DEVELOPING EFFECTIVE MERGER CONTROL IN EMERGING ECONOMIES:
LESSONS FROM ESTABLISHED POLICY AND PRACTICE

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Effective competition policy requires
- Resources
- Experience
- Expertise
- Political and judicial support

Even countries with these advantages do not have “perfect” competition policy

But they represent upper bound on likely success of competition policy in emerging economies
• Study examines experience with competition policy in established setting: Upper bound analysis

• Purposes are to determine how accurate, effective is competition policy under most favorable circumstances

• Also to identify aspects of policy that are done best and can be used as guidance for policy in other countries
EXAMINE MERGER CONTROL

- Setting is U.S.
- Examine merger control only
  - Unlike cartels, requires case-specific analysis
  - Unlike monopoly practices, requires prediction

- Allows use of new data from project evaluating U.S. merger control
(A) Initial conditions that prompt investigation of merger

(B) Agency analysis, prediction, and action

(C) Outcome of merger and policy action
“END-TO-END” EVALUATION

- Permits insight into
  - Criteria for investigation
  - Relationship between conditions and type of action
  - Causal connection between types of actions and outcome

- Some studies of cases, linkages exist
  - For example, retrospective studies of mergers

- Entire end-to-end process has not been studied systematically
  - Nor any previous effort to draw implications for developing merger control
MERGER CONTROL IN U.S.

- Merger Guidelines intended to explain analytical process:
  - Market definition, shares and concentration
  - Entry, efficiencies, etc.
  - Most recently, theory of competitive harm

- Guidelines first issued in 1968
  - Major revisions in 1982, 1992 and 2010

- Merger rules change over time with understanding and experience
FROM GUIDELINES TO PRACTICE

- DOJ/FTC Data permit comparison of Guidelines to actual practice

- Few mergers challenged unless:
  - concentration very high, and change in concentration very large
  - Also, no actions where entry said to be easy

- Despite Guidelines that say challenge likely when HHI $> 1000$ and $\Delta HHI$ $> 100$

- Actual practice may diverge from Guidelines, even systematically
### Cases in which the Agencies Challenged Mergers (1999-2003)

<table>
<thead>
<tr>
<th>Post-Merger HHI</th>
<th>Change in the HHI</th>
<th>0-99</th>
<th>100-199</th>
<th>200-299</th>
<th>300-499</th>
<th>500-799</th>
<th>800-1,199</th>
<th>1,200-2,499</th>
<th>2,500+</th>
<th>total</th>
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</thead>
<tbody>
<tr>
<td>0–1,799</td>
<td>0</td>
<td>17</td>
<td>18</td>
<td>19</td>
<td>3</td>
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<td>57</td>
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<tr>
<td>1,799–1,999</td>
<td>0</td>
<td>7</td>
<td>5</td>
<td>14</td>
<td>14</td>
<td>0</td>
<td>0</td>
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<td>0</td>
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<td>2,000–2,399</td>
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<td>1</td>
<td>7</td>
<td>32</td>
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<td>2,400–2,999</td>
<td>1</td>
<td>5</td>
<td>6</td>
<td>18</td>
<td>132</td>
<td>34</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>197</td>
</tr>
<tr>
<td>3,000–3,999</td>
<td>0</td>
<td>3</td>
<td>4</td>
<td>16</td>
<td>37</td>
<td>63</td>
<td>53</td>
<td>0</td>
<td>0</td>
<td>176</td>
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<tr>
<td>4,000–4,999</td>
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<td>16</td>
<td>34</td>
<td>30</td>
<td>79</td>
<td>0</td>
<td>0</td>
<td>163</td>
</tr>
<tr>
<td>5,000–6,999</td>
<td>0</td>
<td>2</td>
<td>4</td>
<td>16</td>
<td>9</td>
<td>14</td>
<td>173</td>
<td>52</td>
<td>0</td>
<td>270</td>
</tr>
<tr>
<td>7,000+</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>3</td>
<td>10</td>
<td>44</td>
<td>223</td>
<td>0</td>
<td>282</td>
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<td><strong>2</strong></td>
<td><strong>36</strong></td>
<td><strong>47</strong></td>
<td><strong>133</strong></td>
<td><strong>267</strong></td>
<td><strong>153</strong></td>
<td><strong>350</strong></td>
<td><strong>275</strong></td>
<td><strong>1263</strong></td>
<td><strong>1263</strong></td>
</tr>
</tbody>
</table>
Another element of “end-to-end” analysis:
- Ex post evaluations of actual mergers
- Examine prices before and after merger
- Use difference-in-difference estimation

Survey of all merger retrospectives finds 26 studies
- covering 45 mergers
- with 59 estimates of price effects
### SUMMARY OF PRICE EFFECTS

<table>
<thead>
<tr>
<th>Estimated Effect</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRICE INCREASE</td>
<td></td>
</tr>
<tr>
<td>Large</td>
<td>29</td>
</tr>
<tr>
<td>Small</td>
<td>7</td>
</tr>
<tr>
<td>MIXED OR NO EFFECT</td>
<td>17</td>
</tr>
<tr>
<td>PRICE DECREASE</td>
<td></td>
</tr>
<tr>
<td>Small</td>
<td>0</td>
</tr>
<tr>
<td>Large</td>
<td>6</td>
</tr>
</tbody>
</table>
FURTHER ON FINDINGS

- More than half of all studies find price increases after merger—most large
  - Almost none find decrease
- *Implies policy may need tightening*

- Joint ventures and airline code-shares have lesser effects
- *Implies primary concern should be with true mergers*
Evaluation of merger policy requires further information

- Industry facts prior to merger
- Agency concern/theory/prediction

Type of agency action
- Approve without conditions
- Impose conduct conditions
- Require divestiture
- Disapprove
DATA AND RESULTS

- Compile data on actual cases filed
  - Matched to retrospective studies

- Result is “end-to-end” data on 23 merger cases
  - covering 30 distinct products
  - with 25 price outcomes
AGENCY ACTIONS

- Of 25 completely specified cases of products undergoing merger

<table>
<thead>
<tr>
<th>Action</th>
<th>No. of cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approved without conditions</td>
<td>5</td>
</tr>
<tr>
<td>Approved subject to conduct remedies</td>
<td>11</td>
</tr>
<tr>
<td>Approved subject to divestiture</td>
<td>4</td>
</tr>
<tr>
<td>Disapproved (but overridden)</td>
<td>4</td>
</tr>
</tbody>
</table>
INDUSTRY CONDITIONS

- Next we match data on prior industry conditions:

<table>
<thead>
<tr>
<th>Action</th>
<th>No. of cases</th>
<th>Concentration</th>
<th>Entry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approved/ no conditions</td>
<td>5</td>
<td>HHI between 1500 and 6390, CR2 = 100</td>
<td>Easy</td>
</tr>
<tr>
<td>Approved/ conduct remedies</td>
<td>11</td>
<td>HHI between 2540 and 3000, CR2 = 100</td>
<td>Difficult</td>
</tr>
<tr>
<td>Approved/divestiture</td>
<td>4</td>
<td>“Moderate/high” HHI between 6000 and 8000</td>
<td>Difficult</td>
</tr>
<tr>
<td>Disapproved</td>
<td>4</td>
<td>“High/moderate”</td>
<td></td>
</tr>
</tbody>
</table>
TENTATIVE CONCLUSIONS I

- Somewhat higher concentration in cases requiring divestiture, compared to conduct remedies.
- Ease of entry appears to override concerns in cases of high concentration.
**MERGER OUTCOMES**

- Price outcomes from studies, according to agency action:

<table>
<thead>
<tr>
<th>AGENCY ACTION</th>
<th>Large Increase</th>
<th>Small Increase</th>
<th>Mixed/None</th>
<th>Price Decrease</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approved/ no conditions</td>
<td>2</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>Approved/ conduct remedies</td>
<td>8</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>11</td>
</tr>
<tr>
<td>Approved/divestiture</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>Disapproved</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>15</strong></td>
<td><strong>4</strong></td>
<td><strong>6</strong></td>
<td><strong>0</strong></td>
<td><strong>25</strong></td>
</tr>
</tbody>
</table>
## MERGER OUTCOMES

- Price outcomes from studies

<table>
<thead>
<tr>
<th>AGENCY ACTION</th>
<th>Large Increase</th>
<th>Small Increase</th>
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<th>Price Increase</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approved/ no conditions</td>
<td>2</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>5</td>
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<tr>
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<td>8</td>
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<td>1</td>
<td>0</td>
<td>11</td>
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<tr>
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<td>3</td>
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<td>0</td>
<td>5</td>
</tr>
<tr>
<td>Disapproved</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>15</td>
<td>4</td>
<td>6</td>
<td>0</td>
<td>25</td>
</tr>
</tbody>
</table>
Mergers with no (or mixed) price effect approved in 3 of 6 cases
Mergers resulting in price increases approved in 2 of 19 cases
  - Difference is statistically significant

Agencies have some ability to identify more problematic mergers
Of 19 mergers with large price increases:
• Only 2 opposed outright
• Three others had structural conditions attached
• 8 of 11 subject only to conduct remedies

Policy erred systematically toward weaker remedies than underlying conditions required
U.S. MERGER CONTROL: SOME REFLECTIONS

- U.S. competition agencies have $280M budget total
  - Staffs of 130 economists, 750 lawyers
  - Investigate 50 to 100 mergers per year
  - File 5 to 20 challenges per year

- Despite resources and experience, execution imperfect
  - Sizeable overall rate of errors
  - Some systematic errors
1. Heavily case-specific determination is resource intensive but without clear gain in accuracy
   - Cheaper and easier to rely on structural presumption
2. Ease of entry is very important safeguard, even in face of high concentration
   - Policy should aggressively seek removal of barriers to entry
• Conduct remedies are weaker and harder to enforce than divestitures
  ◦ *Policy should employ structural remedies wherever possible*