## User Rights and Sectoral Impacts

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### MICRO DATA

- Thomson Eikon/Datastream
  - Public & Private Companies
  - Multiple Industries
  - Multiple Countries
  - Time Series

- Sample Results for
  - Select Industries and Countries
  - Market Concentration, Competition, Rates of Return, R&D Intensity

### Selected Industries

#### **Copyright/Information Industries**

Motion Picture and Video Industries

Newspaper, Periodical, Books, etc.

Radio and Television Broadcasting

Satellite Telecommunications

**Software Publishers** 

Sound Recording Industries

Cable and Other Subscription Programming

Data Processing, Hosting, and Related

Wired Telecommunications Carriers

Wireless Telecommunications Carriers

Other Telecommunications

Other Information Services

#### **Complementary Industries**

IT Services & Consulting

**Integrated Telecommunications Services** 

Online Services

Software Services & Consulting

Wireless Telecommunications Services

### Selected Countries: 1990 - 2016

U.S.A. Netherlands France

U.K. Korea Japan

Germany Spain Brazil

Canada Australia

#### **Issues:**

- 1) Nature of Markets
  - How concentrated are markets? How competitive?
  - What has been the impact of copyright regulations, as well as user rights/openness?
- 2) Firm Performance
  - Have changes in copyright regimes and market competition harmed/improved "profitability"?
  - What are the impacts on the R&D incentives of complementary industries affected?

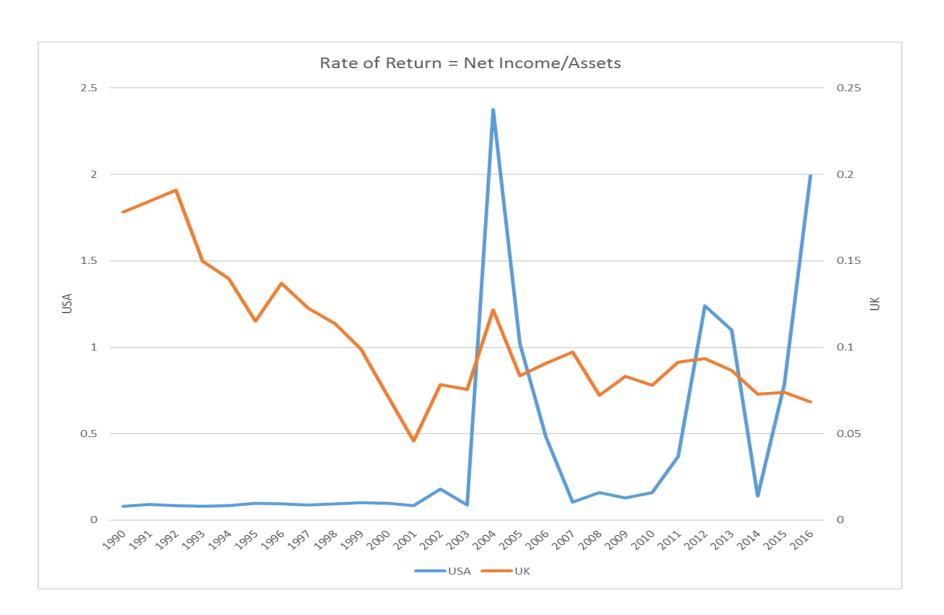
# Market Concentration -- Copyright Sector

$$HHI = \sum_{i=1}^{N} S_i^2$$

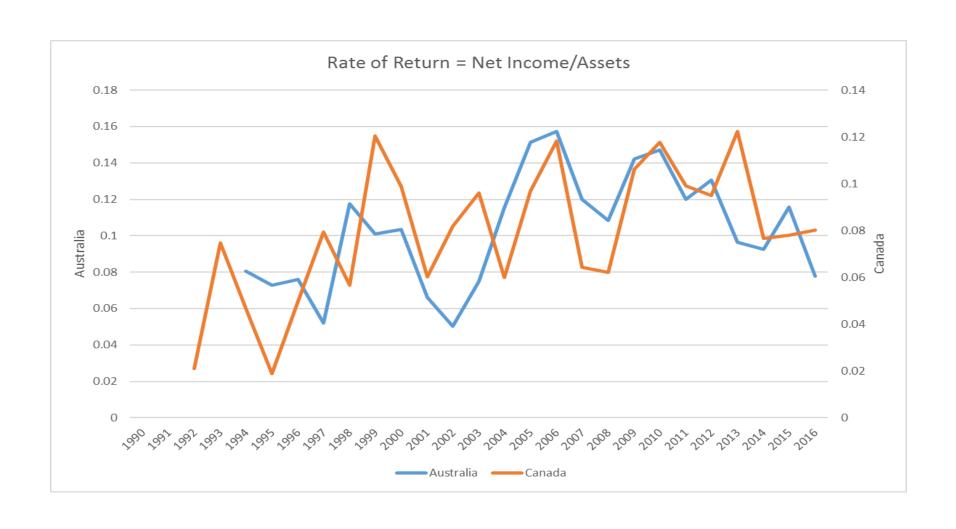
year	USA	UK	Germany	Canada	Netherlands	Korea	Taiwan	Australia
1990	0.138	0.467						
1995	0.089	0.302	0.453	0.899	0.310			0.500
2000	0.056	0.208	0.294	0.229	0.287	0.476	0.498	0.449
2005	0.036	0.180	0.285	0.115	0.276	0.413	0.434	0.425
2010	0.038	0.188	0.265	0.070	0.183	0.337	0.329	0.414
2016	0.026	0.176	0.234	0.057	0.130	0.247	0.378	0.332

HHI ~ Herfindahl-Hirschman Index

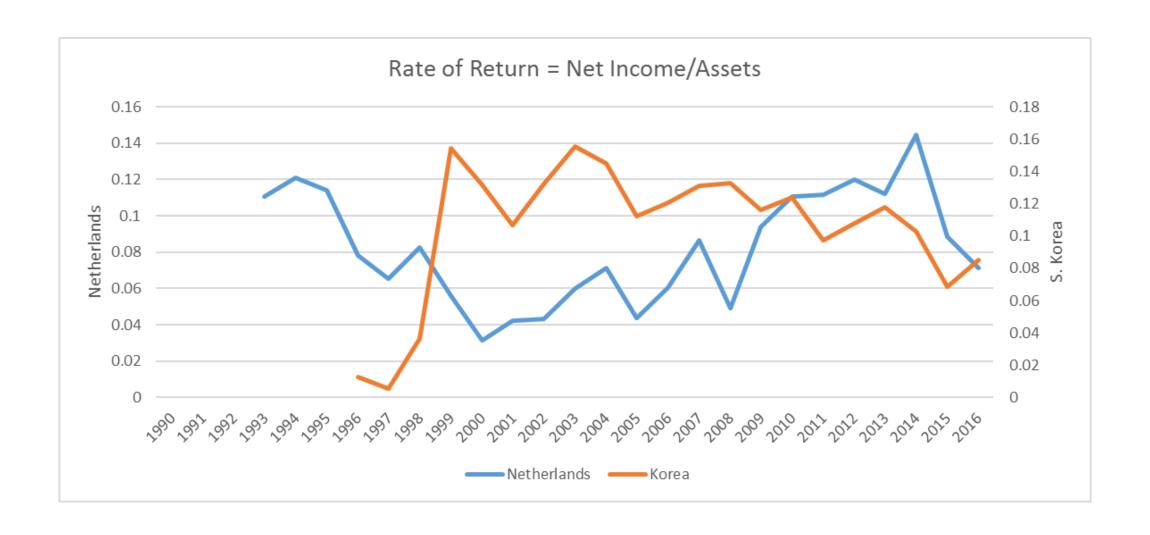
# Market Performance – Copyright Sector



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# Market Performance – Copyright Sector



### R&D Intensity in the Complementary Industries

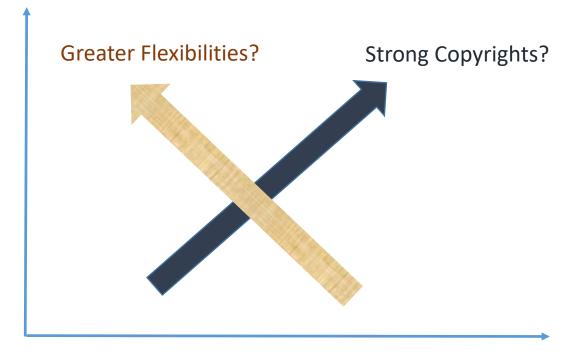
### • R&D/Sales Ratio

year	US	UK	Germany	Netherlands	Korea	Canada	Japan	Brazil
1990-1995	6.08				0.09		5.49	
1996-2000	8.67	10.82	21.03		1.51	2.99	2.90	4.30
2001-2005	9.28	15.32	19.95	2.95	2.53	8.38	2.47	4.47
2006-2010	7.44	4.25	14.48	2.13	3.16	7.76	2.28	3.97
2011-2016	7.73	8.62	14.83	3.27	5.80	12.46	2.59	2.38

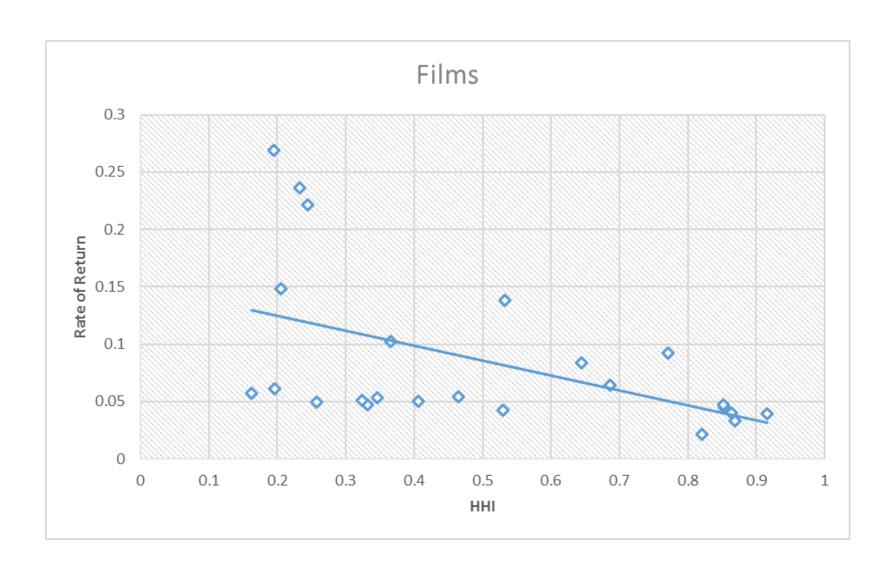
# Hypotheses

• What might we expect?

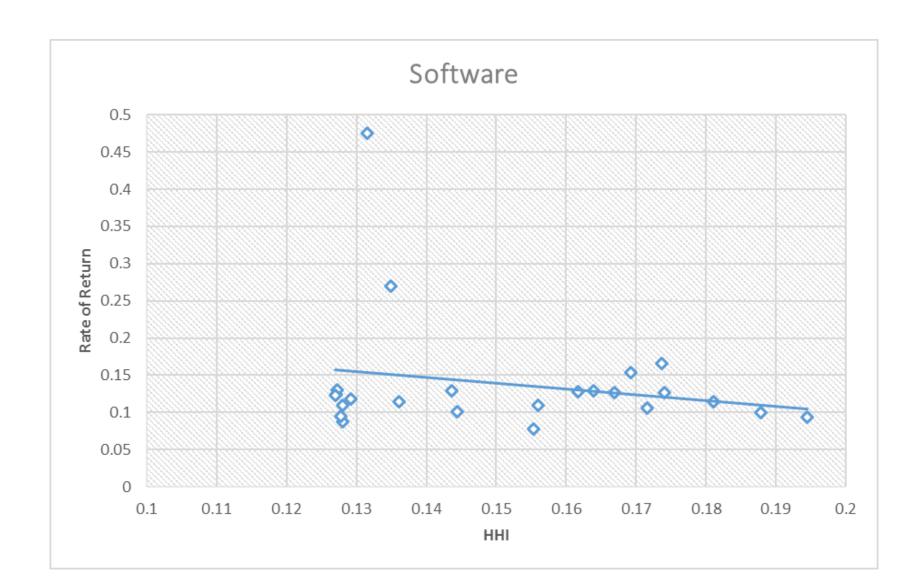
Rate of Return



## ... Look at the U.S.

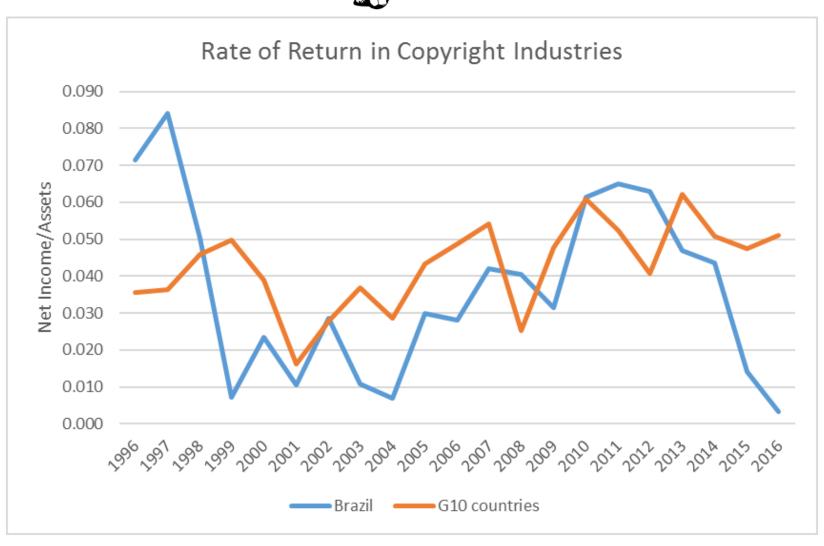


### ... Look at the U.S.



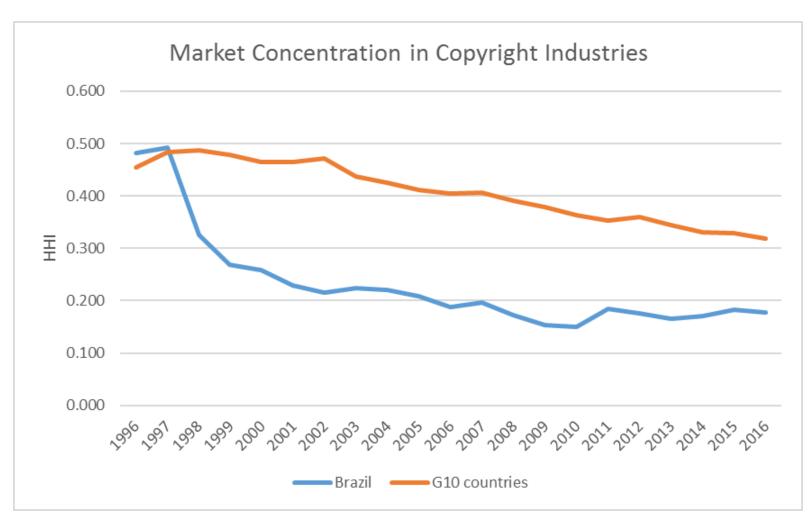
### Brazil vs. G-10



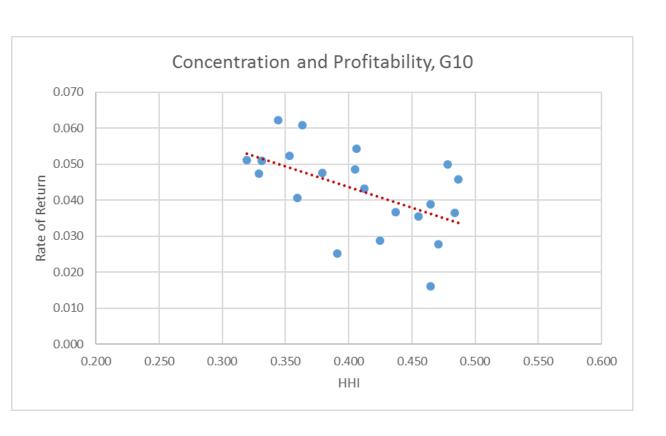


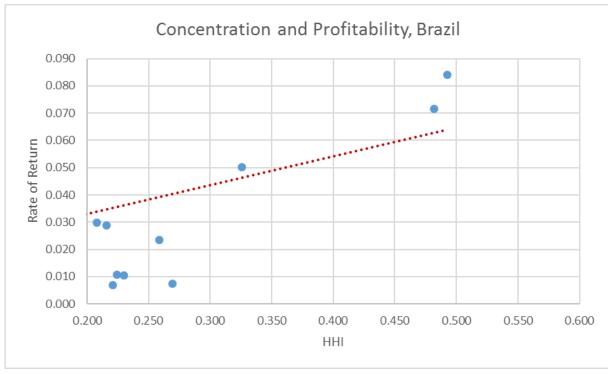
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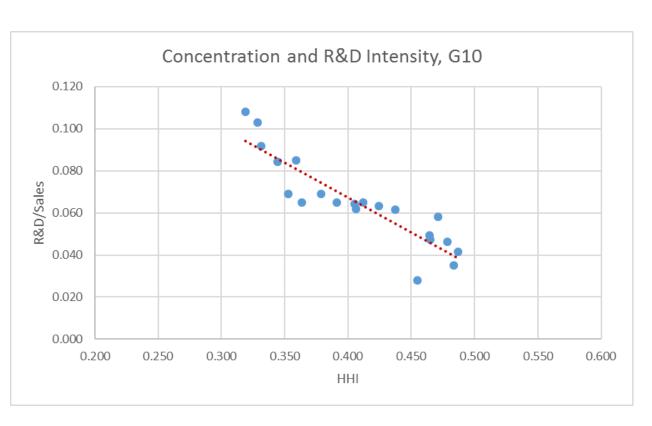


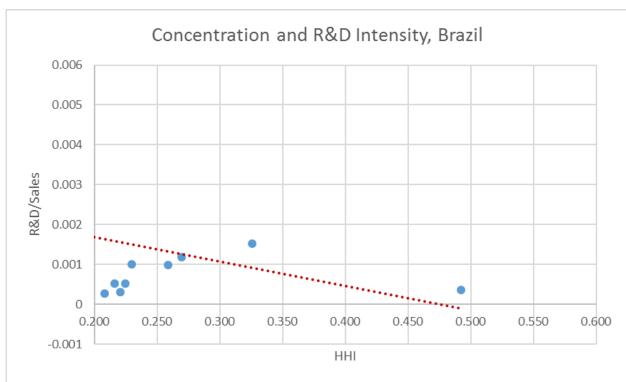
### Copyright Market Structure, Conduct, and Performance



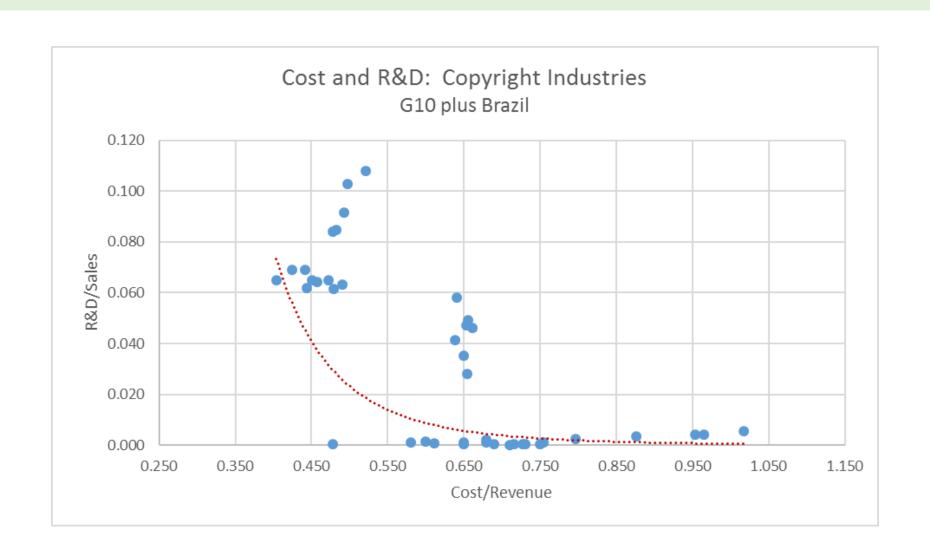


### Copyright Market Structure and R&D Intensity





# Cost Factors and R&D Intensity



### Copyright Burdens?

