Marginal Tax Rates: A Quick Overview

Brief #1 in ASPE Marginal Tax Rate Series **March 2019**

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What's the Problem?

Program benefits for needy families typically are designed to decline as earnings increase and families become more self-sufficient. As income increases and benefits decrease, some families are left with fewer resources than before. The risk of being worse-off after an earnings increase is potentially a disincentive to pursue extra work hours or a raise. This presents a challenge for how program benefits can best be designed to support families and incentivize work.

What Are Marginal Tax Rates?

An **effective marginal tax rate** (hereafter, 'marginal tax rate') specifies the proportion of new earnings owed in taxes or needed to offset reductions in program benefits and quantifies the share of new earnings not available to families. For example, a struggling family earns an additional $400 during the year which prompts a reduction in child care and WIC[i] benefits. Subsequently the family pays more out-of-pocket for child care and food and does not realize the full value of their additional earnings. Hypothetically the family may retain $240 from the $400 to add to household resources, a marginal tax rate of 40 percent as follows:

Additional $400 of earnings

marginal tax rate = $400 - $100 of child care subsidy - $40 of WIC - $20 higher income tax
marginal tax rate = $160 in reduced benefits and taxes owed ($160/$400 = .40)
marginal tax rate = 40% of additional earnings

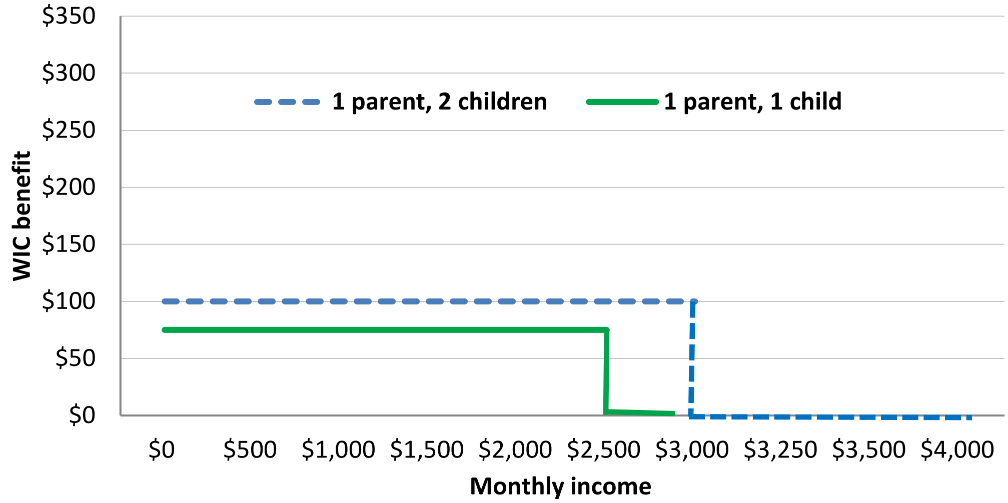
Marginal tax rates may have the effect of dampening work efforts and the effect may be stronger when a family participates in more than one benefit program. In the face of anxiety over the real or perceived loss of resources, families may manage the risk of losing benefits by declining pay raises or additional work hours. Benefit reductions should be foreseeable and comprehensible, allowing families and caseworkers to anticipate and then plan for self-sufficiency.

A family's marginal tax rate varies according to the family's household composition and income in relation to a particular program's income eligibility threshold and phase-out schedule.

What Are Program Cliff Effects?

A program "cliff effect" refers to a marginal tax rate of 100 percent or more. This results from a loss of benefits that equals or exceeds the earnings gain. That is, 100 percent or more of new earnings are eclipsed by benefit losses. The cliff effect arises when income increases by a modest amount and families lose eligibility for programs such as child care vouchers, housing assistance, or WIC. The cliff effect can be seen in graphs of benefit levels as an abrupt drop in resources. In Figure 1, earning $2,500 per month or more renders families ineligible for WIC, resulting in a drop in benefits.

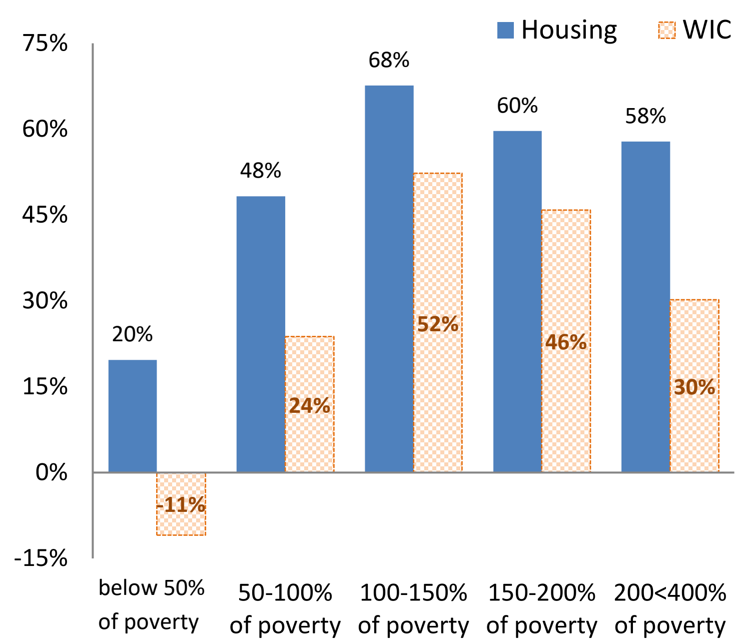
Figure 1. WIC Benefit Cliff in Northeast Region



Why Are Marginal Tax Rates Hard for Families to Anticipate?

Different benefit programs target slightly different populations and use their own income limits to determine eligibility. SNAP benefits, for example, require family income to be below 130 percent of the federal poverty guidelines while housing assistance is generally restricted to the neediest families below poverty. Programs determine benefit levels independently of other programs, and with uncoordinated benefit schedules, families can lose benefits from more than one program at the same time, resulting in high marginal tax rates. Just as assistance programs target low-income families broadly or more narrowly, programs structure benefits differently as earnings increase to either reduce benefits or reward work.

Figure 2. Marginal tax rates for families with housing assistance or WIC, after $2,000 in annual increased earnings ($40 per week)



The analysis relies on TRIM3 (Transfer Income Model) microsimulation model with data from the Current Population Survey 2015. Analysis units (households: n = 63,493) with a householder or spouse ages 18 to 64 without disabilities.

Figure 2 illustrates the difficulty of predicting average marginal tax rates at similar levels of income. For families with WIC below 50 percent of poverty, the average marginal tax rate is negative (-11 percent). This is not necessarily due to the structure of WIC, but to other benefits these families may receive. At the same income level, families with housing benefits have a marginal tax rate of 20 percent. When income is between 50 and 100 percent of poverty, the marginal tax rate of families with a housing benefit is more than double at 48 percent. The highest rates are observed when income is just above poverty (52 percent for WIC benefits and 68 percent for housing assistance).

What Are Negative Marginal Tax Rates?

Any marginal tax rate less than zero indicates resources are increased by an amount *greater than* new earnings alone. A negative rate incentivizes work and boosts earnings. A good example is the federal or state Earned Income Tax Credit (EITC) which provides low-income taxpayers with refundable credits that *increase with income*. A marginal tax rate of -25 percent means $400 in earnings becomes $500.

What Can We Do About Marginal Tax Rates?

Marginal tax rates can be a problem for low-income families trying to reach self-sufficiency. Several approaches are available to policymakers to ease the burden of marginal tax rates and encourage, rather than discourage, additional work and earnings. For example, program offices could adjust program phase-out schedules to make benefit reductions more gradual. Alternatively, program offices could extend recertification periods, or when earnings increase, allow a grace period before eligibility is reassessed.

State and federal policymakers could coordinate across programs so that families phase out of programs sequentially and not simultaneously. To accomplish this, benefit reductions could be averaged across programs or staggered. Strategies that lower marginal tax rates or make them more predictable and transparent would assist families and caseworkers, reduce the risk of accepting additional employment, and likely boost work efforts.

Our Approach to Estimating Marginal Tax Rates: Real Families

A common method of studying marginal tax rates in the literature is the *hypothetical family unit* which uses abstract family types with specific characteristics (e.g., a single parent household with two children and $20,000 in earnings living in Colorado). A 2012 study by the Urban Institute[2] provides a good example of this approach which typically assumes families receive <u>all program benefits</u> for which they are eligible. For conceptual research the approach is quite useful but it does not account for widely different levels of program participation. For example, in 2016 only six out of ten eligible adults participated in SSI and fewer than one out of four eligible families participated in TANF (24.9 percent).[3]

To extend the research further, our method is grounded in household microdata which allowed us to estimate the actual number of households with high marginal tax rates and particular family characteristics. This method is useful for understanding the range of family characteristics associated with high marginal tax rates and cliff effects and which programs are involved. The output from this work can help policymakers prioritize their program efforts for greatest impact.

For topics in our marginal tax rate series, see <https://aspe.hhs.gov/marginal-tax-rate-series>.

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[1]WIC refers to the Special Supplemental Nutrition Program for Women, Infants, and Children
[2]Urban Institute, see Maag, E., Steuerle, C.E., Chakravarti, R., and Quakenbush, C. (2012). "How Marginal Tax Rates Affect Families at Various Levels of Poverty." National Tax Journal, December, 65 (4): 759-782. https://www.ntanet.org/NTJ/65/4/ntj-v65n04p759-82-how-marginal-tax-rates.pdf?v=%CE%B1&r=03589733876287937
The approach was also used by Mok, S. (2016). "Effective Marginal Tax Rates for Low- and Moderate-Income Workers in 2016." Congressional Budget Office. https://www.cbo.gov/system/files?file=2018-06/54093-taxrates.pdf
[3]Welfare Indicators and Risk Factors, 18th Report to Congress. Forthcoming. 2019. HHS ASPE.