



Liege
Competition
and
Innovation Institute

TECHNOLOGY GIANTS, THE “MOLIGOPOLY” HYPOTHESIS
AND CONGLOMERATE COMPETITION: A PRIMER

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Bruegel, Digital Platforms: A Policy and Research Agenda

Brussels, 20 October 2016

Tech v Antitrust

- ▶ Google, Apple, Facebook, Amazon, Microsoft as oligopoly competitors at war in the market (Antitrust scholars: Tim Wu, “In the Grip of the New Monopolists”, *Wall Street Journal*, 2010)
- ▶ Archipelago of relevant markets with monopolists on each island (Ongoing investigations agst GOOG)

Outline

1. The Oligopoly Hypothesis
2. The Nature of Oligopoly Competition
3. The Problem with Competition Economics
4. Proposed Framework for Competition Policy
5. Conclusion

1. The Moligopoly Hypothesis

COMPANY PROFILE, TOP 3 COMPETITORS				
HOOVERS INDUSTRY ANALYZIS (30 DECEMBER 2015)				
Google ¹	Apple Inc. ²	Facebook Inc. ³	Amazon.com ⁴	Microsoft ⁵
Yahoo! Inc.	HP Inc.	Microsoft Corporation	Wal-Mart Stores, Inc.	Apple Inc.
MSN	Google Inc.	Google Inc.	Apple Inc.	Oracle Corporation
Facebook., Inc.	Blackberry Limited	Twitter, Inc.	Alibaba Group Holding Limited	Google Inc.

Yahoo! Finance – Overview

Dow 0.25% Nasdaq 0.65%

Microsoft Corporation (MSFT) - NasdaqGS

52.32 0.43(0.83%) May 27, 4:00PM EDT

After Hours : 52.30 0.02 (0.04%) May 27, 7:11PM EDT

Competitors

Get Competitors for:

GO

Direct Competitor Comparison

	MSFT	ORCL	GOOG	AAPL	Industry
Market Cap:	411.26B	166.28B	503.02B	549.66B	386.51M
Employees:	118,000	132,000	64,115	110,000	646.00
Qtrly Rev Growth (yoy):	-0.06	-0.03	0.17	-0.13	0.21
Revenue (ttm):	86.89B	37.16B	77.99B	227.54B	151.71M
Gross Margin (ttm):	0.63	0.59	0.62	0.40	0.59
EBITDA (ttm):	29.15B	14.91B	25.51B	78.50B	4.97M
Operating Margin (ttm):	0.27	0.35	0.26	0.29	0.06
Net Income (ttm):	10.48B	8.84B	17.04B	50.68B	N/A
EPS (ttm):	1.30	2.03	24.58	8.98	0.02
P/E (ttm):	40.34	19.70	29.81	11.17	29.26
PEG (5 yr expected):	2.38	2.29	1.33	1.31	1.65
P/S (ttm):	4.69	4.46	6.37	2.42	3.11

ORCL = Oracle Corporation

GOOG = Alphabet Inc.

AAPL = Apple Inc.

Industry = Business Software & Services

Yahoo! Finance – Results

YAHOO! FINANCE: “GET COMPETITOR FOR” (28 MAY 2016)				
GOOG	AAPL	FB	AMZN	MSFT
YHOO	HP	GOOG	AAPL	ORCL
PVT1	GOOG	MSFT	WMT	GOOG
FB	PVT1 (Blackberry)	TWTR	BABA	AAPL
YAHOO! FINANCE: “GET INDUSTRY FOR” (28 MAY 2016)				
<i>“Internet Information Providers”</i>	<i>“Electronic Equipment”</i>	<i>“Internet Information Providers”</i>	<i>“Catalog & Mail Order Houses”</i>	<i>“Business Software & Services”</i>

Reuters Finance

REUTERS FINANCE, STOCKS, COMPETITORS, 31 MAY 2016				
GOOG	AAPL	FB	AMZN	MSFT
NA	Samsung Electronics Co Ltd	Microsoft Corporation	Wal-Mart Stores, Inc.	Sony Corp
NA	Sony Corp	Mixi Inc	Target Corporation	Nintendo Co., Ltd
NA	ASUSTEK Computer Inc.	Tencent Holdings Ltd	Best Buy Co Inc.	Apple Inc.
NA	HP Inc.	Twitter Inc.	Alibaba Group Holding Ltd	HP Inc.
NA	Microsoft Corporation	LinkedIn Corp	Dollar General Corp.	IBM Corp.
NA	IBM Corp.	Yahoo! Inc.	eBay Inc.	Amazon.com, Inc.
NA	Cisco Systems, Inc.	Renren Inc.	Big Lots, Inc.	Cisco Systems, Inc.
NA	Nokia Corp	NA	Overstock.com, Inc.	Oracle Corporation
NA	Motorola Solutions Inc	NA	Books-A-Million, Inc.	BlackBerry Ltd
NA	NA	NA	Sears Holdings Corp	Yahoo! Inc.

Bloomberg

BLOOMBERG RESEARCH, STOCK, COMPETITORS, 31 MAY 2015

GOOG	AAPL	FB	AMZN	MSFT
AT&T Inc.	Alphabet Inc.	AT&T Inc.	AT&T Inc.	Alphabet Inc.
Oracle Corp.	China Mobile	Comcast Corp.	Comcast Corp.	Comcast Corp.
Tencent Holdings Ltd	General Electrics Co.	IBM Corp.	IBM Corp.	General Electric Co.
Walt Disney Co	Samsung Electronics Co. Ltd	Samsung Electronics Co. Ltd	Home Depot Inc./The	IBM Corp.
Verizon Communications Inc.	Verizon Communications Inc.	Verizon Communications Inc.	Verizon Communications Inc.	Wells Fargo & Co.

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

FORM 10-K

- ▶ FAQ: firms must provide “*information about the most significant risks that apply to the company or to its securities*”
- ▶ “*companies generally list the risk factors in order of their importance*”
- ▶ Google, Amazon, Microsoft, mention “*intense competition*” as the first risk factor faced by their businesses, and all give colourful descriptions of fierce industry rivalry
- ▶ Apple consistently ranks competition (in particular price) as the second risk factor, and defines it as “*aggressive*”
- ▶ Facebook does not mention competition within the three main risk factors, yet it appears in fifth rank in all its 10-Ks

SEC 10-K FILINGS – TOP 3 RISK FACTORS – ITEM 1A

FIRM	2012	2013	2014	2015
GOOG	<ol style="list-style-type: none"> 1. "Intense competition" 2. Investments in new business strategies, products, services 3. Difficulties created by acquisition and integration of new businesses 	<ol style="list-style-type: none"> 1. "Intense competition" 2. Investment in new businesses and new products, services, and technologies is inherently risky 3. Transition of users from PC to other devices to access the internet and search 	<ol style="list-style-type: none"> 1. "Intense competition" 2. Investment in new businesses and new products, services, and technologies is inherently risky 3. Transition of users from PC to other devices to access the internet and search 	<ol style="list-style-type: none"> 1. "Intense competition" 2. Investment in new businesses and new products, services, and technologies is inherently risky 3. Transition of users from PC to other devices to access the internet and search
AMZN	<ol style="list-style-type: none"> 1. "intense competition" 2. Global expansion strains resources 3. Risky expansion in new market segments 	<ol style="list-style-type: none"> 1. "intense competition" 2. Global expansion strains resources 3. Risky expansion in new market segments 	<ol style="list-style-type: none"> 1. "intense competition" 2. Global expansion strains resources 3. Risky expansion in new market segments 	<ol style="list-style-type: none"> 1. "intense competition" 2. Global expansion strains resources 3. Risky expansion in new market segments
FB	<ol style="list-style-type: none"> 1. Failure to retain existing users or add new users 2. Loss of marketers, or reduction in spending by marketers 3. Growth in the use of FB on mobile may decrease available revenue 	<ol style="list-style-type: none"> 1. Failure to retain existing users or add new users 2. Loss of marketers, or reduction in spending by marketers 3. Growth in the use of FB on mobile may decrease available revenue 	<ol style="list-style-type: none"> 1. Failure to retain existing users or add new users 2. Loss of marketers, or reduction in spending by marketers 3. Growth in the use of FB on mobile may decrease available revenue 	<ol style="list-style-type: none"> 1. Failure to retain existing users or add new users 2. Loss of marketers, or reduction in spending by marketers 3. Growth in the use of FB on mobile may decrease available revenue
AAPL	<ol style="list-style-type: none"> 1. "Global economic conditions" 2. "Highly competitive global markets characterized by aggressive price cutting" 3. "Manage frequent product introductions and Transitions" 	<ol style="list-style-type: none"> 1. "Global economic conditions" 2. "Highly competitive global markets characterized by aggressive price cutting" 3. "Manage frequent product introductions and Transitions" 	<ol style="list-style-type: none"> 1. "Global economic conditions" 2. "Highly competitive global markets characterized by aggressive price cutting" 3. "Manage frequent product introductions and Transitions" 	<ol style="list-style-type: none"> 1. "Global economic conditions" 2. "Highly competitive global markets characterized by aggressive price cutting" 3. "Manage frequent product introductions and Transitions"
MSFT	<ol style="list-style-type: none"> 1. "Intense competition across all markets" 2. Risks and costs of focus on cloud based services 3. "Investments in new technology are speculative" 	<ol style="list-style-type: none"> 1. "Intense competition across all markets" 2. Risks and costs of focus on cloud based services 3. "Investments in new technology are speculative" 	<ol style="list-style-type: none"> 1. "Intense competition across all markets" 2. Risks and costs of focus on cloud based services 3. "Investments in new technology are speculative" 	<ol style="list-style-type: none"> 1. "Intense competition across all markets" 2. Risks and costs of focus on cloud based services 3. "Investments in new technology are speculative"

Summation

Support to moligopoly hypothesis? Y

- ▶ Non AT experts characterize each GAFAM as a technology pole that offers a mix of products and services;
- ▶ Non AT experts recognize the distinctly superior position held by each GAFAM in one or more core businesses; and
- ▶ Non AT experts balance this with a variety of competitive threats exerted “*across industries*” by other technology and non-technology firms in actual or future markets outside of the core

“*Extended rivalry*”? Porter (1985)

- ▶ “(1) firms not in the industry but who could overcome entry barriers particularly cheaply; (2) firms for whom there is obvious synergy from being in the industry; (3) firms for whom competing in the industry is an obvious extension of the corporate strategy; (4) customers or suppliers who may integrate backward or forward”

2. The Nature of Moligopoly Competition

Observations

- ▶ Conglomeratism
- ▶ Disruptism
- ▶ R&Dism
- ▶ Serendipitism
- ▶ Transactionalism

Interpretation

- ▶ Competing against the **non-consumption**

Conglomeratism

MARKET LINE, COMPANY PROFILES, MAJOR PRODUCTS AND SERVICES, 29 JUNE 2016

GOOG	APPL	FB	AMZN	MSFT
<ul style="list-style-type: none"> • Search • Advertising • Consumer Content and Platforms • Enterprise products • Mobile wireless devices • Wi-Fi-enabled thermostats • Smoke detectors • Security systems • Research and development on biology that controls lifespan • Fiber to the premises (FTTx) services • Venture capital funding • Investments in growth stage companies 	<ul style="list-style-type: none"> • Mobile communication and media devices • Personal computing products • Portable digital music players • Televisions • Peripheral products • Networking solutions • Third-party hardware and software products • Mobile operating systems • Desktop operating systems • Server and application software 	<ul style="list-style-type: none"> • Pages • Platform • Desktop applications • Mobile apps • News Feed • Graph Search • Mobile-to-mobile messaging • Online advertising • Measurement and insights tools • Development tools • Application programming interfaces (APIs) 	<ul style="list-style-type: none"> • Books: • Movies, music and games: • Electronics and computers: • Home, garden and tools: • Grocery, health and beauty: • Toys, kids and baby: • Clothing, shoes and jewelry: • Sports and outdoors: • Automotive and industrial: • Kindle e-readers and books: • Amazon fire TV: • Services 	<ul style="list-style-type: none"> • Windows operating system • Office productivity suite • Gaming and entertainment consoles • Surface devices and accessories • Personal computer (PC) accessories • Smartphones • Search advertising • Display advertising • Server operating systems • Embedded software • Social networking • Consulting services • Cloud solutions • Premier product support services • Training and certification services • Customer relationship management (CRM) solutions • Supply chain management solutions

Disruptism

- ▶ E. Schmidt, “*someone, somewhere in a garage is gunning for us*”, *The New Gründergeist*, Monday, October 13, 2014.
- ▶ 10-K filings
 - ▶ “Our business is characterized by rapid change as well as new and disruptive technologies”
 - ▶ “[...] many of the areas in which we compete evolve rapidly with changing and disruptive technologies, shifting user needs, and frequent introductions of new products and services”
 - ▶ “Our business is characterized by innovation, rapid change, and disruptive technologies”.

R&Dism

R&D EXPENSES (SOURCE: GAFAM 10-K FILINGS TO THE SEC, 2015)			
	2012	2013	2014
Google	\$6,083b	\$7,137b	\$9,382b
Microsoft	\$9,8b	\$ 10,411b	\$ 11,381b
Facebook	\$1,40b	\$1,42b	\$2,67b
Apple	\$3,4b	\$4,5b	\$6,0b
Amazon ¹	\$4,564b	\$6,565b	\$9,275b

RATE OF R&D/REVENUE (SOURCE: GAFAM 10-K FILINGS TO THE SEC, 2015)			
	2012	2013	2014
Google	13,212%	12,855%	14,214%
Microsoft	13,293%	13,373%	13,10%
Facebook	27,510%	18,038%	21,418%
Apple	2,160%	2,6%	3.304%
Amazon ¹	7,470%	8.939%	10,422%

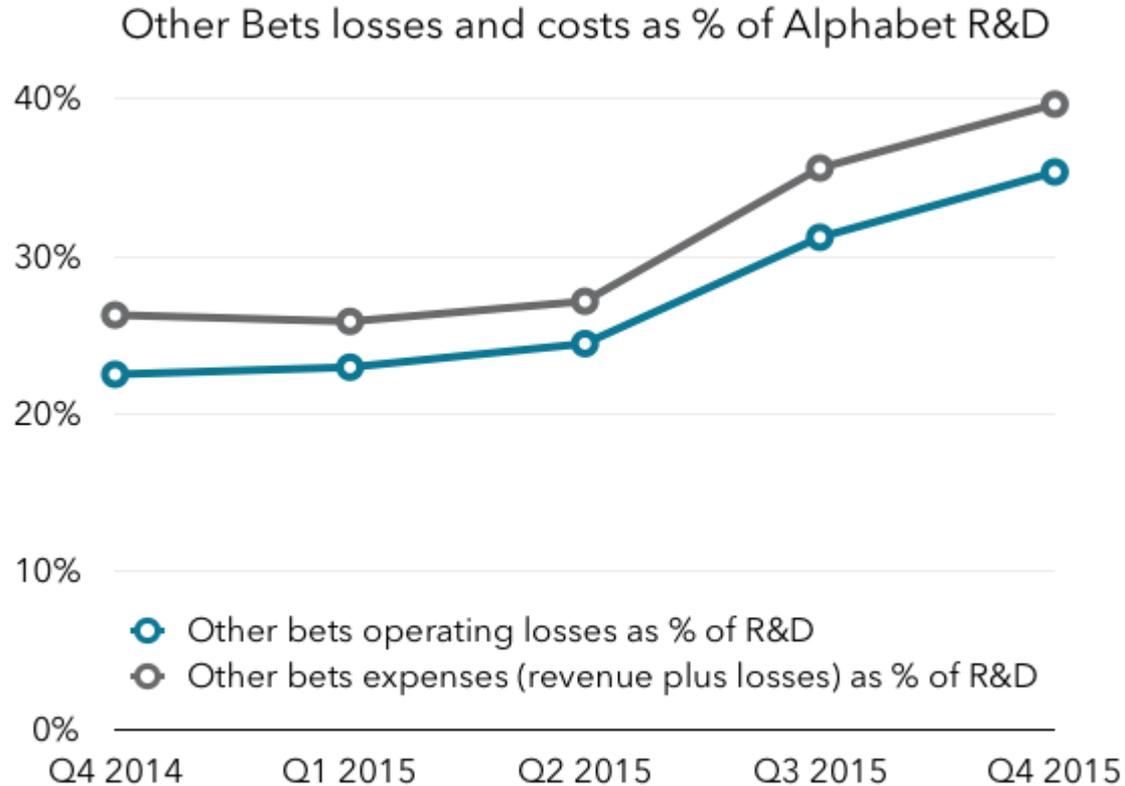
R&Dism, Cont'd

Rank in 2015	Company	Country	R&D in 2014 (€m)	R&D intensity (%)	Rank change 2004-2015
1	VOLKSWAGEN	Germany	13120.0	6.5	up 7
2	SAMSUNG	South Korea	12187.0	7.9	up 31
3	MICROSOFT	US	9921.7	12.9	up 10
4	INTEL	US	9502.5	20.6	up 10
5	NOVARTIS	Switzerland	8217.6	16.7	up 15
6	GOOGLE	US	8098.2	14.9	up > 200
7	ROCHE	Switzerland	7422.1	18.8	up 11
8	JOHNSON & JOHNSON	US	6996.1	11.4	up 4
9	TOYOTA MOTOR	Japan	6858.4	3.7	down 4
10	PFIZER	US	6844.6	16.8	down 8
11	GENERAL MOTORS	US	6095.0	4.7	down 5
12	MERCK US	US	6056.3	17.4	up 17
13	FORD MOTOR	US	5683.2	4.8	down 12
14	DAIMLER	Germany	5650.0	4.4	down 11
15	HUAWEI	China	5441.2	14.0	up > 200
16	CISCO SYSTEMS	US	5112.4	12.6	up 14
17	ROBERT BOSCH	Germany	5042.0	10.3	up 10
18	APPLE	US	4975.7	3.3	up 86
19	SANOFI-AVENTIS	France	4812.0	14.2	down 3
20	HONDA MOTOR	Japan	4576.6	5.0	down 9

Source, 2015 EU Industrial R&D Scorecard

R&D intensity: “High above 5%; Medium-high between 2% and 5%; Medium-low between 1% and 2% and Low below 1%”.

Serendipitism



Source: Alphabet financial reporting, Jackdaw Research analysis

Transactionalism

M&A ACTIVITY, GAFAM, 2003-2016, COMPANY PROSPECTOR, MARKETLINE (28 JUNE 2016)				
Company Name	Primary Industry	Country	M&A Vol.	M&A Value(\$m)
Alphabet Inc.	Business and Consumer Services	United States	181	37.485,0
Amazon.com, Inc.	Retailing	United States	52	4.167,0
Apple Inc.	Communications	United States	58	6.655,0
Facebook, Inc.	Media	United States	80	27.324,0
Microsoft Corporation	Technology and Services	United States	157	68.332,0

GAFAM M&A DEALS/YEAR, MARKETLINE (28 JUNE 2016)					
Year	GOOG	AAPL	FB	AMZN	MSFT
2016	5	3	1	4	6
2015	15	11	4	8	18
2014	30	9	9	5	11
2013	21	13	10	6	10
2012	20	4	19	2	9
LARGEST ACQUISITION TO DATE & VALUE					
	Motorola Mobility \$12,5 billion	Beats Electronics \$3 billion	WhatsApp \$19 billion	Zappos \$1,2 billion	LinkedIn \$26 billion

Interpretation: Compete v non-consumption?

▶ “*New market footholds*”

- ▶ Ambition to build the next “General Purpose Technologies” (Bresnahan and Tratjenberg); “Generative Technologies” (Zittran); “Bell Labs model” (Klein) ?
- ▶ Human skills that create, scale and manage
- ▶ Artificial skills that compute
 - ▶ Digital oil (data)
 - ▶ Digital machines (AI, VR, etc.)

▶ “*Low end market footholds*”

- ▶ AMZN
 - ▶ Toys “R” Us
 - ▶ FedEx, UPS, TNT
- ▶ GOOG
 - ▶ Fiber
 - ▶ ProjectFi
- ▶ MSFT
 - ▶ Cisco
- ▶ Hagiu and Yoffie, “What’s Your Google Strategy”?, HBR 2009

Interpretation, Cont'd

- ▶ Degree of mimicking in a large number of markets
- ▶ Almost never in the core, or through low end product (exception is MSFT with Bing)
- ▶ Competition to keep « iron in the fire », and keep ability to « hop » to markets leads wich prove sucessful (dominant design theory)

3. The Problem with Competition Economics?

Mainstream

- ▶ **Over-simplification?**
 - ▶ Discredit of general equilibrium analysis and domination of partial equilibrium analysis in micro-economics => 2D analysis
 - ▶ Mono-parametrical competition (price or output)
- ▶ **Generalization?**
 - ▶ Abundant and fungible labour
 - ▶ Conglomerate discount
 - ▶ Distrust for investments in tech startups and venture capitalism as source of innovation and competition
- ▶ **Disciplinarity: “one theory science”**

Applied

- ▶ **Market definition “cage”**
 - ▶ Google >< Apple
 - ▶ WhatsApp >< Instant Messaging
- ▶ **Focus on barriers to entry, incumbency and scale in the core**
- ▶ **Out of market efficiencies generally irrelevant**
- ▶ **Hunger for Dystopian Theories of Harm: Walled Garden, Platform Threat, The Cycle, etc.**

4. Alternative Framework

- ▶ Monigopoly screen
- ▶ Barriers to entrepreneurship

4.1. Moligopoly Screen

- ▶ As long as innovation and competition against non-consumption thrives, no need to look into the core
- ▶ When moligopolist shirks on ambition to disrupt itself, dominance or restraint in core no longer insulated from antitrust scrutiny
- ▶ Dynamic analysis, geared on level of ongoing intensity of conglomeratism, experimentalism, R&Dism
- ▶ Consider dominance or restraints restrictions in core if and only if competition and innovation in peripheral segments is insufficient
 - ▶ Number of conglomeral footholds
 - ▶ Structure of R&D process (blue sky v pipeline)
 - ▶ Skills expenses
 - ▶ Nominal R&D expenses
 - ▶ Content of R&D expenses
 - ▶ Ratio R&D expenses to revenue (or profit)
 - ▶ Retained earnings v buybacks of stock and dividends
 - ▶ M&A, CVC and VC expenses

SERENDIPITISM?		PATIENT CAPITALISM		PLATFORM LEADERSHIP?	
	Conglomeratism (footholds)	Experimentalism	R&D to revenue/ profit	Retained earnings	Number and value of transactions; private equity funding; internal v industry platform
High?	GOOG; AMZN; MSFT	GOOG; AMZN; MSFT	FB (21,0%); GOOG (14,9%); MSFT (11,9%); AMZN (10,42%)	AAPL: 87b GOOG: 61b	GOOGL; MSFT; FB; AMZN
Low?	AAPL; FB	AAPL; FB	AAPL (3,0%)	MSFT: 9b FB: 6b AMZN: 1,9b	AAPL

4.2. Barriers to entrepreneurship

R&Dism: engine of disruption

- ▶ Large R&D expenses of digital economy firms
- ▶ Indirect R&D through M&A, Venture Capitalism (VC) and Corporate Venture Capitalism (CVC)

Labour-intensive R&D

- ▶ « *Despite the growing use of sophisticated instrumentation, computer simulation, and laboratory automation, R&D is still a labor intensive process* »
(Pisano, 2012)
- ▶ VC and CVC is about identifying founders and incubating their ideas



4.2.1. Capital

- ▶ Entrepreneurs compete for equity capital on the fundraising market
- ▶ Venture Capital (VC) Funds=> pure financial players, no product/service, invest in many competing startups
 - ▶ Andreessen Horowitz support to RBnB, Groupon or Twitter
- ▶ Corporate VC funds => hybrid players, product/service, invest less in competing startups
 - ▶ Google venture, Microsoft Accelerator, etc.
 - ▶ Microsoft participation in Facebook
 - ▶ Google investment in Uber

4.2.1. Capital, Cont'd

- ▶ VC/CVC exclusivities
 - ▶ Prohibition on entrepreneurs to negotiate with competing funds
 - ▶ Right of first refusal for CVC investor
 - ▶ Right to source-code on Change of Control
- ▶ Exclusive supply
 - ▶ Uber and Lyft “*asked potential investors to sign agreements stating they won’t invest in competitors for a period of six months to a year*”



4.2.2. Skills

- ▶ Non-competes “*restrict an employee’s postemployment ability to work for a competitor or start a competing company*”
- ▶ Often met in digital economy markets
- ▶ Not necessarily enforceable, sometimes banned
- ▶ Yet, remain pervasive in contracts
- ▶ US White House report, May 2016
 - ▶ Narrow the market by « *contracting the labor pool from which to hire* »
 - ▶ Deter entry by preventing « *workers from launching new companies* »
 - ▶ Deprive other firms of external economies
 - ▶ Yet, necessity to protect trade secrets + incentives to invest in human capital and training

4.2.2. Skills, Cont'd

- ▶ In digital economy markets, complex competitive assessment
 - ▶ Many startups founded by former employees of big tech => non compete as « *silent killers* » of entrepreneurship
 - ▶ + particularly problematic in industries that are clusterized, because they kill « *agglomeration benefits* »
 - ▶ Studies find correlation btw prohibition of non-competes and number of patented inventions, and startups creations
 - ▶ But necessity to protect trade secrets and training incentives?

4.2.3. Implications for Antitrust Policy?

- ▶ If entrepreneurs are inputs of competitive disruption in digital economy, then antitrust cannot be dismissed out of hand
- ▶ POTUS Executive Order, April 2016 urges agencies to “*identify specific actions that they can take in their areas of responsibility to build upon efforts to detect abuses such as ... anticompetitive behavior in labor and other input markets*”
- ▶ If antitrust is ever to take a look, area where rule of reason analysis is warranted
- ▶ Complex questions for antitrust

4.2.3. Implications for Antitrust Policy?

Fundraising exclusivities

- ▶ **Policy considerations: *de minimis***
 - ▶ Startups are small firms whose death has little economic impact?
 - ▶ Yet, network effects and tipping point create Ant-Men, *ie* small sized firms with superpower on market (eg, Snapchat)
- ▶ **Ancillary doctrine arguments: valid for CVC, less for VC?**

Non competes

- ▶ **Inapplicability of antitrust laws**
 - ▶ US Clayton Act “*labor of a human being is not a commodity or an article of commerce*”
 - ▶ EU law: agreements with employees not caught + dominance threshold
- ▶ **But antitrust places limitations on restrictions to workers mobility**
 - ▶ *US v Adobe* no cold call case
 - ▶ Dutch *Hospital anesthesiologists* case
- ▶ **Discrete non competes not a problem, but if systemic there may be cumulative anticompetitive effects**
 - ▶ CJEU *Brasserie de Haecht contre Consorts Wilkin-Janssen*
 - ▶ CJEU *Delimitis*

5. Conclusions

Theory

- ▶ Need a theory of the “*whole*” where competition in nonconsumption matters
- ▶ Role of business strategy literature
- ▶ AT agencies tagging “*monopoly*” label risks precipitating ex ante populist regulation, rent seeking conduct and knee jerk responses

Practice

- ▶ Relevant market analysis is a cage
- ▶ Accommodate technologism?
- ▶ New types of practices: non competes in labour contracts
- ▶ *Ex post* case studies
 - ▶ Microsoft conduct during the browser/OS war?
 - ▶ High or low degree of technologism?
 - ▶ HYPOTHESIS: anticompetitive conduct in core, to keep iron in fire following failure to anticipate « *mobile revolution* »?

Thank you

- ▶ Paper to be posted on [ssrn.com](https://papers.ssrn.com/sol3/cf_dev/AbsByAuth.cfm?paper_id=358753) page later in the day:
 - ▶ https://papers.ssrn.com/sol3/cf_dev/AbsByAuth.cfm?paper_id=358753
- ▶ Contact details: Nicolas.petit@ulg.ac.be and Twitter [@CompetitionProf](https://twitter.com/CompetitionProf)