Markups, profit, and competition enforcement

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Macro evidence accumulating

Jan De Loecker and Jan Eeckhout (2018)

• CRSP data 1950-2016
• Assume cost minimization; nothing about conduct
• Find a variable input and its cost - calculate output elasticity
• Get expression for markups:

\[ \mu_{it} = \theta_{it}^{V} \frac{P_{it} Q_{it}}{P_{it}^{V} V_{it}}. \]

• Include SG&A as another “variable” input with own output elasticity

\[ \Pi = PQ - c(Q) - F. \]
Markup = Market Power?

Dividends and Market Value

[Graphs showing the relationship between markup, share-weighted dividend, and share-weighted market value over time.]
Labor share

- Criticism of the markups work is that with a fixed output elasticity of labor, they are just measuring changes in the labor share.
- Not sure why this conclusion is a problem/rebuttal
- If inputs switching to IT away from labor, we still have problems:
  - Macro facts like less investment
  - Less business dynamism
  - Profits but no expansion of business
  - Widening income inequality
- Where are those dollars going? Not to labor, not to suppliers of financial capital, but to the owners of equity =>
  - Generates desire to exclude
  - Generates desire to lobby, etc
Working conclusion

• Markups (P/C) rising over the last 30 years
  – Driven by the top end of the P/C distribution
  – More prevalent in IT-heavy industries
  – Result seem stronger in the US compared to Europe
  – Markups rise, but not by as much in variety of European countries
• Results robust to different production functions
• Results lessened but robust to including some SG&A as another input that can be adjusted
• Other work comes to similar conclusions

“Markups” have a pejorative connotation – turn to policy implications
Explanation #1: Fixed costs are a growing share

- IT adoption must have caused a rise in the share of fixed costs since 1980 around the world
  - Assume consumers want the attributes generated by fixed costs
    - Research into new treatments / invention of widgets
    - Good websites / apps / functionality
- Would generate a trend of increasing fixed costs as a share of total costs
  => In eqbm will see $p > mc$
- Is this a welfare harm?
  - Yes, in a static model $p > mc$ generates DWL
  - In a dynamic model, the firm cannot run this business model and pay for its fixed costs if $p = mc$
  - Consumers likely better off with markups to induce existence of products
Are fixed costs harmful to competition?

- If we take the dynamic view AND there is a zero-profit constraint, then no
- Firms make gross margin on each unit, multiply by quantity, get revenue to cover fixed costs
- If firms are not making any excess profit because they compete with other firms to generate the products consumers want (=the type of fixed cost that is most beneficial), there is no competition problem
- The flow of profit may increase complexity: do the profits occur in some periods and losses in others? Do firms expect zero profits but achieve realized losses or profits?
- We need the firm to earn zero PDV expected profit
Competition enforcement implications

• Higher fixed costs => more concentrated markets
• More concentrated markets means less competition IN the market and more competition FOR the market
• Locus of competition moves to entry
• Enforcers need to place more weight on…
  – Potential entry theories of harm
  – Incipiency theories of harm
  – Impact of small firms that may be disruptive
  – Potential entrants from elsewhere in the vertical chain
Fixed costs only?

- How to test for zero economic profit?
- Jan*Jan show their estimated US markups rise with stock prices
  - Also with dividend payouts
- This evidence indicates there is economic profit, so fixed costs alone is not the explanation
  - Sample selection is an issue: Firms not on the stock market may have failed and therefore had negative returns omitted from the sample.
  - How much positive bias in set of existing firms?
- Note also that fixed cost story should hold across all developed countries
- But evidence of rising markups is weaker in Europe
- And fixed costs increases should not only appear at the top end of the markup distribution

=> Seems likely that fixed costs are not the whole story…
Explanation #2: Globalization

• Falling tariffs and transport and contracting costs since 1980
• Operations in multiple countries allows for legal tax evasion
• Input costs lower
  – Access to lower wages
  – Choose location with favorable input costs
  – Optimized chain of production
  – Economies of scale
• Invest in brand which generates value among wealthy consumers
  ⇒ Higher markups for largest firms with global reach
  ⇒ Consistent with increase over time for a subset of firms
Macro-finance explanation #3: Intangibles

• We are missing a factor of production, “intangible assets” (Peters and Taylor)
• First reaction: convenient. Un-measured. Can explain anything
• Second reaction: interaction between skills, IP, and firm capabilities like management
  – Return to labor / skills only at the very top of the labor hierarchy
  – Causes more inequality in earnings
• If you believe you have measured it, can then explain a lot of macro patterns
• Shouldn’t this show up in all firms? Not just at the top
• Critical question:
  – Is this creation of entirely new surplus
  – Or, capture of previous consumer surplus
Macro-finance

• Standard macro models do not accommodate economic profit
• Interesting national accounting facts
  – Labor share falling
  – Capital share falling
  – Firms profitable but not expanding
  \[\Rightarrow\] Market power would generate all of these outcomes

• Share to “rents” has been rising (Philippon and Gutierrez (2017), Barkai (2016))
• Rents could have any empirical pattern across firms
• What are possible rents?
Explanation #4: Rents that create DWL and bad incentives

- Excessive occupational licensing (15% => 30% of US workers)
  - State legislature restricts entry into a profession
  - Conditions not related to consumer welfare
- Non-compete clauses for low-wage workers
  - Now affecting significant fraction of low wage workers
  - Fast food franchisees commonly use them
- Patent trolls, upward trend in last 30 years
  - Assemble large portfolios of junk patents and repeatedly sue
- Regulatory capture
  - DOT/airlines, FCC/cable, states/car dealerships
Some rents are monopoly profits caused by lack of competition enforcement in the US…

• Full effect of Chicago School thought – 40 year trend towards less enforcement
• Ironically, we now know how badly wrong most of those ideas are:
  – “Monopoly is inherently transitory”
  – “Most mergers are fine;” “vertical mergers are always fine”
  – “Oligopoly markets are contestable and price will equal marginal cost”
  – “Coordinated effects impossible unless agreement or ability to monitor and punish”
• Firms that have benefited by being allowed to create and keep market power could be the top of the markup distribution
• This is a specifically American approach to competition enforcement, so it is also consistent with the rise in markups being stronger in the US
Specific areas to worry about

• Dominant tech firms: Need theories of harm

• Merger under-enforcement evidence indicates a need for tightening:
  – Remedies (Kwoka) Evidence that past remedies ineffective
  – Small mergers (Wollmann) Mergers under threshold are anticompetitive
  – Potential competition (Ederer et al) Pharma projects in development ended

• Harmful unilateral conduct that could be challenged under current law:
  
  Platform MFN                  Horizontal shareholding
  SSO / FRAND                  Monopsony
  Loyalty rebates              Platform exclusion
<table>
<thead>
<tr>
<th>Markets where economic theory and/or evidence supports more competition enforcement</th>
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<td>Exclusive contracts and bundling</td>
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<td>Acq of potential competitors</td>
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Lack of competition enforcement

- Areas lacking enforcement
  - Platform MFN
  - SSO / FRAND
  - Loyalty rebates
  - Exclusives in IT platforms
  - Common ownership
  - Monopsony
  - Acquisitions

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<th>EU</th>
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<td>-- (researching)</td>
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<td>X (less problematic?)</td>
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Rent #5: Institutional malfeasance?

- Inelastic demand for medical services (Cooper and Scott Morton)
  - ED physicians bill “out-of-network” inside an in-network hospital
  - Anesthesiologists and assistant surgeons also…
- Dialysis providers and pharmaceutical manufacturers
  - Donate to non profit to subsidize purchase of private insurance that pays high prices for care / drugs
- Hedge funds (Seim et al)
  - Purchase TV stations and strategically withhold in FCC reverse auction
- PBM (pharmacy benefit managers)
  - Enable product hopping by not moving client to least expensive product
  - Create incentive to raise list prices but not discounts
- Data
  - Take advantage of unsophisticated consumers, fraud etc, e.g. Facebook
Conclusion

• Depressing!
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• But lots to do; economics actually has some useful answers
• With those answers, can make policy changes that lower harmful markups and increase social welfare
• But those changes will reduce monopoly rents, and the parties currently receiving those rents will object
• We expect those parties to use the political system to try to keep their rents; achieving beneficial social change will not be easy