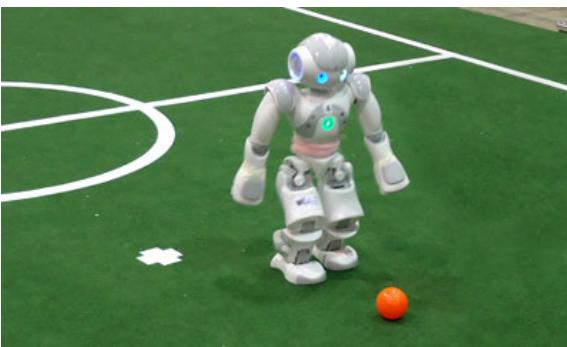


Understanding the future of banking

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Stockholm, October 24, 2018

Technological revolution in banking...



Triple challenges for financial sector

- Financial stability
- Finding sustainable business models and dealing with disruptive forces – FinTech
 - Understanding consumer preferences
- Dealing with society...
 - Trust important, what role to play in society?
 - How will governments manifest themselves?

Uncertainties surrounding these developments, is extra challenge... ‘unknown unknowns’...

Distrust in society is a problem

- See populist movements across the world...
 - Politicians may seek control and that is not (necessarily) good
 - (Perceived) problems created by finance may invite capital controls and harm world trade
 - Rent seeking and (perceived) arbitrary wealth by a few may undermine social fabric...

Casson (1991): “Overall economic performance depends on transaction costs, and these mainly reflect the level of trust in the economy”.

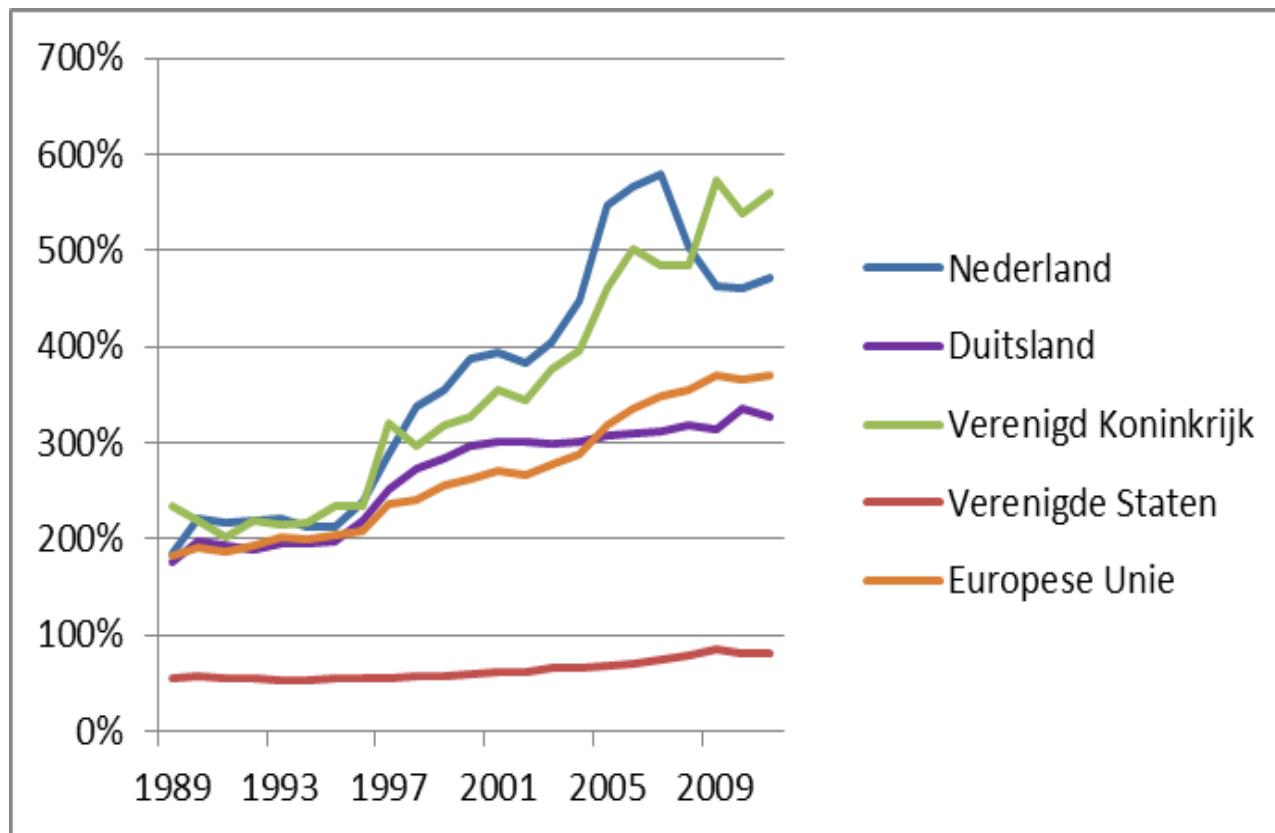
More on trust...

Key:

The presence of social norms and respected social constructs (institutional arrangements, laws, regulations, etc.) that limit the pursuit of self-interest for the common good (Brennan, 1995)

Financial sector became growth industry

Bank balance sheets as percentage of GDP



Yet, financial sector important for economic growth

- Financial sector plays a key role in modern market-based economies
- But: rent seeking problem in financial sector is real, and too much finance can be problematic (Arcand-Berkes-Panniza, Zingales, Philippon, Carlin, etc.)

Business models going forward: Ongoing effort to understand FinTech/ICT (e.g. WEF, 2015-18)

Received guidance from thought leaders across global financial institutions



Conducted interviews and solicited input from subject matter experts



Engaged leaders in academia, government and regulation

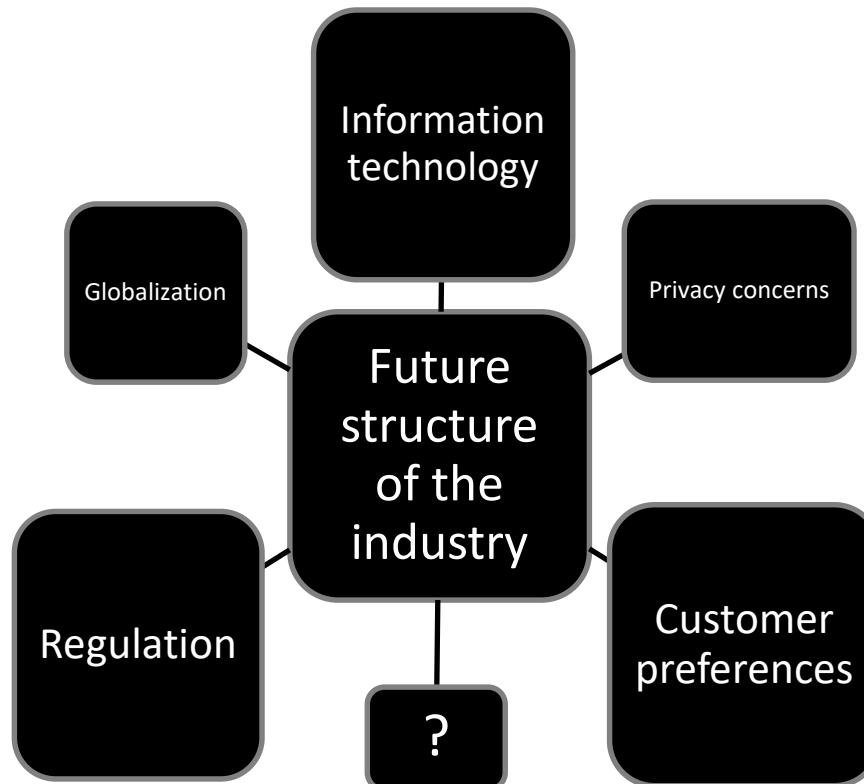


The future: key questions

- What are the main drivers of change in the financial services industry?
- How will information technology reshape the financial services industry?
- What about bank business models going forward?

Change Drivers in Financial Services Industry

- Public regulation, technology and customer preferences are the most fundamental and disruptive forces
- But there are others, e.g. privacy concerns, globalization backlash..



Customer Preferences

- The rise of social media and the desired immediacy of consumer gratification will have implications...
 - Customers desire empowerment and more control over their finances
 - Social media will play a key role in the process of customer engagement
- Building trust and empowerment will be paramount
 - To be successful, banks will need a better understanding of their customers and to tailor product offers accordingly

Government regulation

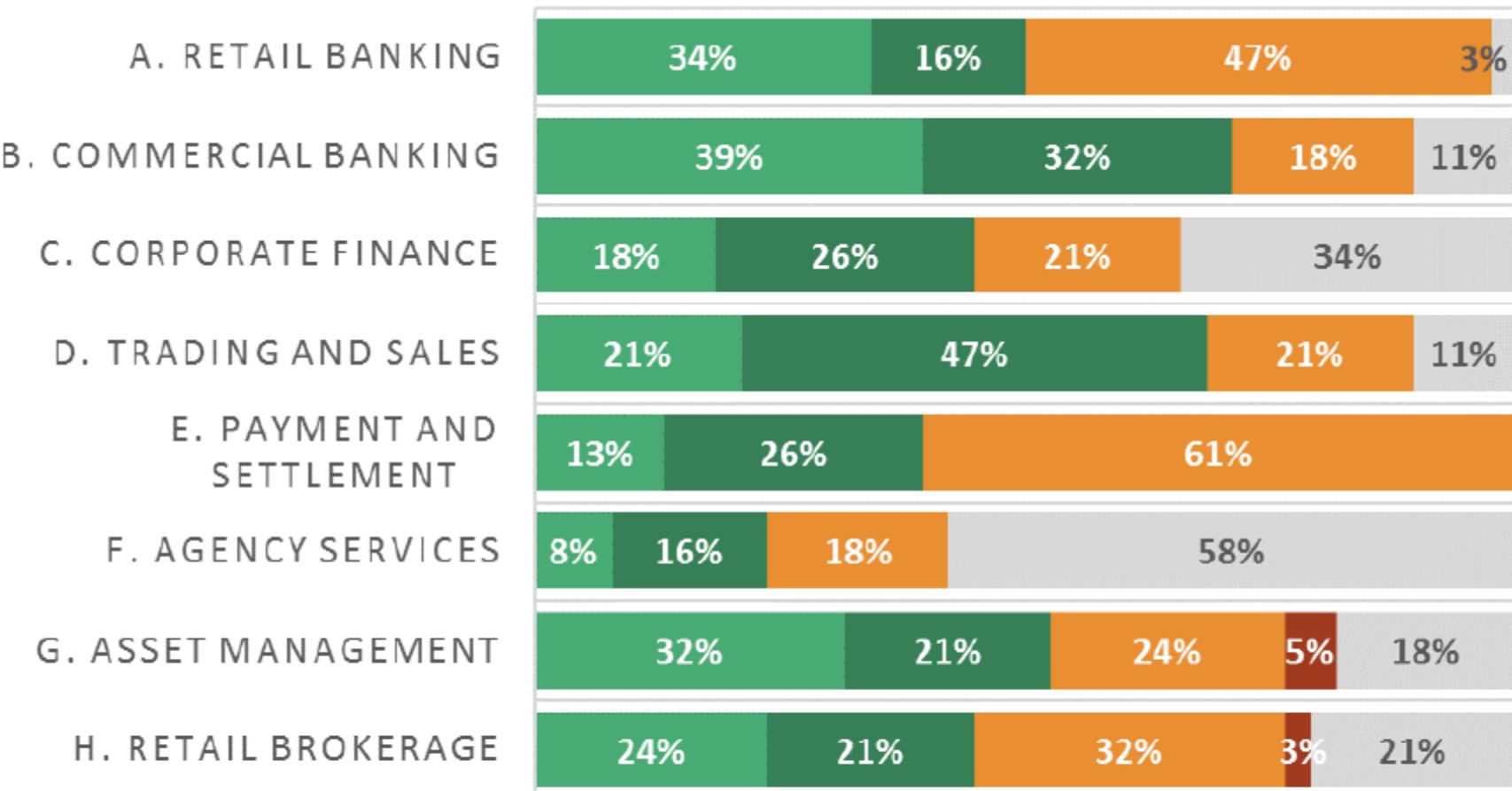
- Trend towards more intrusiveness is likely to continue with structural implications for the industry
 - At the detriment of incumbents? Or does it protect them?

Information technology/FinTech

- Major changes are evident in distribution systems and the way financial institutions interact with their clientele
 - From product to customer orientation
 - Use of data
- There are new disruptive players on the periphery that challenge existing practices and institutions
 - Specialists in payment and transaction services, including role Apple, Paypal, etc.
 - Disintermediation via more direct interactions, e.g. P2P?
 - More...

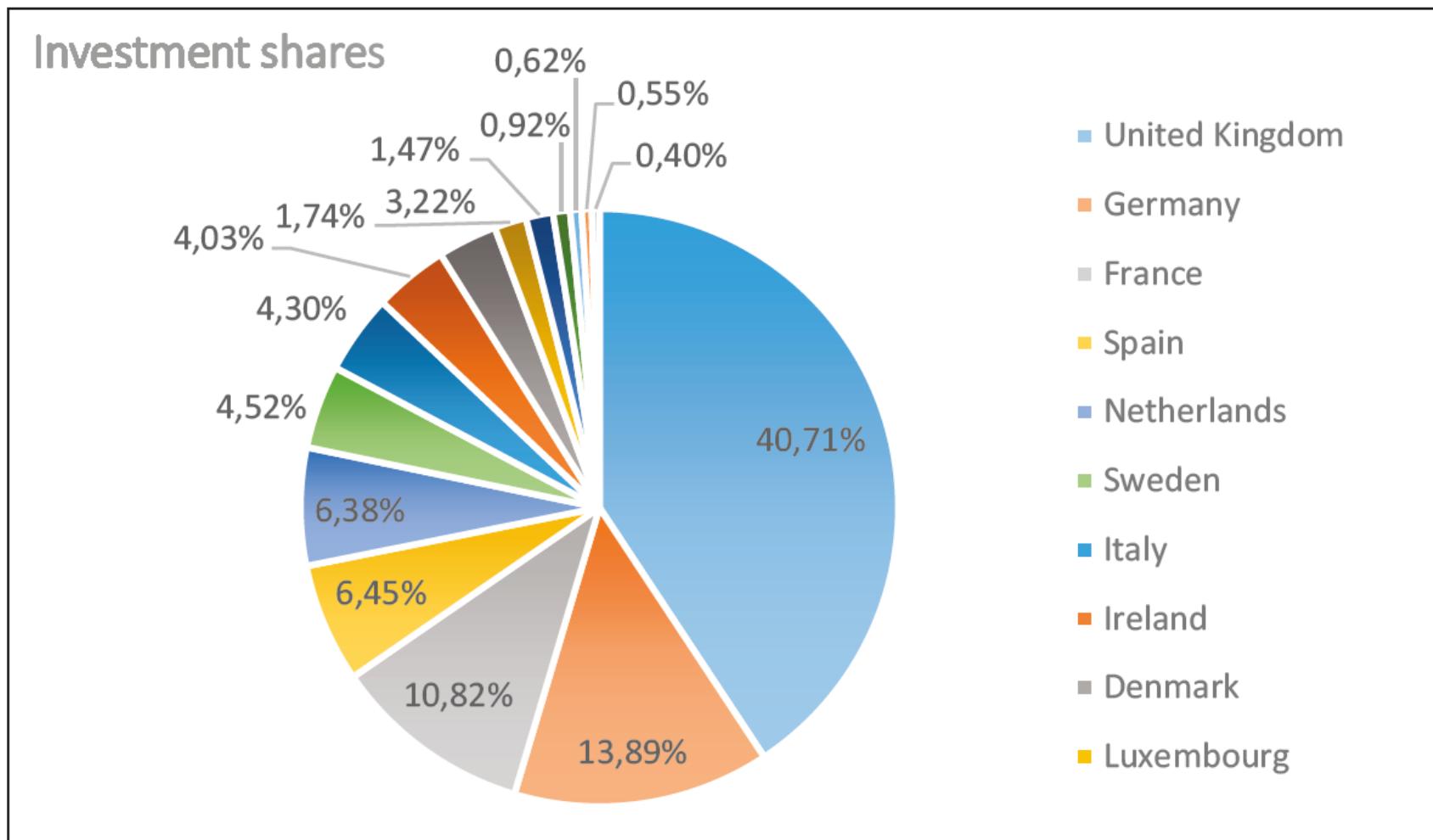
Survey among incumbent banks (EBA survey)

How do you see FinTech affecting your business model?



- Opportunity to increase revenues
- Opportunity to decrease costs
- Threat to decrease revenues
- Threat to increase costs
- No impact / not relevant

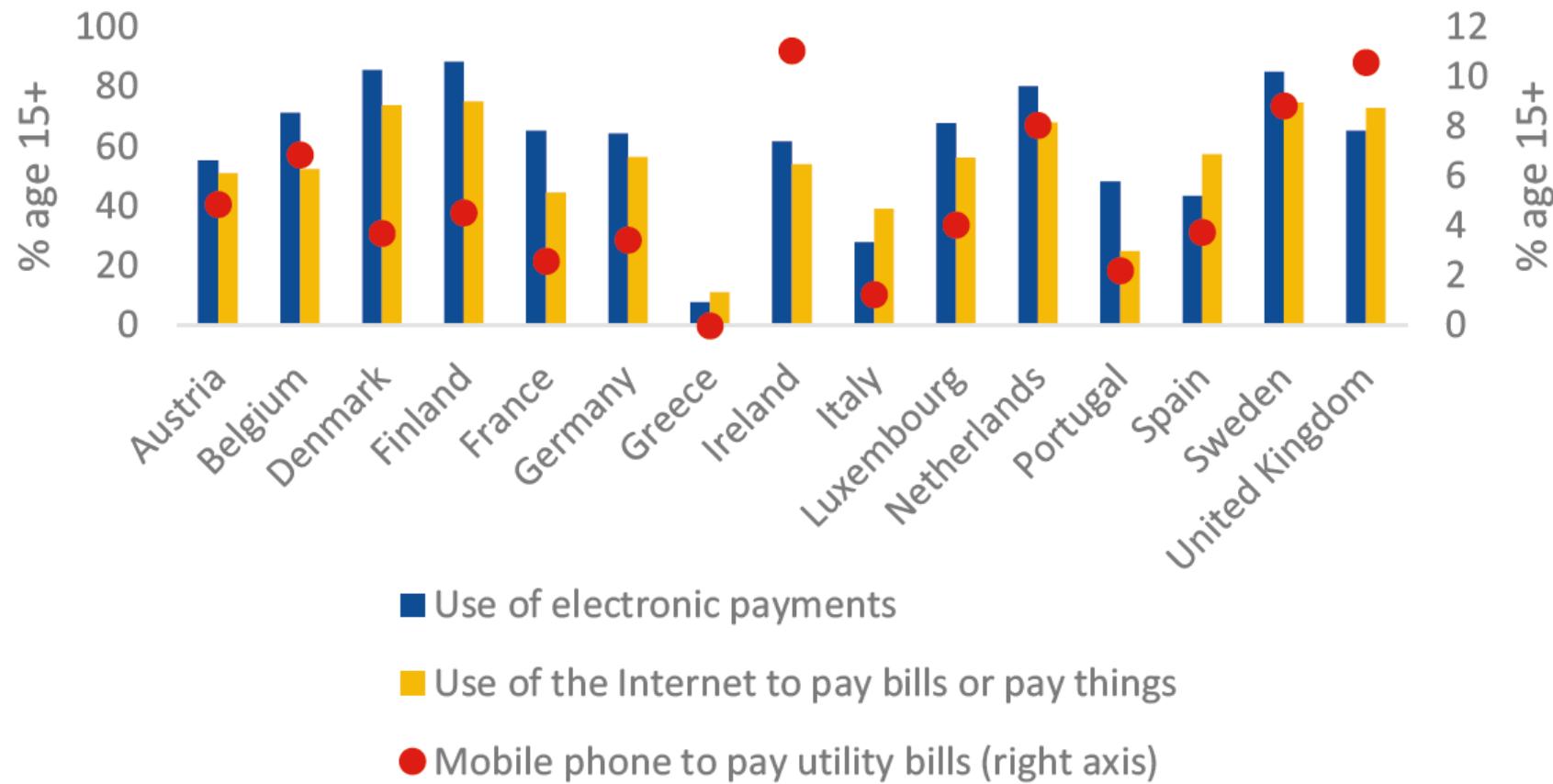
Investment shares in FinTech among EU countries



Source: Own elaboration based on data from CBInsights (available at: <https://www.cbinsights.com/>). Country shares of total investment in FinTech companies between 2011Q1 and 2017Q3.

Not all countries are equal: electronic payments

Use of electronic payments



Source: Own elaboration based on the World Bank's survey on Global Financial Inclusion (available at: <http://www.worldbank.org/en/programs/globalfinindex>) database. The vertical axis represents percentage of respondents aged 15 or more. Electronic payments are those initially processed and received electronically, beyond the traditional payments systems provided by the banking industry.

Platforms and demand aggregators

- Disaggregation of the value chain could follow from online platforms becoming the preferred customer interface (threat of BigTech)
- Financial services platform might act as a market place where people interact directly
 - P2P lending platform could reduce search costs
 - New specialized lenders that implements sophisticated algorithms based on Big Data analyses have come up

→ This could (partially) replace relationship lenders

FinTech truly disruptive

- Yes: big data and data analytics truly change the picture
 - Examples.... (lending examples, robo asset management, etc. [Berg et al (2018)])

Yet:

- EBA (2018): “At this stage, FinTech firms do not seem to be in direct competition with incumbent institutions”
- And things do not always seem what they are, see P2P: involvement banks important

Are banks doomed?

- Banks are not passive observers, i.e. they are active participants in FinTech
 - IDC, 2016 → banks biggest investors in data and data analytics
- Banks have competitive advantages
 - Banks benefit from the anxiety of people about the safety of their money
 - Regulation, including TBTF concerns, give funding cost advantages (other developments surrounding data mixed impact, PSD2, GDPR)

See also, Boyd and Gertler (1994): “Are banks dead? Or are the reports greatly exaggerated?

- The core functions of banks in the lending process – origination (including screening), servicing and monitoring – do not just disappear

Bank strategy

- Legacy issue serious.... (compare to state carriers versus discount airlines...)
 - Not just IT but everything.... People, overhead, etc.
 - Note that Swedish banks have done well on average
- Tactical issue, how to deal with FinTech
 - Yes/no collaborate with new entrants? And how? Partner or perish???

But what business models can we envision?

Bank business models going forward

- Keep in mind: decision making under fundamental uncertainty is challenge → moving to more flexible organization key...
- We will see intermediate strategies that say little about the long term, e.g. tendency to create dinosaurs' and in this way 'optimize' political backing to preserve turf...
- Long term business models will be different

Three business models...

- A very, very few banks may play leading role in the FinTech eco-system (centrality, open architecture, constantly interacting, and changing in sync with players around it)
 - May go beyond financial services
- More traditional niche strategy around high(er) value services for businesses, trusted advisor type role
- Lean and mean, low cost, simple services/products financial services provider

Conclusion

- The interaction of technology, regulation and customer preferences will radically reshape the financial institutions of the future
- While Swedish banks have adjusted early to the digital realities, going forward their position will be challenged

And the relationship between finance and society has to be reestablished

- There is a (perceived) disconnect between the financial and real economy

Interrelationships Between Drivers for Change

- The drivers for change are very much interrelated
 - For example, social media that play a role in shaping customer behavior are products of information technology
- Information technology may facilitate regulatory arbitrage, necessitating a regulatory response
- The proliferation of social media could potentially elevate systemic risks through herding behavior that leads to bank runs
- A common element behind all drivers for change is that all have a level of unpredictability that has elevated uncertainty about the future nature of banking