BANCO DE ESPAÑA
Eurosistema

TECHNOLOGY AND FINANCE: NEW RISKS PLUS NEW CHALLENGES OR TRADITIONAL RISKS IN NEW SUITS?

Ángel Estrada
Director General, Financial Stability, Regulation and Resolution

CITY WEEK "MEETING GLOBAL CHALLENGES THROUGH INNOVATION"

Guildhall, London
26th April 2023

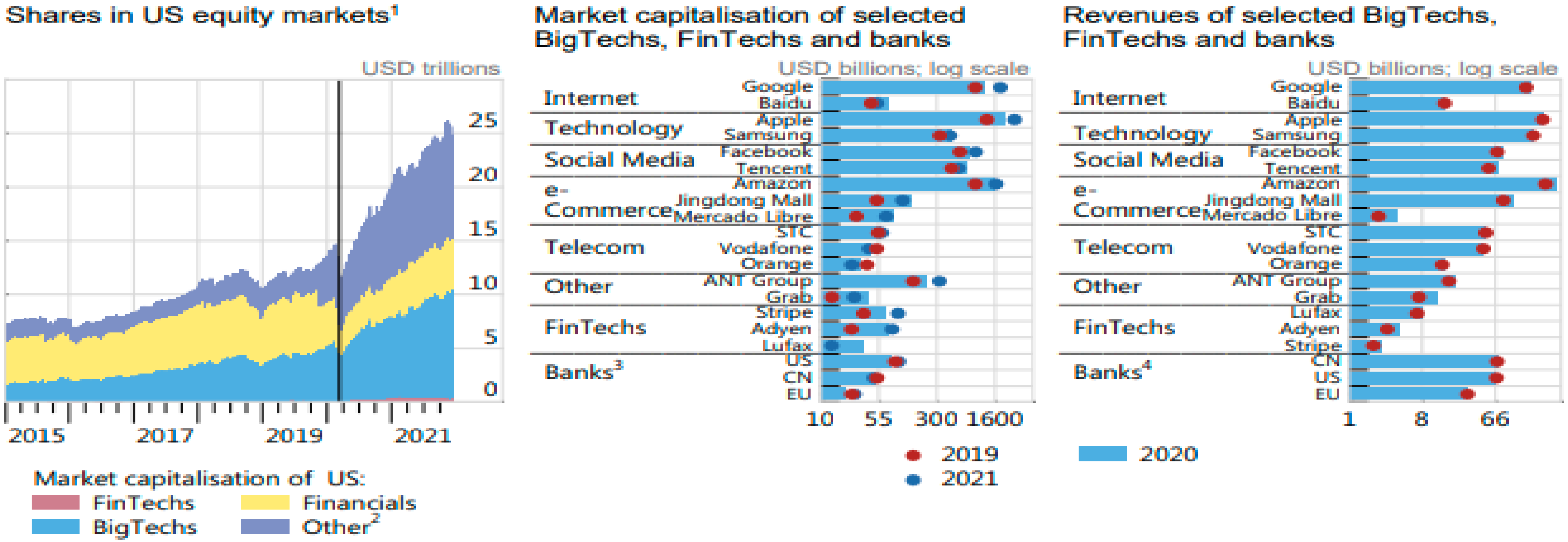
1. Introduction
2. How technology is changing the financial system
3. Key risks plus levers to address them
4. Conclusion

New assets (unbacked crypto-assets, stablecoins and tokenised traditional assets)

New players (FinTechs and Bigtechs)

BANCO DE ESPAÑA
Eurosistema

Performance of BigTechs, FinTech and incumbents during Covid-19 **Graph 1**



[1] The vertical line denotes 11 March 2020, when the WHO characterised Covid-19 as a pandemic. [2] Calculated as the market capitalisation of S&P 500 and Nasdaq minus the market capitalisation of FinTechs, BigTechs and financials. [3] Many FinTechs are not publicly listed. In these cases, data on market capitalisation and revenues are drawn from news sources. [4] Average market capitalisation of banks in the S&P 500 index, EuroStoxx Banks index and Shanghai Composite index. [5] Average revenue, weighted by market capitalisation, of banks in the S&P 500, EuroStoxx Banks index and Shanghai Composite index.

Sources: Bloomberg, Eikon, S&P Capital IQ; FSB calculations.

New tools (artificial intelligence and machine learning)

BANCO DE ESPAÑA
Eurosistema

Prevalence of data, innovation, RegTech, and SupTech strategies amongst supervisors

Authorities with one or more strategies in place are shaded in blue — **Graph 4**

Source: FSB survey

Technology brings both potential benefits and risks

BANCO DE ESPAÑA
Eurosistema

- Cost-benefit analysis:
  - First obstacle, data scarcity: need for international cooperation across relevant authorities
- Potential benefits, including:
  - Financial inclusion, deeper reach to underserved customers
  - Efficiency gains, lower costs, time-saving solutions
  - Enhanced data analytics, combining big data with AI/ML

Some levers have been developed for addressing the new assets' risks

- Crypto-assets:
  - Unbacked crypto-assets
  - Stablecoins
  - Tokenised traditional assets

Levers

- Warnings to customers/investors
- International – FSB principles for Global SC
- European – MiCA Regulation
- EU COM pilot regime

➢ *CBDC developments could have important implications for the financial system and would warrant a dedicated keynote speech*

The risks to the banking sector are both direct and…

- Exposure to crypto-assets
- Operational risk (including third and fourth-party dependencies)
- AI/ML explainability and accountability

Levers

- BCBS prudential treatment of crypto-asset exposures
- PSMOR/POR and EU DORA
- Risk management and supervisory guidance and oversight

…indirect

- Competition
- Business model sustainability
- Digital fraud

- Macro perspective: lack of a broad toolkit

Levers

- Entities vs activities regulation
- Same business, same risk, same rules
- Cyber-risk controls, financial and digital education for customers

New risks plus new challenges? Or traditional ones in new suits?

- Rapid development, cost-benefit analysis is needed, including how regulation can mitigate risks. Need to fill in data gaps for the monitoring and identification of risks.

- Efficiency gains, but also risks.

- Traditional risks such as liquidity runs, with higher systemic risks as a result of the use of technology (higher speed and coordination).

- Same business, same risk, same rules, plus a cautious initial approach.

- Need to keep up with the pace of developments on the regulatory and supervisory side, including from a macroprudential perspective.

- But risk management and industry awareness will continue to be key.

BANCO DE ESPAÑA
Eurosistema

Thank you for your attention