# Discussion of "How EU Markets Became More Competitive Than US Markets: A Study of Institutional Drift" by Gutiérrez and Philippon

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Northwestern University and Chicago Fed

2020 Winter EFG

	I/K	$\Pi/K$	Markups	Concentration
US	$\searrow$	$\longrightarrow$ or $\nearrow$	7	7

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1. US macro "symptoms" of declining competition are hard(er) to find in the EU

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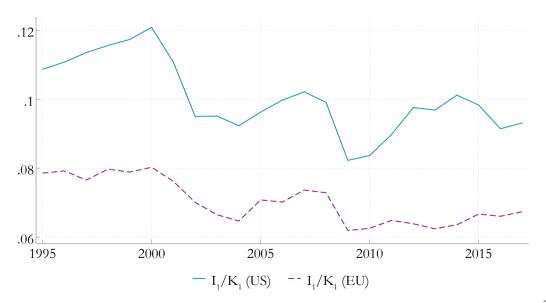
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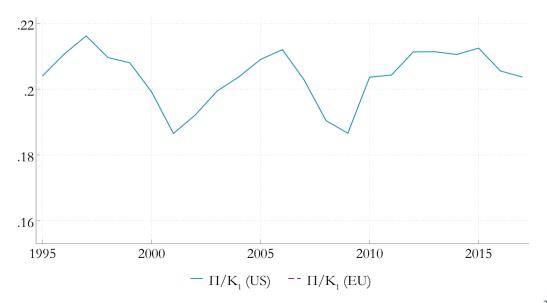
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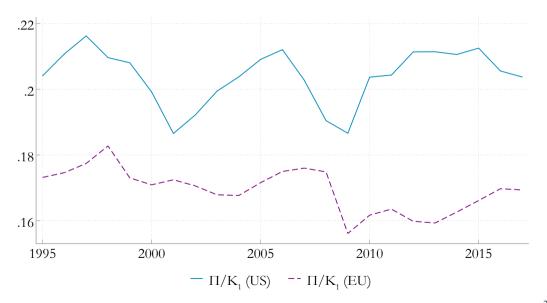
# PPE investment rates are falling both the US and in the EU



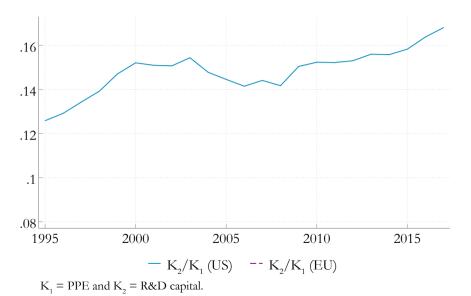
# Average returns to physical capital are stable in the US



# Average returns to physical capital are stable in the US, falling in the EU

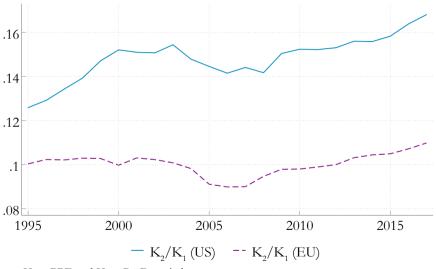


## Intangible capital is rising in the US



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## Intangible capital is rising in the US, not in the EU



 $K_1 = PPE$  and  $K_2 = R&D$  capital.

Crouzet and Eberly (2020)

$$V_{t} = q_{1,t}K_{1,t+1} + q_{2,t}K_{2,t+1} + \sum_{n=1}^{2} \sum_{k>1} \mathbb{E}_{t} \left[ M_{t,t+k}(\mu-1) \prod_{n,t+k} K_{n,t+k} \right]$$

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Hayashi (1982)

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+ rents  $\rightarrow$  physical capital

Lindenberg and Ross (1981)

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Crouzet and Eberly (2020)

"Investment gap"

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$$R_n \equiv r + \delta_n + \gamma_n g r, \quad n = 1, 2,$$

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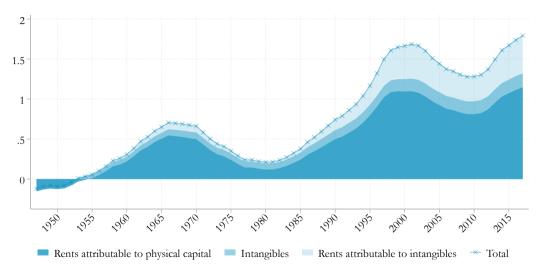
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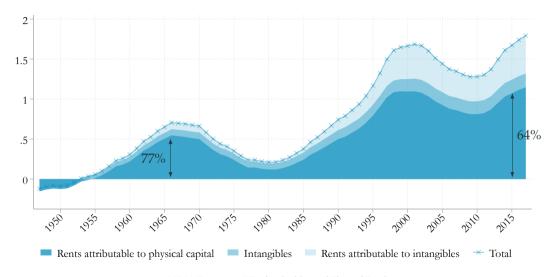
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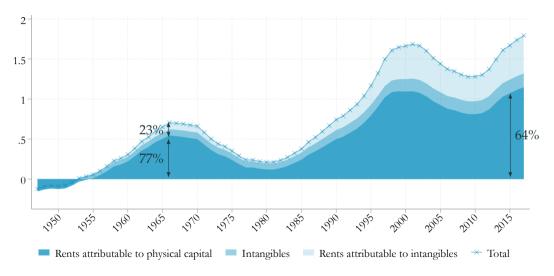
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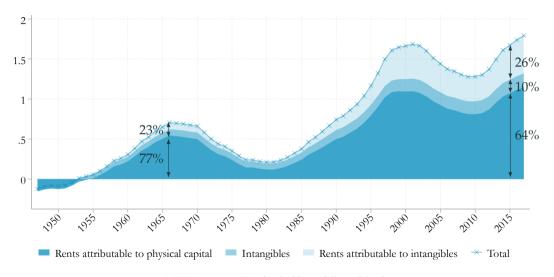
This simple version of the investment gap can be constructed using a few (6) time series.

But the decomposition is very general — see our paper!

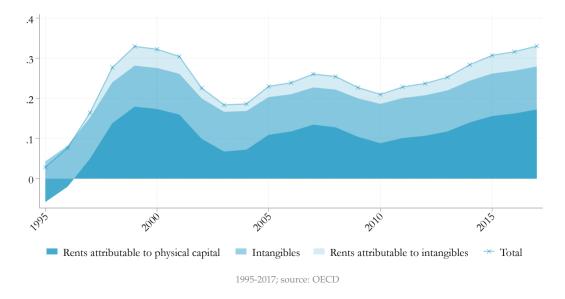




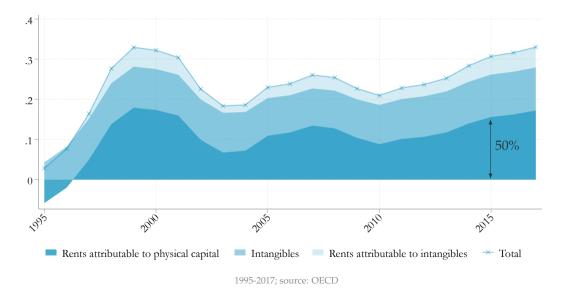




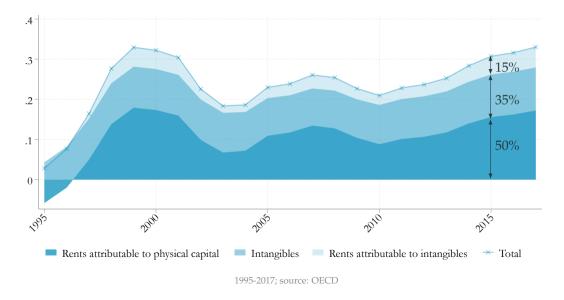
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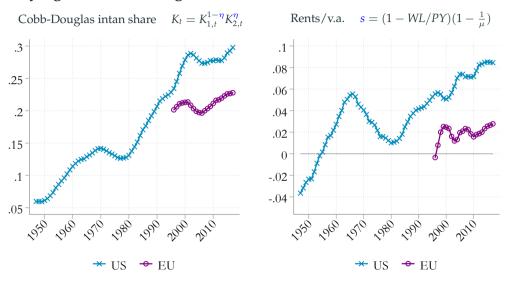
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#### Underlying structural changes



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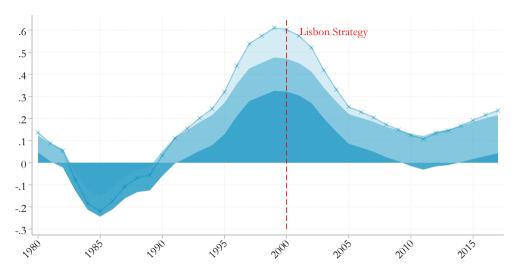
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# The investment gap in France



1980-2017; source: OECD, INSEE, and Global Financial Database

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Crouzet and Eberly (2020)

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· telecom evidence: compelling, but nationally regulated?

2. Equilibrium regulation: theory

- Two goods i = 1, 2; two countries j = 1, 2

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- Regulator chooses markups  $\leftrightarrow$  prices  $\leftrightarrow$  quantities  $x_1, x_2$ 

$$\max_{x_1, x_2} \quad U_1 + U_2$$
 $x_1 = z$ 
 $x_2 = z$ 
 $U_1 = U^* = 2(\log(z) - 1)$ 
 $U_2 = U^*$ 

$$\max_{x_1,x_2} \quad U_1 + (1 - \theta)U_2$$

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$$x_1 = (1 - \theta/2)z \qquad < z$$

$$x_2 = \frac{(1 - \theta/2)z}{1 - \theta} \qquad > z$$

$$U_1 = U_+^{SR}(\theta) \quad \approx \quad -\log(1 - \theta) \quad > \quad U^* \quad \text{as} \quad \theta \to 1$$

$$U_2 = U_-^{SR}(\theta) \quad \approx \quad -\frac{1}{1 - \theta} \qquad < \quad U^* \quad \text{as} \quad \theta \to 1$$

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Cost of capture by other country always outweighs benefits of control

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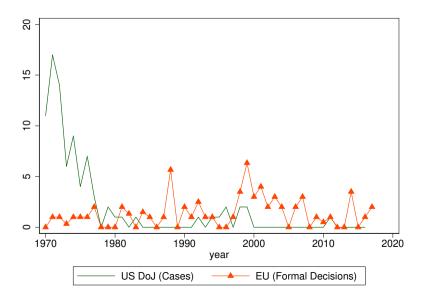
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- Comment 2: what changed in the EU? in the US?
  - $\cdot$  EU: why shift from NR to SR within single market?

3. Evidence on competition regulation in the EU vs. the US

- Evidence:
  - 1. framework: DG comp stricter than FTC/DOJ and national EU regulators
  - 2. enforcement: DG comp more active on mergers, abuse of dominance, and cartels

### Abuse of dominance cases



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  - · *risk attitudes* : FTC/DoJ short-run consumer prices; DG Comp long-run precautionary, approach?



### Conclusion

- Ambitious, important paper
- Shifted my priors on
  - · macro symptoms in US vs. EU
  - · enforcement of antitrust in US vs. EU
- But is it really the *supranational* nature of DG comp that matters?
  - · would be better for the US if the answer were no!

# Additional slides

## National regulator

$$\max_{x_1} \ U_1 = \log(x_1) + \log(x_2) - \frac{2x_1}{z}$$
 $x_1 = \frac{1}{2}z < z$ 
 $x_2 = \frac{1}{2}z < z$ 
 $U_1 = U^{NR} \equiv U^* - (2\log(2) - 1) < U^*$ 

National regulators  $\sim$  monopolists

 $U_2 = U^{NR}$