Lecture 14(iii)
Announcements

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- Final OneStop page at the bottom of our Canvas site
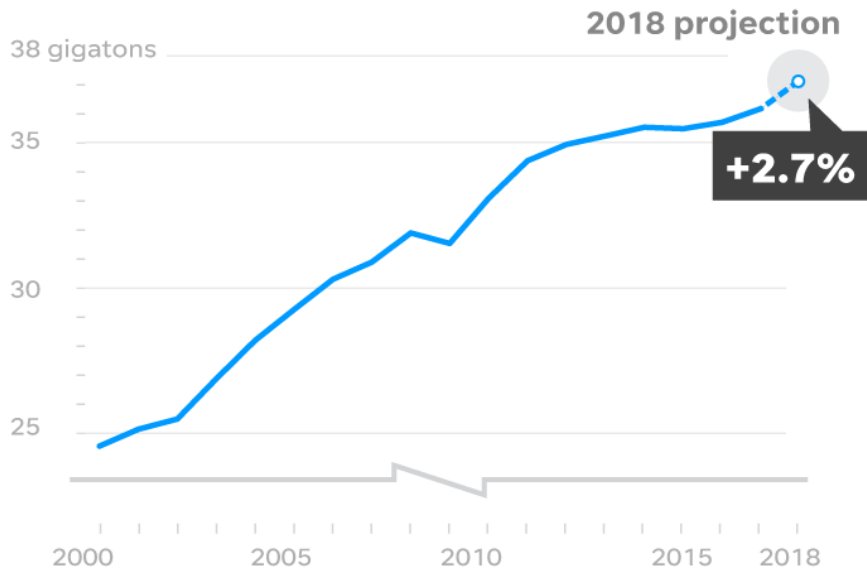
In the news...

0. Unions

1. Trends in Inequality
    1% and 99%

2. Policies that address inequality

3. Labor market discrimination

News

Annual emissions of carbon dioxide reached an all-time high in 2018

2018 projection

38 gigatons

+2.7%

35

30

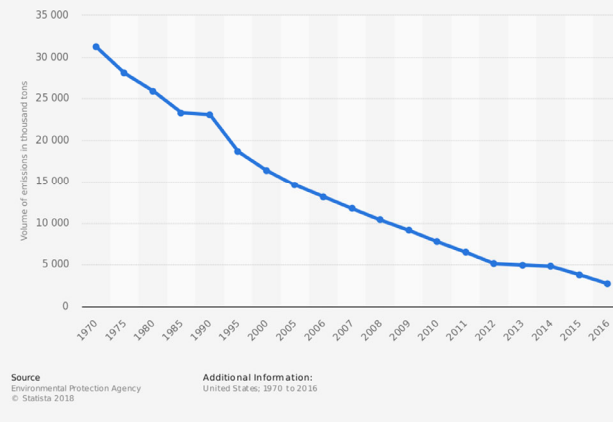25

2000   2005   2010   2015   2018

SOURCE CDIAC/Global Carbon Project
Jim Sergent/USA TODAY

US up (+2%
China up (+4%)
India up (+6%)
Europe down a little...

Volume of sulfur dioxide emissions in the U.S. from 1970 to 2016 (in 1,000 tons)

35 000

30 000

25 000

20 000

Volume of emissions in thousand tons

15 000

10 000

5 000

0

1970 1975 1980 1985 1990 1995 2000 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016

Source
Environmental Protection Agency
© Statista 2018

Additional Information:
United States; 1970 to 2016

During the administration of George H.W. Bush the revision of the clean air act was passed in 1990. It set up a "Cap and Trade" system for sulfur dioxide that was very effective. The U.S. solved its acid rain problem.

Scene from Paris protesting
25 cents a gallon increase in gas tax put in place to combat climate change.

There is a fundamental difference between the acid rain problem and carbon problem. Acid rain was primarily a problem at the **national level**. The U.S. solved this problem by electing leaders to change the laws. It didn't matter with China or India or Europe did. The carbon problem is at the **global level**. If France cuts is carbon, it won't help if other countries expand.

Another point: the protester in picture also happen to be from rural areas that are being left behind. In the cities, people tend to be well educated and to benefit from the increases in the skill premium. (And they take publis transit so don't care so much about taxing gas)

Increase in Skill Premium

Factor 1: Skill Biased Technical Change.

Factor 2: Expansion of trade and immigration.

Next: a contributing factor not based on shifts in demand and supply

Decline of Unions

Next: a contributing factor not based on shifts in demand and supply

Decline of Unions

Unions have declined significantly over the past 30 years. Production (or "blue collar") jobs are much more likely to be unionized than "white collar" jobs like management

In the 1950s and 60s, when the skill premium was the lowest, the percent unionized was the highest.

What do unions do?
Now watch clip of "Mike Brandl" "concept clip" of textbook, "Unions" who has replaced Mankiw on textbook clips.

Not so great. *Terrible!*
Better stick with the classroom model for now.

Union in Econland:
Remember S1's derived demand for Labor from Lec 14(i), when the price of a widget was $2?

Wage $

Labor Demand

Labor Demand after Union

Labor Demand No Union
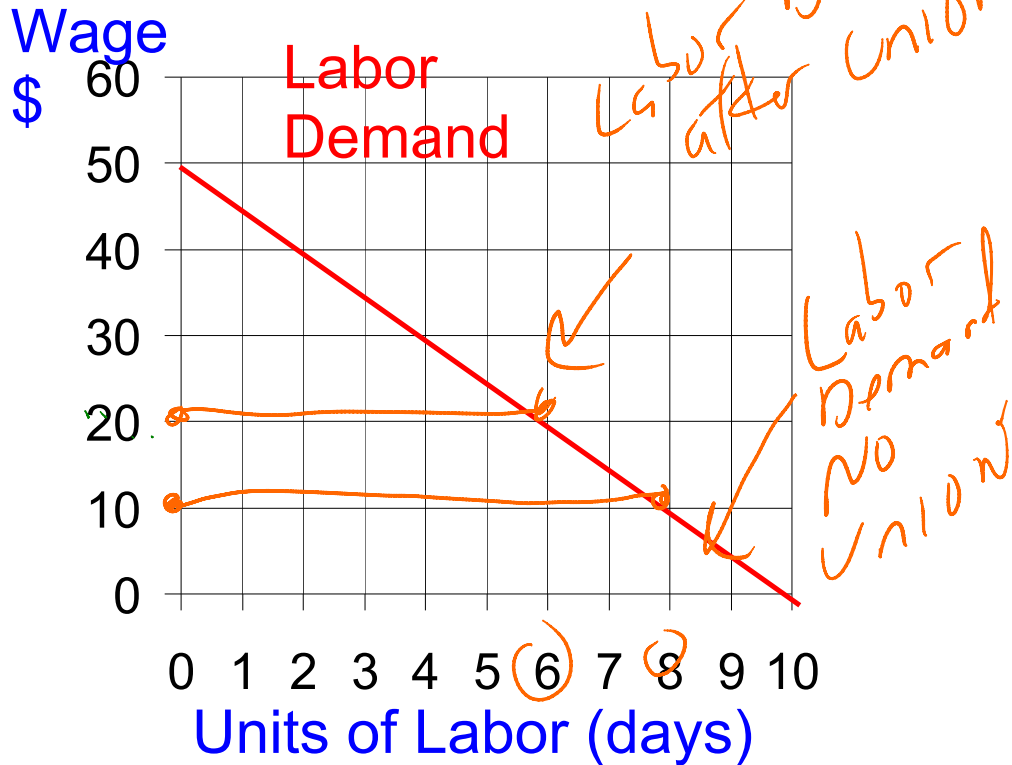
Units of Labor (days)

Suppose the units of labor are "Day"

Suppose the competitive price of labor is $10 a day. Then S1 will demand 8 days of labor.

Now suppose the plant is organized by "WWI" (Widget Workers International)

Suppose union negotiates a wage hike to $20 a day but firm still in charge of running the plant (and picking employment size)

The firm will respond by having 6 workers in the plant each day.

Suppose the 8 workers initially in the plant share the reduced work.

If they workers take off every one day out of very four days, there will be 6 workers in the plant every day, which is what the firm demands at a wage of $20.

Average take-home pay: = (3/4)*$20
= $15

And one day off out of four!.
Of course the widget workers love this!

Economic Effects

1) Quantity of Labor
as with any monopoly, predict lower quantities (get get weight loss from too little output)

2. Inefficient Production
"Featherbedding"
work-rules to increase quantity of labor needed to do a job.
(as unions have been squashed, currently much less featherbedding then before.
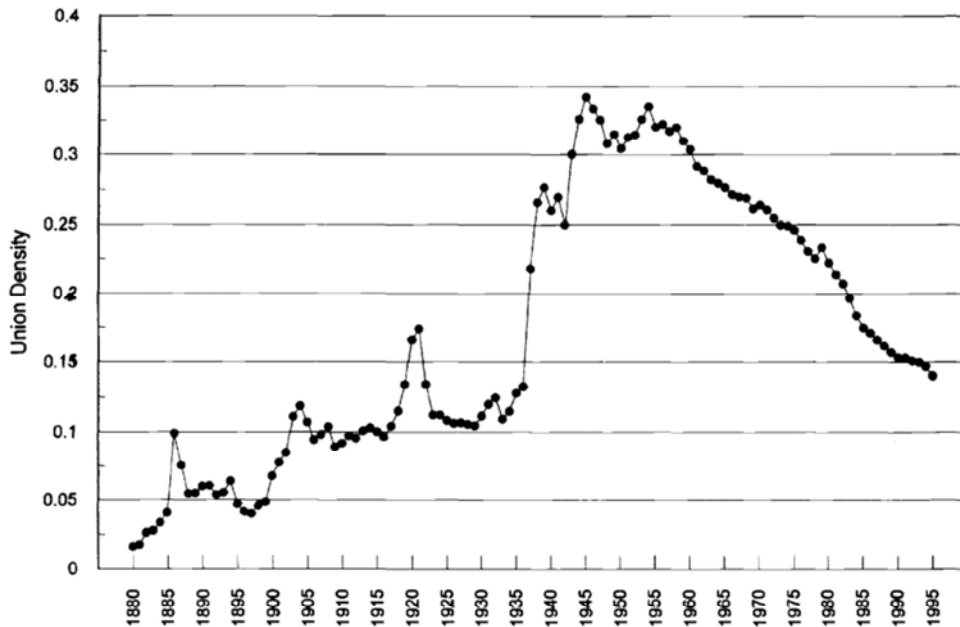
3. Transfer of surplus
Union wage premium:
average about 15 percent

Let's look at a graph of the fraction workers in the U.S. represented by Unions

Figure 1: Changing Percentage of Non-Agricultural Workers Who Are Members of Unions, 1880-1995

Observe the steady decline since the maximum point of 35% in 1950.

As of 2013: union rate is
11.2% (membership share)
12.4% (coveraged by contract

membership<coverage since workers can usually choose not to be a member (but usually still required to pay union dues, unless they live in a "right-to-work" state.)

Private Sector   7.5% (covered)
Public Sector   38.7% (covered)

Lots of factors underlying decline:

(1) Shift of industry composition from manufacturing to services

(2) Within industries from blue collar to white collar

(3) within manufacturing and blue collar, a shift from union firms like GM and Ford, to nonunion firms like Toyota and Honda (companies not around in the US back in 1950s).

Once a union gets into a plant rare to get out. Volkswagen had plant in PA in 1970s, was unionized, but closed. Now back again in Tennesee, but union not getting in.

(4) Change in legal environment
- Harder to organize (firms can do things to campaign against unions that would be called an unfair labor practice in an earlier day).

- There is now even a right-to-work law in Michigan!

Mention my 1998 study on location of manufacturing and right to work laws. In 1998 this what the map looked like: See Holmes (2000), *Regulation*
http://object.cato.org/sites/cato.org/files/serials/files/regulation/2000/4/holmes.pdf

The 99% and the 1%
(or 99.99 and .01%)

Next look at increasing inequality even within the upper range of the income distribution. The "haves" starting to complain about the "have mores"

Let's look at recent research from Piketty and Saez
("World Top Incomes Data Base)
http://wid.world/

Use tax return data to estimate the distribution of income at the very top. Strong evidence that "have mores" rising relative to the "haves"
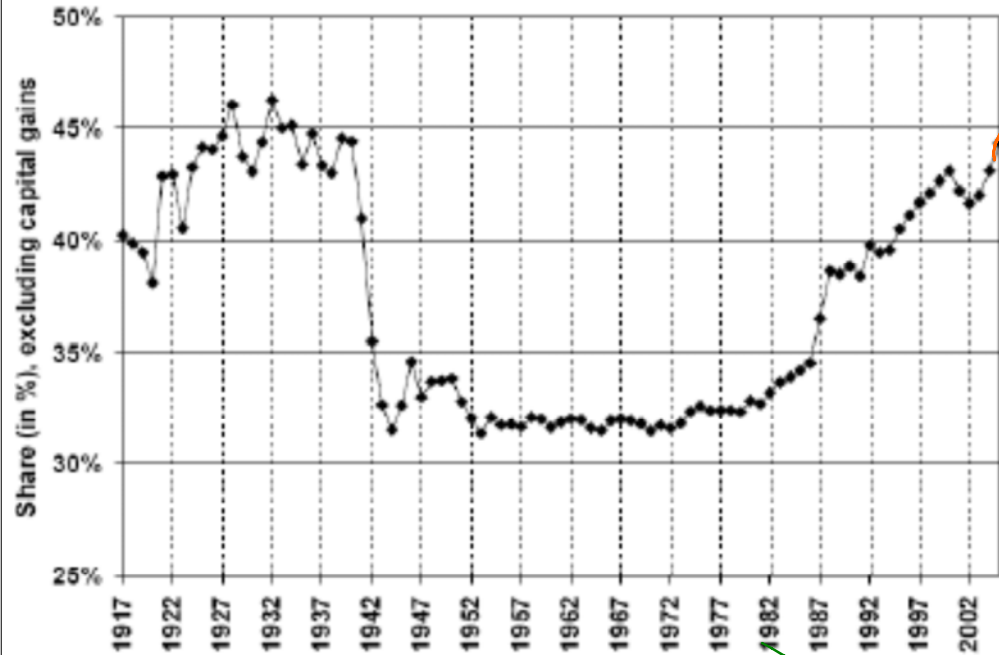
Start with the top 10 percent

Share (in %), excluding capital gains

FIGURE 1
The Top Decile Income Share, 1917-2005

Great compression

Top 10 percent

Year	Share of Total Income	Income Relative to Average
1917	40%	4.0 = 40%/10%
1972	32%	3.2
2012	48%	4.8

So a nice relative raise for "haves" between 1972 to 2012:
3.2 times average income to 4.8 times average income.
Next look at the "have mores," the top .1% income share

Next look at the top 1% of income

Year	Share of Total Income	Income Relative to Average
1913	18.0%	18.0
1972	7.8%	7.8
2012	19.3%	19.3

So "have mores" get an even better wage.

To get the best raise, need to look at top .01% of income! "have lots more"

Year	Share of Total Income	Income Relative to Average
1913	2.7%	270
1972	0.5%	50
2012	4.0%	400

So a fantastic relative raise going from 1972 to 2012, going from 50 times average income to 400 times average income.

Explanations of Increase in returns at the very top:
1. (Supply and Demand)
"Extreme skill-biased technical change" (benefiting workers way out a the extreme of the talent distribution.)
Return to very special talent has gone up, economics of superstars (easier to leverage up talent)

2. Return to special talent always there, but social norms limited pay differences.

3. Looting. The .01% have figured out a new way to work the system to redistribute the economic social pie to themselves, including busting unions. (Occupy Wall Street explanation.)

Let's have a look a baseball salaries.

Pretty clear increase in the value of the marginal product. (Globalization, cable TV revenue, etc.)
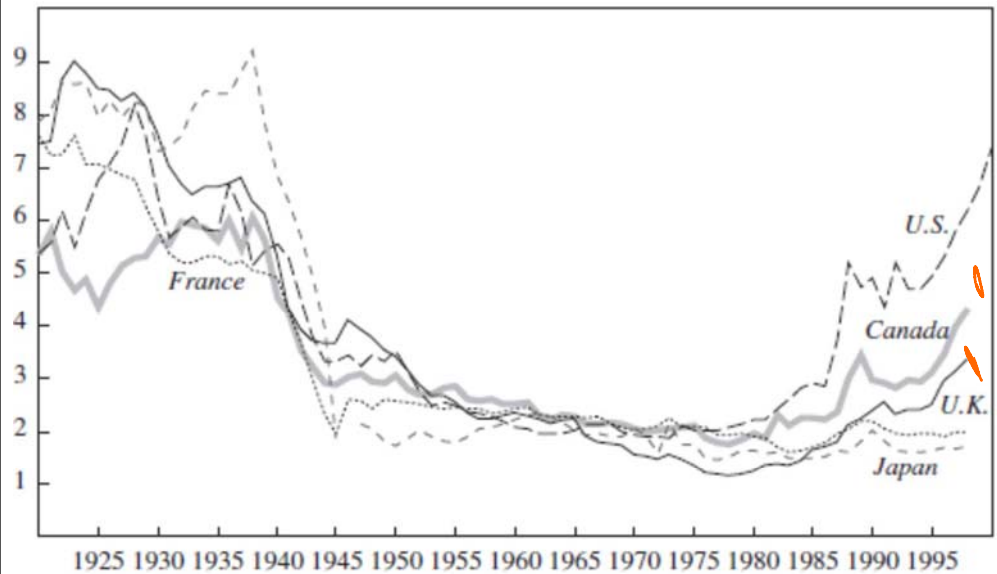
Highest Paid ball players

	Hank Aaron 1972	Clayton Kershaw 2015
Salary ($)	$200,000	$31 million
GDP per capita ($)	$6,000	$53,000
Ratio	33	585

What is going on with top ball players fits the more general pattern

Figure 3. Share of the Top 1 Percent in Total Income in Selected Industrial Countries, 1920–2000[a]

Percent of total income

Source: Piketty and Saez (2006b).
a. Total income includes labor, business, and capital income but excludes capital gains.

As cited in Gorden and Dew-Becker, "Selected Issues in the Rise of Income Inequality

We see hear a similar picture as we saw for U.S. only, only now additional countries are added.This is a very interesting graph.

In terms of past several decades

"Anglo countries"
Canada is "US light"
UK is "US lighter"

Japan and France completely different.

If this is all Skill-Biased Technical Change, why are the Anglo countries different?

One possible explanation: France not paying market wages.

Interesting New York Times article about "brain drain" of academics to the United States
http://www.nytimes.com/2010/11/22/world/europe/22france.html

Percent of French émigrés to U.S that were academics
1971-1981: 8 percent
1996-2006: 27 percent

Many reasons for this, one is pay. A French biologist who moved back to France had to take a 2/3 pay cut.
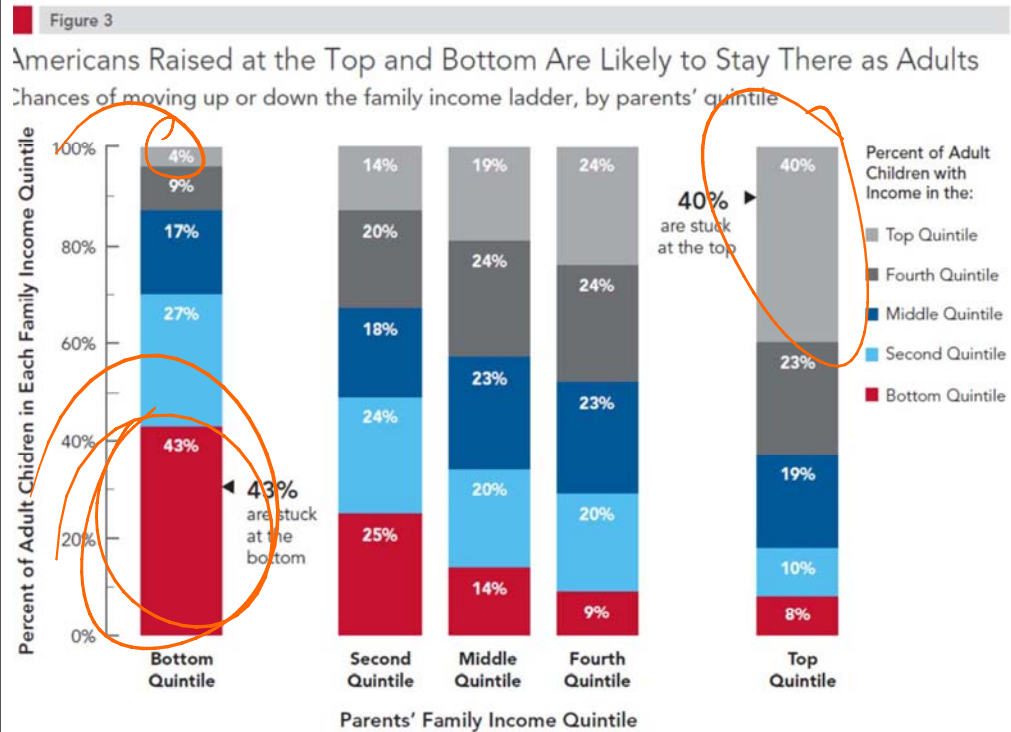
Next is issue of economic mobility

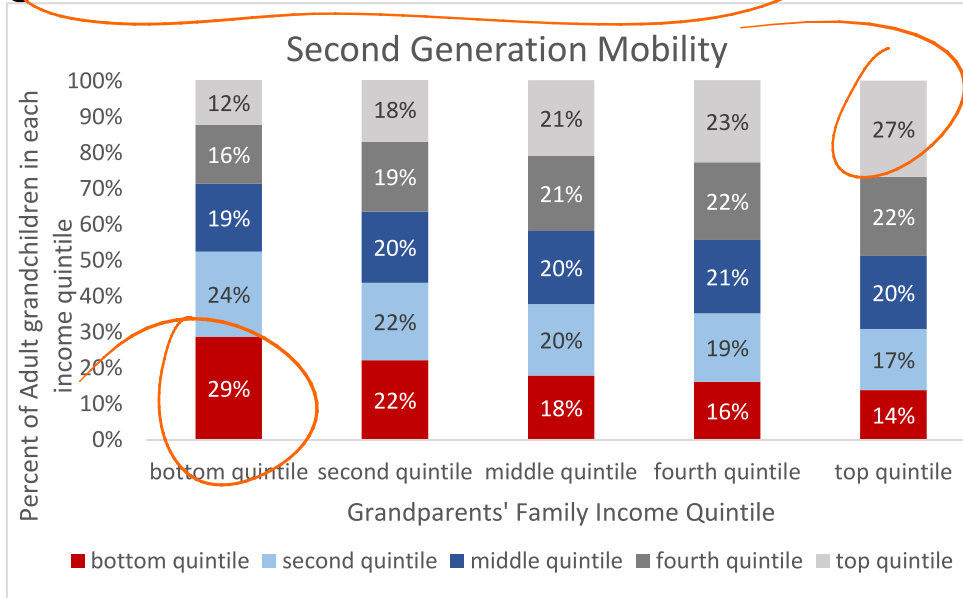US society was clearly very mobile coming out of WWII.
Many high-rolling Wall Street types today have grandparents who were dirt poor during the depression.

Income mobility is down.

Here is current mobility numbers in the US from 2012 Pew Report (Pursuing the American Dream):

Figure 3

Americans Raised at the Top and Bottom Are Likely to Stay There as Adults

Chances of moving up or down the family income ladder, by parents' quintile

Percent of Adult Children with Income in the:
- Top Quintile
- Fourth Quintile
- Middle Quintile
- Second Quintile
- Bottom Quintile

Parents' Family Income Quintile

43% are stuck at the bottom

40% are stuck at the top

But more mobility after another generation:

Second Generation Mobility

2. Proposed Policies to Change Income Distribution

1). Minimum wage
Minneapolis: $10.00 in January 2017 and 11.25 in July, goes up a dollar a year.

Go back to our earlier analysis of price floors. This is a price floor.

A lot of arguments debate about who will benefit and how much it will cost business, and how much will costs be passed along to workers.

These are arguments about elasticities.

2) Using tax system to redistribute income.

More debates about elasticity.
Also, how high income people may flee (particularly need to worry about this at the state level compared to federal.)

Negative income tax:
People at the bottom of the income scale get money back.
Have something like this because:
1) earned income tax credit
2) some in-kind benefits.

3) Human capital
(Give a man a fish...vs. teach a man to fish)

(a) early childhood education
A big focus of recent economics literature

(b) investment in public schools

(c) public investment in higher education
student loan policy

3. Labor Market Discrimination

Suppose there are two kinds of workers, type A and type B, and they have equal ability.

- Suppose there are two kinds of firms, biased and unbiased.
  - Biased firms refuse to hire type B
  - Unbiased firms don't care, will hire whichever type is cheapest.

So equilibrium in the labor market might look like this

$ S(typeA)

N^A

D^{biased}

Type A Labor

$ S(typeB)

W^B

$D^{unbiased}$

Type B Labor
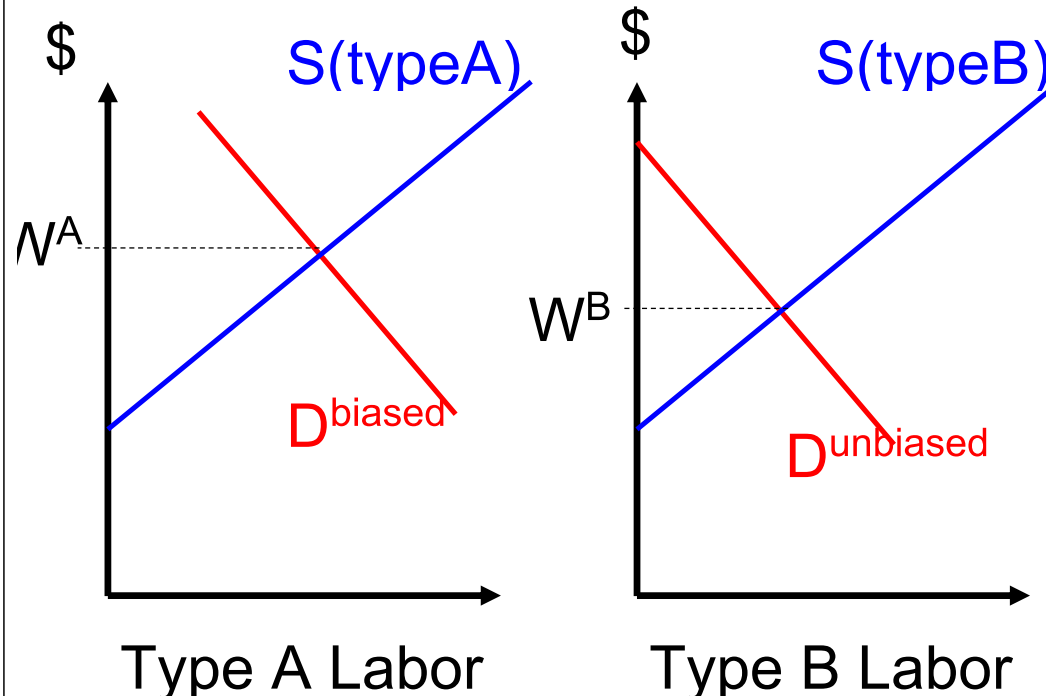
We see that in equilibrium $W^B < W^A$.

How can this be? Biased firms know they can pay less for type B workers, but they refuse to hire them. The wage W^A is where the demand for type A workers by biased firm equals all of the supply.

Since $W^B < W^A$, unbiased firms won't hire any type A workers, since they are too expensive. (Or rather then say they won't hire type A workers, they will offer W^B to both kinds of workers. But only type B workers will accept these wages. So W^B is where the supply of type B workers equals the demand from unbiased firms.

Could we draw things differently and have an equilibrium where $W^B > W^A$?

Because…….

Bottom line: If some firms are biased, we can have an equilibrium where $W^B < W^A$.

But now think about the long run. Since biased firms pay higher wages for the same quality labor, biased firms will have higher average cost than unbiased firms. In the long run, low cost firms will tend to drive high cost firms out of the market.

We conclude: If discrimination is due to preferences by firms, we expect market forces to work towards driving the discrimination out of the market.

But what if firms don't care about the type of workers, but the firms' customers do? Suppose customers are biased and they don't like buying

from a firm that employs type B
workers. Then these firms will be
able to charge higher prices, and so
they won't go out of business.

We conclude: If discrimination is due
to preferences by consumers about
the kind of workers that get hired, we
do not expect market forces to work
towards driving the discrimination
out of the market.