

# Trade and Labor Market Outcomes

Elhanan Helpman

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  - only a fraction of firms export;
  - exporters are bigger and more productive than non-exporters

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- In addition, macro studies find that:
  - 1 to explain unemployment in European economies, it is necessary to allow for interactions between shocks and differences in labor market institutions;
  - 2 changes over time in labor market institutions are important determinants of the evolution of unemployment in OECD countries.

# Labor Market Rigidities

- There are substantial differences across countries in labor market rigidities

Country	Hiring	Hours	Firing	Index
United States	0	0	0	0
Uganda	0	20	0	7
United Kingdom	11	20	10	14
Japan	28	60	0	29
<b>OECD</b>	<b>27</b>	<b>45</b>	<b>27</b>	<b>33</b>
Mexico	33	40	40	38
Germany	33	60	40	44
Russia	33	60	40	44
Rwanda	56	60	30	49
France	67	60	40	56
Morocco	100	40	50	63
Spain	78	60	50	63
Bolivia	61	60	100	74

Source: Botero, Djankov, La Porta, Lopez-de-Silanes, and Shleifer (2004)

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- It seeks to achieve job flexibility and employment security via active labor market policies.

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  - and what is the impact of trade on inequality and unemployment?

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- Preferences: quasi linear (marginal utility of homogeneous good constant), CES in differentiated sector (homothetic with constant relative risk aversion can be used instead).



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- Output is produced and markets clear.

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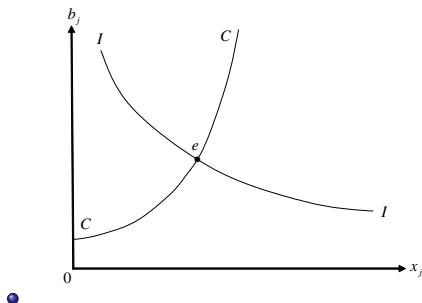
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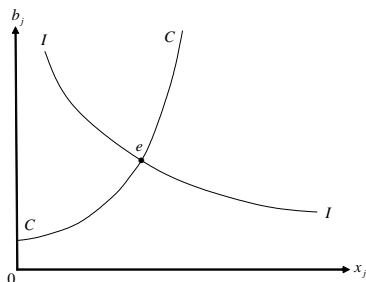
- Unemployment:

$$u = (1-x + \sigma_f x) \frac{N}{L}.$$

# Hiring Costs and Tightness in Labor market

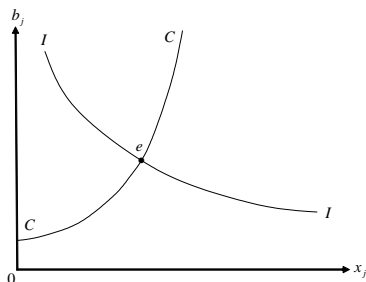


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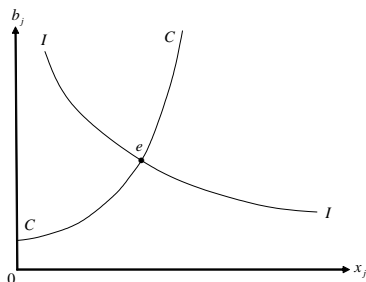
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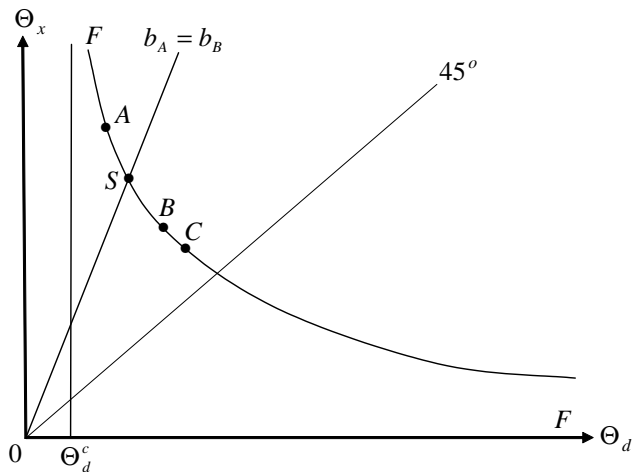


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- Larger hiring costs  $\implies$  less competitive industry.

# Equilibrium Cutoffs



Hiring costs affect productivity cutoffs

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  - If in addition, productivity is distributed Pareto, then: (iii)  $TFP$  is higher in country  $B$ ; (iv) an improvement in labor market institutions in country  $j$  raises  $TFP_j$  and reduces  $TFP$  of the trade partner; (v) a reduction of trade costs raises  $TFP$  in both countries.

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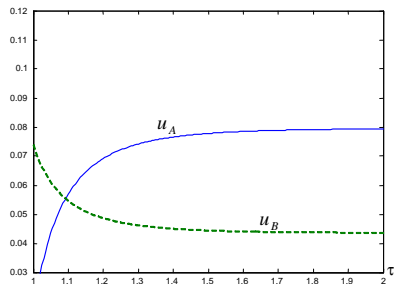
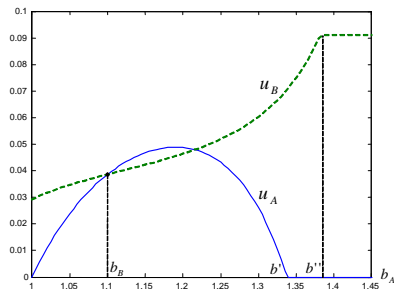
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- Welfare (assuming small unemployment benefits):
  - (i) both countries gain from trade; (ii) welfare is higher in country  $B$ ; (iii) an improvement in labor market institutions in one country raises its welfare and reduces the welfare of its trade partner; (iv) a simultaneous improvement in labor market institutions in both countries, with  $\hat{b}_A = \hat{b}_B$ , raises welfare in both of them.

# Large Differences in Labor Market Frictions



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- Higher severance pay or higher unemployment benefits may raise competitiveness.

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# Worker Heterogeneity

- A limitation of the previous analysis is that workers are homogeneous, and, as a result, all firms pay the same wages in the differentiated sector, irrespective of productivity and trade status.
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- Now assume that firm productivity and worker ability are distributed Pareto (makes closed-form solutions possible) and there is no firing and no unemployment benefits.

# Screening

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- Unemployment rate:

$$u = (1 - \sigma_c x) \frac{N}{L}.$$

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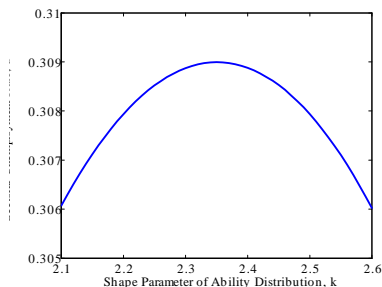
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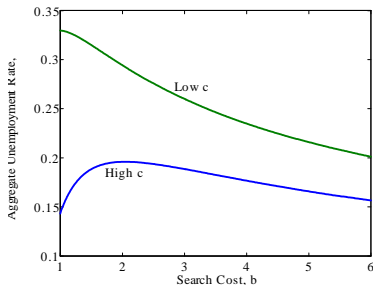
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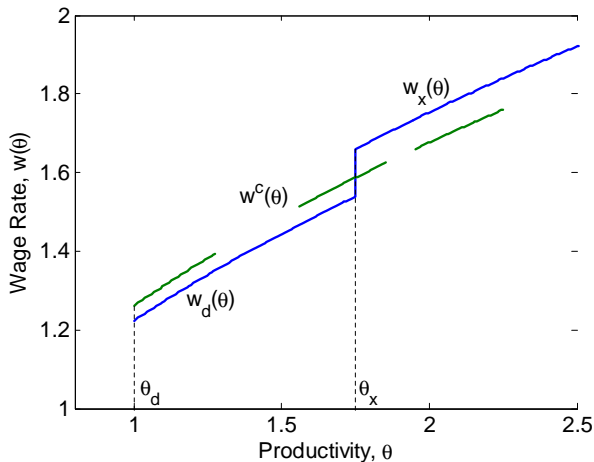
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# Wage Profile: Open vs Closed Economy



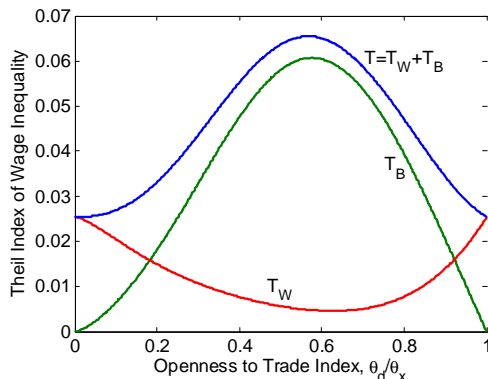
There is a fixed exporter fixed effect in the wage equation

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Inequality vs openness

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- 6 Finally, simple macro models are inadequate for assessing active labor market policies, and especially so in a world of integrated economies.