The Impact of Taxes on Income Mobility

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The last four decades have witnessed a sustained increase in income and wealth inequality in the US, particularly at the top end of the distribution. This phenomenon has received substantial attention in academic research, policy debates as mentioned in President Obama's Economic Report, and popular opinion (e.g. protest movements such as Occupy Wall Street). However, there are other features of the income distribution beyond inequality that have welfare implications for the society and are relevant from a policy point of view. Overlooking some of these aspects may yield an incomplete or inaccurate picture of the effects of policies that address economic disparities.

This paper looks at the impact of fiscal policy on another aspect of the income distribution different to inequality. Particularly, I investigate the relationship between taxes and income mobility. While inequality reflects changes in the variance (and higher moments) of the income distribution, income mobility is the result of variations in the covariance of income between two periods of time. For any given level of income inequality, mobility reduces the association between the positions of origin and destination in the income distribution, increasing equality of opportunity. Therefore, to the extent that income mobility is a desirable feature of an economy, it is then relevant to consider how fiscal policy may affect it.

I analyse the impact of taxes on the probability of moving in the income distribution in the US using data from the Panel Study of Income Dynamics (PSID). I measure income mobility as changes in the relative position of households in the income distribution (i.e. changes in deciles or quintiles) across time. Income is defined as the Adjusted Gross Income (AGI) of the household. I assess the degree of mobility across three specifications for the income distribution that consider pre-tax income, post-tax income and post-tax and post-transfer income respectively. Then, I construct the federal individual tax liabilities faced by each household in the sample using the NBER TAXSIM simulator. With these data in hand, I estimate a linear probability model to understand how changes in the marginal tax rate affect the likelihood that households are mobile in the income distribution during two adjacent years. My identification approach accounts for endogeneity in the marginal rates by isolating the variation in taxes that is only due to legislative changes. I exploit this source of exogenous variation as an instrument in the regressions.

The results obtained suggest that higher marginal tax rates reduce income mobility. Particularly, I find that an increase of one percentage point in the marginal rate is associated with declines of about 0.5-1.3% in the probability of changing deciles of income. A decrease of 7 percentage points in the marginal tax rate (slightly smaller than a standard deviation of changes in the rates) can account for about a tenth of the average income mobility in a year. The effect of taxes on mobility arises in specifications that consider income distributions both before and after taxes and transfers, suggesting that the impact of taxation on mobility goes beyond redistribution effects. The economic mechanism that induces this impact seems to be related to the labour market incentives created by changes in the tax schedule. Additional results suggest that the effect of taxation on income mobility differs according to the level of human capital (measured as the education of the head of the household) and that it is particularly significant when considering mobility at the bottom of the distribution.

The evidence that taxes have a negative impact on income mobility has important implications for the design of policies that aim to address economic disparities. While some studies have pointed out to the importance of progressive taxation in addressing inequality, the results from this paper suggest that such changes may have a detrimental impact on income mobility. Therefore, the design of optimal fiscal policy should consider the overall impact on welfare of the trade-off that might arise when jointly addressing income inequality and mobility.