## WORKING PAPER

## Executive Summary

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## CENTER FOR RETIREMENT RESEARCH AT BOSTON COLLEGE

## VALUING ASSETS IN RETIREMENT SAVINGS ACCOUNTS

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The rising importance of assets in tax-deferred accounts has changed the way U.S. households prepare for retirement. Assets in Individual Retirement Accounts IRA's and 401(k) plans, which were effectively introduced in the early 1980s, exceeded \$4 trillion at the end of 2001. If current contribution patterns persist and if asset returns follow historical trends, the assets in retirement saving accounts will become a much more significant part of household wealth in the next three decades.

Many studies have addressed the question of whether households change their saving behavior outside tax-deferred accounts when they make 401(k) or traditional IRA contributions. These studies have analyzed the extent to which contributions to tax-deferred accounts reduce assets held in traditional taxable accounts. An implicit premise of this research is that a dollar of tax-deferred assets was equivalent to a dollar of assets held in a taxable account. However, as Gale (1998) recognized, simple comparisons may be inappropriate given the different tax status of assets in taxable accounts and in retirement saving accounts.

For 401(k)s and traditional IRAs, withdrawals are taxed. This tax liability generates differences in the potential value of assets inside and outside tax-deferred retirement accounts. It is even possible, as Gokhale and Kotlikoff (2003) note, that the tax rates facing a household when assets are withdrawn from a retirement account are greater than the tax rates that were avoided when funds were originally contributed to the account. If this happens, the household may actually be worse off for making these contributions. These considerations, which can make assets in retirement saving accounts less valuable than similar assets outside such accounts, are offset by the fact that assets in retirement saving accounts can grow tax-free until the time of withdrawal. This "inside build up" can make an asset more valuable inside a tax-deferred account than outside, particularly if the account holder has a long investment horizon.

This paper presents new evidence on the relationship between the retirement wealth that can be generated by a dollar in a tax-deferred account and a dollar held in the same asset in a traditional taxable account. Summary information based on the current age, asset, and tax rate distributions for tax-deferred account holders suggests that on average, the deferred taxes that will be due when these assets are withdrawn outweigh the benefits of tax-deferred accumulation. It would therefore require less than one dollar of taxable investment assets outside an IRA or a 401(k) plan to deliver the same resources at retirement as the average dollar of assets held within those plans. This finding is strengthened by the tax changes that were incorporated in the Jobs and Growth Tax Relief Reconciliation Act of 2003, which lowers the tax rate on dividends and capital gains on corporate stock held outside a tax-deferred account, while preserving the taxation at ordinary income rates on withdrawals from tax-deferred accounts.

The statement about the average dollar in a tax-deferred account does not capture the substantial heterogeneity across households. The tradeoff between the amount of retirement wealth that can be generated by a dollar in a tax-deferred and a taxable account is very different for households of different ages - as younger households benefit from tax deferral for a longer time period - and it is also sensitive to household marginal tax rates. A particularly important consideration is the possibility that the household's marginal tax rate may change over time. If tax rates are higher when the household is retired, and drawing assets out of the tax-deferred account, than when the household is contributing, this reduces the value of the tax-deferred account.

The present analysis illustrates how assets in tax-deferred accounts could be valued under various assumptions about accumulation patterns and withdrawal behavior. The range of potential results highlights the need for additional empirical research that provides information on the withdrawal patterns from both Individual Retirement Accounts and other tax-deferred accounts. This could be combined with information on the pattern of household marginal tax rates over the lifetime, which would make it possible to consider the substantive importance of higher marginal tax rates in retirement than over the course of the working life.

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