

# Sorting and Factor Intensity: Production and Unemployment Across Skills

Eeckhout and Kircher

Discussant:

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Matching theory has extended in many directions,  
BUT it still takes many parameters as given:

- The quotas in many-to-one matching
- Firms' willingness to pay for workers in many-to-one matching with contracts
- Agents' preferences in generalized matching

Eeckhout and Kircher point out that in many situations these preferences stem from a production function

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They see “intensive” and “extensive” margins as representing a variety of situations:

- Quality and quantity of workers
  - Hospitals choosing quotas
  - Firm preferences over different  $\{worker, wage\}$  contracts
- Quantity and distance of housing
- Quantity or quality of two matched groups: managers and workers or “teams”

# Possible Extensions

- How many workers to hire/how many hours to have them work
  - Instead of firm quality, consider the number of worker hours so higher  $y$  is more expensive
  - Complementarity  $\Rightarrow$  optimal for a firm to have higher quality workers work more hours
- Interactions across quality of workers
  - Their “teams” applications starts at this
  - There are complementarities and substitutions across different quality workers
  - Have  $F$  take a vector of  $l$ 's and look for conditions on  $F_{l_i, l_j}$  and  $F_{l_i, r_j}$  for firms to hire only one type of worker.

# Connecting to the Matching Literature

- Substitutability
  - Wages + concave production
  - Complementarities across qualities would be a problem
- What if firms do not know their quality / who they will get?
  - I think their framework still rules out complementarity:
    - CES implies that even if a firm can't get 5 high quality workers it would rather have 4 high quality and a couple low quality than switch to entirely low quality
  - So how do firms set preferences and quotas or wage offers?