# Digital Finance Platforms, BigTech and FinTech 4.0

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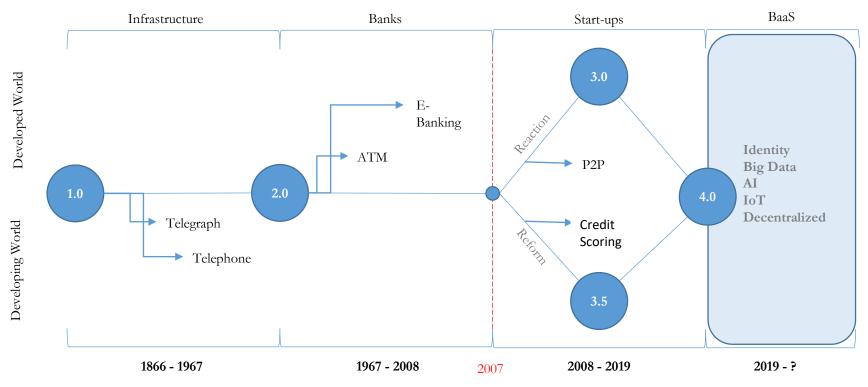
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# Looking back, looking forward

- Finance in the 2010s
  - Global Financial Crisis
  - Regulation
  - Technology
- Finance in the 2020s
  - Sustainability
  - Technology
  - Globalization vs fragmentation
- FinTech / RegTech

#### The Evolution of FinTech:

#### https://papers.ssrn.com/sol3/papers.cfm?abstract\_id=2676553





#### **Options**

Traditional framework: permissive / restrictive, rules / principles, risk-based

Pre and Post-Crisis environment: innovation and Volcker

Doing nothing: permissive / restrictive, intentional / unintentional

Cautious exploration: forebearance / leniency

Structured experimentation: sandboxes

Regulatory design: payments, crowdfunding

Regulation of DFS in China: <a href="http://ssrn.com/abstract=2660050">http://ssrn.com/abstract=2660050</a>

Regulatory Sandboxes: <a href="https://ssrn.com/abstract=3018534">https://ssrn.com/abstract=3018534</a>



## US vs Europe vs China: Evolution of NBF

- US:
- <u>Digital Finance Platforms: Toward a New Regulatory Paradigm by Dirk A.</u> Zetzsche, William A. Birdthistle, Douglas W. Arner, Ross P. Buckley:: SSRN
- EU:
- The Future of Data-Driven Finance and RegTech: Lessons from EU Big Bang II by Dirk A. Zetzsche, Douglas W. Arner, Ross P. Buckley, Rolf H. Weber :: SSRN
- China:
- Regulation of Digital Financial Services in China: Last Mover Advantage by Weihuan Zhou, Douglas W. Arner, Ross P. Buckley :: SSRN

## EU Big Bang II?

- MiFID 2: Markets in Financial Instruments Directive 2 transparency across markets
- GDPR: General Data Protection Regulation
- PSD 2: Payment Services Directive 2 open API banking
- eIDAS Regulation

## Finance in the 2020s: Pandemic Impact

- Technology
  - Digitisation: track / trace / test / ecommerce etc
  - BigTech / scale
  - Infrastructure
  - CBDCs
  - Techrisk
- Sustainability
  - Development
  - Travel
  - Small businesses
  - Future crises: resilience? (jared diamond): digital ID / simplified account opening / eKYC / electronic payment (CBDCs?)
- Globalisation / fragmentation
  - Trade patterns
  - Movement
  - Finance / money
  - Geopolitics

Technology is no longer the constraint in an increasing range of cases.

- Regulating Libra: The Transformative Potential of Facebook's Cryptocurrency and Possible Regulatory Rsponses:
- https://papers.ssrn.com/sol3/papers.cfm?abstract\_id=3414401

#### **Implications**

Main current concerns of policymakers and industry arise not from the technology itself but from the question of *who* is applying technology to finance along with the *speed* of development.

An evolutionary approach to create a framework of understanding is necessary to understand the implications for established financial institutions, IT companies, start-ups and regulators alike.



### Regulatory challenges

New emerging FinTech companies often have limited track records regarding their business (eg risk management, liquidity and profitability) and difficulty identifying their obligations (eg applicable regulations or licences).

For regulators, these early-stage companies represent a limited prudential & consumer risk. However, exponential company growth can create "risk blind spots". Additionally, frequent failures or fraud can impact market or investor confidence.

Too Small		Too Large		Too Big
to Care	Tacit acceptance	to Ignore	Licensing obligation	to Fail



## **COVID** Impact

Digitisation

- RegTech / SupTech: digital reporting
- AML / market integrity?
- Payments / CBDCs?
- BigTech / data

#### TechRisk

- <a href="https://papers.ssrn.com/sol3/papers.cfm?abstract\_id=3478640">https://papers.ssrn.com/sol3/papers.cfm?abstract\_id=3478640</a>
- Cybersecurity
- Data: protection / security / privacy
- Infrastructure: data / cloud
- TechFin

## BigTech / TechFin

- Network effects
- Regulation: new SIFIs
- Competition / antitrust
- Non-traditional infrastructure

• <u>BigTech and Platform Finance: Governing FinTech 4.0 for Sustainable Development by Douglas W. Arner, Ross P. Buckley, Kuzi Charamba, Artem Sergeev, Dirk A. Zetzsche :: SSRN</u>

## Non-traditional infrastructure

- Data
- "financial operating systems": Aladin
- Cloud: FinTechs, incumbents, SIFIs, BigTech / TechFin
- New infrastructure: blockchain
- Libra, stablecoins, CBDCs, public-private: Utility Settlement Coin (USC)

## RegTech / SupTech?

- Use of technology particularly IT for regulatory implementation, compliance and monitoring, by regulators, supervisors, market participants, infrastructure providers and others
- A subset of Fintech? No uses across all sectors
- Vs Suptech? A subset of Regtech, focusing on supervisory uses
- Regtechs? Typically startups but by no means the major industry players eg IBM Promontory, LSE Refinitiv, NASDAQ, Amazon ...

#### **EU DFS**

- removing fragmentation in the Digital Single Market
- adapting the EU regulatory framework to facilitate digital innovation
- promoting a data-driven finance
- addressing the challenges and risks with digital transformation, including enhancing the digital operational resilience of the financial system

## The Data Challenge

- US
- EU
- China

• The Transnational Data Governance Problem by Douglas W. Arner, Giuliano G. Castellano, Eriks Selga :: SSRN