European Central Bank Conference

MARKET POWER IN THE DIGITAL AGE

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The beginning of a new era?

- ICT/Digital technologies: more than just general purpose technologies.
- To paraphrase Robert Solow's 1987 quip: Not only we see computers everywhere, but we also start to see the consequences of the new digital technologies...
- During the last few years, there has been a wealth of "stylized fact" trends and correlations related to concentration, markups, prices and innovation outcomes.
- Many economists and policymakers are expressing concern over the possibility of increasing monopoly power in the world economy.

The four new digital “laws”

- Moore's Law: The information **processing power** of microchips doubles every 18 months or so.
- Gilder's Law: **Transmission capacity** – bandwidth – doubles every couple of years.
- Metcalfe’s Law: Being connected to a **network** gets more valuable with the square of the size of the network, while the cost of joining falls.
- Varian’s Law: Digital **components** are **free**, while digital **products** are highly **valuable**.

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- A number of recent studies of markups employs an analytical approach that was broadly rejected by the field of industrial organization more than 30 years ago: the structure-conduct-performance paradigm.
- The question--"what is the effect of concentration on prices or markups?"— is not a well-posed question for a variety of reasons (measurement, endogeneity), which makes it fundamentally impossible to learn something useful from these studies.
- So what ***is*** useful?

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- First step: **descriptive baseline analysis**.
  - ✓ Is concentration in general rising across many firms and industries or a relatively small number?
  - ✓ Are accounting markups rising?
  - ✓ Are prices rising?
  - ✓ What are the descriptive correlations across these variables?
- **Cavallo**'s paper is an **excellent example** of that type of work
  - ✓ Online competition ("Amazon effect") leads to high price flexibility and uniform pricing across locations
  - ✓ These two phenomena increase the sensitivity of prices to aggregate shocks

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- Second step: **what** are the **factors leading** to rising **concentration** and **markups**?
  - ✓ Is it mostly about the costs? Variable, fixed or sunk?
  - ✓ Is it due to demand (network effects)?
  - ✓ Is it about the conduct (less competition due to lax antitrust)?
- **Criscuolo's et al**. paper belongs to this stream of literature providing **novel evidence**:
  - ✓ **Intangibles** (innovation & patents) allow **large firms** to **scale up** increasing industry concentration
  - ✓ Intangibles' impact particularly strong in globalized, concentrated and highly digital-intensive industries

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- **Korinek and Ng** work also provides us with **new theories** that:
  - ✓ Highlight the role and macro consequences of digital innovations of Superstar firms/entrepreneurs
  - ✓ Discuss implications for monetary and broader policy
  - ✓ Propose and evaluate different "remedies"

- **What else? What's next?**

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- Need **more** detailed **industry studies** because the **mechanisms** at work are **not the same** across industries.
- Network effects (digital platforms)?
- Monopsony power?
- Increased rent seeking?
- Globalisation?
- Antitrust (killer mergers, patent trolls, foreclosure)?

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