

Slovenian Competition Day

# Platform Entry under Asymmetric Regulation

A Case Study

27 September 2018

Jorge Padilla

## **CONTENTS**

1	Background	2
2	The Big Tech Opportunity	6
3	The Big Tech Threat	17
4	Implications on Competition, Consumer Welfare and Financial Stability	31
5	Regulatory Implications	41
6	References	51

# Case Study: Retail Banking



## RETAIL BANKING / PERSONAL AND SME LENDING





COMPASS LEX<mark>ECON</mark>

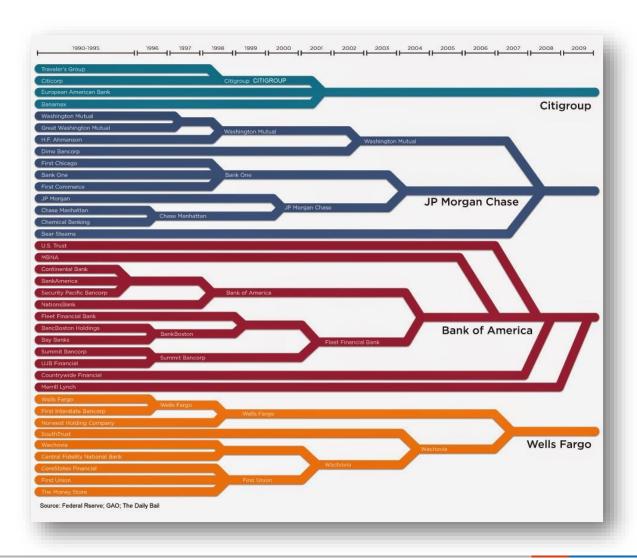
#### COMPETITION IN RETAIL BANKING

- Competition in retail banking, especially in consumer and SME lending, is widely considered to be weak both in Europe and the US
- This may be due to the existence of switching costs and other barriers to entry
- Most importantly, incumbent banks have superior information about their customers
  - Current account information
  - Credit history
  - Other hard information
  - Soft information:Relationship banking



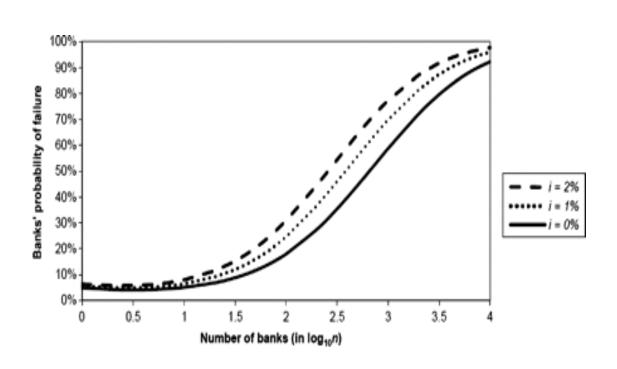
#### **COMPETITION IN RETAIL BANKING**

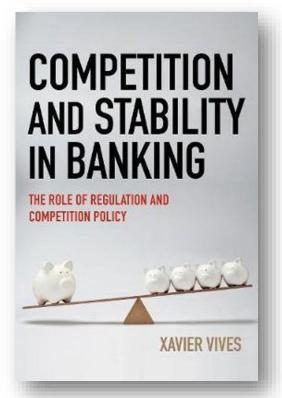
Growing consolidation has aggravated the problem in recent years



#### COMPETITION IN RETAIL BANKING

- Banking regulators have typically considered increased competition risky for financial stability
- Prudential regulation concerns prevailed and still prevail over competition policy objectives

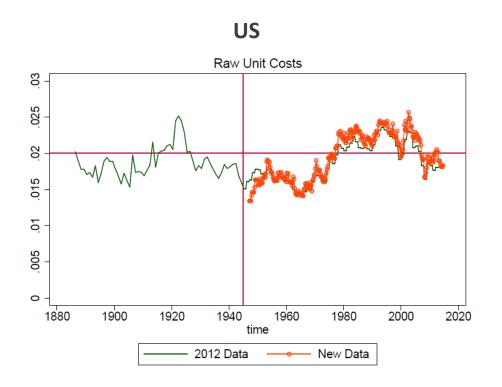


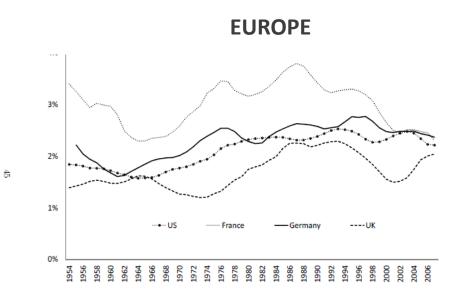


COMPASS LEX<mark>ECON</mark> 6

#### FINANCIAL INTERMEDIATION IS EXPENSIVE

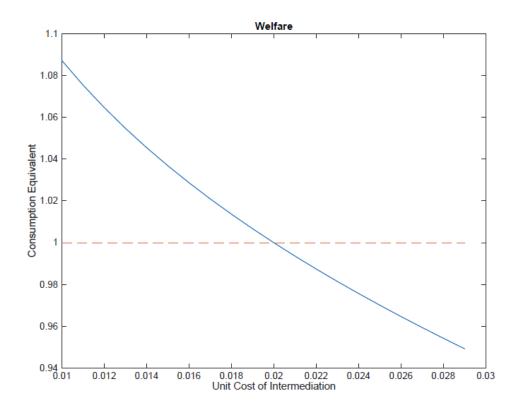
 Thomas Philippon (2015, 2018) using US data and Bazot (2014) for Europe show that the unit cost of financial intermediation is high and has only declined marginally since the 2008 crisis



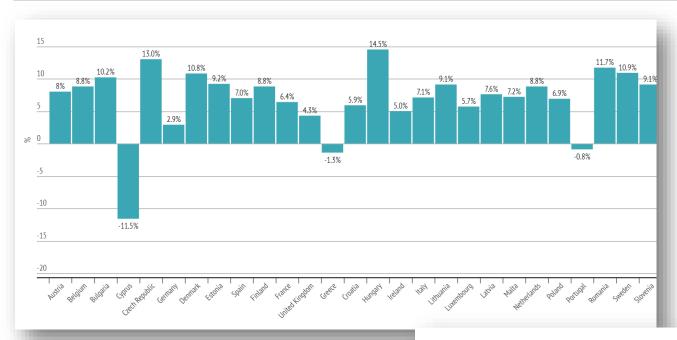


#### FINANCIAL INTERMEDIATION IS EXPENSIVE

Reductions in the unit cost of financial intermediation would increase consumer welfare: agents in the economy are willing to pay 8.7% of consumption to bring the unit cost of intermediation down to 1%

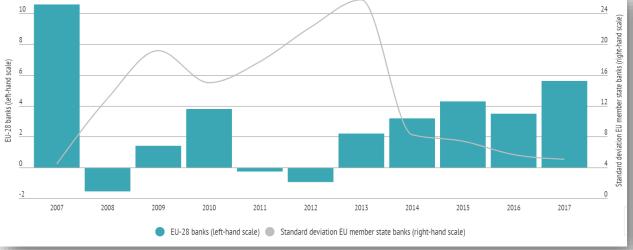


### **BANKS PROFITS**

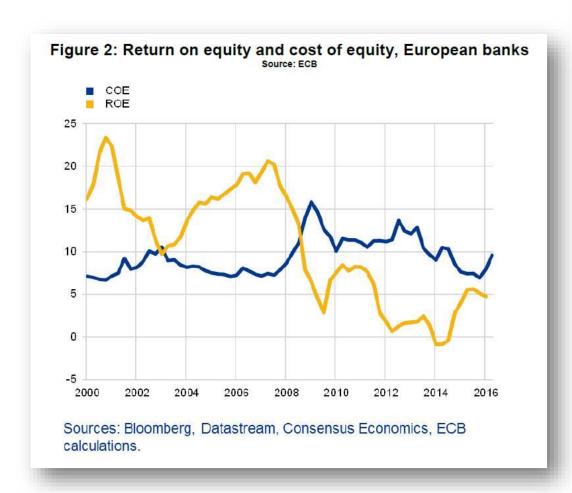


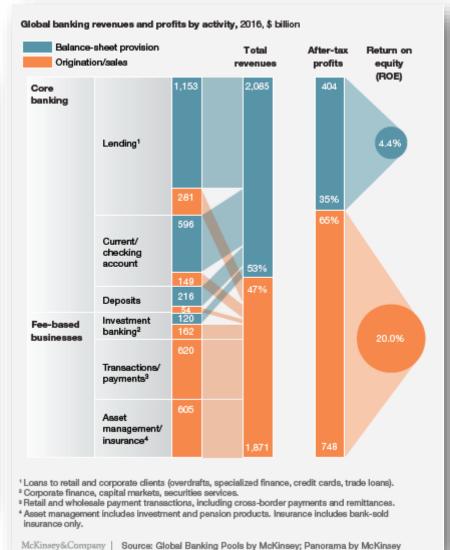
European Banks' ROE, 2018 Source: *EBF* 

European Banks' ROE, 2007-2017 Source: *EBF* 



#### **BANKS PROFITS**





# The Digital Opportunity



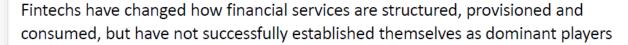
#### FINTECH START-UPS

- Entry by traditional players is unlikely because incumbent banks have many advantages: customer base, experience, reputation and knowledge of existing regulations
- FinTech start-ups may be able to enter successfully because they operate leaner businesses, benefit from the use of the art technologies, provide specific services, and being funded with much more equity will have a regulatory advantage
- However, they face some non-trivial disadvantages:
  - No installed customer bases data disadvantage
  - No established reputation
  - Lack of brand recognition
  - No TBTF subsidies
- Their impact on retail (consumer) and SME banking is unclear. They will likely compete effectively offering payment solutions to large firms and advisory services in capital markets

COMPASS LEX<mark>ECON 12</mark>

#### FINTECH START-UPS

#### **KEY FINDINGS | OVERVIEW**





Many fintechs (small, technology-enabled new entrants) came into existence with the goal of overtaking incumbents as the new dominant players in financial services – but have shifted to building partnerships as they struggle with scale and customer adoption

#### WHERE FINTECHS HAVE SUCCEEDED



Fintechs have seized the initiative – **defining the direction, shape and pace of innovation** across almost every subsector of financial services – and have succeeded as both stand-alone businesses and crucial parts of financial value chains



Fintechs have reshaped customer expectations, setting new and higher bars for user experience.

Through innovations like rapid loan adjudication fintechs have shown that the customer experience bar set by large technology firms, such as Apple and Google, can be met in financial services

#### WHERE FINTECHS HAVE FALLEN SHORT



Customer willingness to switc incumbents has been overesti switching costs are high, and n often not sufficiently material a new provider, especially as in Customer willingness to switch away from incumbents has been overestimated. Customer switching costs are high, and new innovations are often not sufficiently material to warrant the shift to a new provider, especially as incumbents adapt\*



Fintechs have struggled to create new infrastructure and establish new financial services ecosystems, such as alternative payment rails or alternative capital markets. They have been much more successful in making improvements within traditional ecosystems and infrastructure

#### CONCLUSION

Fintechs have materially changed the basis of competition in financial services, but have not yet materially changed the competitive landscape

World Economic Forum, Beyond FinTech: A Pragmatic Assessment of Disruptive Potential in Financial Systems, August 2017

COMPASS LEX<mark>ECON 13</mark>

#### **BIG TECH PLATFORMS**

- The entry of Big Tech players into online banking may increase effective competition in retail and SME banking (e.g. lending and payment markets) by leveraging their superior information about consumers preferences, habits and conduct to offer better targeted banking products and to reach out to consumers that may not be served otherwise
- Big Tech players may also be able to offer new services by bundling their existing services with traditional banking products
- They not only have lots of valuable customer data, they also have the analytical tools (e.g. Al algorithms) to analyze and interpret such data in order to anticipate their customers' needs and influence their conduct



And they have the scale required to profitably invest in the development of new tools

COMPASS LEX<mark>ECON 14</mark>

#### **BIG TECH PLATFORMS**

Big Tech Platforms may act as marketplaces

**KEY FINDINGS | PLATFORMS RISING** 



Platforms that offer the ability to engage with different financial institutions from a single channel will become the dominant model for the delivery of financial services

The shift to multiple-provider platforms as a channel to distribute and trade is gradually emerging across geographies and throughout a wide range of financial products – here are just a few examples of what has been developed

Or as intermediaries, in direct competition with incumbents



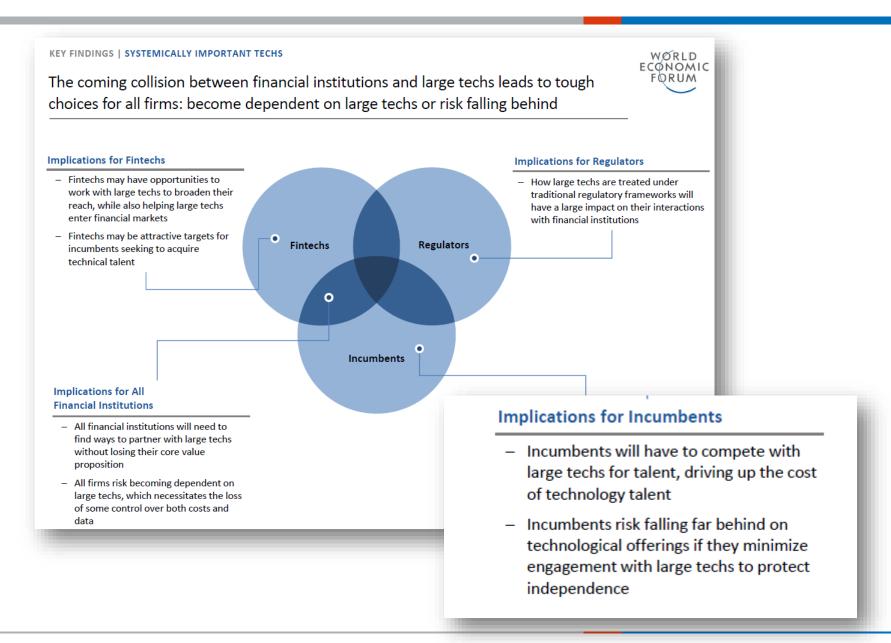
COMPASS LEX<mark>ECON 15</mark>

#### **BIG TECH PLATFORMS**

- Unlike FinTech start-ups, Big Tech Platforms (a) have exceptional data and the ability to monetize it effectively, (b) play a central role in relation to many consumer decisions impacting on their financial choices, (c) enjoy significant brand recognition and customer trust
- Big Tech Platforms threaten the most profitable lines of business of incumbents:
  - According to a recent McKinsey report, they could target the distribution business of banks, which represents 47% of their revenues but 65% of their profits and has an ROE of 20% (compared with an average ROE of 7-8%)
  - Rakuten issues credit cards and offers financial services, e.g. mortgages and securities brokerage
  - Amazon provides lending and factoring services for small and medium enterprises

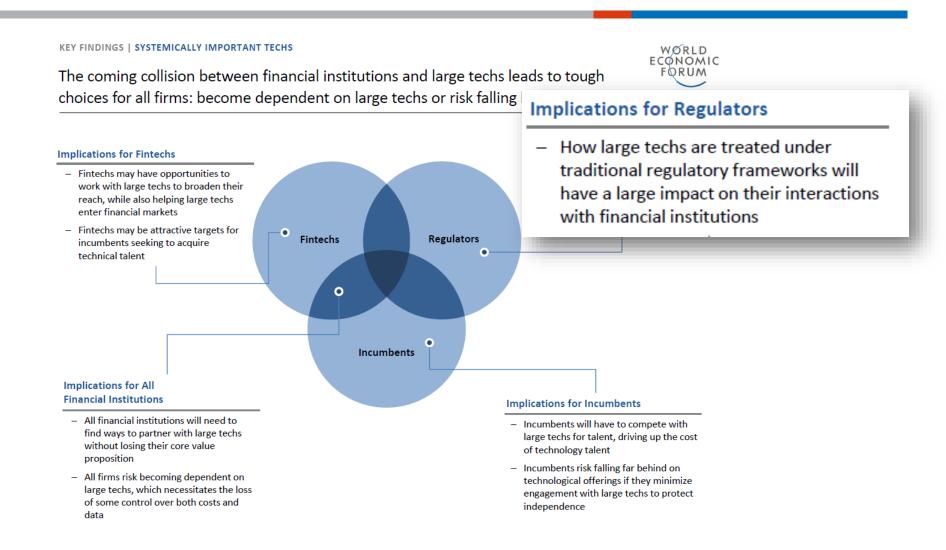
COMPASS LEX<mark>ECON 16</mark>

#### **IMPLICATIONS**



COMPASS LEX<mark>ECON 17</mark>

#### **IMPLICATIONS**



World Economic Forum, Beyond FinTech: A Pragmatic Assessment of Disruptive Potential in Financial Systems, August 2017

## Asymmetric Regulation



#### **ASYMMETRIC REGULATION**

Philippon (2018):

What does a level playing field mean when incumbents are too-big-to-fail? Or when they rely excessively on short-term leverage? The level playing field argument applies when entrants are supposed to do the same things as incumbents, only better and/or cheaper. But if the goal is to change some structural features of the industry, then a strict application of the level-playing field principle could be a hindrance...

... one can see capital requirements as a way to reduce barriers to entry and foster a level-playing field

COMPASS LEX<mark>ECON 20</mark>

#### **ASYMMETRIC REGULATION**



#### **Regulatory Disruption**

Regulators are curtailing financial institutions' control over access to infrastructure, lowering market power and shifting profits away from firms that oversee infrastructure



Example: The European Union's revised Payment Services Directive (PSD2) threatens to disintermediate payment networks by mandating that banks allow open, secure connections between merchants and user accounts

World Economic Forum, Beyond FinTech: A Pragmatic Assessment of Disruptive Potential in Financial Systems, August 2017

#### Payment Systems Directive 2

- Banks will have to allow authorized Third Party Providers (TPPs) (i) access to their customers' account information and (ii) make payments from customers' accounts
- TTPs will be able to compete with banks by offering payment initiation services (PIS) and account information services (AIS), thus threatening incumbents' profitable distribution services

COMPASS LEX<mark>ECON 21</mark>

#### **ASYMMETRIC REGULATION**

Asymmetric regulation regarding data portability

PSD2

Vs

**GDPR** 

Banks are obliged to provide customer data to all authorized competitors in digital form and free of charge

Big Tech are obliged to facilitate data portability only where it is technically feasible

Big Tech Platforms have to observe GDPR only and will *de facto* retain economic sovereignty over the data of their customers, according to a recent EY report

# Big Tech Entry



#### THE BIG TECH THREAT

- Big Tech companies operate disruptive business models, which may allow them to dominate consumer and SME banking as they have monopolized other markets
- Experience shows that when Big Tech companies enter industries with complex vertical value chains, they seek to monopolize the layer or layers where they operate, entrench those monopolies by taking advantage of network effects, and extract value from all other layers by
  - Vertically integrating upstream and/or downstream
  - Discriminating in favour of their own upstream/downstream businesses in their core platforms
  - Leveraging dominant services and/or data superiority to attack adjacent markets

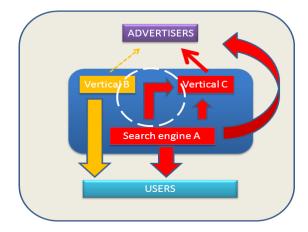
COMPASS LEX<mark>ECON 24</mark>

#### VERTICAL INTEGRATION AND PREFERENCING



1 VERTICAL INTEGRATION



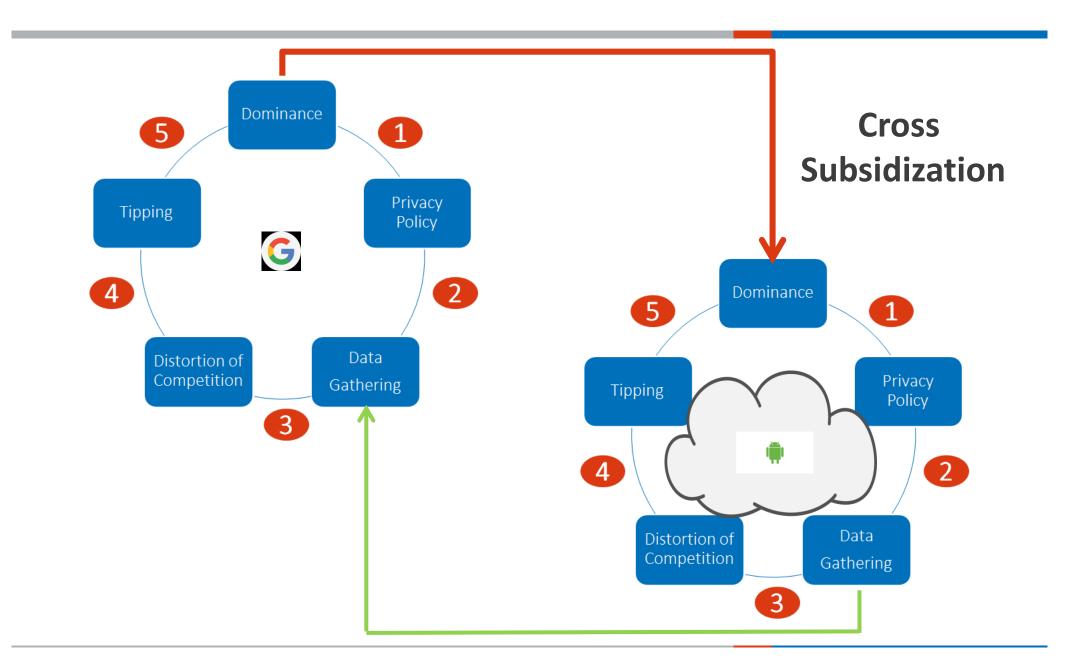


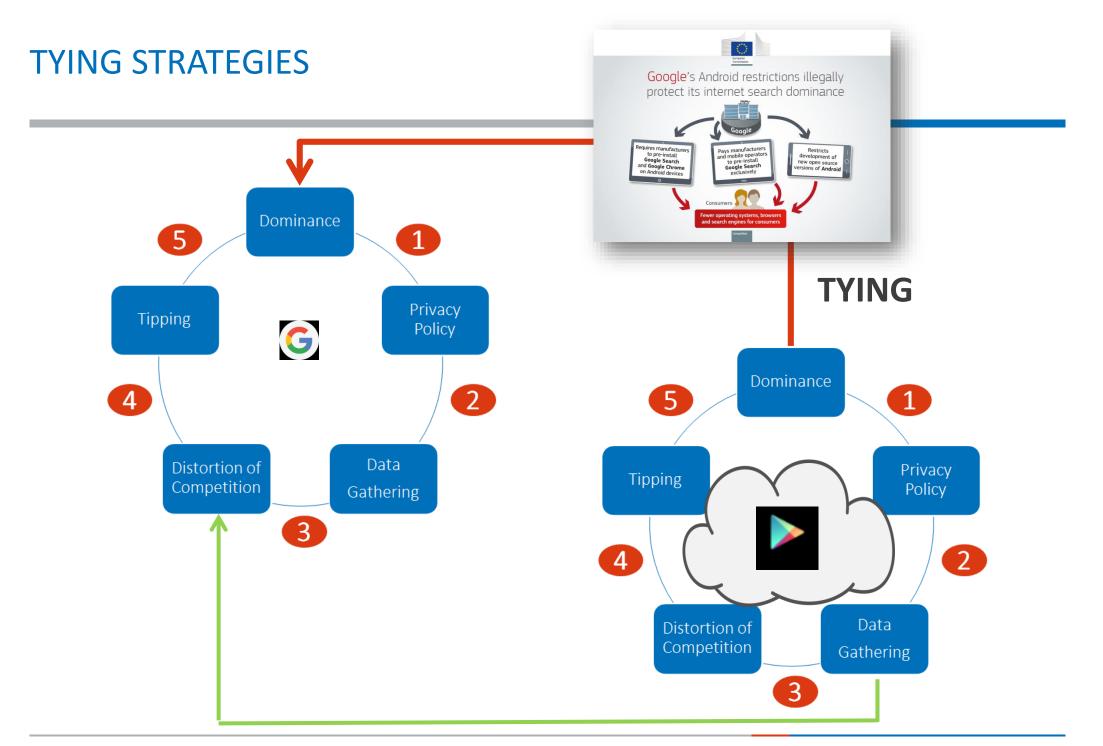
2 DISCRIMINATION

#### SERP INTEGRATION STUDY: GOOGLE SHOPPING

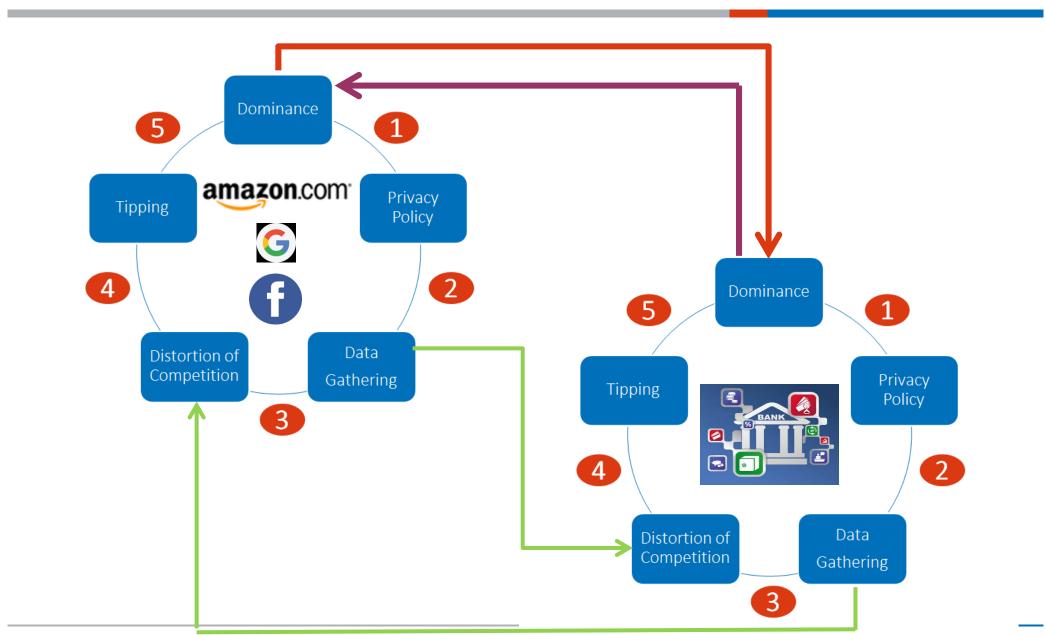


#### **ENVELOPING STRATEGIES**

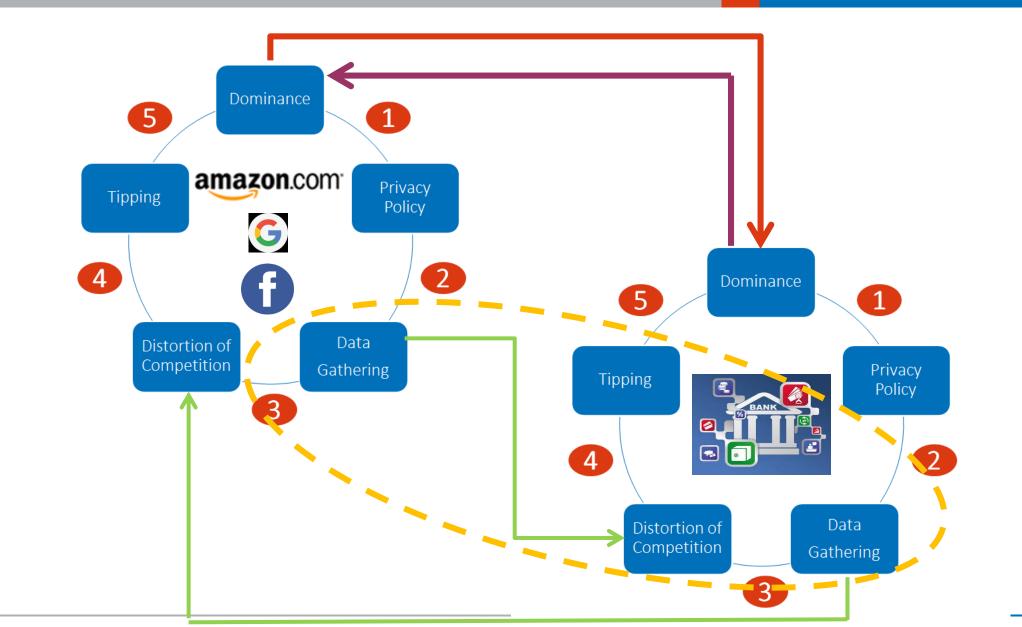




#### LEVERAGING ONLINE PLATFORM POWER ONTO BANKING



### **ENTRENCHED DATA SUPERIORITY**



#### **ENTRENCHED DATA SUPERIORITY**

The power of Big Data corporations and their central place in providing services that are now essential in our everyday lives raise significant questions about the adequacy of global frameworks for competition and regulation. The ordinary consumer may in practice have no choice in whether to deal with these corporations on terms which are non-negotiable and are often too general to be well understood. And without access to the data which consumers have signed – or clicked – away, new businesses may find it very difficult to compete.



Speaker: Charles Randell, Chair, Financial Conduct Authority and Payment Systems Regulator

Location: Reuters Newsmaker event, London

Delivered on: 11 July 2018

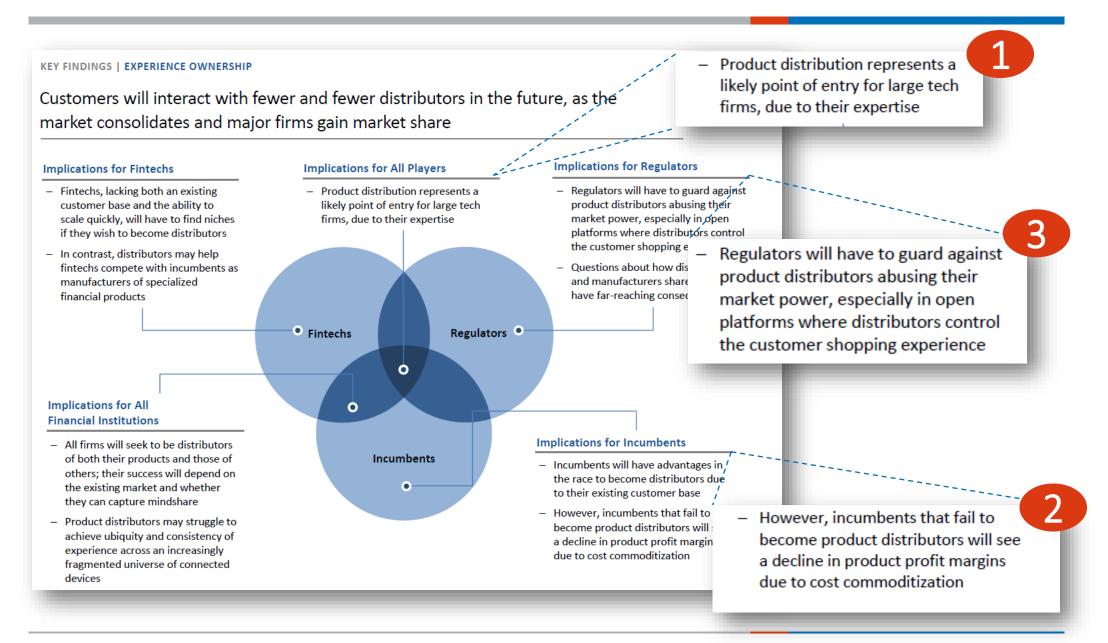
# Implications for Competition and Financial Stability



31

COMPASS LEX<mark>ECON</mark>

#### IMPACT ON THE COMPETITIVE PROCESS



#### IMPACT ON FINANCIAL STABILITY

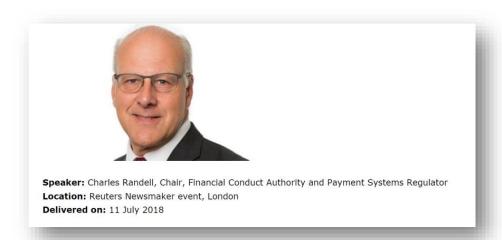
#### Potential moral hazard problems

- Since platforms have little or no stake in e.g. the loans they help to originate. Vallee and Zeng (2018) explain that as the platform takes a more central role in screening loans, it has incentives to reduce the quality of the loan pool to maximize loan origination volume. This results in lower returns compared to scenarios where sophisticated investors are active in loan evaluation and funded only high-quality loans.
- And traditional banks will have less of an incentive to engage in credit screening
- Potential adverse selection problems due to
  - Cream skimming: platforms may be able to screen out bad loans more effectively than FinTech startups and traditional banks
  - The arm's length double-blind nature of peer-to-peer lending makes online lending susceptible to
    adverse selection by borrowers: Balyuk and Davidenko (2018) show that default rates on P2P loans
    are higher than on other credits to consumers with similar credit scores

 As a result, credit risk may be shifted to traditional banks, their investors and their depositors and lending may prove less efficient

COMPASS LEX<mark>ECON 33</mark>

#### FINANCIAL EXCLUSION



We need to anticipate the fundamental questions which Big Data, artificial intelligence and behavioural science present, and make sure that we innovate ethically to shape the answers. Society in general and policy makers in particular need to think about how to mitigate the risk that an algorracy exacerbates social exclusion and worsens access to financial services in the way that it identifies the most profitable or the most risky customers.

COMPASS LEX<mark>ECON 34</mark>

## Policy Implications

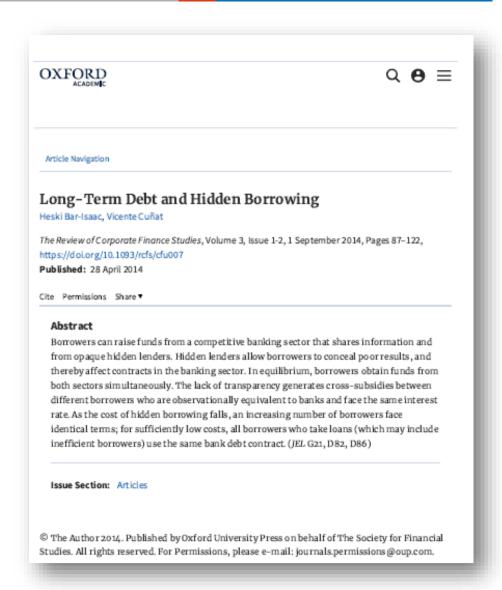


#### NEGATIVE IMPACT OF ASYMMETRIC DATA REGULATION

The exchange of credit information between banks and non-financial companies may affect negatively the efficiency of credit markets when (a) borrowers can borrow from both of them and (b) banks are required to exchange information about their customers but their rivals are not



- Adverse selection problems
- Moral hazard problems



COMPASS LEX<mark>ECON 36</mark>

#### NEGATIVE IMPACT OF ASYMMETRIC DATA REGULATION

 Reduced incentives of banks to invest in information collection and loan screening

## **Information Technology and Financial Services Competition**

Robert Hauswald American University

Robert Marquez

University of Maryland

We analyze how two dimensions of technological progress affect competition in financial services. While better technology may result in improved information processing, it might also lead to low-cost or even free access to information through, for example, informational spillovers. In the context of credit screening, we show that better access to information decreases interest rates and the returns from screening. However, an improved ability to process information increases interest rates and bank profits. Hence predictions regarding financial claims' pricing hinge on the overall effect ascribed to technological progress. Our results generalize to other financial markets where informational asymmetries drive profitability, such as insurance and securities markets.

Informational considerations have long been recognized to determine not only the degree of competition but also the pricing and profitability of financial services and instruments. However, recent technological progress has dramatically affected the production and availability of information, thereby changing the nature of competition in such informationally sensitive markets. This article investigates how advances in information technology (IT) affect competition in the financial services industry, in particular, credit, insurance, and securities markets. We focus on two aspects of improvements in IT: better processing and easier dissemination of information.<sup>2</sup>

We would like to thank Glenn Ellison, Ulrich Hege, Vojislav Maksimovic, and Maureen O'Hara (the editor) for advice that improved the exposition of the article, and participants at the 2001 Econometric Society Summer Meetings and the 2001 European Finance Association meetings for comments. We are especially grateful to two anonymous referees for suggestions that extended the scope of the analysis. All remaining errors are our own. Address correspondence to Robert Marquez, R. H. Smith School of Business, University of Maryland, College Park, MD 20742, or e-mail: marquez@hsmith.umd.edu.

<sup>&</sup>lt;sup>1</sup> The consequences of advances in IT can be seen in the birth of on-line banking, the lowering of economic barriers to entry through better means of communication, and in modern credit and insurance risk assessment techniques such as scoring methods.

<sup>&</sup>lt;sup>2</sup> Shapiro and Varian (1999) also single out these two dimensions of the IT revolution in their discussion of network economies and the role of information in competition. The Federal Reserve Bank of Dallas (1999) estimates that, in the last 30 years, processing power, storage capacity, and transmission speed have multiplied by tens to hundreds of thousands with usage costs falling dramatically.

The Review of Financial Studies Fall 2003 Vol. 16, No. 3, pp. 921–948, DOI: 10.1093/rfs/hhg017 © 2003 The Society for Financial Studies

#### **NEUTRALITY OBLIGATIONS**

#### Strong neutrality

- Platforms ought to employ "neutral" algorithms that determine result rankings based on some "objective" metric of relevance
- Difficult but not impossible:
  - Computer Reservation Systems:
     Amadeus, Sabre

#### Weak search neutrality

- Platforms ought not to give preference to their own content but should instead employ "neutral" algorithms that determine result rankings based on some "objective" metric of relevance
- WSN addresses the so-called own-content bias
- Google Shopping case suggests eemedies are not easy

A.2.2009 EN Official Journal of the European Union L 35/47

REGULATION (EC) No 80/2009 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

of 14 January 2009

on a Code of Conduct for computerised reservation systems and repealing Council Regulation (EEC)

No 2299/89

(Text with EEA relevance)

(9) In order to protect consumers' interests, it is necessary to present an unbiased initial display to users of a CRS and to ensure that information on all participating carriers is equally accessible in order not to favour one participating carrier over another.



#### **PRIVACY POLICIES**

And finally, trust requires good communication so that consumers understand and accept a firm's approach to using their data. By good communication, I don't mean pages and pages of obscure disclosures, disclaimers and consents. I mean short and readable statements which make it clear what firms will and won't do with their customers' data. These need to be developed with consumers, not imposed on them. A number of firms do this already but many do not. Should all businesses have a data charter? Should these be developed through voluntary codes of practice? Will the industry take the lead or should they be a regulatory requirement?



Speaker: Charles Randell, Chair, Financial Conduct Authority and Payment Systems Regulator

Location: Reuters Newsmaker event, London

Delivered on: 11 July 2018

#### DATA SHARING?

#### Competition Policy

- Difficult in Europe:
  - The exceptional circumstances test:
    - Dominance
    - Indispensability
    - Elimination of all effective competition
  - Which remedies?
- Nearly impossible in the US

#### Regulation

- Which info?
- At which price, if any?
- Privacy concerns
  - Opt-out v opt-in clauses?
- Reciprocity?





"Rest assured that your information will not be shared. Now, where can I e-mail the receipt?"

COMPASS LEX<mark>ECON</mark> 40

#### DATA SHARING?

RAND Journal of Economics Vol. 46, No. 1, Spring 2015 pp. 1–22

#### Impact on incentives to screen, loan rates and interest rates

- Depends on price at which information is shared
- At high prices, incentives to screen are increased, loan numbers increased and interest rates fall

# Screening incentives and privacy protection in financial markets: a theoretical and empirical analysis

Jin-Hyuk Kim<sup>2</sup> and Liad Wagman<sup>22</sup>

We study a model in which firms offer financial products to individuals, post prices for their products, and screen consumers who apply to purchase them. Any information obtained in the screening process may be traded to another firm selling related products. We show that firms ability to sell consumer information can lead to lower prices, higher screening intensities, and increased social welfare. By exploiting variations in the adoption of local financial-privacy ordinances in five California Bay Area counties, we are able to provide simple estimates of the effects of stricter financial-privacy laws on mortgage denial rates during 2001–2006. Consistent with the model's predictions, denial rates for home-purchase loans and refinancing loans decreased in counties where opt-in privacy ordinances were adopted. Moreover, estimated foreclosure start rates during the financial crisis of 2007–2008 were higher in counties where the privacy ordinance was adopted.

#### 1. Introduction

Many financial institutions routinely collect nonpublic information about their customers to provide financial products or services. When consumers apply for a loan, for instance, they

Copyright © 2015, RAND.

<sup>\*</sup>Department of Economics, University of Colorado at Boulder. jinhyuk.kim@colorado.edu

<sup>&</sup>quot;Stuart School of Business, Illinois Institute of Technology. Part of this work was completed while visiting at Managerial Economics and Decision Sciences, Kellogg School of Management, Northwestern University. hwagman@stuart.iit.edu

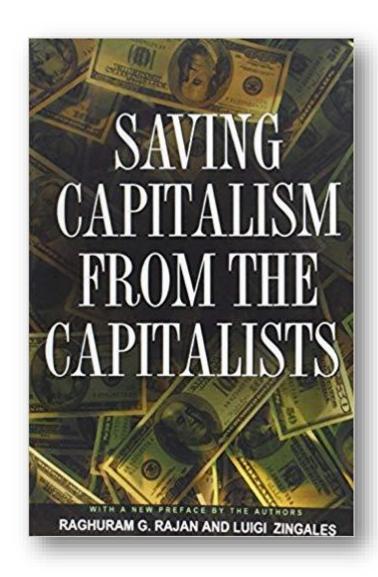
We thank the editor, John Asker, and three anonymous referees for their valuable comments. We also thank Curtis Taylor, Alessandro Acquisti, Jonathan Levin, Nicola Persico, Marciano Siniscalchi, Shane Greenstein, Avi Goldfarb, Catherine Tucker, and Susan Athey for helpful comments and suggestions. We are grateful to seminar audiences at Northwestern Kellogg, Illinois Institute of Technology, University of Alabama, University of Haifa, the National Bureau of Economic Research, the Consumer Financial Protection Bureau, Yahoo Labs, and the International Industrial Organization Conference.

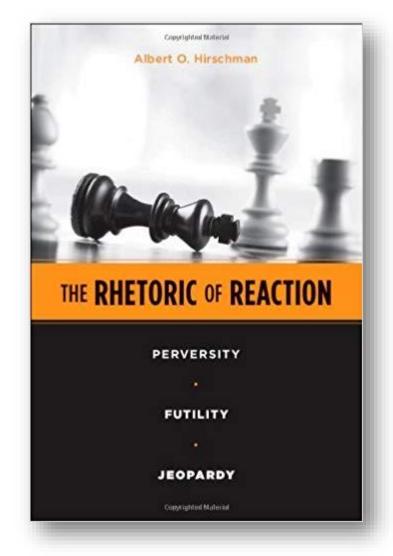
<sup>&</sup>lt;sup>1</sup> "Personally identifiable financial information includes all of the following: (1) Information a consumer provides to a financial institution on an application to obtain a loan, credit card, or other financial product or service. (2) Account balance information, payment history, overdraft history, and credit or debit card purchase information. (3) The fact that

# Concluding Remarks



#### AN IMPORTANT CAVEAT!!





## **THANK YOU!**



## jpadilla@compasslexecon.com

View my research on my SSRN author page: <a href="http://ssrn.com/author=47132">http://ssrn.com/author=47132</a>