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# REGULATING THE TECH GIANTS: COMPETITION POLICY AT A CROSSROAD

Jean Monnet lecture, European Central Bank

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# OUTLINE

Digital revolution and AI offer new challenges: extraordinary impact on labor, health, privacy, politics...

This lecture instead focuses on following two policy questions :

- I. **Competition policy at a crossroad.** Tech giants' dominance does not confront us with an unpalatable choice between laissez-faire and populist interventions. What are the options in the new winner-takes-all world?

Industrial policy

- II. **Currency wars: fintech, private money and CBDC.** Some personal views.

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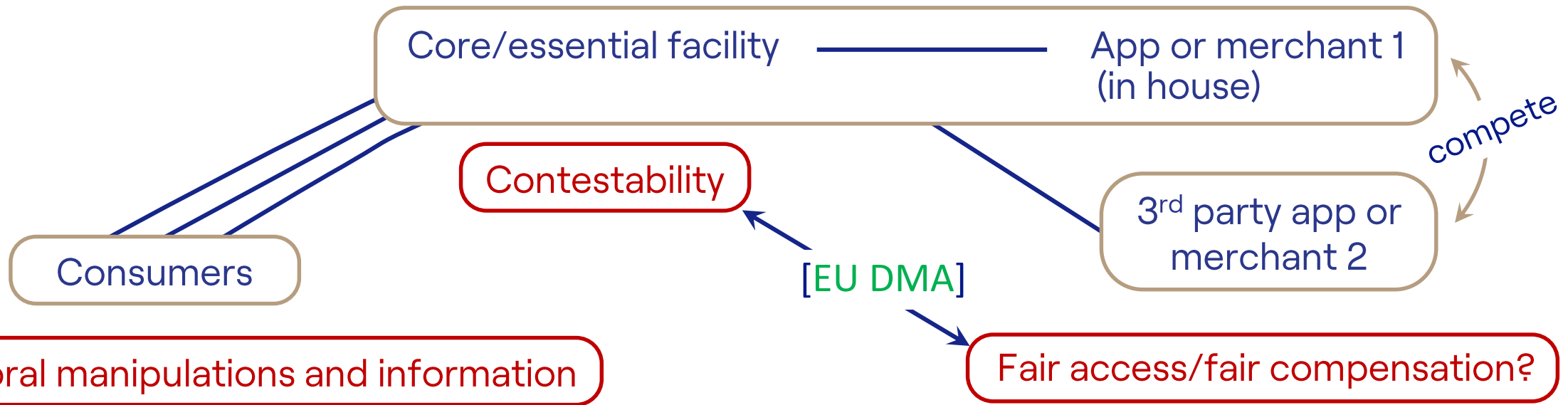
# I. COMPETITION POLICY AT A CROSSROAD

- Recent rise in markups, but concern about market power is not new (Sherman Act 1890). We are no big fans of monopolies: high prices, low innovation (cannibalization).
- In the good old days
  - Regulation of utilities (“network industries”)
  - Competition policy: rest
  - Industrial policy: source of shame for the family.
- Technology (two-sided platforms) challenges our institutions by blurring lines between regulation and antitrust
  - Platforms resemble public utilities (high investment costs and/or network externalities; low/zero MC)
  - High prices (to merchants & advertizers, not consumers)

# Digital ecosystems

Complementary between natural monopoly (core/essential facility /bottleneck /upstream infrastructure) and competitive segment (apps/ merchants)

[EU: search engine, marketplaces, app stores, social networks, video sharing]



[selection of recommendations: EU P2B; behavioral EU AI Act; content curation: EU DSA]

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# 1. DIGITAL PLATFORMS VS. UTILITIES

Regulate platforms as public utilities?

Old-fashioned regulation not really an option for a few reasons:

- *Global firms*. Public utility regulation has been domestic ⇒
  - good data on firm's overall activity
  - no free riding among jurisdictions to provide platforms with profits roughly in line with investment (no supranormal profit).
- *Evolving industrial landscape*: firms not monitored along their lifecycle ⇒
  - Fair rate of return?
  - What was the ex-ante probability of "success"?
- *Rapidly changing products* ⇒ cat-and-mouse game.

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# DIGITAL MARKET ACT (to regulate dominant platforms)

EU DMA (March 2022)'s two concerns:

- *contestability*: Can a more efficient entrant enter the core market?
- *fairness*: Do users (consumers, business) receive fair share of their contribution to the ecosystem? Do they have equal access to core services?

DMA approach

The American Innovation and Choice Act (passed in Judiciary Committee on January 20, 2022) emulates DMA.

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# DIGITAL SERVICES ACT: CURATING CONTENT

## *(a) Possible issues*

- **Illegal content** [revealing plans of nuclear plant, child pornography, hate speech/incitement to terrorism, ...]
- **Fake news** [masks are useless, flat earth, Covid, GMOs, climate change, conspiracy theories, slander, and petitions by false scientists, ...]
- **Defective products** [Amazon bears no responsibility]
- **Exploitation of our weaknesses** [confusing choices, false sense of urgency, digital addiction...]
- **Recommender systems that do not serve consumer**

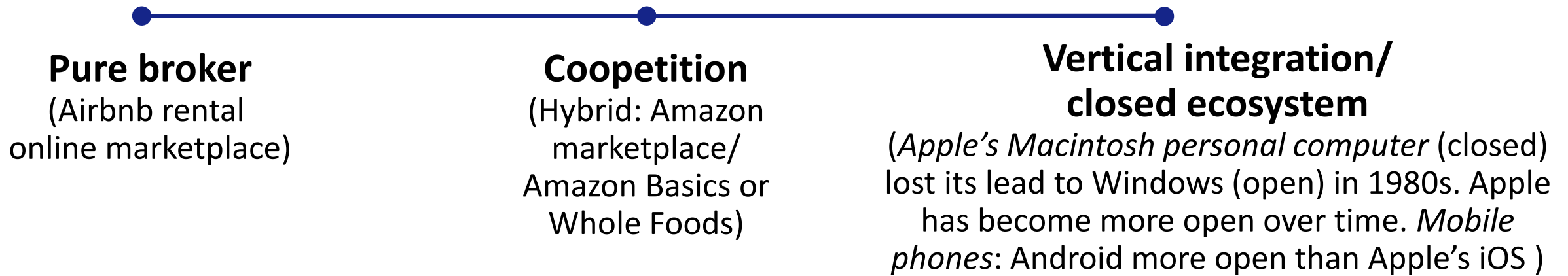
## *(b) Current self-regulation situation .*

- **Section 230 (1996 Communications Decency Act):** No liability for defective products, illegal content, defective goods, fake news
- **Issue company guidelines** against hate speech, harassment, sexual content, misinformation, slurs about disability, etc.

## 2. FAIRNESS

Platforms operate markets, but also compete in them

*Many shades of openness/closedness; location in spectrum is key decision*



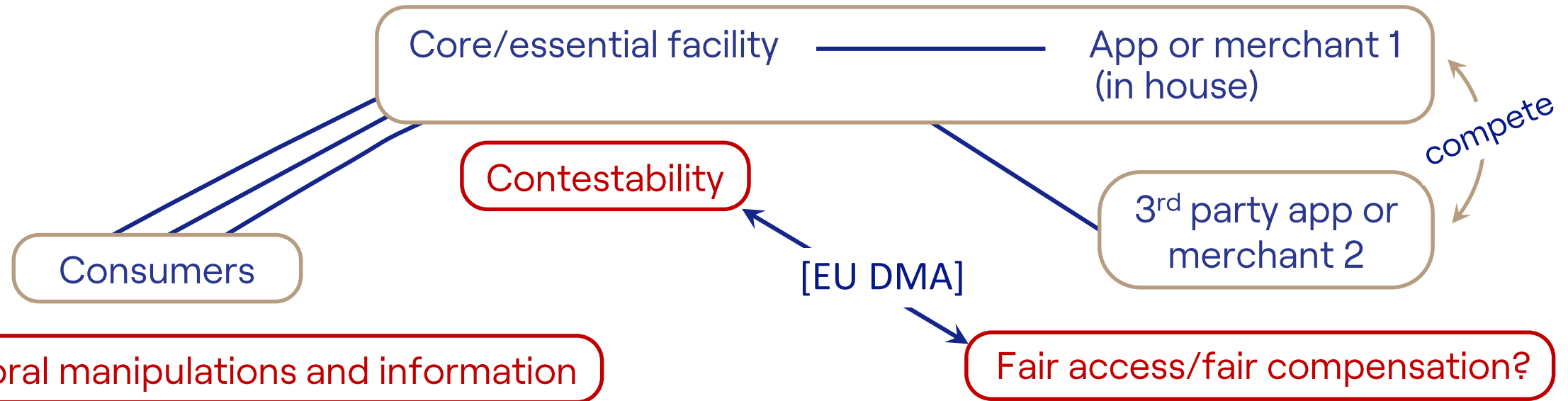
*Closed systems:* In-house offerings motivated by

- Serendipitous innovations
- Control of consumer experience [quality control, seamless operations]
- Anti-competitive behavior.



# RATIONALE FOR PLATFORM REGULATION?

[EU: search engine, marketplaces, app stores, social networks, video sharing]



[selection of recommendations: EU P2B; behavioral EU AI Act; content curation: EU DSA]

*Chicago School:* “Rich ecosystem allows platform to raise price of core service. Self-preferencing must be efficiency motivated”.

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# What's wrong with Chicago School argument?

(1) *Cannot raise price on core services if regulated.*

*May not want to raise price if non-negative price constraint (ZLB) in core market.*

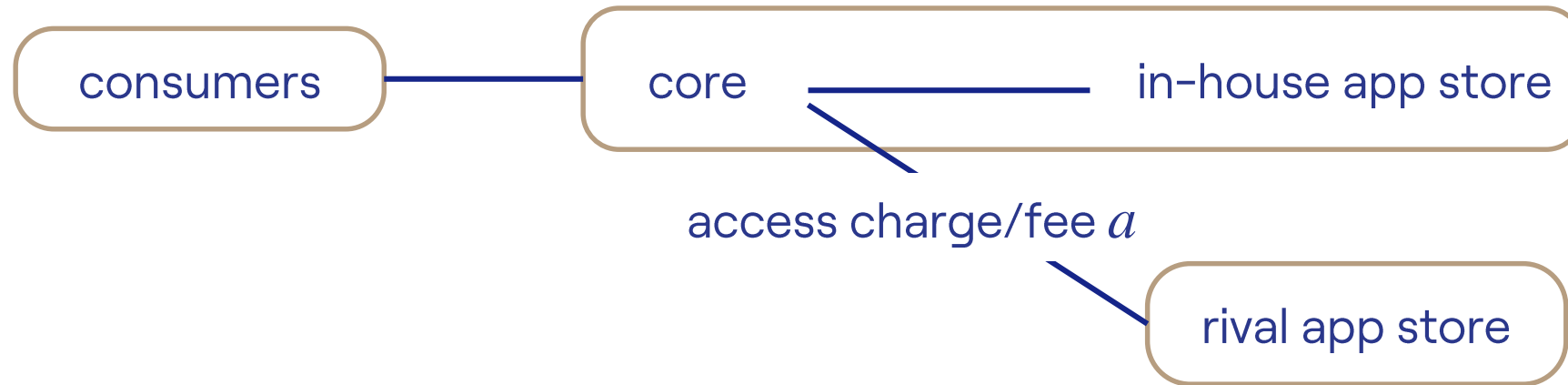
(2) *Contestability of core segment: want to erect barriers to entry in core market*

2a) Apps barriers to entry

2b) Preemptive mergers or exclusivity. Complementor may become a competitor.

(3) *Competitive segment: ZLB in apps market implies supranormal profits for winner.*

# Access charges in two-sided markets



*Applications:* search engine recommendations, market places, access to data, intellectual property.

*Access charge* must balance the conflicting objectives of

- not providing the essential infrastructure owner with incentive to engage in non-price foreclosure ( $a$  too low)
- not penalizing efficient competitors ( $a$  too high)

More on this later.

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# 3. PROTECTING CONTESTABILITY (DMA VIEW)

Beyond prohibition of tying between core services and other services:

- *Multihoming*: no exclusivity requirements (fictitious Uber/Lyft example)
  - Variant: business users can indicate other channels to their users (disintermediation is facilitated)
  - Facilitation of switching (data portability: static & dynamic)
  - Ban on MFNs to encourage multihoming.
- *Interoperability* (say, of social networks)
  - Clash with privacy (WhatsApp end-to-end encrypted)? DMA: APIs must guarantee same level of protection (open-source bridges for encrypted data?)
  - Governance for interoperability/APIs? SSO? Apple? Regulator?
- *Do not combine data* from different services or obtained from 3<sup>rd</sup> parties (Google): data silos

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# What's is the issue with contestability?

## Efficient entrant

- may not be able to enter
  - Applications barrier to entry
  - Entrant offers an app which initially is a complement to core service, but may later become a substitute (Microsoft browser case in the 1990s). Incumbent may then want to foreclose app in the first place
- may be able to, yet not enter (buyout).

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# Defensive mergers

Current review system is broken

[need more empirical work, though, such as Cunningham-Ederer-Ma *JPE* 2021]

(1) When dominant firms purchase emerging firms,

- acquisition often is not notified (below radar). DMA will require notification by “designated platforms”
- burden of proof insurmountable for authorities: no data. Besides, hard to unscramble the eggs ex post
- recommendation: reverse burden of proof for dominant platforms

(2) Should we focus just on substitutes?

- Standard merger reviews target *substitutes*
- In digital world, attack is often from the side, not frontal; products morph. [More generally, new focus on *blurring of distinction between complements and substitutes*; (i) morphing of products, (ii) different usages, C for some, S for others, (iii) C vs S depends on price in general.]

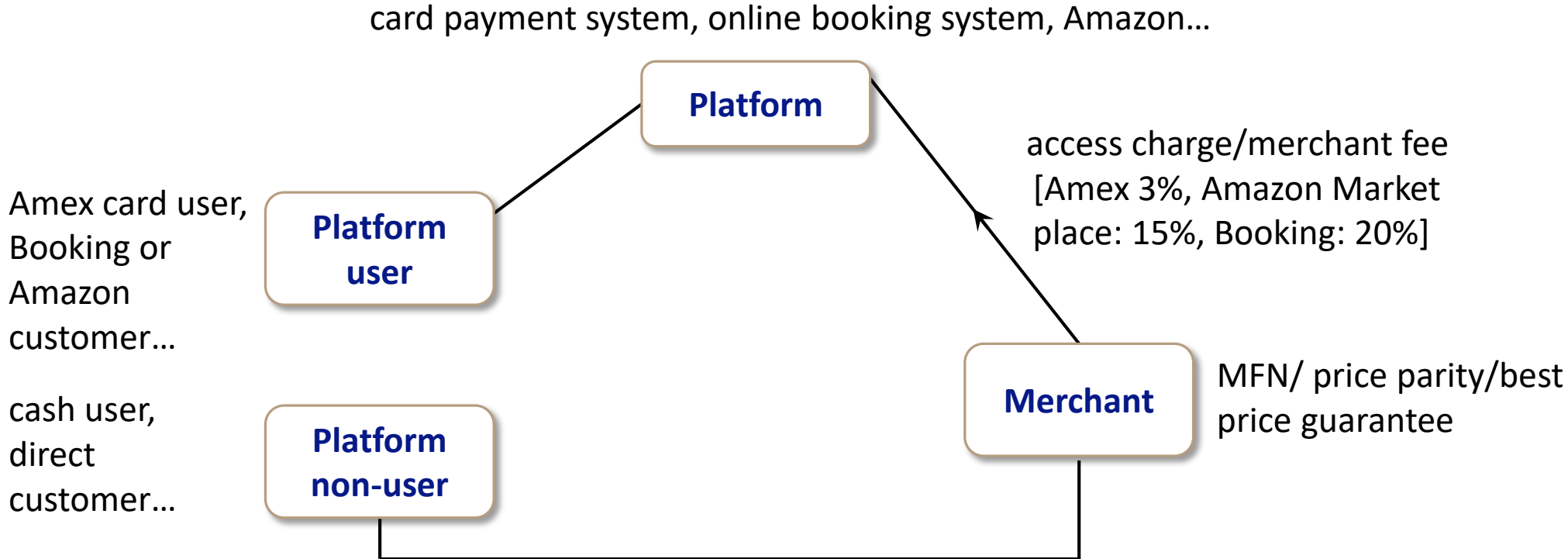
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# Efficiency defenses

1. Purchase of talent (not great: could go elsewhere)
2. Exit mechanism (not great either: highest bidder may not be socially desirable acquirer. IPO, or purchase by other large platforms are alternatives)
3. Avoid double marginalization (counter argument: possibly other instruments, such as nonlinear pricing or screening through price caps as in Rey-Tirole *JPE* 2019)
4. Want to provide seamless experience/create accountability.

Further remarks on efficiency defenses

# 4. MFNs (BEST PRICE GARANTEES)



Oddity: small platforms may have more market power (less is passed through to own customers).  
Tomorrow: personal assistants (Alexa, Google home) [doctors, car drivers, etc. will have to pay a fee for referral]



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# Two issues with prohibition of MFNs

Hope: prohibition of MFN will discipline platform's access charge

- Booking.com [German and French cases: Booking prohibited from demanding lowest price (on and offline: broad clause).]
- Amazon [Amazon abandoned MFN clause in UK and Germany]

*How effective are those structural remedies?* Not very much!

- “voluntary” use of price parity, by fear of being down-listed
- preferred partner programs created by OTAs: price parity counterpart for top listing sellers. Legal, because PPP optional.

*Efficiency defenses*

- *Showrooming*: consumer switches to seller's website, expropriating platform's investment. [Hagiu et al *RJE* 2022]
- *Surcharging*: expropriation of consumer's investment in search & purchase through surcharging. [Gomes-Tirole *QJE* 2018]

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# Challenge: design of access price regulations

Taking two-sided markets seriously (Supreme Court's Amex decision: "total price is what matters" ...)

## *Price cap*

- Payment cards EU: Pigouvian approach capping merchant fee at merchant's convenience benefit [Rochet-Tirole's 2011 "tourist test": EU, Brazil]
- Little theoretical guidance for remedies in other MFN environments.

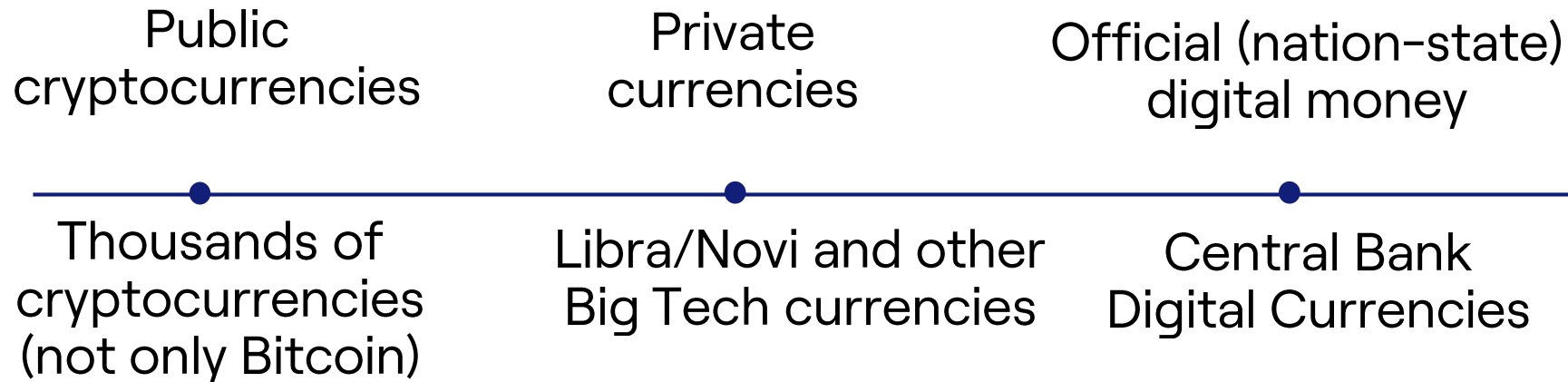
## *Guidelines? Access pricing*

- is the norm (exceptions, e.g. organic search)
- is growing: DMA requires FRAND access to OS and hardware, performance measurement tools, search click and query data...

# II. CURRENCY WARS: FINTECH AND CBDC

## Contours of digital payments still in the making

Ongoing/upcoming digital currency war:



Money: What for?

- store of value/savings (need not be safe for that)
- basis for transactions (medium of exchange, unit of account)

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# PRIVATE MONEY AND CRYPTOCURRENCIES

Genesis: demand and supply sides

*Demand side (users)*

- Low transaction costs [financial inclusion; e-Yuan: 0.1% instead of > 2% cards], especially for cross-border payments
- Escape from dysfunctional monetary system [Venezuela...]
- Less palatable aims [money laundering, crime, tax evasion; vague libertarian ethos]

*Supply side (entrepreneurs)*

- Direct profit: seignorage of new coins, intermediation fees
- Indirect benefits (private sponsors, Libra-style): consumer lock-in, data collection, ancillary services...

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# Cryptocurrencies' challenges

Crypto-assets so far have served as stores of value/ speculative assets

Payment function requires transaction-friendliness. Should allow real-time settlement, but challenges:

- *Still expensive & slow*
- *Platform business model* (to attract buyers and sellers)
- *Price stability*: burst of bubble or forking  $\Rightarrow$  can be highly volatile  
 $\Rightarrow$  *Rationale for stable coins*
  - Collateral must be segregated and prudentially supervised  
(if collateral safe, low-yield  $\Rightarrow$  temptation to under-hoard)
  - Who supervises the reserve fund when stable coin is global?  
Who acts as lender of last resort in case of run?

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# Public policy concerns about private digital currencies

1. Non-palatable aims
2. Loss of seignorage (wasted or privatized)
3. Challenges for financial stability and for counter-cyclical monetary policy
4. If consumers, SMEs or other financial intermediaries are hurt  $\Rightarrow$  pressure for a bailout: good reason why payment systems and central clearing counterparties (CCPs) are highly regulated institutions all over the world!

Related to Farhi-Tirole *REStud* 2021 on architecture of financial system:

- State insurance services (LOLR & DI) go hand in hand with regulation
- Ringfencing regulated institutions from shadow banks.

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# CENTRAL BANK DIGITAL CURRENCY (CBDC)

**Despite these concerns, countries slow at creating an integrated public payment systems, despite some competitive advantages:**

- State decides what is legal tender
- State decides what currency taxes must be paid in
- Can compel banks and Fintech to join platform (Brazilian Pix, digital RMB)

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# Access to CBDC

- retail depositors? to what extent?
- wholesale depositors?

## CBDC competition with bank deposits?

- People's Bank of China: *"New digital currency is not meant to replace deposits held in bank accounts and balances held by payment apps such as Alipay and WeChat"*.
- 7 Central Banks and Bank for International Settlements (10/2020)'s first of 3 key principles: *"Coexistence with cash and other types of money in a flexible and innovative payment system"*



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## Two key observations about what banks do

*Not all deposits are meant to be*

- *safe* (protected from bailinability)
  - Riskless nature of retail deposits is provided by state, covering for tail risk, but deposits in normal times are covered by loans (narrow banking is suboptimal)
- *short term* (demandable)
  - Banks' transformation function: banks take demand deposits and lend long

A wide access to CBDC would substantially enlarge the size of safe, demandable deposits. Is this desirable?

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## Government

would have to make loans if most banks' liabilities fled to the Central Bank.  
However, it

- does not have the expertise to grant loans
- may engage in favoritism
- may be too lenient with insolvent borrowers (SBC)

## My (tentative) conclusion

- limit amount par capita that can be held in CBDC
- CBDC would de facto be the new retail deposits (and pay deposit insurance premium)
- located at banks, but cheap payments for consumer.

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**Economics  
for the  
Common  
Good**



**Jean Tirole**  
Winner of the Nobel Prize in Economics

**THANK YOU FOR YOUR ATTENTION**

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# BONUS SLIDES

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# INDUSTRIAL POLICY

Strong arguments in favor

## 1) Cluster effects

- Infrastructure sharing
- Informal sharing of information (Silicon Valley; Steve Jobs and Xerox Park), learning by doing (emerging industry)
- Labor market (low-cost job mobility)

## 2) Industry spillovers of public R&D

3) Sometimes: reduction in market power (Airbus/Boeing; Alstom-Siemens: “Railbus”, but much less convincing).

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# If so, why so little support from economists [so far]?

*State as regulator* (corrects market failures: market power, education, externalities, inequality, consumer protection, financial regulation etc.)



*State as enabler* (legal framework, funding of high-risk/high-reward projects, etc.)



*Entrepreneurial/managerial State* (where to draw the line w. previous)



*“The State picks winners, losers pick the State” maxim*

- France: Concorde, Bull, Thomson, Agence de l’Innovation Industrielle; *n* industrial plans/ priority programs

*Causes of such failures*

- *Incompetent/uninformed State* (hubris can be a serious issue here)
- *Biased/captured State*: 1984 contaminated blood: industrial policy (French industry wanted to catch up). Diesel subsidies.

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# Role models

US: a lot of “public sector” impetus. Universities +

- NIH (drugs, vaccines)
- DARPA (Apple, which does very little research)
- NASA (Musk's SpaceX, Bezos' Blue Origin)
- NSF (Google)

Virtuous strategies. Example: DARPA

- program directors: recognized experts, independent managers
- funding of high-risk/high-reward, “way out there” projects
- no technological bias (instead: precise objectives)
- ability to stop projects
- significant funding, no scattering (3 to 5 teams).

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# Europe

- *European Research Council*. Success story
- *European Space Agency*. Two handicaps:
  - unwritten “fair-return” rule
  - ESA defines the technical specifications
- *European Innovation Council*. Drawback:
  - European Commission has kept the upper hand on the concrete decisions.



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# Methodology

Recommendations if one is to engage in industrial policy

- 1) Identify the market failure so as to design the proper policy
- 2) Use independent high-level experts to select projects and recipients of public funds
- 3) Pay attention to supply side (talents, infrastructure) and not only to demand side [French clusters : “Field of dreams” mindset]
- 4) Adopt a competitively neutral policy [Schumpeterian view. Aghion-Dewatripont-Legros]
- 5) Do not prejudge the solution; set objectives [delegation]
- 6) Evaluate ex post and disseminate the results, include a “sunset clause” in the program, forcing its closure in the event of a negative assessment
- 7) Involve the private sector in risk taking, so as to avoid white elephants
- 8) One-stop shop [France: over 60 public-sector windows to obtain R&D subsidies]



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# DMA APPROACH

## *(a) Designated platforms*

- 9 specified core platform services
- Mechanical: 45 m users (active?), 10K business users
- Can appeal

Gatekeeper need not be large, though: suffices to have unique customers...

## *(b) Obligations*

- 21 obligations (8 self-enforcing, rest may be further specified by EU)
- Heavy emphasis on self-execution (harness users & trusted flaggers as whistleblowers; algorithms) and self-reporting to regulator

## *(c) Enforcement*

- DG Comp/Connect? Private enforcement in national courts, although Commission can put in brief
- Up to 10% of worldwide turnover.



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# MORE ON DSA

## Large platforms must protect fundamental rights

- “The fundamental rights include, as the case may be, the right to freedom of expression and information, the right to respect for private and family life, the right to protection of personal data, the right to non-discrimination and the right to an effective remedy of the recipients of the service; the freedom to conduct a business, including the freedom of contract, of service providers; as well as the right to human dignity, the rights of the child, the right to protection of property, including intellectual property, and the right to non-discrimination of parties affected by illegal content.”
- “Provider should inform the recipient of its decision, the reasons for its decision and the available redress possibilities to contest the decision”

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# Sanctions and models of enforcement

- Court in previous world could levy fines
- Platform: no fines
  - delete (remove posts, temporary freeze account, suspend user) or add a tag (“disputed”). Efficacy (Jiménez Durán 2022 on Twitter: content moderation may not moderate users)?
  - legitimacy issue
  - incentives: FB wants to keep consumers as long as possible on platform => may benefit from sensational information
  - different treatments and arbitrage (conspiracy communities may move to more lenient platform)
- Government (but autocratic and illiberal ones 😞)

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## DSA too focused on very large online platforms?

- (1) not clear they have less incentives to curate content
- (2) migration of producers of illegal content and fake news (cannot presume all want news that are “informative”)

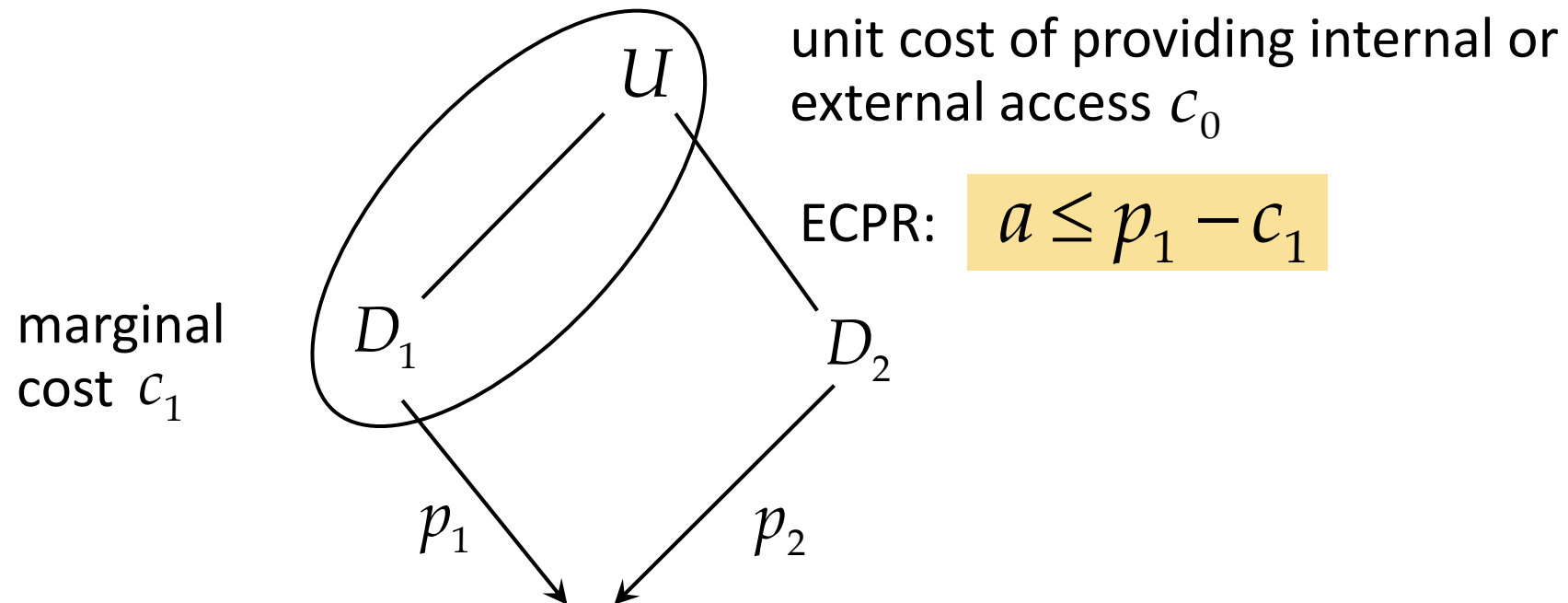


# Access to bottlenecks: lessons from public utilities

## 1. Access must be regulated

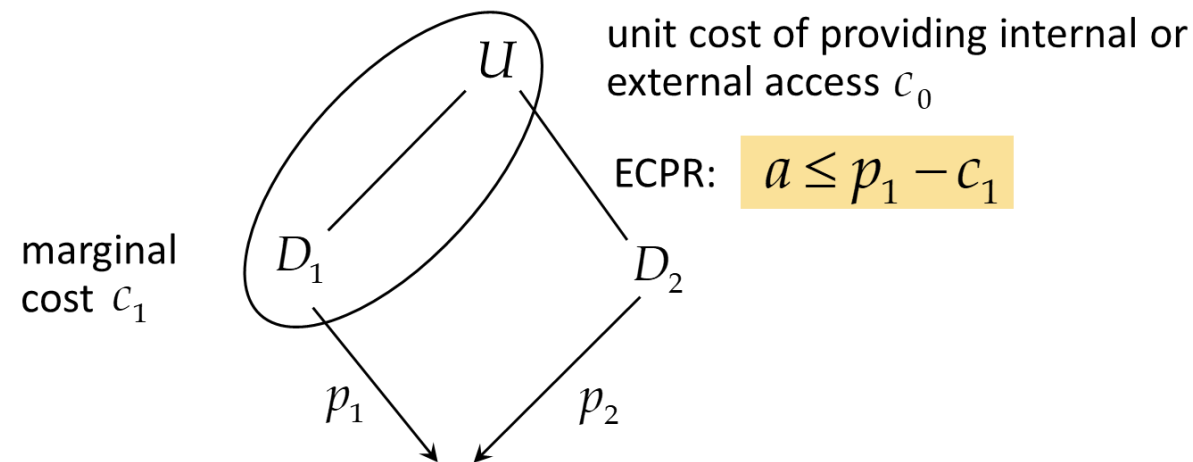
Upstream  $U \leftrightarrow$  core service

Downstream  $D_1$  and  $D_2 \leftrightarrow$  in-house and 3<sup>rd</sup> party apps/merchants.



2. *Efficient-component-pricing rule* (known as “ECPR” or “Baumol–Willig rule”) balances the conflicting objectives of
  - not providing the essential infrastructure owner with incentive to engage in non-price foreclosure ( $a$  too low)
  - not penalizing efficient competitors ( $a$  too high)
3. *Marginal-cost pricing of access is not the right social benchmark* (there is a good reason why the infrastructure is essential!).

An access markup ( $a > c_0$ ) does not always imply that competitors are disadvantaged in their competition with the incumbent.



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# Further remarks on efficiency defenses

- (1) If potential competition may come from substitutes and complements, that may exclude too much: micro-management of dominant firms purchases; also issue of asset specificity (say, boosting iOS)  
Can we have pure-player platforms more generally? [Issue applies also to break-ups: Amazon marketplace, Android...]
- (2) Beware circumvention through the purchase of firm's assets [1950 Celler-Kefauver Act; amends 1914 Clayton act]





# The threat facing commercial banks

