The Economics of Non-compete Clauses

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December 29, 2020
Non-compete clauses

“[N]on-compete agreements are contracts between workers and firms that delay employees’ ability to work for competing firms.” (US Treasury report)

May constrain employee’s external opportunities on

- Industry
- Geography
- Time interval

20% of US employees are bounded by non-compete (Prescott, Bishara, and Starr, 2018)
Theoretical framework

Setup

• The firm produces using human capital contributed by its employee
• The firm provides access to the assets of the firm to enable the employee to produce
• The employee has the threat of competing
• The threat is stronger the more access the firm has provided
• The firm can impose a non-compete clause to limit damage if the employee leaves
Theoretical framework

Question and tradeoffs

• **Question:** What is the optimal degree of access and tightness of non-compete clause, conditional on agent’s human capital (ability)?

• **Tradeoff I:** Access makes the employee more productive inside, but also outside

• **Tradeoff II:** Non-compete limits ex-post bargaining but affects ex ante participation constraint
Access

Access is the ability to use and work with a critical resource of the firm (Rajan and Zingales, 1998)

Critical resource

• idea
• customers
• business plan
Model description I

• A risk neutral firm offers a contract to a risk neutral agent including
  • the non-compete clause \( \lambda \in [0, \bar{\lambda}] \) where \( \bar{\lambda} \) is the legal upper bound on the strength of the noncompete
  • the degree of access \( \theta \in [0, 1] \)
  • (unconditional) wage

All above is observable and verifiable

Production

\[
F(A, \theta) = A\theta
\]  \( (1) \)
Model description II

Timeline

<table>
<thead>
<tr>
<th>Contract</th>
<th>Matching</th>
<th>Competitor offer</th>
<th>Bargaining</th>
</tr>
</thead>
<tbody>
<tr>
<td>$t = 0$</td>
<td>$t = 1$</td>
<td>$t = 1.5$</td>
<td>$t = 2$</td>
</tr>
</tbody>
</table>

Figure: Time line

- The employee has a type dependent PC at $t=0$ that increases in ability
- The key friction of the model is that the employee cannot commit to stay with the firm ($t = 1.5$)
Model description

Outside option and firm damage

• The firm suffers a damage, $d(A, \theta, \lambda)$, if the employee leaves to the competitor
• The damage increases if the employee was provided higher access, laxer non-compete, or the employee is higher ability
• The employee’s outside option is $\alpha d(A, \theta, \lambda)$, where $\alpha$ represents the transferability of access
Results $\alpha > 1$

Small damage to the firm
Results $\alpha < 1$

Large damage to the firm
Results in words

- The firm requires a minimum ability for employment, below which the potential damage would be too high.
- Lowest ability agents are subject to the tightest possible non-compete and minimum wage.
- As ability increases, more access is provided. Access increases not only the payoff of the employee, but also the payoff of the firm.
- If $\alpha > 1$ agents with ability above a threshold (red and yellow lines) are compensated with a laxer non-compete. This is a cheaper instrument for the firm than wage.
- If $\alpha < 1$ the converse is true.
The firm size is larger if non-compete is enforceable i.e.: the higher $\bar{\lambda}$, the legally allowed maximum tightness of non-compete.
Socially optimal $\bar{\lambda}$

Main tradeoff is between

- employment/firm size
- reduced benefits from mobility

If $\bar{\lambda} \uparrow$

- larger firms (more production)
- decreased outside option, especially costly for high ability agents

Distribution of types is crucial to determine which effect dominates
Summary

• Optimal contracting between a firm and an agent on access and non-compete
• Crucial parameter ($\alpha$) is the ratio between employee gain and firm damage
• Kini, Williams and Yin (RFS 2020) empirically establishes similar results
• Socially optimal regulation ($\bar{\lambda}$) trades off firm size to decreased outside option