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Migration and Mega-cities
A (Slightly) More Optimistic View

Economic Demography

Econ/Demog c175

Prof. Goldstein

Spring 2017

Week 12, Lecture A

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From Todaro to Todaro-Harris

- Migration still depends on expected urban wages
- Wages still fixed in urban areas
- But now, we allow rural wages to vary

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Steps toward full model

1. Begin with two sector model with perfect competition
2. Introduce rigid urban wages, but allow no unemployment
3. Full model: rigid urban wages, with equilibrium when expected wages are equal

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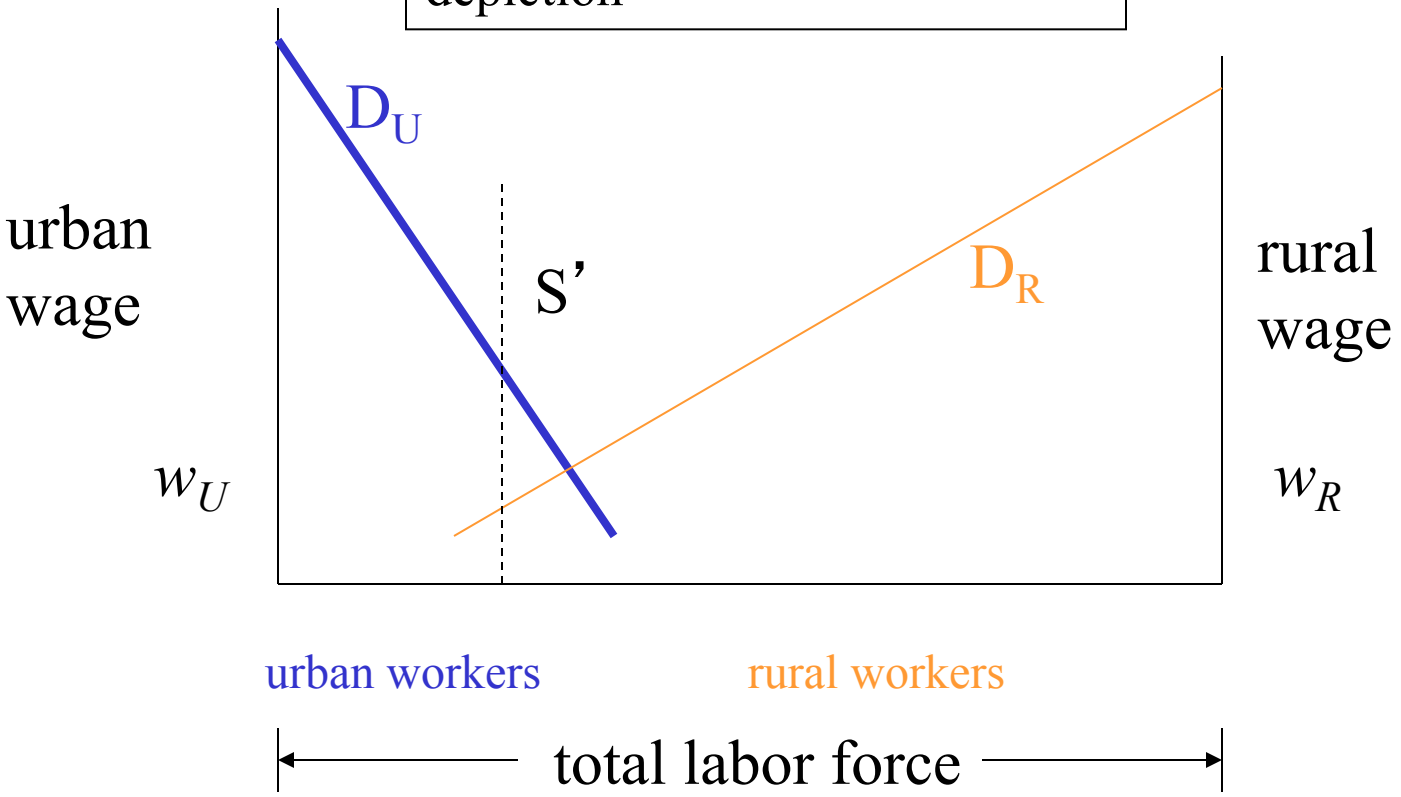
1. "Perfect competition" (when both wage rates are variable)

Note: scale of rural workers is backwards from usual depiction



What happens to migration and wages if we start at S'?
A. no migration
B. urban to rural
C. rural to urban

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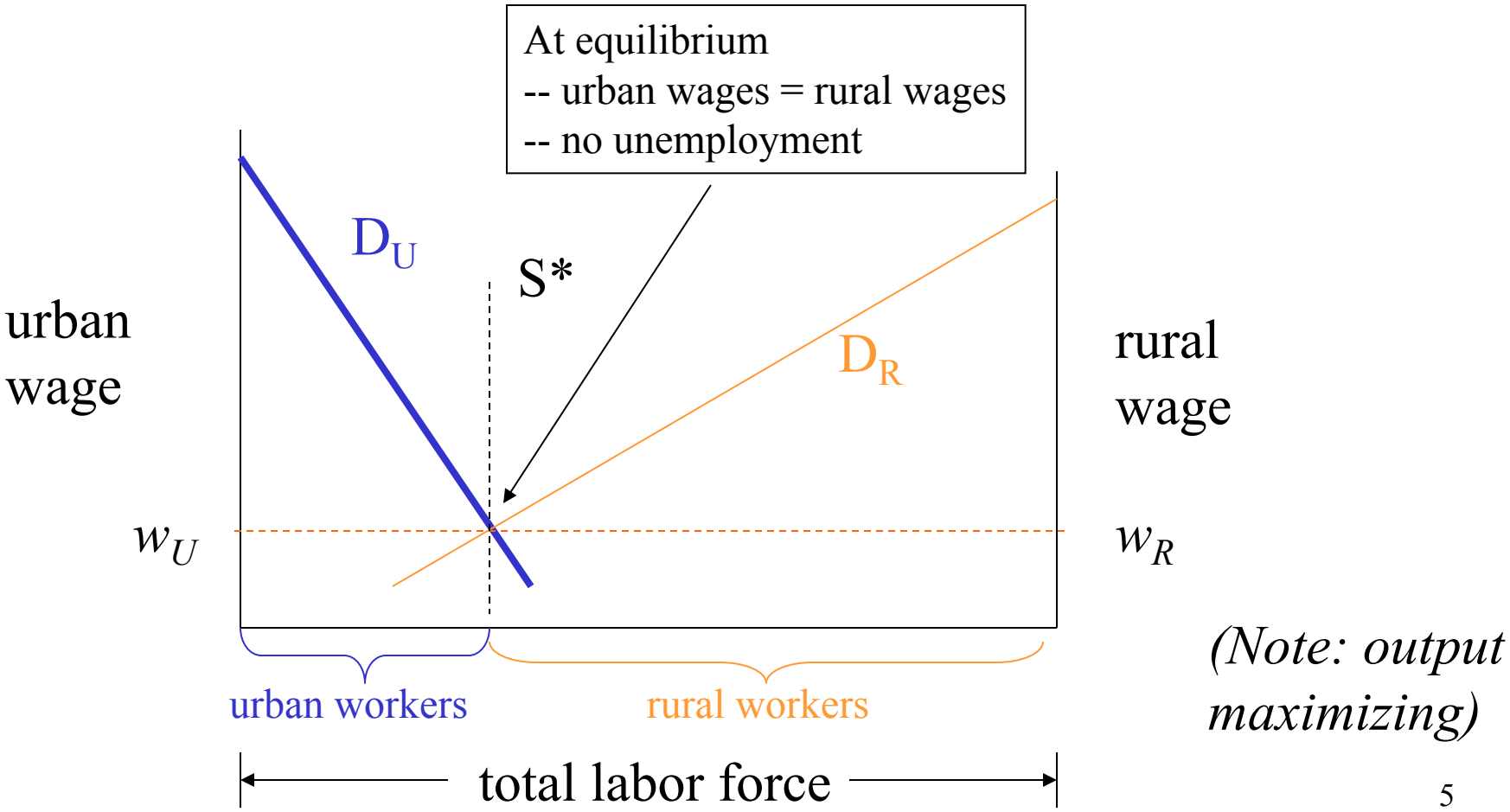
1. "perfect competition" (cont.)



(Note: output maximizing)

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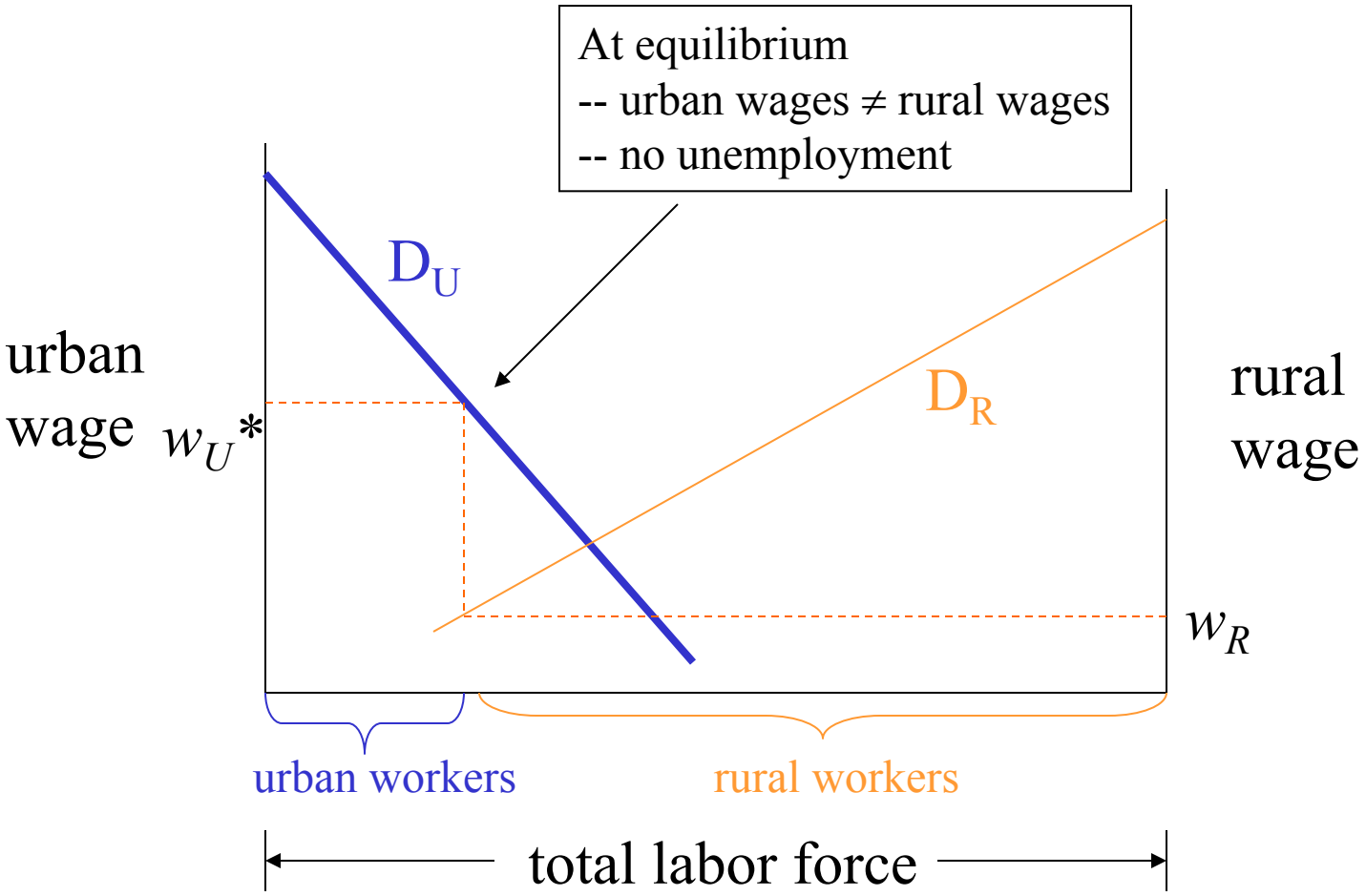
2. *Rigid* Urban Wages and *Flexible* Rural Wages (with "enforced" employment)



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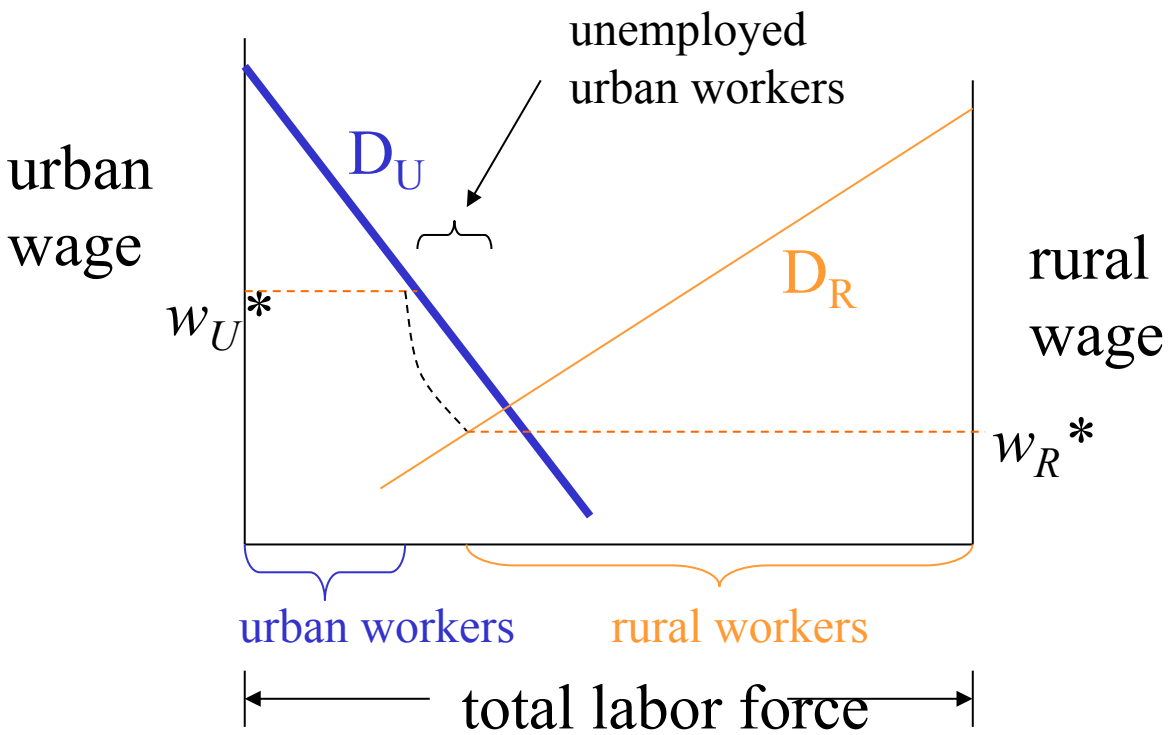
Rigid Urban Wages and *Flexible* Rural Wages (with unemployment) This is "Todaro-Harris" set-up



- The "curve" is the expected urban wage
  $= w_U \, e$
  $= w_U \times E/(E+U)$
  where *italics* are variables.
- A hyperbola like
  $Y = 1/X$
- At equilibrium
  $w_R^* = w_U \, e^*$

See "app"

Policy implication of Todaro-Harris model?

- Let's do urban job creation, shifting D_U to right
- Go ahead and sketch what you think the effect will be

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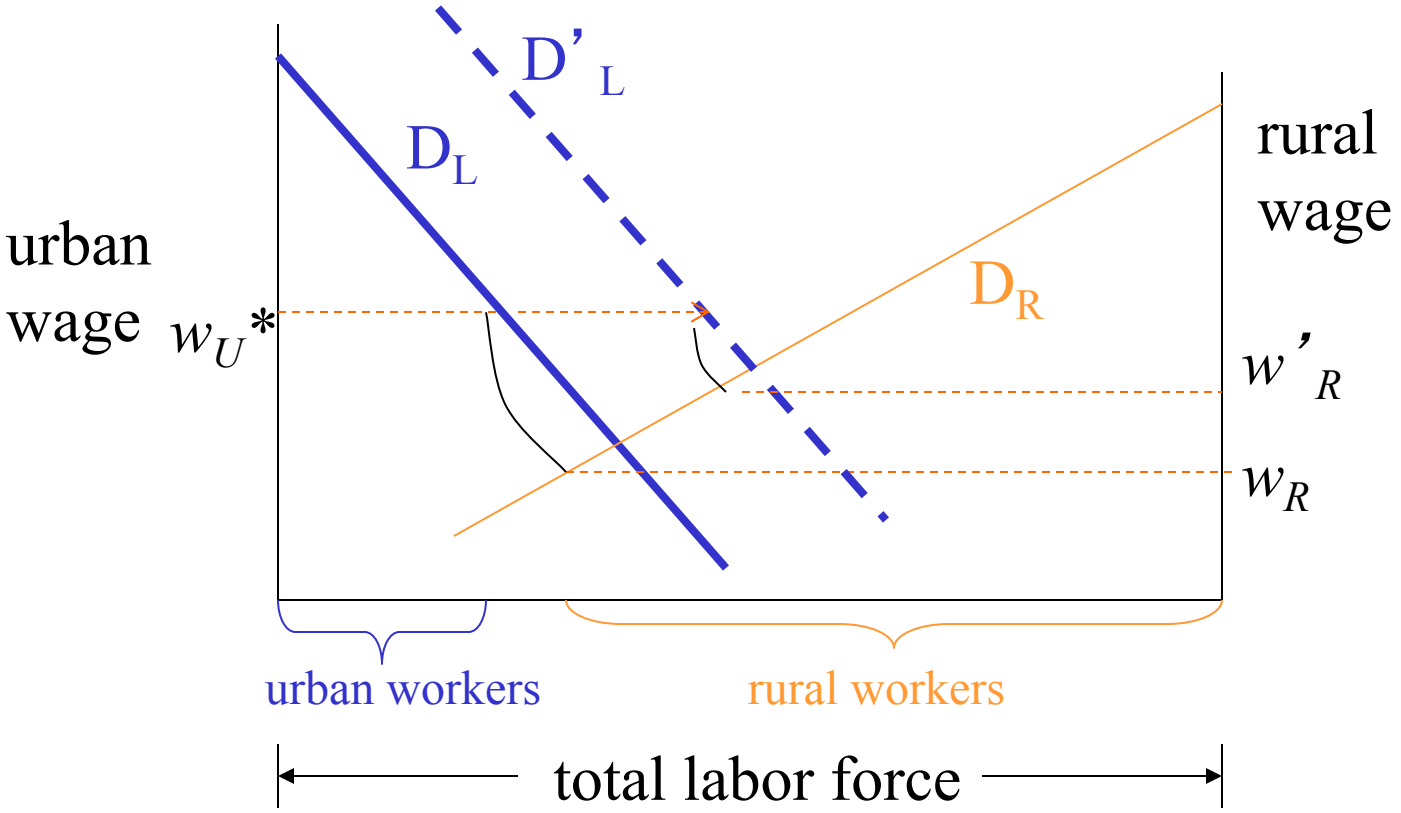
The Answer: Effect of urban job creation in "Todaro-Harris" world



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Optimistic view

If we develop urban economy …

- Increases number of urban workers
- Increases rural wages
- Decreases unemployment rate

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But ...

- Harris and Todaro still advocate keeping some barriers to rural-to-urban migration
- Idea is that aggregate output is maximized (because fewer UE in cities)
- An example where social planner would pick something different from individual
- Does this mean that markets are failing?

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Other questions for you to ask with App

- What happens if we lower or raise urban fixed wage?

- What happens if we create more labor demand in rural areas? (Shifting D_R curve)

Conclusion

- Todaro-Harris model is not so gloomy
- Can somewhat escape the "Todaro trap" because rural wages will also rise, and this will counteract the appeal of more jobs in city

- Models matter: both Todaro and Todaro-Harris still influential. Empirical evidence is still unclear.
- Newer models add informal sector, skills matching, and other benefits of cities.

How do natives gain/lose with immigration?

Today, labor markets

Thursday, taxes

Our agenda

- Is international migration good or bad for the United States?
- Labor market effects
  - Our simple one-sector model
  - Net gain from immigration
- Empirical evidence?

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Trade-offs in considering costs and benefits of immigration

- immigrants vs. natives
- skilled vs. unskilled (workers vs. owners)
- consumers of market goods vs consumers of non-market goods
- increased tax revenue vs. increased expenses
- federal vs. local finances
- what else?

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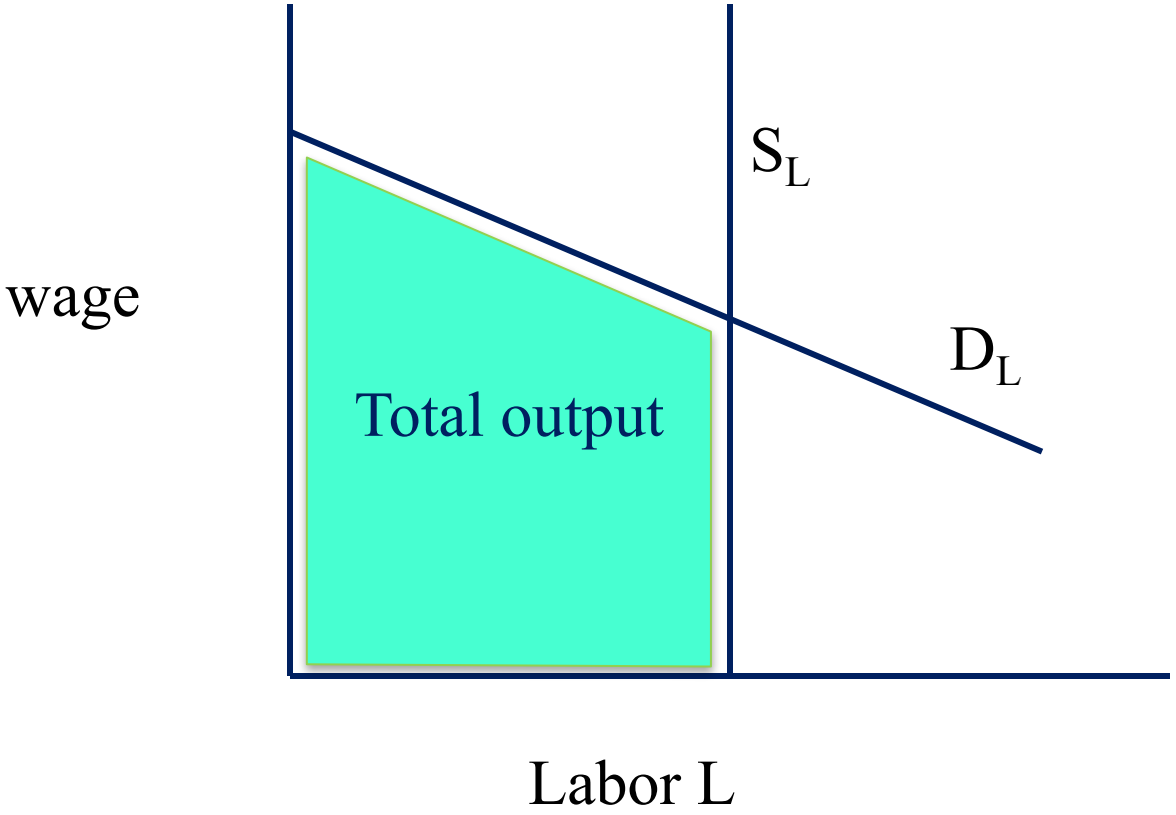
Our simple one-sector labor market model



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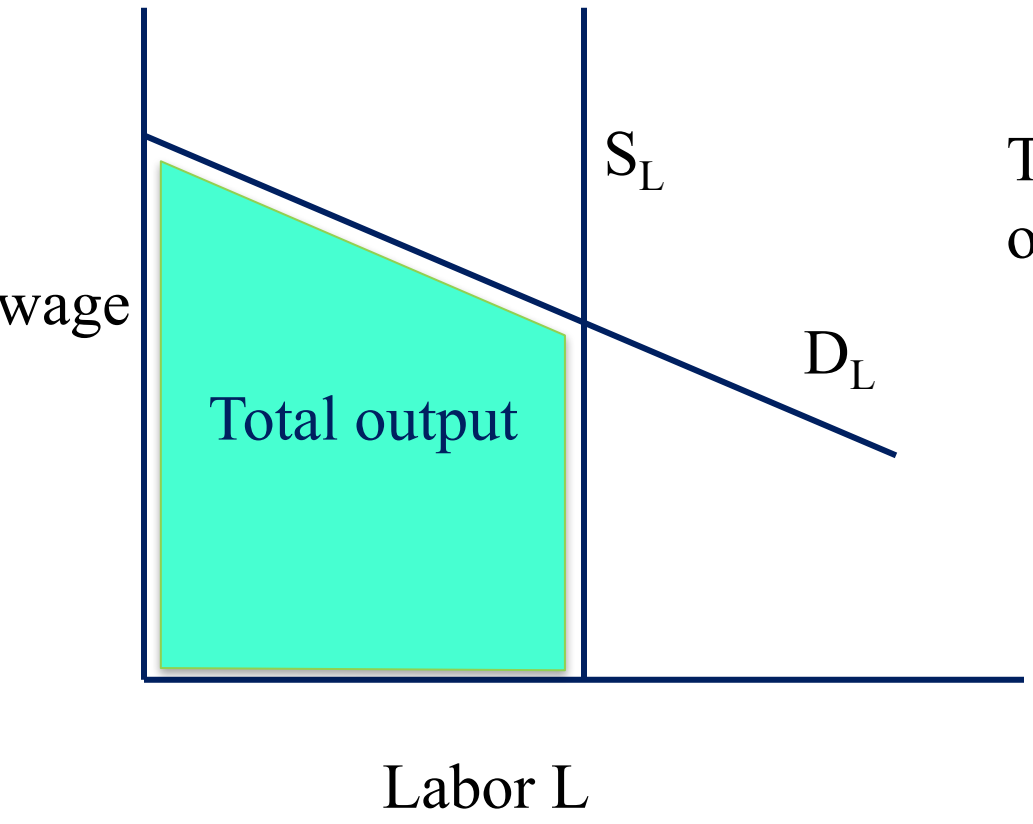
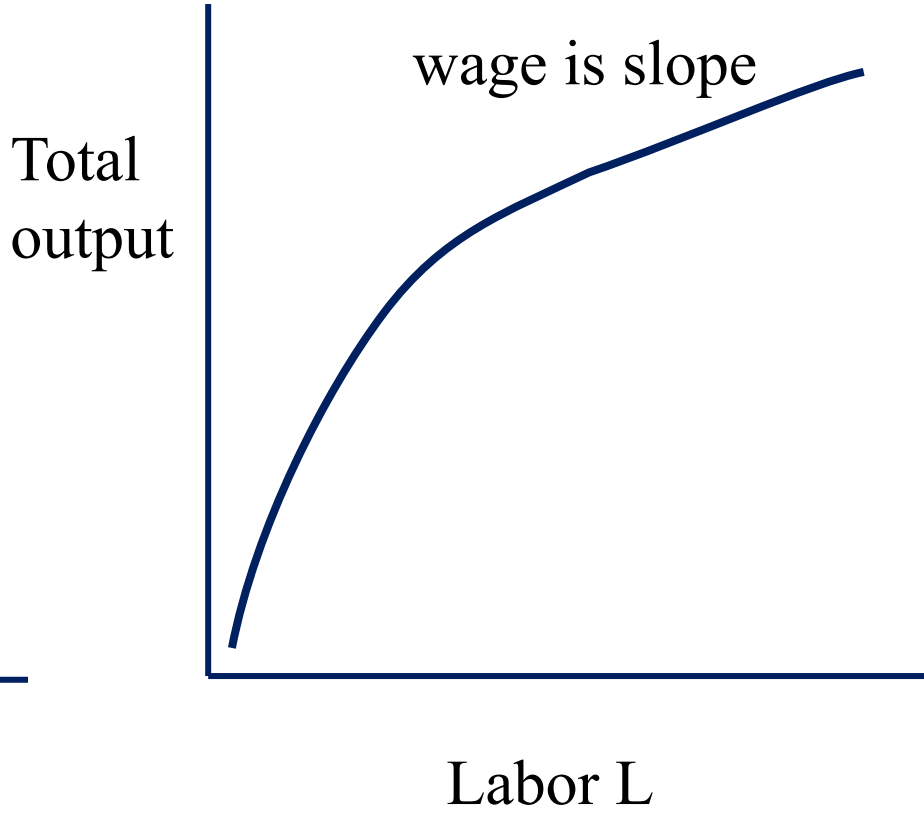
Note: like Solow model, with fixed capital stock





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What happens when we bring in immigrants?

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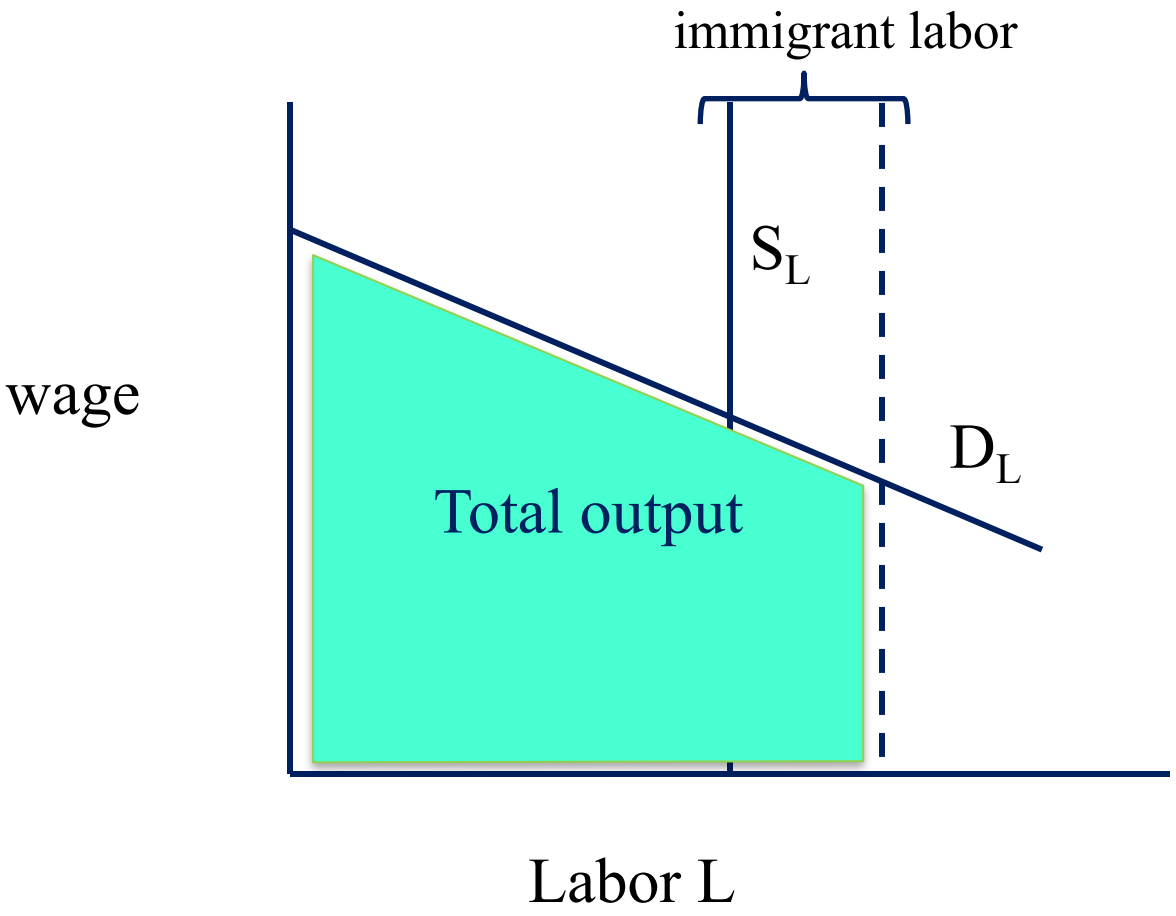
If we bring in immigrants?



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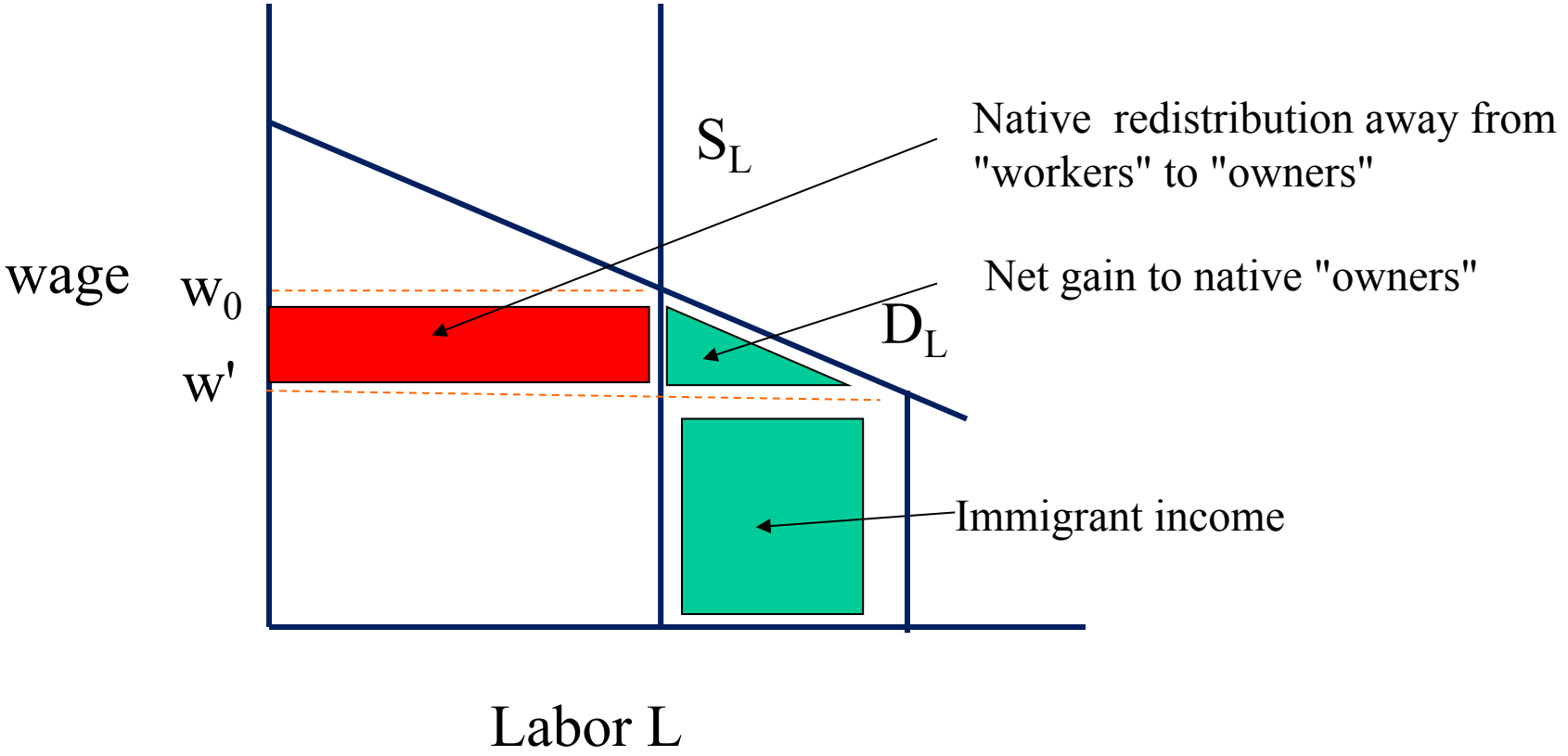
Who wins, who loses?



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So, immigration consequences are

- Creates a net gain for native-born
- But reduces salaries of workers
- Gain goes to complements
  - owners of capital
  - complementary workers (the "skilled", if immig. unskilled)
  - consumers (from lower prices due to cheaper labor)
- Good to be a complement; not good to be a substitute
- Gain is small relative to transfer ...

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Net gain is small relative to transfer

- Say labor force is 10% immigrant
- and change in wages = dw
- transfer/ net gain = (dw * .9) / (dw * .1)/2
- = .9/.05 = 18!
- This is one explanation of why immigration is controversial

Empirical evidence

- Simplest theory tells us to worry about effect on native workers
- But how large is the effect?
  - Steepness of labor demand curve (how much wages change with supply)
  - The extent to which natives are substitutes vs. complements

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Challenge of identifying effect

- Immigrants tend to move to places that wages are high and lots of labor demand
- Often see places with more immigrants having higher wages, lower UE
- Need some kind of natural experiment

Our lab

- Replicate David Card's classic analysis on Mariel boatlift from Cuba to Miami
- Look to see if we can find a negative effect on groups most like the new Cuban arrivals