THE EFFECTS OF MARGINAL TAX RATES: EVIDENCE FROM THE INTERWAR ERA

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A central issue in tax policy concerns the incentive effects of marginal tax rates. Do high marginal rates reduce labor supply? Do they give rise to income shielding? Do marginal rates affect productive investment and entrepreneurial activity? The answers to these questions are crucial for understanding how tax changes are likely to affect tax revenues and economic growth, and thus for designing the tax system.

Many studies have looked at the possible effects of marginal rates using data from the postwar United States. One problem with using the postwar period as the testing ground is that the degree of variation in tax rates is relatively small. For example, the Reagan tax cuts, which are commonly acknowledged to be the most significant in the postwar era, only reduced top marginal rates on personal income by twenty percentage points. Because the identifying variation is relatively small, the effects of tax changes are often measured imprecisely and the studies are inconclusive.

The interwar United States is greatly underused as a laboratory for analyzing the effects of marginal tax rates. Marginal rates moved frequently and dramatically in the period between the two World Wars. To give a sense of the variation, the top marginal rate at the end of World War I was 77 percent; by 1929 it had been reduced to 24 percent; by 1936 it had been raised to 79 percent, and in 1940 it was 86.9 percent. Furthermore, tax changes in this period did not just move the tax schedule up and down uniformly. For example, some acts mainly changed rates at very high income levels, while others were across-the-board changes. As a result, there was both tremendous time-series and tremendous cross-section variation in rates.

Our research seeks to use this extreme variation to provide new estimates of the incentive effects of marginal rates. The initial part of the project will examine the historical record of interwar fiscal policy. This will allow us to better understand the nature of the changes in the tax system, the motivations behind them, contemporary policymakers' views about the incentive effects of marginal rates, and the connection between changes in taxes and changes in government spending. The examination will also give us the information we need to separate changes in marginal rates resulting from legislation from those resulting from a wide range of forces affecting the tax brackets that taxpayers were in, and to make sure that our analysis focuses on the tax code that was in effect at a given time, not on taxes that were applied retroactively.

We will then use the information provided by the tremendous policy-induced changes in marginal rates over the interwar period to examine the incentive effects of marginal rates in two ways. The first will be through time-series/cross-section regressions estimating the responsiveness of taxable income to marginal rates. The use of time-series/cross-section data will allow us to control for potential sources of different trends in income across groups of taxpayers, and more importantly, for aggregate shocks affecting taxpayers' overall taxable income. The enormous variation in the tax system should allow us to estimate the effects relatively precisely.

Second, and more speculatively, to look for longer-run effects of marginal rate changes, we will examine time-series evidence on the response of investment and entrepreneurship. For example, policymakers in the 1920s, especially President Coolidge and his Secretary of the Treasury Andrew Mellon, felt that a key effect of high marginal tax rates was to skew investment funds away from productive activities and toward tax-free state and municipal bonds. In their view, high tax rates distorted behavior in a way that could have reduced economic growth over a very long horizon. Such long-run effects would be difficult to find in our time-series/cross-section analysis, which looks at the response of reported income in the few years immediately following the tax change. We will test for these more long-run effects by examining the response of a number of high-frequency indicators of productive investment activity and business formation to overall changes in marginal rates stemming from policy actions.