

How EU Markets Became More Competitive Than US Markets: A Study of Institutional Drift

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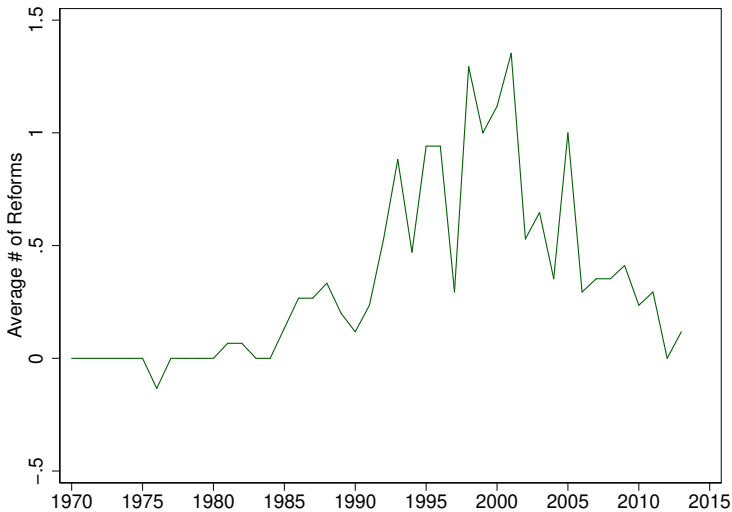
NYU, NBER, CEPR

Dec. 2019 - EIEF, Rome

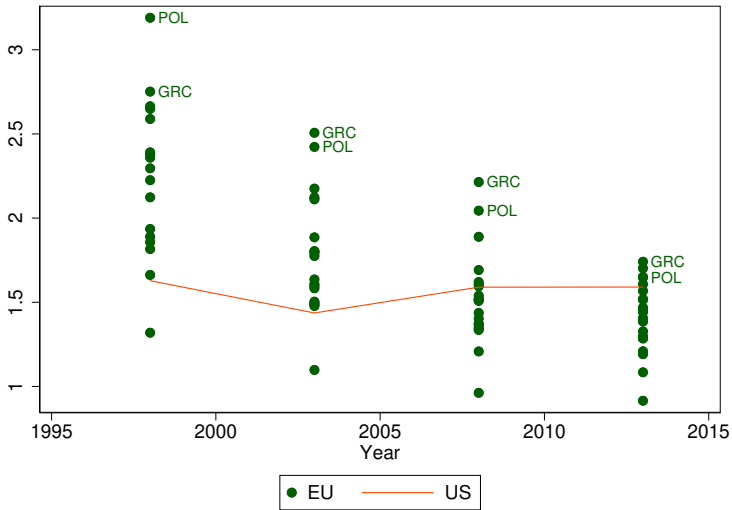
Alesina and Giavazzi (2006)

“If Europe is to arrest its decline [..] it needs to adopt something closer to the American free-market model.”

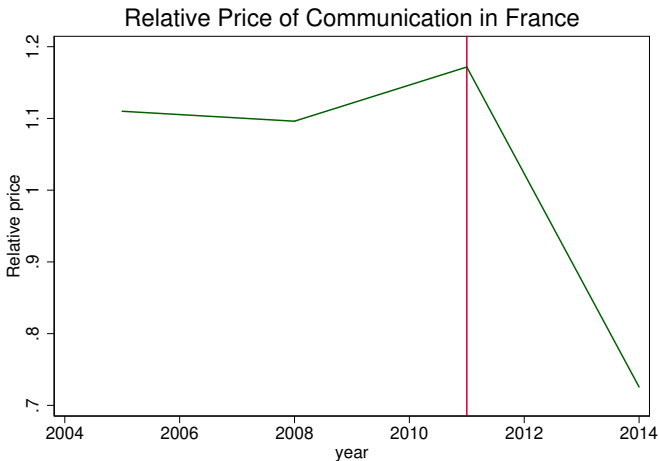
PMR Reforms in EU



Regulation: US vs EU



ICP-PPP, Communication, P^{FR}/P^{US}



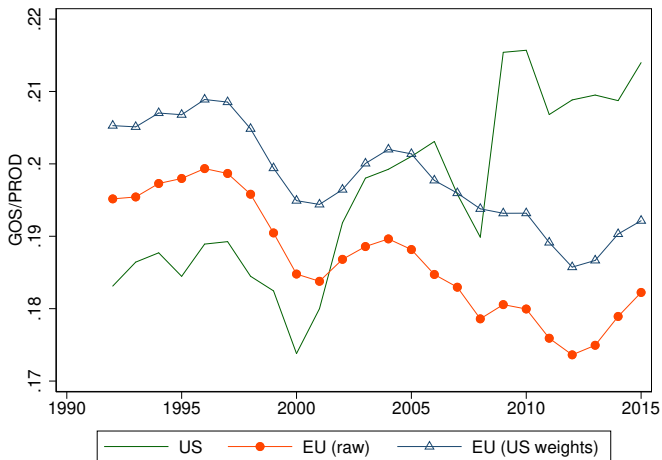
See also Faccio and Zingales (2017).

Internet Access

- 20 years ago (Economides, 2002)
 - *“one reason for Europe’s lag in internet adoption is that, unlike in the U.S., consumers are charged per minute for local calls”.*
- Today’s prices

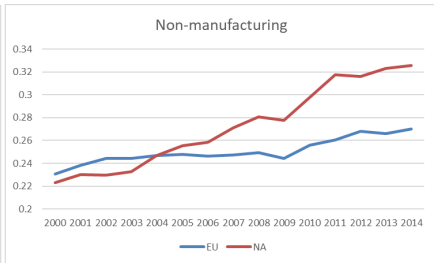
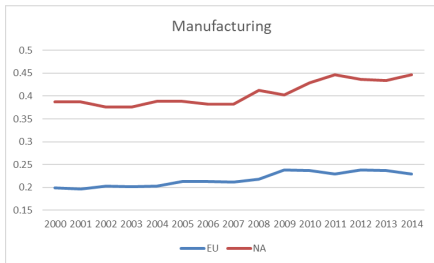
Rank	Country	Broadband Cost
40	France	\$ 31
43	South Korea	\$ 32
53	Germany	\$ 37
...		
119	US	\$ 68

EU vs. US: Gross Profit Margin



Source: OECD STAN. Non-Agriculture Business sector excluding RE. EU series based on weighted average across those EU-28 countries for which data is available in STAN.

EU vs. US: Concentration, OECD



Source: simple average of CR8 from Bajgar et al. (2019)

How Did That Happen?

- Surprising:
 - US historical pioneer in Antitrust & Free Markets
 - No tradition of free markets and independent regulators in most EU countries
- Theory
 - Nash equilibrium under free trade: supra-national regulators designed to be more independent than national ones
- Empirics
 - Tests of 3 predictions of the model
 - Prices: ICP data

Model Timeline

	First Period (1990's)	Second Period (2000's)
Politicians 1	$W = \mathbb{E}[(1 - \beta)U + \beta V_\varepsilon]$.
Politicians 2	.	$V_\varepsilon = U + \gamma \Pi_\varepsilon, \varepsilon \in (1, 2)$
Regulator	θ is set	$\mathcal{R} = \max(1 - \theta)U + \theta V_\varepsilon$

Model: National Regulation

- Technology $x_i = z_i n_i$ and preferences:

$$U \equiv \sum_{i=1}^2 \log(x_i) - n$$

- Equilibrium with mark-up μ_i

$$x_i = \frac{z_i}{1 + \mu_i}$$

- Real profits

$$\Pi_i = \frac{\mu_i}{1 + \mu_i}$$

- Efficient outcome: $\mu_i = 0$ and $x_i^* = z_i$

Political Influence

- Politicians (Grossman and Helpman, 1994)

$$V_{\varepsilon} = U + \gamma \Pi_{\varepsilon}$$

- Regulators, given θ

$$\begin{aligned} \mathcal{R} &= \max_{\{x\}} (1 - \theta) U + \theta V_{\varepsilon} \\ &= \max_{\{x\}} U + \gamma \theta \Pi_{\varepsilon} \end{aligned}$$

- Equilibrium

$$\begin{aligned} x_{i \neq \varepsilon} &= x_i^* = z_i, \\ x_{i = \varepsilon} &= \bar{m}_{\theta} z_i \end{aligned}$$

where $\bar{m}_{\theta} \equiv \frac{1}{1 + \gamma \theta}$.

Regulatory Design

- Ex-ante design

$$W = \mathbb{E}[(1 - \beta)U + \beta V_\varepsilon]$$

- Solution

$$\theta = \beta$$

- Equilibrium markup

$$\mu_{\varepsilon=i} = \gamma\beta$$

- Interpretation

- political bias
- beliefs about (legitimate) externalities

Free Trade with Two Countries

- Free trade. Country j produces good j

$$U_j = \sum_{i=1}^2 \log(x_{i,j}) - n_j.$$

- Demand

$$x_{i,j} = \frac{w_j}{p_i}$$

- Balanced trade

$$p_1 x_{1,2} = p_2 x_{2,1}$$

implies $w_1 = w_2$ and therefore

$$U_i = \log(x_i) + \log(x_j) - \frac{2x_i}{z_i}$$

Regulatory Capture with Two Countries

- Utility of politicians

$$V_i = U_i + \gamma \Pi_i$$

- EU Regulator

$$\begin{aligned} & \max_{\{x\}} (1 - \theta)(U_1 + U_2) + \theta V_\varepsilon \\ &= \max_{\{x\}} U_{\varepsilon=i} + (1 - \theta)U_{\varepsilon \neq i} + \theta \gamma \Pi_{\varepsilon=i}. \end{aligned}$$

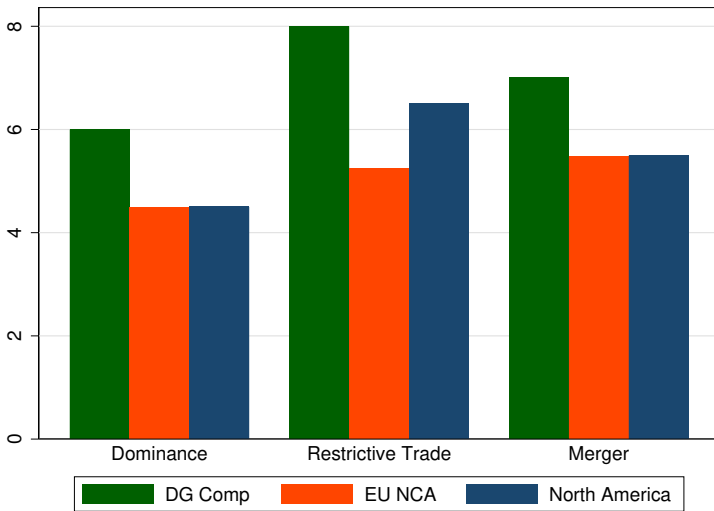
- Therefore

$$\begin{aligned} \frac{x_{\varepsilon=i}}{z_i} &= m^s(\theta; \gamma) \equiv \frac{1 - \frac{\theta}{2}}{1 + \gamma\theta} < \bar{m}_\theta, \\ \frac{x_{\varepsilon \neq i}}{z_i} &= M^s(\theta; \gamma) \equiv \frac{1 - \frac{\theta}{2}}{1 - \theta} > 1. \end{aligned}$$

Three Predictions

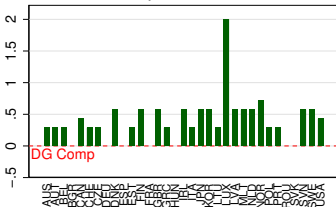
- **Proposition 1 (Pro-Competition Effect of EU Integration):** Supra-national regulator more independent than national ones $\theta^s < \beta$.
- **Proposition 2 (Cross-sectional benefits):** Countries with weaker ex-ante institutions benefit more from supra-national regulation.
- **Proposition 3 (Endogenous Lobbying):** In countries with more independent regulators, firms spend less on lobbying.
 - Intended vs. unintended consequences

Prop 1, Design: DG Comp indeed tougher than NCAs

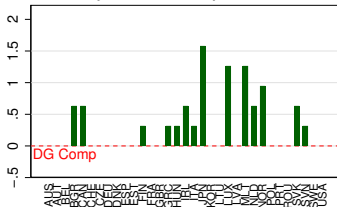


Prop 1: $\theta^{EU} < \min_{i \in EU} \beta_i$

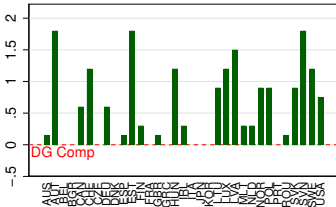
Scope of Action



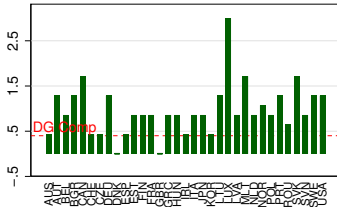
Policy on Anticompetitiveness



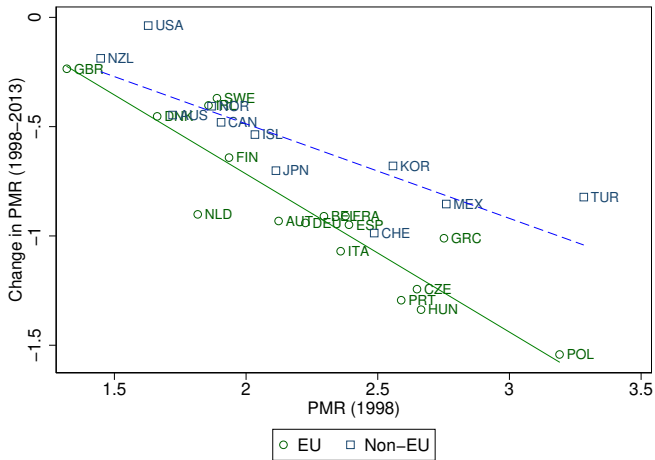
Probability of Investigation



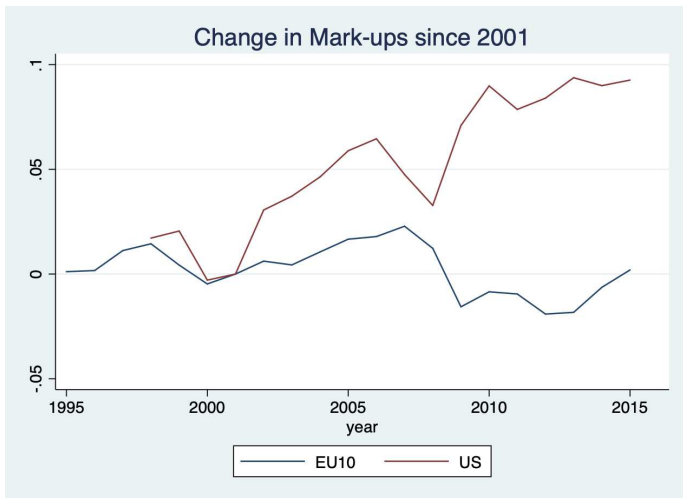
Advocacy



PMR Indicators have Converged Globally But Convergence is Stronger in EU



Markups: $\log(P) - \log(ULC)$



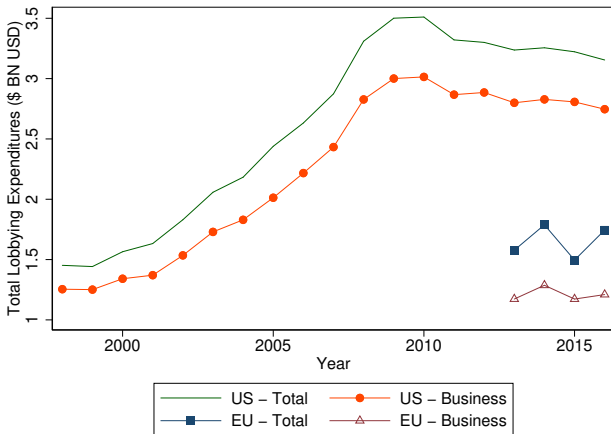
Political Contributions and Antitrust Enforcement

*“I believe that **application of anti-trust against Google would be a woefully misguided step** that would threaten the very integrity of our anti-trust system, and could ultimately **lead to Congressional action resulting in a reduction in the ability of the FTC to enforce critical anti-trust protections**”*

– Jared Polis, Democratic Congressman

One of at least 13 U.S. congressman who sent letters to FTC regarding the FTC's investigation of Google

Lobbying Expenditures: US vs EU

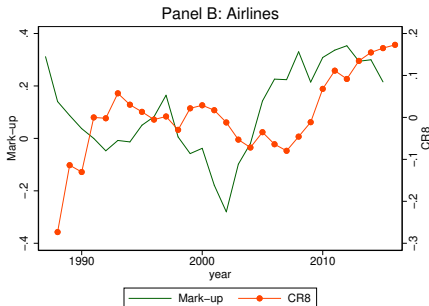
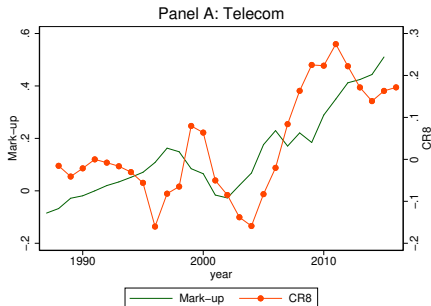


- Firm-level elasticities of 0.15 in EU vs. 0.62 in US

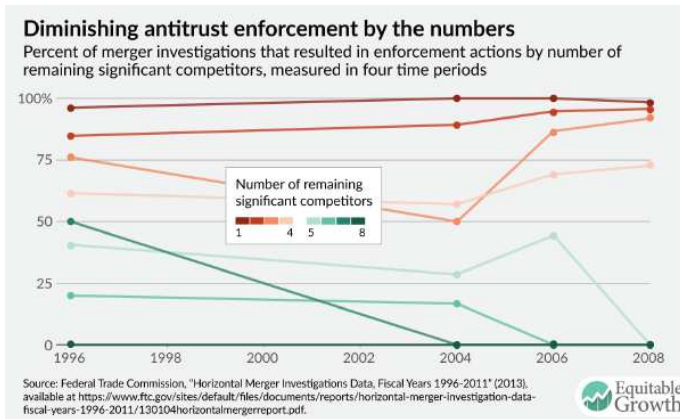
Lobbying Outcomes: US vs EU

- Higher Industry success in US than EU (Mahoney, 2008):
 - In the US, **89% of corporations...succeed**, vs. 40% of citizen groups and 37% of foundations
 - In the EU, ... **61% for lobbying firms win**, vs. 56% of citizen groups and 67% of foundations
- Due to campaign contributions (Mahoney, 2008)
 - Matters for Antitrust and Regulation

US Telecoms & Airlines

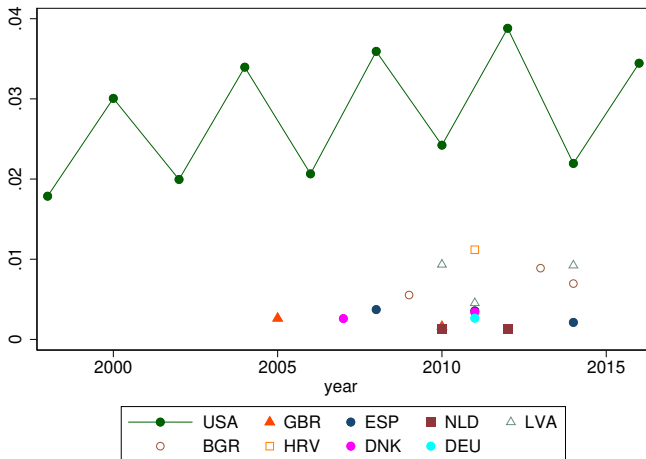


Merger Enforcement: US



Source: Kwoka (2017)

Campaign Contributions: US vs EU (pp of GDP)



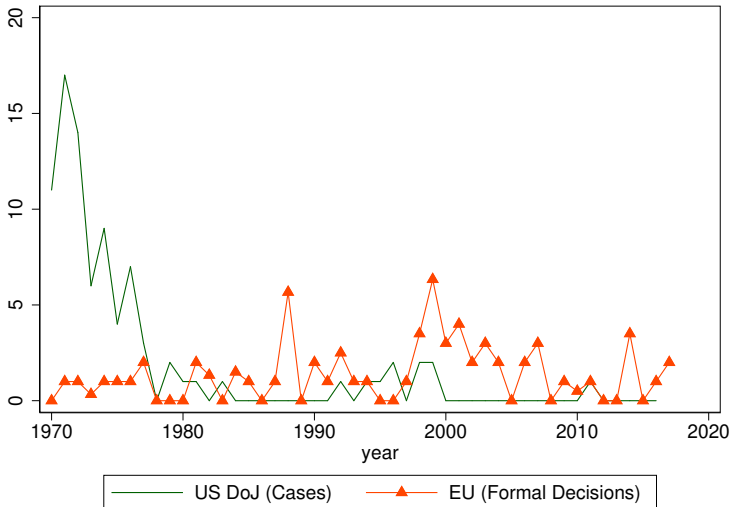
Source: OpenSecrets.com for US, EU (2015) for EU

Conclusion

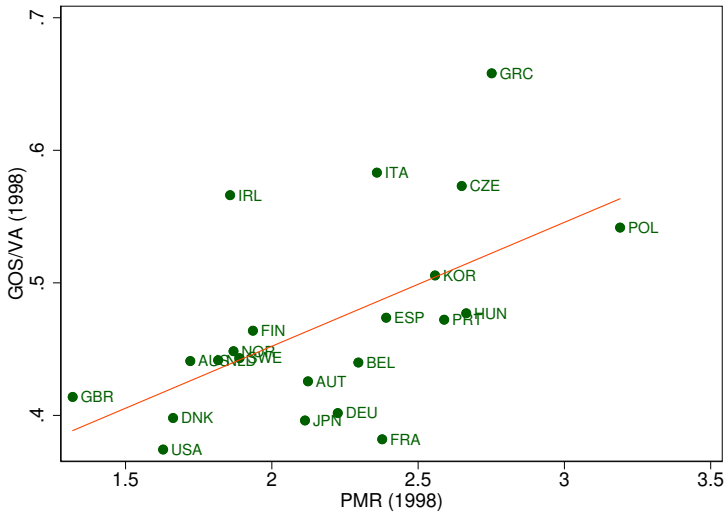
- Cost of higher markups in the US?
 - 5% of private GDP (\$1 trillion)
 - \$1.25 trillion of private labor income (10% for median household)

- Europe: Will it last? Two views
 - Corruption simply takes time
 - Institutions have their own logic and persistence

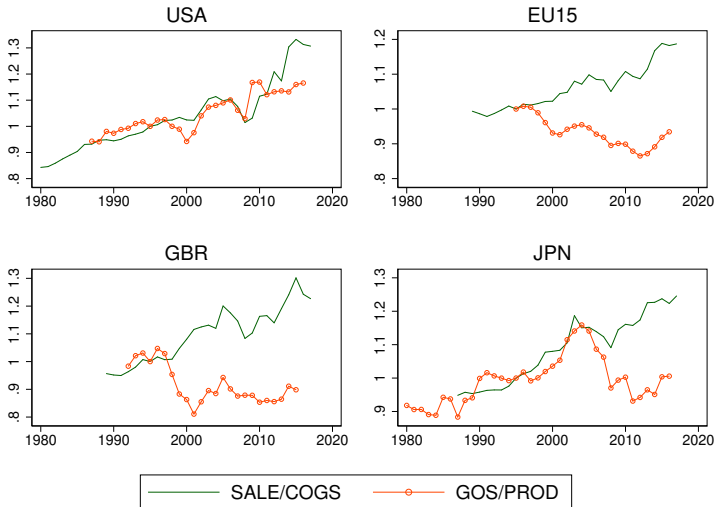
Abuse of Dominance Enforcement: DoJ vs DG Comp Cases



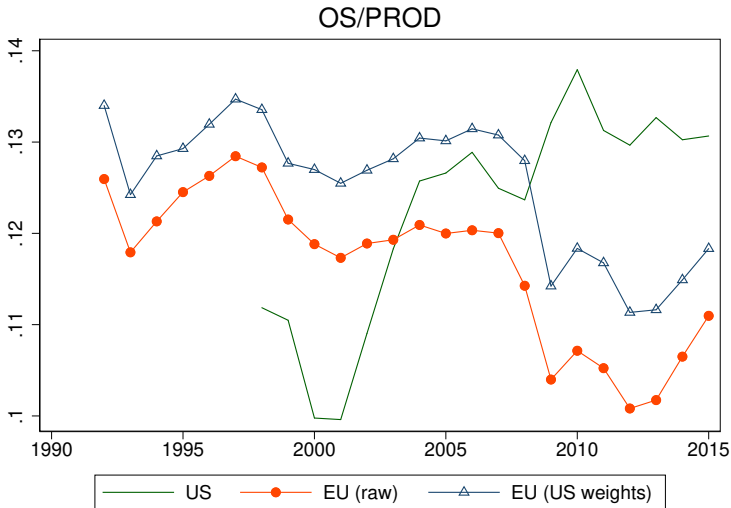
Profits vs. PMR



SALE/COGS vs Gross Profit Rates

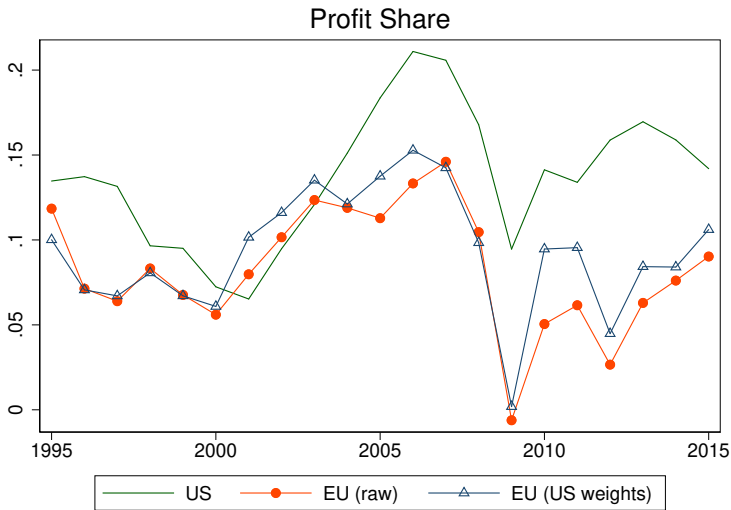


EU vs. US: Net Profit Margin



Source: OECD STAN. Non-Agriculture Business sector excluding RE. EU series based on weighted average across those EU-28 countries for which data is available in STAN.

EU vs. US: Profit Shares



Notes: profit shares following Barkai (2017), but accounting for time-varying cost of equity and debt.

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