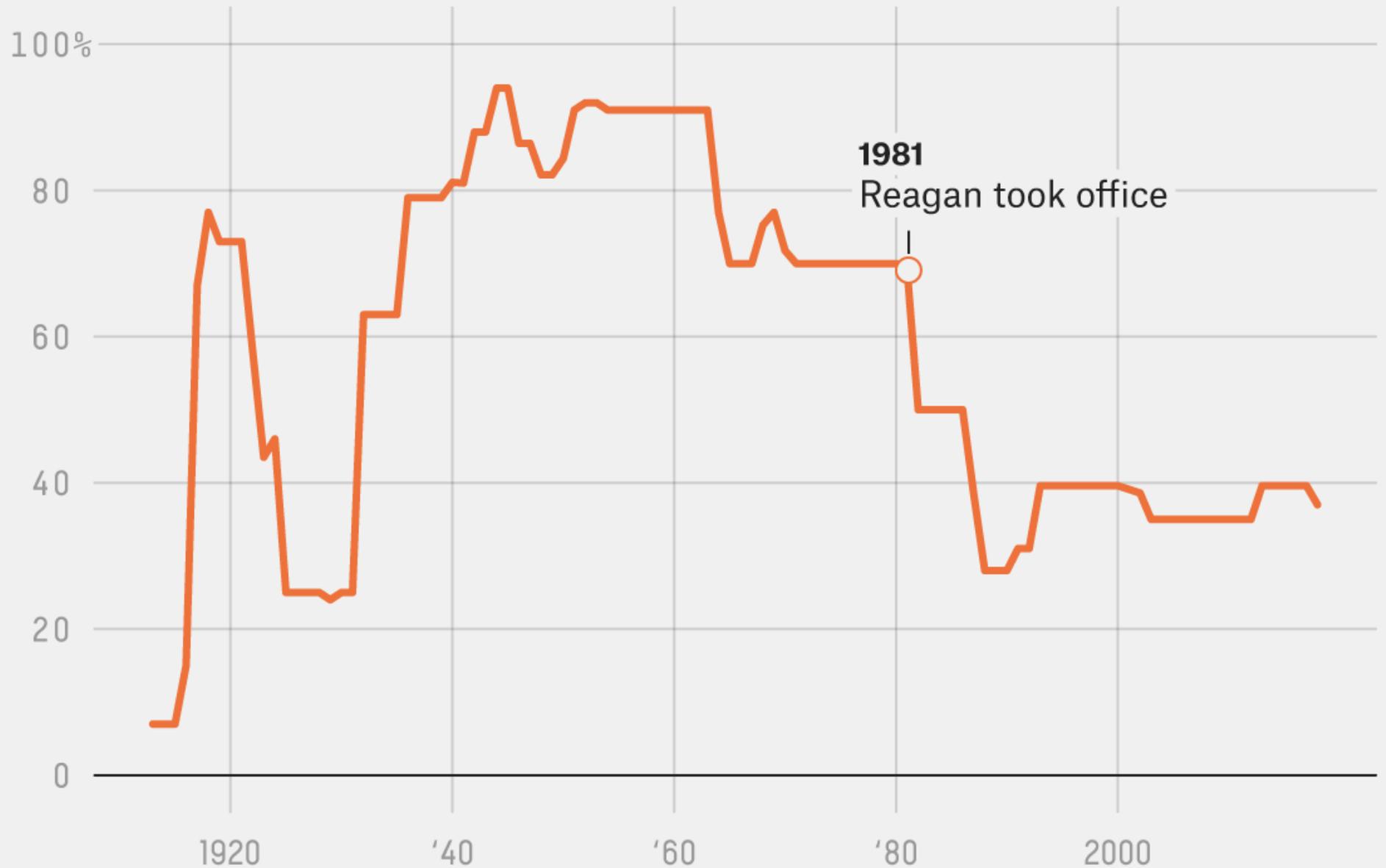


Historically, a 70 percent marginal tax rate is not unusual

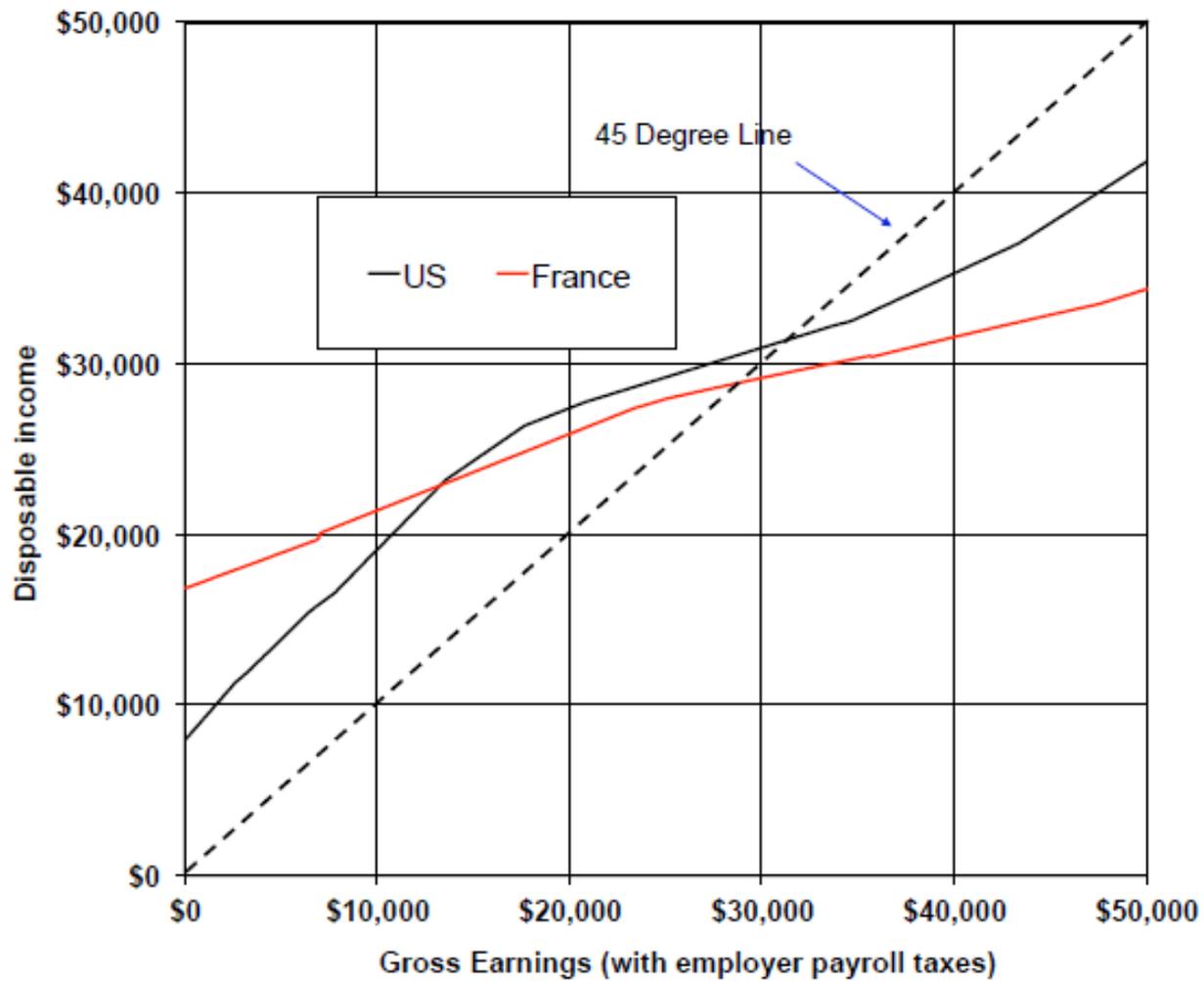
The top marginal income tax rates from 1913 to 2018



US Tax/Transfer System, single parent with 2 children, 2009



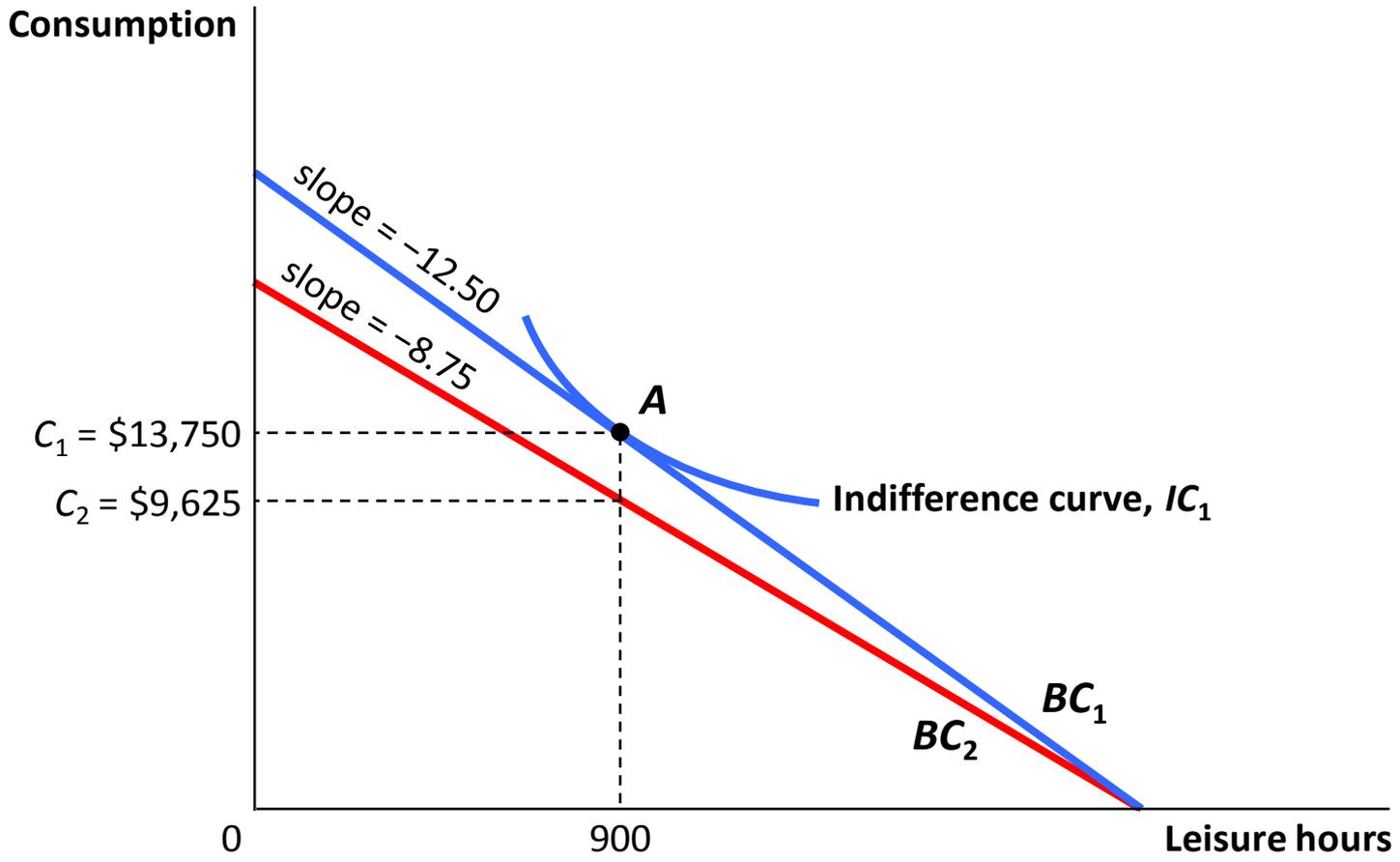
Source: Computations made by Emmanuel Saez using tax and transfer system parameters



Source: Piketty, Thomas, and Emmanuel Saez (2012)

21.1

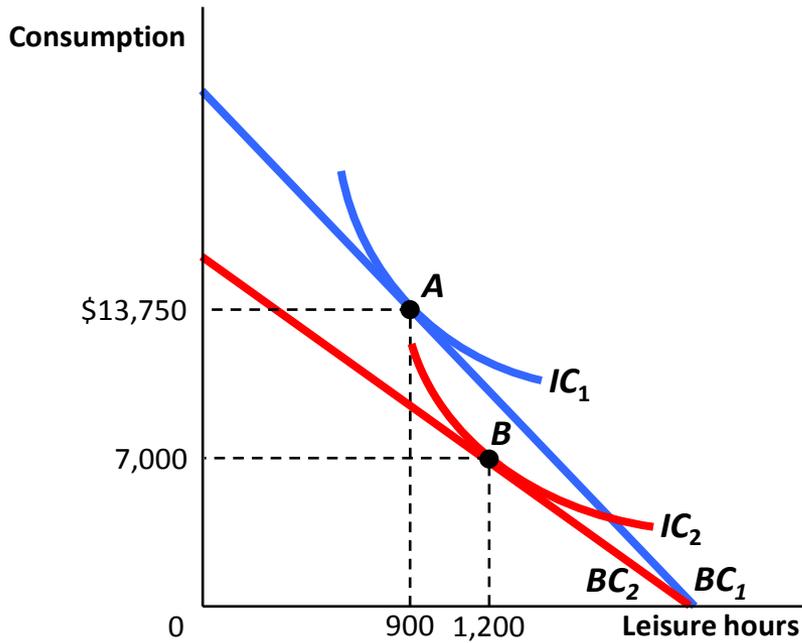
Basic Theory



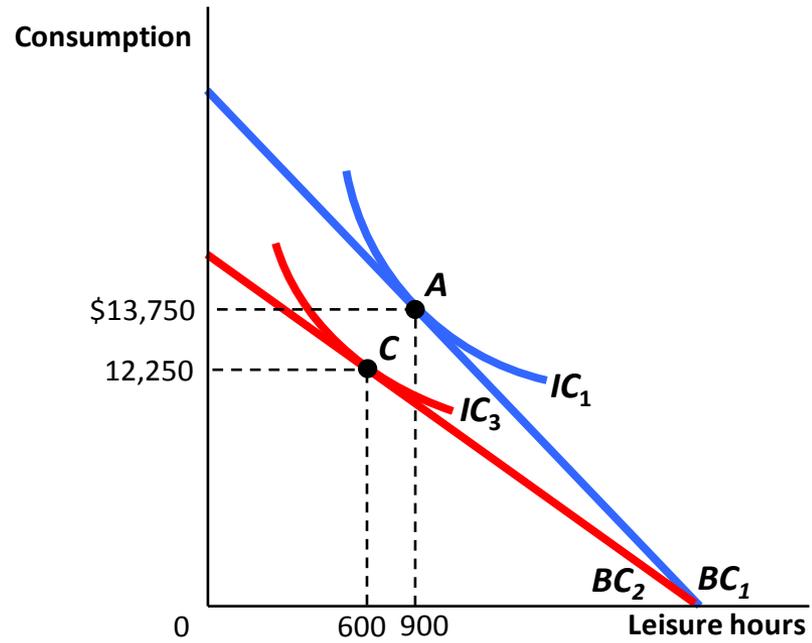
21.1

Substitution versus Income Effect

(a) Substitution effect is larger

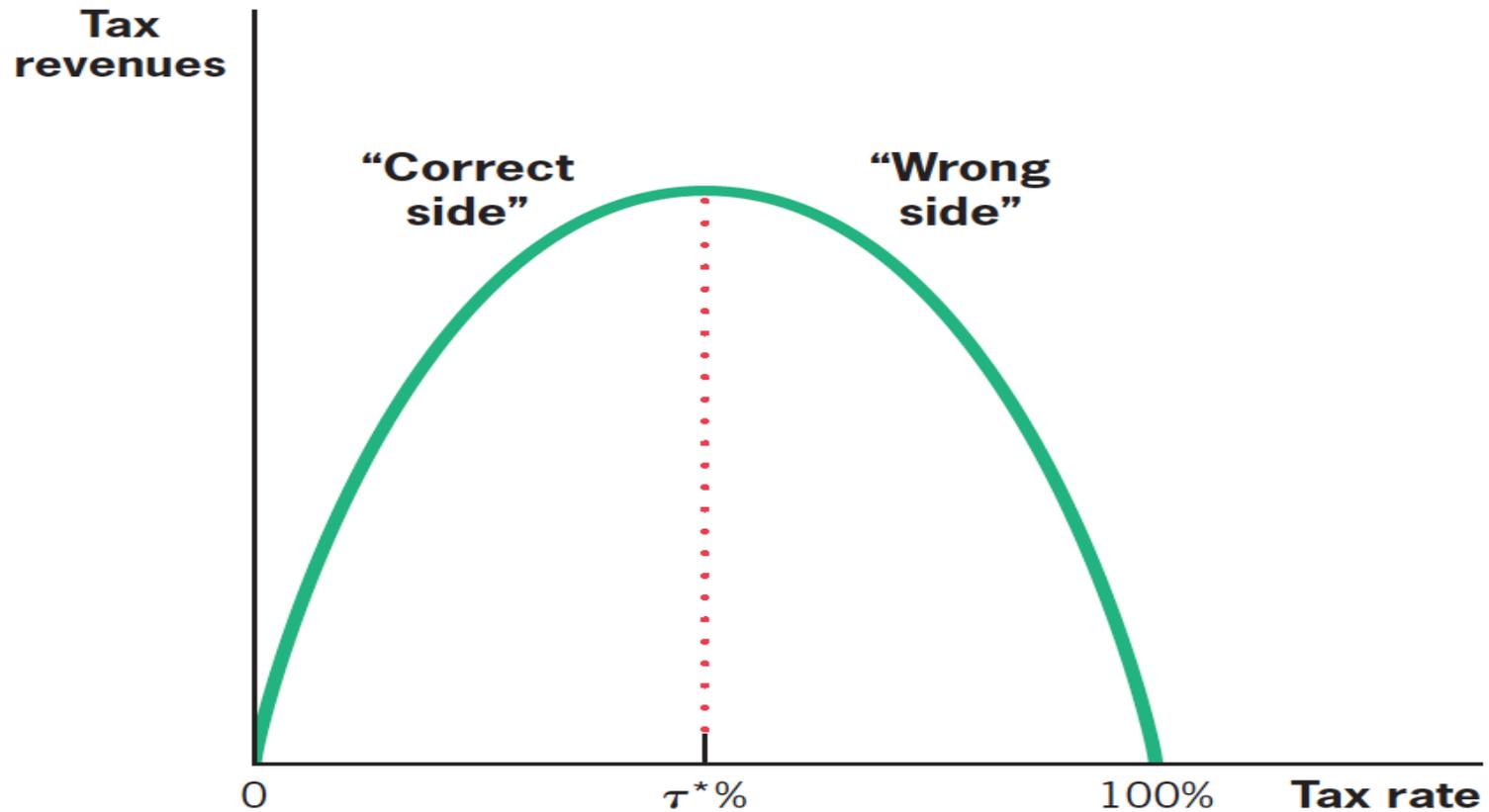


(b) Income effect is larger

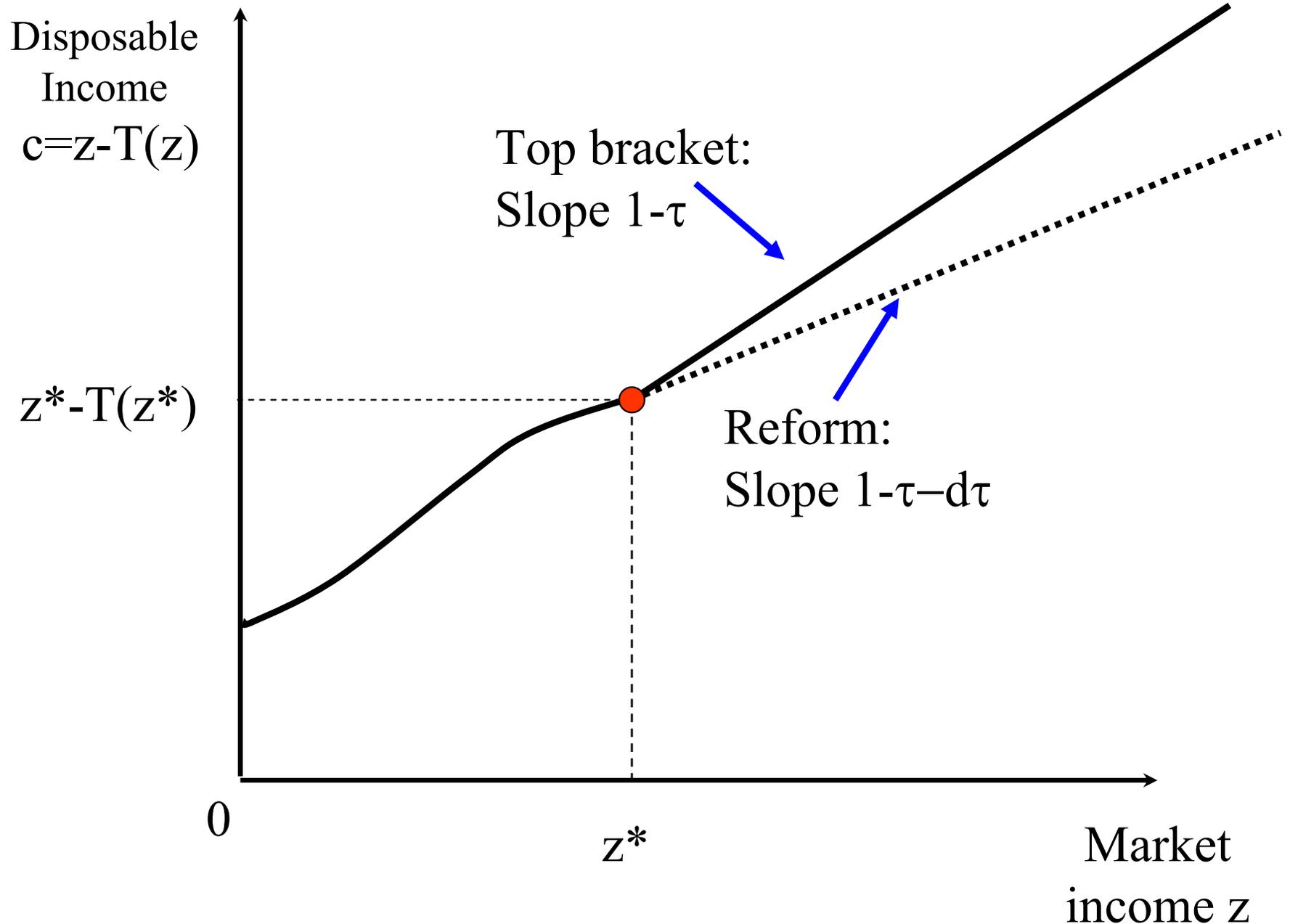


20.3

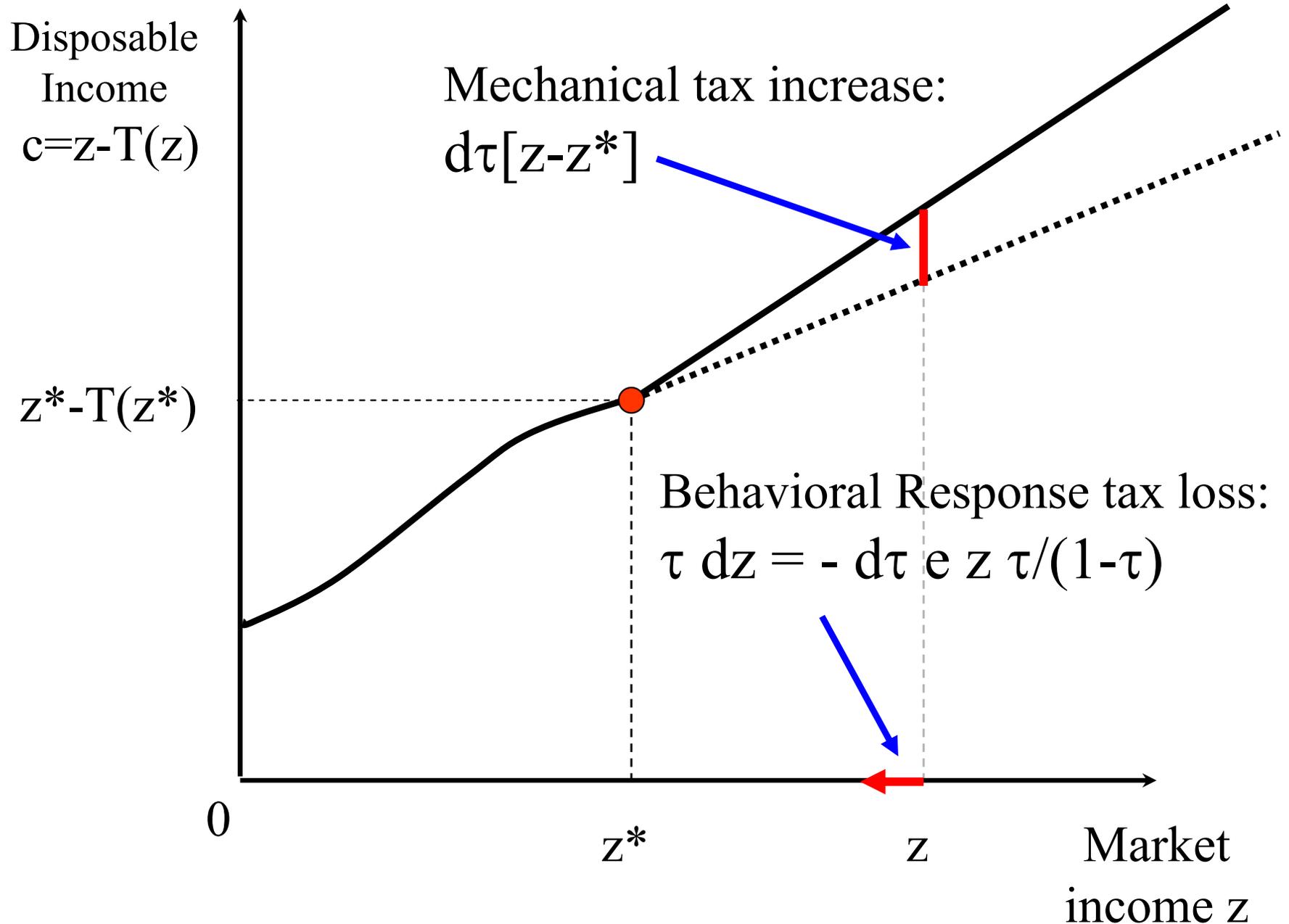
The Laffer Curve

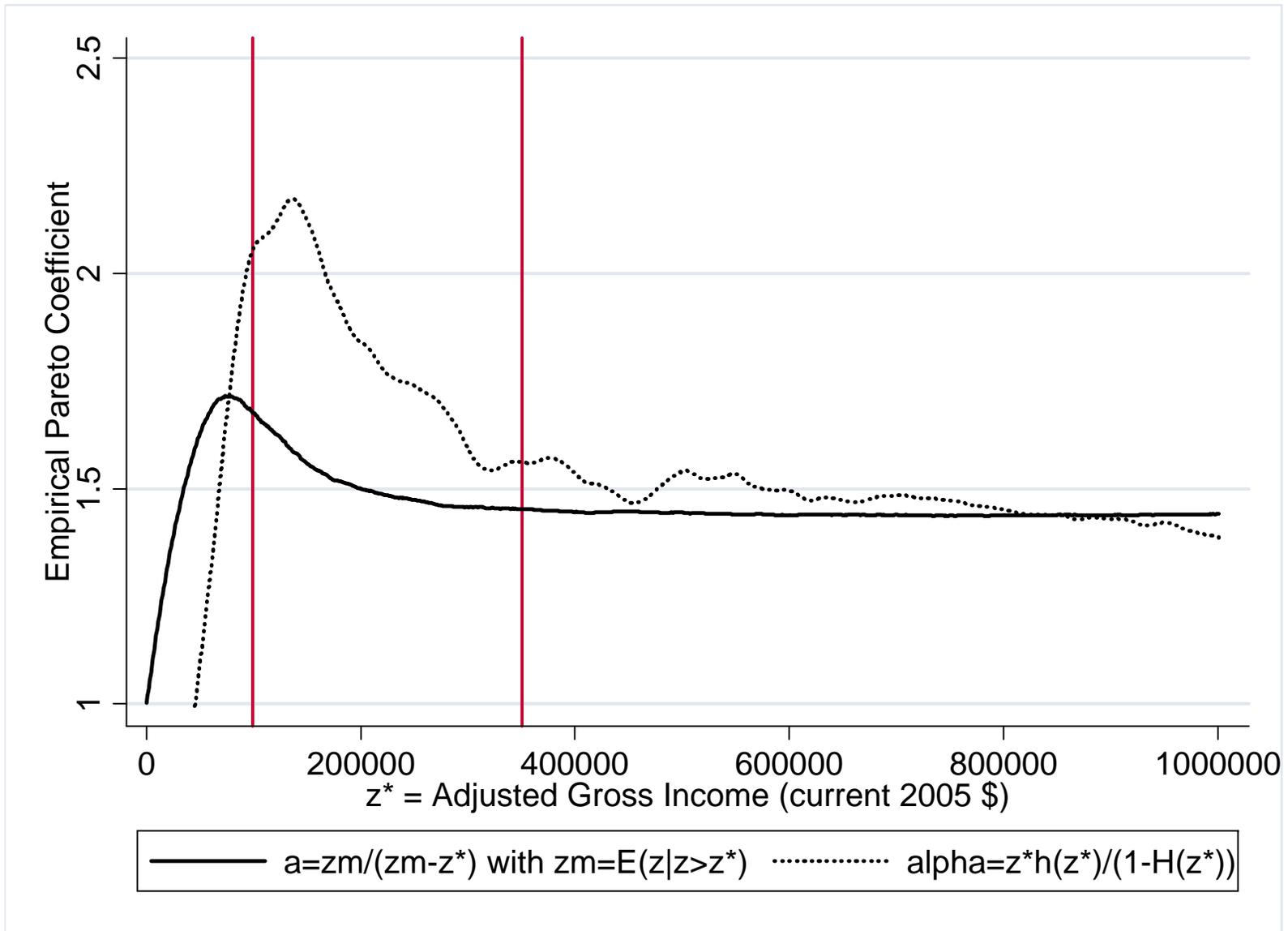


Optimal Top Income Tax Rate (Mirrlees '71 model)



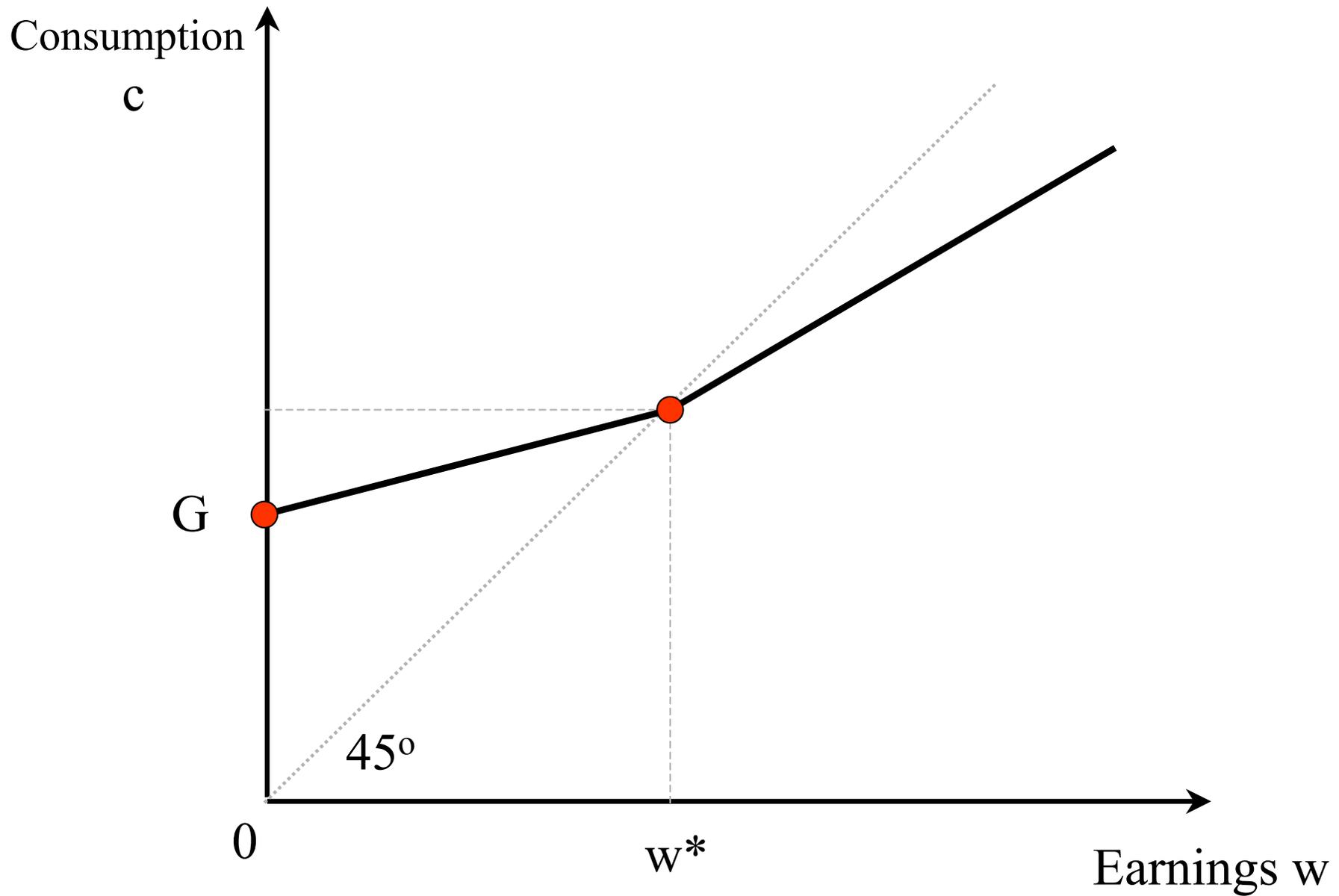
Optimal Top Income Tax Rate (Mirrlees '71 model)





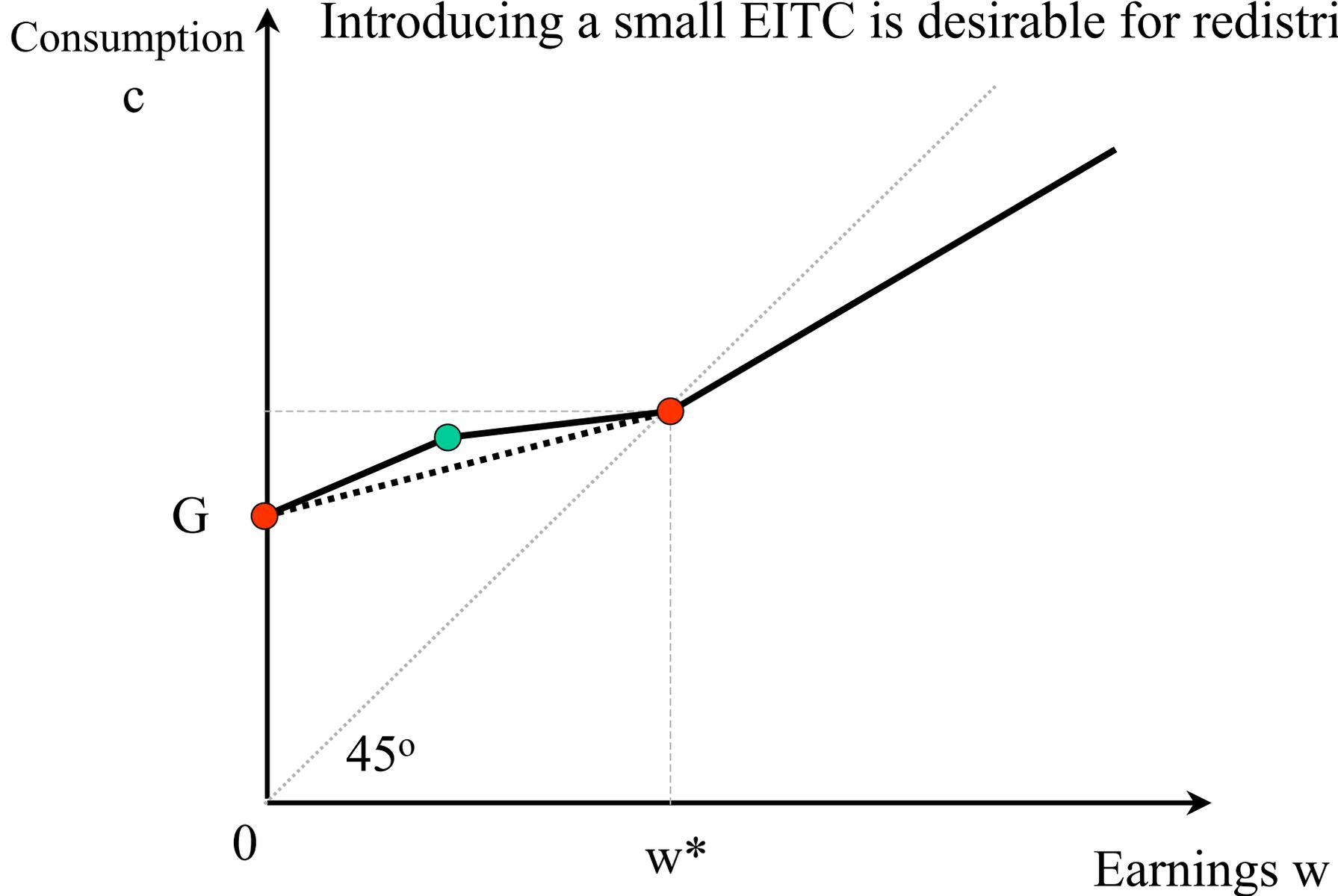
Source: Diamond and Saez JEP'11

Starting from a Means-Tested Program



Starting from a Means-Tested Program

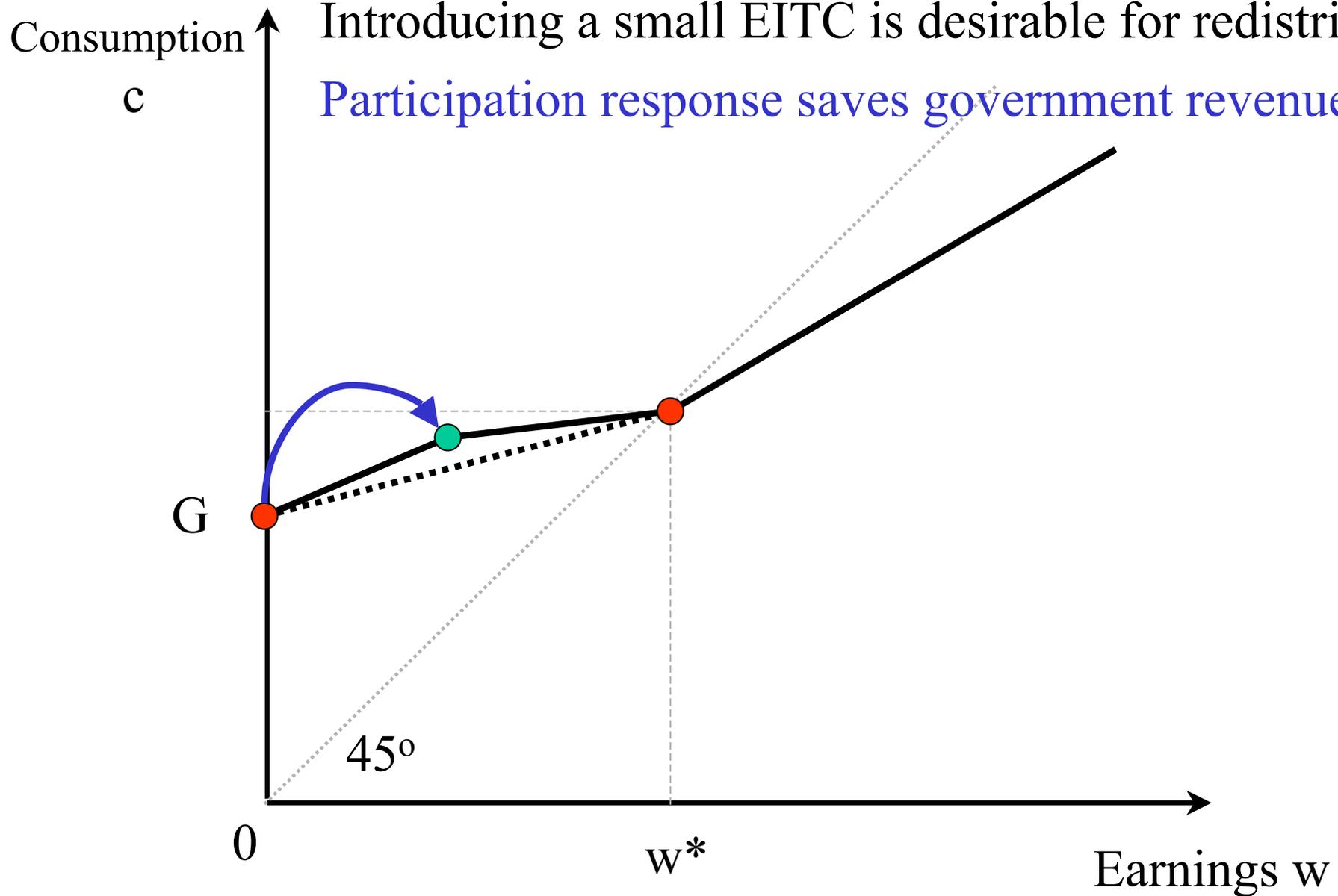
Introducing a small EITC is desirable for redistribution



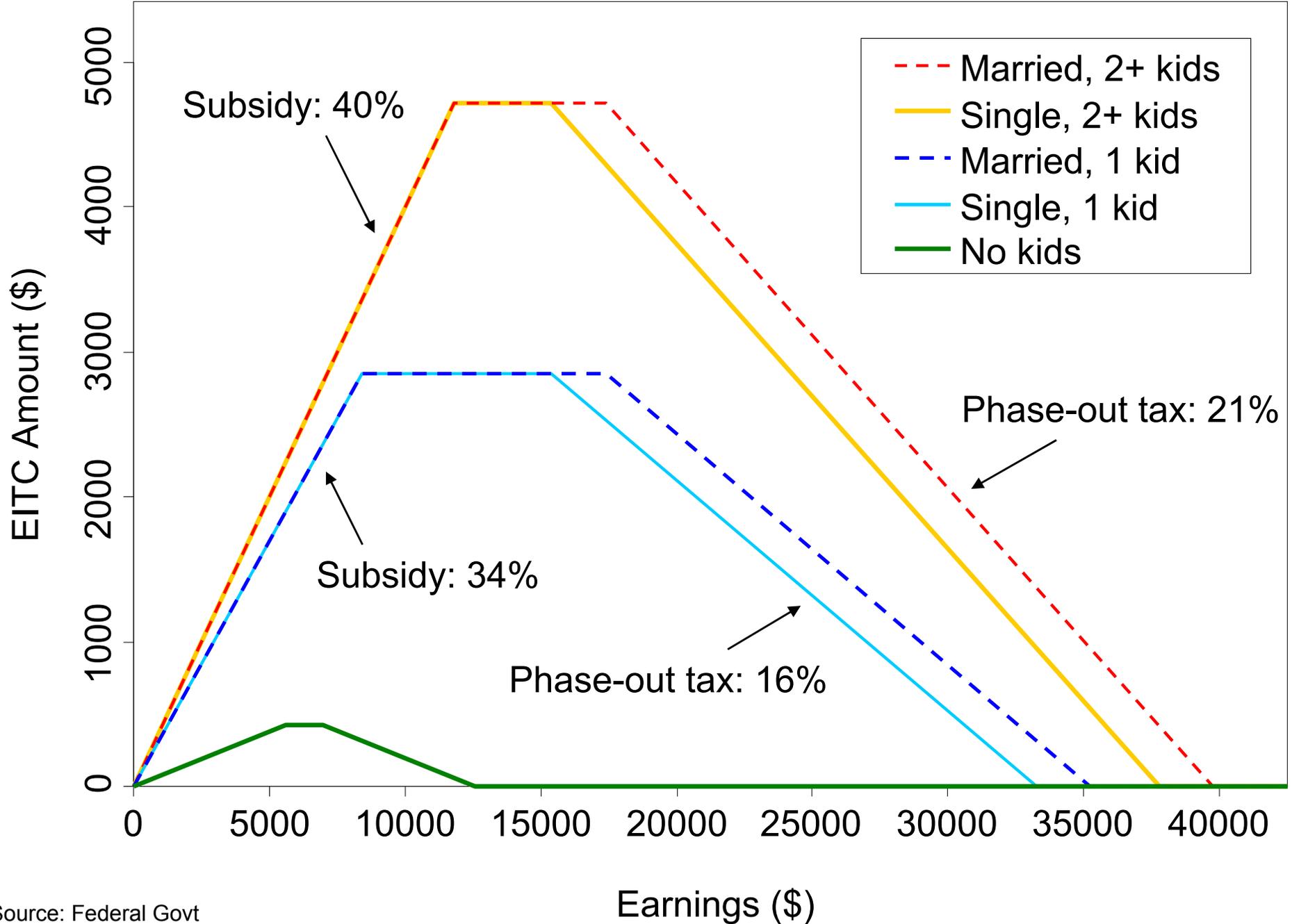
Starting from a Means-Tested Program

Introducing a small EITC is desirable for redistribution

Participation response saves government revenue

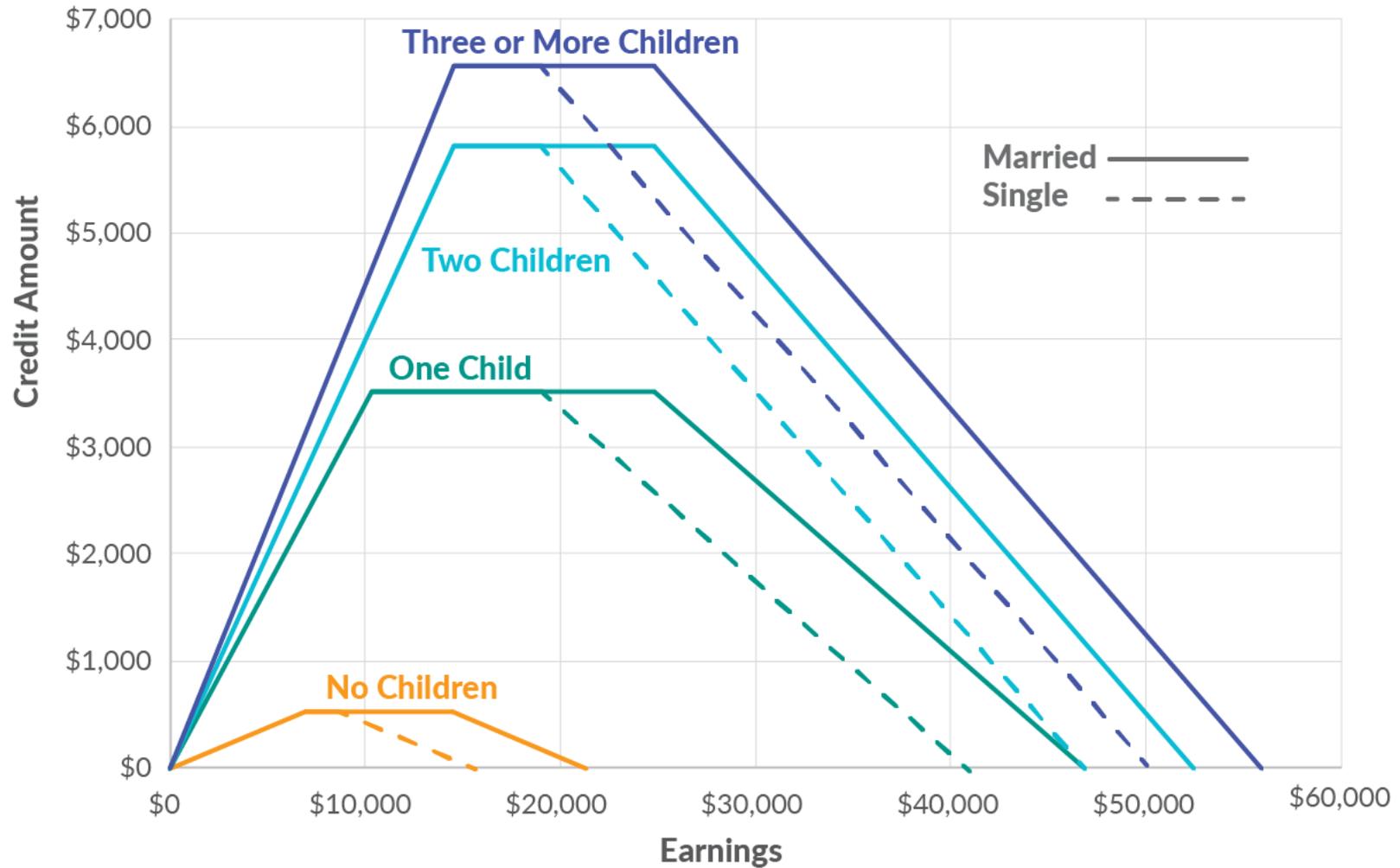


EITC Amount as a Function of Earnings



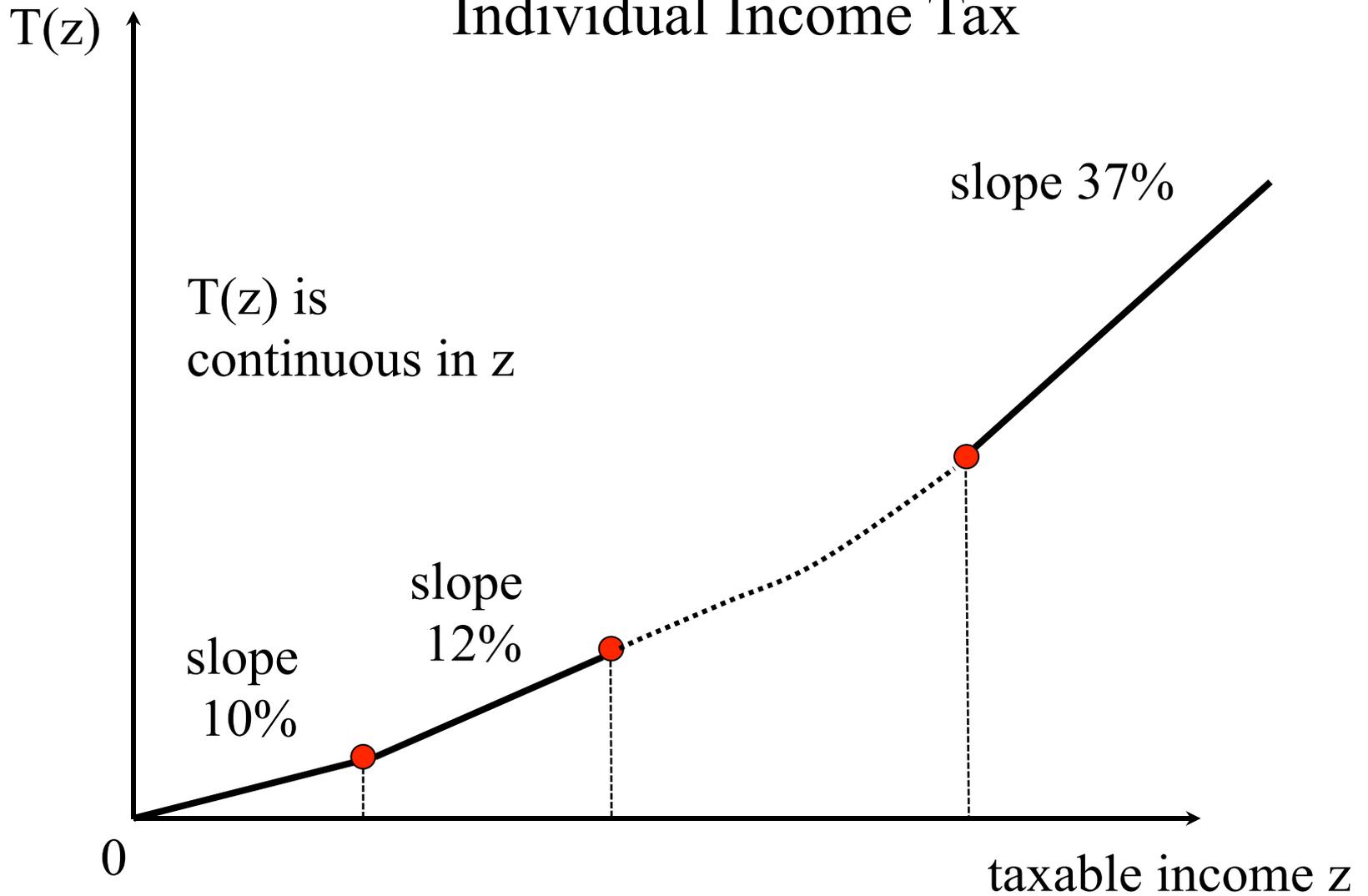
The Phase-In and Phaseout of the EITC

Credit Amount by Marital Status and Number of Children

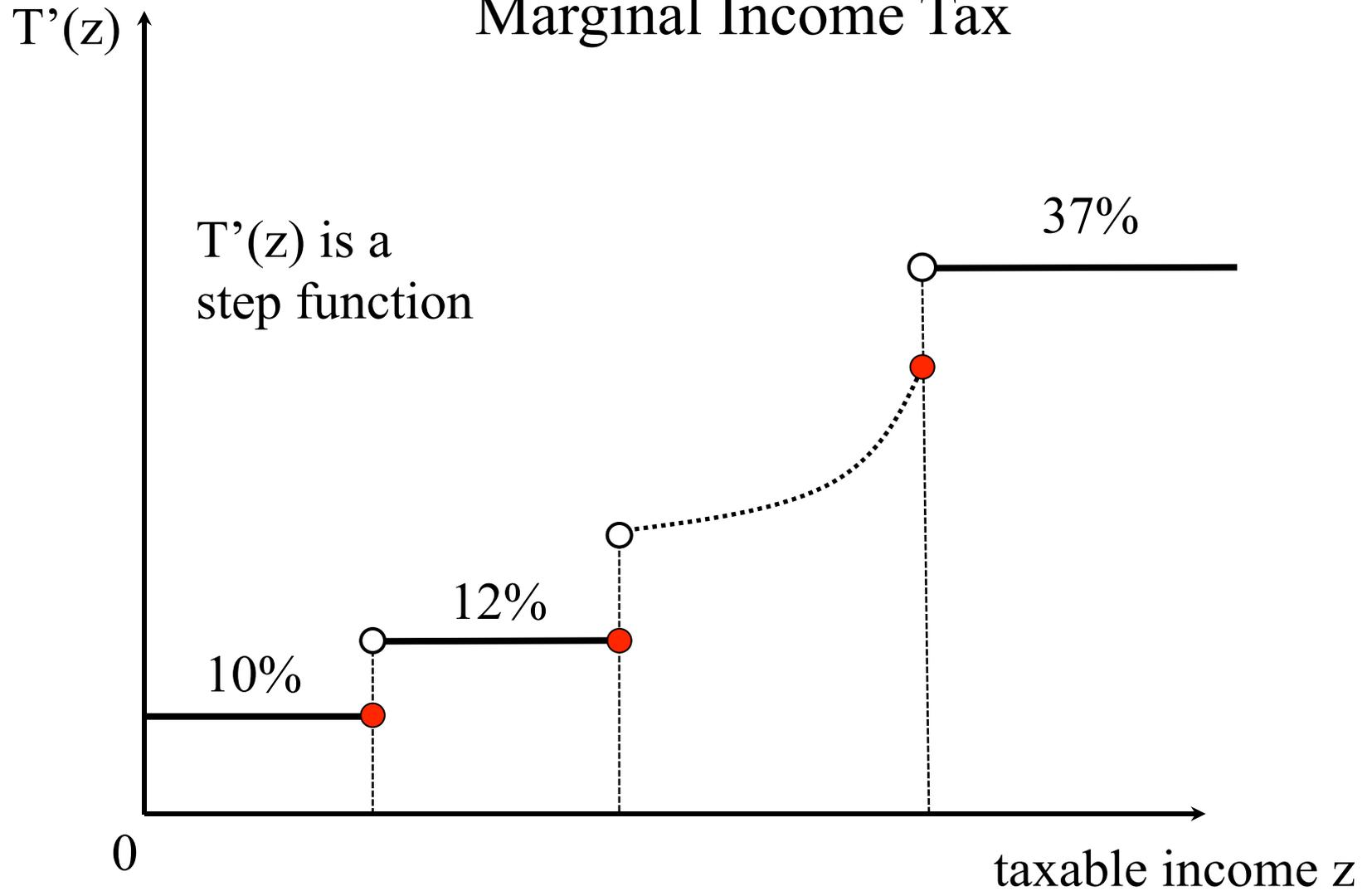


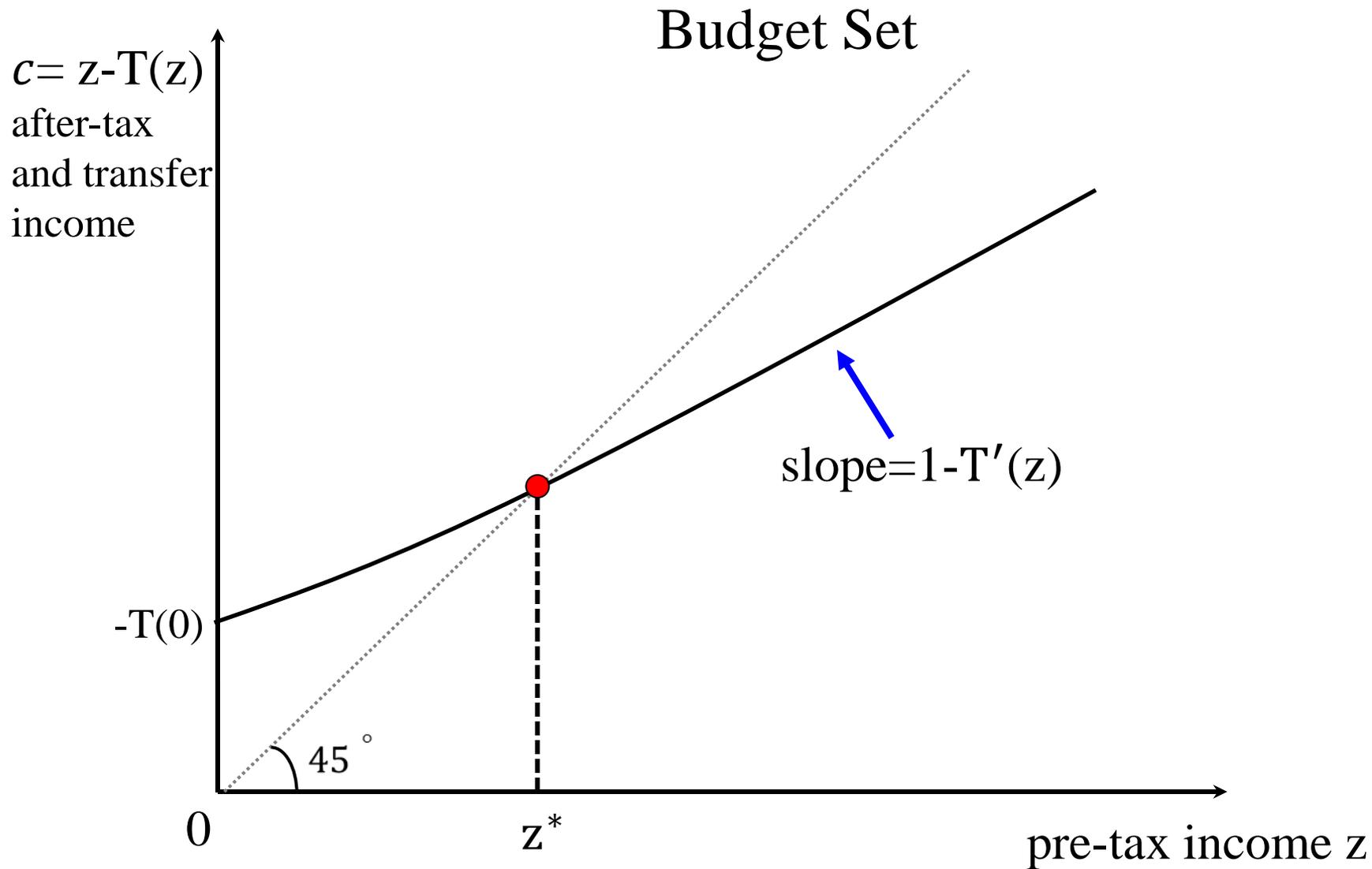
Source: Amir El-Sibaie, "2019 Tax Brackets," Tax Foundation, Nov. 28, 2018.

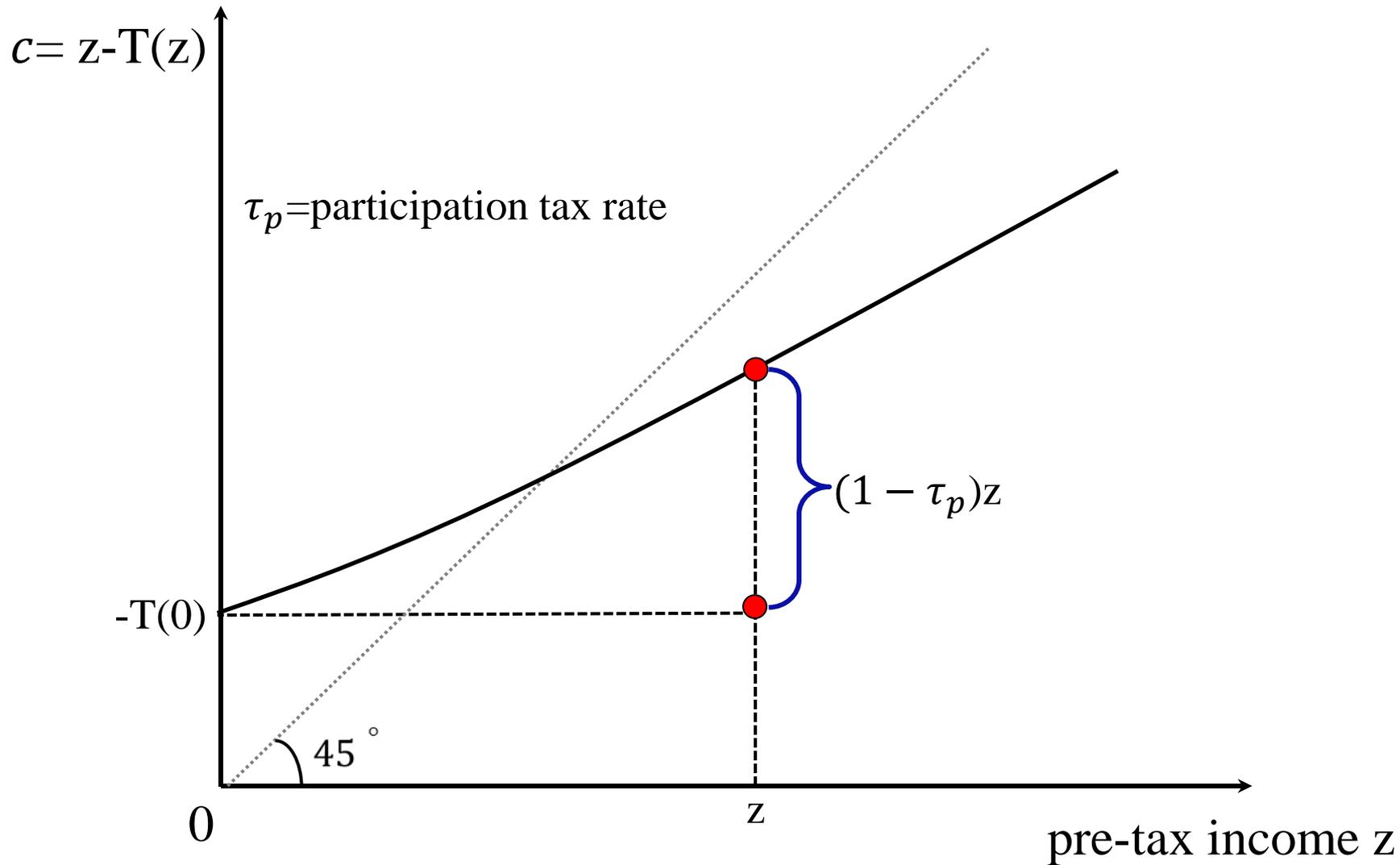
Individual Income Tax



Marginal Income Tax



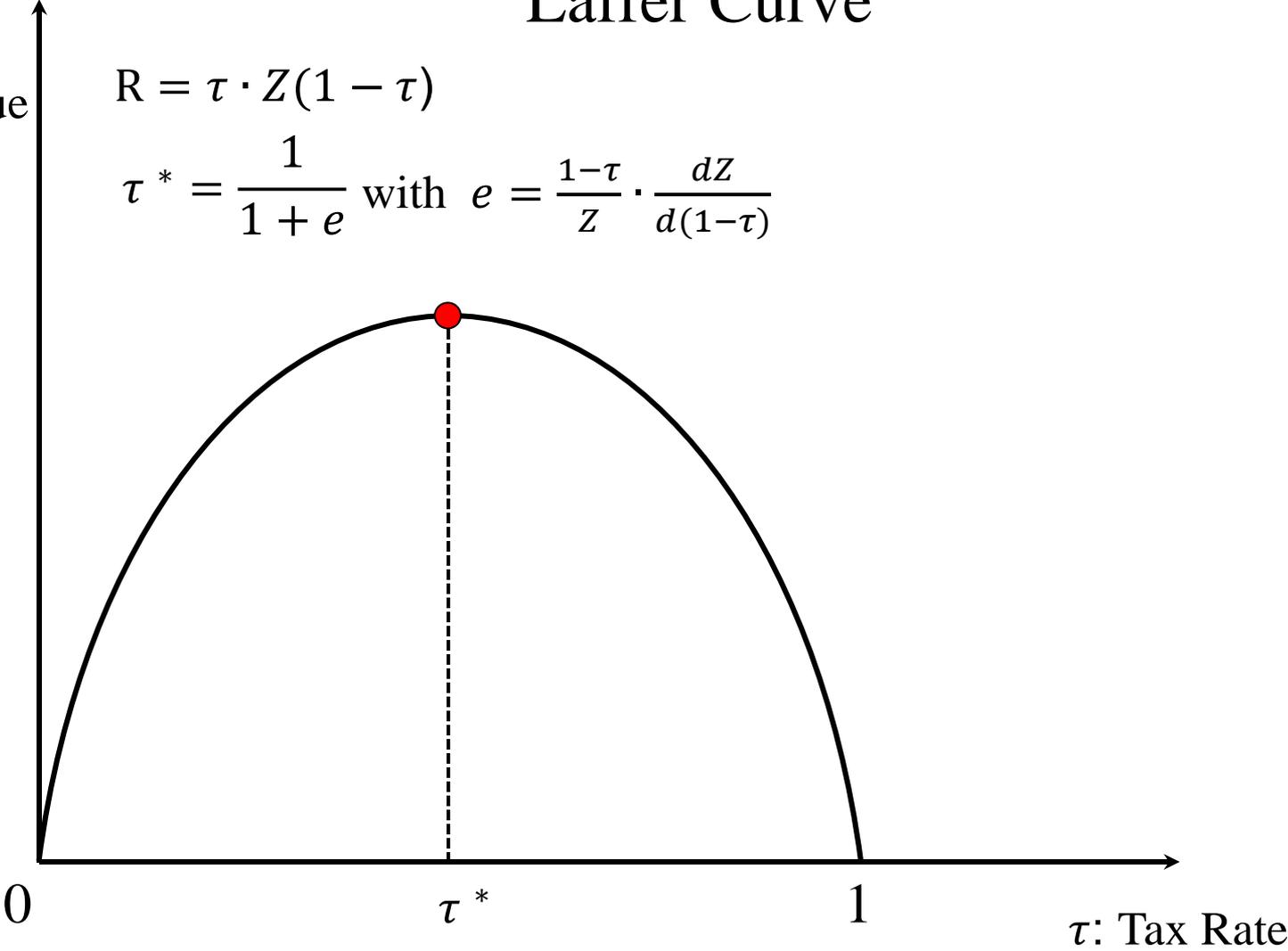




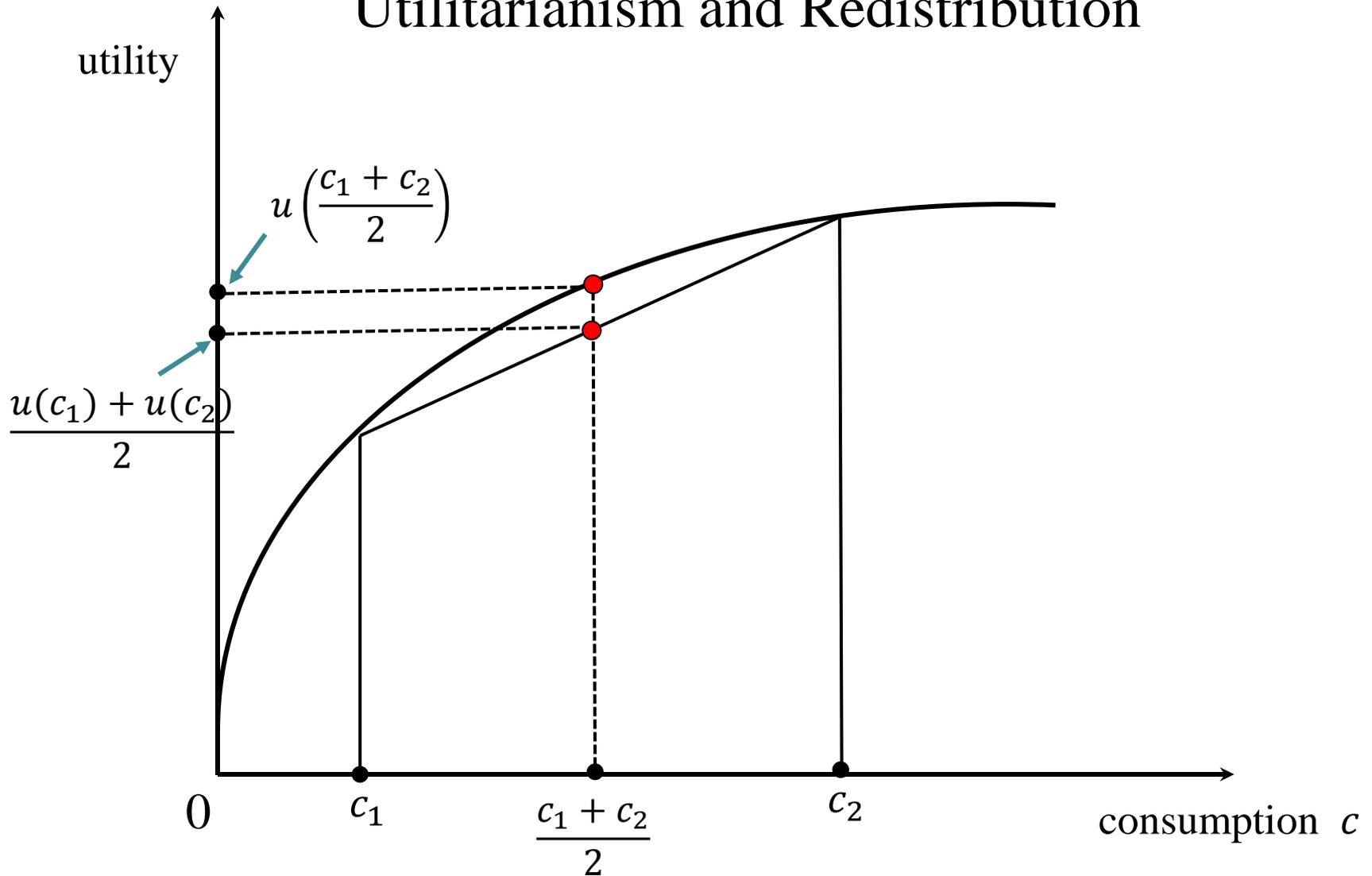
Laffer Curve

Tax
Revenue
R

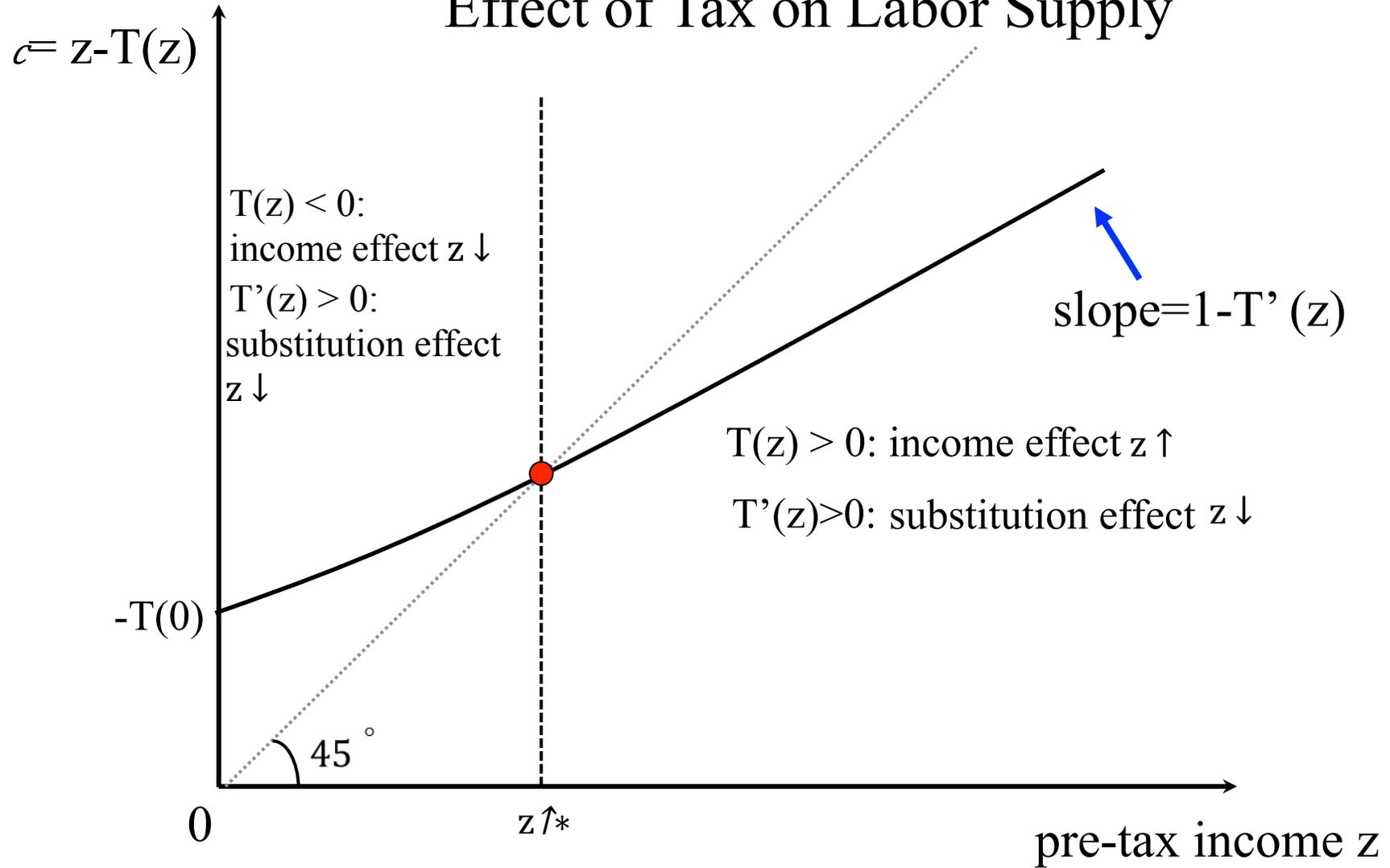
$$R = \tau \cdot Z(1 - \tau)$$
$$\tau^* = \frac{1}{1 + e} \text{ with } e = \frac{1 - \tau}{Z} \cdot \frac{dZ}{d(1 - \tau)}$$



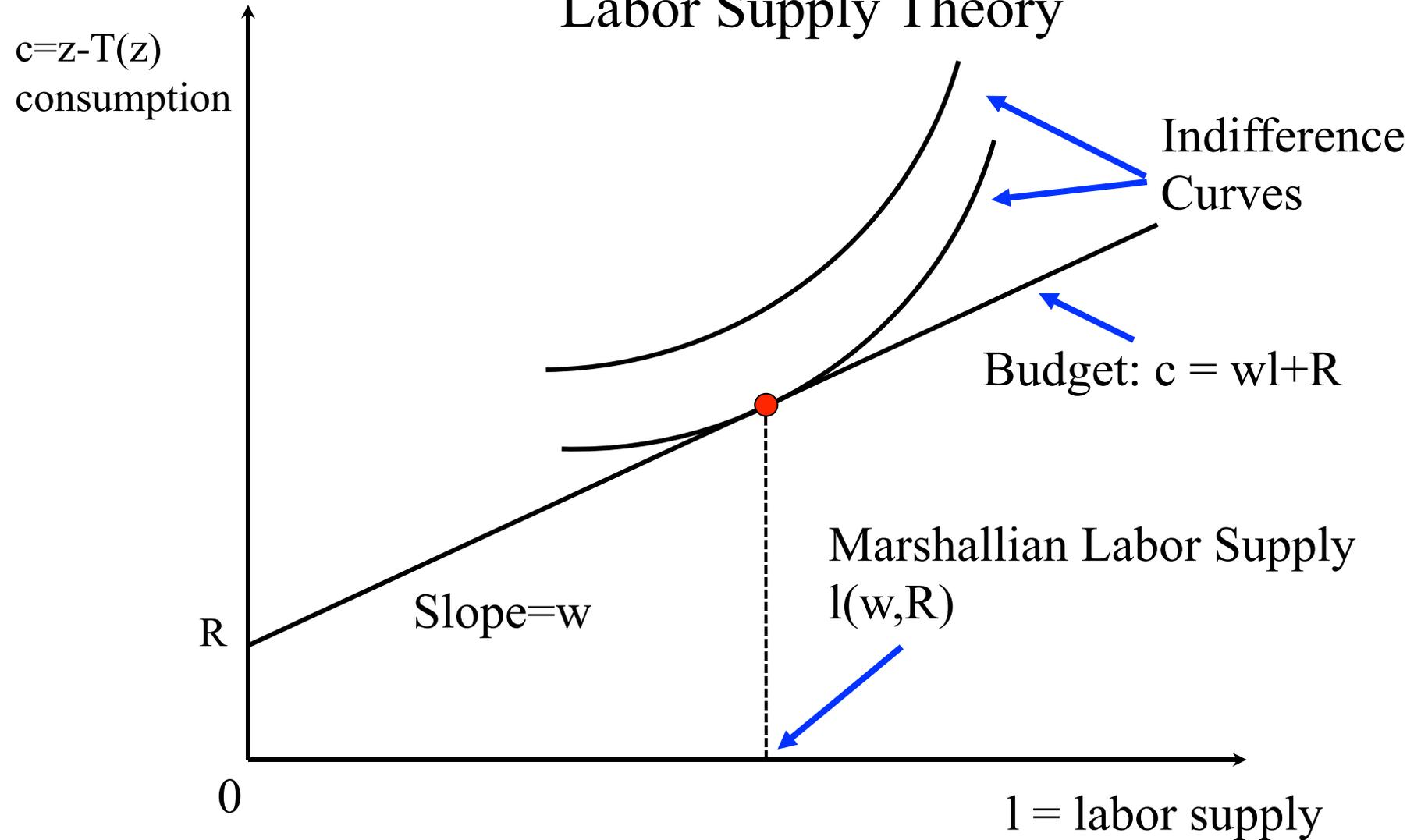
Utilitarianism and Redistribution



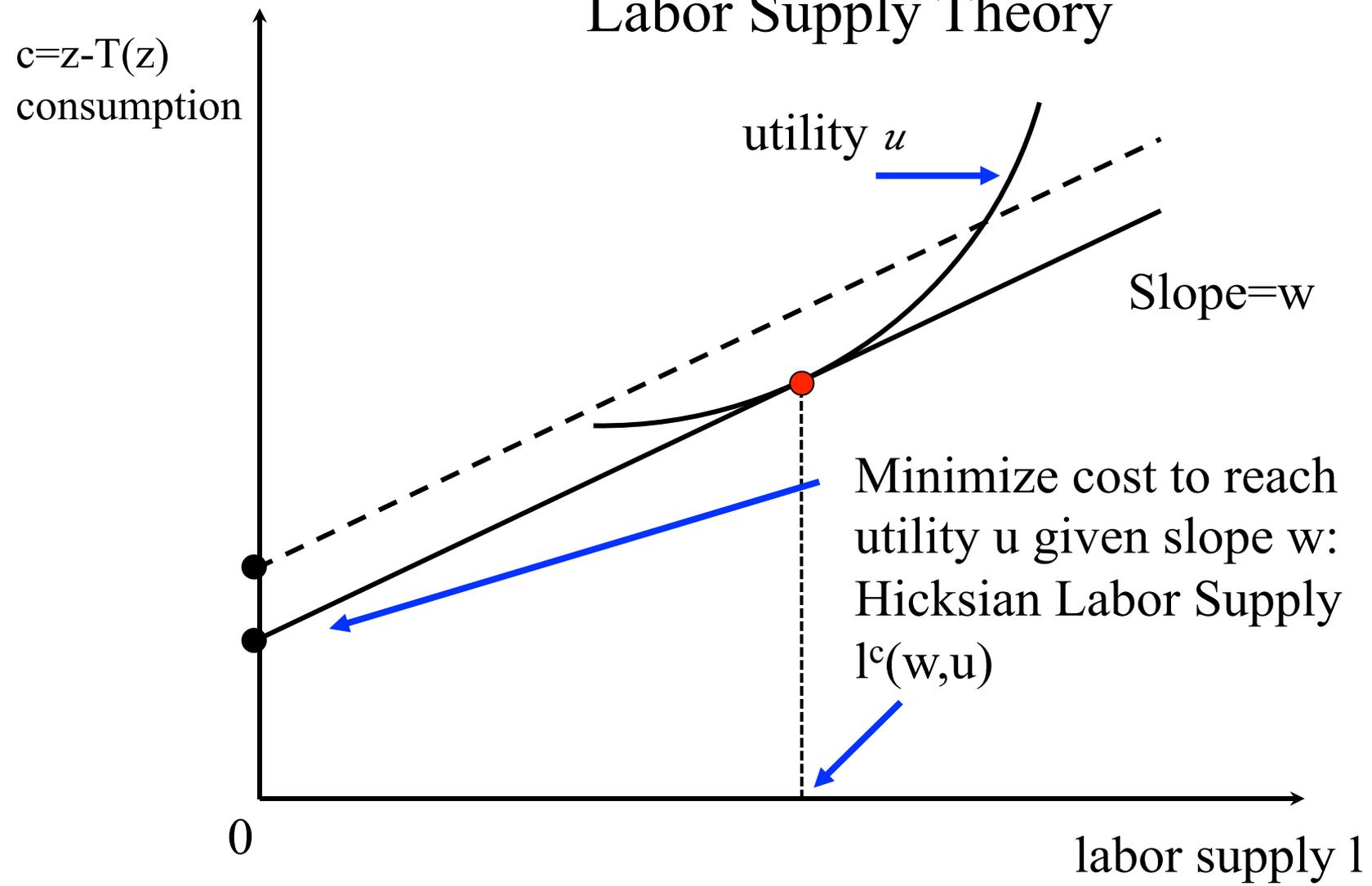
Effect of Tax on Labor Supply



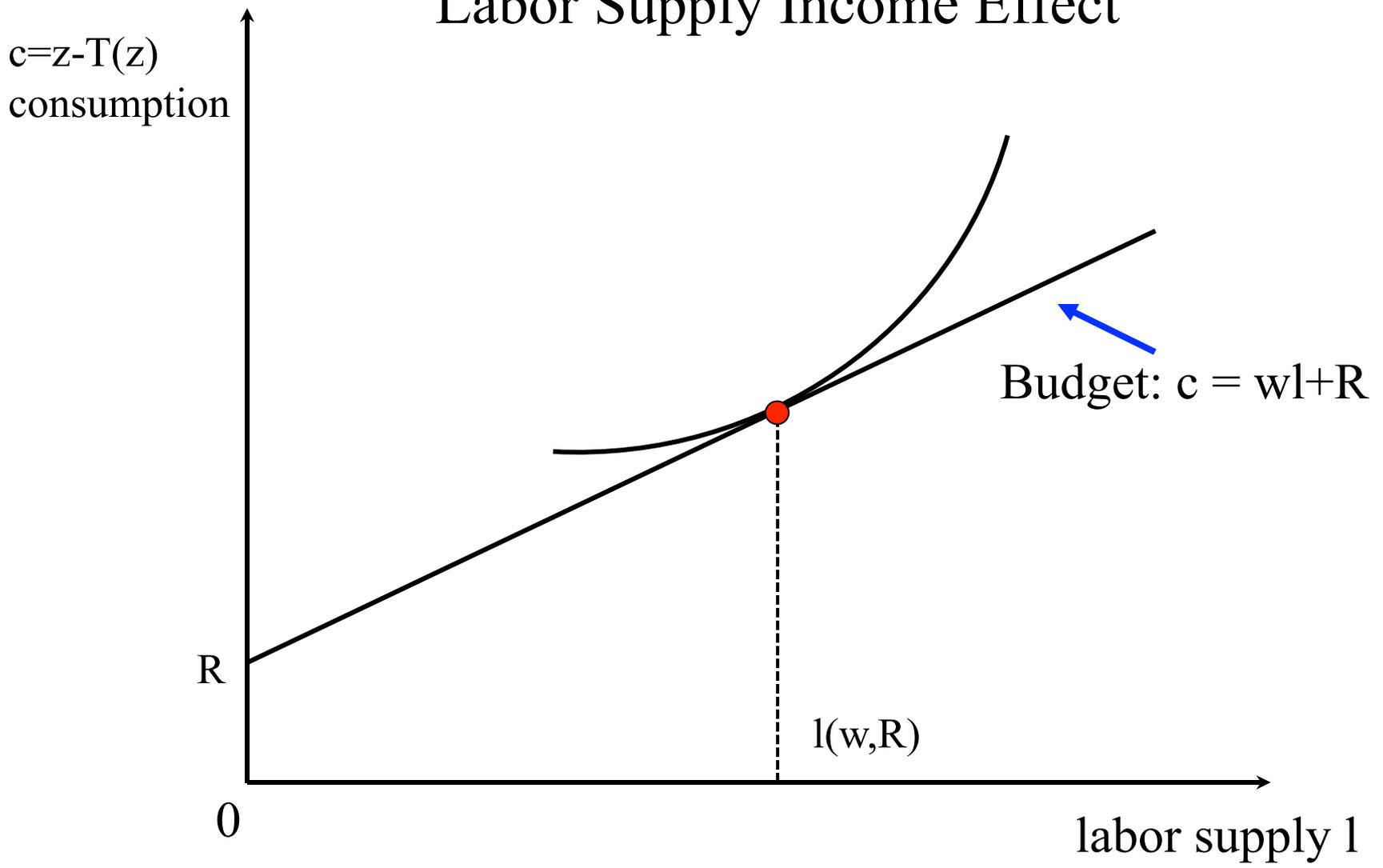
Labor Supply Theory



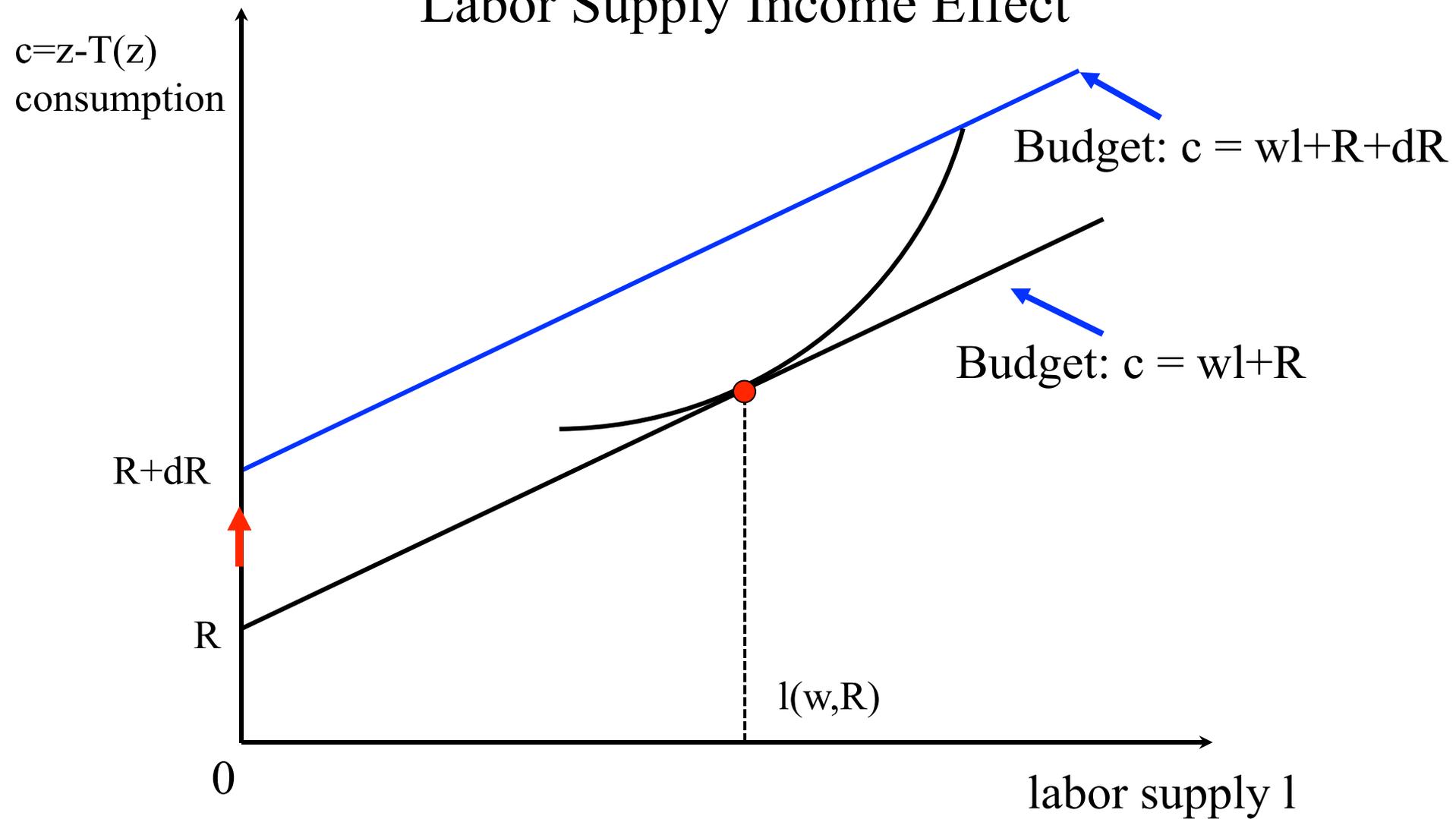
Labor Supply Theory



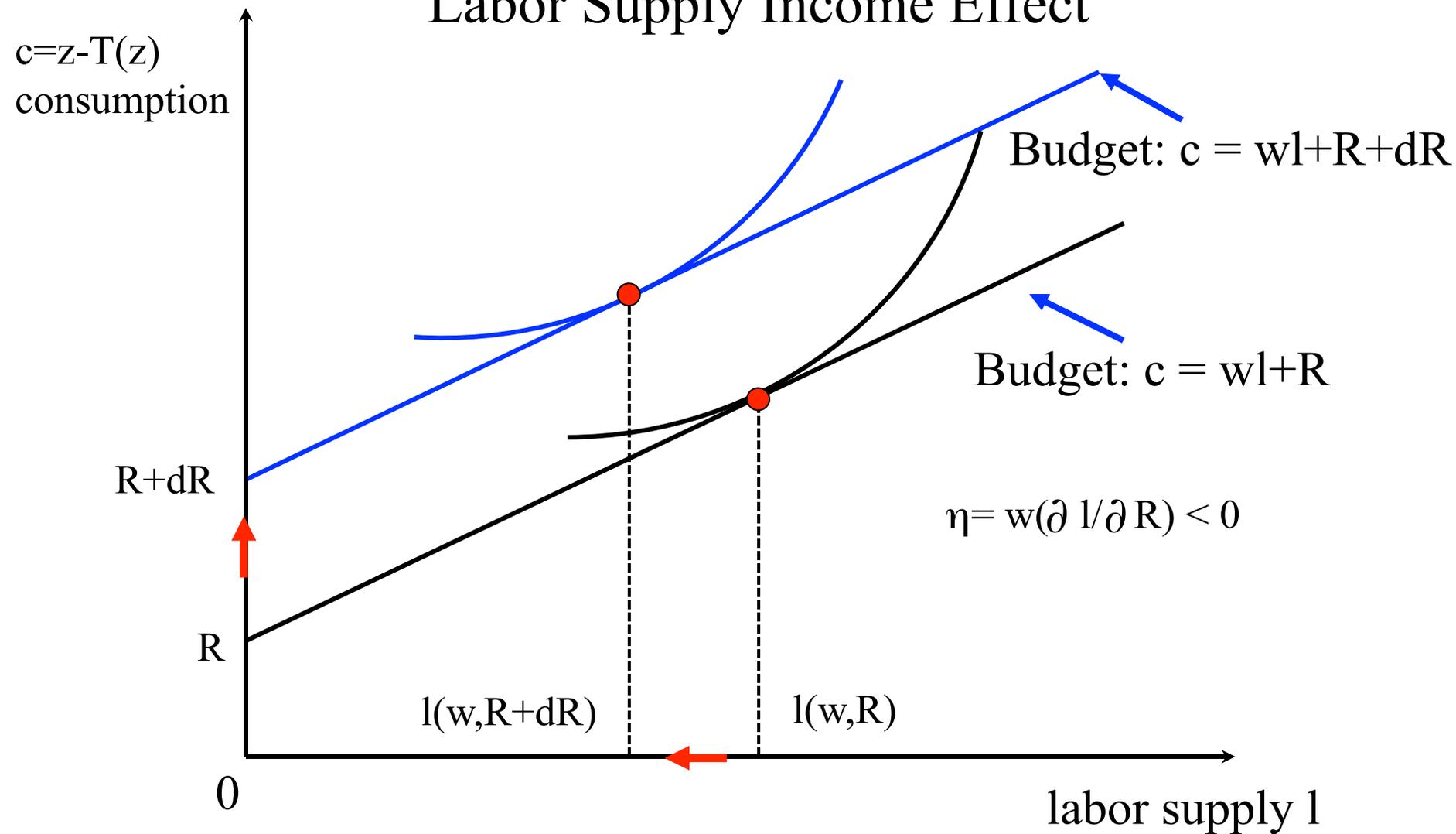
Labor Supply Income Effect



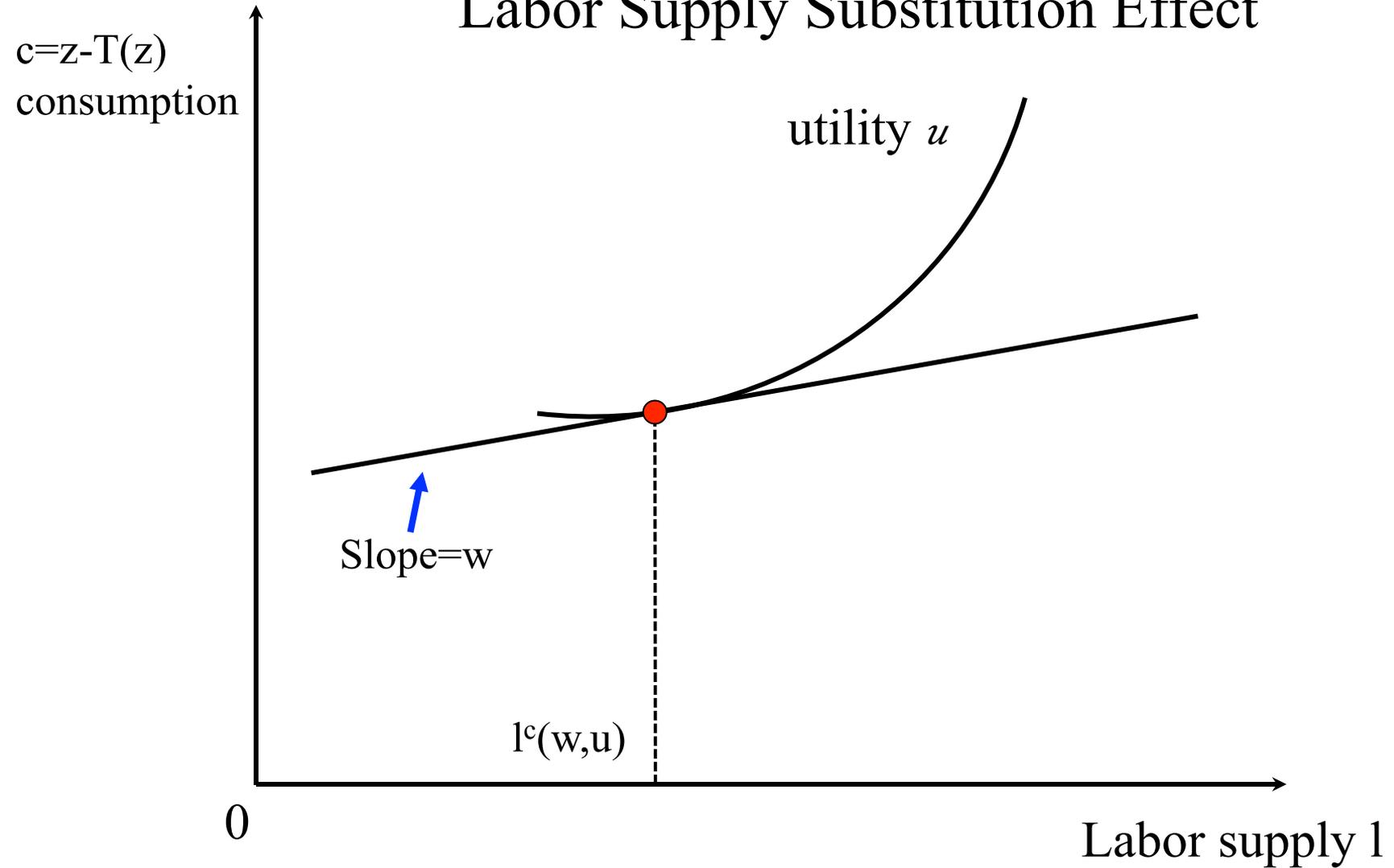
Labor Supply Income Effect



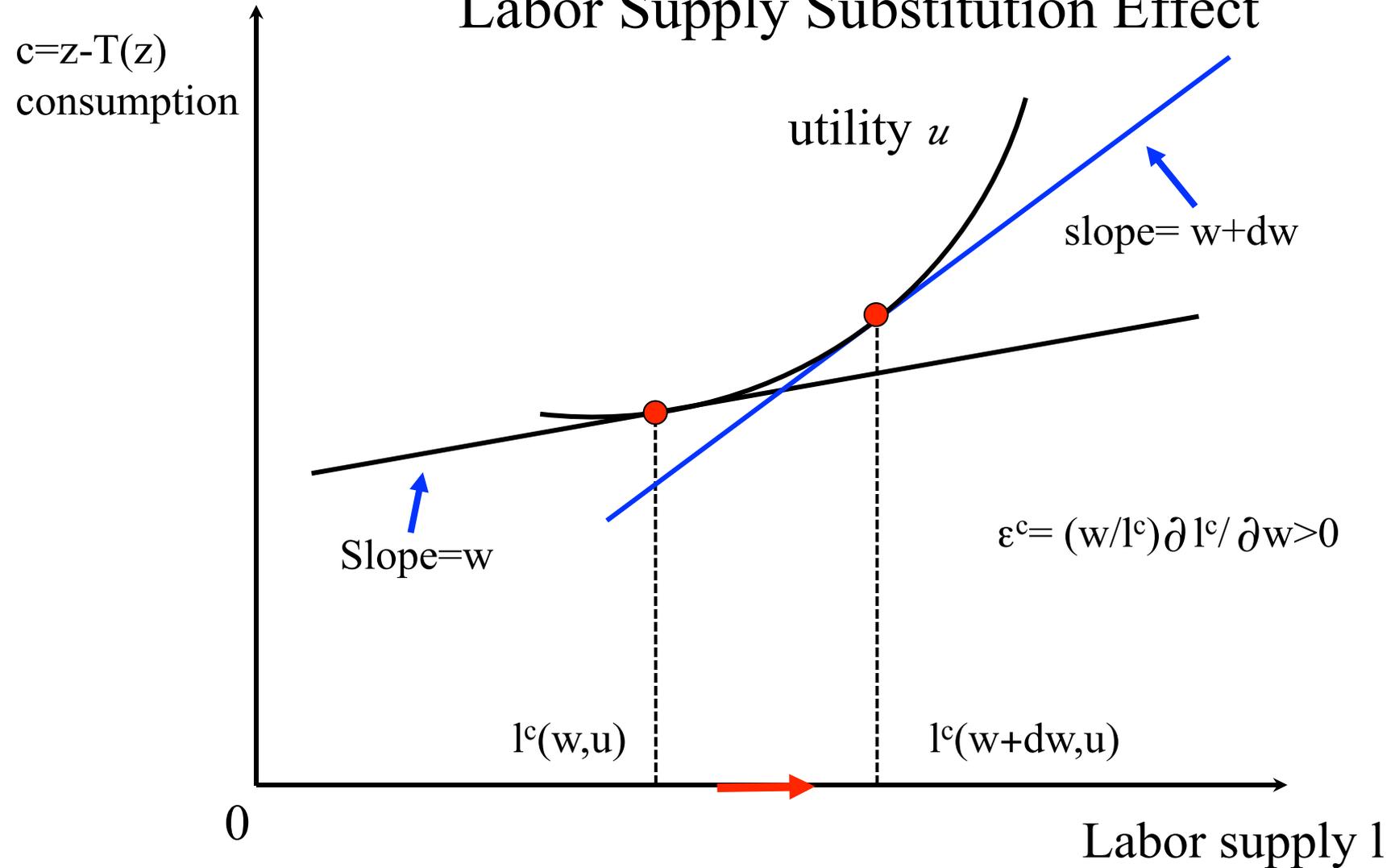
Labor Supply Income Effect



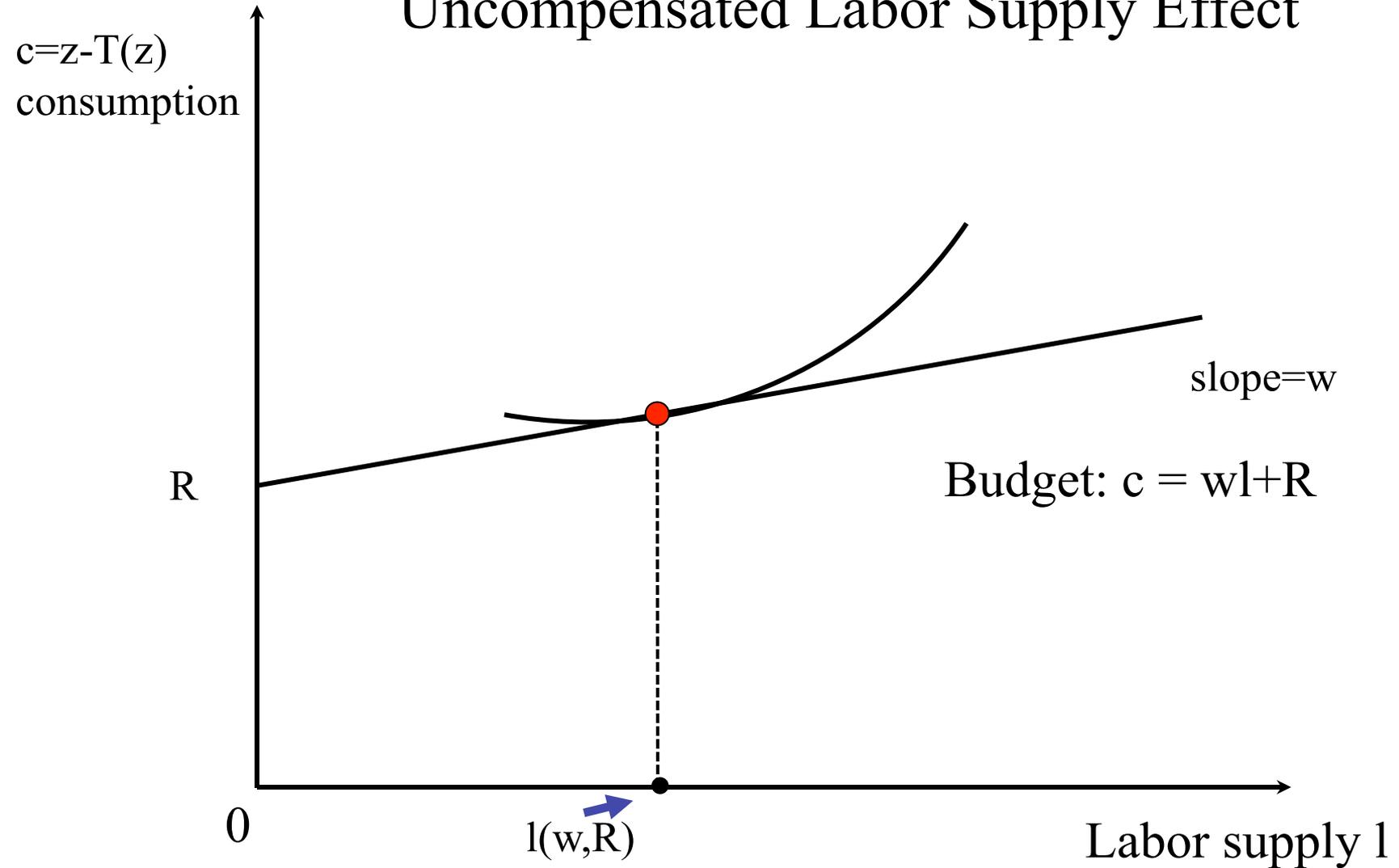
Labor Supply Substitution Effect



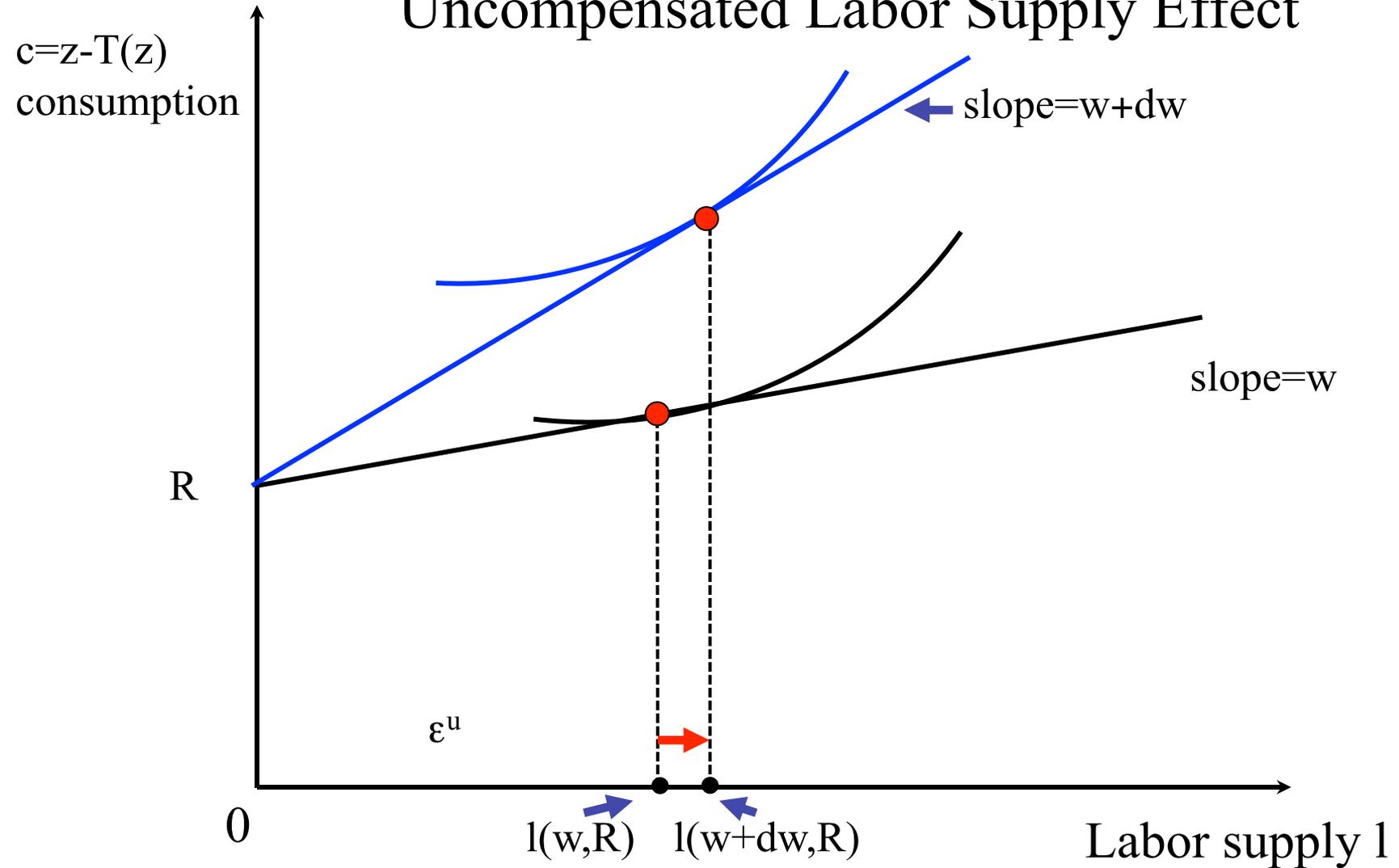
Labor Supply Substitution Effect



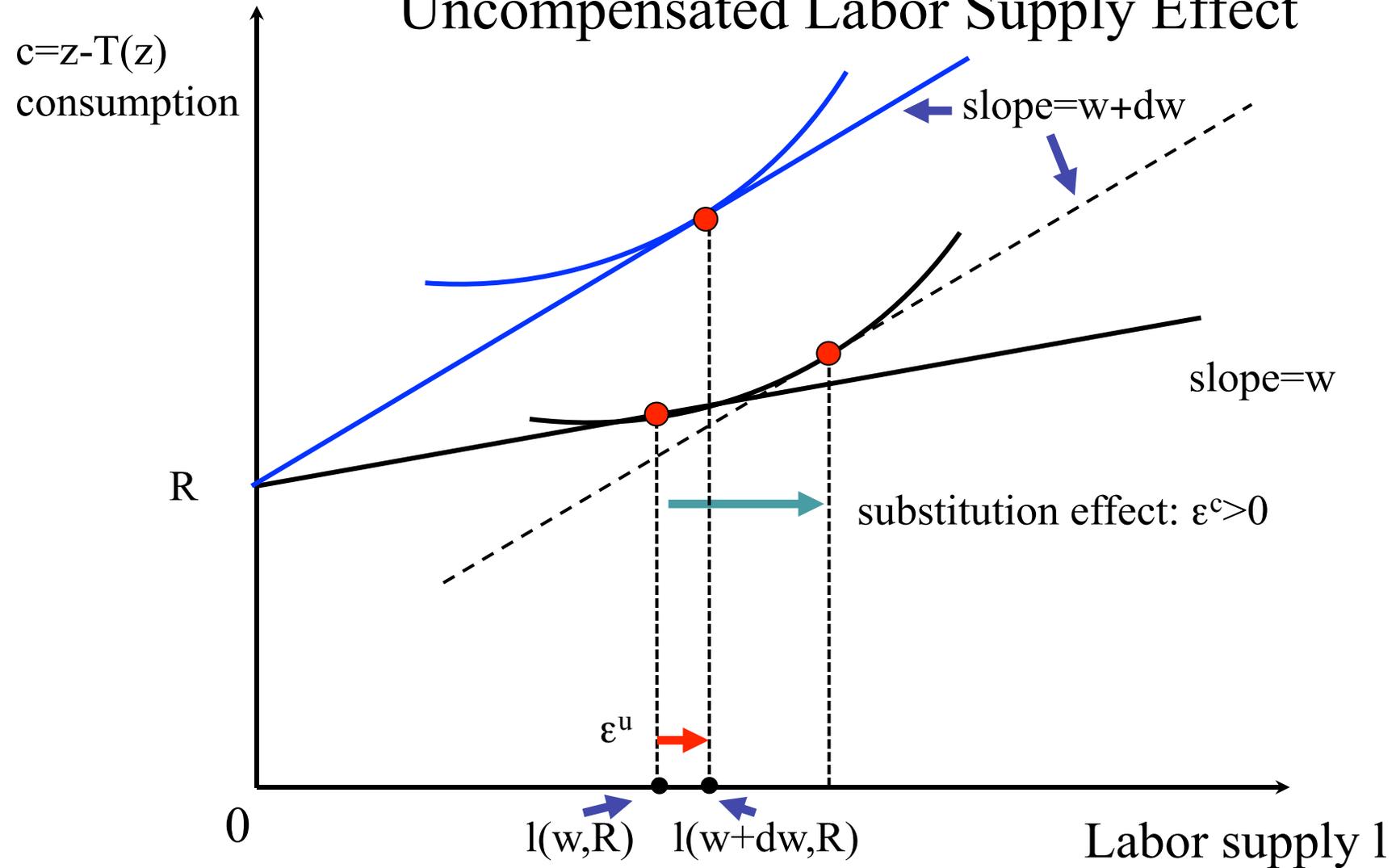
Uncompensated Labor Supply Effect



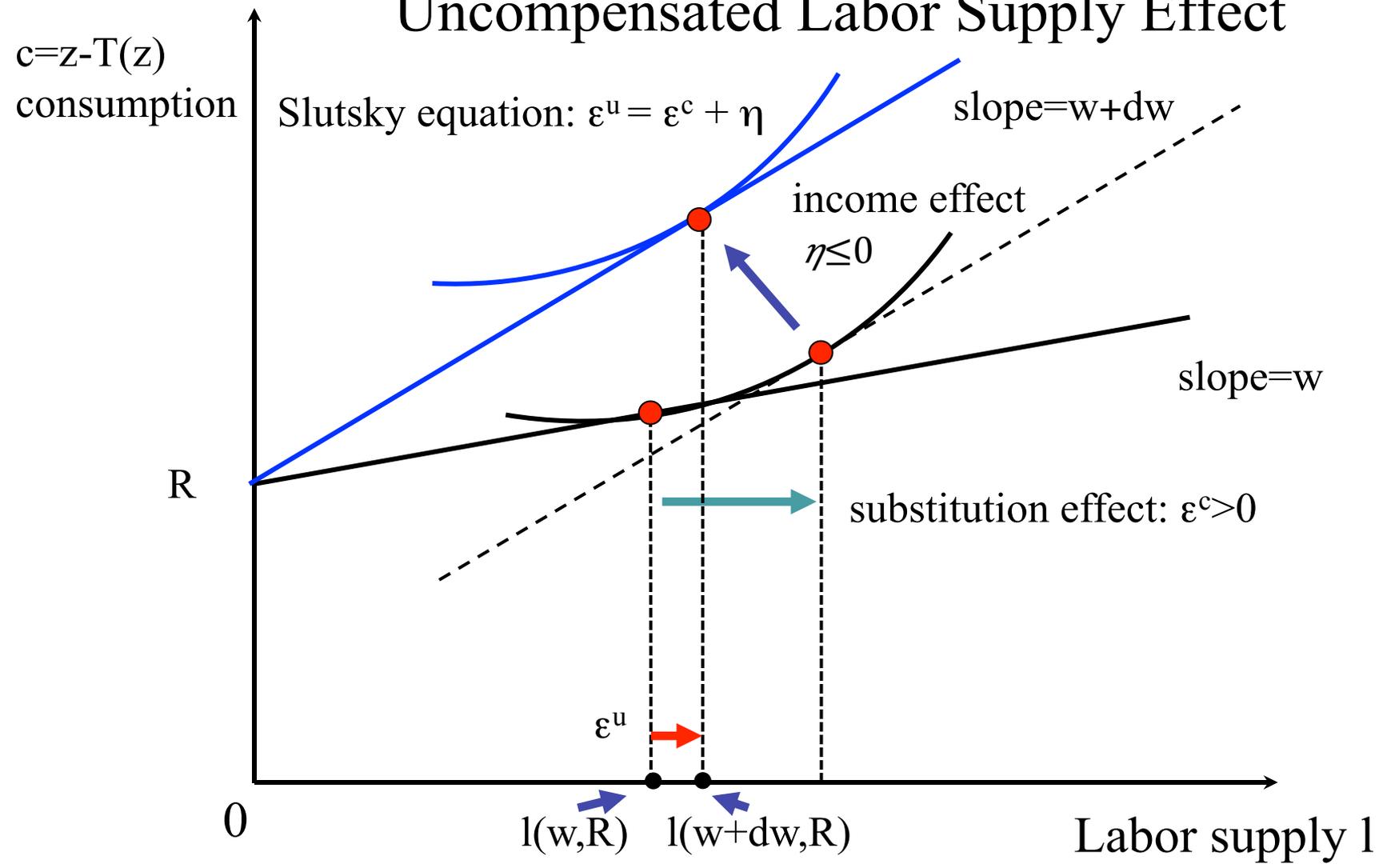
Uncompensated Labor Supply Effect



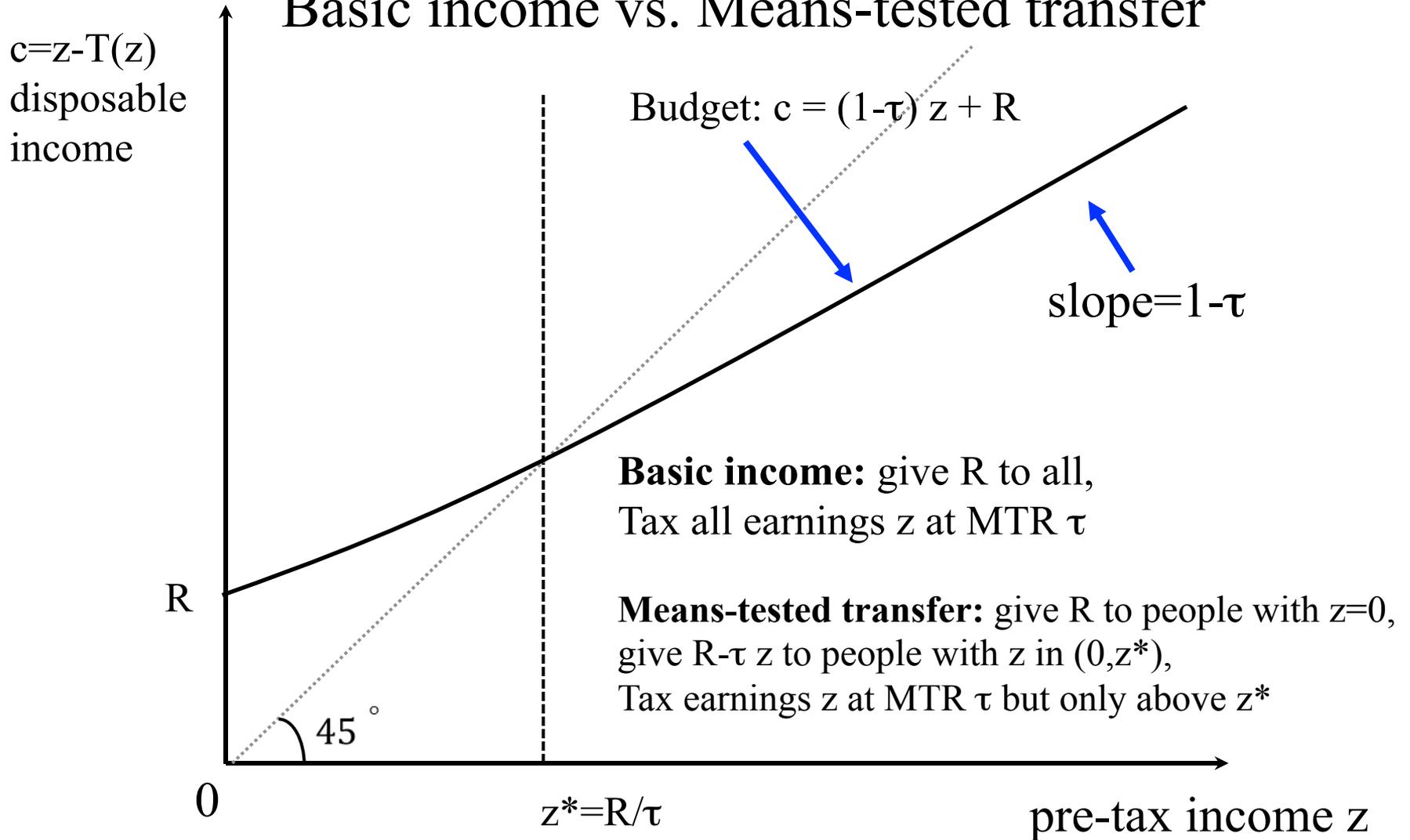
Uncompensated Labor Supply Effect



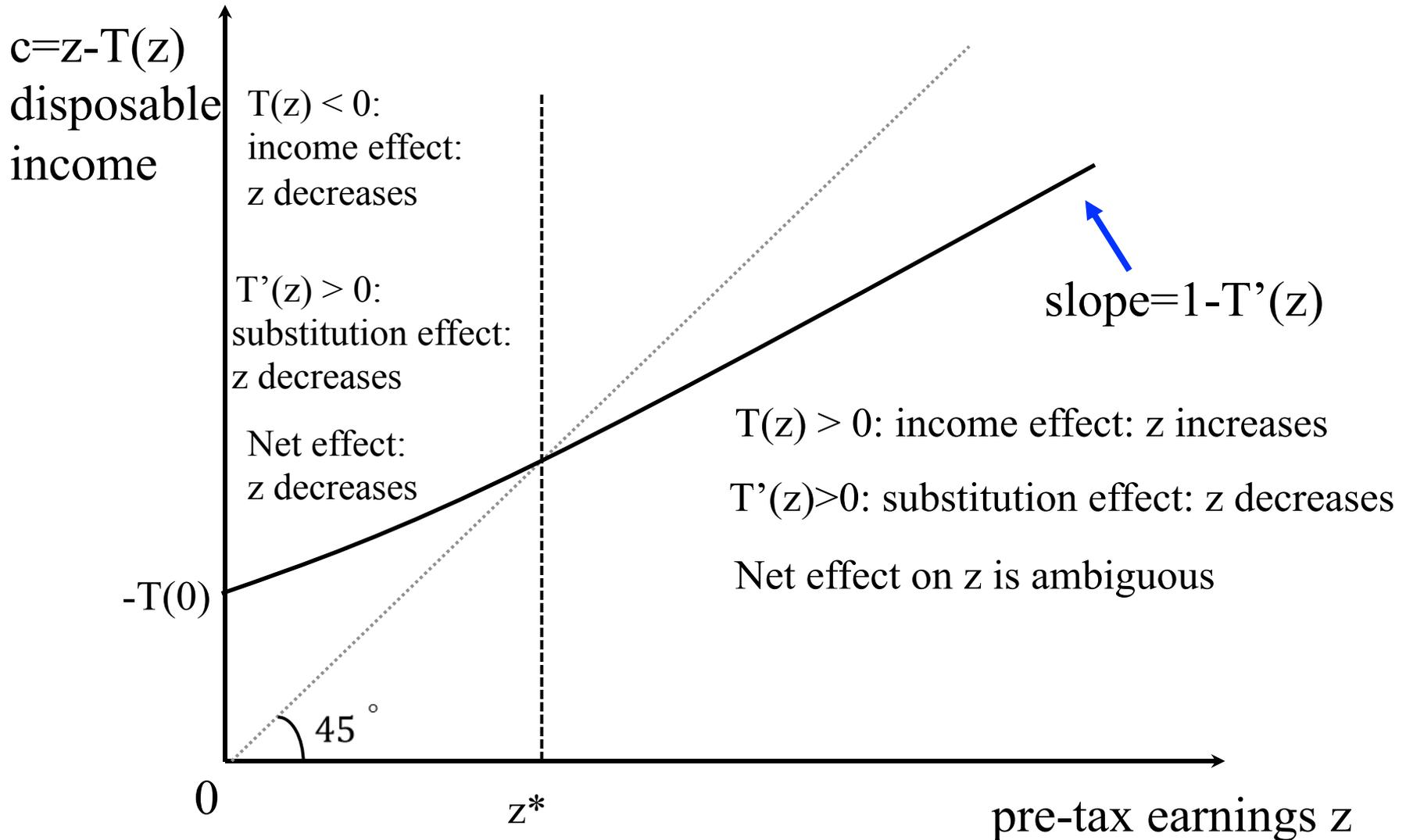
Uncompensated Labor Supply Effect



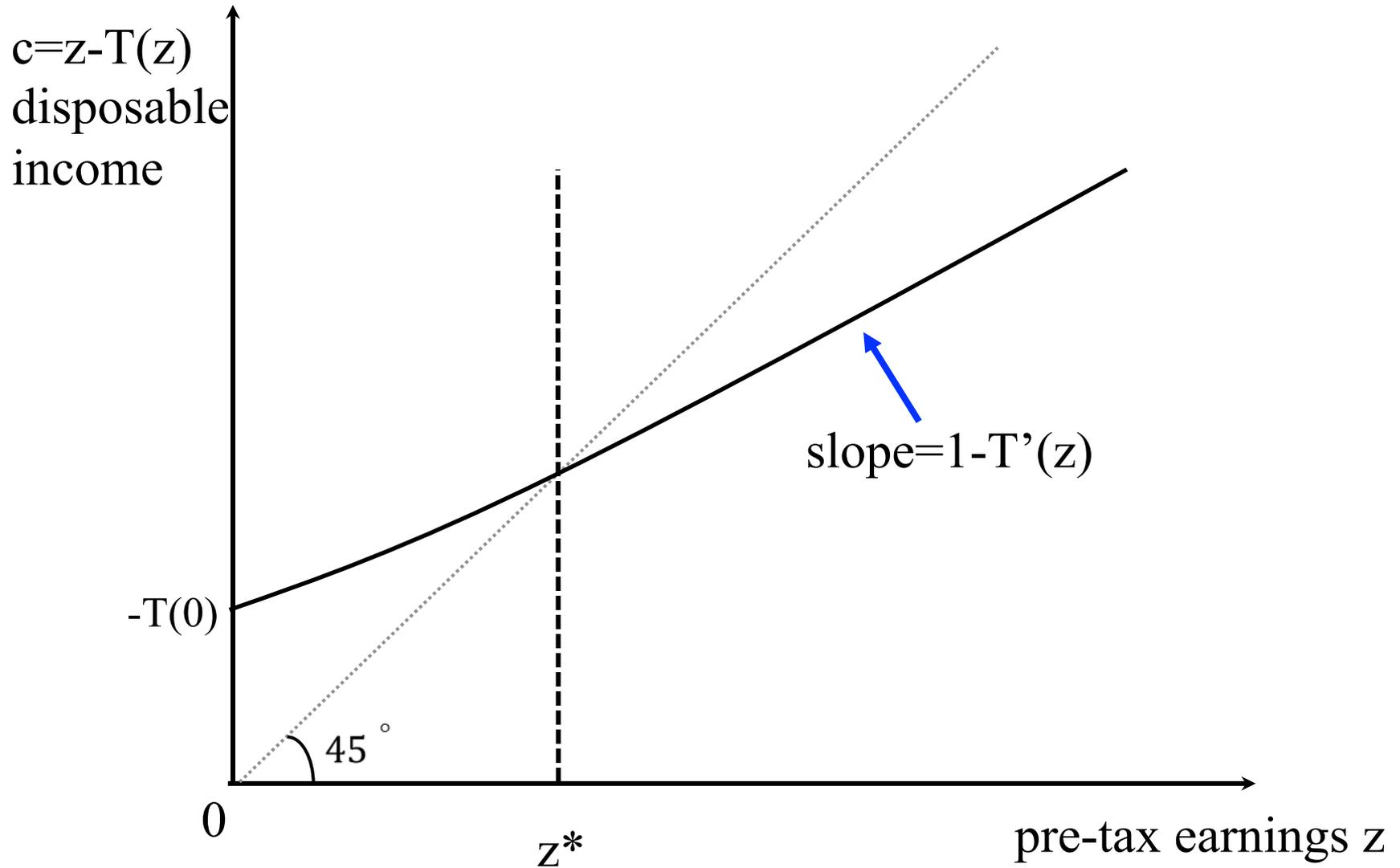
Basic income vs. Means-tested transfer



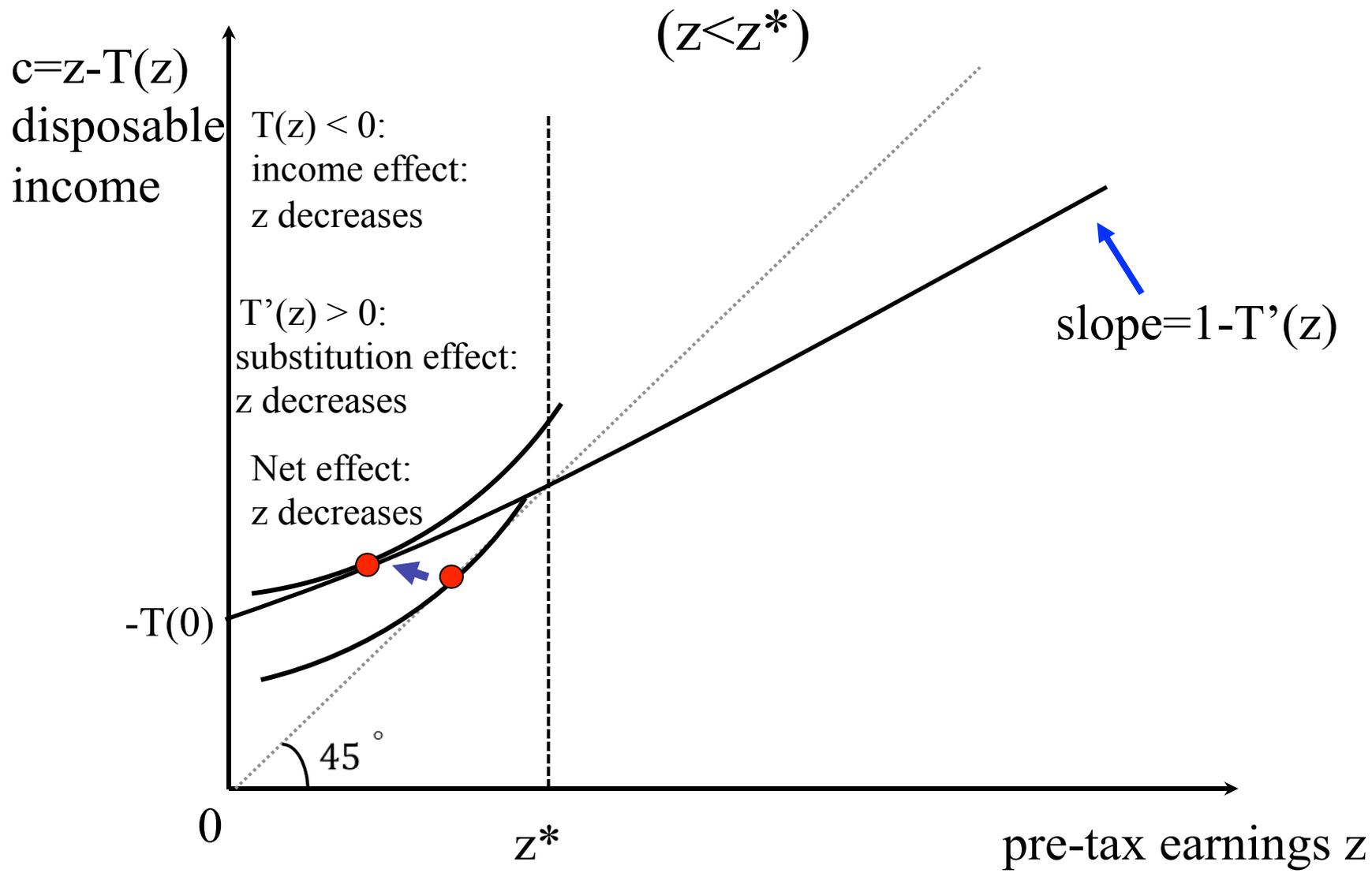
Effect of Taxes/Transfers on Labor Supply



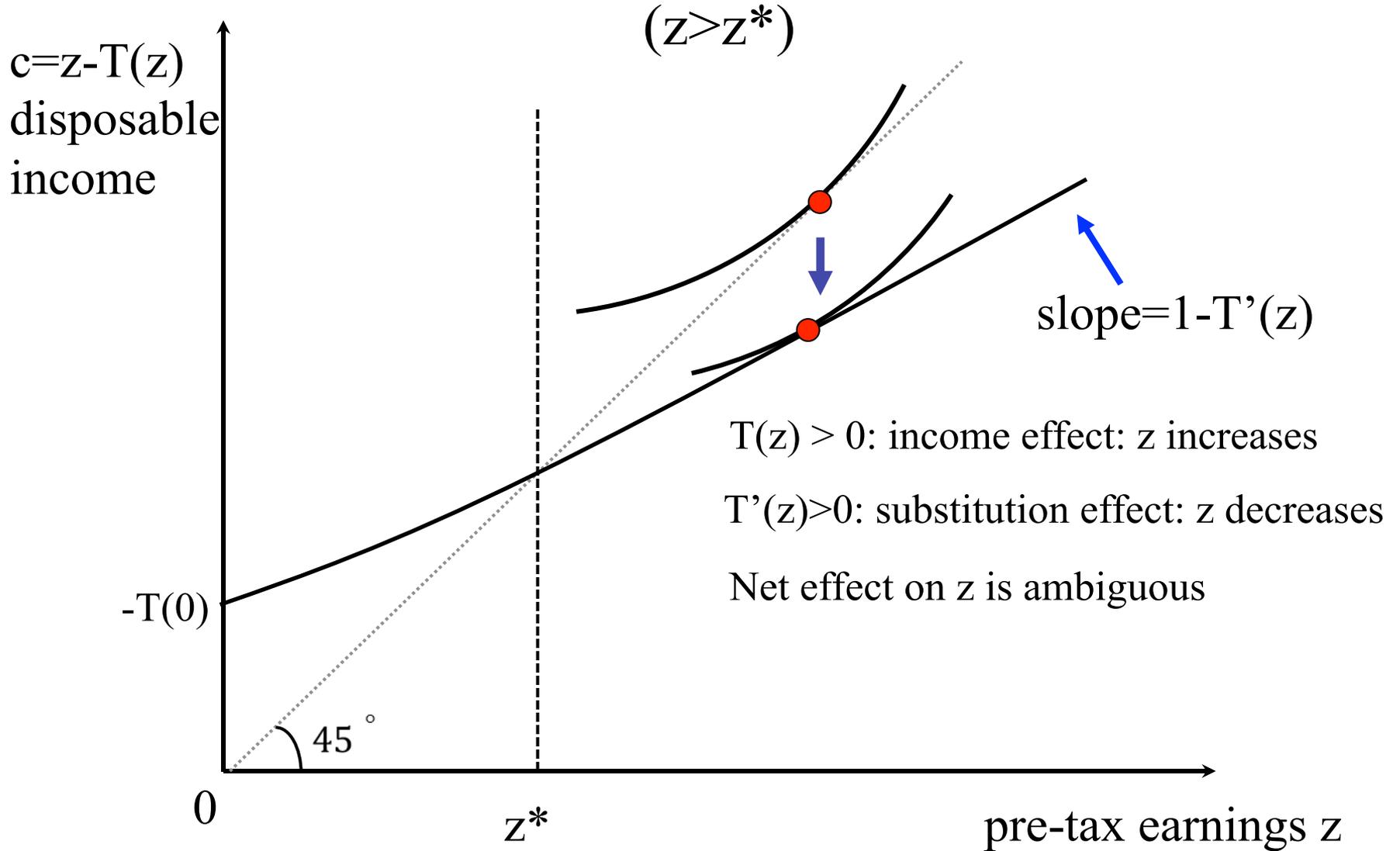
Effect of Taxes/Transfers on Labor Supply



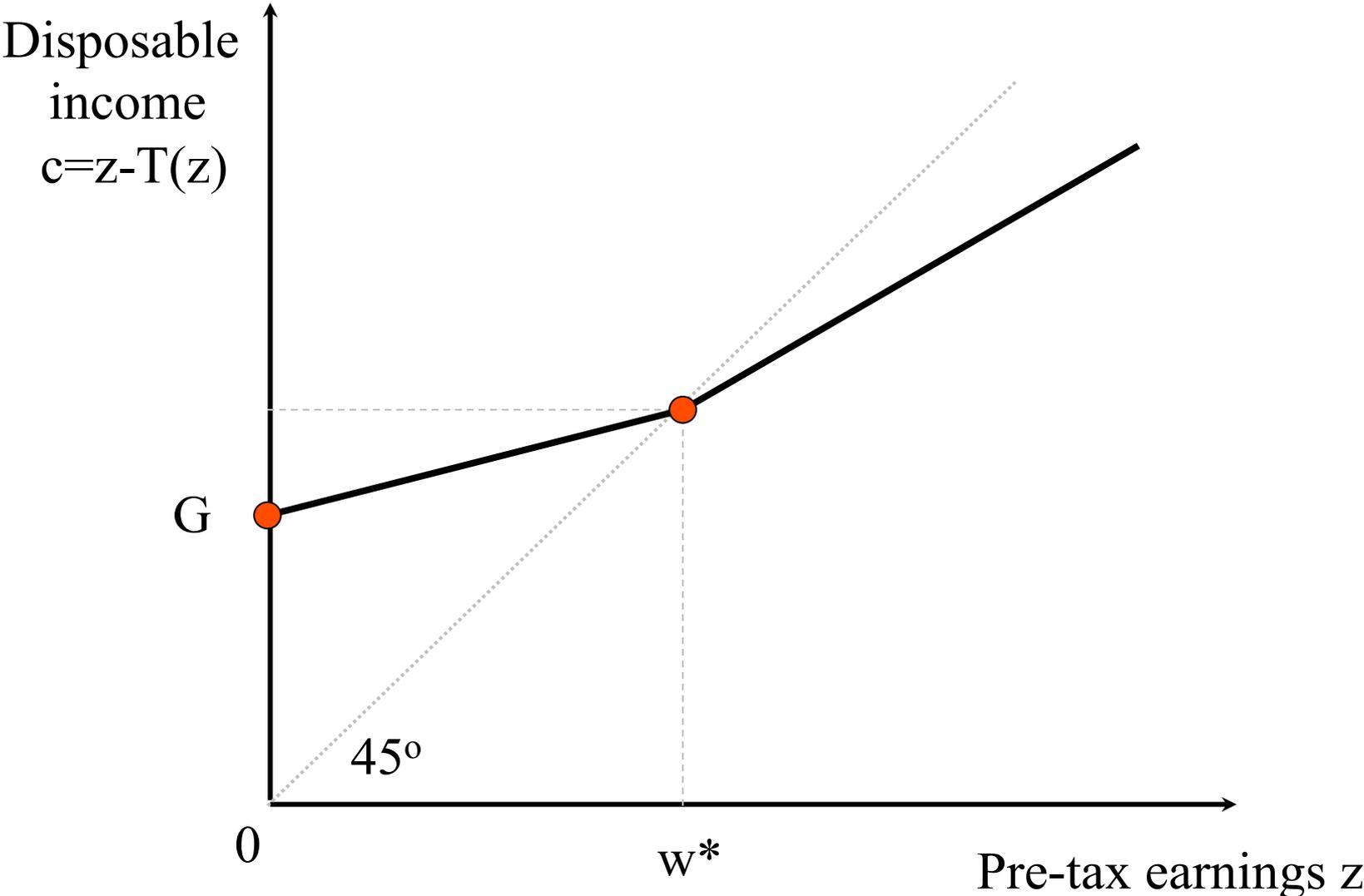
Effect of Taxes/Transfers on Labor Supply



Effect of Taxes/Transfers on Labor Supply



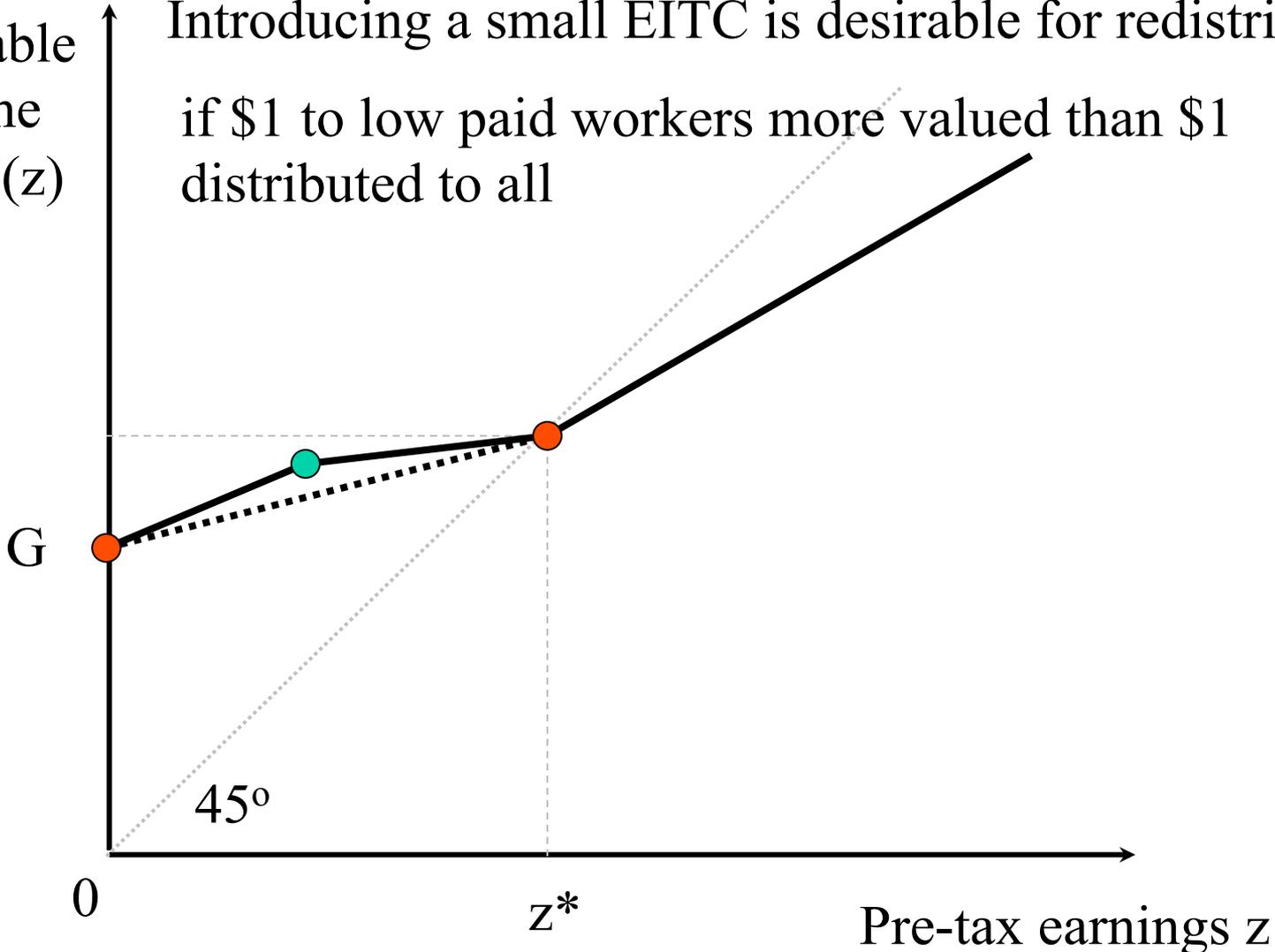
Starting from a Means-Tested Program



Starting from a Means-Tested Program

Introducing a small EITC is desirable for redistribution if \$1 to low paid workers more valued than \$1 distributed to all

Disposable income
 $c = z - T(z)$

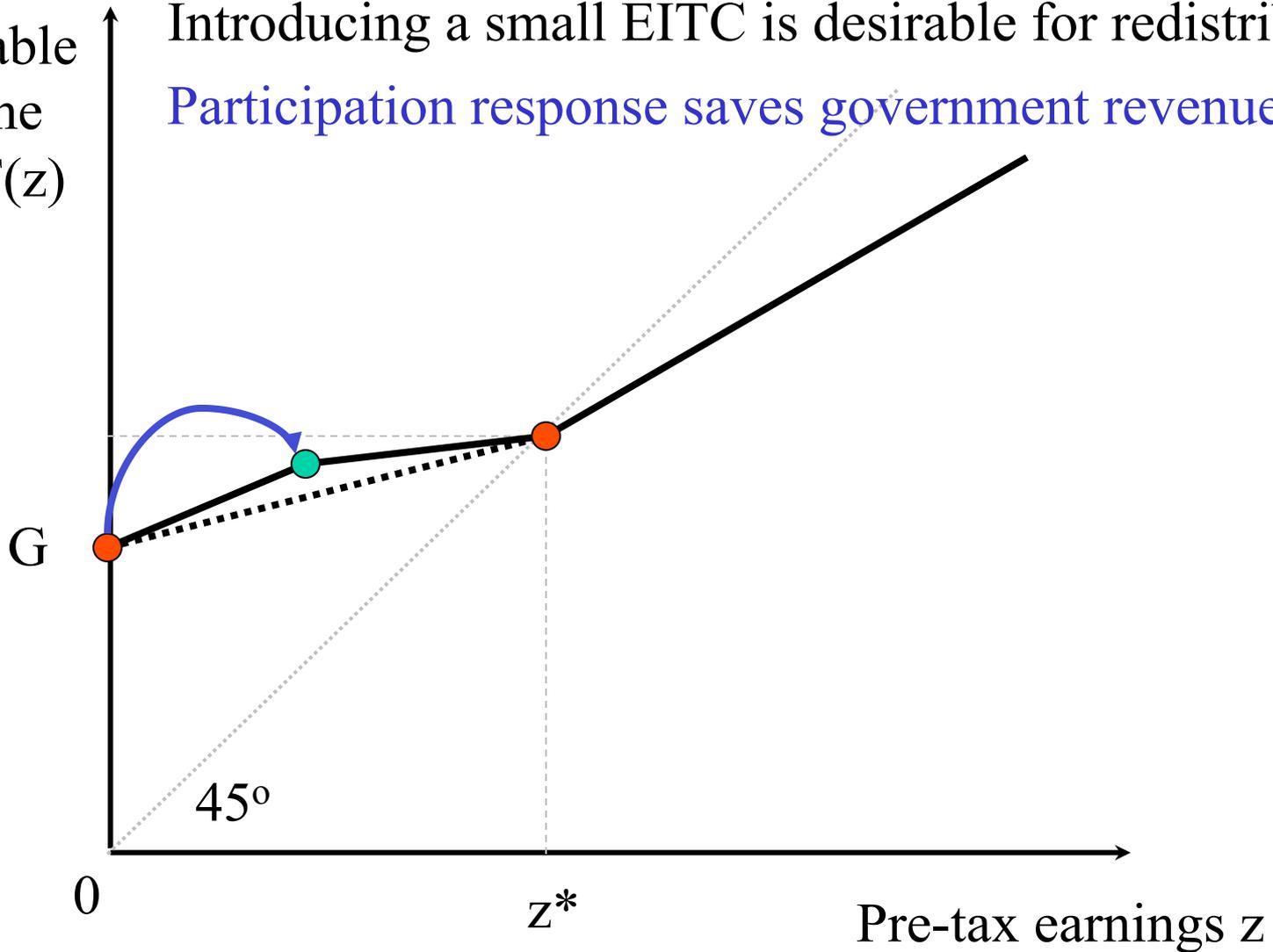


Starting from a Means-Tested Program

Introducing a small EITC is desirable for redistribution

Participation response saves government revenue

Disposable
income
 $c = z - T(z)$



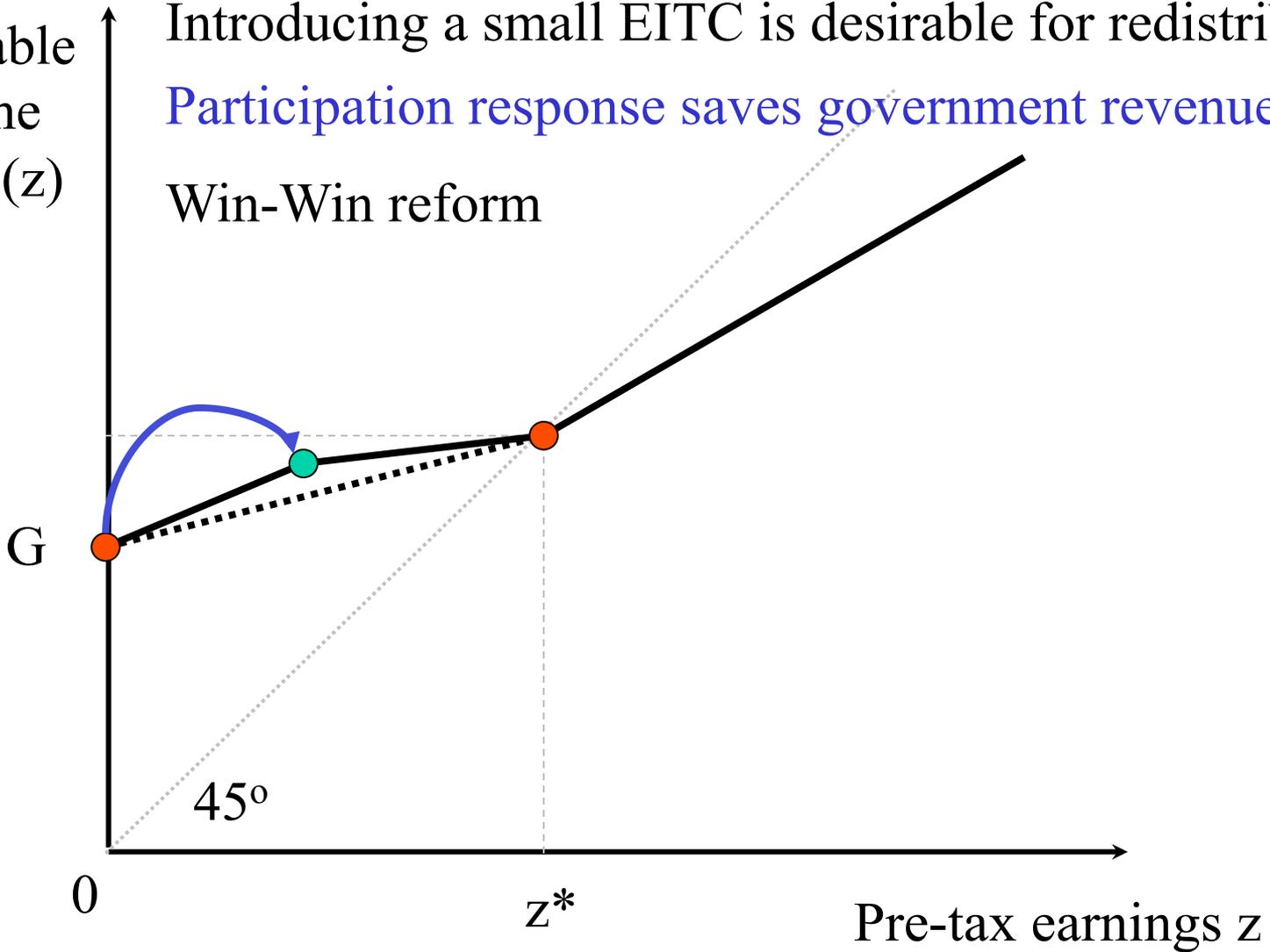
Starting from a Means-Tested Program

Introducing a small EITC is desirable for redistribution

Participation response saves government revenue

Win-Win reform

Disposable
income
 $c = z - T(z)$



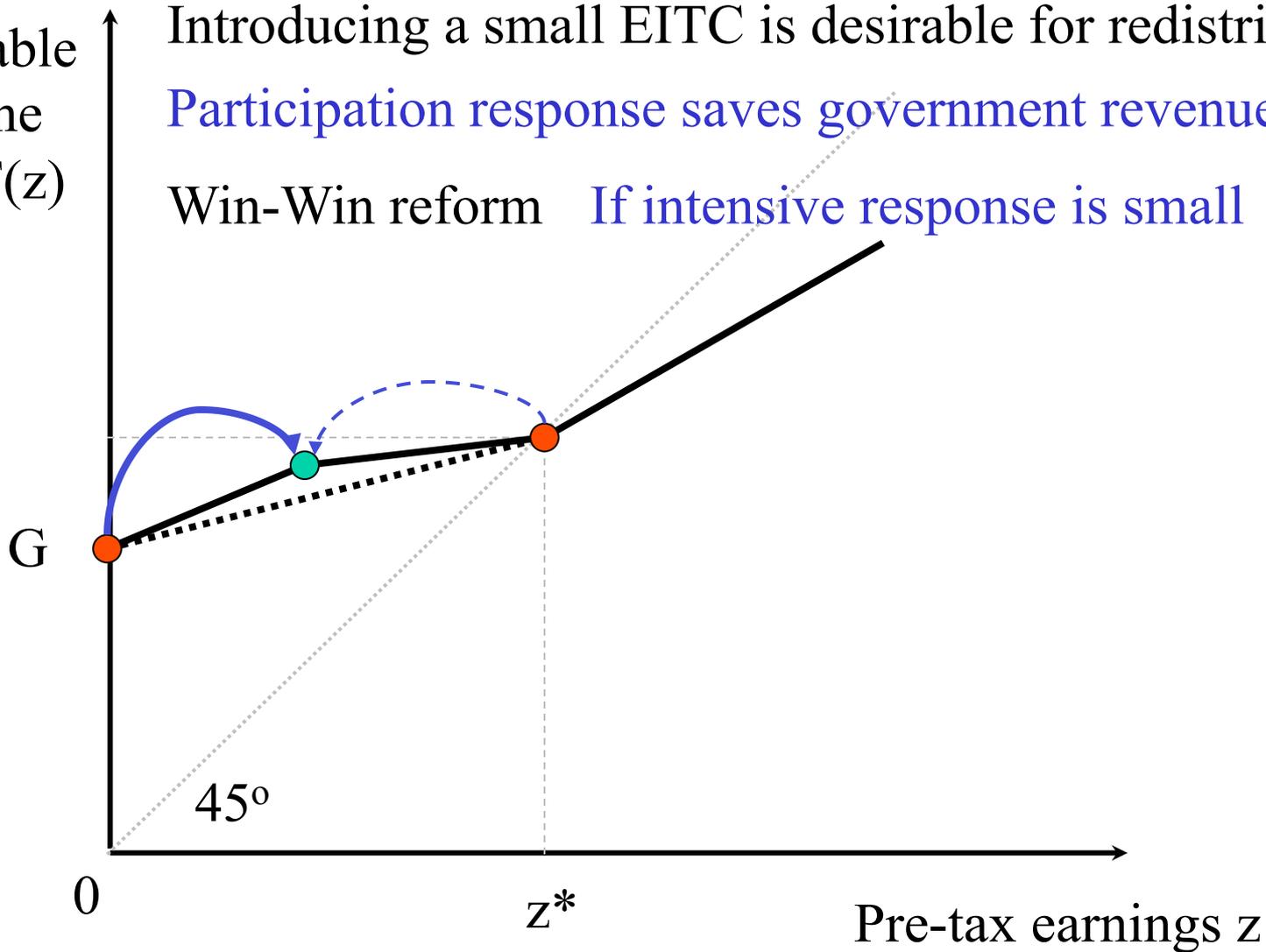
Starting from a Means-Tested Program

Introducing a small EITC is desirable for redistribution

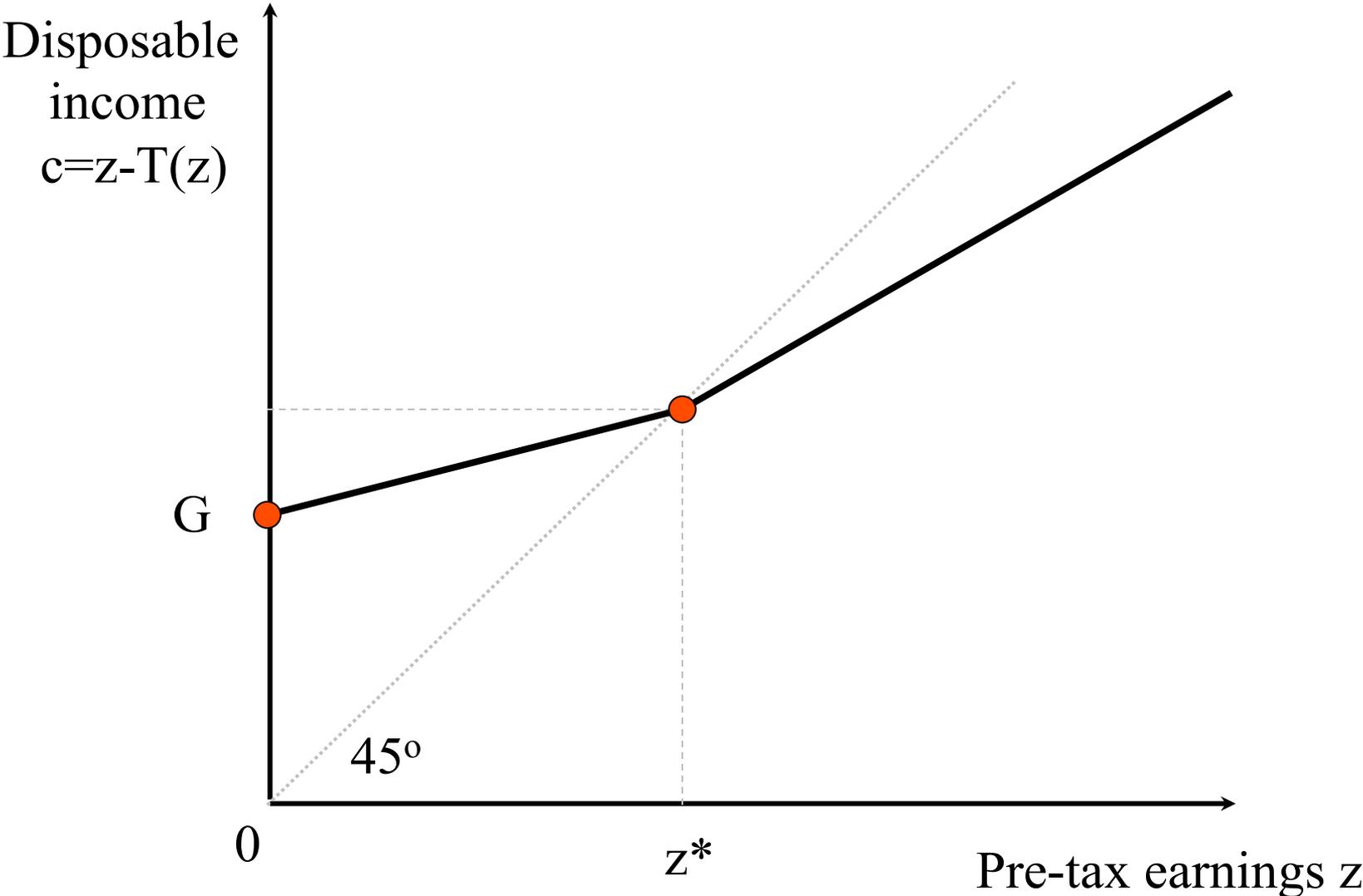
Participation response saves government revenue

Win-Win reform If intensive response is small

Disposable
income
 $c = z - T(z)$



Starting from a means-tested program

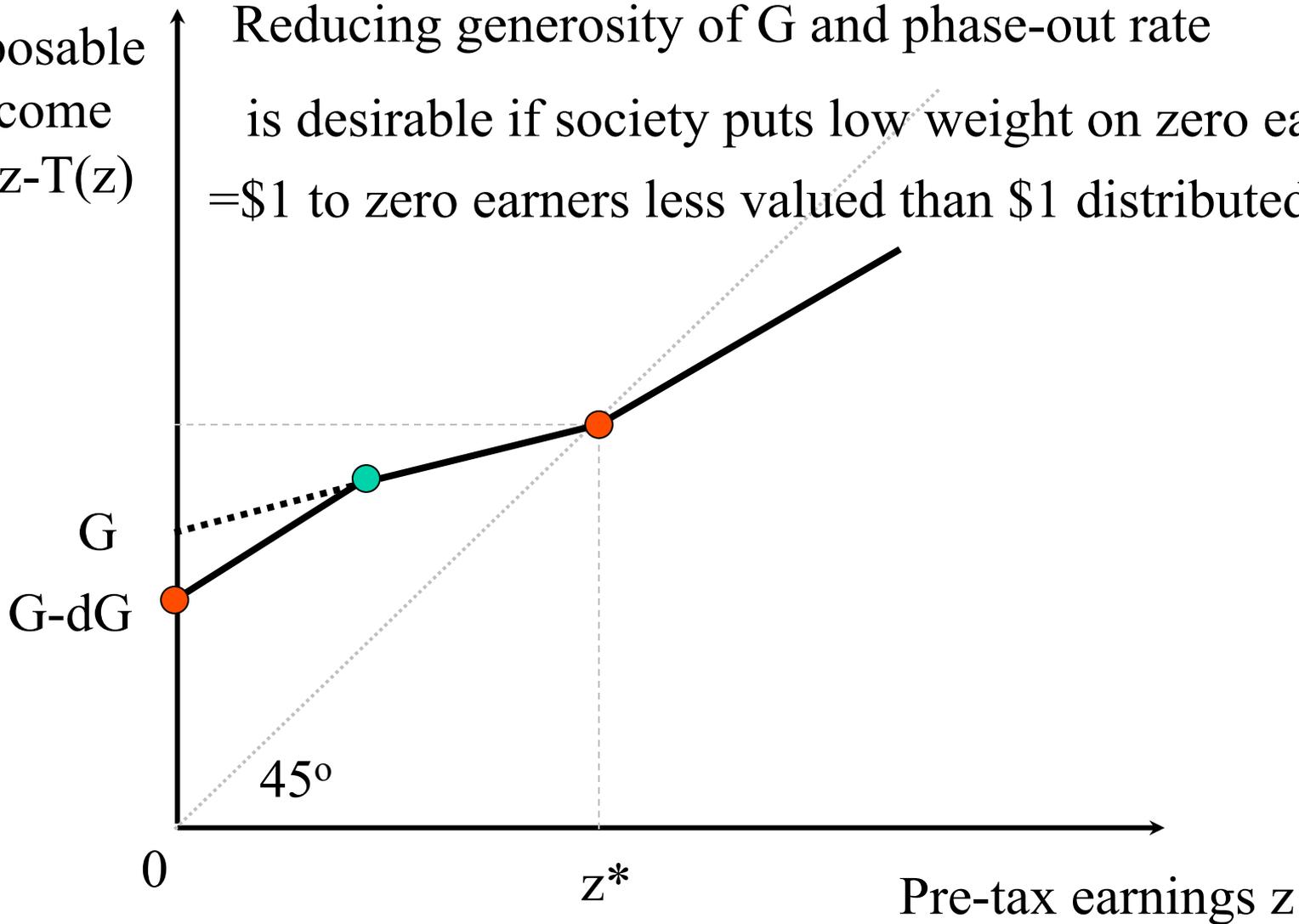


Starting from a means-tested program

Reducing generosity of G and phase-out rate

is desirable if society puts low weight on zero earners
= $\$1$ to zero earners less valued than $\$1$ distributed to all

Disposable
income
 $c=z-T(z)$



Starting from a means-tested program

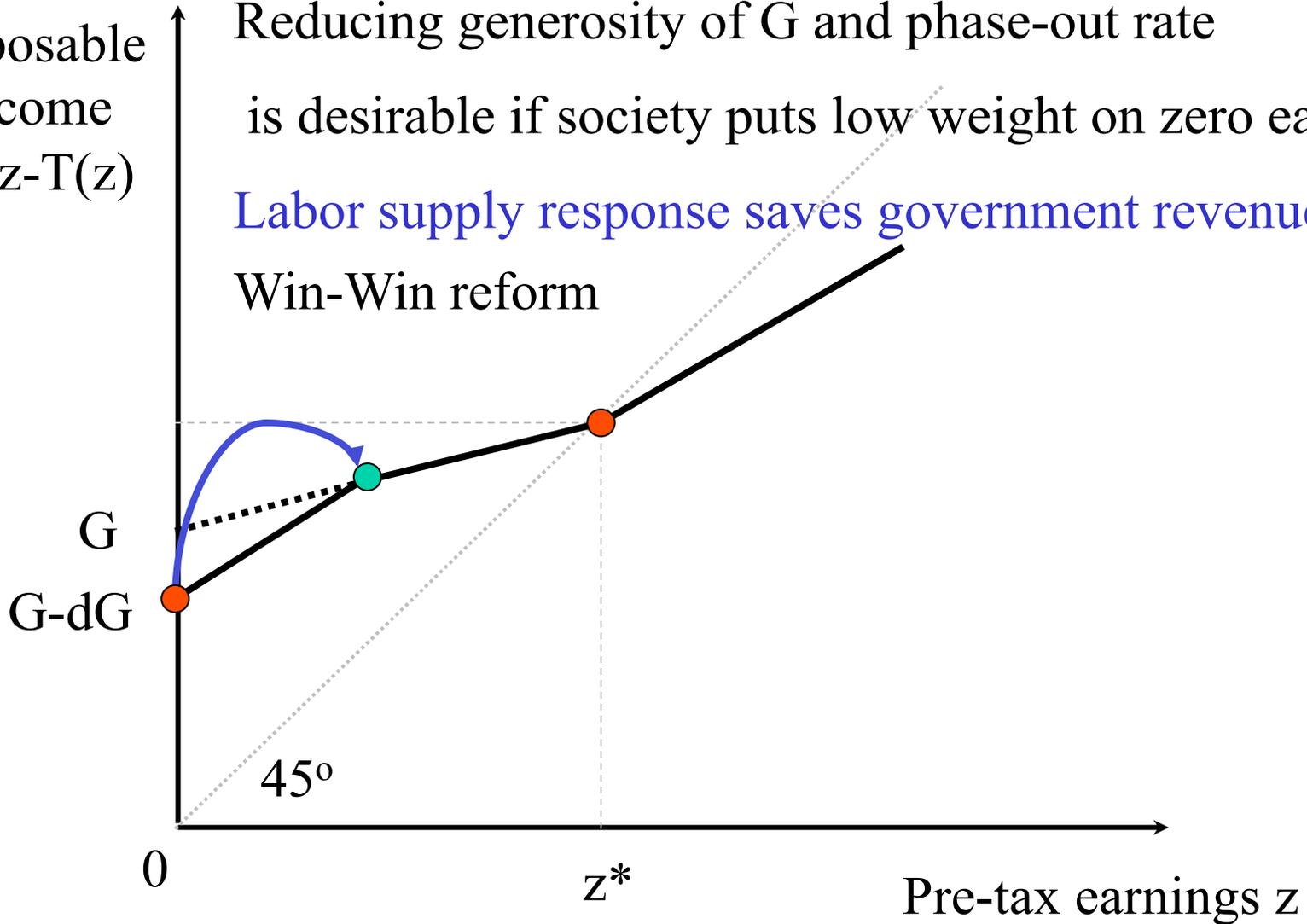
Reducing generosity of G and phase-out rate

is desirable if society puts low weight on zero earners

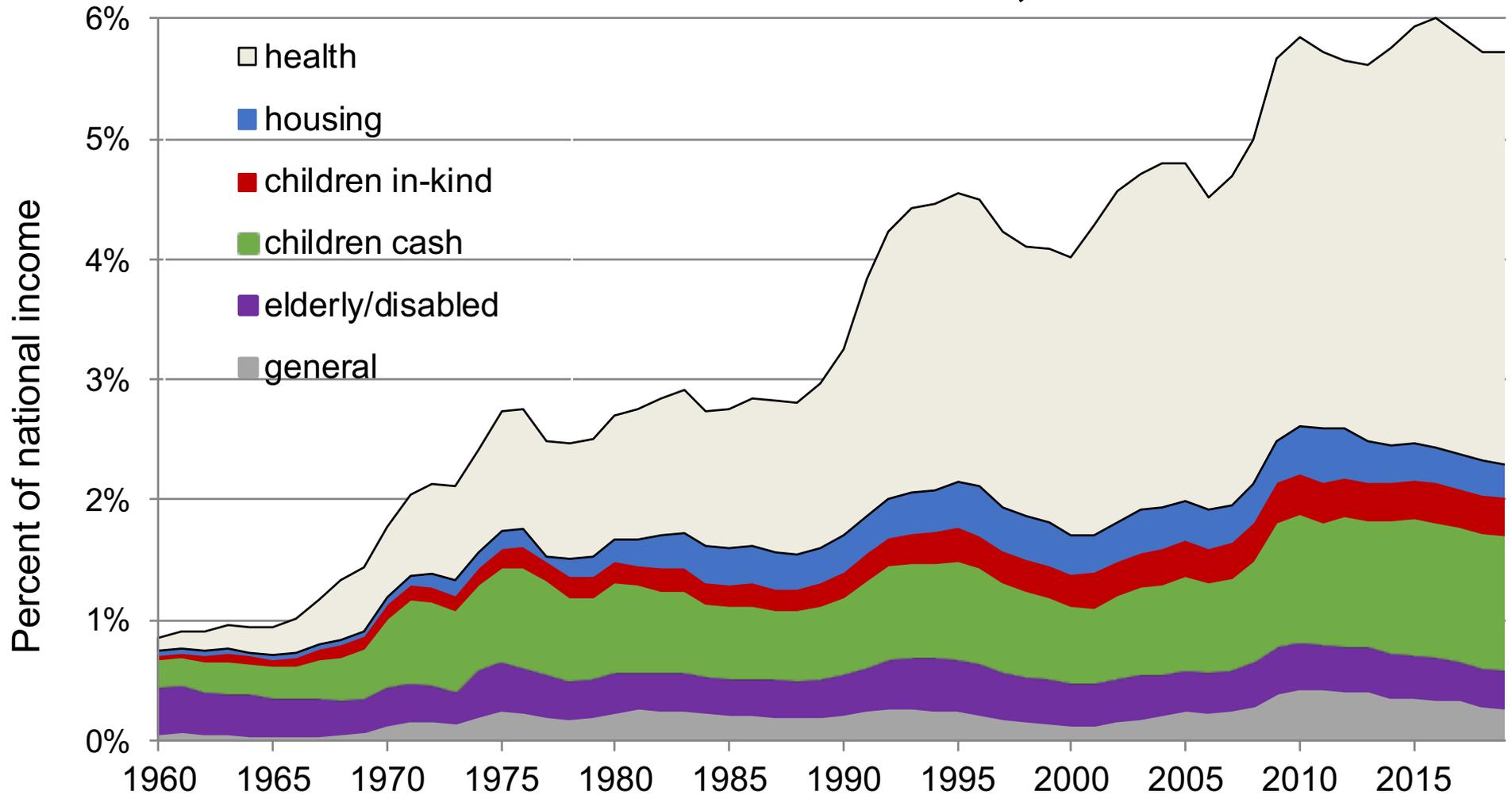
Labor supply response saves government revenue

Win-Win reform

Disposable
income
 $c=z-T(z)$



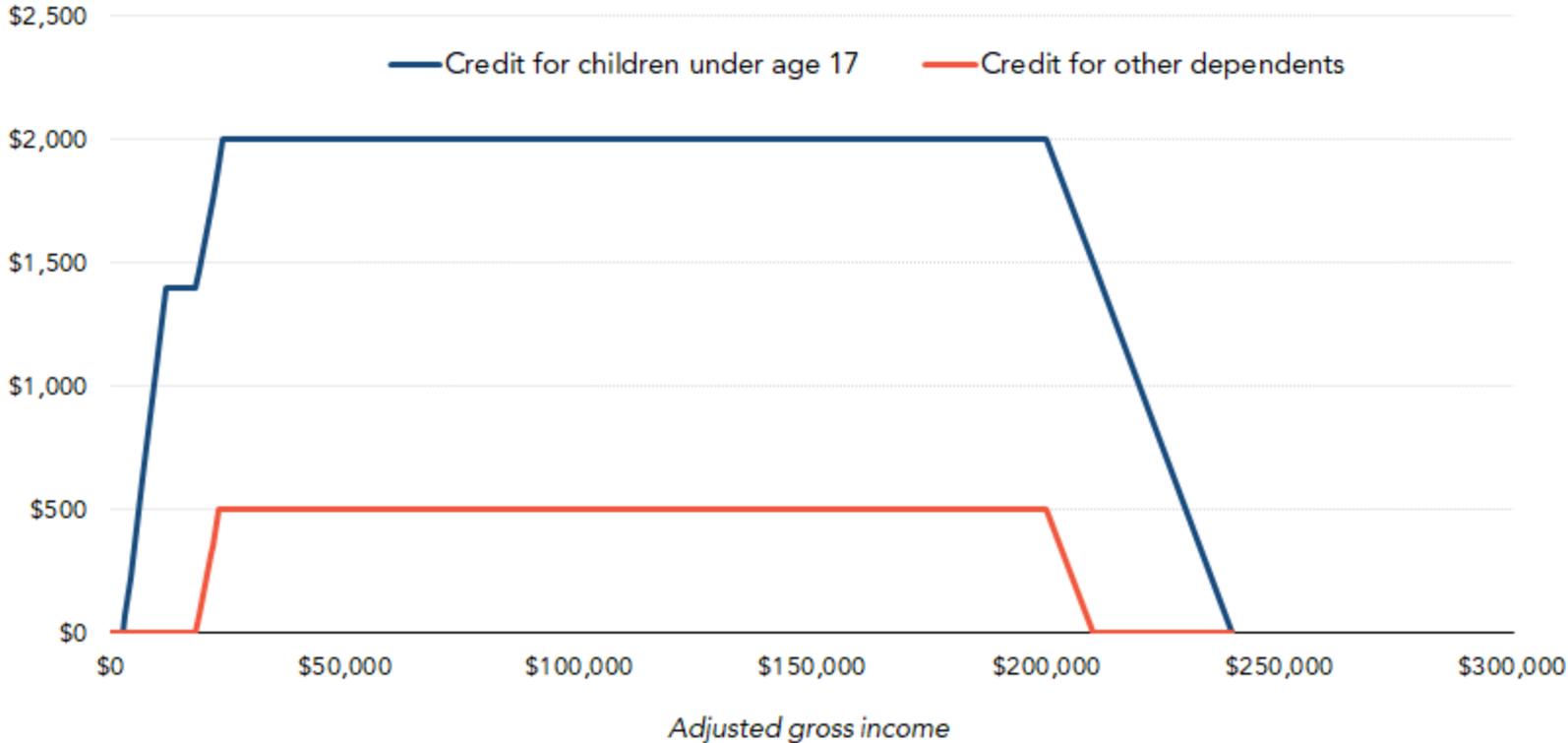
Means-tested Transfers in the US, 1960-2019



Source. National Accounts. Includes all individualized and means-tested transfers. General is untargetted (SNAP and general assistance for adults). Children cash includes refundable tax credits (EITC+CTC), TANF, and SNAP for children. Health is mostly Medicaid.

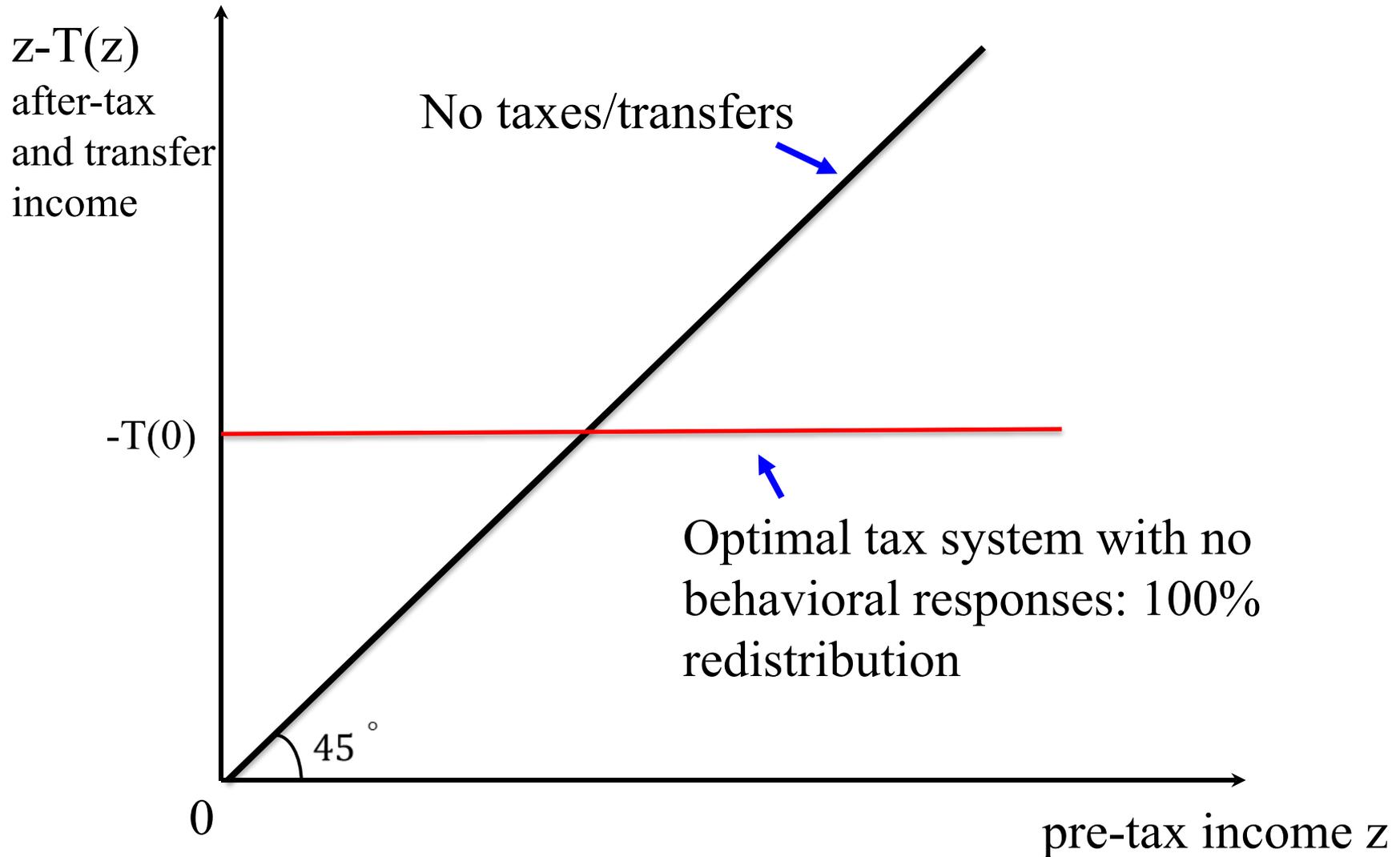


FIGURE 1
Child Tax Credit, Single Parent
For one child, tax year 2020



Source: Urban-Brookings Tax Policy Center calculations.
Notes: Assumes all income comes from earnings, and child meets all tests to be a CTC-qualifying dependent. Credit for married parents begins to phase out at \$400,000 of income. Only citizen children qualify for the \$2,000 CTC for children under 17. Noncitizens under age 17 who meet the dependency tests of eligibility can qualify for the credit for dependents over age 17.

Optimal Tax/Transfer Systems



Optimal Tax/Transfer Systems

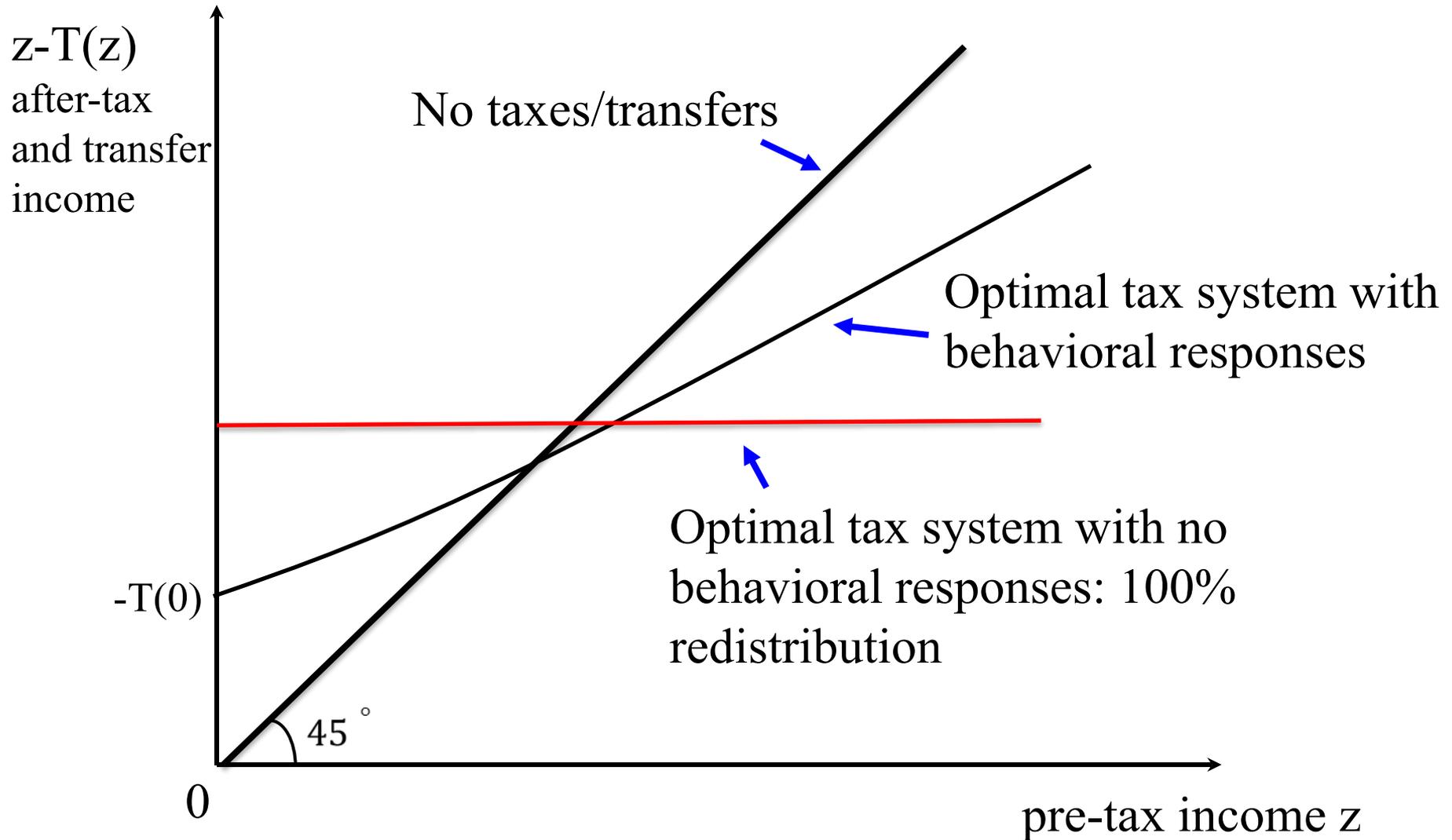
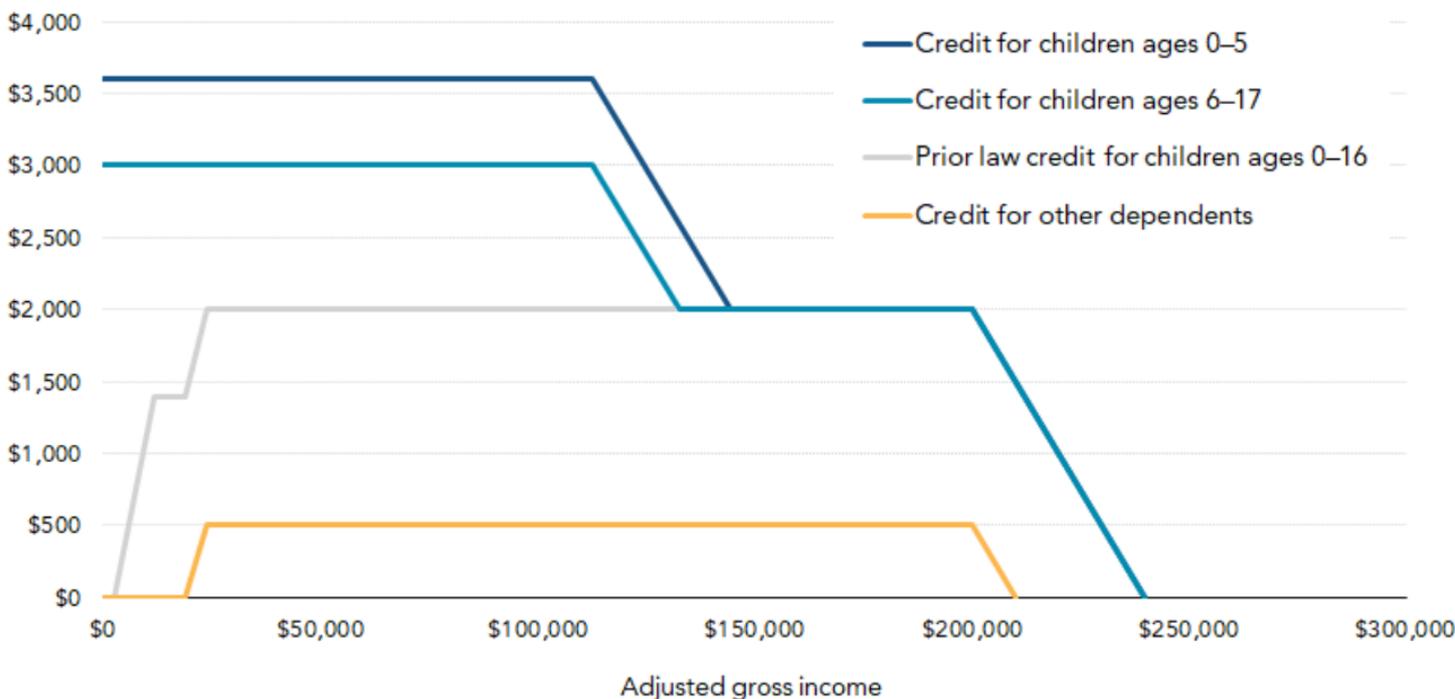


FIGURE 1
Child Tax Credit, Single Parent
For one child, tax year 2021



Source: Urban-Brookings Tax Policy Center calculations.

Notes: Assumes all income comes from earnings, and child meets all tests to be a CTC-qualifying dependent. \$3,000 and \$3,600 credits are fully refundable; prior law limited refunds to \$1,400 out of the maximum \$2,000 credit. Credit for married parents first phases out at \$150,000 of income until credit reaches pre-2021 level; begins second phase out at \$400,000 of income. Only citizen children qualify for the \$3,000 and \$3,600 credits for children under 18. Noncitizens under age 18 who meet the dependency tests of eligibility can qualify other dependent credit.