

The bank business model in the Post-Covid-19 World

The Future of Banking 2

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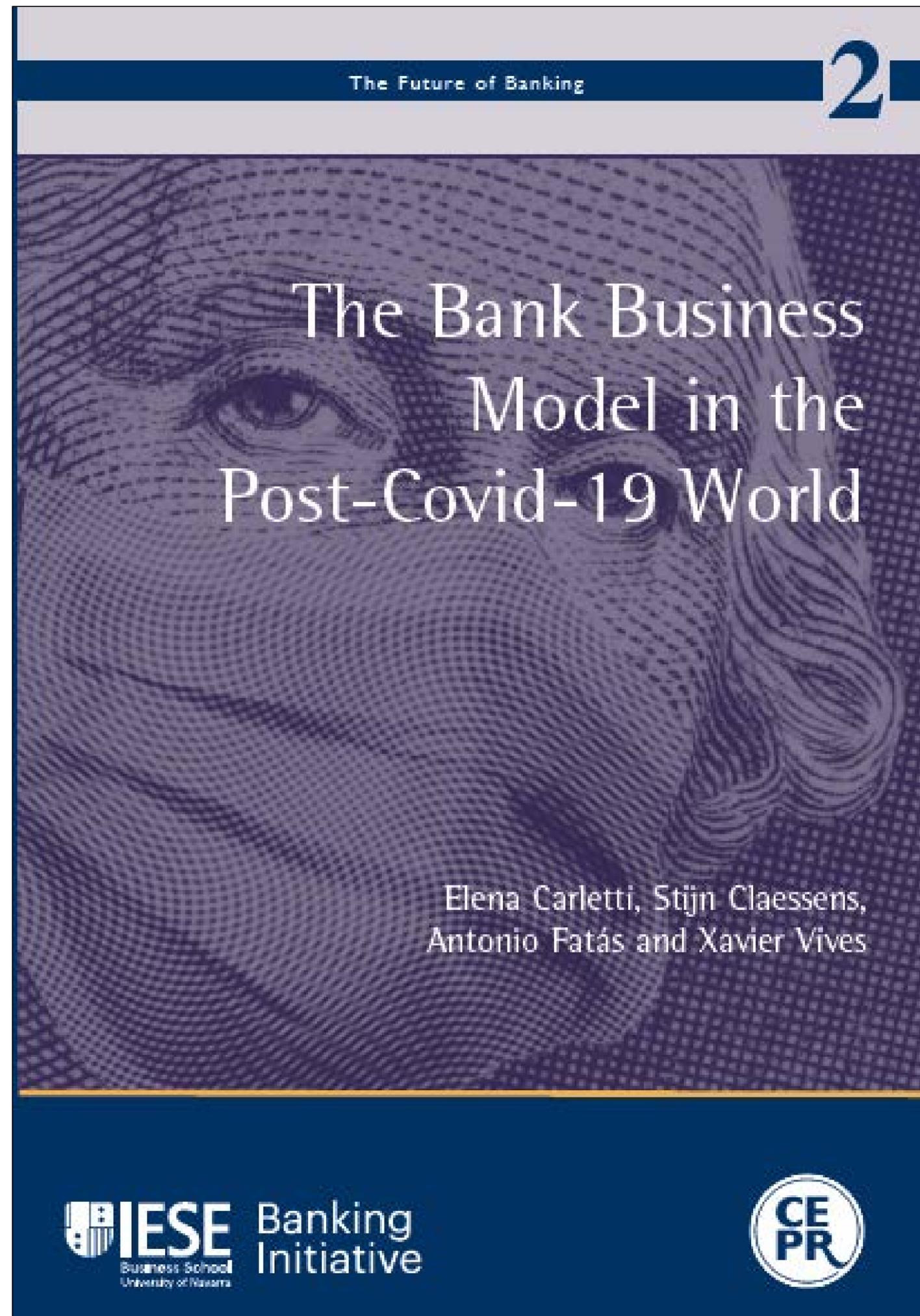
**Banking
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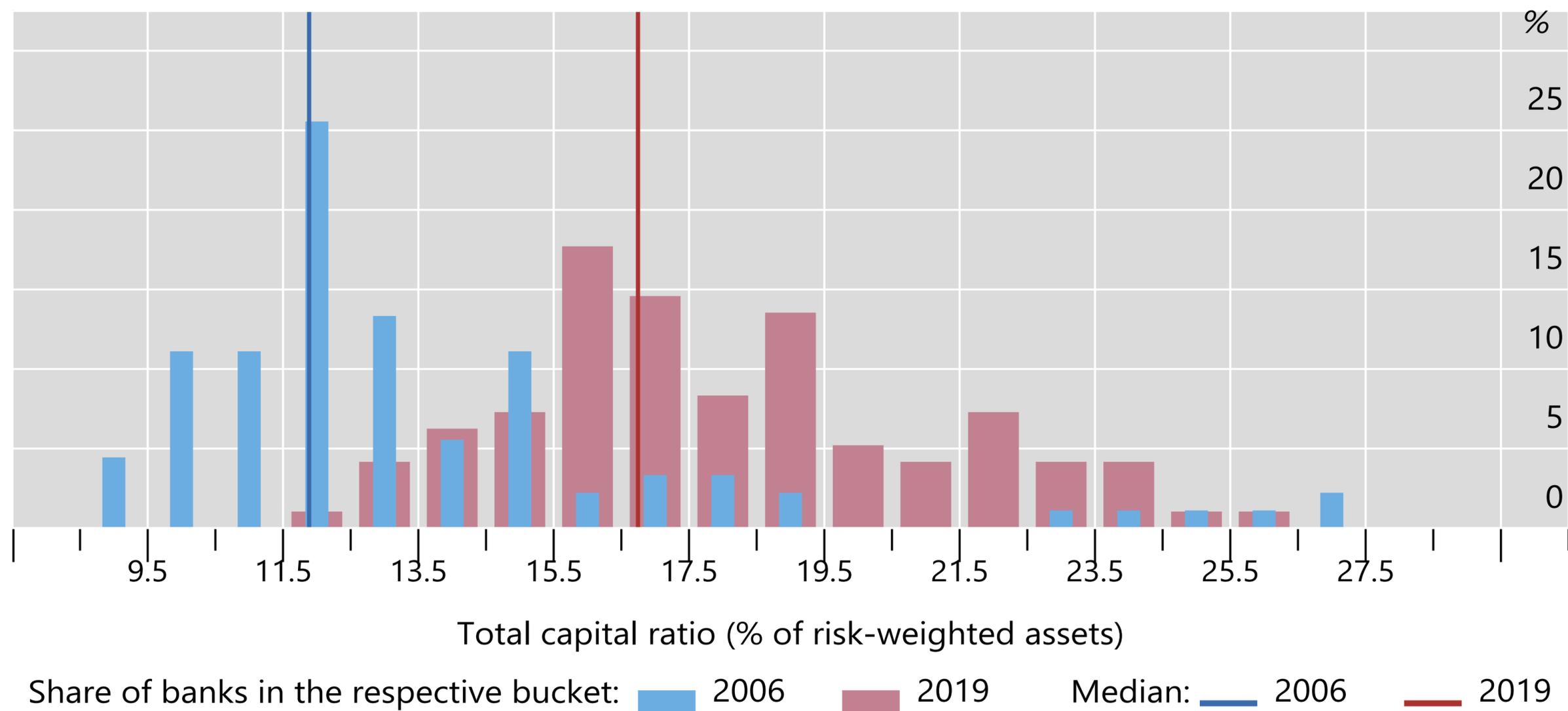


The banking industry pre-Covid-19

- Bank capitalization much stronger than before GFC, but..
- Low profitability and low price to book ratios, esp. of banks in Europe, Japan, ...
- Earlier shocks lingered on
 - Deleveraging/legacy assets from crises, damaged reputation
- Banking business models threatened by
 1. Low rates, modest economic growth
 2. Tighter regulation and compliance requirements
 3. Digital disruption
- Decade ago, ten largest banks were in Europe and US, currently six are Asian
- Capitalization dwarfed by BigTechs'

Banks entered the crisis with higher capital...

In per cent¹

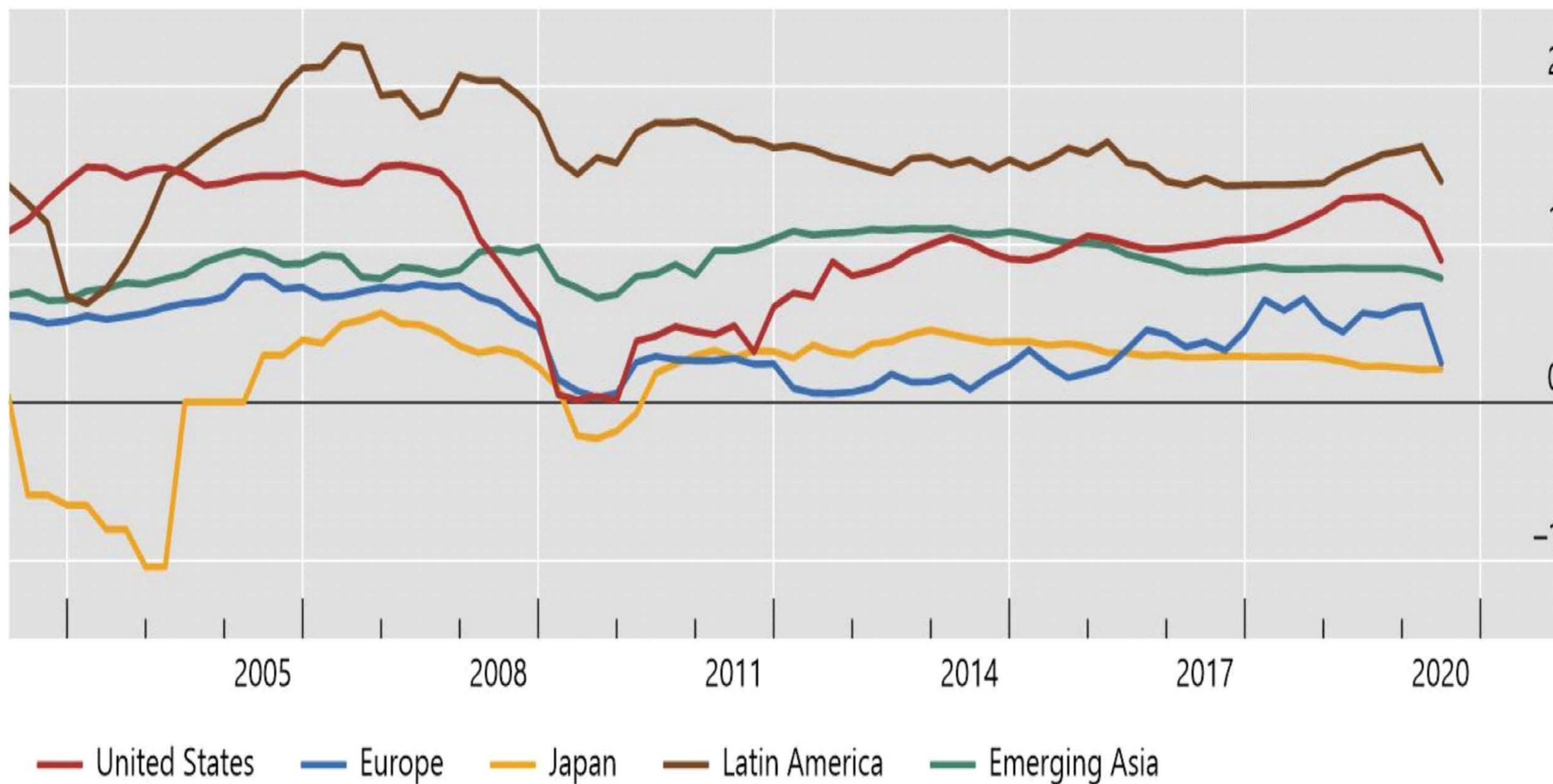


¹ Based on a balanced sample of 135 large banks. The increase in capital ratios is likely to be higher than portrayed due to more stringent rules on regulatory capital and risk-weighted assets introduced after the GFC.

Source: U Lewrick, C Schmieder, J Sobrun and E Takáts, "Releasing bank buffers to cushion the crisis – a quantitative assessment", BIS Bulletin, no 11, May 2020.

But return on assets remains low, esp. in Europe, Japan

Return-on-assets,¹ in per cent

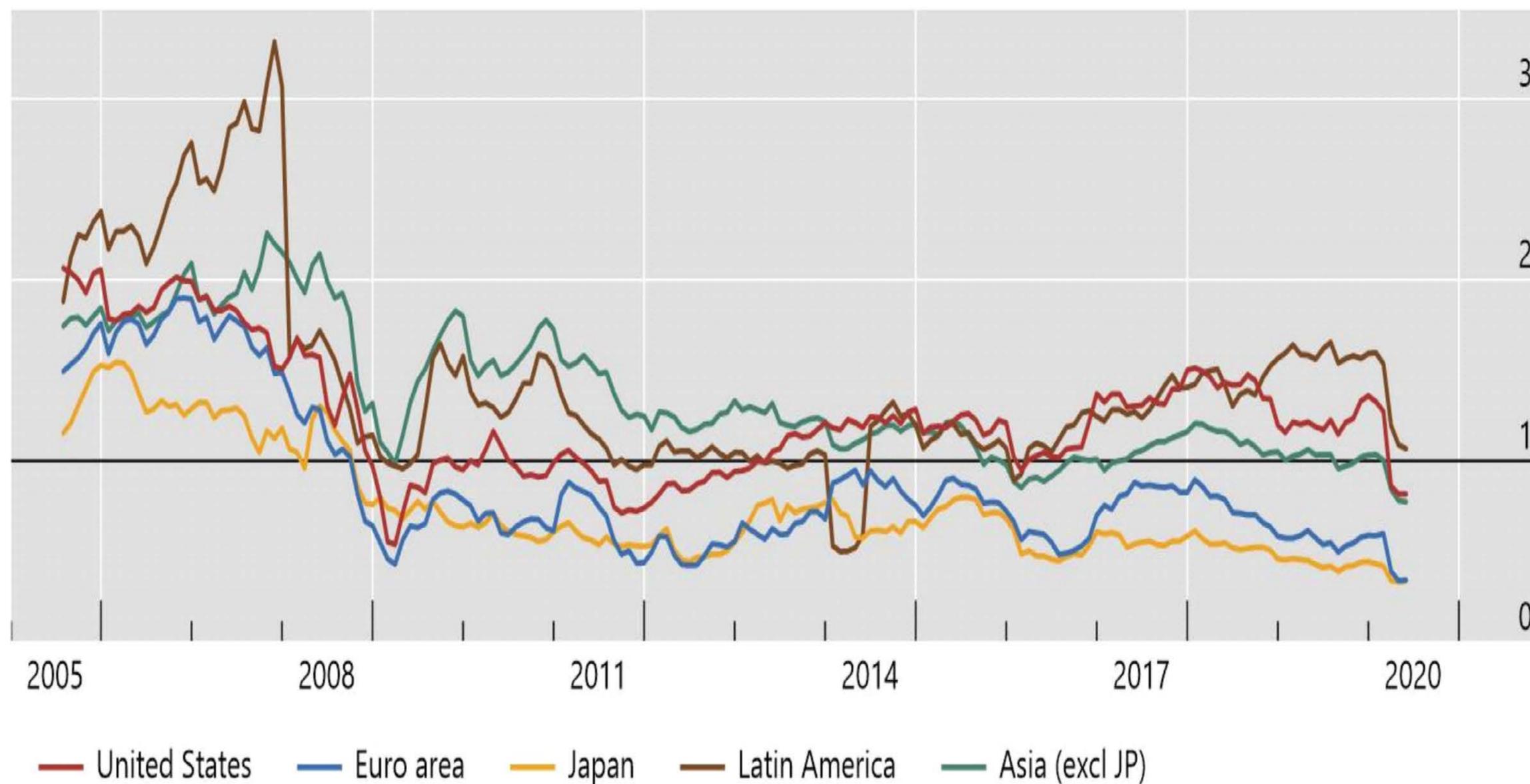


¹ Weighted average based on total assets.

Sources: Datastream; BIS calculations.

Bank price-to-book ratios esp. low in Europe and Japan

Price-to-book ratio¹



¹ Monthly averages of daily data.

Sources: Datastream; BIS calculations.

Reasons for different profitability post-Covid

■ Pre-Covid world

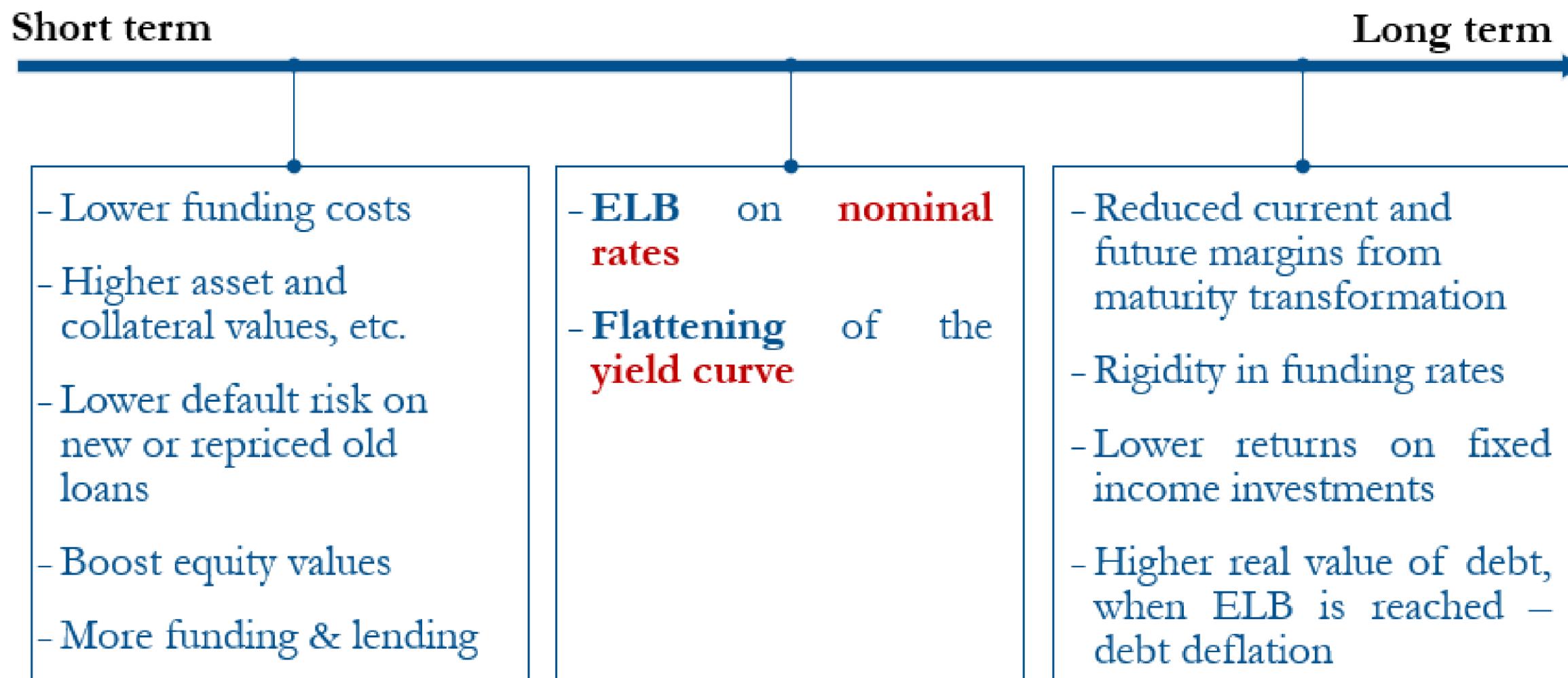
1. Low rates, modest economic growth
2. Tighter regulation and compliance requirements
3. Digital disruption

■ Post-Covid world

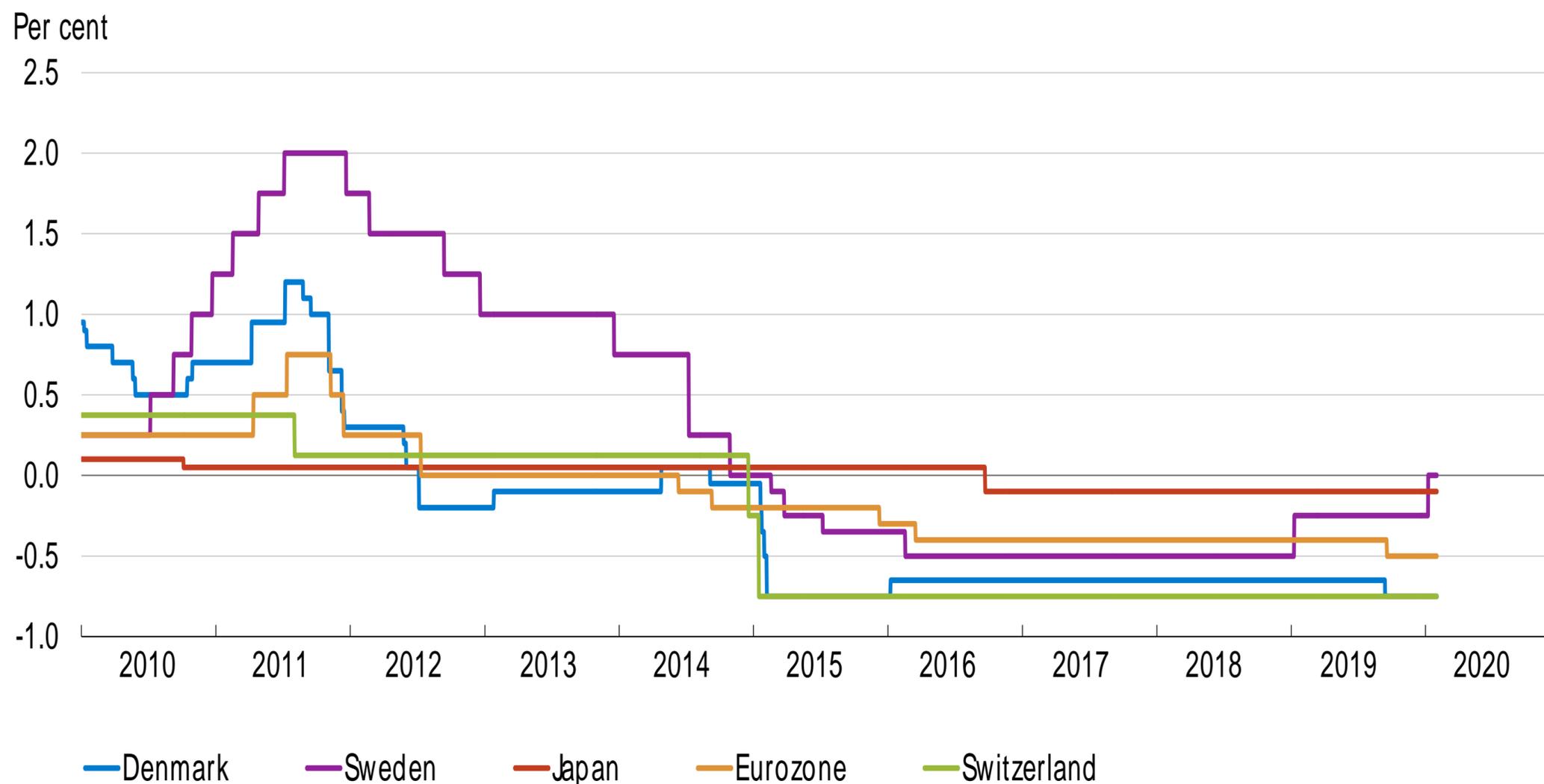
1. Lower interest rate for longer; Worse economic landscape; Higher non-performing loans
2. Lower regulatory burden
3. Accelerating digitalization

First challenge: Low/negative interest rates, low growth

- Prolonged period of **low interest rates** possibly due to structural reasons, with low **consumption, investment** and **output growth**
 - **Flat yield curve** and **compression of margins**
 - **Positive** effects in **short term**, but potentially **adverse** in **long term**



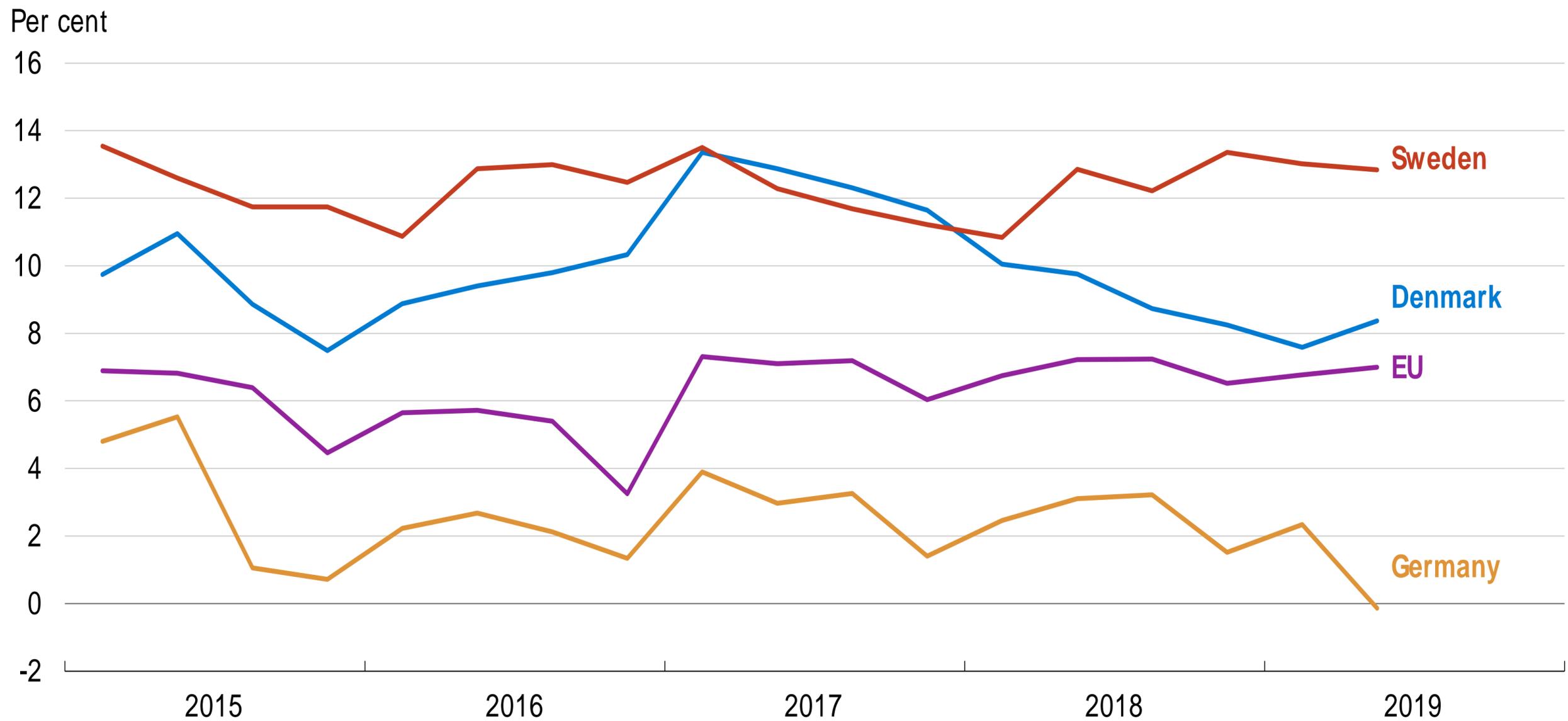
Negative interest rate and tiering policies



Source: Thomson Reuters Datastream

- Pressure on profitability and lending margins (ZLB on deposits)
- Tiering policy – to deal with side effects – not fully offsetting

ROEs differ across EU banks



Source: EBA

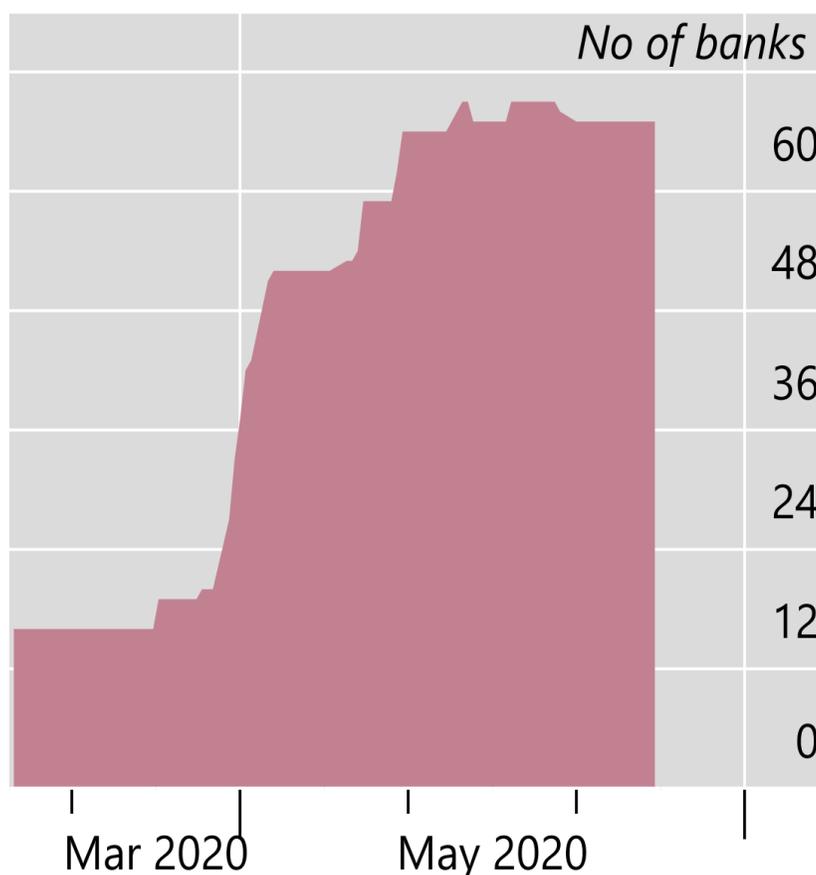
- Suggest differences in business models

Banks are under further pressure due to Covid-19...

Provisions spike¹



Rating outlooks deteriorate²



Banks' stock underperform



Banks' loan loss provisions:

- United States
- Other AEs
- European AEs
- EMEs

■ Banks' negative rating outlook

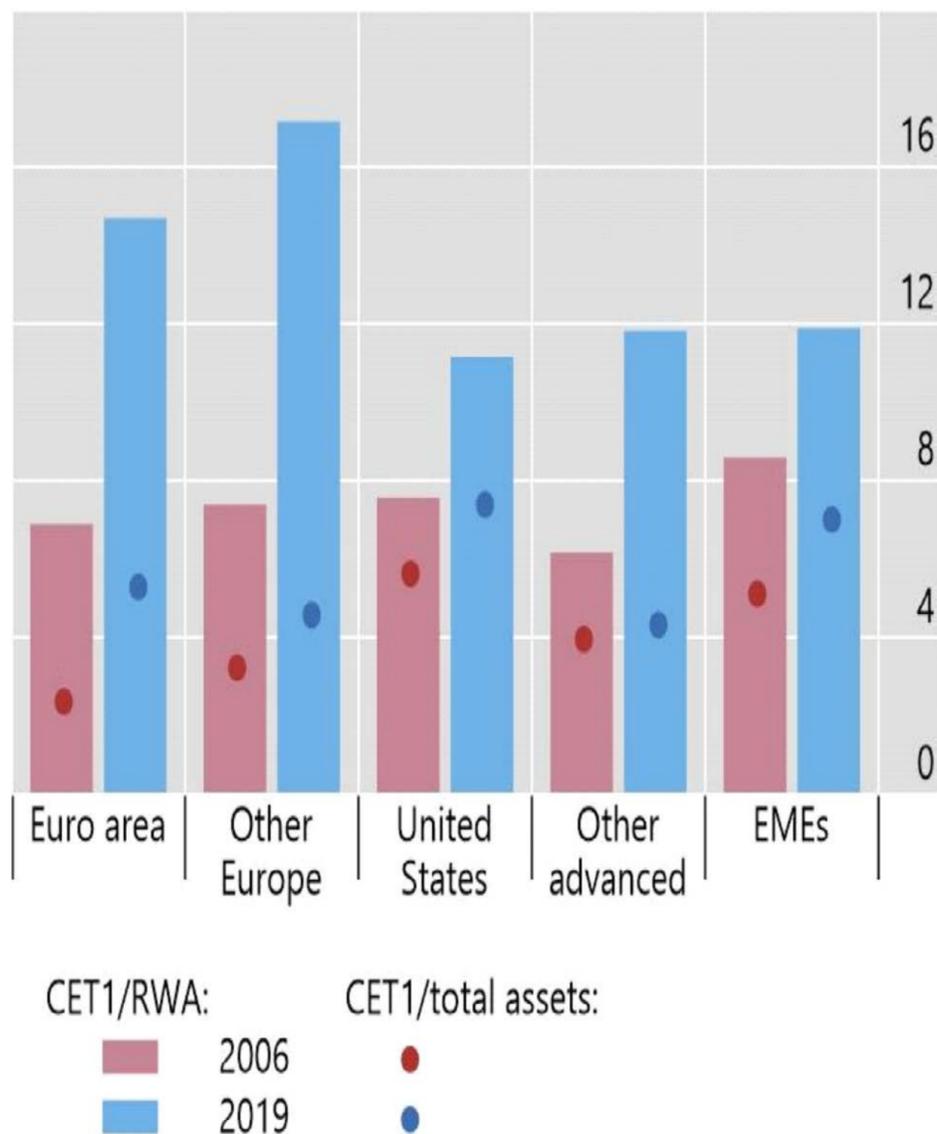
Equity index: — World — Banks

¹Sum of quarterly loan loss provisions across sample of banks. Due to data unavailability, data for reclassified impairment of loans used for several banks. Due to newly introduced expected loss provisioning standards, a break in the series is expected which could show up in different periods across countries, starting in 2018. ² Fitch long-term rating outlook for a constant sample of 108 banks. Rating outlooks were fairly stable in the months leading up to March 2020.

Sources: I Aldasoro, I Fender, B Hardy and N Tarashev, "BIS Bulletin, no 12, May 2020; Datastream; FitchConnect; SNL.

Second challenge: Tightening of regulation

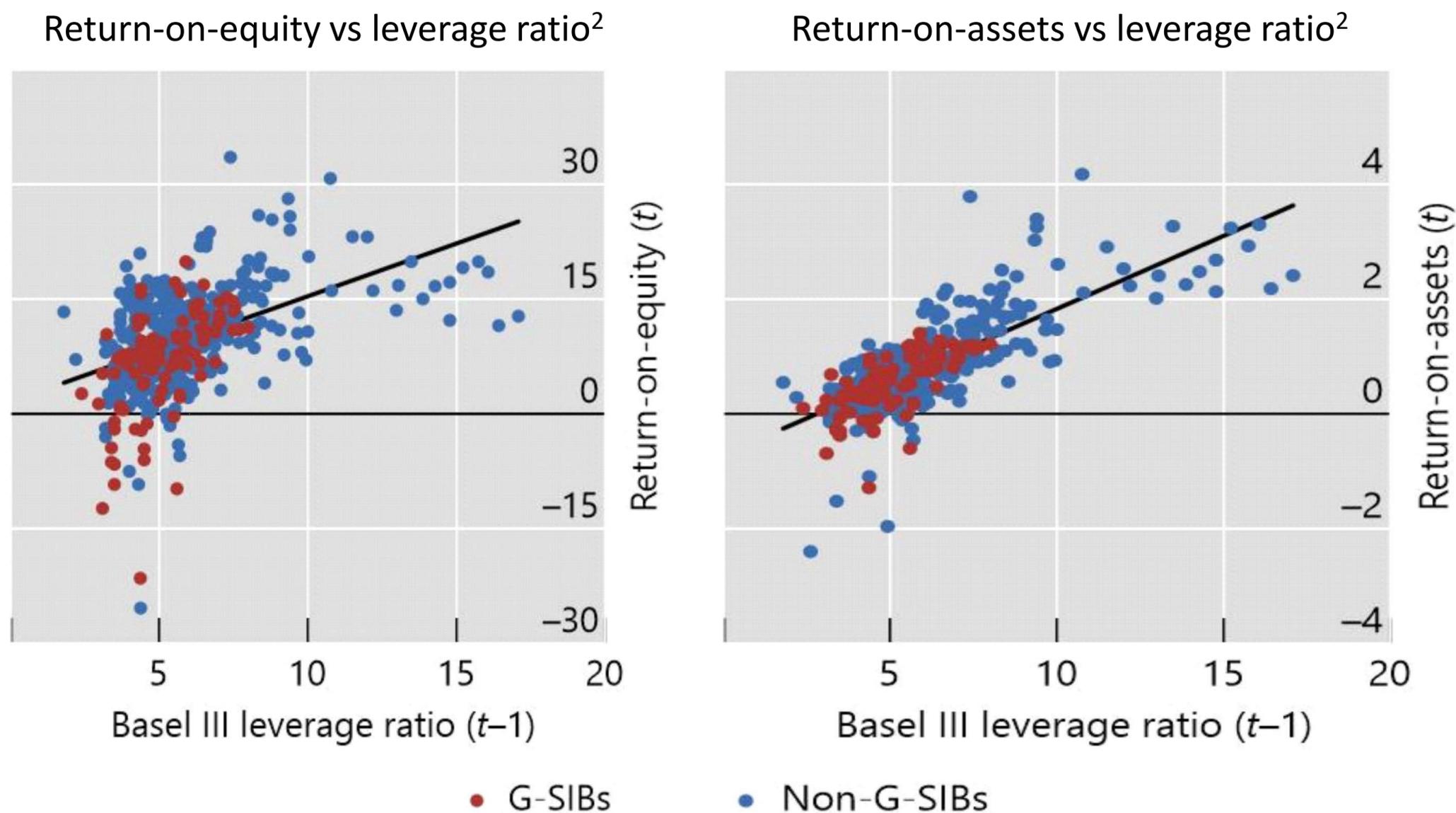
Bank capital ratios
Median ratios, in per cent



Sources: SNL; BIS calculations.

- Main regulatory changes
 - **Capital, liquidity, resolution, bail-in**
 - More macro-prudential policies
 - More intensive supervisory oversight
- Banks **much safer**, better capitalized
- But faced **costs** in the transition
- Consequences
 - Some argue impact on **profitability**
 - **Credit reallocation** towards non-banks

But higher capitalization does not mean lower profits



1 Balanced sample of 85 banks. 2 2000–18 annual data, based on a sample of over 130 major banks

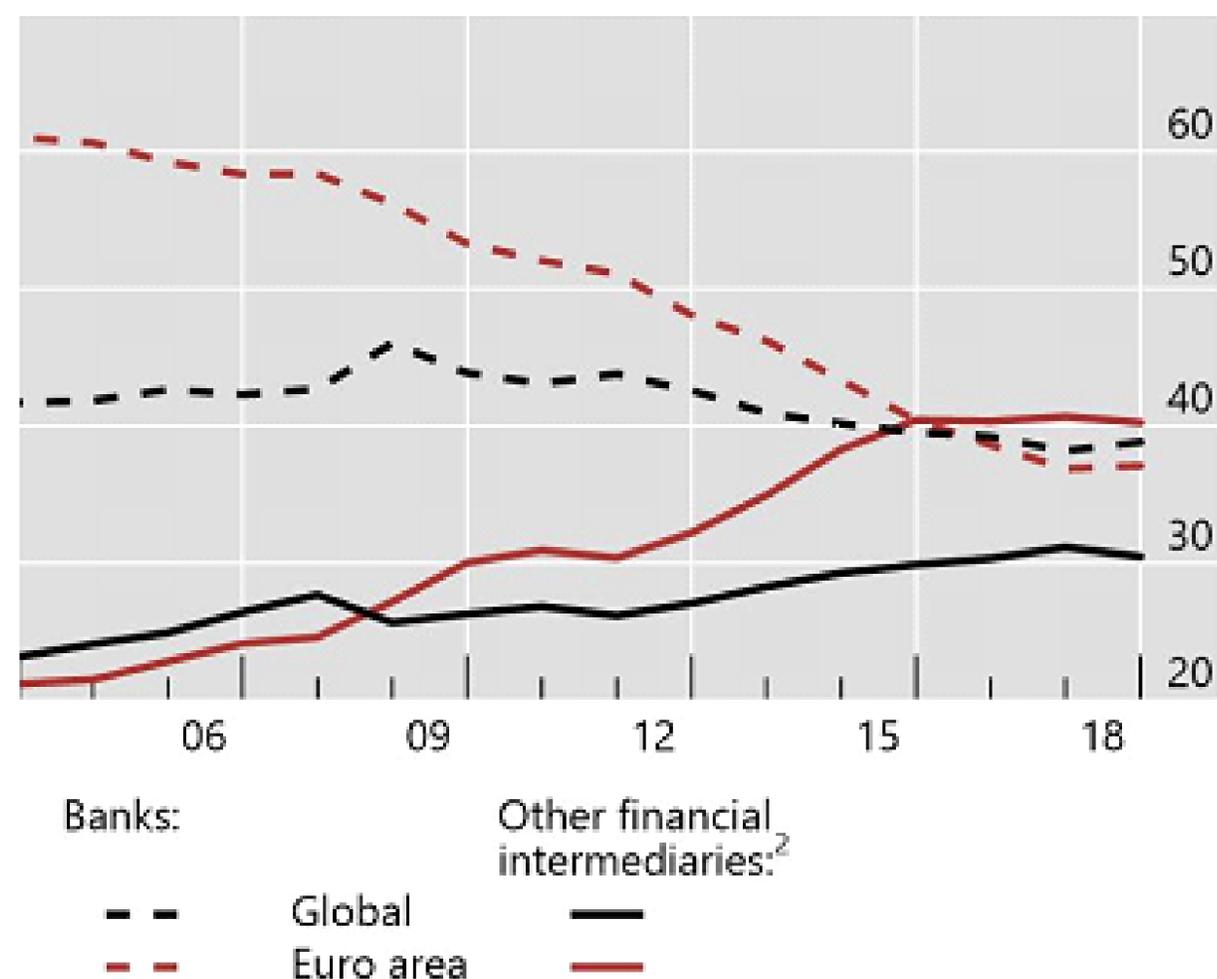
Sources: Financial Stability Board; SNL; author calculations.

Non-banks do pose a more structural challenge

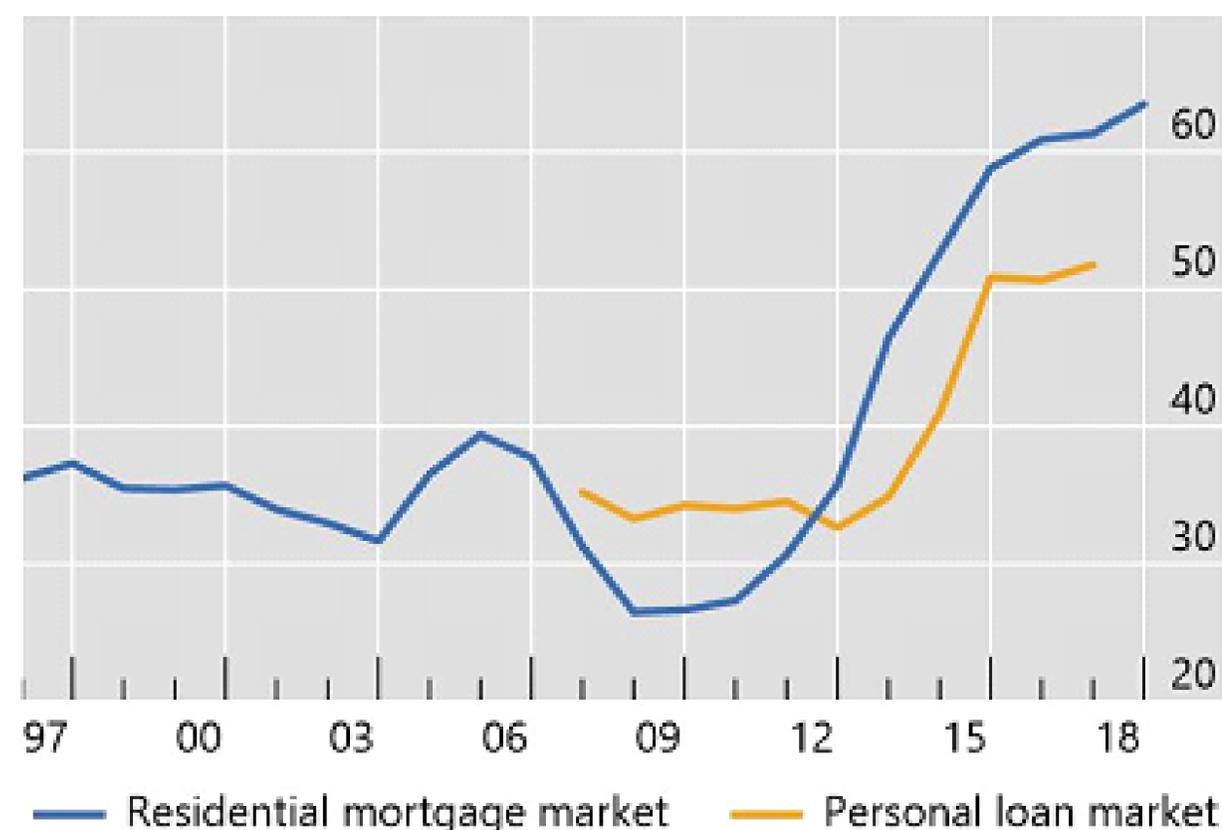
In per cent

Graph 1

Other financial intermediaries are gaining market shares¹



Non-bank share in US on the rise



¹ Shares of total financial corporations' assets (excluding assets of central banks).

² Non-bank financial intermediaries, excluding insurance companies, pension funds, public financial institutions and financial auxiliaries.

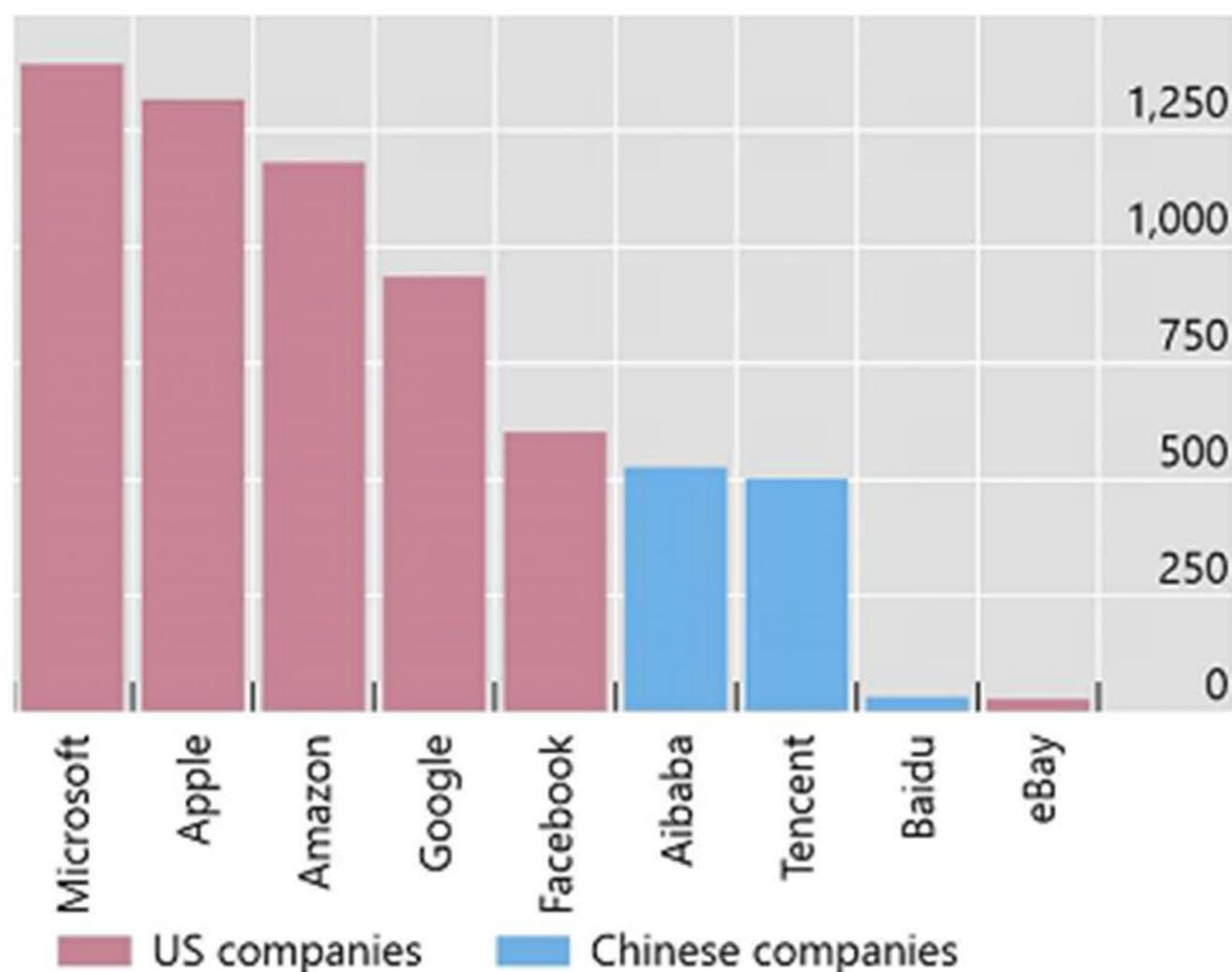
Sources: FSB (2019); Seru (2019); Refinitiv Eikon; S&P Capital IQ; author calculations.

Third challenge: Digitalization and BigTech

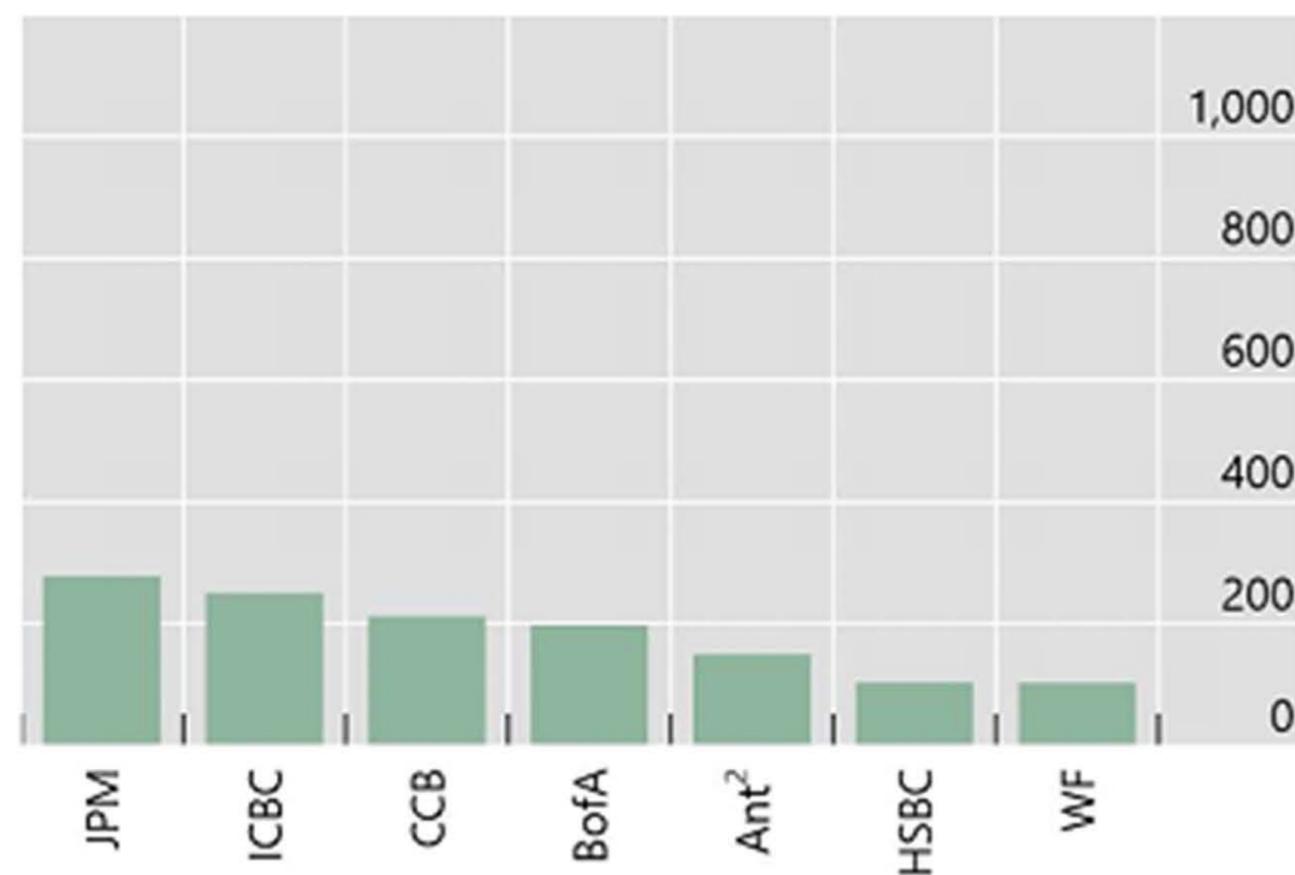
In billions of US dollar

Graph 7

Technology companies



Financial groups



Ant = Ant Financial; BofA = Bank of America; CCB = China Construction Bank; ICBC = Industrial and Commercial Bank of China; JPM = JPMorgan Chase; WF = Wells Fargo.

¹ Stock market capitalization, 7 May 2020. ² The estimated value of Ant Financial was derived from the amount raised in the company's 2018 funding rounds times the stakes sold.

Sources: Refinitiv Eikon; company reports.

■ Digital economy and banks' business models

- Technology is rapidly changing financial services provision, with Covid accelerating digitalization, making banks adapt businesses

Technology impacts business models in many ways

- Existing financial service providers
 - Altering production frontier → lower costs, higher profitability
- Adding new services, products
 - Extending frontier/supply → greater surplus
- Lower cost (of access) for users, better information
 - Extending supply → more access/inclusion
- Entry, exit
 - Changing competition → altering revenue/profits distribution
- **Overall market structure**
 - Economies of scale/scope, network externalities → IO changes

Services affected by technology vary, as do \$ @ risk

- Technology's impact varies by fundamental functions
 - Maturity transformation, information, risk mgt, payments, etc
 - Technology affects various services differently, and so do \$@risk

Table 4: The importance of specific financial services for banks' earnings
(2017 data, main areas only)

Activity	Affected	Risks (billion)
Retail banking: credit, deposit, insurance (life and P&C), brokerage	√ √	\$1745
Institutional, corporate: credit, deposit, insurance (life and P&C)	√	\$1525
Payments (retail and wholesale)	√ √ √	\$715
Asset management, wealth management	√	\$670
Investment banking (underwriting; M&A, advice, etc.	√	\$215
Capital markets, foreign exchange (trading FICC (fixed income, currency, commodities); clearing, settling, custody, etc.	√	\$140

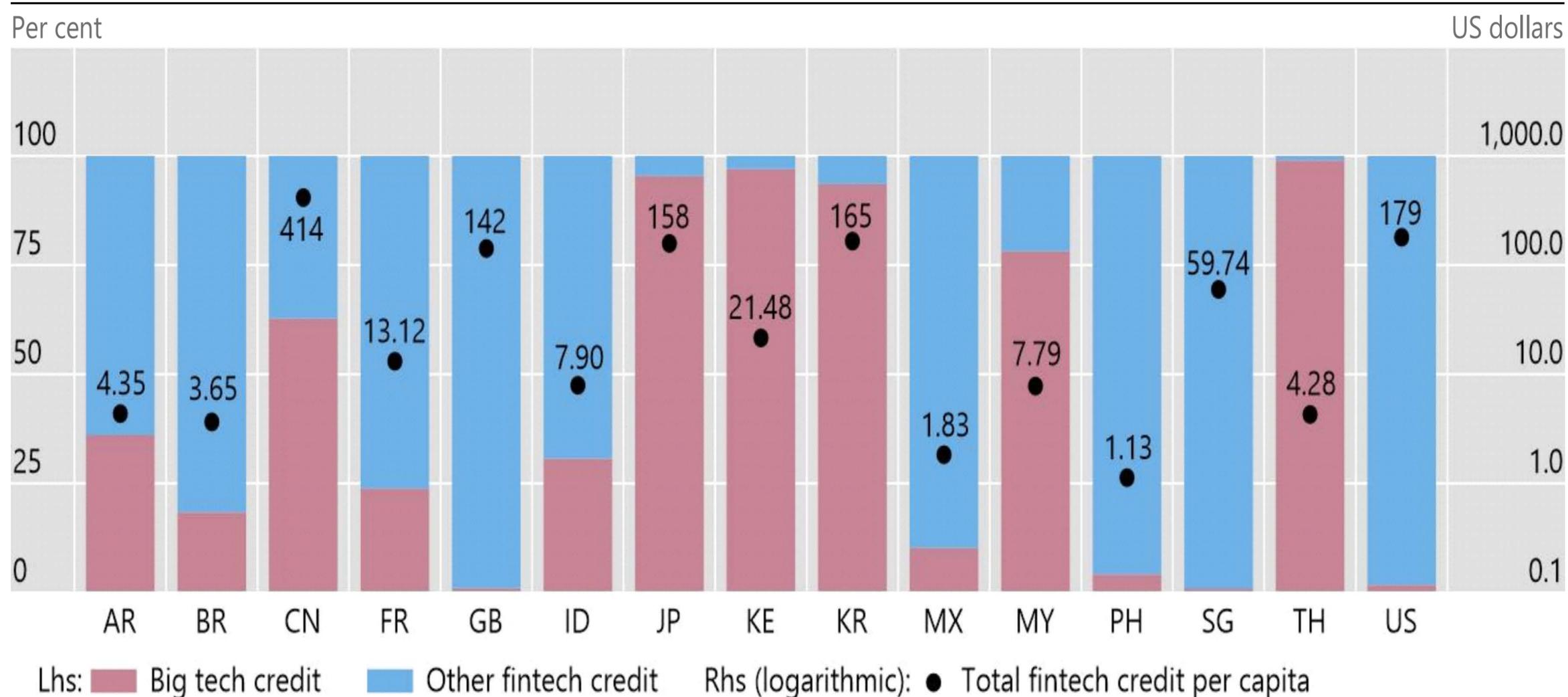
Source: McKinsey(2018b)

■ FinTech, BigTechs: state of affairs, provision and drivers

- **FinTech** more than a niche, making selected inroads
 - Highest in payments, next in credit, still little in deposit, insurance
- **BigTechs'** business model more transformational
 - Start often in payments, next capital markets (eg MMFs), credit
 - Reinforcing: **Data analytics**, **Network externalities**, **Activities**
- BigTech responds to regulations, market structure, as does FinTech
 - But more so, and shows its special factors
 - Advantages of data (eg technology, platform)
 - Network externalities (eg in payments)
 - Legacy of incumbents vs scalability of BigTech

Lending volumes (FinTech and BigTech) rising rapidly, but to varying degrees across countries

Figure 21 Big tech and other FinTech credit in selected jurisdictions



Notes: The bars show the share of big tech and other fintech credit in selected jurisdictions in 2018, while the dots show total fintech credit per capita.

Source: Frost et al, (2019); Cornelli et al (2020).

■ Banks and technology: invest and collaborate

- Banks continuously invest in technology
 - Effects do not (yet) show up in profitability of incumbents
 - Hard to overcome silos, other internal barriers
 - For many (weak) small (some large) banks, outlays constraints
 - Current economic/financial environment a further challenge
 - More digitalisation, lower interest rates, less economic activity
- Banks increasingly collaborate with FinTech
 - Easy way to quickly buy in, costumers-friendly
 - But also profit sharing and disenfranchisement
- Model varies by market's characteristics, regulations
 - eg US: mortgages; EU: (cross-border) payments; emerging markets and developing countries: payments, credit

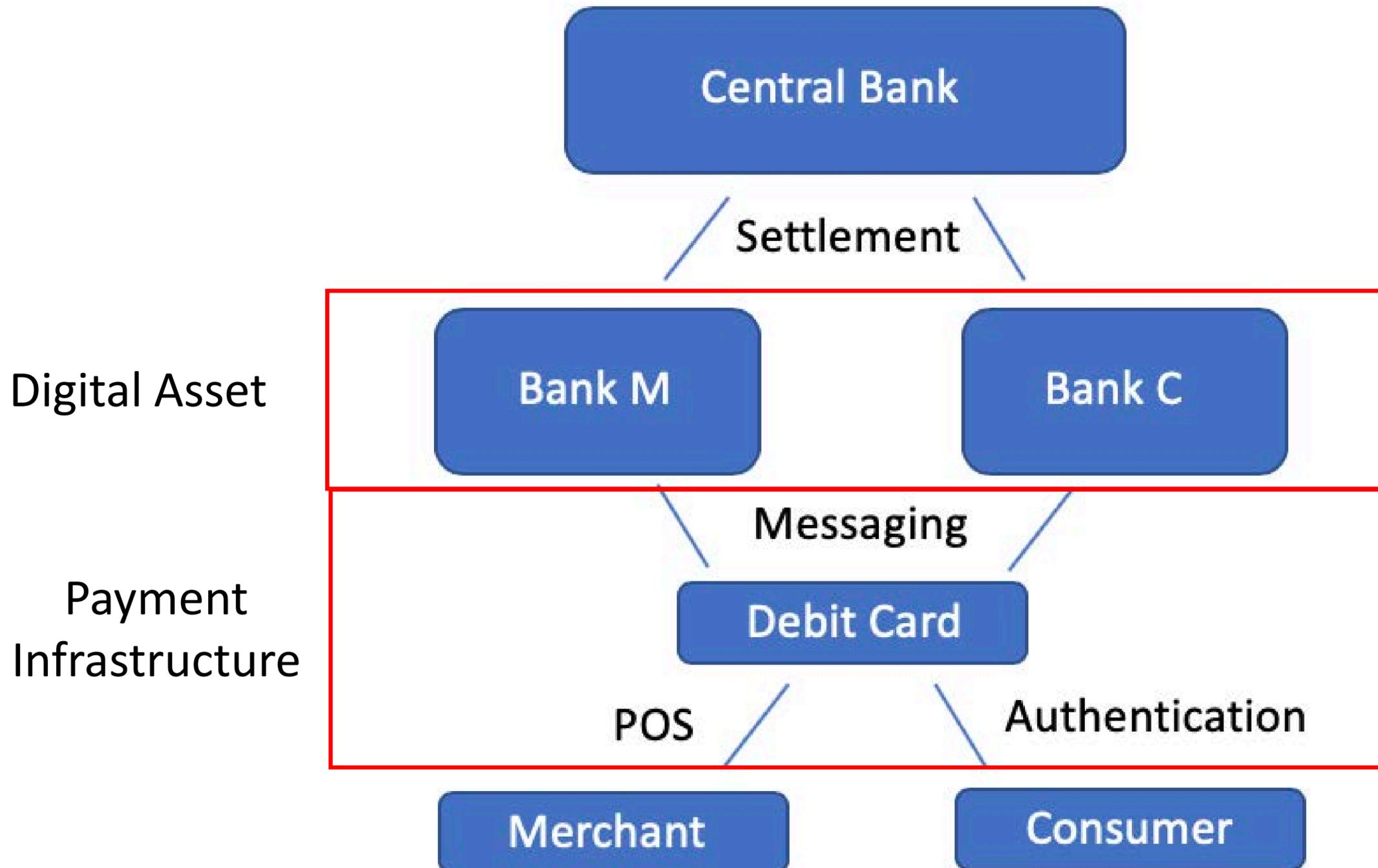
■ Digital money: many developments

- (Digital) Asset } Denominated in a Unit of Account/Currency
- Payment Technology } Needs to be widely accepted
- Physical money: No distinction asset \Leftrightarrow payments (“specimen pays”)
- Digital Money: Potentially complete separation
 - Payment technology drives creation of new assets

■ Payment technology

- Bank deposits are not money without a payment technology
- Payments are complex, many layers
 - Network/processes connecting buyer with seller and their assets
 - Settlement mechanism

Payment technology



■ Payment technology

- Bank deposits are not money without a payment technology
- Payments are complex, many layers
 - Network/processes connecting buyer with seller and their assets
 - Settlement mechanism
- Traditionally controlled by banks
- Today: collection of technology + networks
 - Influenced by changing competition and regulatory framework

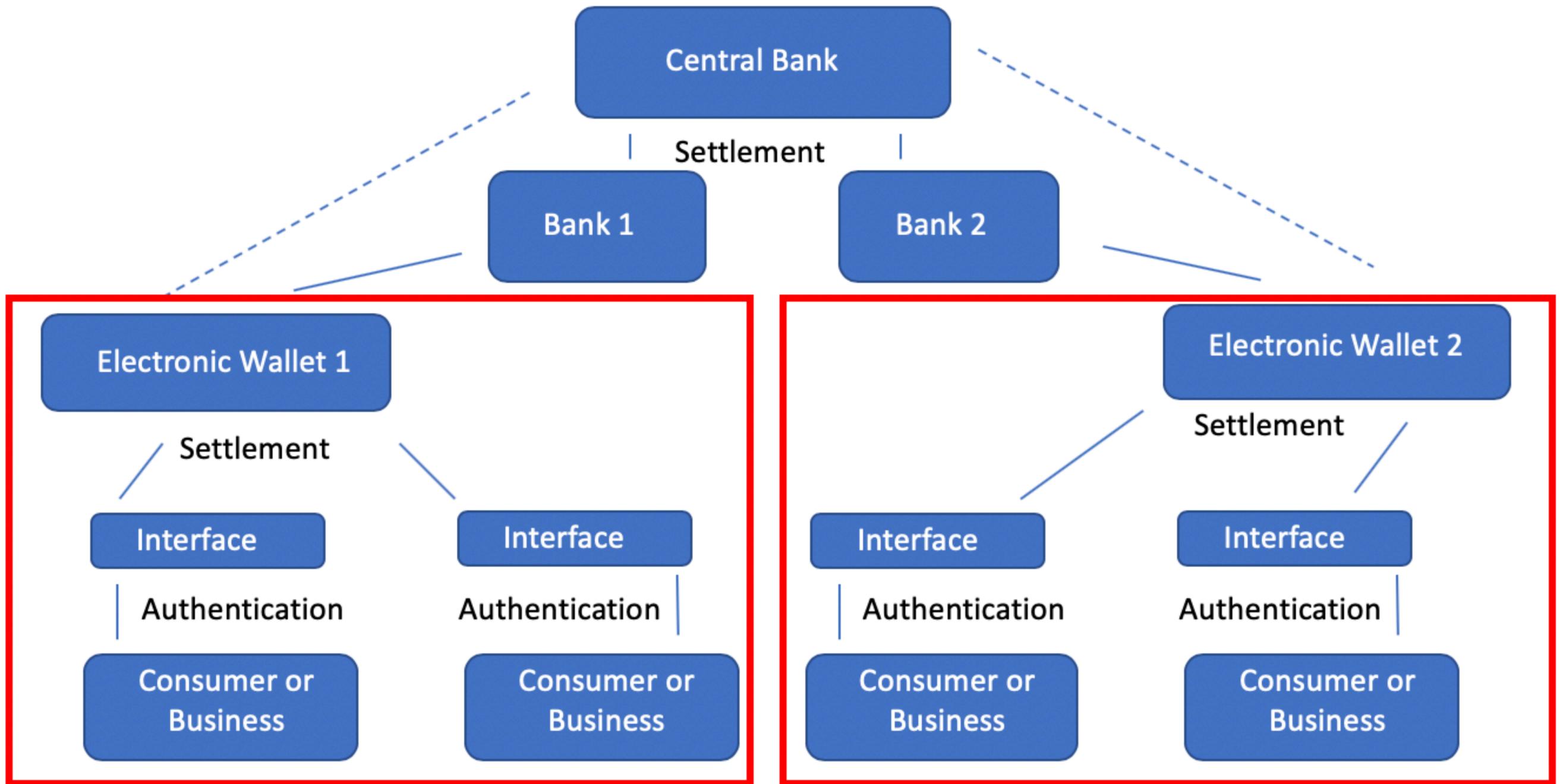
■ Changes. One, to unit of account

- First wave of cryptocurrencies try to compete with Central Banks
- Without history and a proper monetary policy framework → volatility
- “Success” = combination of “investment demand” and payment technology (**platform** to develop other businesses)

■ Changes. Two, to payments technology

- Second wave: benefits of technology + anchor of unit of account
- **Stablecoins** resemble “closed loop” pools of settlements
 - Starbucks card,...
 - Electronic Wallets
 - Dai, Libra,...
 - JP Morgan Coin, USC

Closed-loop payments and banks



■ Changes. Two, to payments technology

- But pools also connect to the rest of the payment system
- Innovation/disruption comes from technology, not from stability mechanism

Changes. Three, regulation and central banks

- Regulation: “same risk same rules”
 - Governance, dispute mechanism for new technologies
 - Risk assessment of balance sheets for stablecoins/e-money
 - AML, CFT, consumer protection, etc.
- Access to central bank for non-bank PSPs
- CBDC: direct access to consumer/final settlement (pros and cons)

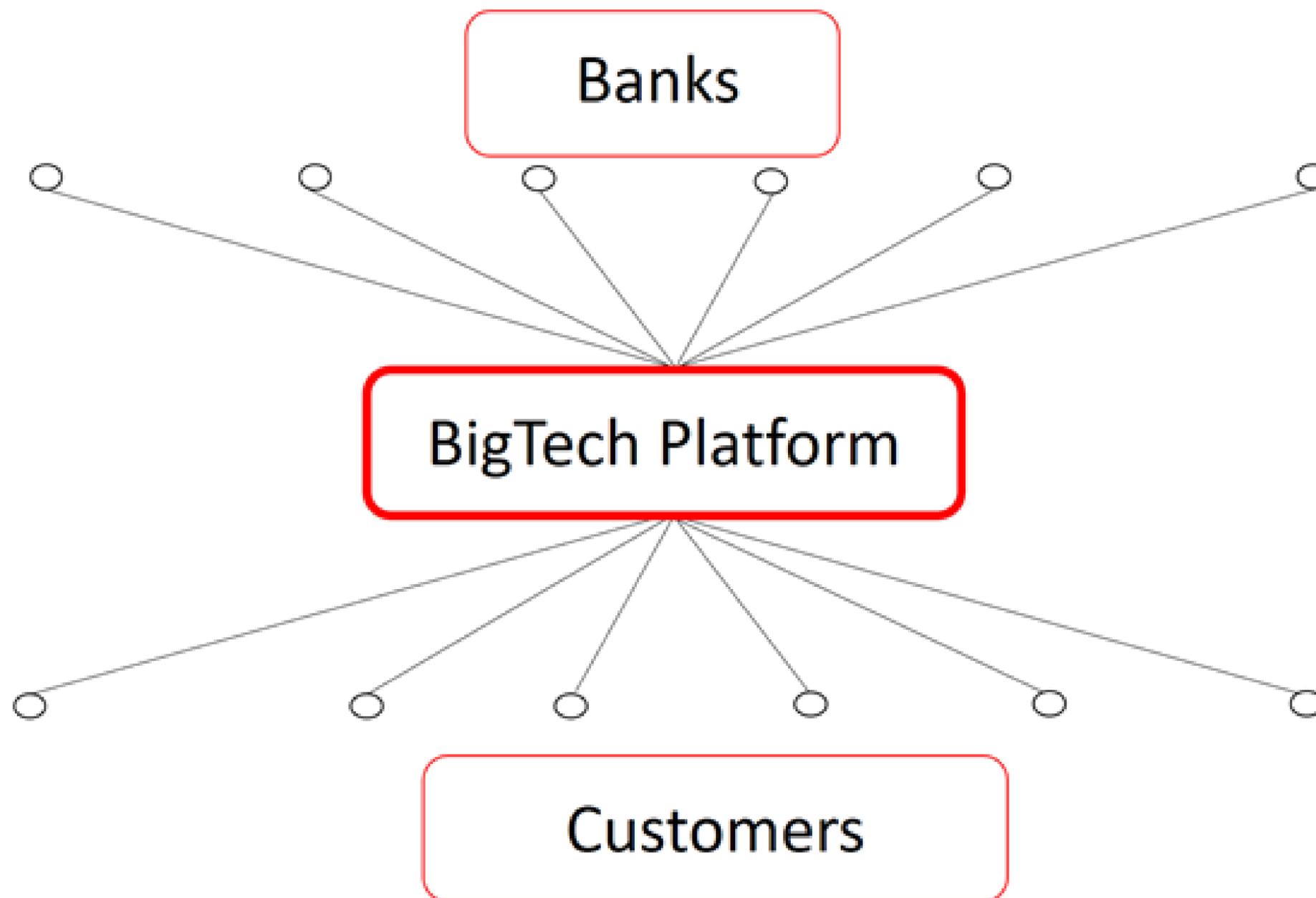
■ Competition to banks in payments

- Bank main functions: information processing, maturity transformation, liquidity provision, **payment services**, risk management
- Competition in one of the most profitable activities
 - Payments = entry point (profits, ubiquity, network effects, data)
 - But deposits provide banks with market power
- Trade off: bank relationship vs convenience + network effects
- New world: instant authentication, faster “pipes”, full detachment of payments from assets, more diverse set of PSPs
 - New dimensions: interoperability, competition, data, stability...

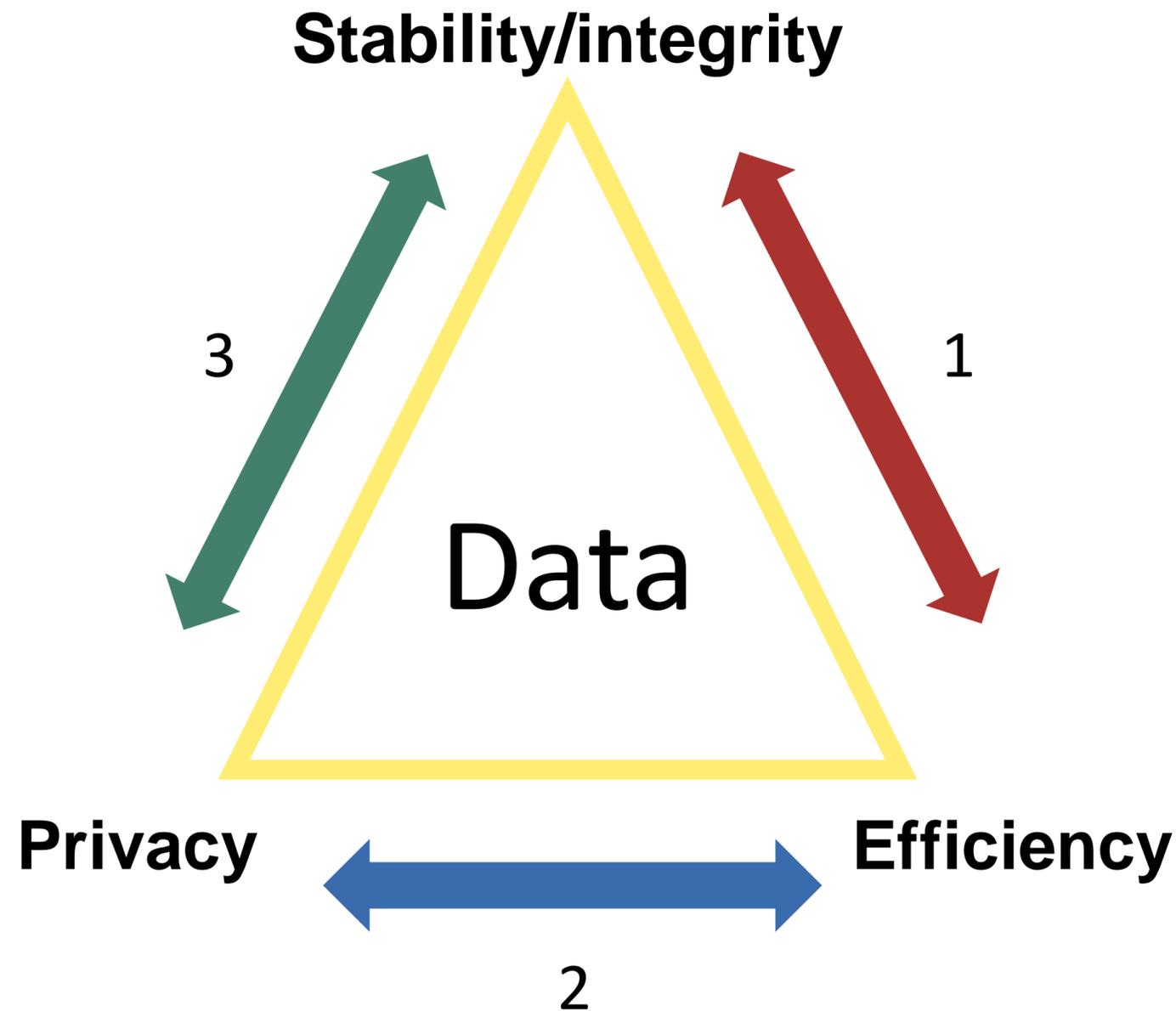
Overall implications for banks' business models: much at risk

- Large banks: overcoming legacy vs time left
- Small, non-niche banks: scale of investment (too) large
- Business and financial environment: “late” to adjust
- Open banking: data asymmetries banks vs BigTech
- Digitalisation increasing (including related to Covid-19)
- Global competition: eg “stablecoins”
- Collectively “fighting a lost battle”?
- Regulation: banks' key comparative advantage (?)

The future: A new platform-based oligopoly?



Greater technology use raises new issues. Three objectives: Stability/integrity, Efficiency, Privacy. Trilogy, trilemma?



1. "Traditional" stability-competition tradeoff, to adapt



2. Access to data for providers vs anonymity (eg better/worse access to credit; or misuse)



3. Access to data for regulatory goals vs anonymity (eg AML/CFT, supervision, judicial)



Conclusions and a Covid-world scenario

- Banks benefit in short-term (regulatory relief, liquidity, guarantees)
- BigTech likely to benefit from even more digital life (and deep pockets)
- Future: pressure on profitability and capital; important regulatory test
- Differences across countries
 - Institutionally weak banks: BigTech could displace banks
 - Stronger banks: FinTech (enter via payments), more competition
- Regulations and policy matter
 - Need to adjust to greater importance of IO and data
 - Can protect banks (eg access to central bank, regulation, fees,
 - Strong interest in CBDC, could be a game changer, but depends