

# Inequality and Income Redistribution

Summer 2023  
Econ S10-A, Harvard University  
Prof. Josh Abel

Textbook chapter 20

# Normative Analysis

- Formal normative analysis so far has focused on efficiency
  - Market maximizes size of the pie in the absence of market failures
    - Externalities, market power, asymmetric information
- But have stressed that efficiency isn't everything; distribution matters, too
  - “Price gouging can harm vulnerable consumers”
  - “International trade creates winners and losers”
- Strongest argument for efficiency: maximizing the size of the pie allows us to make everyone better off
  - Inherent in that is redistributive policy, so we need to understand that
- Price controls or taxes/subsidies/tariffs on products can help redistribute
  - But income taxation is a better way to do it

## Normative Analysis (2)

- Efficiency is simpler and more object than distribution
  - There's an efficient quantity, try to get as close to it as possible
- Distributional concerns are far more complicated and inherently subjective
  - There are many many many ways to divide the pie: which do you most prefer?
  - Economic analysis: formalize your subjective beliefs, see what it implies
- Some might argue that because efficiency is objective and distribution is subjective, we should only focus on efficiency

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- Distributional concerns are far more complicated and inherently subjective
  - There are many many many ways to divide the pie: which do you most prefer?
  - Economic analysis: formalize your subjective beliefs, see what it implies
- Some might argue that because efficiency is objective and distribution is subjective, we should only focus on efficiency
  - That is wrong! Ignoring distribution IS implicitly making a decision about what a good distribution is, whether you mean to or not.
- Will start lecture today by describing distribution of resources – not so easy!
- Will then discuss the theory of redistribution

Inequality

# Modern Wealth Inequality in the US

## WEALTH INEQUALITY IN THE UNITED STATES SINCE 1913: EVIDENCE FROM CAPITALIZED INCOME TAX DATA\*

EMMANUEL SAEZ AND GABRIEL ZUCMAN

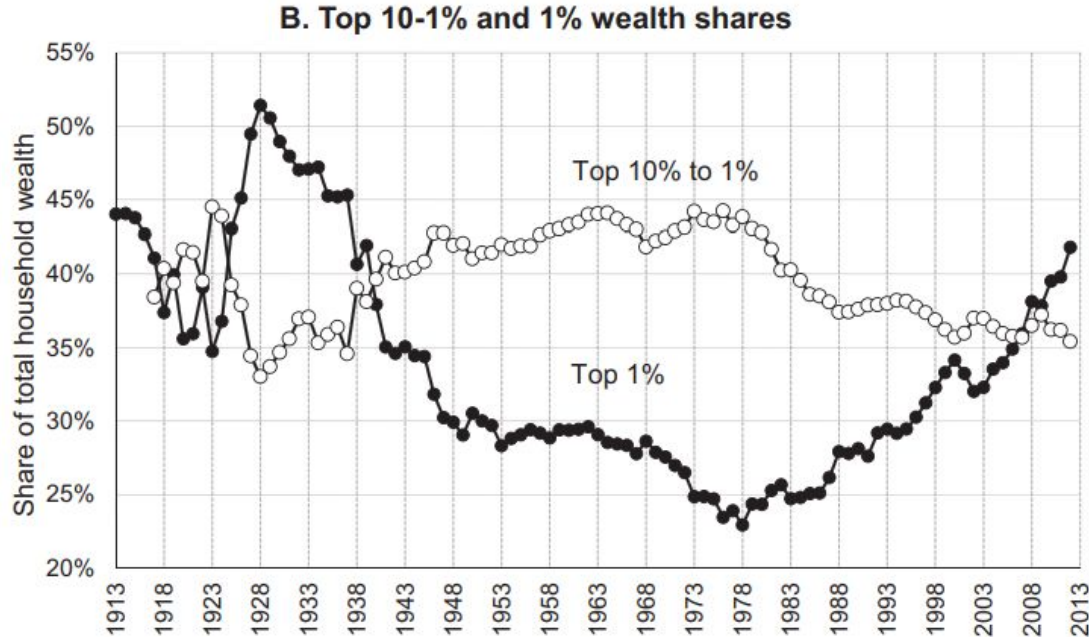
### THRESHOLDS AND AVERAGE WEALTH IN TOP WEALTH GROUPS, 2012

Wealth group	Number of families	Wealth threshold	Average wealth	Wealth share
Panel A: Top wealth groups				
Full Population	160,700,000		\$343,000	100%
Top 10%	16,070,000	\$660,000	\$2,560,000	77.2%
Top 1%	1,607,000	\$3,960,000	\$13,840,000	41.8%
Top 0.1%	160,700	\$20,600,000	\$72,800,000	22.0%
Top .01%	16,070	\$111,000,000	\$371,000,000	11.2%
Panel B: Intermediate wealth groups				
Bottom 90%	144,600,000		\$84,000	22.8%
Top 10-1%	14,463,000	\$660,000	\$1,310,000	35.4%
Top 1-0.1%	1,446,300	\$3,960,000	\$7,290,000	19.8%
Top 0.1-0.01%	144,600	\$20,600,000	\$39,700,000	10.8%
Top .01%	16,070	\$111,000,000	\$371,000,000	11.2%

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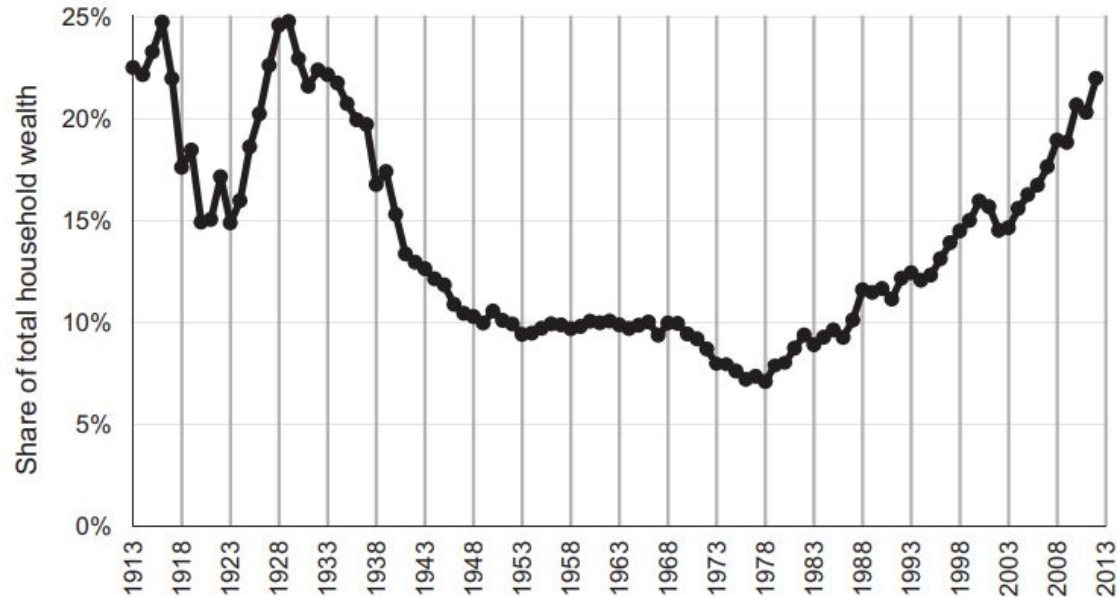


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Top 0.1% Wealth Share in the United States, 1913–2012

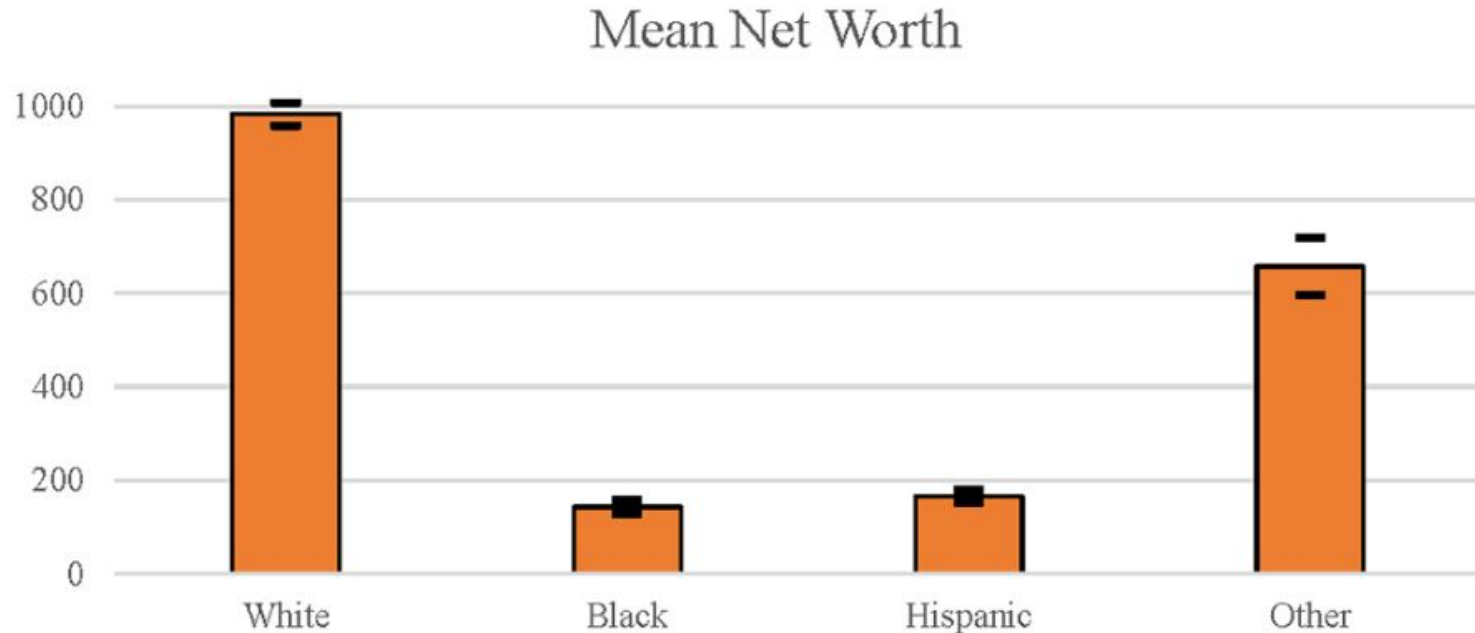




# Modern Racial Wealth Gap in the US

## Disparities in Wealth by Race and Ethnicity in the 2019 Survey of Consumer Finances

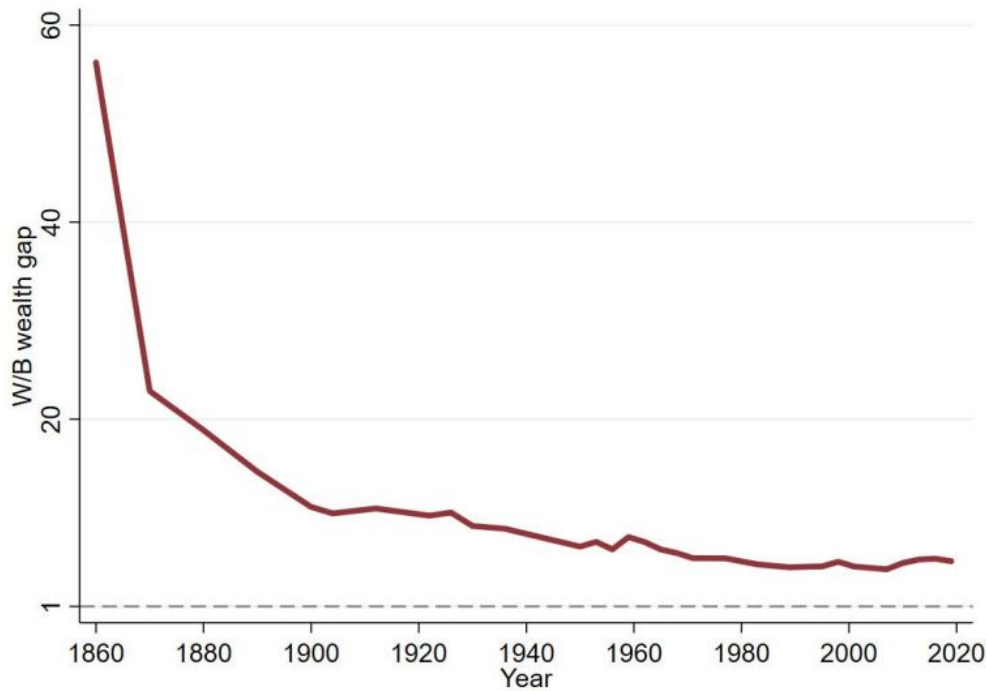
Neil Bhutta, Andrew C. Chang, Lisa J. Dettling, and Joanne W. Hsu with assistance from Julia Hewitt<sup>1</sup>



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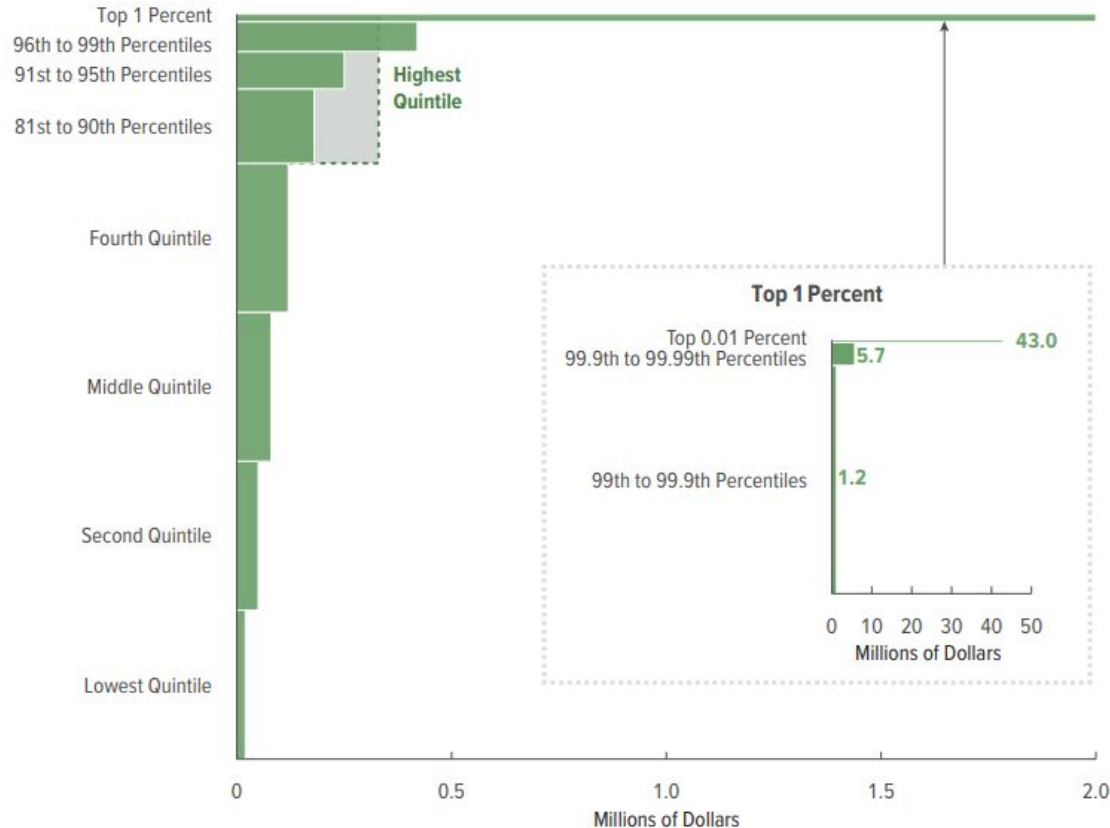
Wealth of Two Nations: The U.S. Racial Wealth Gap, 1860-2020  
Ellora Derenoncourt, Chi Hyun Kim, Moritz Kuhn, and Moritz Schularick  
NBER Working Paper No. 30101  
June 2022

Figure 1: White-Black per capita wealth ratio: 1860-2020



# Modern Income Inequality in the US

## Average Household Income Before Transfers and Taxes, 2019

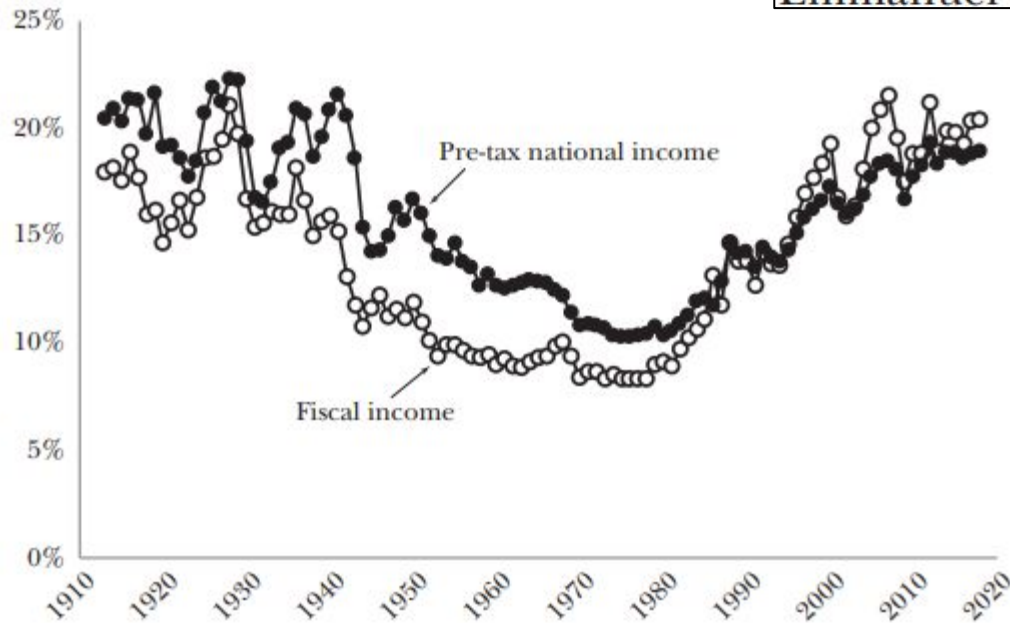


# Historical Income Inequality in the US

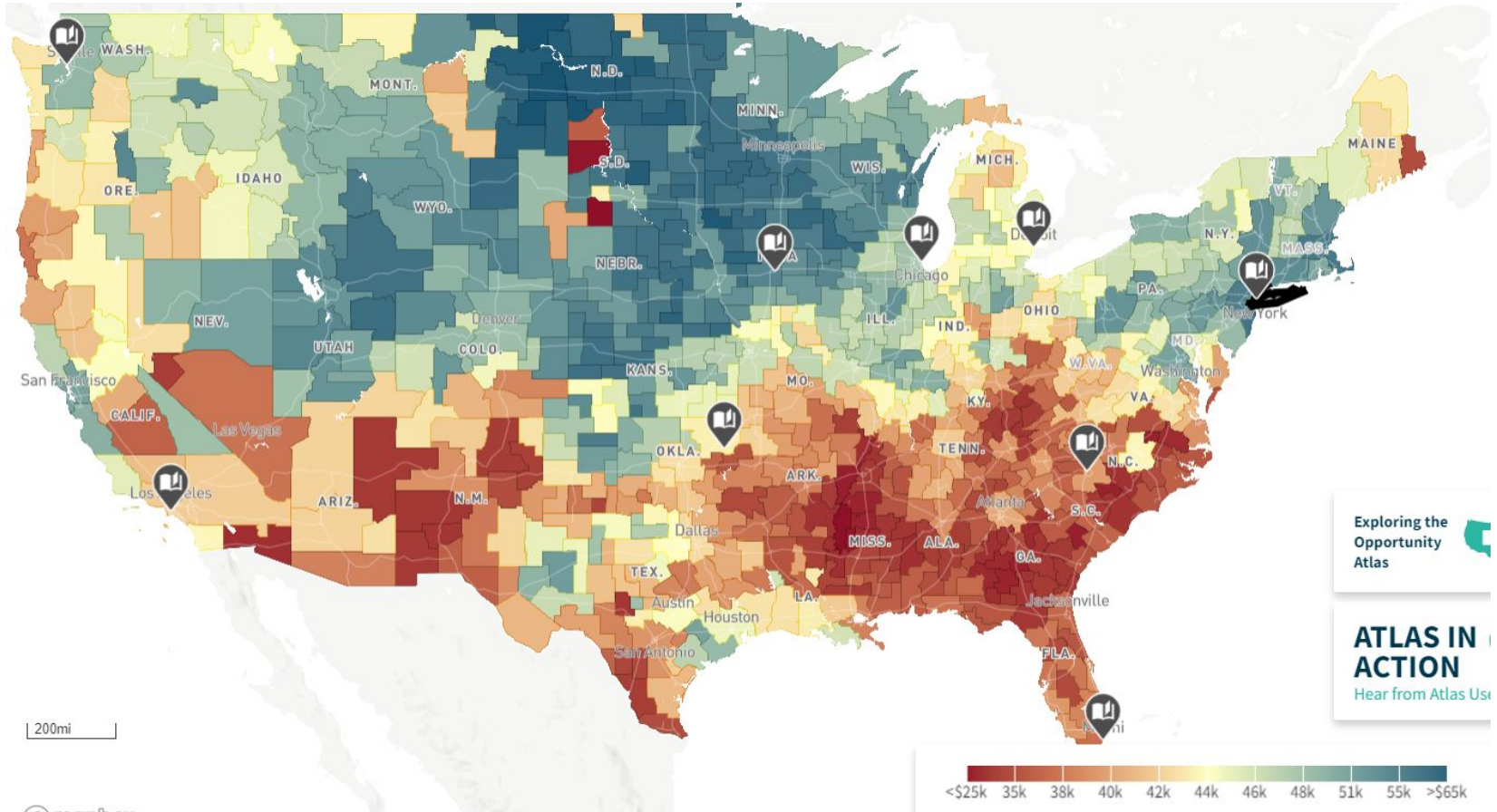
## The Rise of Income and Wealth Inequality in America: Evidence from Distributional Macroeconomic Accounts

Emmanuel Saez and Gabriel Zucman

Share of Income Earned by the Top 1 Percent

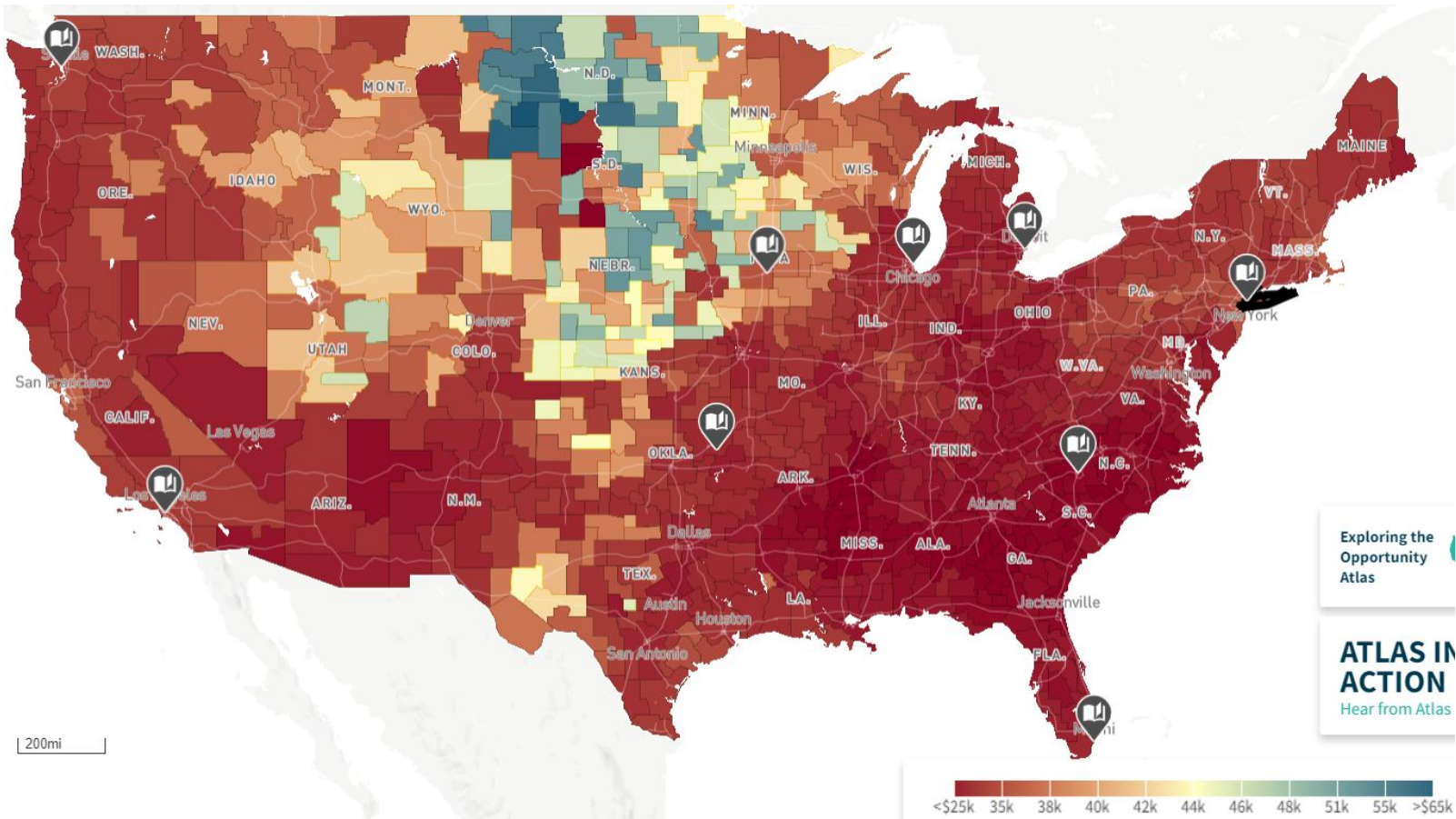


# Average Income for 35-year-olds

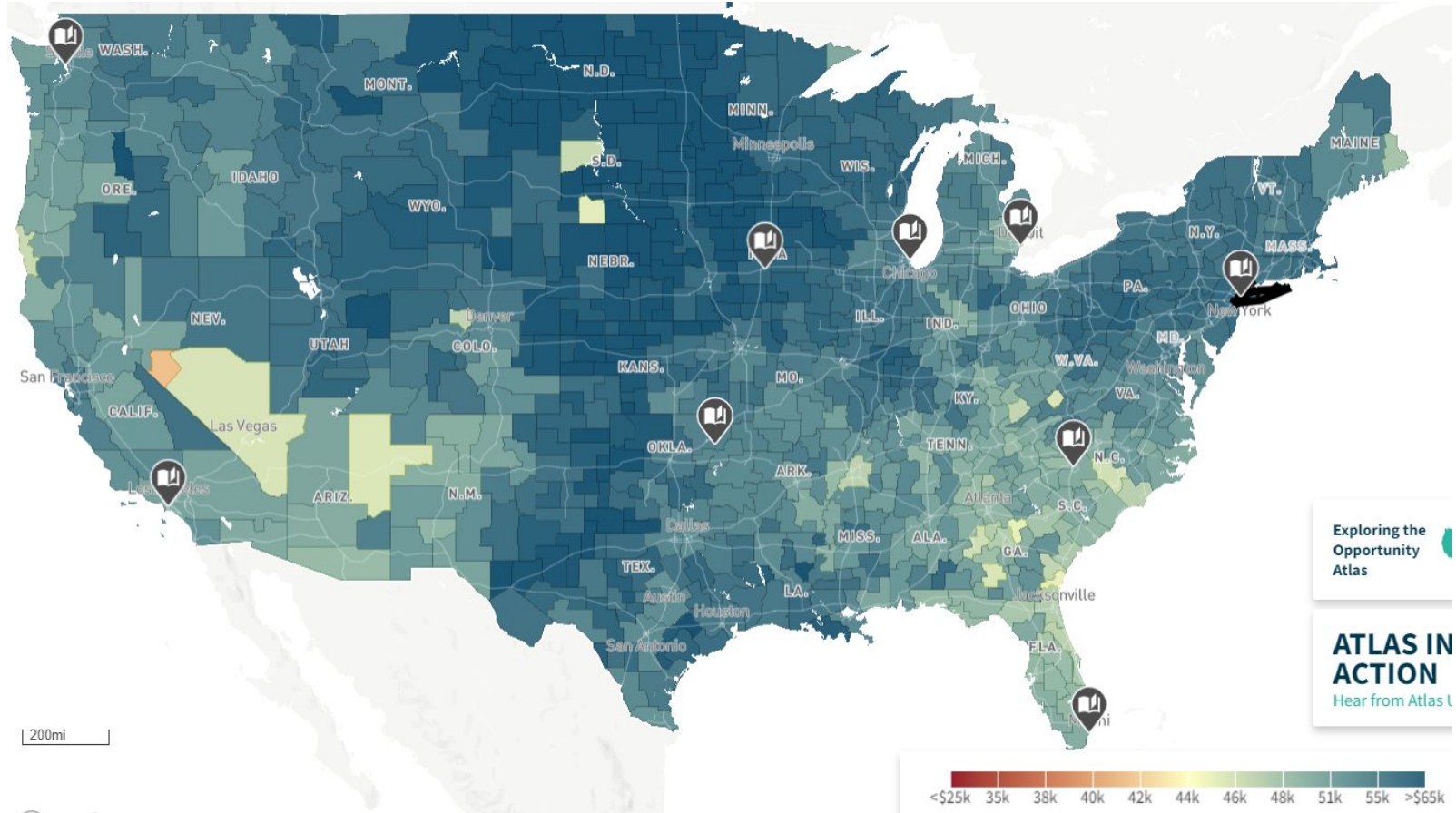




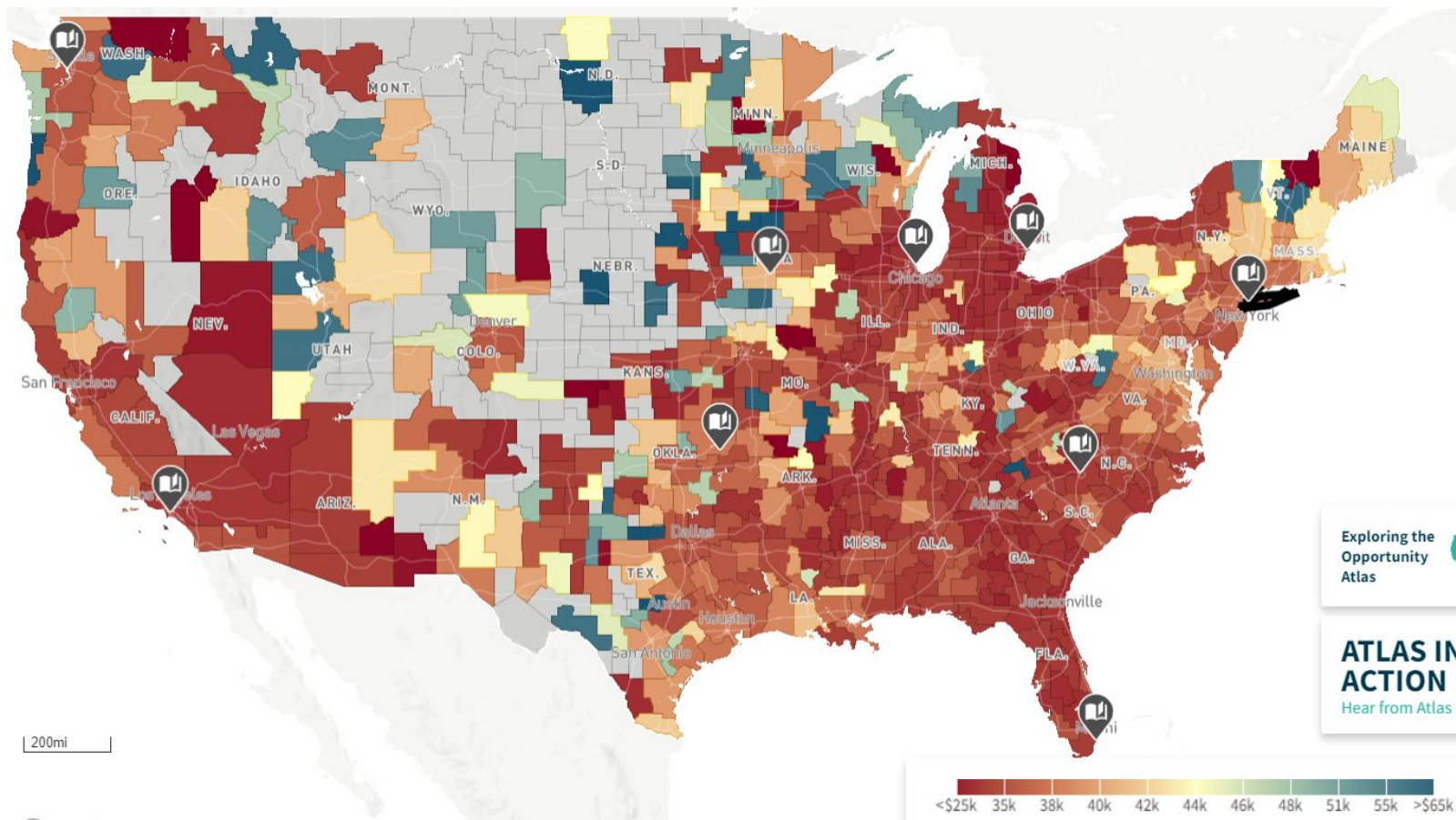
# Average Income for 35-year-olds with Low-Earning Parents



# Average Income for 35-year-olds with High-Earning Parents



# Average Income for Black 35-year-olds with High-Earning Parents





# Income Redistribution

# Equity and Efficiency

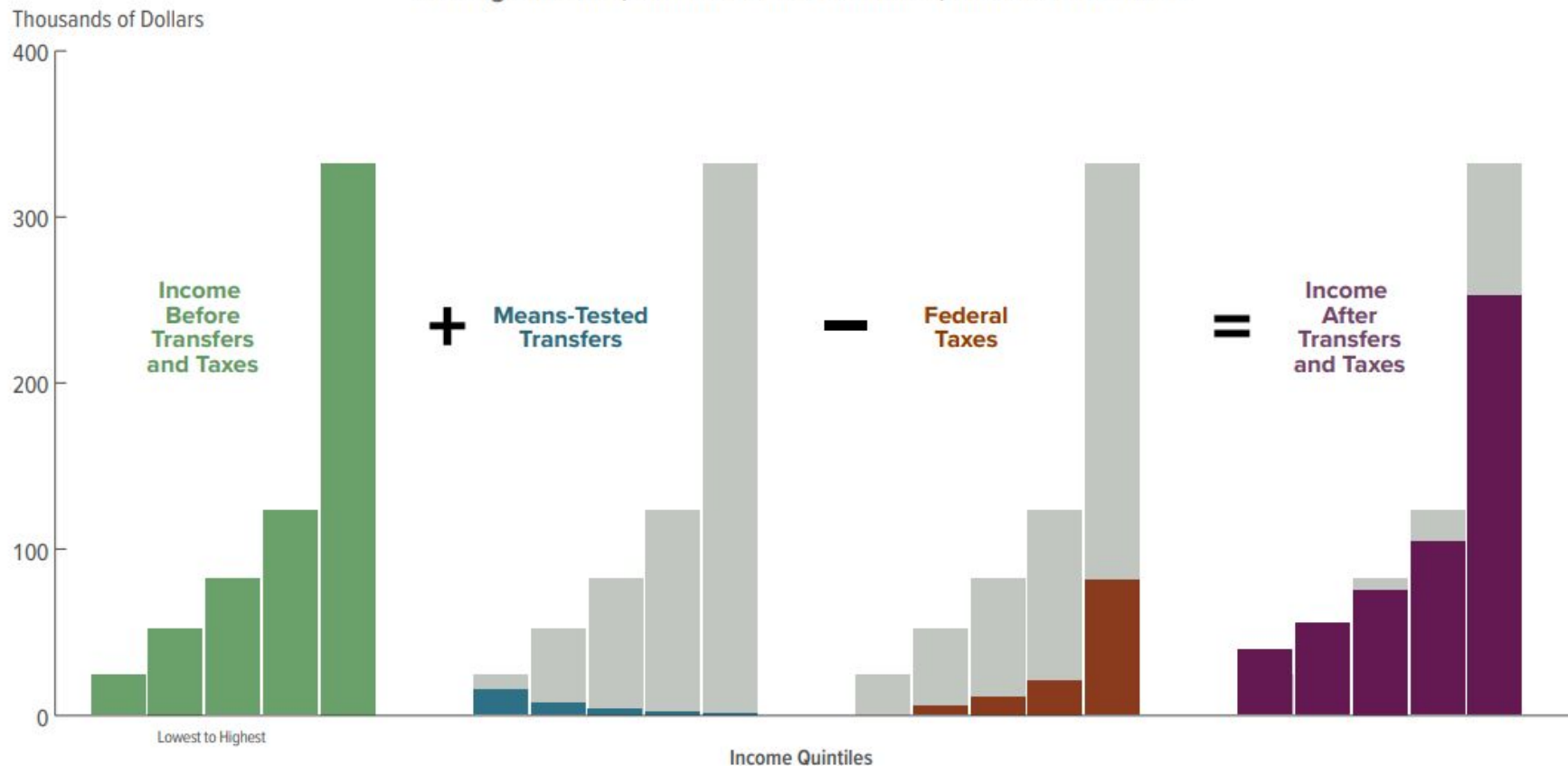
- Status Quo: \$80 for person A and \$20 for person B
  - Total: \$100
- Alternative 1: \$60 for person A and \$40 for person B
  - Total: \$100
- Nearly everyone (including economists) would prefer Alternative 1 to Status Quo
  - Same pie, more evenly distributed

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- Alternative 1: \$60 for person A and \$40 for person B
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- Nearly everyone (including economists) would prefer Alternative 1 to Status Quo
  - Same pie, more equitable
- Alternative 2: \$50 for person A and \$30 for person B
  - Total: \$80
- People will differ if forced to choose between Status Quo and Alternative 2
  - Alternative 2 shrunk the size of the pie: inefficient
  - Alternative 2 made person B better off: more equitable
  - Took away \$30 from person A, gave only \$10 to person B
- Society must decide how much it's willing to shrink the pie to make it more equitable

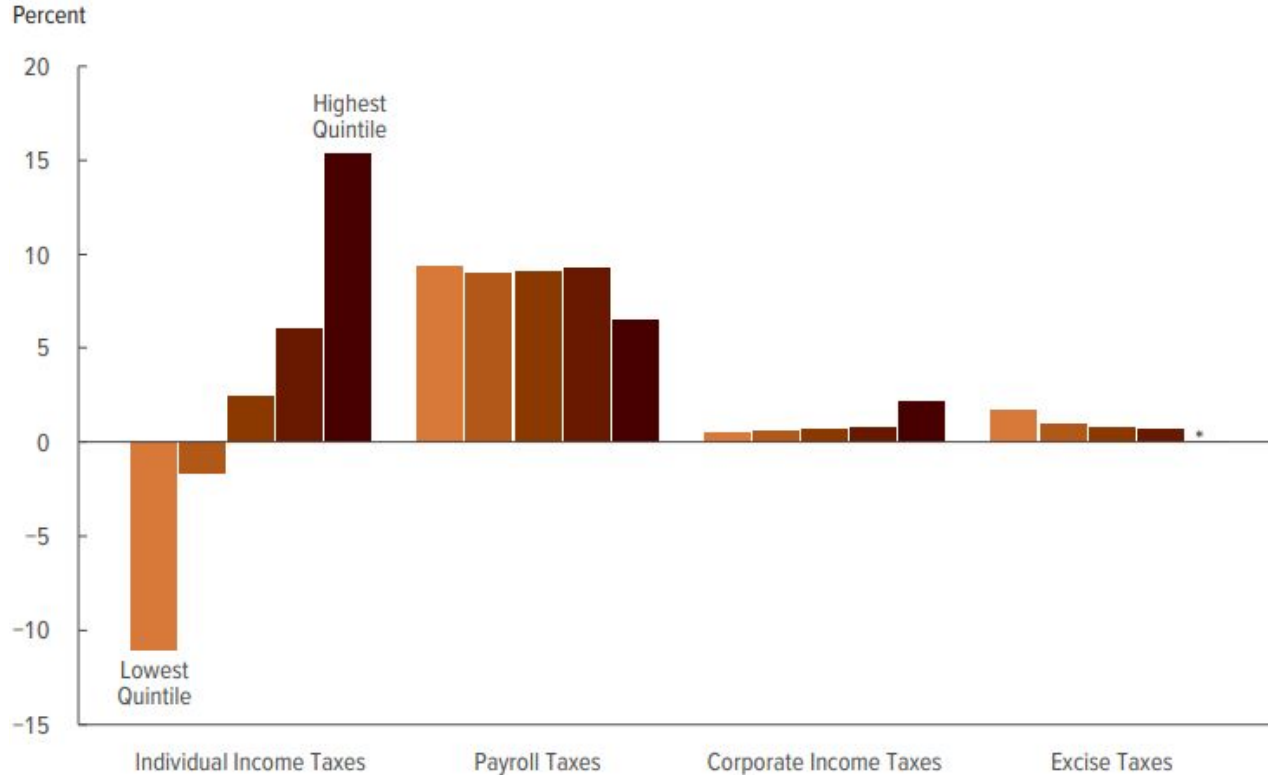
# Income Redistribution in the US

Average Income, Means-Tested Transfers, and Federal Taxes



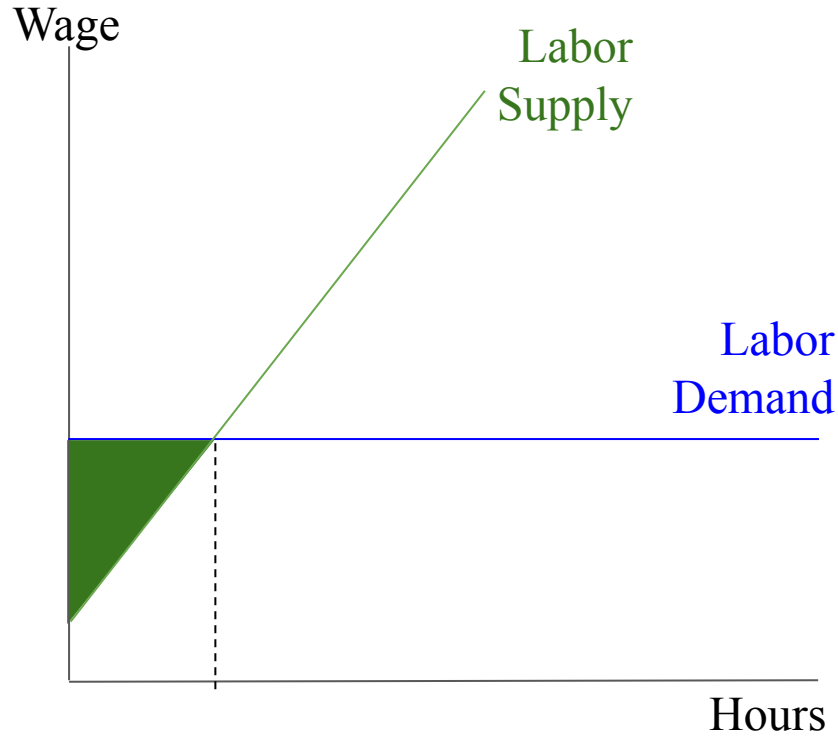
# Average Tax Rates in the US

## Average Federal Tax Rates, by Tax Source, 2019

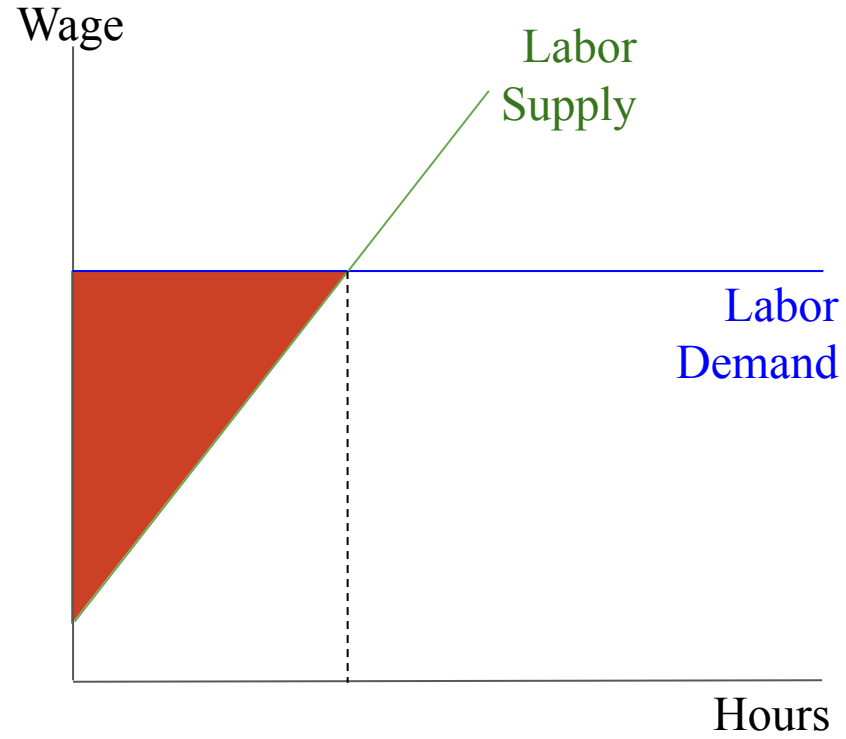


Data source: Congressional Budget Office. See [www.cbo.gov/publication/58353#data](https://www.cbo.gov/publication/58353#data).

# A Model with Inequality

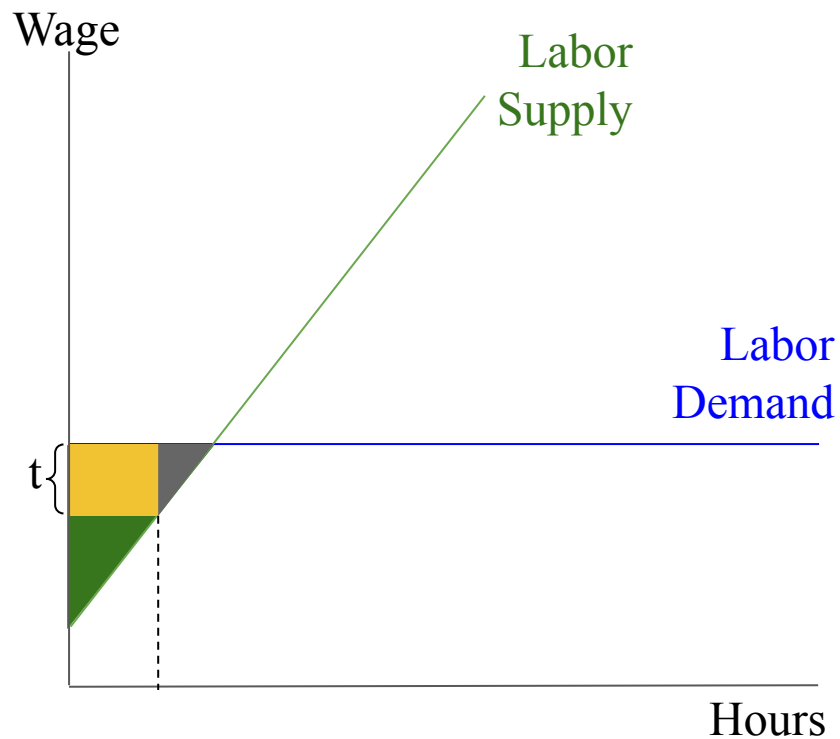


Low-Earner

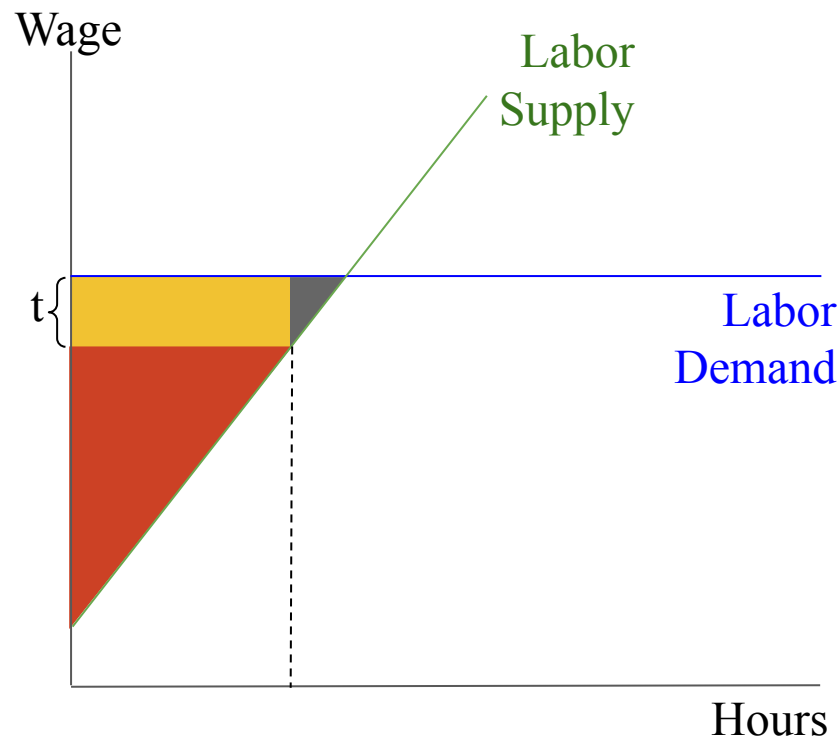


High-Earner

# Redistributive Flat Tax

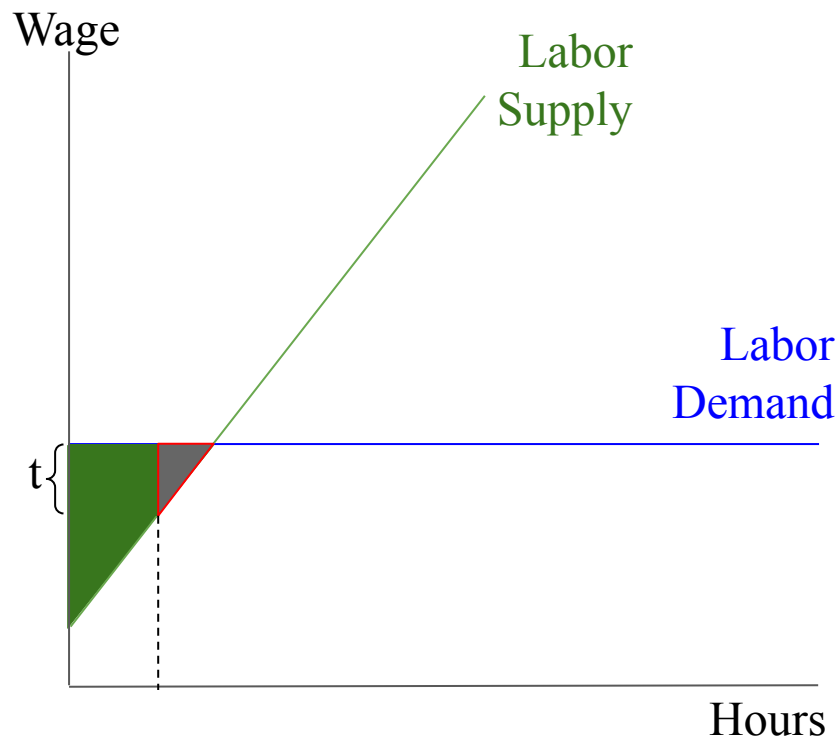


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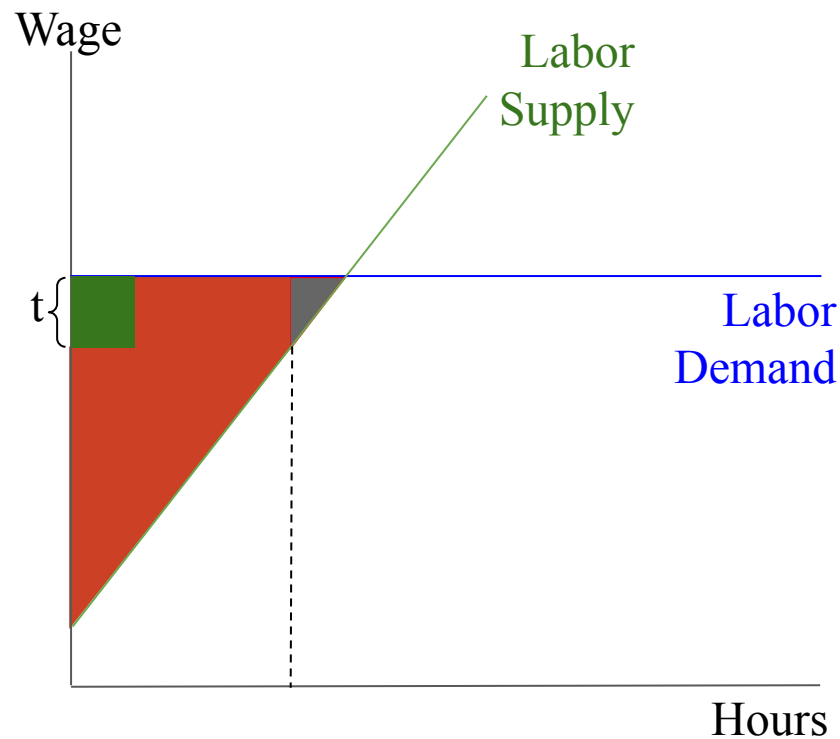


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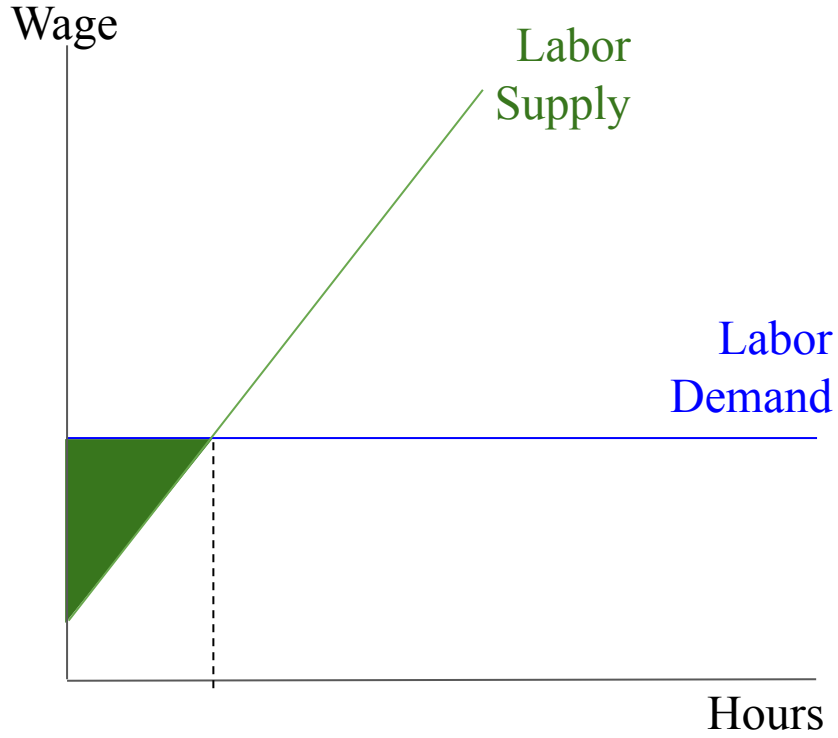
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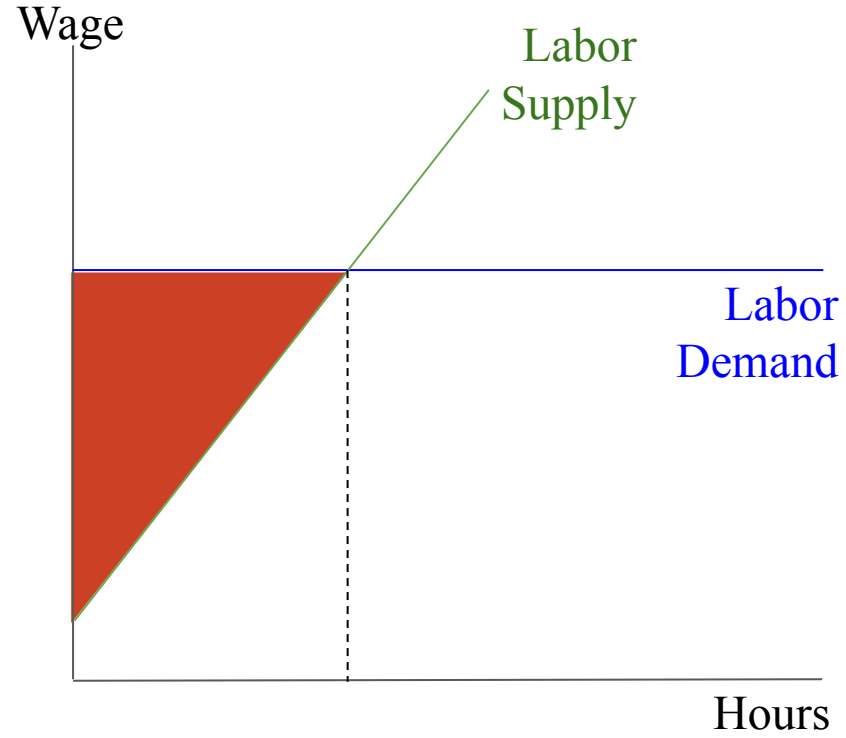
# “The Leaky Bucket”

- Tension between equity and efficiency
- Redistributing from rich to poor shrinks the size of the pie
  - Efficiency cost/DWL
- Payoff from earning money is diminished, discourages productive activity
  - Incentives are distorted
- “Leaky bucket”
  - Redistributing resources can be done
  - But some of the resources get lost along the way
  - Excess Burden

# Progressive Income Tax

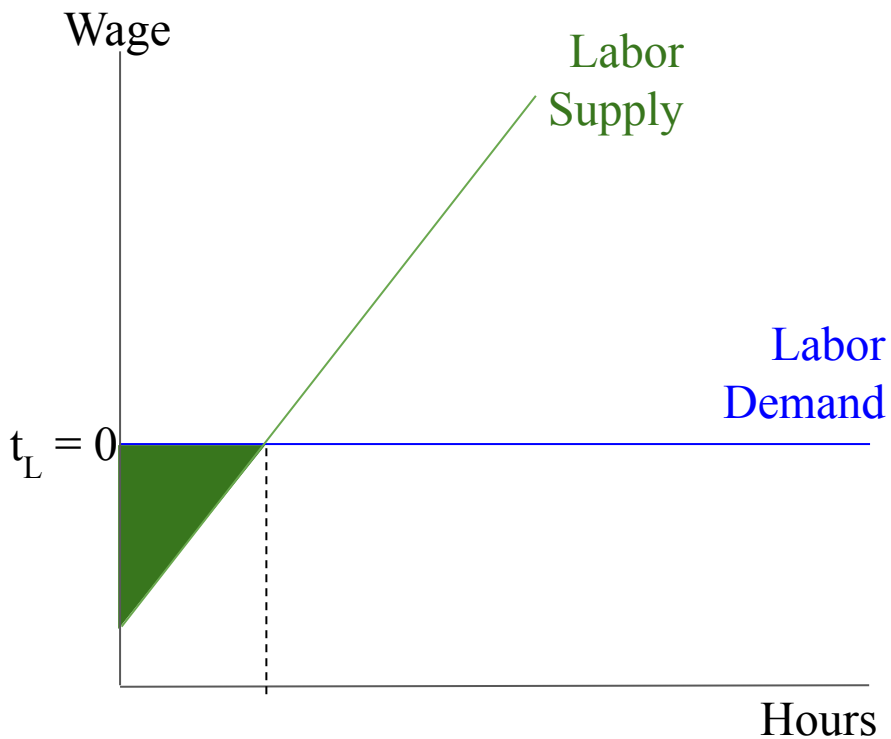


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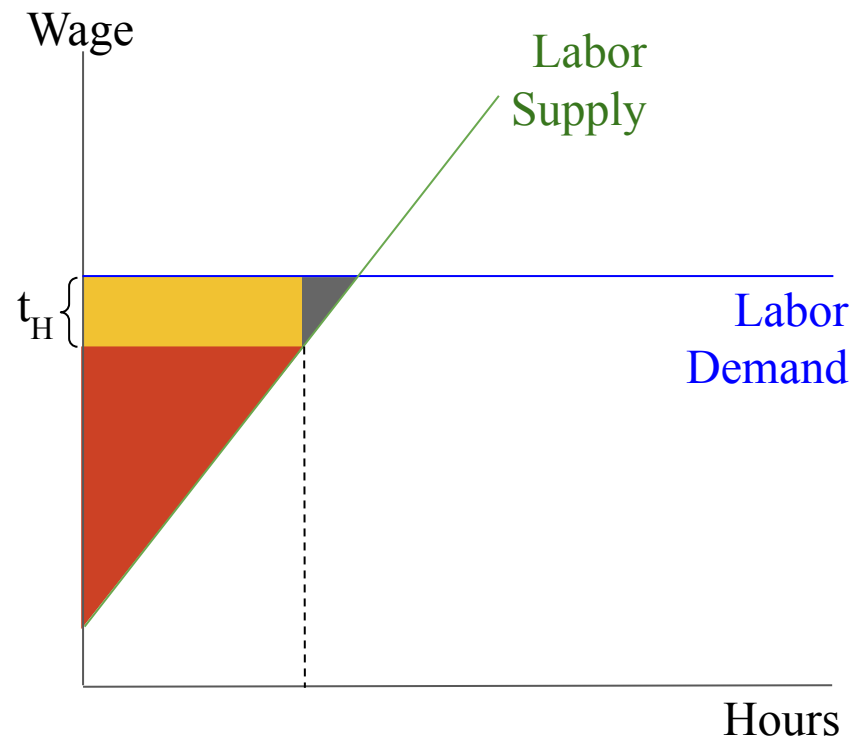


High-Earner

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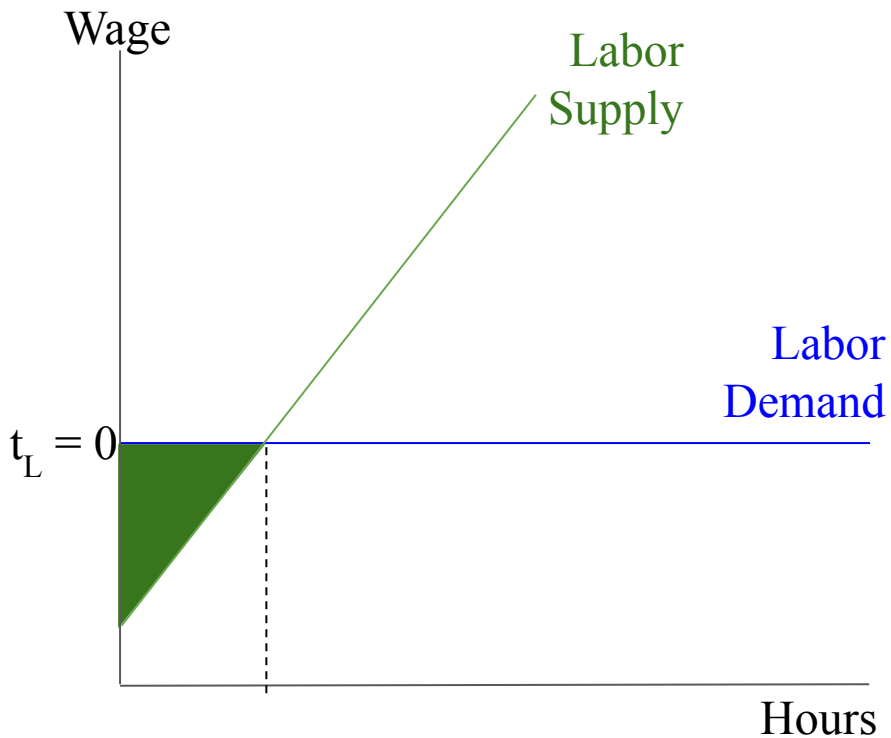


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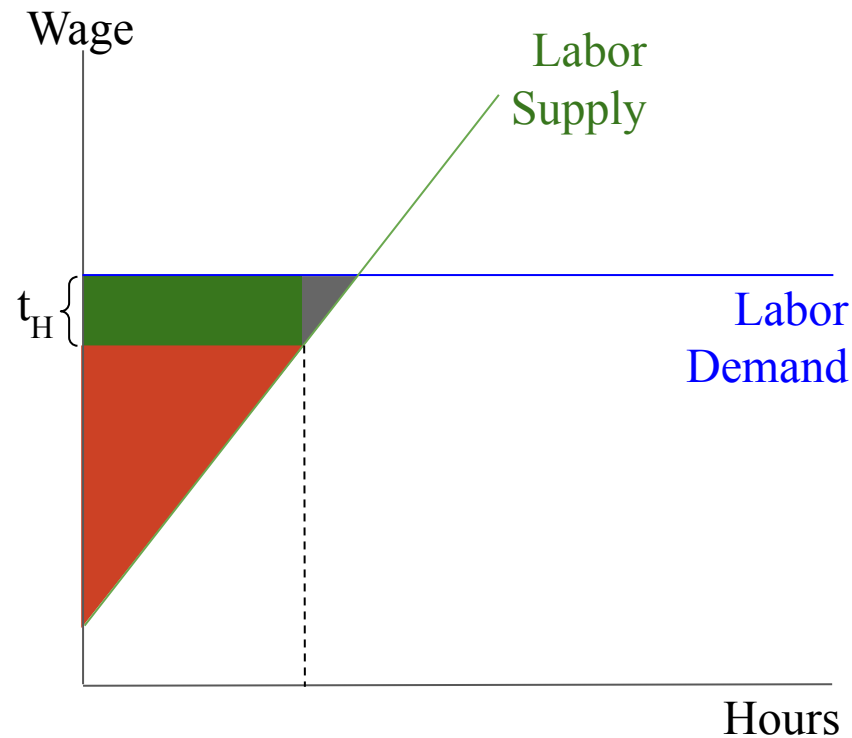


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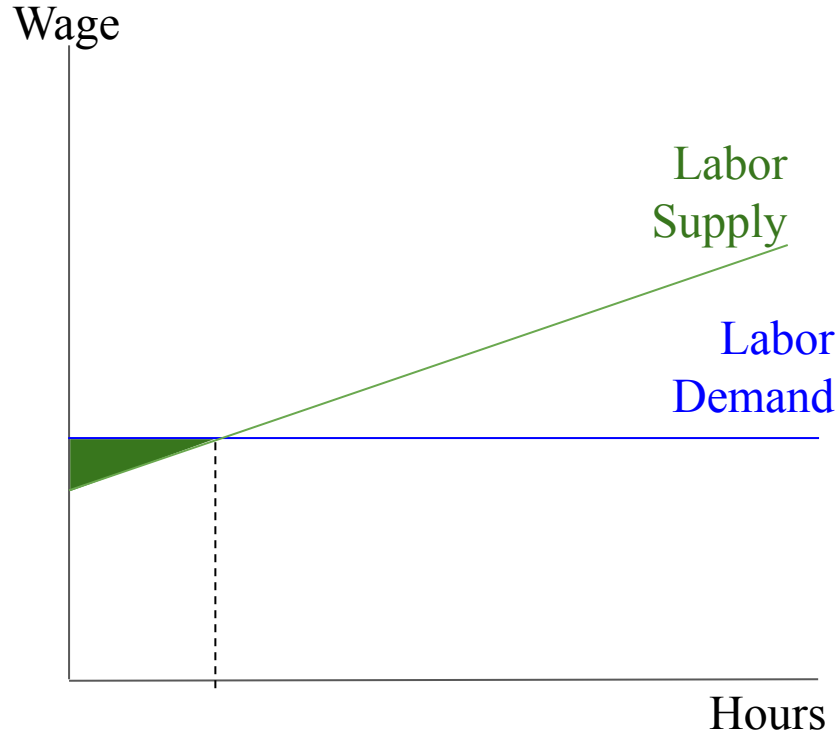


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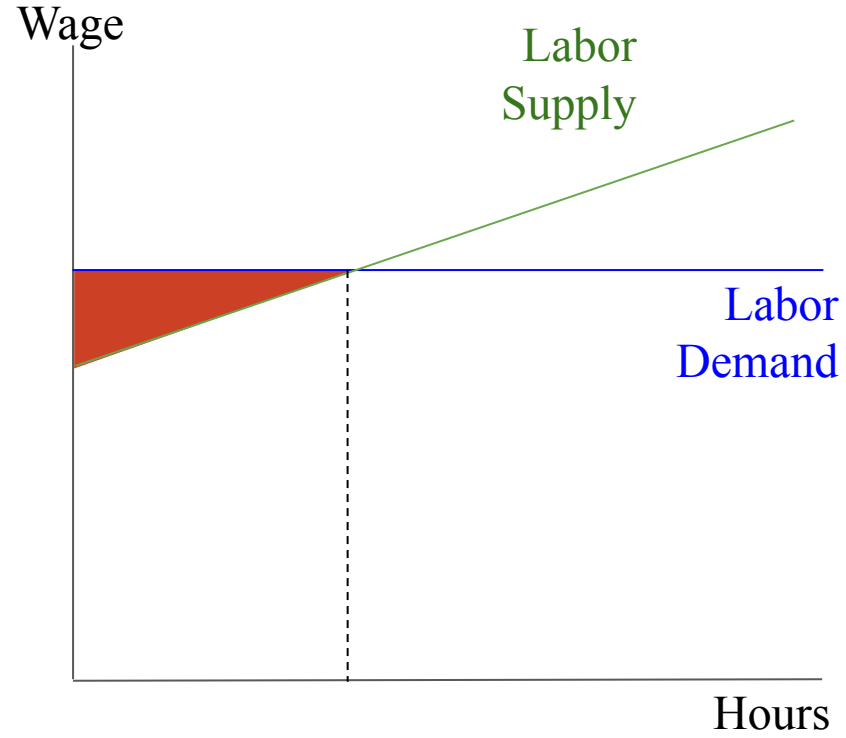


High-Earner

# Elastic Labor Supply

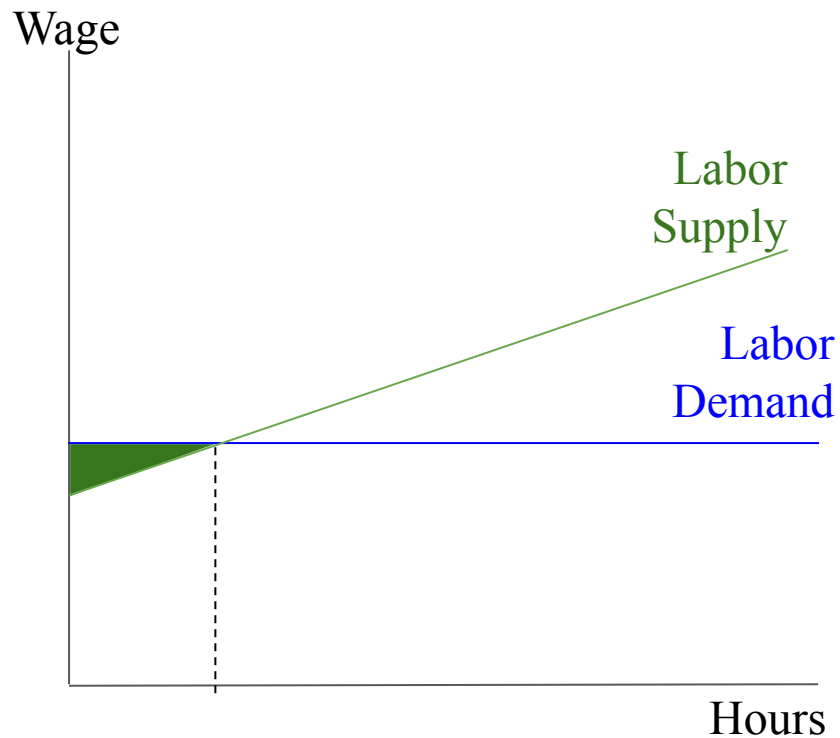


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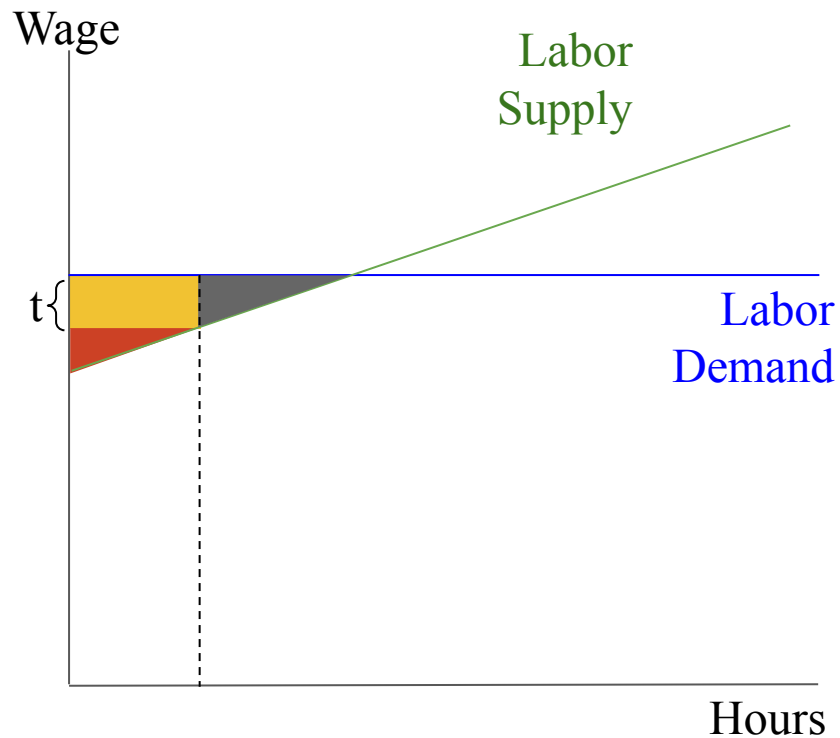


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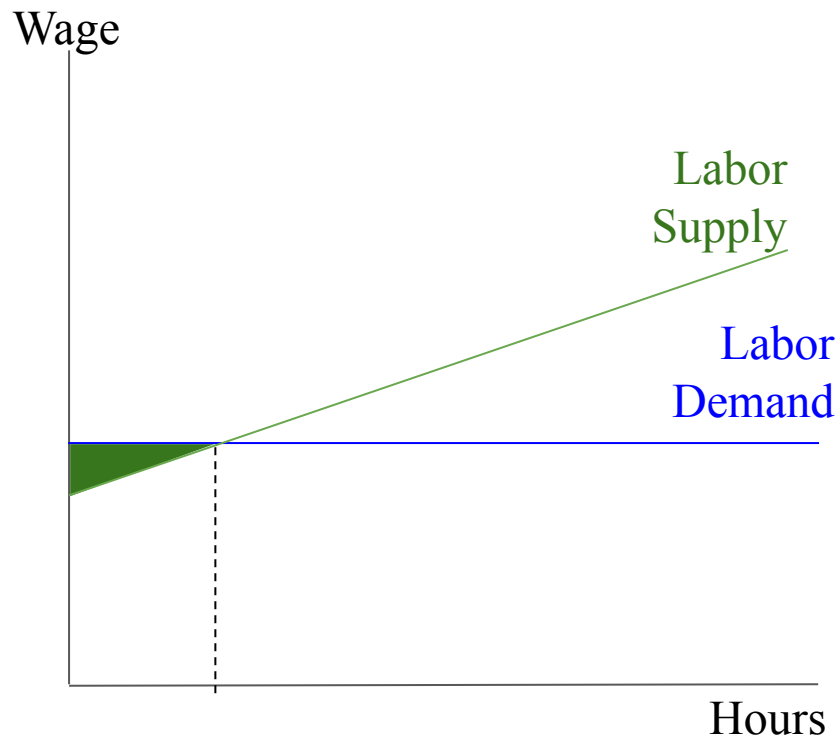


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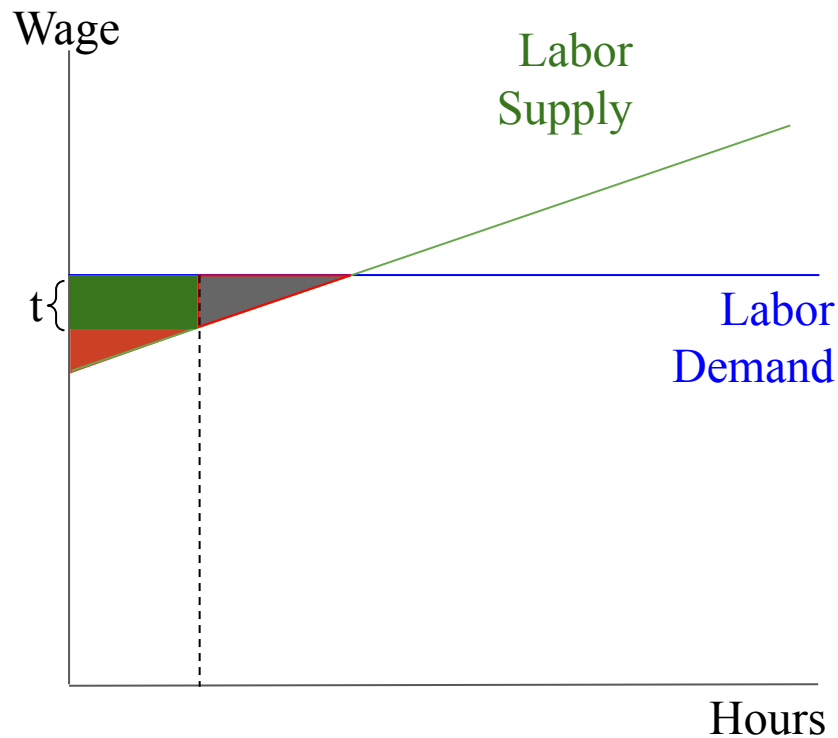


High-Earner

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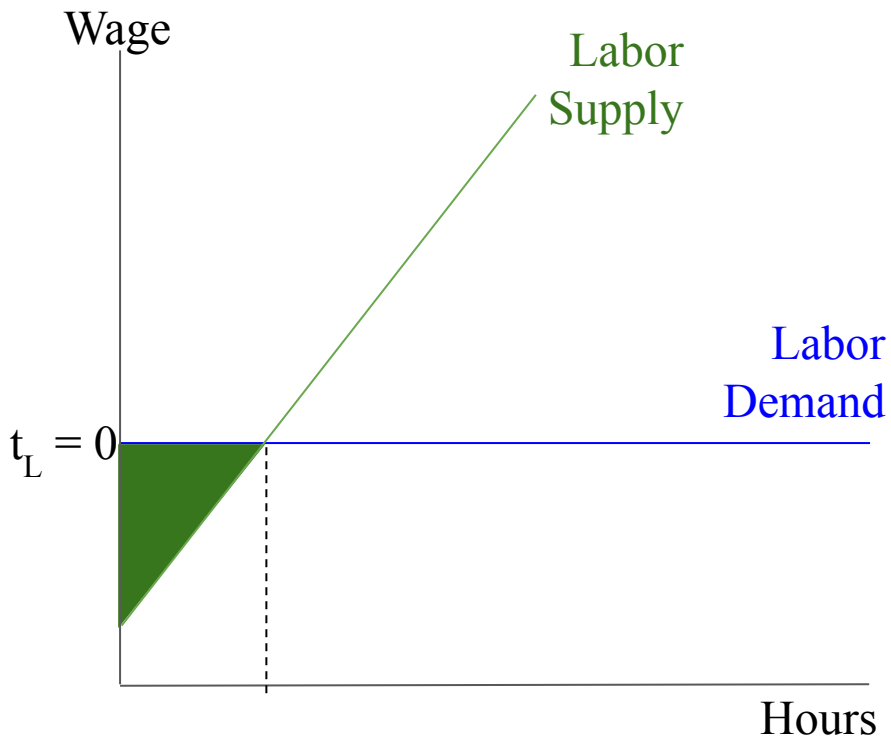


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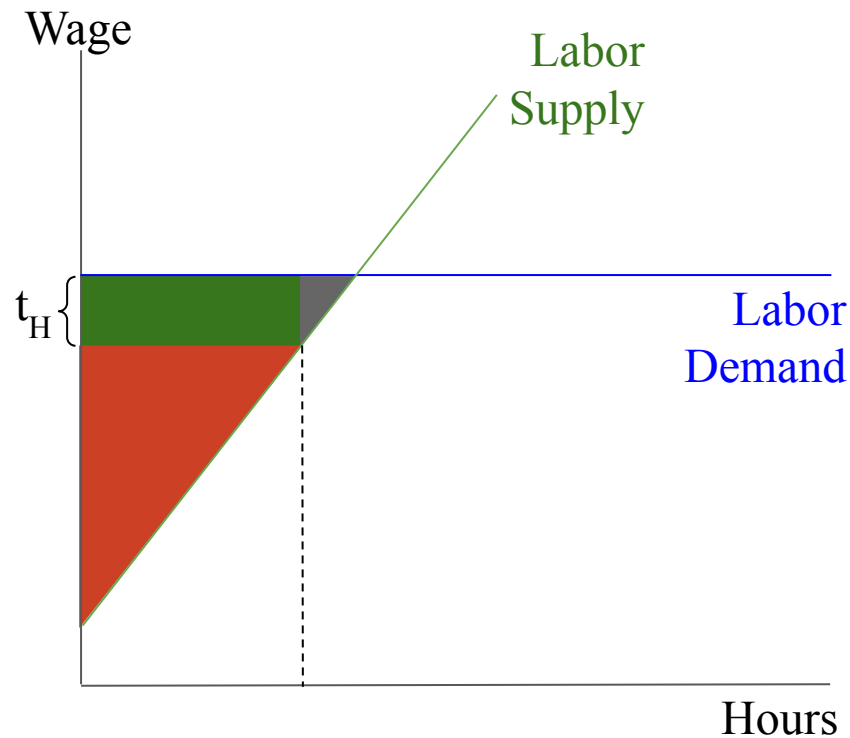


High-Earner

# Progressive Income Tax (repeated)



Low-Earner



High-Earner

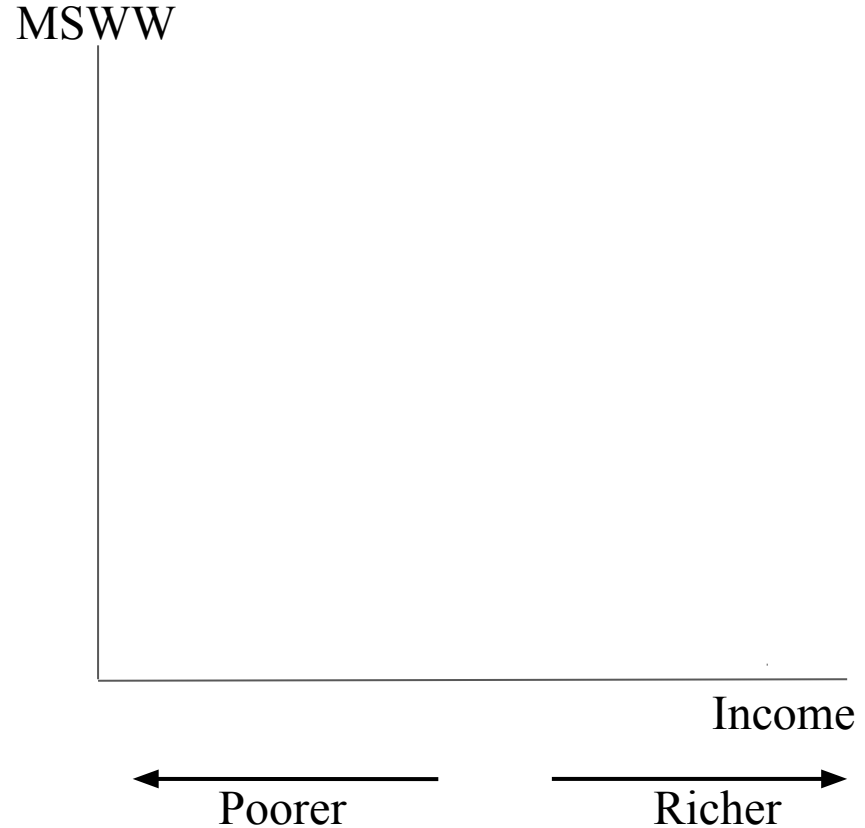


# Preferences and Constraints

- A Democrat is likely to support more redistribution than a Republican is
- 2 primary economic reasons for this:
  1. Republican might perceive greater elasticities
    - “The bucket is very leaky!”
  2. Republican may be less concerned with inequality
    - “To the victor goes the spoils.”
- #1 is objective: ultimately a question of how much inefficiency is caused by taxation
  - Hard to measure, though! Most formal studies find the elasticity is small, but hard to be confident.
- #2 is a subjective/preference issue
  - More an issue of philosophy than economics

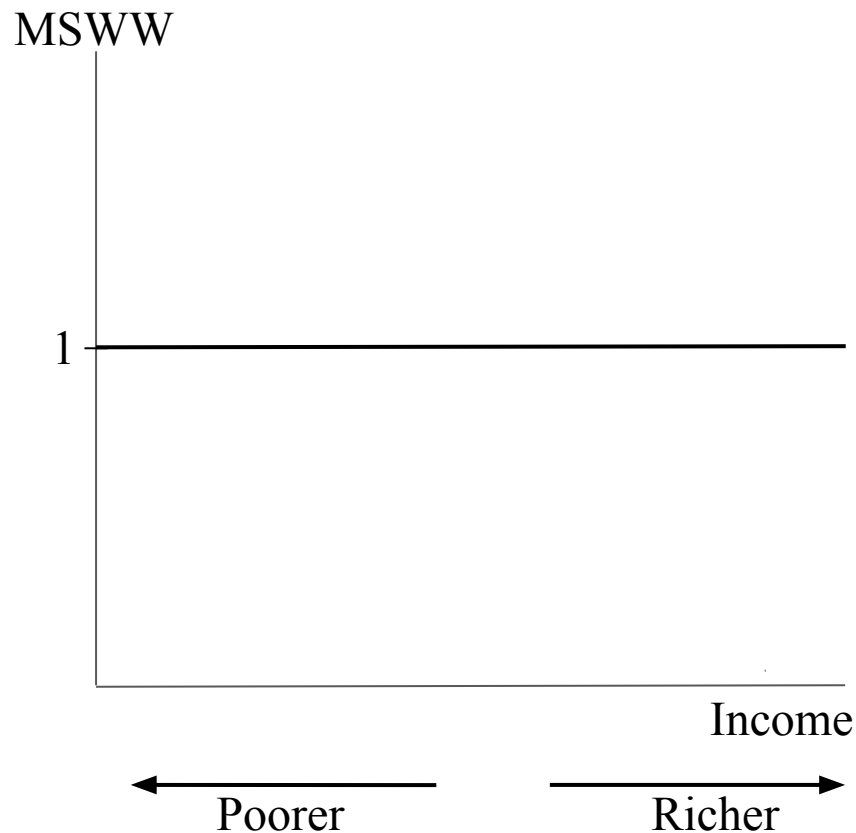
# Social Preferences

- Marginal Social Welfare Weight: how much you value giving \$1 to a person
  - Statement of social preference



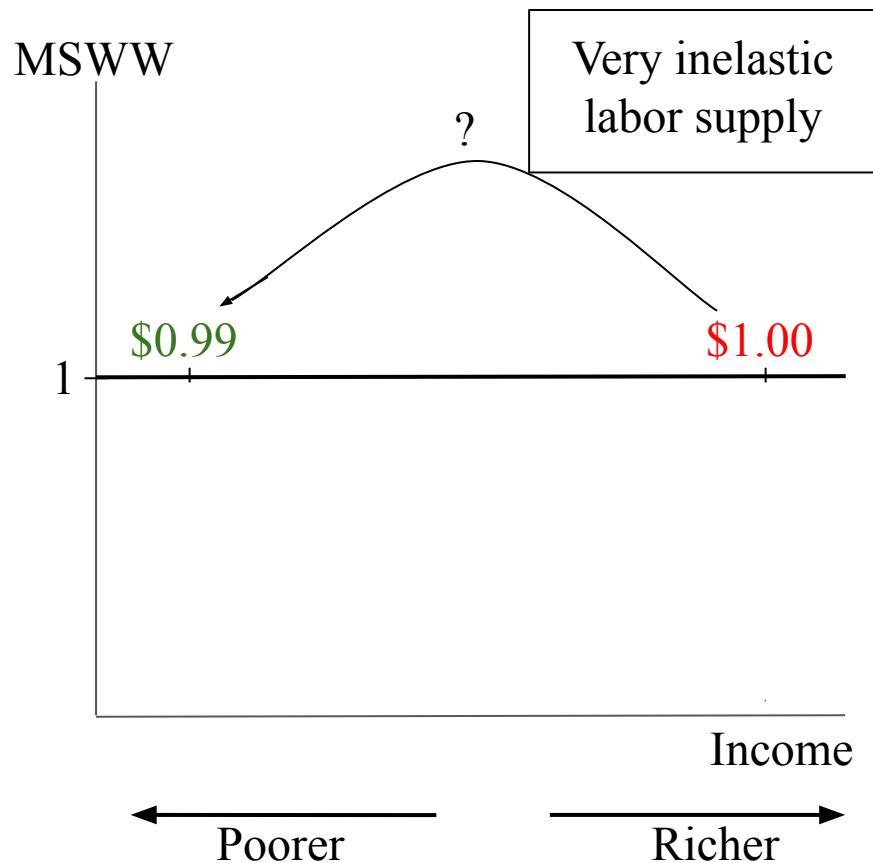
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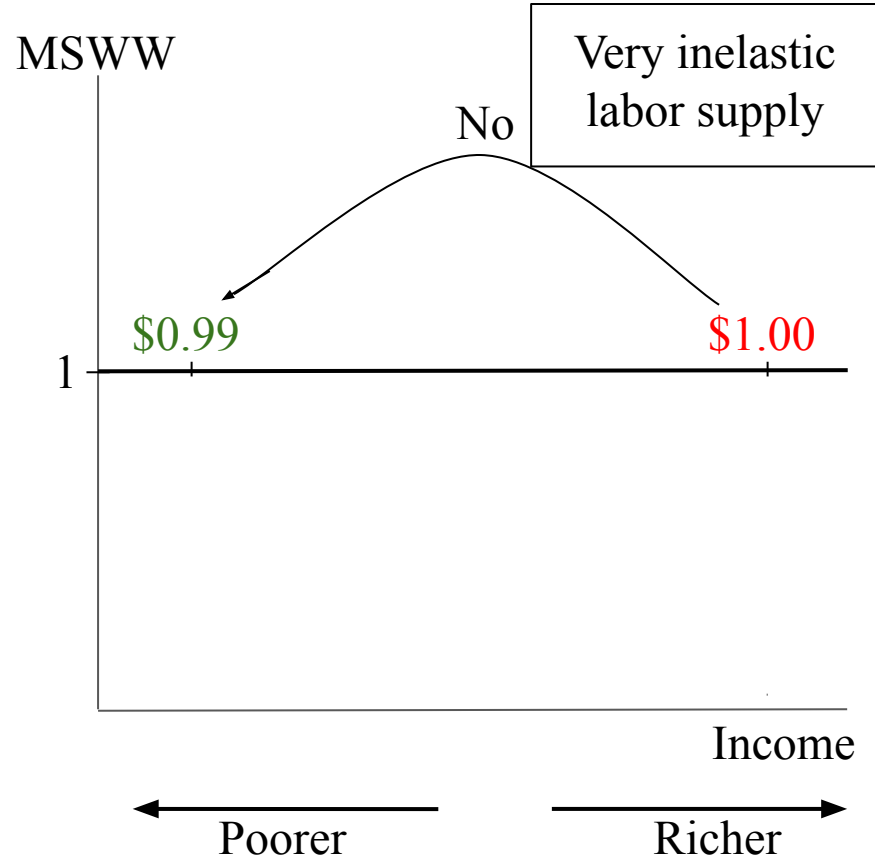
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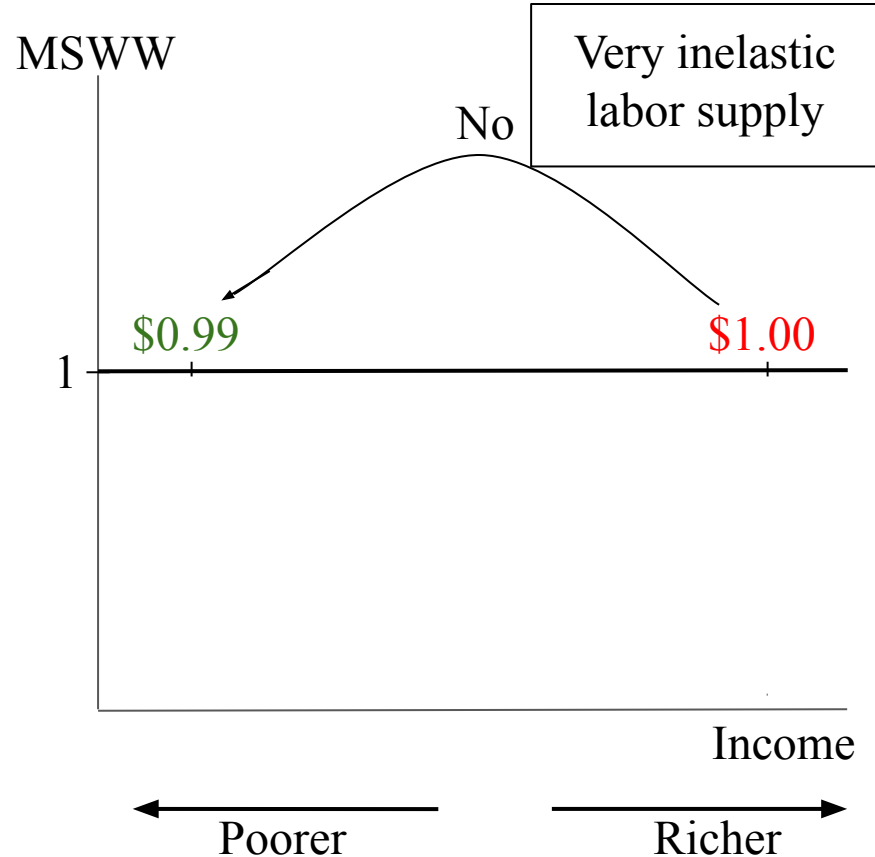
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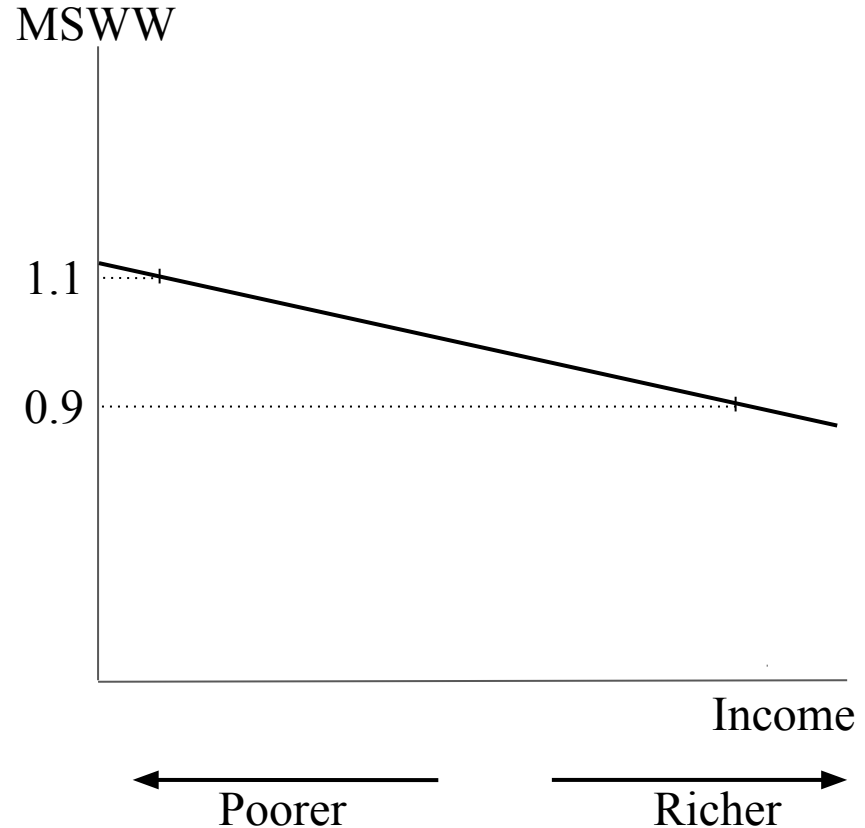
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  - Tax rates will tend to be low and flat



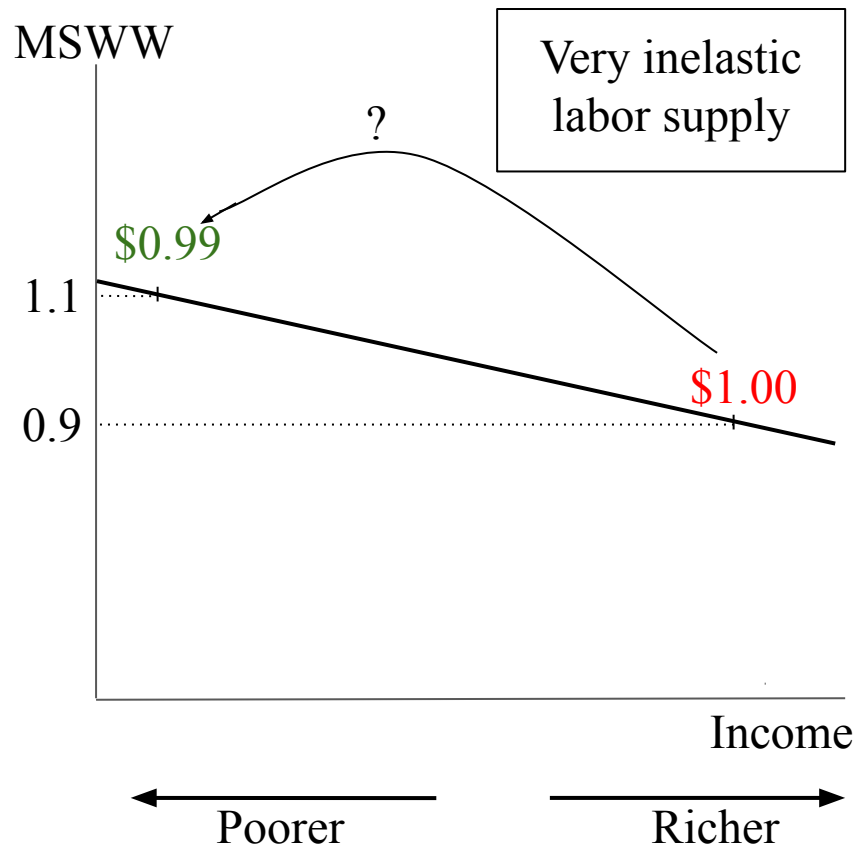
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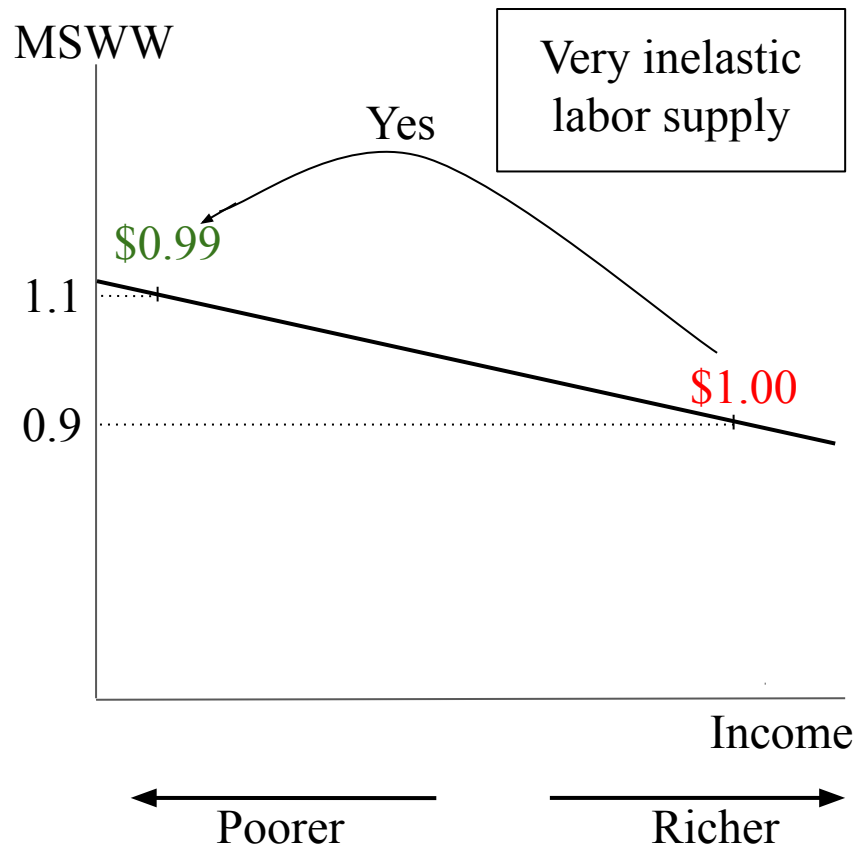
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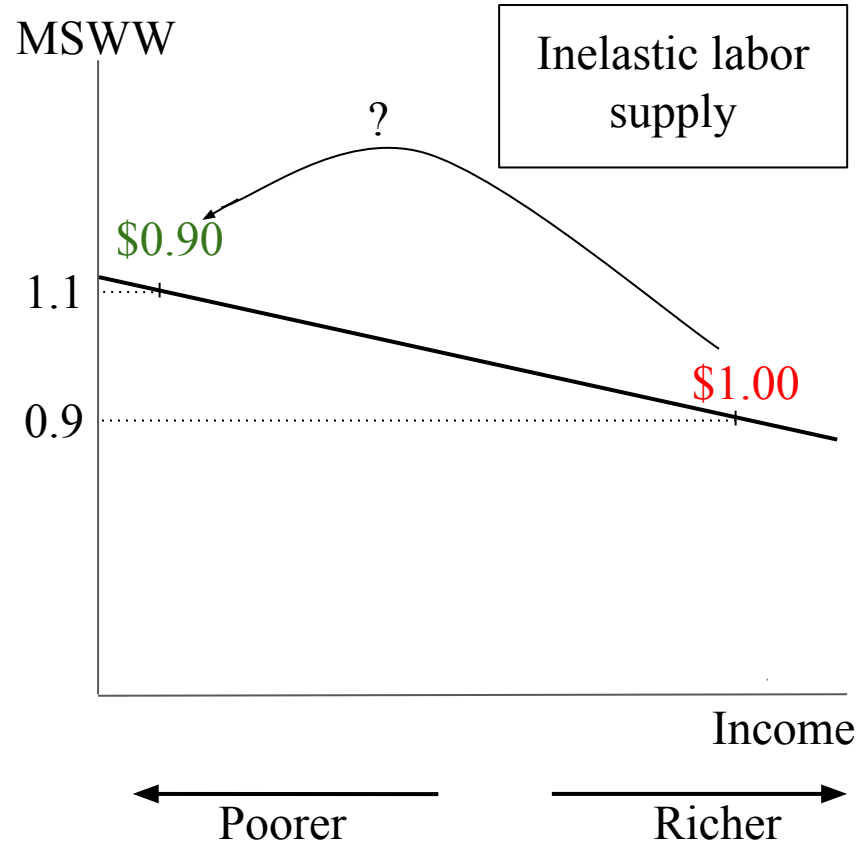
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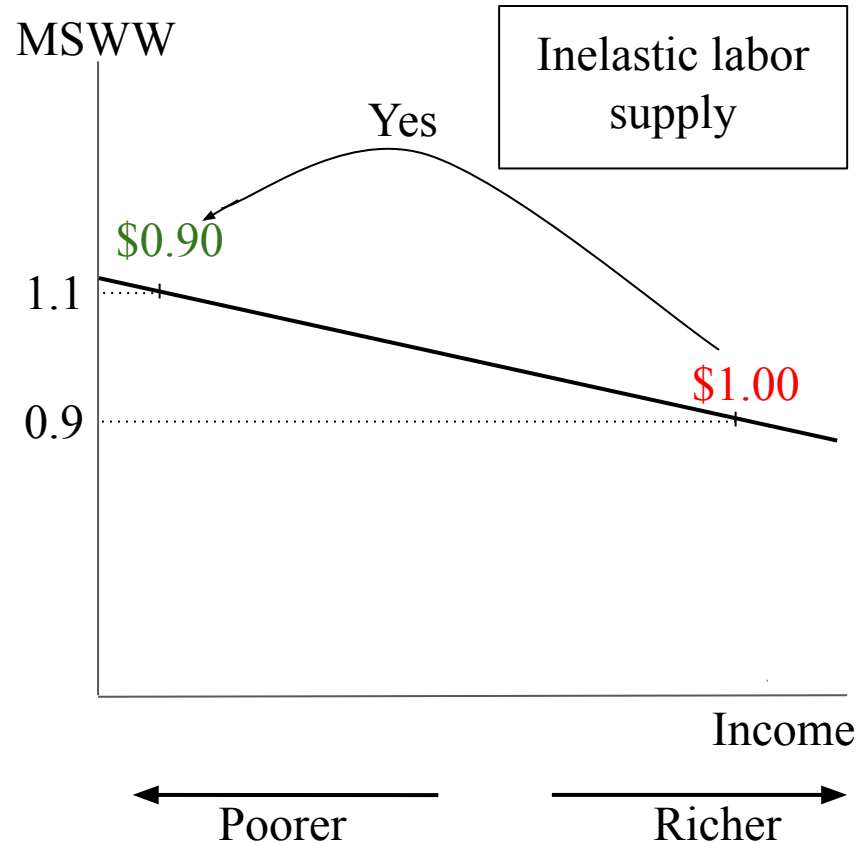
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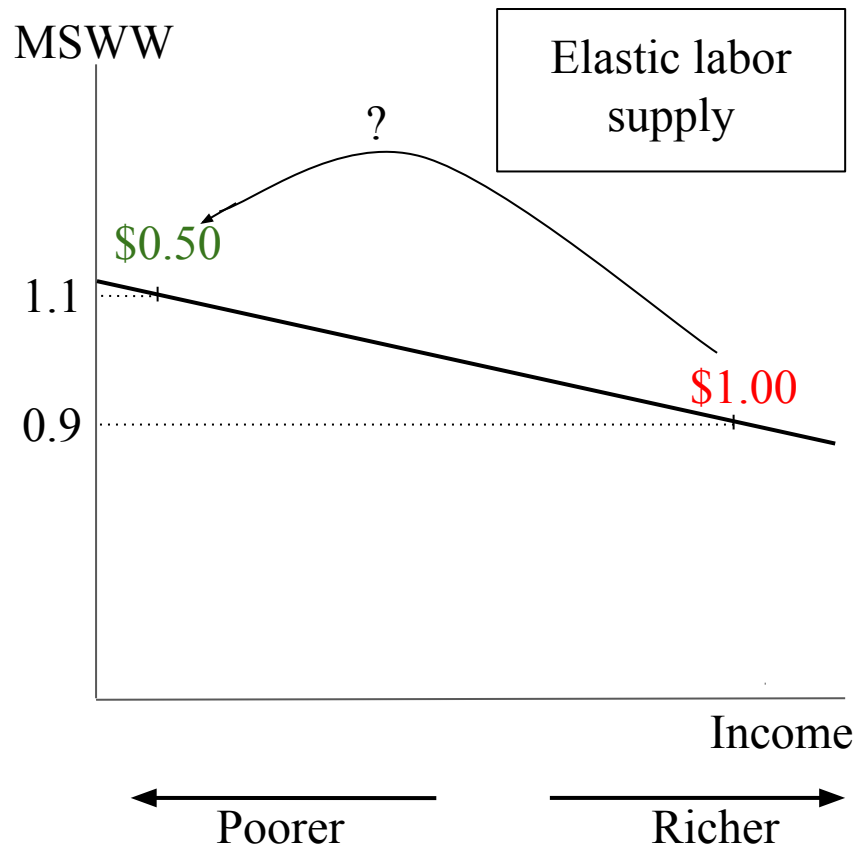
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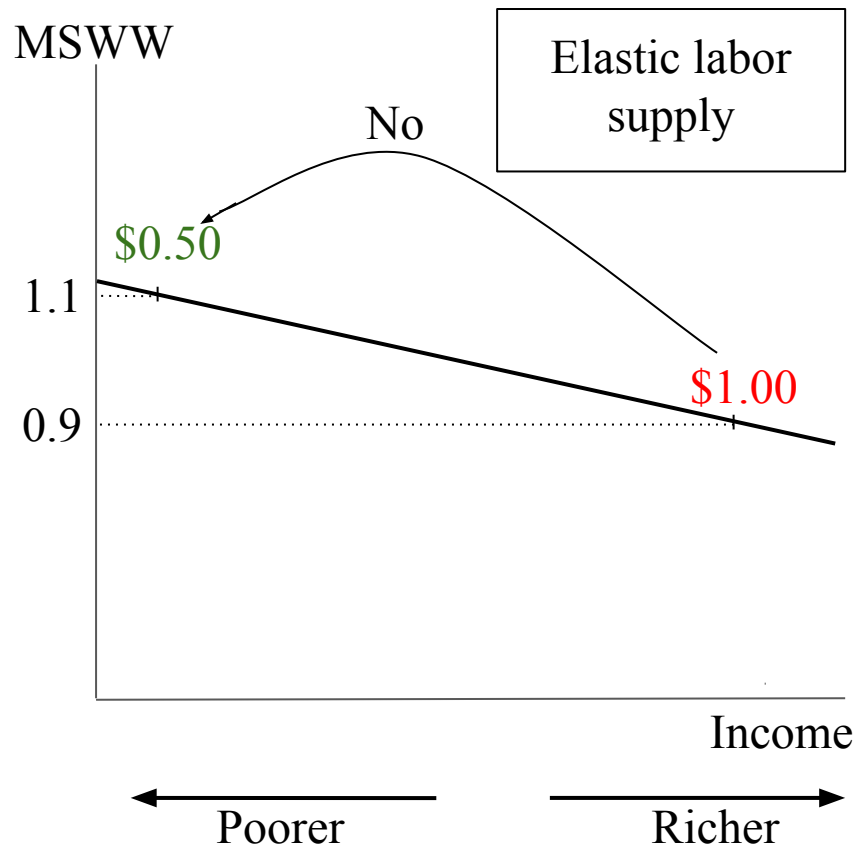
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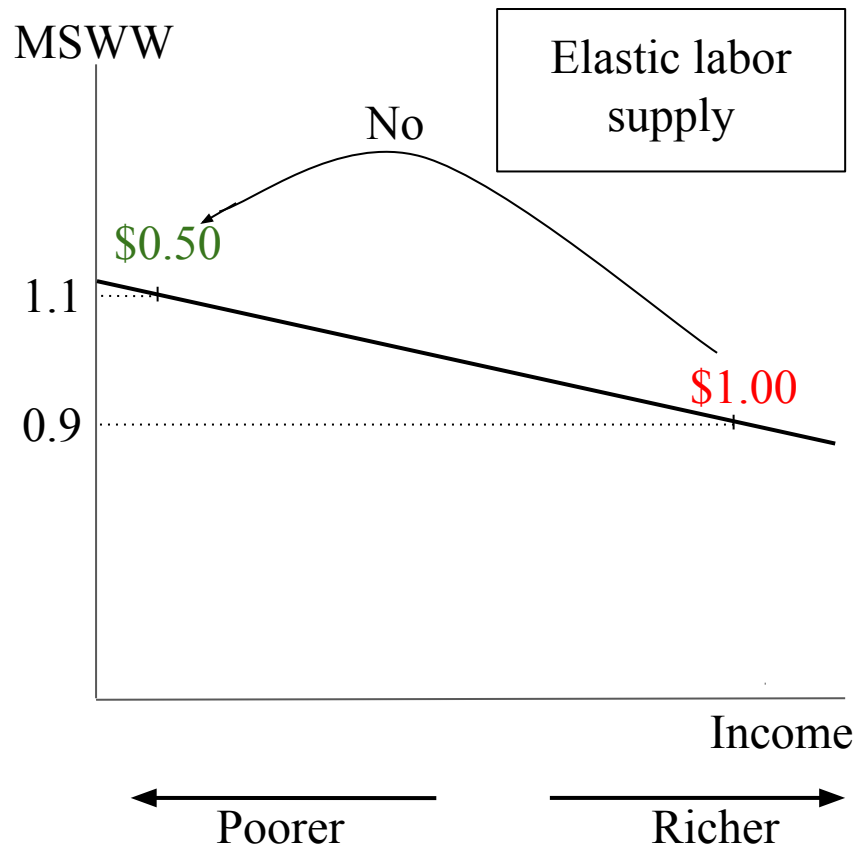
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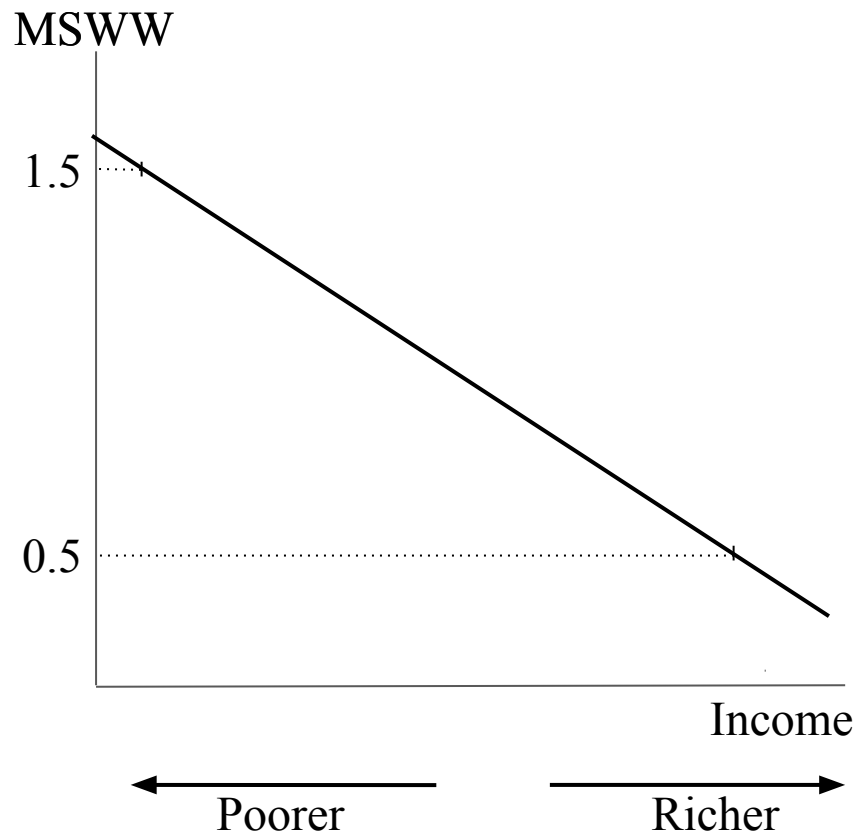
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  - Tax rates can be bigger and progressive, but not too much so, especially if labor supply is elastic



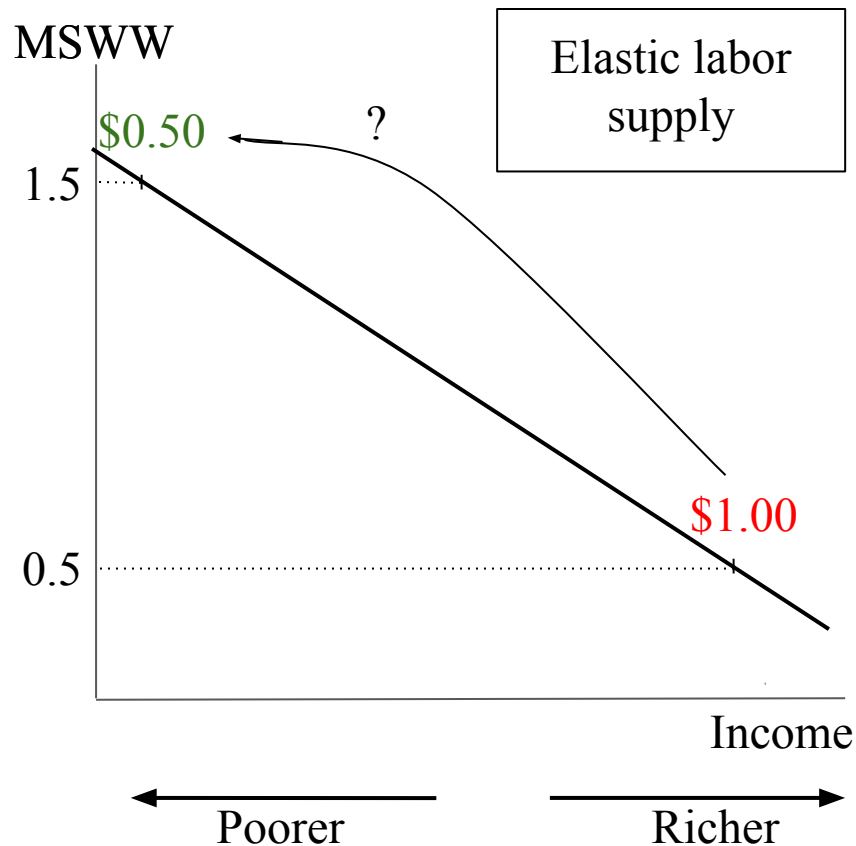
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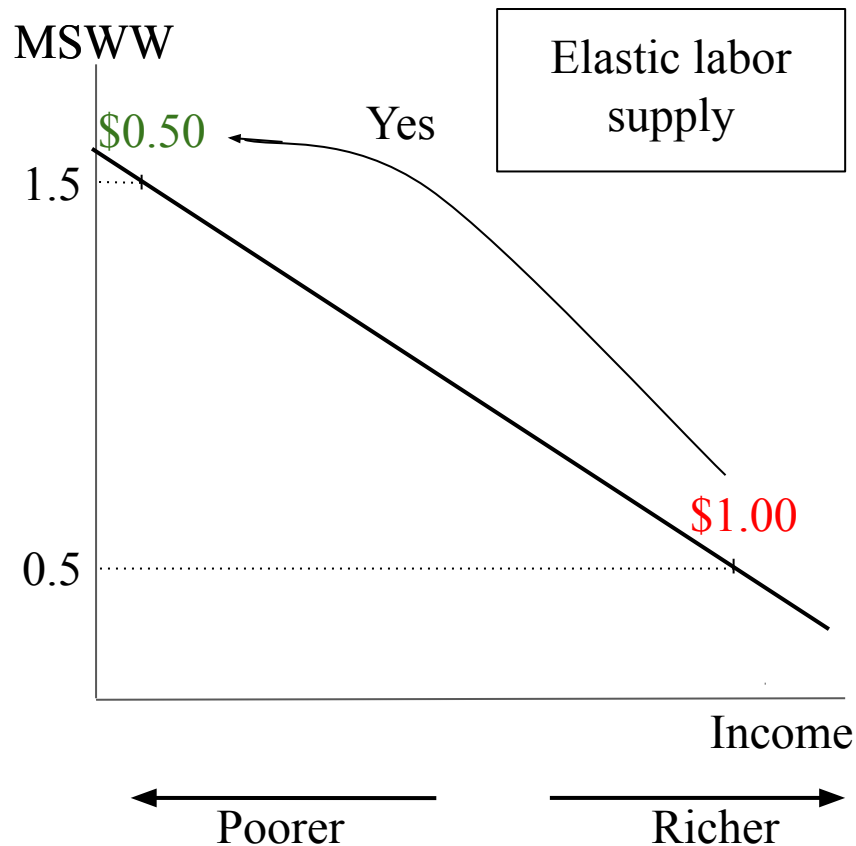
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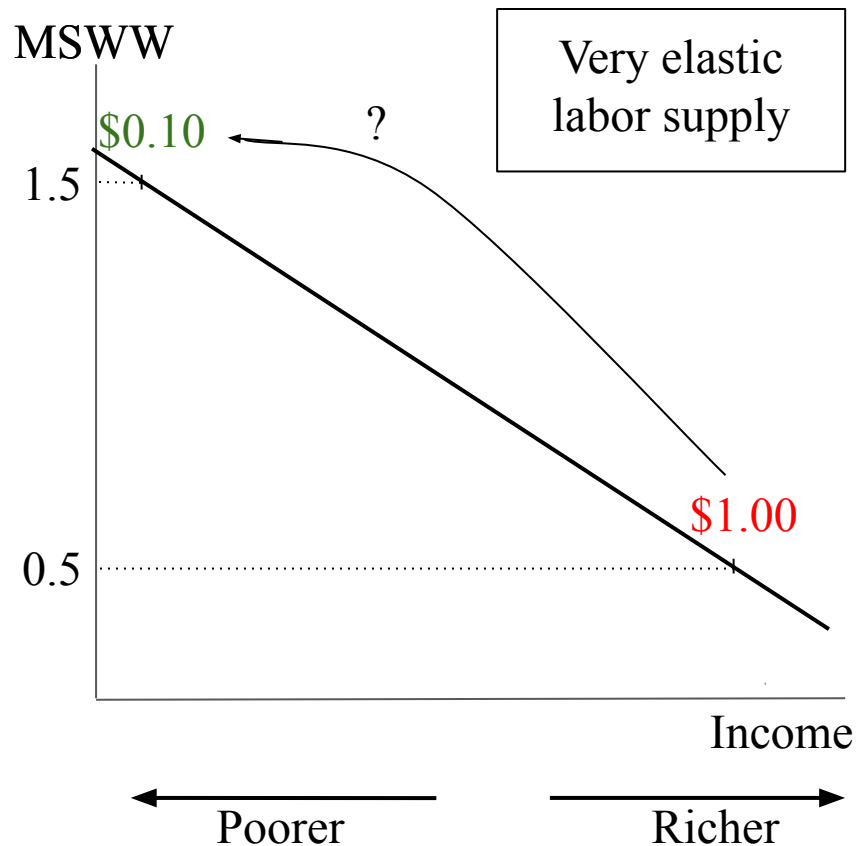
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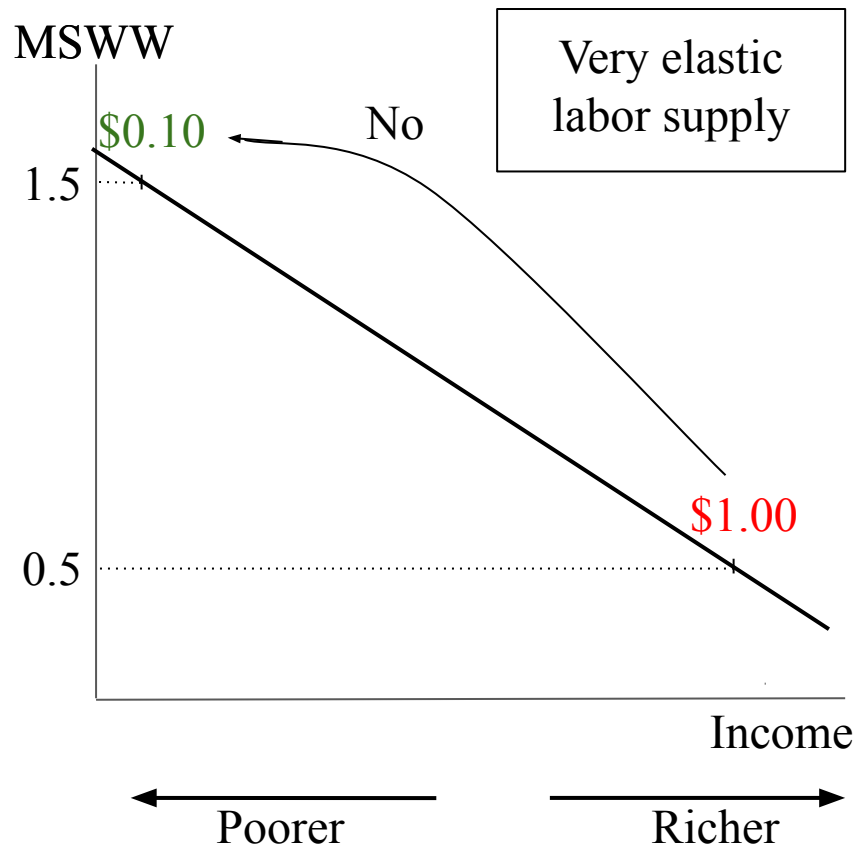
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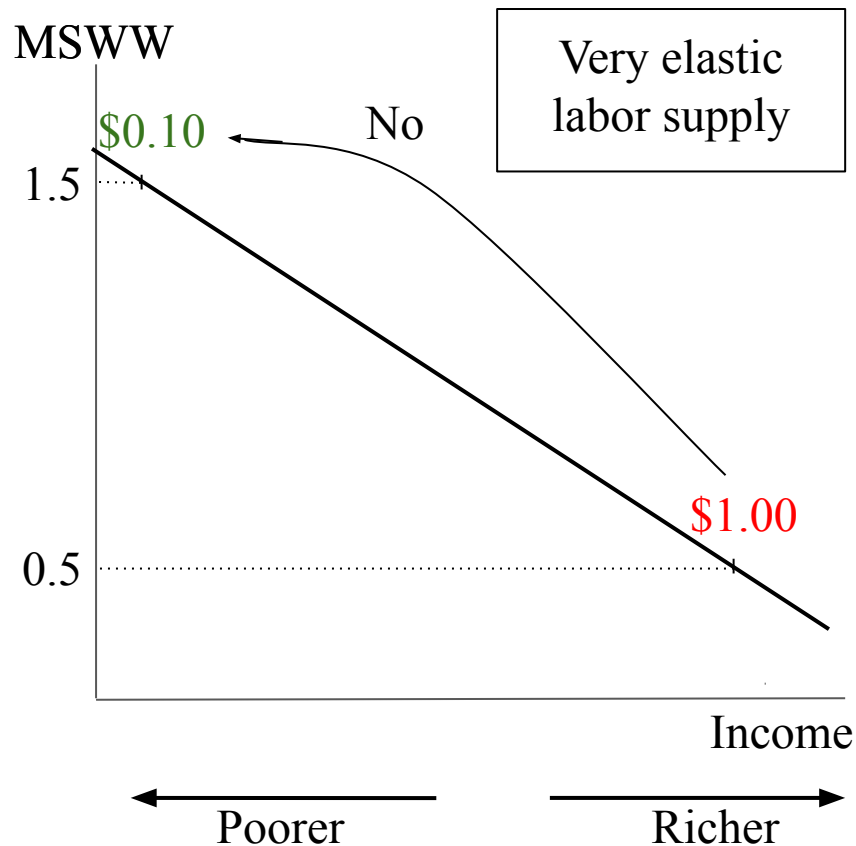
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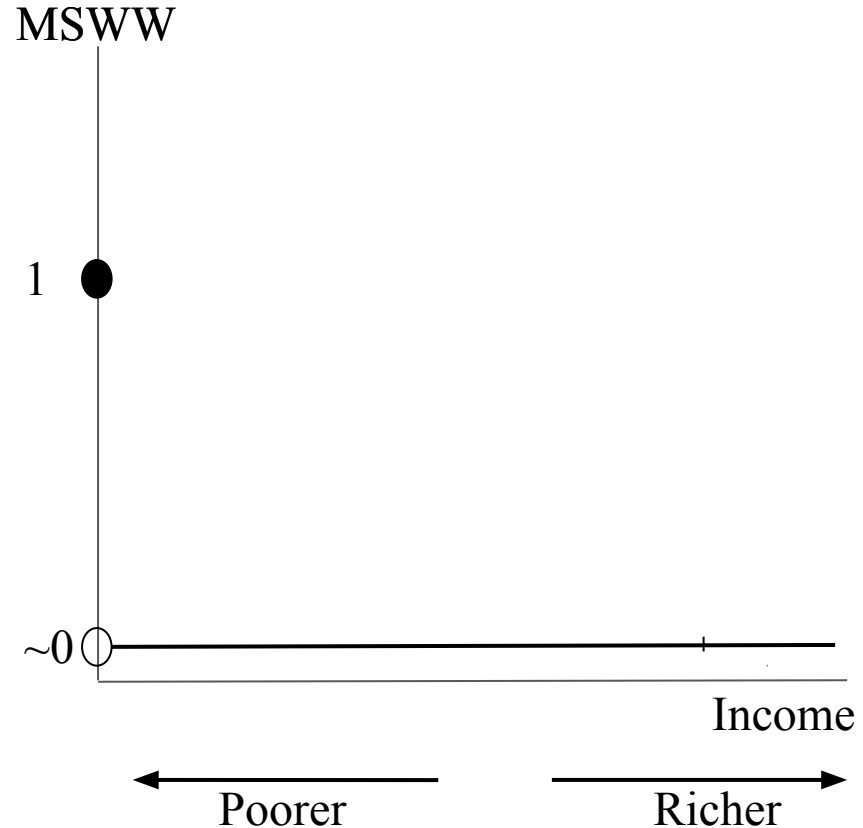
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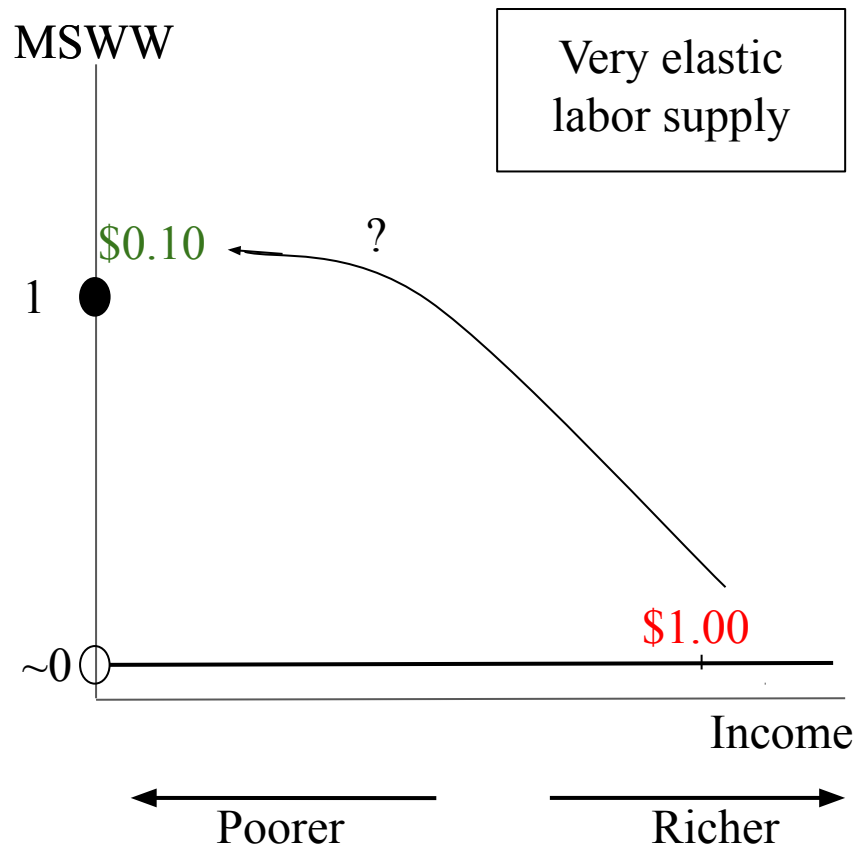
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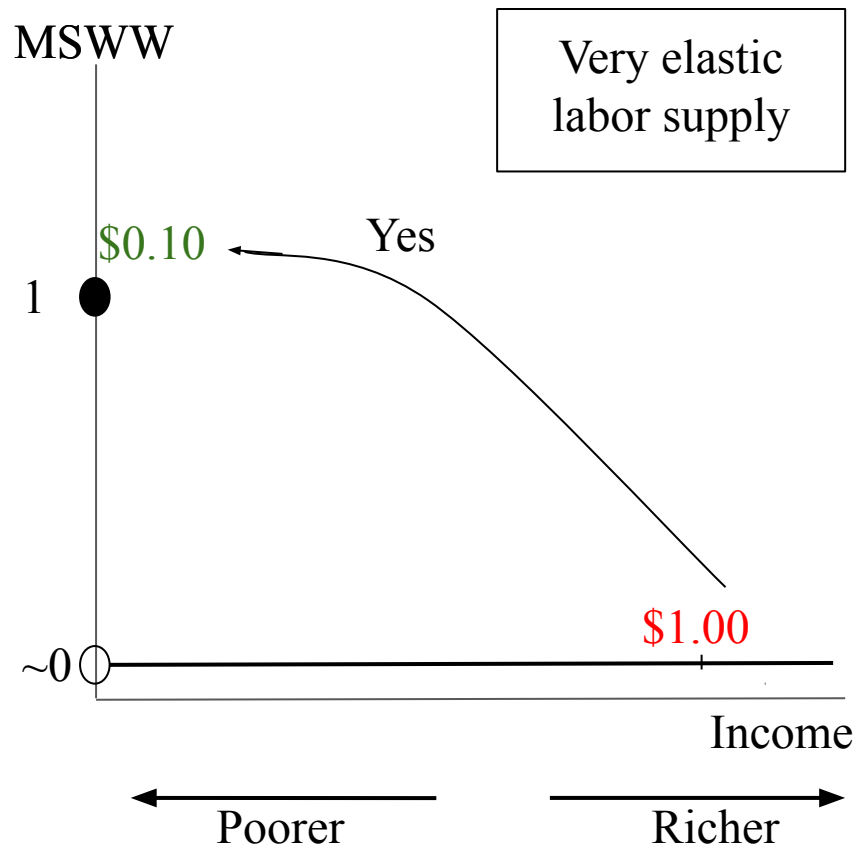
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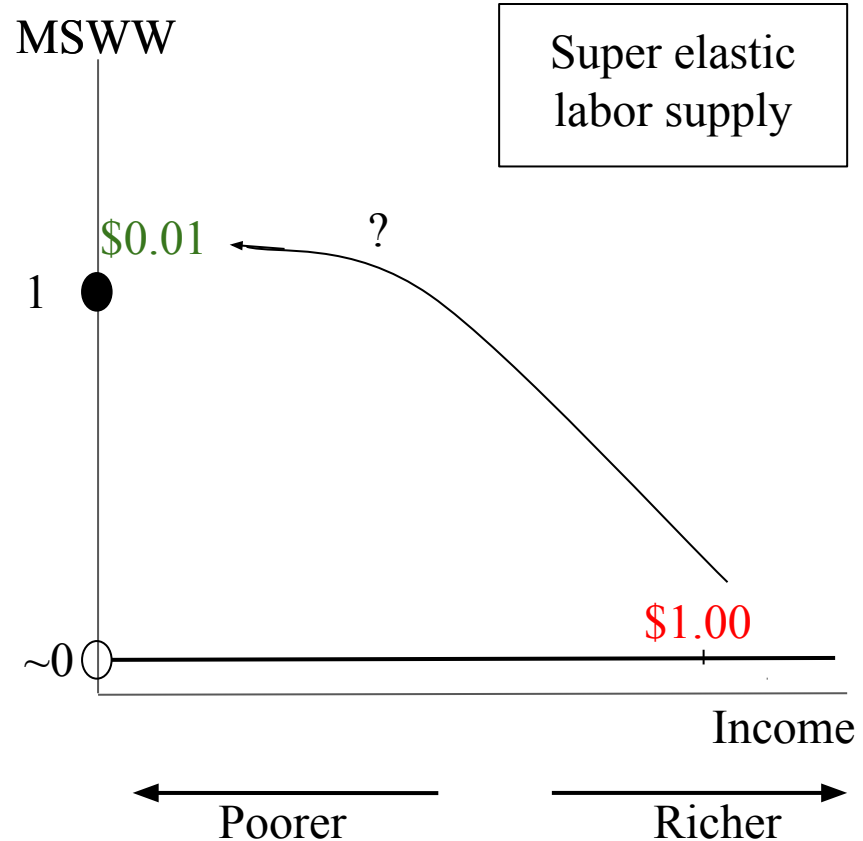
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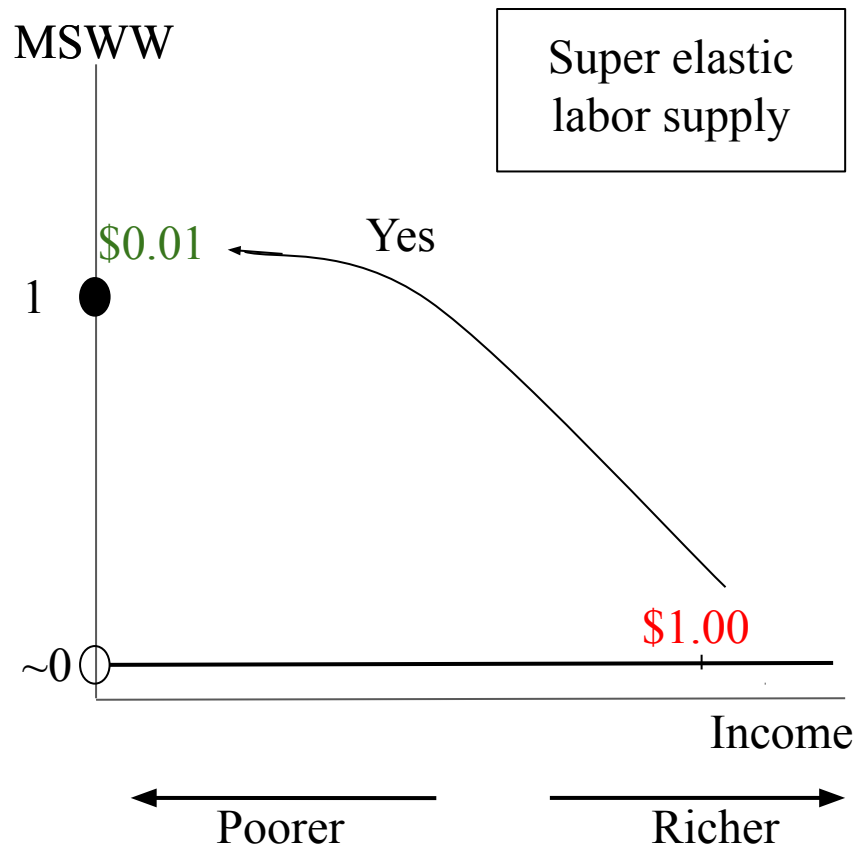
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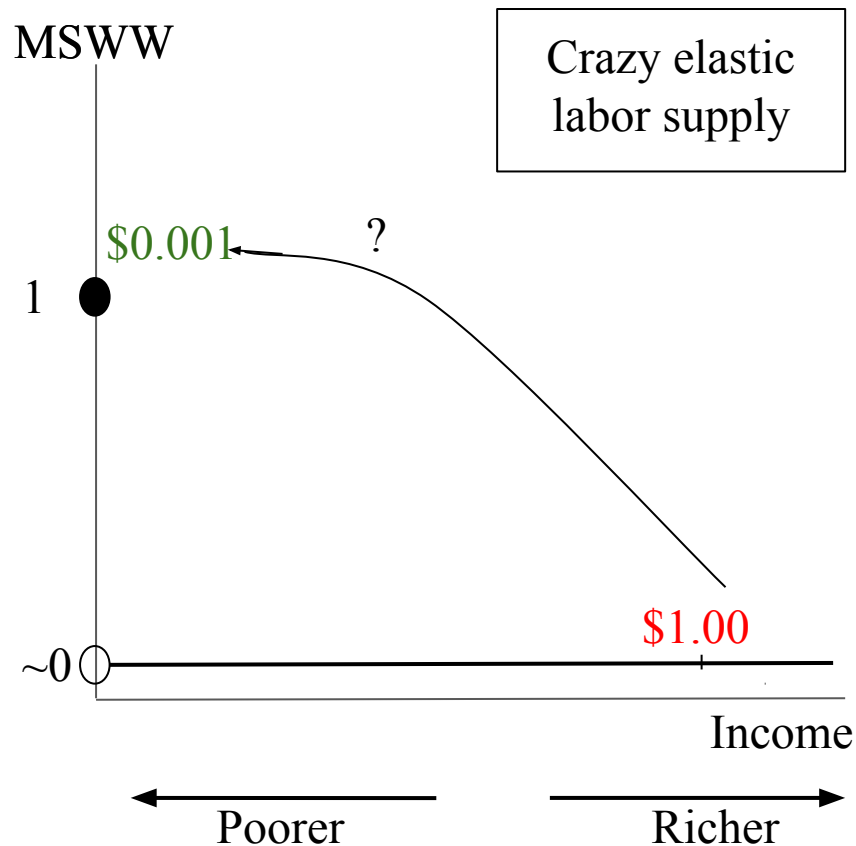
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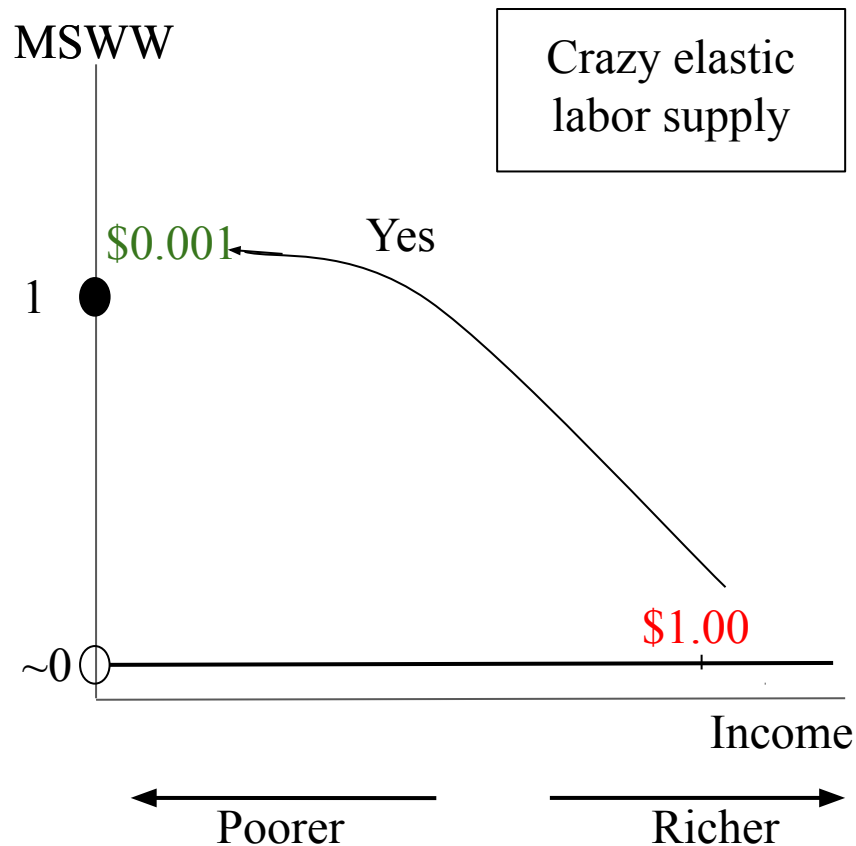
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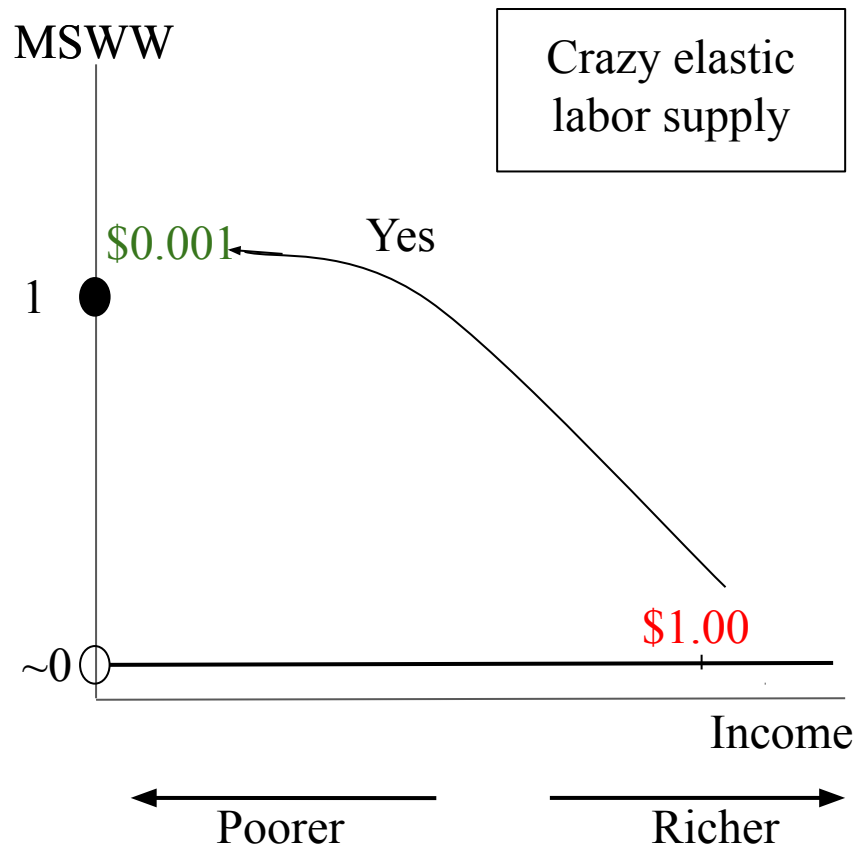
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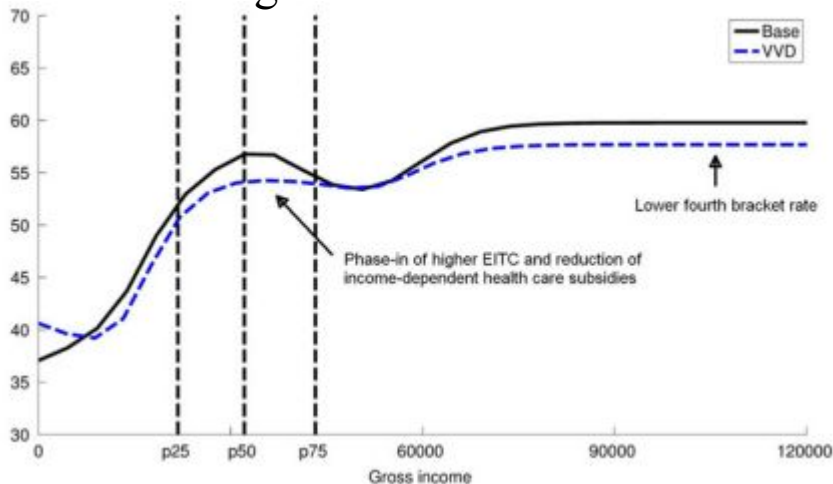
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  - Extract maximal tax revenue
  - Should tax rate on high earners be 100%?



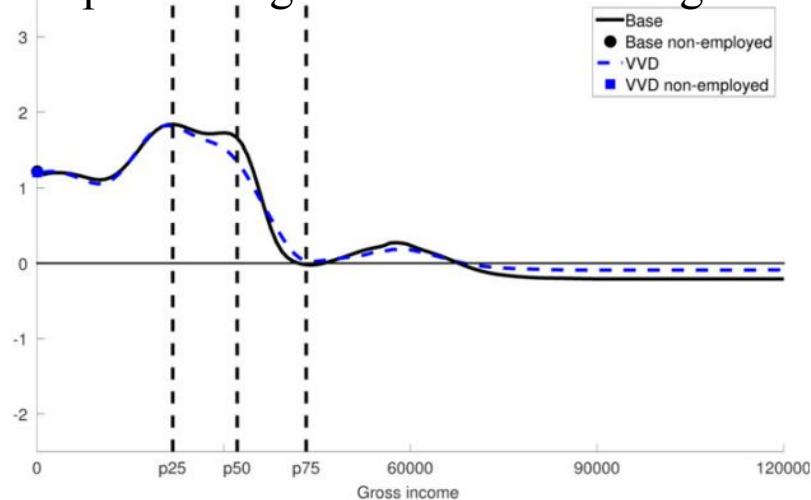
# “Show me your budget, and I’ll tell you what you value.”

- Modern states have very “non-linear” tax codes
  - Almost like a different tax rate on each dollar you earn
- Using fancy versions of the model we just used, economists can infer how much the tax code “cares” about people of different income levels
- Jacobs et al (2017) for the Netherlands

## Marginal Tax Rates



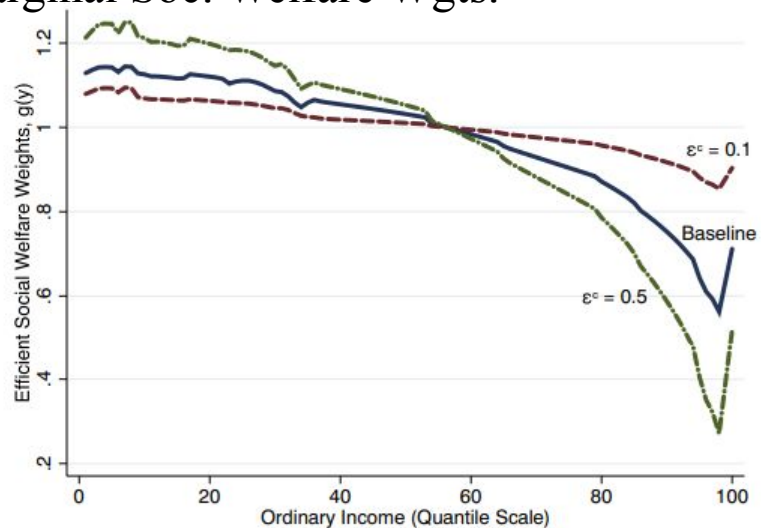
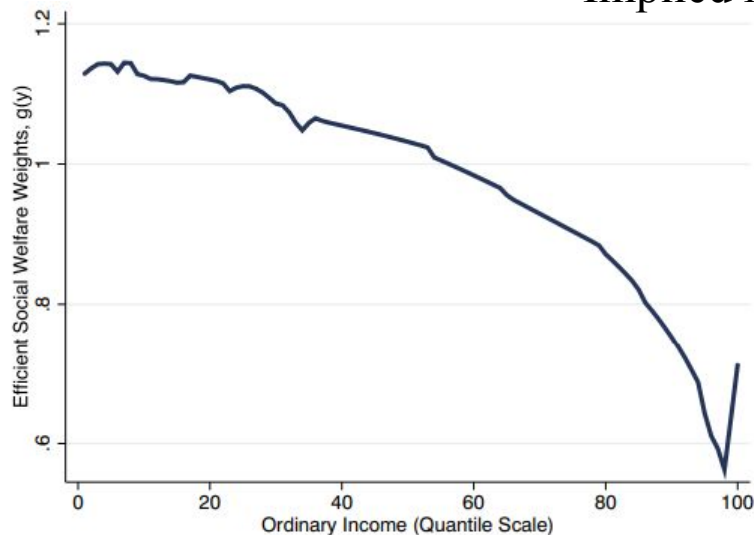
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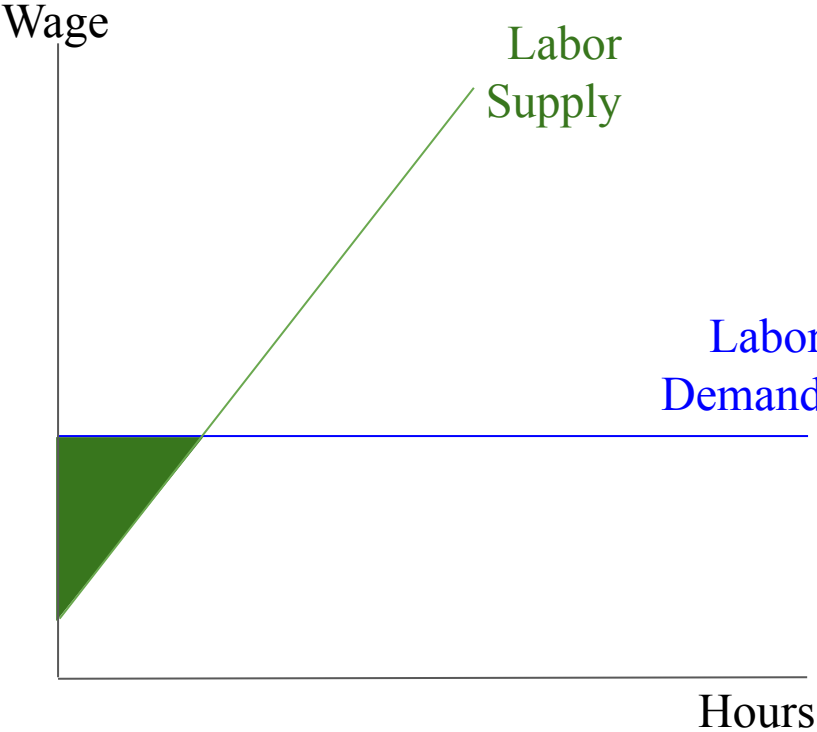
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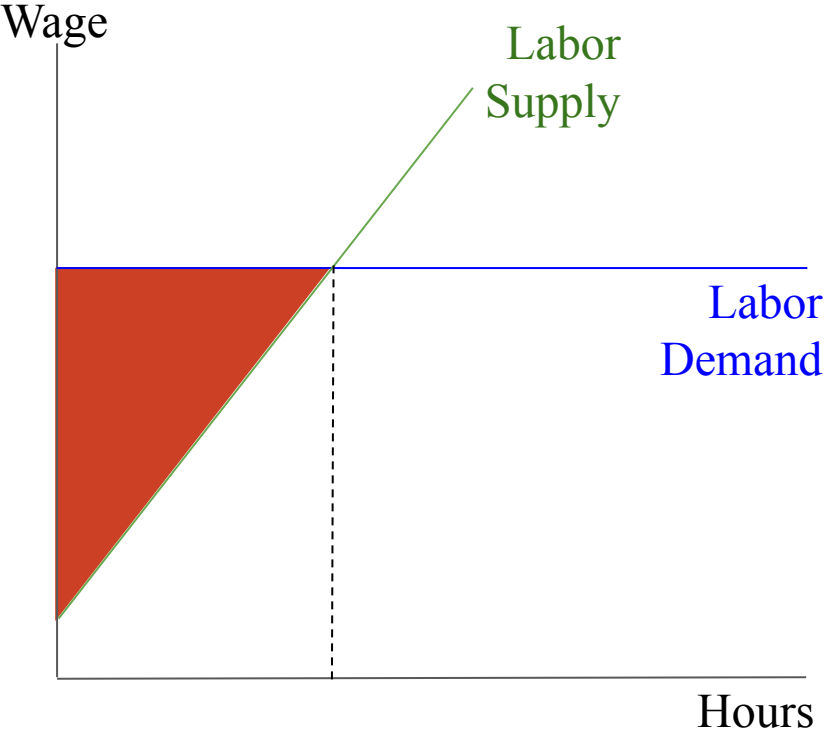
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# Earned Income Tax Credit

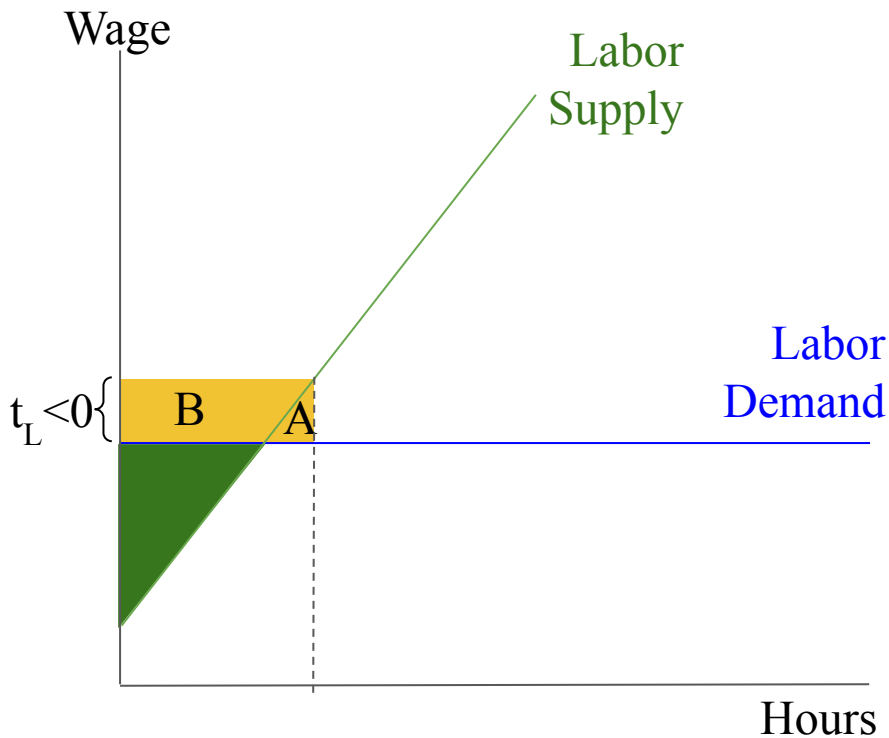


Low-Earner

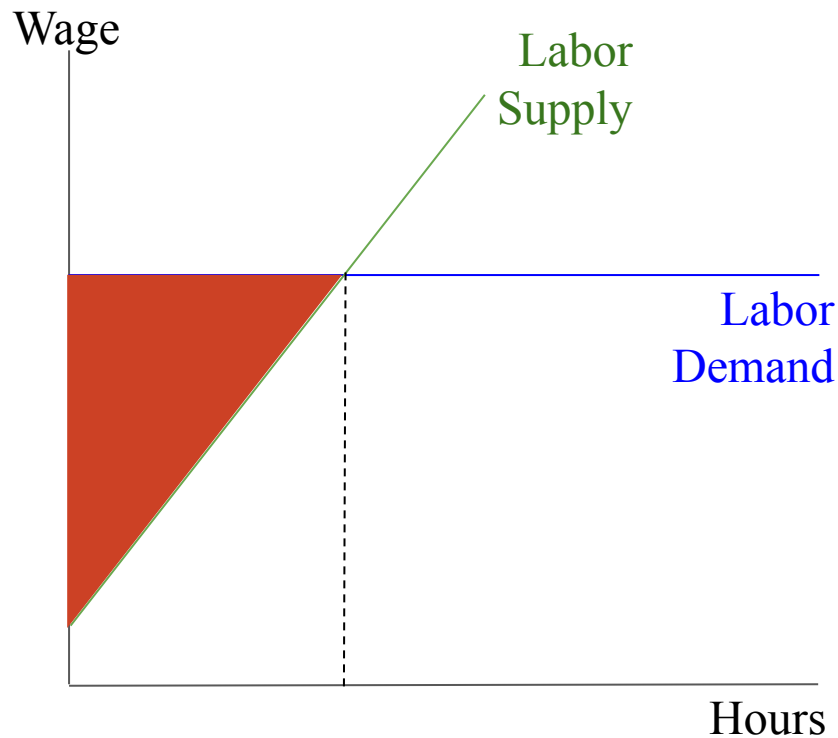


High-Earner

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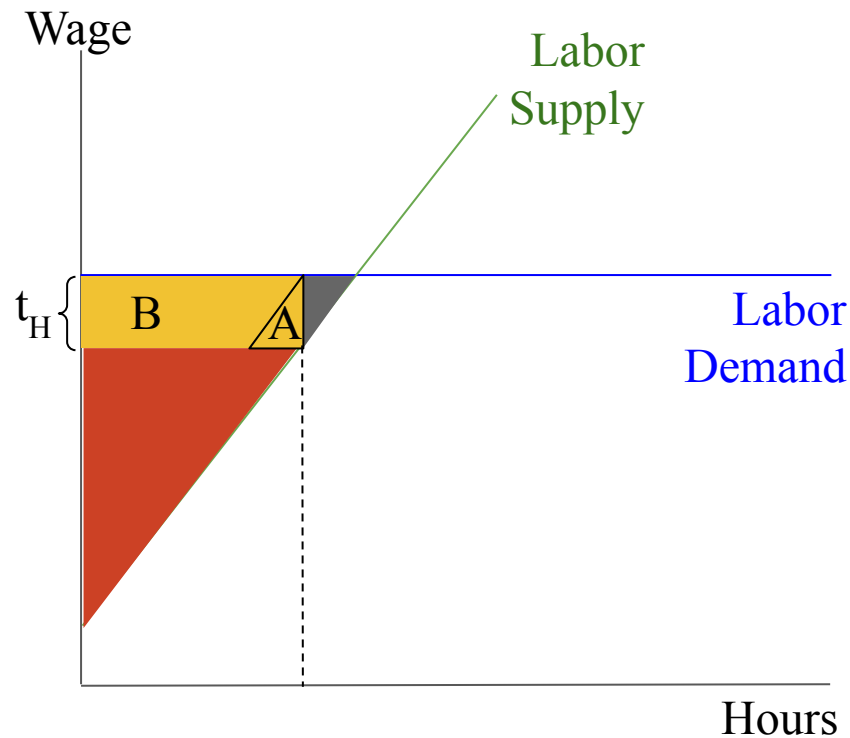
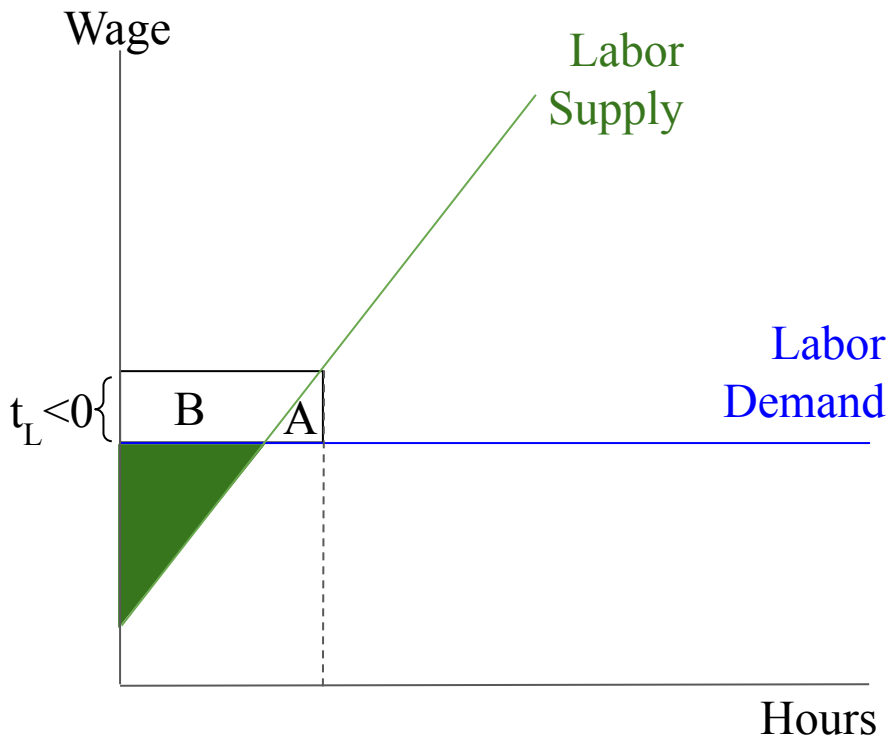
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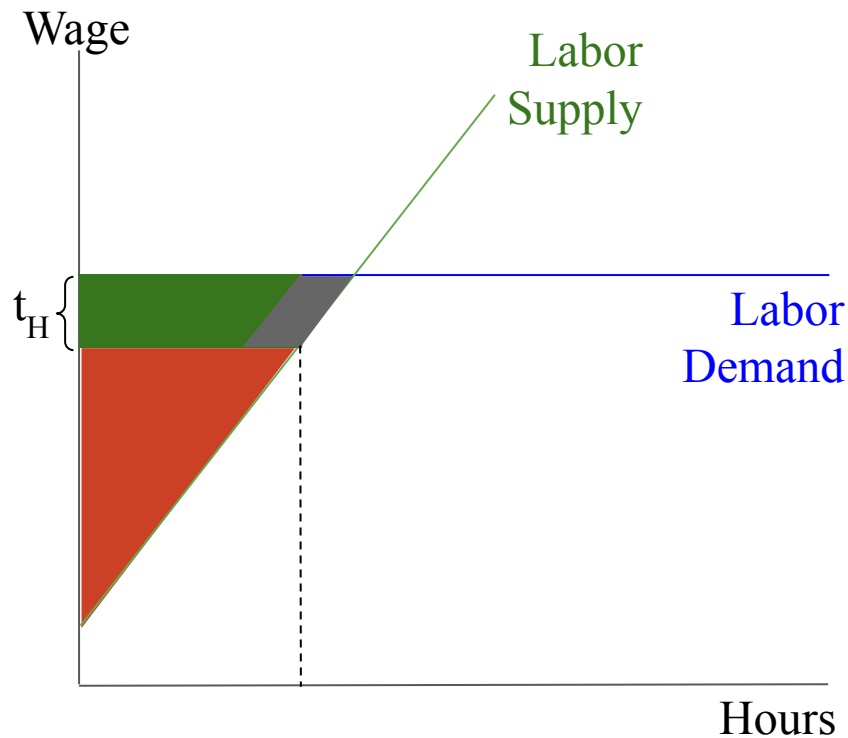
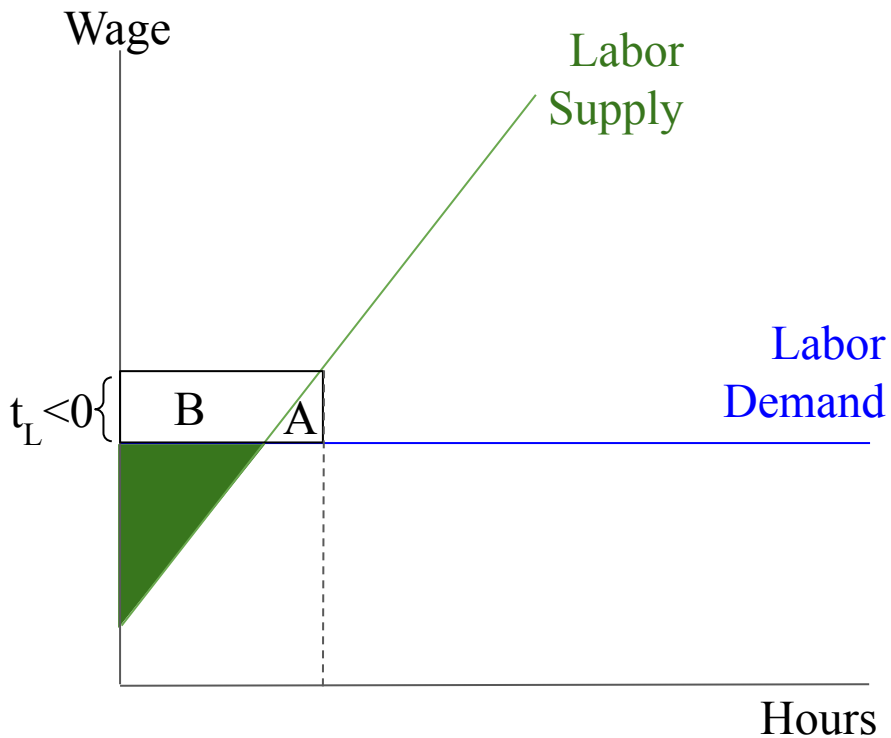
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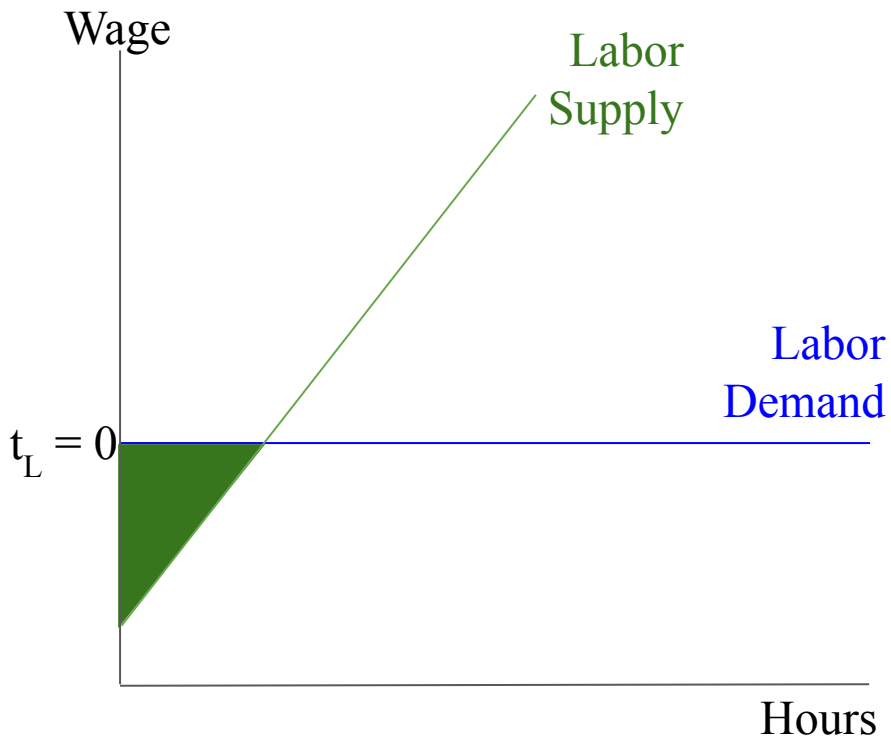
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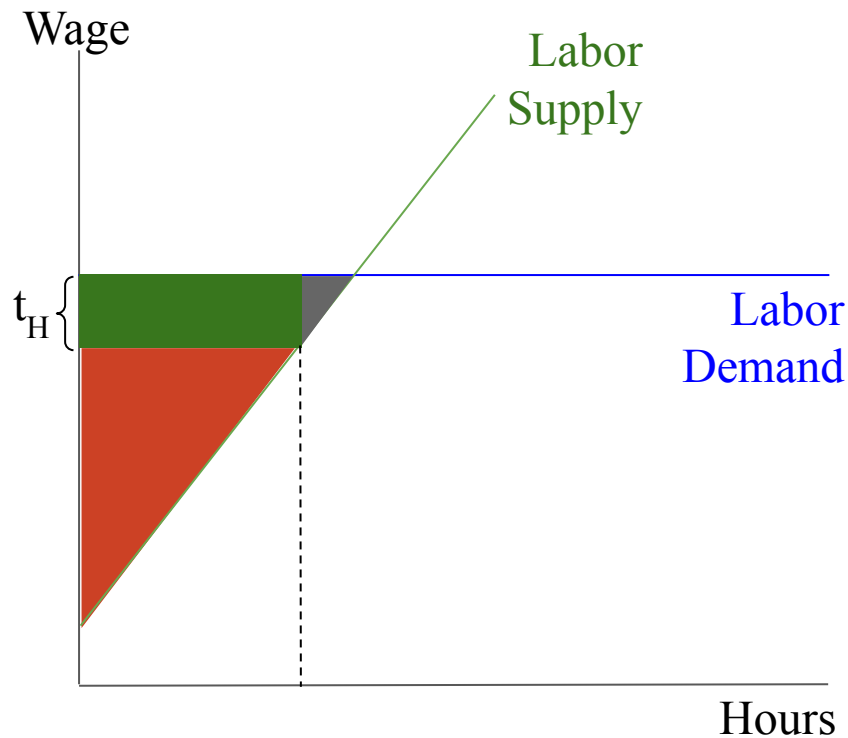
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# Non-Economic Policy Rationales

- Textbook model says we should never subsidize labor
  - It creates a distortion without raising revenue
- Yet EITC has massive bipartisan support. Why?

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- Textbook model says we should never subsidize labor
  - It creates a distortion without raising revenue
- Yet EITC has massive bipartisan support. Why?
  - “Work is good”?
  - “Deserving vs. undeserving poor”?
- Economic analysis can’t say that someone’s non-economic rationale is “wrong”
  - If you think it’s better for people to work more, regardless of the costs and benefits, that’s kind of up to you
- But economic analysis can show the economic cost that such a policy imposes

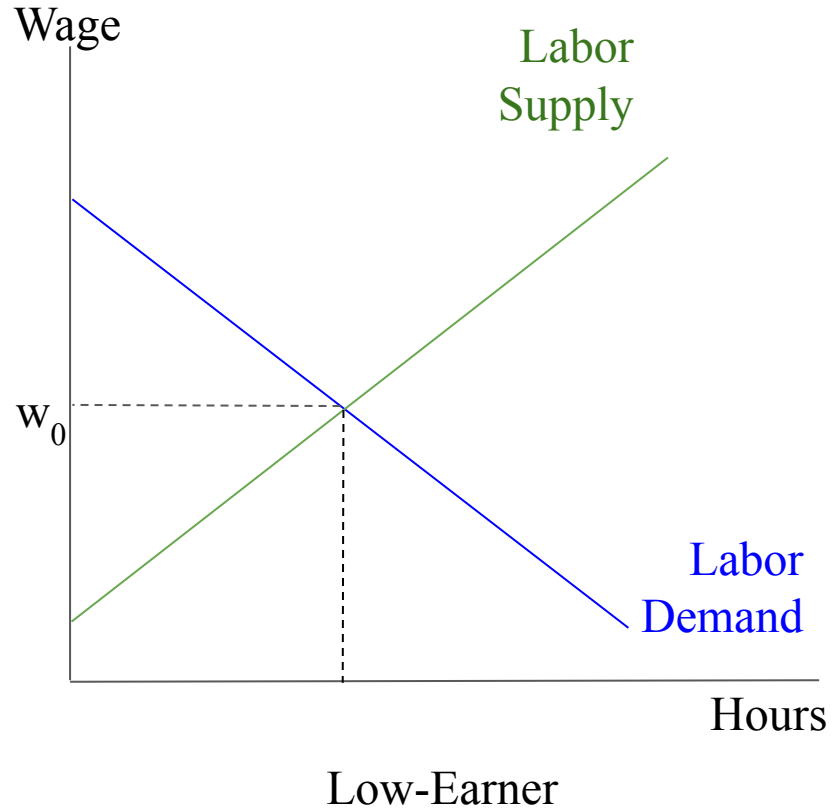
# Change to Tax Code vs. Optimal Tax Code

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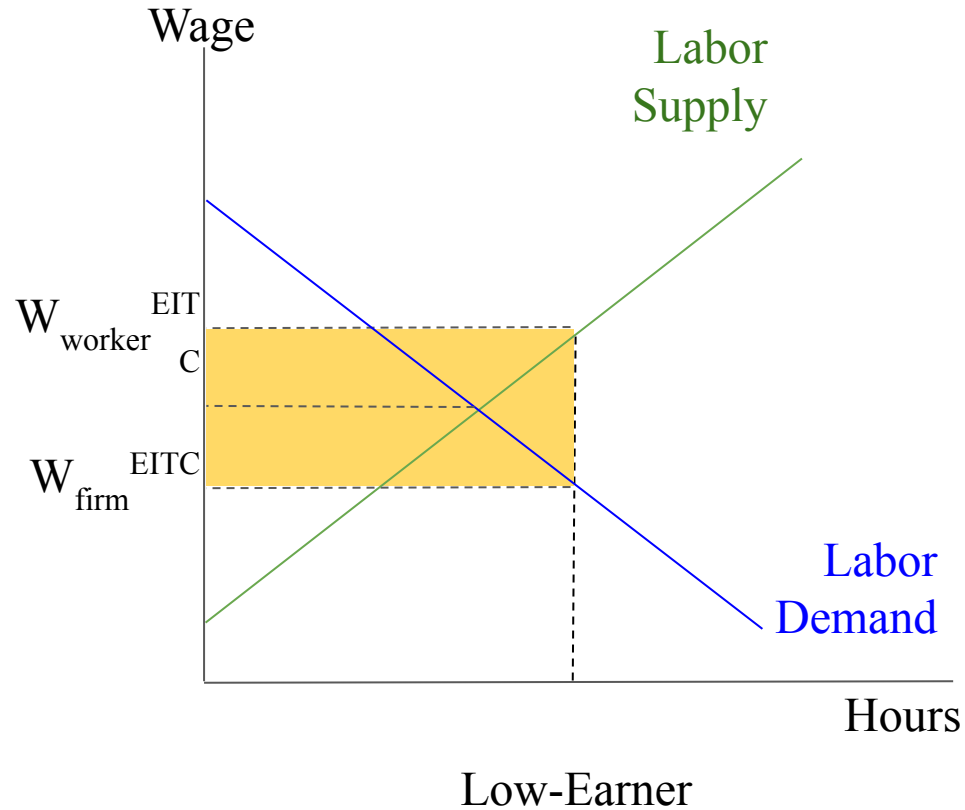
- Lecture has been very critical of the EITC, but...
- ...I really do not want the EITC to be repealed...
- ...even for purely economic reasons.
- I don't think that the *optimal* tax code would involve the EITC
  - Redistribution would be unconditional, rather than conditional on working
    - “Universal Basic Income”
- But I don't think our tax code is optimal, or close to it
- Removing the EITC would be regressive and remove income support for many people
- So, removing EITC would move us further from the optimal tax code, not closer
  - Even though the optimal tax code would not have an EITC
- If you believe that the tax code is already too redistributive, then removing the EITC probably would seem like a good policy change

# EITC with Inelastic Labor Demand

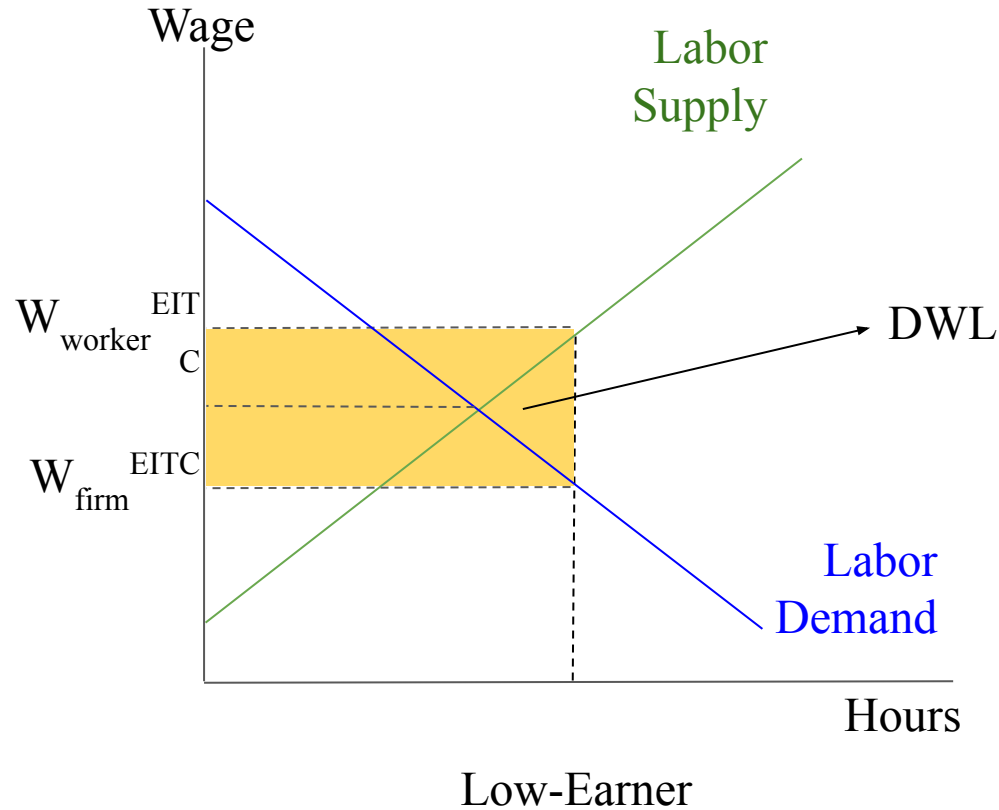




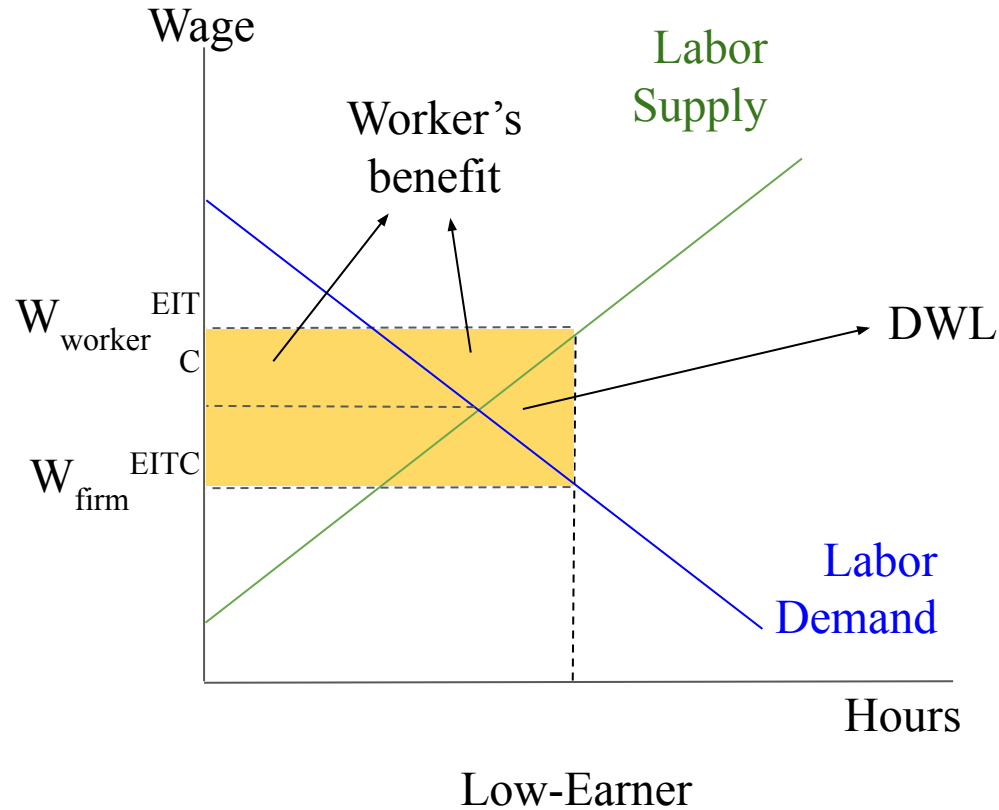
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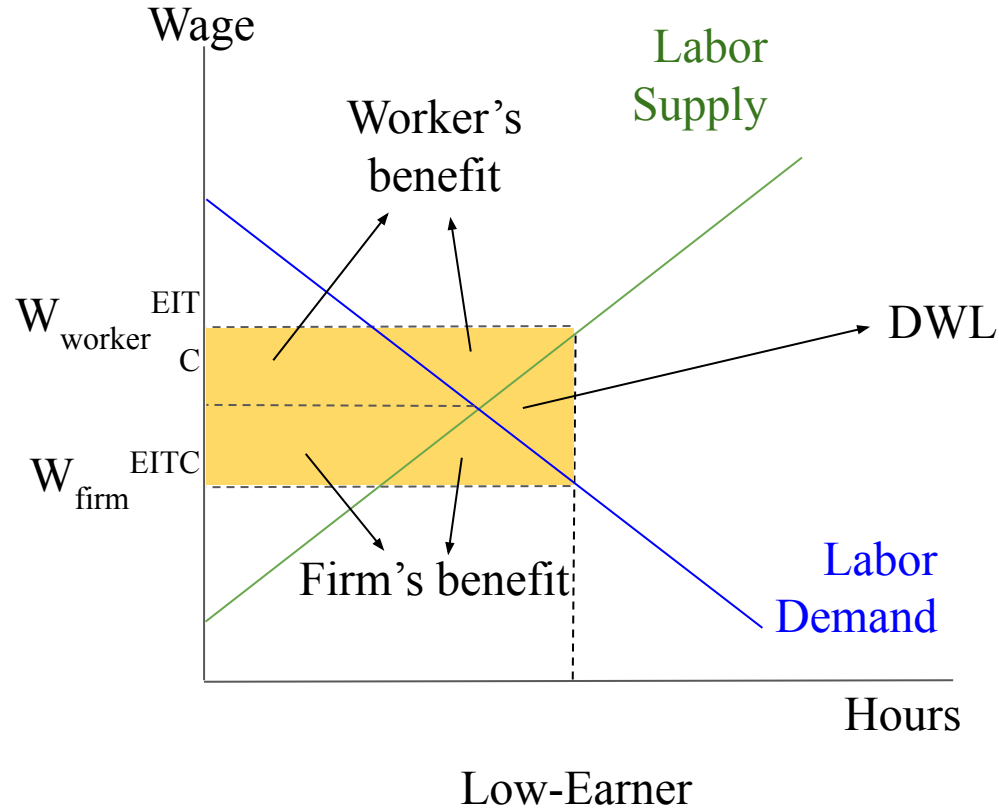
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# EITC with Inelastic Labor Demand



# Incidence Matters, Too!

- Previously, had only focused on inefficiency/DWL
  - Perfectly elastic Labor Demand kept the wage constant (no incidence analysis)
- In reality, some of the benefits of the EITC actually go to employers
  - This makes EITC an even less effective tool for redistribution
- This problem also plagues in-kind benefits transfers
  - Grocery stores raise prices when money for Food Stamps is distributed
- There are many, many factors that affect how successful policy is!

# Redistribution

***Broadly speaking, equity should be pursued through (progressive) income taxation***

- Price controls (e.g. rent control) may help some low-income people, but they cause distortions and interfere with some things that the market does very well
- Taxing goods distorts the decision of which goods to buy
  - If you tax Apples and not Bananas, society will over-consume Bananas
- Taxing income distorts the decision of how much to work, but...

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  - If you tax Apples and not Bananas, society will over-consume Bananas
- Taxing income distorts the decision of how much to work, but...
- ...so does taxing goods! Taxing goods causes a “double distortion”
  - Lowers the “real wage” and so discourages work
  - Distorts prices and causes people to consume inefficient bundles
- Taxing income does cause inefficiency, but that’s inherent in redistributive policy
  - Income taxation avoids causing other distortions
  - It is the most efficient of these inefficient options