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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:

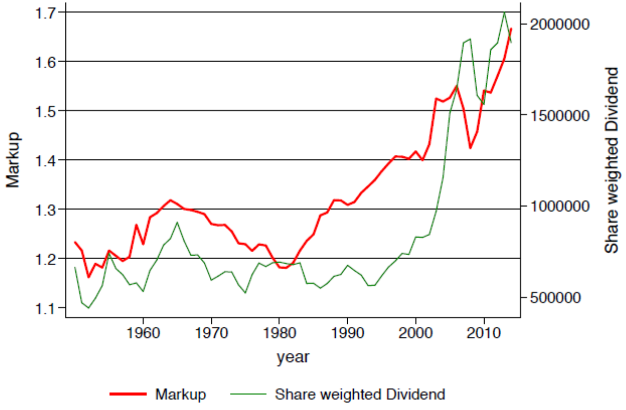
$$\mu_{it} = \theta_{it}^{V} \frac{P_{it} Q_{it}}{P_{it}^{V} V_{it}},$$

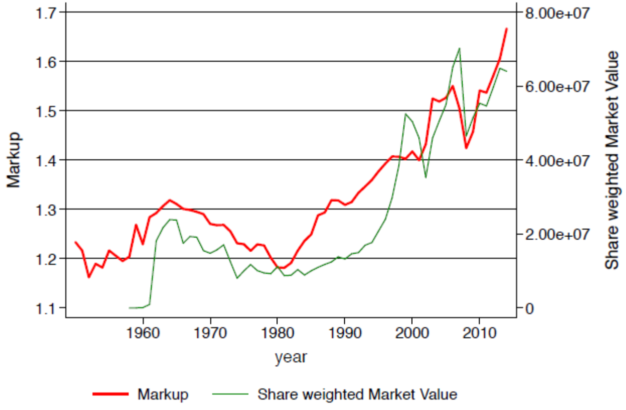
- Include SG&A as another "variable" input with own output elasticity

$$\Pi = PQ - c(Q) - F.$$

Markup = Market Power?

Dividends and Market Value





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

$\Rightarrow$ Higher markups for largest firms with global reach

$\Rightarrow$ 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 heirarchy
  - 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

Markets where economic theory and/or evidence supports more competition enforcement	
Platform MFN	OTA raises price of hotels on rival site or cost of rival payment card
SSO / FRAND	SSO creates monopoly and allows members to violate FRAND
Loyalty rebates	Incumbent ‘taxes’ the sales of rival
Horizontal shareholding	Large mutual funds own rivals in oligopoly and reduce incentive to compete
Monopsony	Large employers in narrow geo or skill category drive wages below competitive levels
Exclusive contracts and bundling	Platform prevents app entry, search entry, or OS entry
Acq of potential competitors	Platform buys up potential rivals to prevent competition

Lack of competition enforcement

Areas lacking enforcement	US	EU
– Platform MFN	X	✓
– SSO / FRAND	X	✓
– Loyalty rebates	X	✓
– Exclusives in IT platforms	X	✓ (search *and* Android)
– Common ownership	X	-- (researching)
– Monopsony	X	X (less problematic?)
– Acquisitions	X	X

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

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- 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