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DOES IT PAY, AT THE MARGIN, TO WORK AND SAVE? -- MEASURING EFFECTIVE  
MARGINAL TAXES ON AMERICANS' LABOR SUPPLY AND SAVING

Laurence J. Kotlikoff  
David Rapson

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Does It Pay, at the Margin, to Work and Save? -- Measuring Effective Marginal Taxes on  
Americans' Labor Supply and Saving

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**ABSTRACT**

Building on Gokhale, Kotlikoff, and Sluchynsky's (2002) study of Americans' incentives to work full or part time, this paper uses ESPlanner, a life-cycle financial planning program, in conjunction with detailed modeling of transfer programs to determine a) total marginal net tax rates on current labor supply, b) total net marginal tax rates on life-cycle labor supply, c) total net marginal tax rates on saving, and d) the tax-arbitrage opportunities available from contributing to retirement accounts. In seeking to provide the most comprehensive analysis to date of fiscal incentives, the paper incorporates federal and state personal income taxes, the FICA payroll tax, federal and state corporate income taxes, federal and state sales and excise taxes, Social Security benefits, Medicare benefits, Medicaid benefits, Food Stamps, welfare (TAFCD) benefits, and other transfer program benefits. The paper offers four main takeaways. First, thanks to the incredible complexity of the U.S. fiscal system, it's impossible for anyone to understand her incentive to work, save, or contribute to retirement accounts absent highly advanced computer technology and software. Second, the U.S. fiscal system provides most households with very strong reasons to limit their labor supply and saving. Third, the system offers very high-income young and middle aged households as well as most older households tremendous opportunities to arbitrage the tax system by contributing to retirement accounts. Fourth, the patterns by age and income of marginal net tax rates on earnings, marginal net tax rates on saving, and tax-arbitrage opportunities can be summarized with one word -- bizarre.

Laurence J. Kotlikoff  
Department of Economics  
Boston University  
270 Bay State Road  
Boston, MA 02215  
and NBER  
kotlikoff@bu.edu

David Rapson  
270 Bay State Rd  
Department of Economics  
Boston University  
Boston, MA 02215  
rapson@bu.edu

## I. Introduction

Households both want and need to understand the incentives they face at the margin for working and saving. Yet any American seeking to understand her total effective net marginal tax on either choice faces a daunting challenge. First, she needs to consider a host of taxes and transfers including federal personal income taxes, federal corporate income taxes, federal payroll taxes, federal excise taxes, state personal income taxes, state corporate income taxes, state sales taxes, state excise taxes, Social Security benefits, welfare benefits (TAFDC), Supplemental Security Income benefits (SSI), Medicaid benefits, Medicare benefit, food stamps, nutrition benefits (WIC), and energy assistance benefits (LIHEAP). Second, she needs to understand in very fine detail how each of these taxes and transfers is calculated. Third, she needs to understand the interactions of the different tax and transfer programs. Fourth, she needs to consider the fact that these taxes and transfers are paid and received over time. And fifth, she needs to have a method for translating all of these interconnected time-dated tax payments and benefit receipts into a simple and comprehensible statement of her marginal reward for working and saving.

This paper uses *ESPlanner*<sup>TM</sup> (Economic Security Planner<sup>TM</sup>) in conjunction with detailed modeling of non-Social Security transfer programs (*ESPlanner* incorporates Social Security) to generate total effective (net) marginal taxes on labor supply and saving for stylized American households. It also examines the tax arbitrage opportunity available to households from saving in either a) 401(k), traditional IRA, or other tax-deferred retirement accounts or b) Roth IRAs, Roth 401(k)s, or other Roth accounts.

The paper builds and draws on Gokhale, Kotlikoff, and Sluchynsky (2002) which

studied the incentives of Americans to work full or part time. That study showed that the overall tax/transfer system is progressive, particularly at the very low end of the earnings distribution, that all households face very high marginal taxes on the choice of working full or part time, that many low- and moderate-income households face substantially higher marginal taxes on working full or part time than do high-income households, and that many low-income households face confiscatory taxes on switching from full to part time work or from switching from full-time work by one spouse to full-time work by both spouses.

The value added of this paper relative to Gokhale, Kotlikoff, and Sluchynsky (2002) is that we consider the marginal net taxes on working extra hours in the current year, working extra hours throughout one's career, and increasing one's current saving. We also examine the tax arbitrage opportunity available to different households from contributing to a) 401(k), traditional IRA, or similar tax-deferred accounts or b) Roth IRAs, Roth 401(k)s, or other Roth accounts.

With the exception of certain very low-earning households, we find high to very high marginal net tax rates – ranging from 24 to 45 percent -- on current and life-cycle labor supply. These calculations are made at particular levels of pre-tax and pre-transfer earnings and are based on discrete increments in earnings. As we also demonstrate, marginal net tax rates on current and life-cycle labor supply are astronomical over much smaller increments in gross earnings at particular levels of earnings at which income and asset eligibility tests of particular tax and transfer programs become relevant.

The Congressional Budget Office's (2005) recent study of effective tax rates on labor supply reports much lower marginal rates, particularly for low-income households,









































































































































