

Good rents versus bad rents: R&D misallocation and growth

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Discussion by Nicolas Crouzet

Kellogg

Overview

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Recent trends profit shares, markups, concentration point to rising rents

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welfare implications?

	Dependent variable : markup (log)			
	Consumer	Manufacturing	High-tech	Healthcare
Compustat intangible share s_t (OLS)	-0.132*** (-6.32)	0.044* (1.62)	0.452*** (5.90)	0.709*** (6.01)
Compustat intangible share s_t (IV)	-0.157*** (-8.75)	0.879*** (2.98)	0.498*** (2.81)	1.424*** (18.17)
<i>First-stage F-stat</i>	802.12	10.47	89.31	617.89
Observations	56	504	168	112
Industry f.e.	Yes	Yes	Yes	Yes

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high incremental product quality firms have too low a market share

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high incremental product quality firms have too low a market share Decentralized: 73% vs. Planner: 100%

high process efficiency firms have too high a market share Decentralized: 36% vs. Planner: 13%

Roadmap

1. Facts

2. Theory

1. Facts

Summary

$$TFPR_{j,t} = \frac{VA_{j,t}}{K_{j,t}^{\alpha} L_{j,t}^{1-\alpha}}$$

$$P_{j,t} = \text{weighted average product price} \quad [\approx \text{Product quality}]$$

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Firm size increases with both product quality and process efficiency

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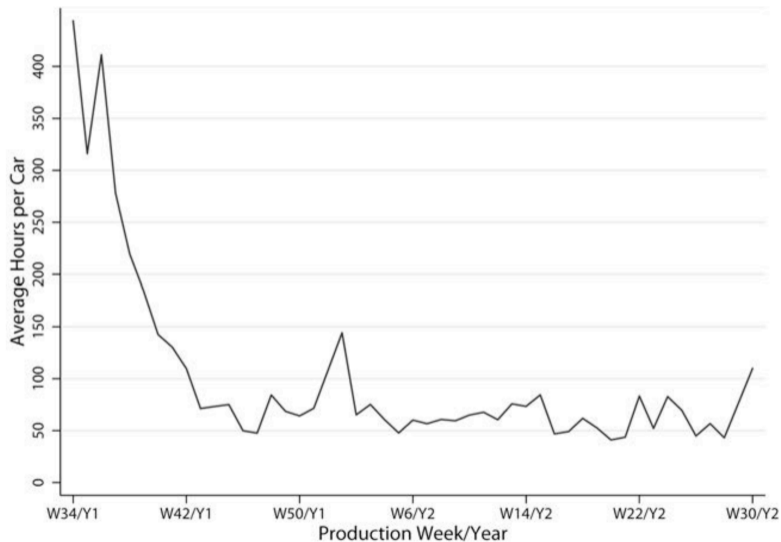
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Firms make investments in process efficiency

[Levitt, List, Syverson, 2013]



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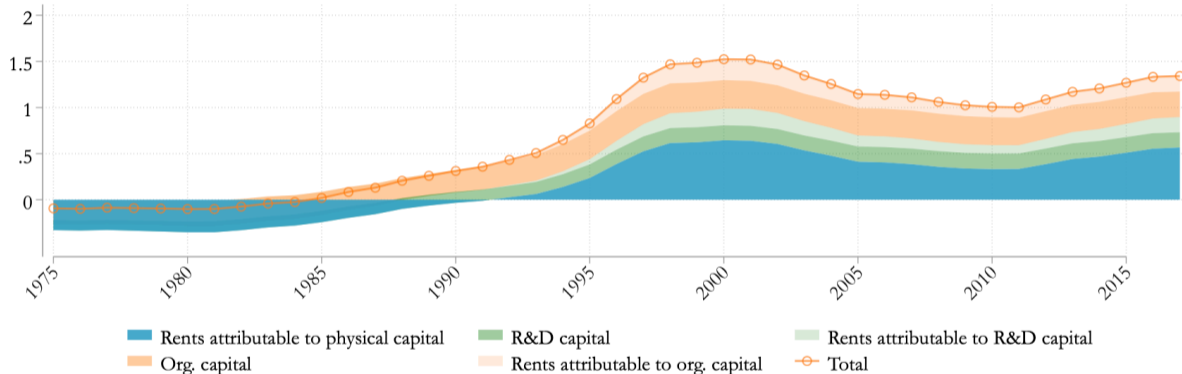
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These investments contribute to firm value

[Crouzet, Eberly, 2023]



$$\text{Vertical axis} = \frac{\text{Enterprise value of public, non-financial US firms}}{\text{PPE replacement cost}} - 1$$

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Suggestion: Does the paper need to take the stance that empirically, growth in $A = 0$?

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maybe: existing evidence that TFPQ does not contribute substantially to aggregate growth?

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Welfare implications when model matches $0 > \zeta_{P,A} > -1$?

2. Theory

Key equations

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$$C_0 \propto \overbrace{\left(1 - \frac{1}{J} \sum_k \frac{S_k^2}{\phi_k}\right)}^{(1)} \times \underbrace{\left(a_L \left(\frac{a_H}{a_L}\right)^{S_1+S_2}\right)}_{(2)} \times \overbrace{\mathcal{M}}^{(3)}$$

(1) = Overhead costs

(2) = Process efficiency

(3) = Markup dispersion

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Suggestions:

③ depends on $\{\phi_k\}$; consider edge cases

e.g. static and dynamic gains aligned if $\phi_{HB}, \phi_{LS} \gg \phi_{HS}, \phi_{LB}$

Planner

$\mathcal{M} = 1$. Then:

- ① $\gamma_B = \gamma_S, a_H = a_L$: convex costs of concentration \implies equal market shares across firms, $S_k = \phi_k$
- ② $\gamma_B = \gamma_S, a_H > a_L$: trade-off: concentration vs. static efficiency gains
- ③ $\gamma_B > \gamma_S, a_H > a_L$: trade-off: concentration vs. (static efficiency gains or dynamic quality gains)

Suggestions:

③ depends on $\{\phi_k\}$; consider edge cases

e.g. static and dynamic gains aligned if $\phi_{HB}, \phi_{LS} \gg \phi_{HS}, \phi_{LB}$

Decentralized equilibrium

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Suggestions:

Sign of the distortion in ②?

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Suggestions:

Sign of the distortion in ②?

Calibrate the model to cases ① and ②, and compare to ③?

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Suggestions:

Sign of the distortion in ②?

Calibrate the model to cases ① and ②, and compare to ③?

To deal with static misallocation separately, other policy tools than R&D subsidies?

A different view of good and bad rents

[Crouzet, Eberly, Eisfeldt, Papanikolaou, 2013]

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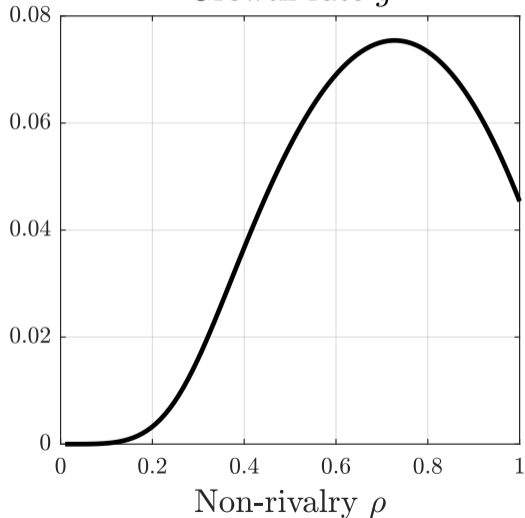
total rents

the share of **“good”** and **“bad”** rents

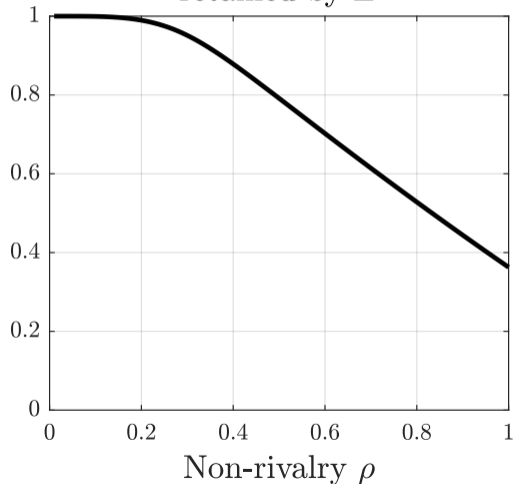
Equilibrium growth

[Crouzet, Eberly, Eisfeldt, Papanikolaou, 2023]

Growth rate g



Share of initial project value retained by E



Conclusion

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Welfare implications of rising rents?

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too much "**bad rents**", from fixed advantages in process efficiency

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is growth in process efficiency dead?

is it about the types of rents, or about how they are shared between firms?