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Income inequality and income taxation

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Abstract

This paper presents summary information on the before- and the after-tax income distribution in the United States between 1984 and 2004, along with data on effective tax rates on households in various quintiles of the income distribution. It describes two effects of tax policy on income distribution. The first involves the redistributive impact of taxes for a given pre-tax distribution of income. The second involves changes in the pre-tax distribution of income that are induced by taxpayers' behavioral responses to the tax system.

Keywords: Pre-tax income distribution; After-tax income distribution; Tax system

1. Introduction

The tax system is the public policy instrument that is most often considered when the objective is to alter the after-tax income distribution. The payroll and income tax systems are the most visible components of the tax structure, but excise taxes and the corporate income tax, which is ultimately borne by households, also affect the after-tax distribution. Many other policies, such as training and education programs, social insurance programs that affect retirement and labor market decisions, and immigration rules, also affect the after-tax income distribution. Their effects come through changes in the pre-tax distribution. The tax system has both a direct effect on the after-tax income distribution and an indirect effect because it may influence the pre-tax income distribution.

This short paper summarizes recent trends in before- and after-tax income inequality and explores the impact of the tax system on the after-tax distribution of income. The paper is divided into six parts. The first presents summary information on the pre- and post-tax distribution of income in 2004 and compares these distributions with their counterparts in several earlier years.

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It emphasizes that changes in the after-tax income distribution between two dates must be decomposed into two components: one due to changes in the pre-tax income distribution, and the other due to changes in the pattern of effective tax rates across income groups. The second section tracks changes in effective tax rates for different income groups over time, and explains how changes in the pre-tax income distribution affect the revenue yield of the federal income tax. The income tax code is progressive, which means that income tax revenues are increasing in the income share of high-income households. The growth in the last decade of the share of income received by high-income households has therefore contributed to rising federal revenues. Section 3 summarizes the changing concentration of federal tax payments across households, and notes the rising share of taxes paid by those at the top of the income distribution. The fourth section examines how the 2001 and 2003 federal income tax reforms affected the after-tax income distribution and the distribution of tax burdens in 2004. It suggests that tax reforms had a much smaller effect on the distribution of after-tax income in 2004, relative to the distribution in 2000, than the changes in the pre-tax income distribution over the same time period. Section 5 discusses the indirect link between the tax code and the after-tax income distribution, focusing in particular on the effect of changes in marginal income tax rates on the aggregate level and distribution of income before-tax. There is a brief conclusion.

2. Summary information on the pre- and after-tax income distributions

Studies of the distribution of income, and in particular the role of taxation in affecting income inequality, draw on data from several different sources. No data source is perfect. Piketty and Saez (2007) recent work is based on analysis of income tax returns. While tax returns have the important advantage of providing very accurate measures of tax payments by tax-paying households, not all households file returns. Non-filing is particularly prevalent among low-income households. Moreover, tax returns do not display all components of household income: they omit unrealized capital gains, tax-exempt interest and the value of various in-kind transfer payments. The income reported on individual income tax returns is also sensitive to the division of corporate earnings between dividends and retained earnings: dividends are reported on individual income tax returns, while retained earnings only appear to the extent that they generate realized capital gains.

The Current Population Survey (CPS) is another common data source for studying income distribution issues. It contains detailed information on labor earnings but limited detail on capital income. This makes the CPS particularly limited for analyzing the income share of those in the highest income strata. The CPS has been widely used in studies of the earnings gap between those in roughly the highest decile and the lowest decile of the income distribution. Autor, Katz, and Kearney (2007) summarize the findings of this literature and present new evidence on the changing pattern of inequality across households.

The present study relies on income distribution estimates that are produced by the Congressional Budget Office (CBO). They are based on data from the CPS, augmented with information from the national income accounts as well as both individual and corporate income tax filings. The CBO includes measures of transfer program receipt in its measure of household income, and it imputes the earnings of corporations as well as the taxes paid by firms to the owners of capital. By focusing on a broad measure of capital ownership, the earnings and taxes of firms are distributed more broadly than they would be if these aggregates were allocated according to the ownership of corporate capital. The CBO allocation is based on the general equilibrium assumption that investors in all types of capital experience lower returns as a result of the corporate income tax.