Optimal Labor Market Policy with Search Frictions and Risk-Averse Workers

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Motivation

- What is the optimal design of labor market institutions?
- A fundamental trade-off between:
  - Demand for insurance of risk-averse workers
  - Production efficiency of the labor market
- Search frictions are a major source of the trade-off, since they:
  - Generate unemployment
  - Prevent an immediate reallocation of workers from low to high productivity jobs
- General equilibrium effects are important $\Rightarrow$ Different policy instruments do interact
Contribution

- Joint derivation of optimal level of:
  - Unemployment benefits
  - Firing taxes (Employment protection)
  - Hiring subsidies
  - Income taxes

- Optimal policy derived within Mortensen-Pissarides (1994) with risk-averse workers
Related Literature

- A considerable literature on labor market institutions:
  - Optimal unemployment insurance
  - Employment protection
- Two papers consider the optimal setting of different policy instruments \textit{jointly}:
  - Blanchard Tirole (2008): Joint derivation of optimal unemployment insurance and employment protection in a \textit{static} model with \textit{risk-averse} workers
Results: First-Best Benchmark

- Implementation of first-best allocation characterized by:
  - Full insurance
  - Firing taxes should induce firms to internalize the costs/benefits of dismissal:
    - Cost: Unemployment benefits + Income taxes
    - Benefit: A desirable reallocation of workers from low to high productivity jobs
  - Hiring subsidies needed to offset the impact of firing taxes on the job creation rate
  - Income taxes $\approx 0$
Results: Financing of Public Expenditures

Observation: Employment protection generates some revenue

Question: Should firing taxes be higher when governmental expenses are higher?

**Proposition** The level of public expenditures has no effect on the optimal level of firing taxes and hiring subsidies
Question: What is the optimal policy when it is not possible/desirable to provide full insurance using unemployment benefits?

**Proposition** A higher non-insurable utility cost of being unemployed is associated with a lower optimal rate of unemployment.

- Reducing unemployment is a substitute to the provision of unemployment benefits
- There is a cost: Output is no longer maximized
- Optimal rate of unemployment ≠ Output maximizing rate of unemployment
Results: Bargaining Power

Question: What is the optimal policy when workers do have some bargaining power?

<table>
<thead>
<tr>
<th>β</th>
<th>0</th>
<th>0.5</th>
</tr>
</thead>
<tbody>
<tr>
<td>$\theta$</td>
<td>1.88</td>
<td>0.66</td>
</tr>
<tr>
<td>$F - H$</td>
<td>0.411</td>
<td>0.533</td>
</tr>
<tr>
<td>$(1 - u)\tau / ub$ (%)</td>
<td>2.33</td>
<td>-18.55</td>
</tr>
</tbody>
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Moral hazard does not change these qualitative insights (unless $\beta < 0.2$)
Conclusion

- Firing taxes should exceed Hiring subsidies for two reasons:
  - When $\beta$ is low: To reduce the amount of resources allocated to recruitment
  - When $\beta$ is high: To reduce wages and increase unemployment benefits

- Firing taxes and hiring subsidies: Pigouvian instruments (not a source of revenue for the government)

- Uninsurable unemployment risk $\Rightarrow$ Lower optimal rate of unemployment

- General equilibrium effects maybe more important than Moral hazard