

Understanding benefit cliffs and marginal tax rates

TAKEAWAYS

A family hits a *benefit cliff* when a small income increase makes them ineligible for public benefits they had been receiving.

A family faces *marginal tax rates* when their increased income triggers an increase in tax liability or loss of public benefits.

Benefit cliffs and high marginal tax rates may work against government efforts to encourage work and economic self-sufficiency when increased earnings trigger reductions in benefits or increases in income taxes.

Those with similar earnings can experience very different marginal tax rates because many different factors affect how increases in family income might trigger a household's loss or reduction of benefits.

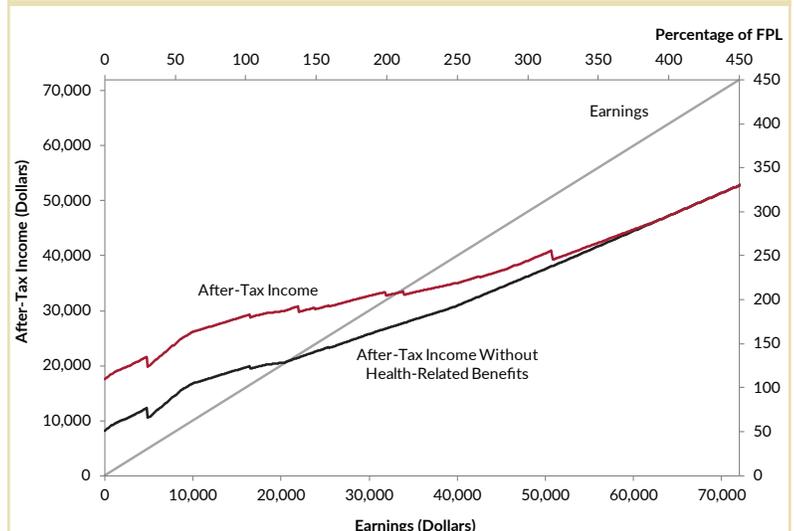
The U.S. safety net aims to encourage work and economic self-sufficiency by making work pay and promoting marriage, especially among couples with children.¹ Yet, some aspects of tax and benefit policies may unintentionally work against these goals. Understanding how interactions between earnings, family structure, government benefits, and income taxes work together is a challenge for policymakers.² The first step is to identify the ways in which earnings increases and family structure changes affect income taxes and benefit receipt. As earnings increase, the percentage of each additional dollar in income lost through benefit reduction or increased tax liability is called the *effective marginal tax rate* (hereafter, *marginal tax rate*). An income increase that triggers a loss of public benefits equal to or greater than the dollar value of the income increase (i.e., a marginal tax rate of 100 percent or higher) is called a *benefit cliff*. Simulated scenarios of changes in earnings and family structure suggest that current benefit structures and tax policy can result in benefit cliffs and high marginal tax rates for some program participants. However, a lack of empirical evidence has led to disagreement about the extent and impacts of these effects, how they affect behavior, and whether and how they should be addressed.³

Simulations suggest marginal tax rates are highest for families as they move out of poverty.

At low earnings levels, refundable tax credits and means-tested transfers result in higher total income after taxes. As earnings rise, however, benefits and tax credits phase out and tax liabilities increase. The specific programs a household participates in, family size and composition, and state and local policies influence a household's phase-out pattern. As a result, those with similar earnings can experience very different marginal tax rates, although such variation is smaller at higher incomes.⁴

Figure 1 depicts the results of a simulation by the Congressional Budget Office (CBO) focusing on a hypothetical single parent with one child living in Pennsylvania. The figure examines marginal tax rates as the parent's earnings increase in \$100 increments from zero to 450 percent of the federal poverty line. The simulation assumes that, when income-eligible, the family receives TANF, SNAP, Medicaid, and Children's Health Insurance Program benefits, as well as cost-sharing subsidies for health insurance and applicable state and federal tax provisions in 2016. In this scenario, after-tax (and transfer) income is higher than earnings at very low levels of earnings, but grows more

Figure 1. After-tax income exceeds earnings at very low levels of earnings, reflecting a low (or negative) marginal tax rate, but the marginal tax rate increases relatively quickly with earnings (as reflected by a flat slope) for a single parent with one child in 2016.



Note: See <https://www.cbo.gov/sites/default/files/114th-congress-2015-2016/reports/50923-marginaltaxrates.pdf>, p. 3.

Source: Congressional Budget Office.

slowly than earnings—reflecting a high marginal tax rate. Indeed, the marginal tax rate for the family at an income between 115 percent and 126 percent of the federal poverty line would average 75 percent.⁵

Researchers at the U.S. Department of Health and Human Services (HHS) used a microsimulation model to estimate marginal tax rates associated with an earnings increase for families at various income levels using a typical bundle of benefits received and subtracting childcare costs, payroll taxes, and income taxes.⁶ Figure 2 presents median marginal tax rates associated with a \$2,000 gain in earnings for families with and without children. Notably, families with incomes below about 35 percent of the poverty line experience a negative marginal tax rate, such that they would retain the entire \$2,000 in increased earnings and would experience a net increase of more than \$2,000 in total income. However, the marginal tax rate for families with children with incomes between about 35 and 150 percent of poverty increases sharply with the \$2,000 earnings gain, topping out at a 51 percent marginal tax rate between 100 and 125 percent of poverty. The marginal tax rate remains high for families up to 200 percent of poverty until coming down to just over 20 percent thereafter. By contrast, there is much less variation in marginal tax rates among families without children.⁷

However, some researchers argue that microsimulations cannot produce generalizable findings on which to base policy changes. They note the fluid and complex nature of low-income families' finances and the wide variation in program eligibility and take-up and benefit levels across states.⁸

Research is mixed on whether marginal tax rates substantially change behavior.

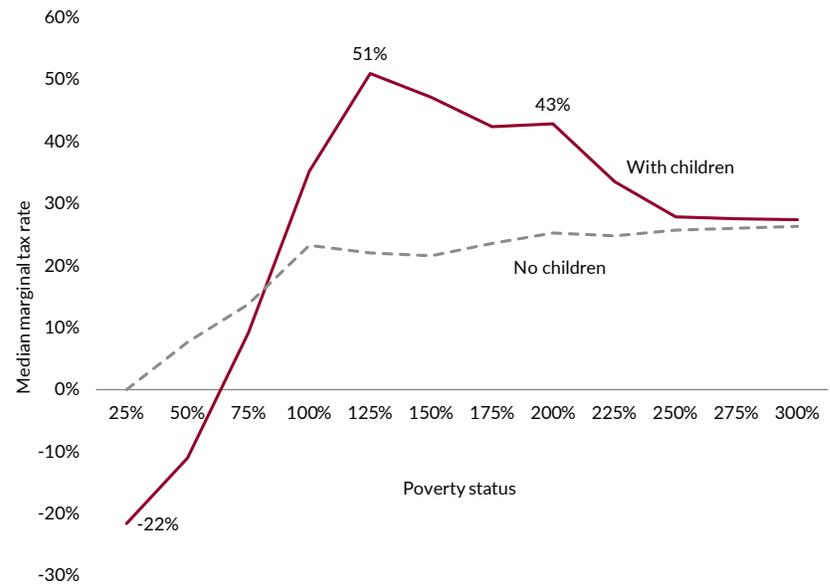
Hypothetically, increases in tax credits resulting from earnings increases (called a *negative marginal tax rate*) should increase work effort, marriage rates, and upward mobility, whereas high positive marginal tax rates should do the opposite. However, for many reasons, empirical estimates of such effects have produced mixed evidence. For example, some studies argue against efforts to reduce marginal tax rates because they find the effects on low-income families are, on average, negligible.⁹ Other studies argue that marginal tax rates and benefit cliffs negate the earnings increases of many low-income families and should therefore be addressed.¹⁰ As mentioned earlier, public benefits can vary dramatically by individual circumstance, and different programs use their own income limits to determine eligibility, so it is often difficult for families to anticipate marginal tax rates (and benefit cliffs).¹¹ Further, some researchers note that any negative effects on hours worked are moderated because most people cannot easily choose how many hours to work.¹²

Policy changes can reduce marginal tax rates, but there are trade-offs.

Avoiding high marginal tax rates and benefit cliffs may be an important policy goal even if high marginal tax rates and benefit cliffs, themselves, do not produce large behavioral responses. For example, lowering marginal tax rates and smoothing benefit cliffs can help ensure that low-income families see greater resources from working more, a potentially important issue of fairness. Researchers and policymakers have suggested a range of options, from making tax credits and benefits universal, to eliminating credits and benefits and replacing them with wage subsidies. More incremental approaches aim to lessen the blow of marginal tax rates and benefit cliffs, such as holding benefits constant for a transition period, or better coordinating phase-in and phase-out rates across programs.¹³ While there is no clear consensus on the best approach, there is agreement that any policy lever would have trade-offs in terms of benefit eligibility and levels, caseload sizes, and associated public costs.

For sources and more information, go to <https://www.irp.wisc.edu/resource/understanding-benefit-cliffs-and-marginal-tax-rates/>.

Figure 2. Marginal tax rates after a \$2,000 annual earnings increase are highest for households with children whose earnings are between 100 and 200% of poverty.



Source: U.S. Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation.

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ENDNOTES

¹See, for example, J. L. Romich, J. Simmelink, and S. D. Holt, “When Working Harder Does Not Pay: Low-Income Working Families, Tax Liabilities, and Benefit Reductions,” *Families in Society: The Journal of Contemporary Social Services* 88, No. 3 (2007): 418–426.

²See the U.S. Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation, Marginal Tax Rate Series, which comprises five briefs: “Marginal Tax Rates: A Quick Overview”; “What Happens When People Increase Their Earnings? Effective Marginal Tax Rates for Low-Income Households”; “Effective Marginal Tax Rates for Households with Child Care Subsidies: What Happens Following an Earnings Increase?”; “What Happens When TANF Recipients Increase Their Earnings? Effective Marginal Tax Rates for Households with TANF Income”; and “Estimating Marginal Tax Rates Using a Microsimulation Model: Technical Appendix,” available at <https://aspe.hhs.gov/marginal-tax-rate-series>.

³See, for example, O. Cass, “An Antipoverty Program Even Conservatives Can Love,” *Politico*, November 20, 2018, available at <https://www.politico.com/agenda/story/2018/11/20/wage-subsidies-low-income-americans-000788>; see also, S. Parrott and R. Greenstein, “Policymakers Often Overstate Marginal Tax Rates for Lower-Income Workers and Gloss Over Tough Trade-Offs in Reducing Them,” report, Washington, D.C.: Center on Budget and Policy Priorities, available at <https://www.cbpp.org/research/policymakers-often-overstate-marginal-tax-rates-for-lower-income-workers-and-gloss-over>.

⁴Congressional Budget Office, *Marginal Federal Tax Rates on Labor Income: 1962 to 2028*, January 2019, available at <https://www.cbo.gov/system/files/2019-01/54911-MTRchartbook.pdf>.

⁵The family’s marginal tax rate would range from 28 to 61 percent once its income exceeded about 200 percent of the poverty line.

⁶TRIM3 was developed by analysts at the U.S. Department of Health and Human Services (HHS), Office of the Assistant Secretary for Planning and Evaluation (ASPE), and Urban Institute.

⁷For such families, a \$2,000 increase in earnings is associated with a low marginal tax rate of about 0 percent when income was close to zero. Although the marginal tax rate rises with income, topping out at about 26 percent, it is relatively constant for families between about 75 and 300 percent of the poverty line.

⁸O. Cass, “An Antipoverty Program Even Conservatives Can Love.”

⁹Parrott and Greenstein, in “Policymakers Often Overstate Marginal Tax Rates for Lower-Income Workers and Gloss over Tough Trade-Offs in Reducing Them,” suggest that some policymakers overstate the magnitude of marginal tax rates and their effect on employment and fail to consider negative trade-offs involved with attempts to reduce these rates. They argue against reducing marginal tax rates, citing research showing that social welfare benefits lift more than 40 million people out of poverty—even after taking into account the effects of marginal tax rates on workers’ employment.

¹⁰Romich, Simmelink, and Holt in “When Working Harder Does Not Pay: Low-Income Working Families, Tax Liabilities, and Benefit Reductions,” suggest that in many circumstances the combined effect of marginal tax rates and benefit reductions result in a net loss, or at least no net gain, of disposable income. Specifically, they find that policy reforms aiming to support employment (e.g., Earned Income Tax Credit, childcare subsidies) increase the income and well-being of low-income working households but end up, under some conditions, in effect, being taxed away by reductions in benefits. For some households, receiving a raise can trigger reductions in several benefits, as well as higher payroll taxes and increased income tax liabilities.

¹¹S. Macartney and N. Chien, “Marginal Tax Rates: A Quick Overview,” Brief #1 in ASPE Marginal Tax Rate Series, U.S. Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation, March 2019, available at <https://aspe.hhs.gov/system/files/aspe-files/260661/brief1-intromtrs.pdf>.

¹²Moreover, it appears that different subgroups of the population may respond differentially. For example, increases in the refundable Earned Income Tax Credit are associated with greater employment among women but not necessarily men. In addition, there is disagreement regarding the proportion of low-income families that are subject to high marginal tax rates and benefits cliffs. See, for example, A. Briggs, “All Tax Increases Are Not Created Equal,” Real Clear Markets, Washington, D.C.: American Enterprise Institute, November 14, 2012, available at https://www.realclearmarkets.com/articles/2012/11/14/all_tax_increases_are_not_created_equal_99988.html; Steuerle, “Marginal Tax Rates and 21st Century Welfare Reform.”

¹³Some mid-range policies include holding benefits constant for a six- or twelve-month period of transition after income increases (during which the family is notified of the impending change), thereby giving the family more time to plan for the benefit loss. Others include better coordinating phase-in and phase-out rates across programs, increasing work requirements in certain benefit programs, and allowing states flexibility to design programs that address these cliffs. Romich, Simmelink, and Holt, “When Working Harder Does Not Pay”; O. Cass, “An Antipoverty Program Even Conservatives Can Love”; A. Rachidi, “Work! (But Not Too Much),” AEI Ideas public policy blog, July 2, 2015, available at <http://www.aei.org/publication/work-but-not-too-much/>.