DYNAMISM AND THE FINE PRINT

Sep 11, 2020

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Technology and Declining Economic Dynamism Conference

Boston University
How does the rise of post-employment restrictive covenants relate to declining economic dynamism?

**Dynamism Facts**

1. Stagnant Wages
2. Declining Job Mobility
3. Declining Start-up Rate
4. Harder to Find New Ideas
How does the rise of post-employment restrictive covenants relate to declining economic dynamism?

**Dynamism Facts**
1. Stagnant Wages
2. Declining Job Mobility
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**Post-Employment Restrictive Covenants**
1. Non-disclosure agreement
2. Non-solicitation of clients agreement
3. Non-recruitment of co-workers agreement
4. Noncompete agreement
How does the rise of post-employment restrictive covenants relate to declining economic dynamism?

<table>
<thead>
<tr>
<th>Dynamism Facts</th>
<th>Post-Employment Restrictive Covenants</th>
</tr>
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<tbody>
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</tr>
<tr>
<td>4. Harder to Find New Ideas</td>
<td>4. Noncompete agreement</td>
</tr>
</tbody>
</table>

Answer: For the most part, we don’t know
No broad, longitudinal evidence on the use of these provisions
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Likely noncompete use increased over time
No broad, longitudinal evidence on the use of these provisions

Likely noncompete use increased over time

- **Executives**: 61.3% in 1994 —> 86.2% in 2009
  (Bishara et al. 2015)
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Robert H. Smith School of Business
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- **“Reported” Decisions**: 528 in 2000 —> 1,002 in 2019  
  (Beck 2020)
- **Recent Anecdotal evidence**

A noncompete clause he signed prevented the stylist Daniel McKinnon from working near his previous employer for a year. Katherine Taylor for The New York Times

By Steven Greenhouse

June 8, 2014
No broad, longitudinal evidence on the use of these provisions

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  —Damon Silvers, AFL-CIO

Source: Farber et al. (2018)
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Likely that use of other provisions increased over time

No broad, longitudinal evidence on the use of these provisions

Source: Farber et al. (2018)
Two questions

1. What do we know about the use of these provisions?

2. How do they—or the policies that regulate them— influence wages, mobility, entrepreneurship, innovation?
What do we know about the use of these provisions?

- Balasubramanian et al. (2020): Data on multiple provisions, at firm/individual level from 2017
What do we know about the use of these provisions?

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Individual-Level Data (N=35k)
What do we know about the use of these provisions?

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Source: Balasubramanian, Starr, Yamaguchi 2020 “The Co-Adoption of Restrictive Covenants”
# Post-Employment Restrictive Covenants Come as a Bundle

## Table 1. Distribution of Contract Bundles

<table>
<thead>
<tr>
<th>Combination of contracts: (NDA, NS, NP, NC)</th>
<th>1(Adopt) = Yes or Maybe Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>(0,0,0,0)</td>
<td>41.31</td>
</tr>
<tr>
<td>(1,0,0,0)</td>
<td>24.47</td>
</tr>
<tr>
<td>(1,1,0,1)</td>
<td>2.25</td>
</tr>
<tr>
<td>(1,1,1,0)</td>
<td>6.28</td>
</tr>
<tr>
<td>(1,1,1,1)</td>
<td>17.19</td>
</tr>
<tr>
<td>Other combinations</td>
<td>8.50</td>
</tr>
</tbody>
</table>

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Post-Employment Restrictive Covenants Come as a Bundle

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<th>Combination of contracts: (NDA, NS, NP, NC)</th>
<th>Individual-Level Data</th>
<th>Firm-Level Data</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1)</td>
<td>(2)</td>
</tr>
<tr>
<td>(0,0,0,0)</td>
<td>41.31</td>
<td>22.00</td>
</tr>
<tr>
<td>(1,0,0,0)</td>
<td>24.47</td>
<td>25.90</td>
</tr>
<tr>
<td>(1,1,0,1)</td>
<td>2.25</td>
<td>5.20</td>
</tr>
<tr>
<td>(1,1,1,0)</td>
<td>6.28</td>
<td>11.60</td>
</tr>
<tr>
<td>(1,1,1,1)</td>
<td>17.19</td>
<td>22.90</td>
</tr>
<tr>
<td>Other combinations</td>
<td>8.50</td>
<td>12.40</td>
</tr>
</tbody>
</table>

Source: Balasubramanian, Starr, Yamaguchi 2020 “The Co-Adoption of Restrictive Covenants”
More Common in High-Tech Industries

Source: Balasubramanian, Starr, Yamaguchi 2020 “The Co-Adoption of Restrictive Covenants”
Ex ante unclear whether these provisions—or the policies that regulate them—are good or bad for dynamism?

Bad for dynamism

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Two Notes

1. Literature focuses mostly on noncompetes (some trade secret law)
2. Distinction between noncompete Enforceability and Use
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**Use:** What happens if a worker signs a provision?
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1. Literature focuses mostly on noncompetes (some trade secret law)
2. Distinction between noncompete Enforceability and Use

Enforceability: What happens when a state changes its policies?

Use: What happens if a worker signs a provision?

DIFFERENT, though related, parameters
• Harder to estimate causal effect of use
Challenges to Freedom of Contract

Details of the noncompete contracting process (Starr et al. 2020 JLE):

- < 10% Negotiate
- 83% read & sign when asked
- 86% promised nothing in exchange
- 30% sign after accepting job, without change in responsibilities.
- CNC associated with lower earnings where more enforceable
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Mixed results on earnings re: noncompete use

- Physicians (Lavetti et al. 2019)
- Executives (Kini et al. 2019, Garmaise 2011)

Selection concerns unresolved.
Hawaii’s 2015 noncompete/nonsolicit ban for tech workers raised mobility and earnings

Quarterly Separation Rate

Hawaii’s 2015 noncompete/nonsolicit ban for tech workers raised mobility and earnings

Banning Noncompetes Raises New Firm Entry

See also Starr et al. (2017), Jeffers (2019), Stuart and Sorenson (2003), and Marx (2018).
Negative Spillovers: Where Noncompete Use/Enforceability is High, Mobility/Wages are lower even for those who are bound
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See also, Johnson, Lavetti, and Lipsitz (2019): Negative wage effects of enforceability spill across state borders.
Mixed Evidence on Investment and Innovation

Noncompete enforceability hurts innovation

- Silicon Valley (Hyde 2003, Gilson 1999)
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Noncompete use and enforceability boosts firm investment

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Noncompete use and enforceability boosts firm investment

Table 10: Investment Rate by Ex-Ante Industry Competition

The dependent variable is net investment scaled by one-year-lagged assets ($I/A$). The sample is divided into three groups: high, medium, and low product market competition. “Knowledge Firm” (KF) is an indicator for firms that employ an above-median fraction of knowledge workers. In Panel A, the regressions use the full sample of matched firms. In Panel B the sample of firms is limited to firms with at least 40% of employees in the main state. Standard errors in parentheses are clustered at the state level. Industry is 4-digit NAICS.

<table>
<thead>
<tr>
<th>Panel A: All firms</th>
<th>(1) I/A</th>
<th>(2) I/A</th>
<th>(3) I/A</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High Competition</td>
<td>Medium Competition</td>
<td>Low Competition</td>
</tr>
<tr>
<td>Treated*Post</td>
<td>0.0179***</td>
<td>0.00222</td>
<td>-0.00352</td>
</tr>
<tr>
<td></td>
<td>(0.00614)</td>
<td>(0.00775)</td>
<td>(0.00960)</td>
</tr>
<tr>
<td>Treated<em>Post</em>KF</td>
<td>-0.00150</td>
<td>0.00739</td>
<td>0.0179**</td>
</tr>
<tr>
<td></td>
<td>(0.0132)</td>
<td>(0.00381)</td>
<td>(0.00705)</td>
</tr>
<tr>
<td>KF-Industry-Year FE</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Company FE</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Observations</td>
<td>264</td>
<td>1,224</td>
<td>3,190</td>
</tr>
<tr>
<td>Required</td>
<td>0.858</td>
<td>0.843</td>
<td>0.717</td>
</tr>
</tbody>
</table>

Positive investment effects only in highly competitive markets
Jeffers 2019 “The Impact of Restricting Labor Mobility on Corporate Investment and Entrepreneurship”
Unenforceable Noncompetes are Common
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<table>
<thead>
<tr>
<th>STATE</th>
<th>All employees</th>
<th>Any employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>All</td>
<td>31.8%</td>
<td>49.4%</td>
</tr>
<tr>
<td>California</td>
<td>28.6%</td>
<td>45.1%</td>
</tr>
<tr>
<td>Texas</td>
<td>50.0%</td>
<td>60.7%</td>
</tr>
<tr>
<td>Florida</td>
<td>39.3%</td>
<td>46.4%</td>
</tr>
<tr>
<td>New York</td>
<td>21.7%</td>
<td>44.2%</td>
</tr>
<tr>
<td>Illinois</td>
<td>14.3%*</td>
<td>50.0%</td>
</tr>
<tr>
<td>Pennsylvania</td>
<td>31.1%</td>
<td>42.2%</td>
</tr>
<tr>
<td>Ohio</td>
<td>41.4%</td>
<td>66.7%*</td>
</tr>
<tr>
<td>Georgia</td>
<td>33.3%</td>
<td>51.4%</td>
</tr>
<tr>
<td>North Carolina</td>
<td>29.0%</td>
<td>51.6%</td>
</tr>
<tr>
<td>Michigan</td>
<td>37.9%</td>
<td>55.2%</td>
</tr>
<tr>
<td>New Jersey</td>
<td>25.6%</td>
<td>48.8%</td>
</tr>
<tr>
<td>Virginia</td>
<td>44.8%</td>
<td>64.3%</td>
</tr>
</tbody>
</table>

Colvin and Shierholz (2019)

See also Starr et al. (2020) JLE “Noncompete Agreements in the US Labor Force”

Balasubramanian, Starr, Yamaguchi (2020)
Unenforceable Noncompetes are Common

NON-COMPETE AGREEMENT:
As a coach and volunteer for Girls on the Run of Silicon Valley, I agree to the following:

1.) I will not deliver the Girls on the Run program or any similar program unless I am working as an employee or volunteer of Girls on the Run.

2.) I may not create or help develop a program that has similar goals and structure to that of Girls on the Run International within a two-year period of my involvement with Girls on the Run.

See also Starr et al. (2020) JLE “Noncompete Agreements in the US Labor Force”
Balasubramanian, Starr, Yamaguchi (2020)
Workers Unaware of Law—Assume Enforceable

Prescott and Starr (2020): “Subjective Beliefs about Contract Enforceability”
Workers Unaware of Law—Assume Enforceable

(Unenforceable) Noncompetes Exert Chilling Effect on Mobility

Table 5: Turning Down Job Offers

<table>
<thead>
<tr>
<th>Sample</th>
<th>(1) All</th>
<th>(2) States That Do Not Enforce Noncompetes</th>
<th>(3) States That Enforce Noncompetes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Panel A: Was your noncompete a factor in your choice to turn down your offer from a competitor?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>41.4%</td>
<td>37.5%</td>
<td>42.3%</td>
</tr>
<tr>
<td>Panel B: If you received an offer from a competitor, would your noncompete be a factor in your choice to accept it?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>47.6%</td>
<td>46.6%</td>
<td>47.8%</td>
</tr>
<tr>
<td>Panel C: How important is your noncompete in determining if you leave for a competitor?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not at all Important</td>
<td>9.0%</td>
<td>6.2%</td>
<td>9.5%</td>
</tr>
<tr>
<td>Very Unimportant</td>
<td>6.0%</td>
<td>7.4%</td>
<td>5.8%</td>
</tr>
<tr>
<td>Somewhat Unimportant</td>
<td>6.5%</td>
<td>5.3%</td>
<td>6.6%</td>
</tr>
<tr>
<td>Neither Important nor Unimportant</td>
<td>23.3%</td>
<td>26.4%</td>
<td>22.8%</td>
</tr>
<tr>
<td>Somewhat Important</td>
<td>21.3%</td>
<td>19.1%</td>
<td>21.6%</td>
</tr>
<tr>
<td>Very Important</td>
<td>17.5%</td>
<td>17.2%</td>
<td>17.5%</td>
</tr>
<tr>
<td>Extremely Important</td>
<td>16.5%</td>
<td>18.4%</td>
<td>16.3%</td>
</tr>
<tr>
<td>Somewhat or Very or Extremely Important</td>
<td>55.3%</td>
<td>54.7%</td>
<td>55.3%</td>
</tr>
</tbody>
</table>

Prescott and Starr (2020): “Subjective Beliefs about Contract Enforceability”

Concluding Remarks

• Growing evidence that post-employment restrictive covenants likely contributed to declining economic dynamism

• Some policies have proven effective in combatting declining dynamism
  • Not clear what to do re: unenforceable contracts and chilling effects

• Many opportunities for future work
  • Gather historical data: link adoption patterns to dynamism directly
  • Resolve selection vs. treatment concerns
  • Address innovation/investment discrepancies
  • Broaden beyond noncompetes
  • Many more …