# Common Ownership

## by

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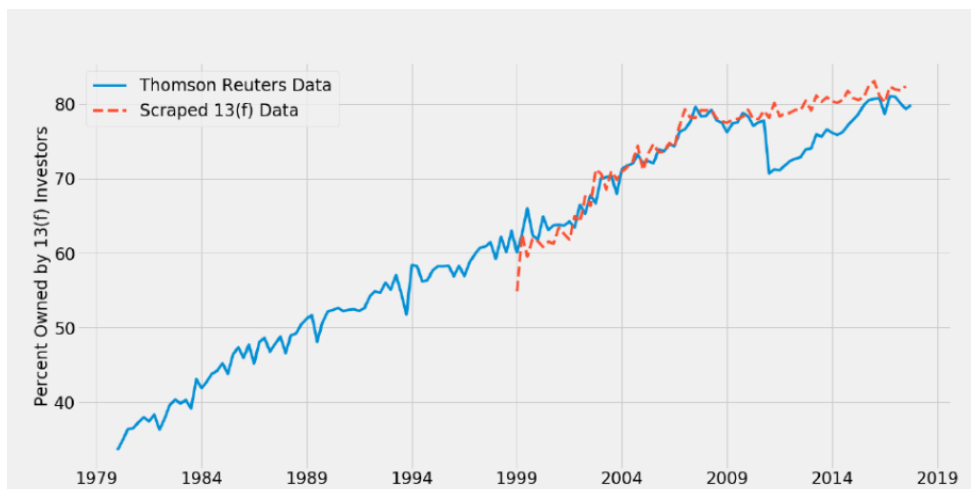Remarks by
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## The Theme:

Secular increase in institutional ownership (S&P500):



Source: Backus, Conlon, Sinkinson (2019)

## The Big Picture:

Is common ownership a problem for

- corporate governance
- firm performance
- competition policy
- industry productivity
- corporate input markets
- macroeconomic growth
- society
- …?

## The Question

"Stealth Socialism"

**First Fundamental Theorem of Welfare Economics:**

If preferences are rational and locally non-satiated and firms maximize profits, any competitive equilibrium allocation is Pareto efficient.

## 1) How to measure common ownership and its consequences

Common ownership is multi-dimensional and thus difficult to measure.

Example: 2 firms, retail investors (small, diversified), 2 large investors

| | Retail | Inv. A | Inv. B | Firm 1 | Firm 2 | Indexer |
|---|---|---|---|---|---|---|
| Firm 1 | 70 | 30 | 0 | - | 0 | 0 |
| Firm 2 | 70 | 0 | 30 | 0 | - | 0 |

| | Retail | Inv. A | Inv. B | Firm 1 | Firm 2 | Indexer |
|---|---|---|---|---|---|---|
| Firm 1 | 20 | 20 | 10 | - | 20 | 30 |
| Firm 2 | 30 | 10 | 20 | 10 | - | 30 |

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Measuring the possible consequences of common ownership for managerial decision making:

(along the lines of Bresnahan-Salop (1986), O'Brien-Salop (2000) etc.)

Consider a firm j and a universe of I shareholders, *i=1,…I.*

- Profits (distributed cash flows) $\pi_j$,
- Profit (cash flow) rights of each shareholder $v_{ij}, \sum_i v_{ij} = 1$
- Total profit income for investor *i*: $\sum_j v_{ij} \pi_j$
- Firm j maximizes weighted average of its investors' profits, places Pareto weights $w_{ij}$ on investors *i.*

Firm objective:

$$Q_j = \sum_i w_{ij} \left( \sum_k v_{ik} \pi_k \right)$$ **shareholder structure**

$$= \sum_i w_{ij} v_{ij} \pi_j + \sum_i w_{ij} \sum_{k \neq j} v_{ik} \pi_k = \sum_i w_{ij} v_{ij} \left( \pi_j + \sum_{k \neq j} r_{jk} \pi_k \right)$$

where **share structure**

$$r_{jk} = \frac{\sum_i w_{ij} v_{ik}}{\sum_i w_{ij} v_{ij}} = \frac{\langle w_j, v_k \rangle}{\langle w_j, v_j \rangle}$$

is firm j's profit weight for firm k (describing the degree of internalization of k's profits by j).

Traditional theory (perfect or imperfect competition):
$r_{jk} = 0$ for $k \neq j$.

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The main free variable (or open question) in this theory:
what are the shareholder weights $w_{ij}$?

- proportional to cash flow rights: $w_{ij} = v_{ij}$?
- generalized proportionality: $w_{ij} = v_{ij}^a, a > 0$?
- democracy: $w_{ij} = 1/I$?
- function of formal voting rights (if no one-share-one vote)
- function of shareholder characteristics
   - passive-active?
   - vertically related?
   - domestic-foreign?

Note: Under (generalized) proportionality the weight of retail investors vanishes, that of larger investors matters much (convexity).

The evidence (raw data): The internalization weights $r_{jk}$
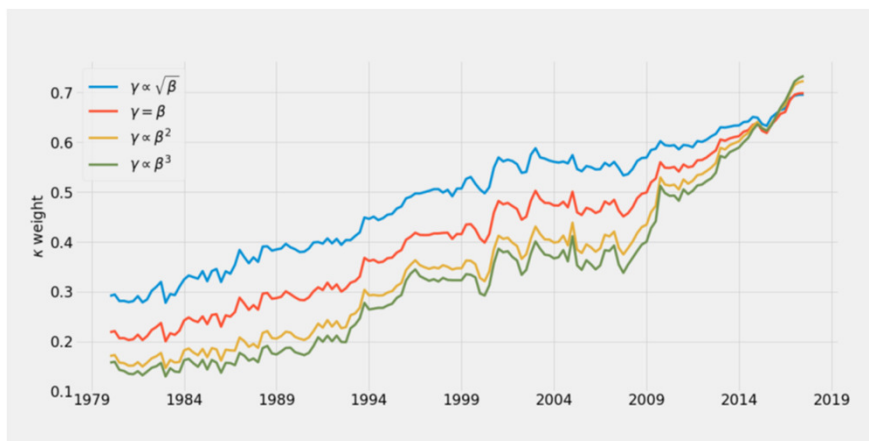


Source: Backus, Conlon, Sinkinson (2019)

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Market interaction:

Most papers depart from the First Welfare Theorem in two ways:  - firms are not competitive
          - firms maximize $Q_j$ instead of $\pi_j$

In the non-competitive case, the market matters (4 digit SIC codes). Interaction: Cournot, differentiated Bertrand, etc.
Outcomes in terms of MHHI or similar measures.
Note: These depend on the $r_{jk}$ within market.

Example: SIC code 2066:
4 large players:      - 2 in the S&P 500
                            - 1 private
                            - 1 foreign

Main conceptual questions for understanding the data:

- Disentangle non-competitive behavior from $Q_j$-maximization
- Correlation vs. causality
- What is $w_{ij}$?
- Endogeneity of market structure
  (the modern "Structure-Conduct-Performance" problem)

Main policy question: Do we get
- Competition with coordination on fixed costs?
  (the best of both worlds) or
- Central planning without accountability?
  (the worst of both worlds)

## 2) Topics for discussion: Firm decisions

Classical literature: Cournot, Bertrand competition → classical collusion.
More relevant probably:
- long-term decisions (product choice, variety)
- entry, exit

Market becomes endogenous, dito number of firms.

Think of firm decision as a general $x_j$. Then the traditional $\pi_j(q_j, q_{-j})$ becomes $Q_j(x_j, x_{-j})$, and the game changes.

## 3) Topics for discussion: Owner-manager relation

How do corporate managers and common owners communicate?
- explicit communication: evidence?
- Larry Fink's letters
- anticipatory obedience ("vorauseilender Gehorsam")
- information about the investors behind $v_j$?

Is it possible to identify different communication styles that can be used to estimate the mapping $v_j \rightarrow w_j$?

Classical collusion vs. coordinated collusion: how to detect and punish deviations? Stability?

## 4) Topics for discussion: Takeovers

Matvos-Ostrovsky (2008): Takeovers have a higher chance of succeeding and yield a higher return to the bidder if bidder and target have common owners.

Can one use this reasoning to identify the $w_{ij}$?

Scenario: Classify takeover bids according to
- whether there was a competing offer to that of firm j
- whether there were potential competing bidders k in the same industry who did not bid

Prediction: Missing bids by competitors are more likely the higher $r_{kj}$. The probability of completion is higher and the takeover premium is lower the higher $r_{kj}$.

## 5) Topics for discussion: CEO pay

Prediction: CEO pay is less performance-sensitive if the firm is part of a sub-group of the industry with high $r_{jk}$.

Brilliantly done by Antón, Ederer, Giné et al. (2018).

## 6) Topics for discussion: Find the $w_{ij}$

Remember: Everything is driven by the shareholder weights $w_{ij}$.

Can one identify them by estimating the $r_{jk}$ in two different set-ups?

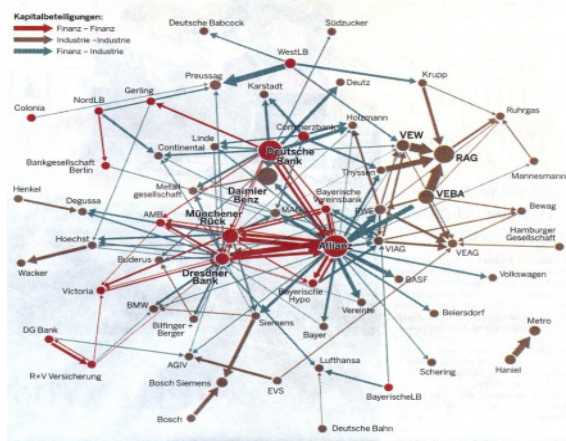## 7) Topics for discussion: Europe

Europe has many ownership – control arrangements that are rare in the U.S.
What does this imply for the theory? Does this help to better identify the empirical results?

Of particular interest: Private firms.
Is the CO problem another reason for the alleged superiority of economies with many strong (independent) SMEs?

## Europe: Cross-Ownership in Germany



(1996)