of progressive consumption taxes for progressive income taxes would probably result in some net stimulation of saving but raises very substantial transitional, enforcement and other problems. The substitution of flat consumption taxes for income taxes in our tax structure might have a larger stimulating effect, but only at the price of strongly regressive changes in the tax structure and a more negative effect on labor supply.

The apparent paucity of non-coercive economic measures which could be taken by the government to increase household or private saving may seem strange in view of the extremely large observed differences in the underlying saving-income ratios for different countries. Although these differences have not been satisfactorily explained in the literature, it is my judgment that to a major extent they represent cultural differences or differences in tastes (perhaps like those reflected in the Puritan ethic). As a consequence, it may be possible to

increase private saving more effectively through non-economic than through economic policies. Such non-economic policies were not considered to be within the province of this paper.

While acceptable changes in economic policies seem to have limited scope for improving the nation's productivity by increasing private saving, there is substantial scope for improving allocational efficiency and hence productivity by insuring that, except for exceptional circumstances, the same tax rates apply to all measures of economic return. This should generally be true whether the return comes from investment in housing or plant and equipment, from stocks or bonds, from capital gains or ordinary income, and from deposits in banks and similar institutions or policies in life insurance companies.