The same day was also the start date of a new Medicare contribution tax, passed in 2010 as part of health care reform, which imposes on high income taxpayers an additional 3.8% tax on capital income generally, including dividends and capital gains.

These tax increases bring to the fore a set of commonly held reservations regarding the taxation of income from savings and investment. Principal among these is the concern that taxing capital income hampers economic growth and job creation.

According to this view, raising taxes on capital income discourages savings and investment. A diminished flow of savings and investment causes, in turn, slower growth in the economy’s stock of capital goods, such as plant and equipment. And when the capital stock grows more slowly, so too do output, employment, productivity, and wages.

On the surface, the growth argument against capital income taxes seems clear and compelling. And many policymakers and pundits—on both sides of the aisle—appear to regard it as common sense.

A very different picture emerges, however, from the academic research on taxes and growth. Scholarly evidence on the growth argument against capital income taxation is mixed at best. Indeed, it would not be unreasonable to conclude, based on the best available theory and data, that the growth argument has no real basis.
The object of this policy brief is to lay out the relevant research on capital income taxes and growth. The first part of the brief discusses the growth effects of capital income taxes considered in isolation from other policies. Both domestic and international dimensions of the issue are reviewed. The second part of the brief concerns the growth effects of alternative policy measures that would be likely to go hand in hand with any reduction in capital income taxes—namely increased labor income taxation and increased government borrowing.

**CAPITAL INCOME TAXES CONSIDERED IN ISOLATION**

**DOMESTIC SAVINGS AND INVESTMENT**

A key premise of the growth argument is that taxing capital income decreases savings and investment. The research on capital income taxes, however, casts doubt on this premise. Consider first the theory and then the data.

**THEORY**

Even the simplest models of savings yield no clear prediction regarding the impact of capital income taxes on savings.

Imagine an individual deciding how much to save for retirement. When the government takes a portion of what is earned on savings, every dollar of planned future consumption requires more dollars of present savings. Thus, taxing the return to savings effectively raises the price of retirement consumption in terms of forgone current consumption.

It is fair to assume that this price increase reduces the individual’s planned level of retirement consumption. It is also fair to assume that, all else the same, it makes the individual worse off. But does it also reduce the individual’s retirement savings?

Savings is the not the same as desired future spending: desired future spending is what one ends up with; savings is what one puts away. The distinction matters because, while capital income taxes may decrease the amount that one desires to end up with, they increase the amount that one must put away to end up with any given amount.

Suppose, for example, that before a tax payer who expects to earn more, rather than less, in future years. One could also take into consideration the tendency for individuals to make decisions based on rules of thumb, rather than rational calculation.

But none of these complications sharpen the predictions of the theory. Indeed, most only serve to introduce addi-

**FIGURE 1:** PERSONAL SAVINGS RATE AND MAXIMUM EFFECTIVE RATE ON LONG-TERM CAPITAL GAINS

![Graph showing personal savings rate and maximum effective rate on long-term capital gains.](source: U.S. Treasury, Office of Tax Analysis; U.S. Department of Commerce, Bureau of Economic Statistics.)

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1 The growth argument, though salient and influential, is not the only serious argument against capital income taxation. Other important issues include: the potential for “lock-in,” whereby taxpayers unnaturally delay selling appreciated investments in order to defer taxation; the fact that the calculation of gain is not adjusted for inflation; and the fact that corporate investors are already taxed under the corporate income tax. Though a full analysis of capital income taxation would necessarily address these arguments, to keep this “brief” true to type, I do not consider them here. Suffice it to say that these alternative arguments—though not without merit—are not so strong as to render the growth argument superfluous.

2 A similar picture emerges if the maximum effective rate on long-term capital gains is replaced by an overall measure of the intensity of capital income taxation. Gravelle and Marples (2011).


on capital gains (accounting for deduction phase-outs, etc.). The graph reveals little discernible relationship between such tax rates and savings. Notice in particular that the personal savings rate appears to move with, not against, the capital gains rate until the mid 1980’s and from the mid-1990’s until the mid-2000’s.7

Yet one must be very cautious about drawing conclusions merely from the relative ups and downs of these two lines. Other determinants of savings may have been changing at the same time as taxes. The effects of these other changes might mask a clear negative relationship between saving and taxation. It is possible, for instance, that the personal savings rate would have fallen even faster than it did in the early 1980’s if not for the simultaneous reduction in capital gains tax rates.

Several studies have attempted to control for the non-tax determinants of savings, so as to capture the true impact of taxation. Estimates in this literature vary substantially and are difficult to compare. But most academic commentators who have assessed this literature suggest that the takeaway is that taxes on capital income have essentially no impact on savings.8

Some researchers have argued that the preceding group of studies provides misleading predictions regarding the impact of tax policy changes. The concern is that the measured responsiveness of savings to taxes is not a fixed fact relative to tax policy, but is rather determined in part by the tax regime in place at the time of measurement. According to this research, such measurements therefore cannot be used to predict the impact of new policies.9

In response, a second set of studies attempts to estimate the underlying, policy-constant parameters of individual choice—from which the effect of policy changes may then be deduced. Most such research concerns one particular parameter, the “intertemporal elasticity of substitution.” This parameter measures how quickly an individual’s perceived value of additional future consumption increases as the individual’s quantity of future consumption decreases. The studies in this literature indicate that the increase is relatively rapid. Each percentage point decrease in the ratio of future to current consumption appears to increase the value of additional future consumption (in terms of current consumption) by 1 percentage point or more—significantly more in some studies.10

Applied to the retirement savings example above, such estimates imply that individuals quickly put the brakes on any tax-induced reduction in planned future consumption. This, in turn, points toward the possibility that the reduction in desired future consumption is overshadowed by the need to save more per dollar of future consumption still desired. Such results thus indicate that savings does not decrease, and may actually increase, in the face of greater taxation of capital income.

INTERNATIONAL INVESTMENT FLOWS

Measures of global financial integration—such as the flows and stocks, gross and net, of foreign assets and liabilities—have increased several-fold since the 1980’s.11 It is thus increasingly difficult to adequately describe the growth impact of capital income taxation without assessing the international dimensions of the issue.

INDUCED OUTFLOWS

The problem with capital income taxes, one might assert, is not that over-taxed U.S. taxpayers will invest less, but that they will invest less in the U.S. This, it is argued, will have the same harmful effect on U.S. capital accumulation as an overall reduction in savings.

As a preliminary matter, it is important to keep in mind that investing abroad does not, in the first instance, allow a U.S. taxpayer to avoid U.S. tax on capital income. The U.S. generally taxes the income of U.S. citizens and residents from whatever source derived.

On the other hand, there are currently opportunities to effectively defer U.S. taxes by investing in foreign corporations that are located and operated so as to trigger little or no corporate level tax—U.S. or otherwise. In this case, the only tax paid, directly or indirectly, by the U.S. investor is the tax paid when and if the investor receives dividends or sells shares.

But while this feature of the current U.S. international tax regime is important and controversial, it has ambiguous policy implications with respect to setting the proper level of capital income taxation. The problem caused by this feature is that the taxation of (certain) capital income from foreign investment is preferred relative to the taxation of capital income from domestic investment. The solution, presumably, is to equalize the two tax treatments and thus eliminate the tax preference for foreign investments. Yet a reason to equate two tax treatments has no implication for the level at which the treatments are equated. Lowering the taxation of domestic investment income to meet the taxation of foreign investment income is but one way to generate parity. An alternative would be to raise the taxation of foreign investment income to meet the taxation of domestic investment income. The point is this: the argument that “U.S. investors will just go abroad” if U.S. citizens and residents are less heavily taxed than abroad is not a compelling reason for not taxing U.S. capital income at all, or at a lower rate than foreign capital income.

Notes

3. Foreigners’ active business income from U.S. sources is generally taxed by the U.S. as if it were the income of a U.S. citizen. Moreover, dividends paid to foreign shareholders are generally subject to a 30% “withholding” tax. Bilateral tax treaties often lessen these tax burdens.
5. Kose, M. Ayhan, Eswar Prasad, Kenneth Rogoff, and

Some studies suggest that savings does not decrease, and may actually increase, in the face of greater taxation of capital income.
capital income taxes are raised ignores the fact that tax rates on foreign investments can be changed too.

**COMPENSATING INFLOWS**

If outflows of U.S. investment dollars are part of the story, so too are inflows of foreign investment dollars.

In the simple version of the growth argument described in the introduction to this brief, all capital accumulation was assumed to come from domestic savings, or more to the point, savings whose return is reduced by U.S. capital income taxation. There is, of course, another source of funds for U.S. capital accumulation. This is lending and (non-active business) investment from abroad by those who are not subject to U.S. taxes, and whose behavior would not therefore be directly affected by any change in the U.S. taxation of capital income. For example, 20% of U.S. corporate bonds (by value) are held by foreigners, up from 16% in 2004.

Thus, even if it were true that raising capital income taxes reduces domestic savings, this does not imply a reduction in the stock of productive capital in the U.S. economy. Potentially, as domestic savings ebb, foreign savings flow.

Whether foreign investment is an adequate substitute for domestic savings depends on several factors.

The first factor concerns the extent to which non-U.S. taxed foreign investment seamlessly replaces domestic savings. One possibility is that foreign investment must be coaxed into any space left by receding domestic savings with the promise of higher returns. The necessity of paying higher returns would in turn choke off marginal, but formerly viable, investment projects.

Another possibility is that, capital being extremely mobile, a large pool of foreign capital rests in precarious balance on the precise level of the presently-offered U.S. return, and is poised to rush in and capture the benefit of any upward pressure on such returns caused by receding domestic savings. The result of this would be that the return would never have a chance to increase, and investment within the U.S. would remain at essentially the same level.

Many commentators believe that the latter story, though idealized, is a closer depiction of reality. This is partly supported by the fact that, as noted, measures of global financial integration have increased several-fold since the 1980’s. Net borrowing by the U.S. has increased even more dramatically. A second factor to consider in assessing whether foreign investment can adequately substitute for domestic savings, centers around the fact that when capital is foreign-owned, the return to that capital flows abroad. The implication is that some portion of the benefits of U.S. growth accrues to foreigners. This raises two questions: How much actually flows abroad? And how much is too much?

At least in recent years, the answer to the "how much" question appears to be "very little." While the foreign contribution to domestic growth has increased, the reward for that contribution has not. The yield on ten year Treasury bonds has fallen steadily over the last two decades and is now below the rate of inflation in many countries. In the view of the Federal Reserve Chairman the U.S. finds itself amid a "global savings glut." How much outflow of capital income is too much depends in part upon one’s underlying objective in promoting growth. In particular, those whose chief concern is jobs and wages are less likely to be concerned with capital owners’ nationality. Domestic capital accumulation increases employment, productivity, and worker compensation without regard to who owns the capital.

**ALTERNATIVE POLICIES**

If one holds fixed the level of government spending, the chief alternatives to capital income taxation are two: labor income taxes and government borrowing.

Both of these alternatives figure large in the recent fiscal cliff deal. In addition to raising capital income taxes on high income taxpayers, that deal also raises the top rate on labor income from 35% to 39.6%. It also allows a temporary 2-percentage point reduction in the payroll tax rate to expire. Moreover, a .9 percentage point increase in the Medicare payroll tax for high income taxpayers, passed in 2010 as part of health care reform, comes online in 2013. Furthermore, the cliff deal increases the deficit by $4 trillion, according to CBO (compared to what spending and tax policy would have been in the absence of an agreement). Growth-based objections to the cliff deal’s capital income tax increases must also address the growth impact of alternatively steepening the increase in either labor income taxes or government borrowing.

**LABOR INCOME TAXES**

There are stories to be told about the negative impact of labor income taxes on growth that seem no less theoretically compelling and are no less empirically grounded than the corresponding stories for capital income taxation.

Consider again the retirement savings example discussed above. Recall that capital income taxes reduced desired future consumption, but increased the amount that had to be saved for each dollar of future consumption still desired.

Like taxing capital income, taxing labor income plausibly reduces desired future consumption. In fact, with labor income taxation, there is an additional downward force. As with capital income taxes, labor income taxes raise the implicit price of future consumption—in terms of work hours, rather than in terms of forgone current consumption. Unlike capital income taxes, however, labor income taxes also reduce the after-tax value of individuals’ lifetime earning poten-
tial, leaving them less to allocate to all uses, including future consumption.

Furthermore, with labor income taxes, any given reduction in future consumption translates more readily into a reduction in current savings. When the tax is on labor income rather than capital income, there is no countering increase in the amount that must be saved for any given amount of future consumption. Adapting the numerical example presented above, suppose that it is an increase in wage tax, rather than interest tax, that causes desired retirement consumption to decrease from $110x to $105x. Increasing the wage tax leaves unchanged the amount that must be saved per dollar of future consumption. Consequently, less future spending always means less current savings. Here the individual saves only $95.45x rather than $100x.

It should also be noted that taxing labor income may also discourage education and training. In terms of economic principles, education and training may be regarded as another form of saving and investment, generating another stock of productive (human) capital that increases output and productivity. Furthermore, to tax labor income is, in part, to tax the return to human capital investment. Thus, whatever one believes to be the mechanism by which capital income taxes hamper the accumulation physical capital, it is worth asking whether this same mechanism applies to labor income taxes and the accumulation of human capital.

GOVERNMENT BORROWING

The government might also finance lower capital income taxes with additional government borrowing. Through a combination of pre-existing fiscal policies, policies designed to reverse the recent downturn, and the downturn itself, government debt held by the public now stands at over 70% of GDP, a magnitude not seen since the aftermath of WWII.

The impact of government borrow-
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