#### The platform economy and Europe: between regulation and digital geopolitics

The Digital Humanism Initiative, Lecture series, May 18 2021

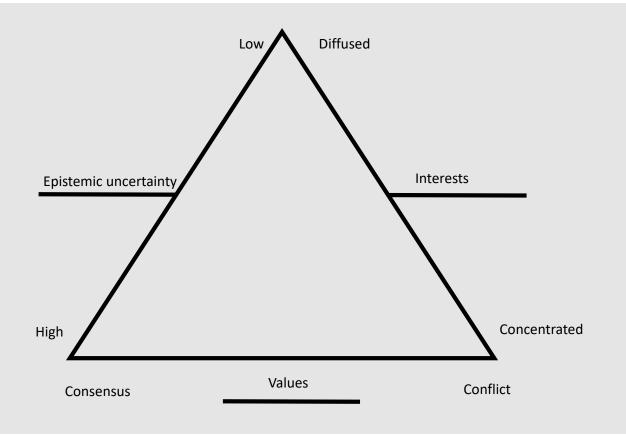
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Key concepts

A few statistics

Does data dependency matter?

## My approach: the policy triangle and rhetorical framing



- Framing: the process by which some elements of reality are given visibility while others are omitted
- Tversky e Kahneman have shown experimentally that simply changing order in which information is provided about the same experimental task produced radically different choices in treated and control group
- On some policy issues: evidence is moulded into opportune narratives and framings that amplify values and emotions
- In the face of an issues, we observe an oversupply (positive bubble) or undersupply (negative bubble) of policy
- Platform Economy is a case of negative policy bubble thanks to a very skilful and opportunistic rhetorical framing by lobbyists
- A strategy of 'fait accompli' in a regulatory vacuum platforms'

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Online
platforms are
two- or
multisided
firms

## Two- and multisided firms sell access to customers

A traditional firm buys "raw material", makes stuff, and sells it to consumers.

A two-sided firm recruits one type of customers and makes those customers available to another type of customers. The customers are the raw materials.

The demand by one group depends on the demand by the other group for the special kind of firms

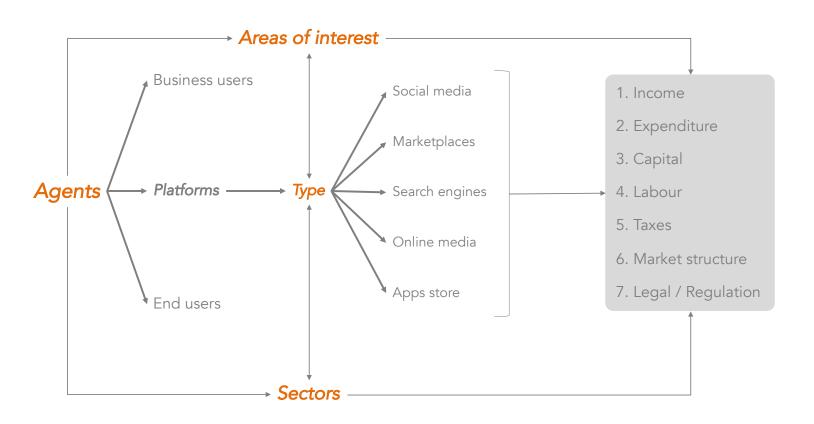
The demand by one group for the business depends on the interest (and therefore the demand) of the other group.

The demand of each group is dependent on the demand by the other group.

## Examples

COMPANY	CUSTOMER SIDE A	CUSTOMER SIDE B	CUSTOMER SIDE C
Uber	Drivers	Passengers	
Apple iOS	Phone users	Application Developers	
YouTube	Uploaders of video	Viewers of video	Advertisers
Sony PlayStation	Console users	Game Developers	
Facebook	Friends who send messengers	Friends who receive messengers	Advertisers
Google Search	Searchers	Advertisers	Websites
London Stock Exchange	Liquidity providers	Liquidity takers	
Monster	Job seekers	Employers	
Daily Telegraph	Readers	Advertisers	
Centro in Oberhausen	Retail Stores	Shoppers	
PayPal	People and businesses who send money	People and businesses who receive money	App developers
Match.com	Men	Women	





## Economics of externalities

Externality: Impact of one person on another that doesn't get recovered in price.

- Negative is bad (neighbor plays load music at night).
- Positive is good (neighbor has beautiful flower garden).

Network effect: Impact of one more participant on a a network on the value to another; this is a type of externality.

- Direct is when the addition of the same kind of participant increases value (more stores at a mall increases foot traffic for all stores).
- Indirect is when the addition of one kind of participant increases the value for the other kind of participant (more stores increases the value to shoppers)

## Policy concerns for platform markets?

Indirect network effects & economies of scale  $\rightarrow$  strong tendency towards concentration and constitution of "big firms" in this type of market

Increasing role of platforms in traditional industries  $\rightarrow$  concentration in these industries too

Persistent effects: strong network effects  $\rightarrow$  (positive) feedback effects and risk of <u>lock-in</u>

Remarks: Two-sided markets are not necessarily "winner-take-all" markets, due to (1) consumer taste for variety, (2) diseconomies of scale (congestion, etc.), (3) if multi-homing is possible and pursued.

## Other policy themes

Data and privacy concerns, extraction of behavioural surplus

Monopoly on data and European data dependency

Behavioural bias: a fourth market failure leading to hyper-nudging

A hybrid between a firm and a market: quasi-institutions?

Profitmaximizing price for one side can be less than marginal cost in theory

Traditional microeconomic theory finds that P ≥ MC

Multisided platform theory finds that on one side of platform the *profit-maximizing* price can be less than MC or even less than 0.

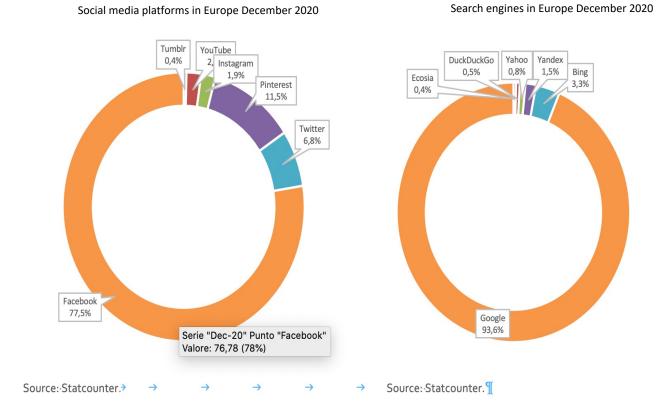
Multisided platform empirics finds that P < MC, including "free", is common in fact.

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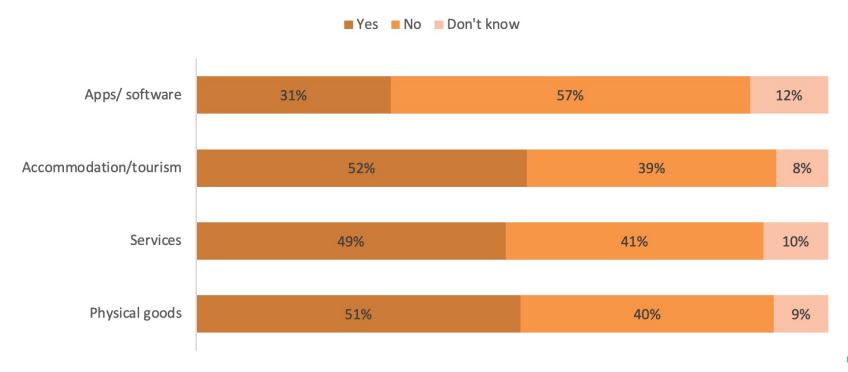
Does data dependency matter?

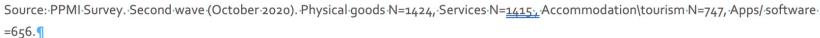
## Traffic share



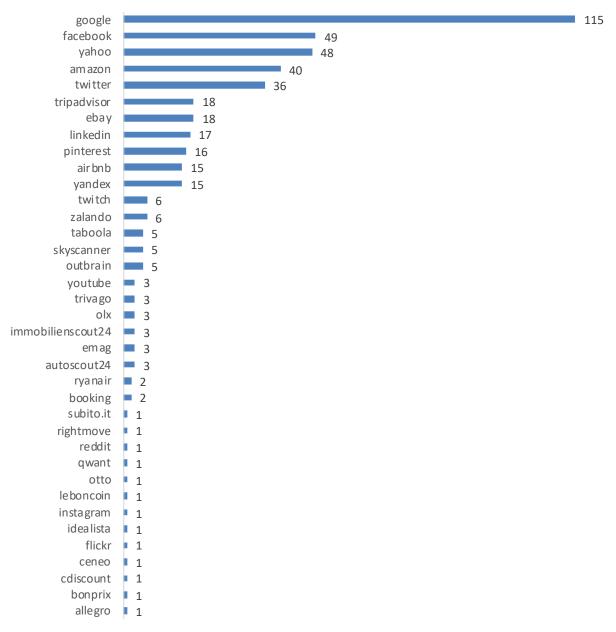
## Business dependence: % of company doing multi-homing

Does your business use more than one online platform to sell:





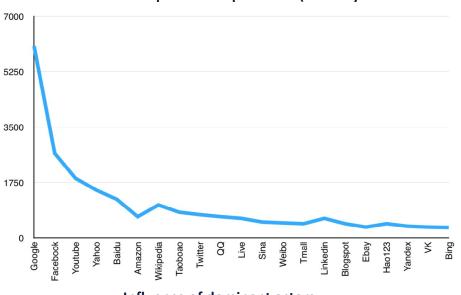
# Acquisitions by platforms 2013-2020



Source: own elaboration based on Crunchbase data

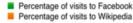
## Europe data dependencies (Faravelon et al. 2016)

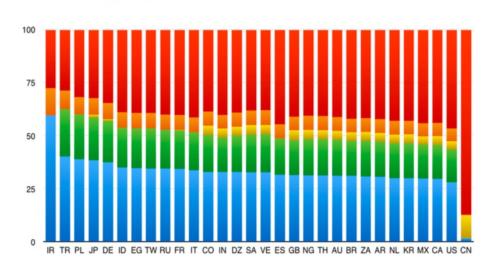
#### Global traffic of top world corporations (monthly visits in millions)



#### Influence of dominant actors

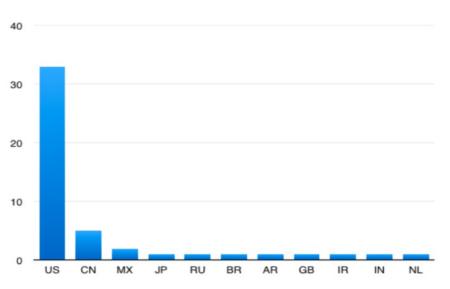




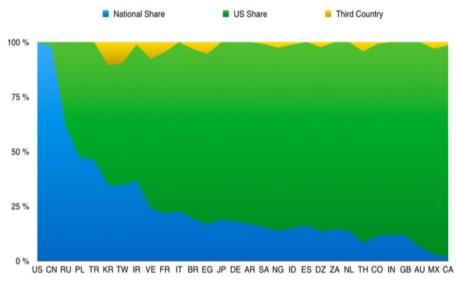


Source: Faravelon, A. et al. (2016). Chasing Data in the Intermediation Era: Economy and Security at Stake. Economics of Cybersecurity, Part 2, 14 (3), pp.22-31.

#### Number of influential platforms by countries



### Ratio of sites in the Top 25 of each country headquartered in the US, nationally, or in a third country



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## Data imbalances: do they matter?

As seen there are power laws at work: only a few influential platforms mostly concentrated in the US or China attracting most of traffic and getting most of data, so in the new intermediation economy we see the 'dependency of most countries on foreign platforms'

US platforms dominate, collect data from users at any interaction, bring data home, develop algorithms that process them into valuable services/products, a steady self-reinforcing loop that makes them more powerful and lock in other countries in the role of raw data supplier

Data flows can demonstrate imbalances among exports and imports. Some of these flows represent 'raw' data while others represent high-value-added data products

Does any of this make a difference in national economic development trajectories? Some economists answer is YES IT DOES!

Suppose EU country F decides that its position in the data economy does indeed place it in a dependent relationship with U.S. platform businesses. It considers that the risks of a self-reinforcing dependency that traps it in a data periphery role as a low value-add raw material exporter and high-value add data product importer are real. What options present themselves to a policy maker in F struggling with longer term economic growth prospects? We first look briefly at economic development theory, and then answer the question

# Economic development theories

1945-1982: Import Substitution Strategy, decent economic growth required a complete value chain of an industry at home: Tariffs, restrictions on import, and subsidies

1982-2002: Washington Consensus: ICT and reduction in transportation pushed to unbundle supply chains, move pieces behind borders and organise them; Macro-economic policies, globalisation, etc. (ICT about coordination not about the data)

Since 2007-2008 allure of above idea reduced (global flows of all kinds, except data, have decreased and not back to pre-crisis level)

What new big idea? The data economy

## Options for developed but data dependent country

- Joint the predominant global value chain led American platforms, and seek to maximize leverage and growth prospects within it to catch up
- Join a competing value chain, like Chinese intermediation platform businesses and try to do the same
- 3. Combine (1) and (2)
- 4. Insulate or disconnect to a meaningful degree from those value chains, and work to create an independent data value chain within the country or perhaps regionally within the European Union

The first three strategic options are really variants on one big choice: does joining existing global data value chains point toward an economic and technologically advantageous future?

Several economists suggest a healthy dose of scepticism about that prospect and that a new ISI strategy with vertical reintegration in one country or better the entire EU is the only possible way out of dependency

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## Two opposing views

- Regulating the platform economy would stifle innovation
- De-regulation or selfregulation by platforms
- Current attempts: protectionism in disguise
- Impossibility statement: technological developments too complex for regulators

- Advocates of common carriage / public utility regime
- Competition policy to break down monopolies
- Need of regulatory innovation: new definition of market power
- Consider data implications of M&A

## Precautionary principle vs cost-benefit approach

- Uncertainty not risk
- Adoption of precautionary principle to pre-empt damages to individual and society
- Radical renewal of competition policy to be applied to curb the power of dominant platforms

- Precautionary approach has been criticized as 'the law of fear'
- Regulation defended on the principle of the worst scenario, then a lack of regulation can be defended by the same argument when the consequences of strict regulations are potentially very negative;
- The precautionary principle claims that dangers should not be downplayed, but this builds a negative public discourse that would block innovators

## Conclusions

There is a point in Sunstein's critique of the precautionary principle, in that by reacting to uncertainty and complexity with across-the-board regulation may end up stifling true innovation without cutting the nails of the incumbents.

There are many innovative platforms and not all of them are or will become as GAFAM. The latter and the concerns they raise can only be dealt with new competition policy instruments and cases, and with political will to do so.

On the other hand, regulators should incentivize relevant actors to adopt governance standards and procedures that will support their efforts to operationalize trustworthy digital transformation and online platform economy.

Furthermore, they should support the development of technologies, systems, and tools to help relevant actors identify and mitigate relevant risks. This means incentivizing organizations to adopt robust internal governance and equipping them with tools to identify and mitigate risk is considered more effective than a regulatory regime that mandates specific outcomes.

New regulation should support ongoing efforts to build best practices, rather than risk cutting them short with inflexible rules that may not be able to adapt to a rapidly- changing field of technology.

In conclusions, regulators should carefully weight the pros and cons of policy responses adopting the precautionary principles and those that support a case by case cost benefit analysis before introducing any new piece of legislation.