

Faculty of Law, Economics and
Finance of the University of
Luxembourg

DIGITAL FINANCE PLATFORMS
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AND FINANCE

Zetsche et al, Digital Finance Platforms, 23:1 J. Bus. L. 273 (2021), www.ssrn.com/abstract=3532975
Buckley/Arner/Zetsche, FinTech: Finance, Technology, and Regulation (CUP 2023), pp. 247-310

- Multi-tiered services chain in the financial sector
 - Cross-border set-up of financial services groups
 - Additional investment objectives: ESG/sustainability
 - **Datafication of Finance**
 - **New tech-based actors in traditional finance**
- ⇒ Regulators worldwide inquire into
- «BigFinTechs» (FSB/BIS)
 - «Mixed Activity Groups» (EU)
 - «TechFins »

Joint ESAs: Global Footprint of Mixed Activity Groups (7/2022)

HQ	MAG	Main business	Current accounts	Credit provision	Payments	Crowdfunding	Asset management	Insurance
US	Alphabet (Google)	Internet search/advertising	x	x	x			
US	Amazon	E-commerce/online retail		x	x	x		x
US	Facebook	Social media/advertising		x	x			
US	Apple	Tech/producing hardware			x			
US	Microsoft	Tech/producing hardware			x			
CN	Alibaba (Ant Group)	E-commerce/online retail	x	x	x	x	x	x
CN	Tencent	Tech/gaming and messaging	x	x	x	x	x	x
CN	Baidu (Du Xiaoman)	Internet search/advertising	x	x	x	x	x	x
CN	JD.com (JD Digits)	E-commerce/online retail	x	x	x	x	x	x
JP	NTT Docomo	Mobile communications	x	x	x	x		
JP	Rakuten	E-commerce/online retail	x		x		x	x
AR	Mercado Libre	E-commerce/online retail		x	x		x	
UK	Vodafone	Mobile communications		x	x			
KR	Samsung	Tech/producing hardware			x			

Key Contributions of Our Research

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- «Rule of the 12» institutional investors due to technology
- General applicable lessons for financial services at large
- How to regulate digital finance
- A look into the future?

- I. Introduction ✓
- II. The Rise of Digital Finance Platforms
- III. The Case for Regulating Digital Finance Platforms
- IV. A New Approach to Regulating Digital Finance Platforms
- V. A Brief Look at the EU
- VI. Conclusion

§ 2 - The Rise of Digital Finance Platforms

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§ 2 - The Rise of Digital Finance Platforms in Asset Management

- A. Conceptualizing Digital Finance Platforms
- B. Aladdin: The Paradigmatic Back-end Platform
- C. Front-End Investment Platforms
- D. Towards Financial Ecosystems

Back-end DFPs: data control

- Blackrock's Aladdin as « first FinTech »
- The data giant:
 - assets > U.S. GDP, US total stock market cap
 - +240 institutions / 55,000 investment professionals

⇒ Data control

Front-end DFPs: Liquidity control

- Various front-end FOS emerging: Fidelity, Vanguard, Schwab, J.P.Morgan, Goldman (Marcus) pp.
- Why «Zero fees»?

⇒ Liquidity control

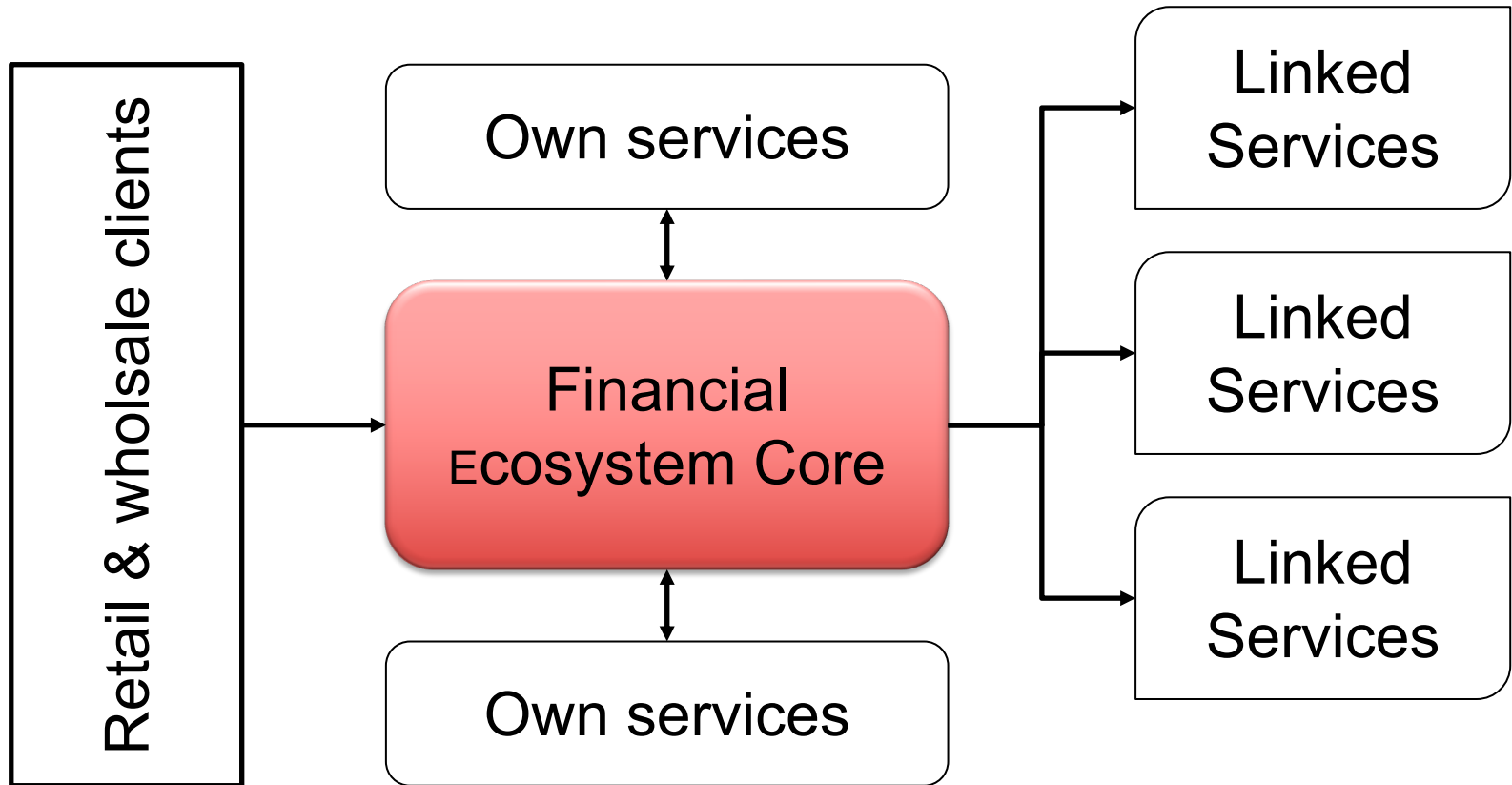
	Clients	AuA (approx)
Schwab	34 mn	\$ 8 trillion
Vanguard	30 mn	\$ 7 trillion
Fidelity	41 mn	\$ 6/10 trillion
Blackrock	60 mn	\$ 9 trillion

Front-and-back-end DFPs: **Financial Ecosystems**

- Ant Group: most precious FinTech (Ant > Godman)
- Full service range: payments, investment advice, funds, insurance, financial planning
 - Alipay: 900 mn Chinese clients / 65% GDP; market share: 54%
 - Globally 1.3 bn users, 27 currencies
 - Yuebaoh: Largest money market fund in the world (\$250 billion)
 - AntFortuna: 180 mn users; all 116 regulated fund managers
 - Insurance: 400 mn clients

⇒ Data + Liquidity control

Front-and-back-end DFPs: Financial Ecosystems as «super-super app»



§ 3 – The Case for Regulating Digital Finance Platforms?

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§ 3 - The Case for Regulating Digital Finance Platforms

A. Benefits

B. Risks and Costs

C. Regulatory Arbitrage

The Case for Regulating DFPs

- Benefits
 - Transaction costs ↓
 - Service level ↑

The Case for Regulating DFPs

- Risks and costs
 - Client protection: uncovered tech risks; platform complexity
 - Innovation? Access of third-party developers?
 - National security: single point of failure
 - Tech Risk of Systemic Dimension
 - Oligopolization of the Financial System, irrespective of balance sheets

(1) Systemic Risks

Too small to care

Too large to ignore

Too big to fail



(2) TechRisk

- Cyberresilience ↔ access to FS
- From side to central
- From back to front office

- Enhanced Complexity (AI etc.)
- Dynamic innovation
- Limited Resources at FI, FSAs

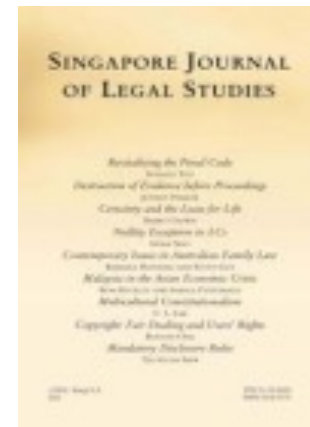


Access

Expertise &
Resources

Competition,
Concentration
vs Innovation

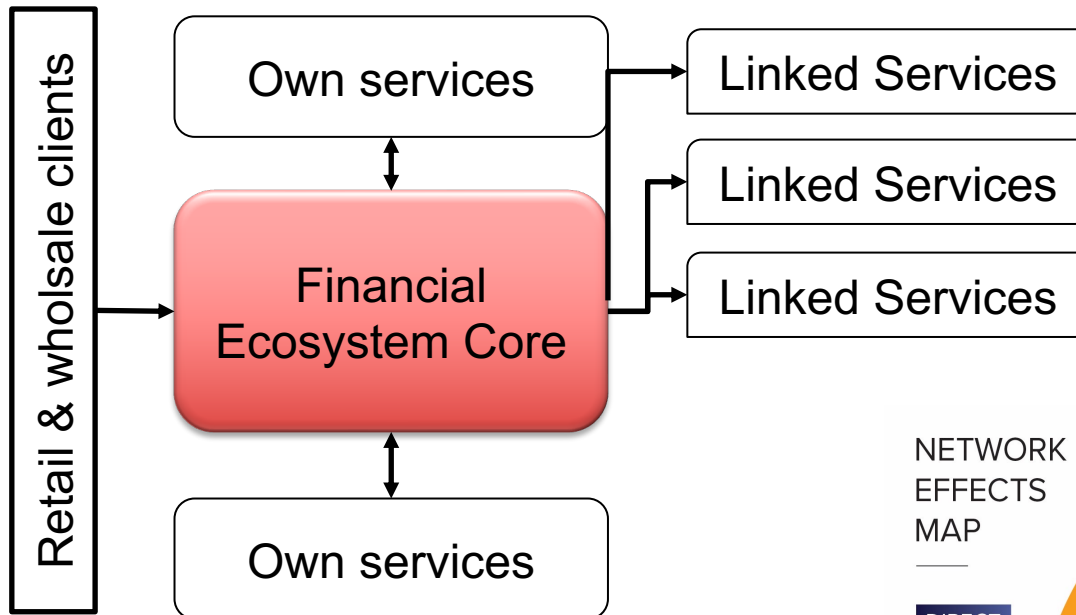
Interlinkage
& Asymmetry



- Data & software scale economies
- Network effects
- From ,too small to care' to ,TBTF'

- New Interconnectedness („TCTF“)
- Risk Symmetry from Operational Risk
- International Dimension / Transparency

(3) Market Concentration in Core Technologies ... single points of failure



NETWORK EFFECTS MAP

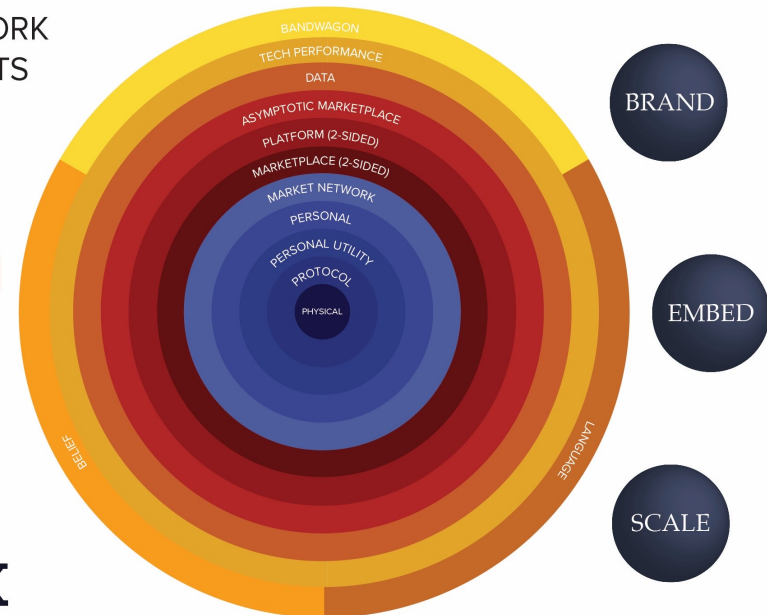
DIRECT

2-SIDED

DATA

TECH

SOCIAL



NfX

Source: James Currier, [The Network Effects Manual: 13 Different Network Effects \(and counting\) \(nfx.com\)](https://nfx.com/)

The Case for Regulating DFPs

- DFPs escape regulation
 - Technology ≠ regulated activity
 - Jurisdictional & sectoral conflicts
 - Tech dependency ≠ traditional definition of systemic risk
- ⇒ Financial Holding Companies?

§ 4 – Addressing Digital Finance Platforms

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§ 4 - Addressing Digital Finance Platforms

- A. Supporting Competition
- B. Moderate Regulatory Interventions
- C. Regulation as Public Utilities

A. Stimulate Competition

- Mandating access
- Diversification?
- Rotation?
- Open Data requirement re dominant platforms
- Unbundling of Service & Prices
- Merger Control

B. Moderate Interventions

- Self-regulation?
- Reform command and control regulation
 - «Financial data gathering and analytics» as regulated activity?
 - Code Review by FSAs?
 - Indirect Regulation:
 - => specific: TechRisk
 - => generic: Delegation and counterparty controls
 - Expand Bank / Financial Holding Company regulation

Examples:
EU: DORA + MAG inquiry
Luxembourg: PFS

C. Regulation as Public Utility

- Public Utility Regulation?
- Nationalization / Co-Ownership of large DFPs (>10% market share)
- Unbundling and separation of DFP functions
 - Eg Investment funds: client intermediary, investment advisor, custodian/depositary

§ 5 – A Brief Look at the EU

- EC's Call for Advice on Digital Finance (Feb 2021)
- Joint ESAs, Stocktake on Multi-Activity Groups (7/2022)
- Joint ESAs, Report on 2023 stocktaking of BigTech direct financial services provision in the EU (Feb 2024)
- Study commissioned by European Commission on MAGs (Fall 2024)
- Decision on forthcoming legislation (exp. 2025).

§ 5 – EC's and Joint ESAs' Focus

- Monitoring of scale and scope of BigTech direct financial services
- Role as major technology provider ⇔ DORA
(Regulation (EU) 2022/2554)
- Provision of gatekeeper platform services ⇔ Digital Markets Act
(Regulation (EU) 2022/1925)

MAG Dependency Spectrum

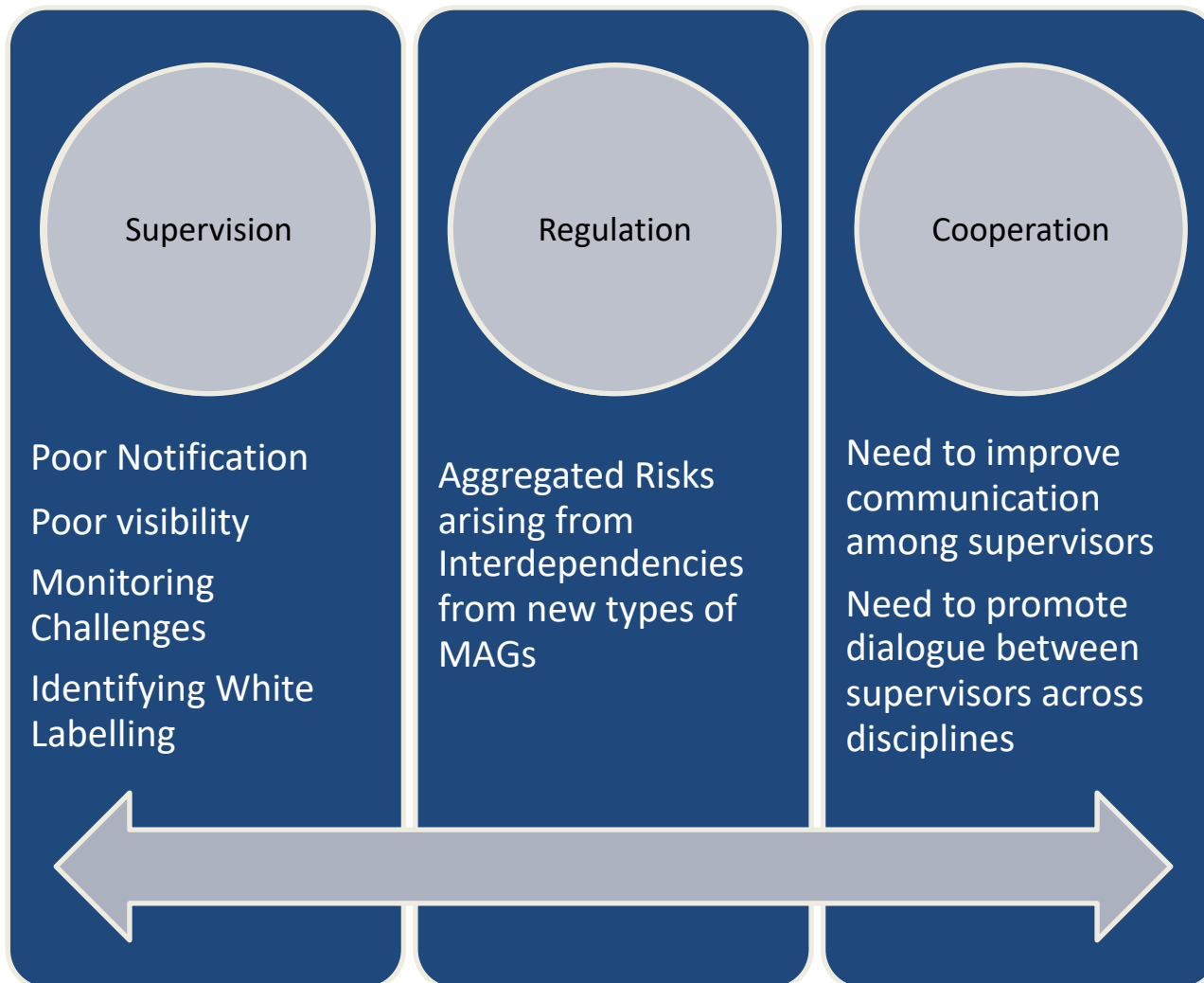
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§ 5 – Risks

- Operational resilience & cybersecurity risks
- In-group Concentration risk, spill-over effects
- Reputational and Intra-group Contagion Risks
- Governance (conflicts, transparency)
- Data abuse, Consumer Data Risk
- Financial Exclusion
- Systemic Risk
- Risks to the Strategic Autonomy of EU

Supervision and Regulatory Issues



§ 6 - Conclusion

- Data + Liquidity drive concentration in finance
- Traditional regulatory objectives command action
- Adequate 'market structure' as new regulatory concern
- Concentration, Intranparency ↔ Regulation

PBOC subjected Ant as financial superpower to financial conglomerate regulation + datalake requirements: harbinger of the future?

Please find our latest work at SSRN: www.ssrn.com/author=357808

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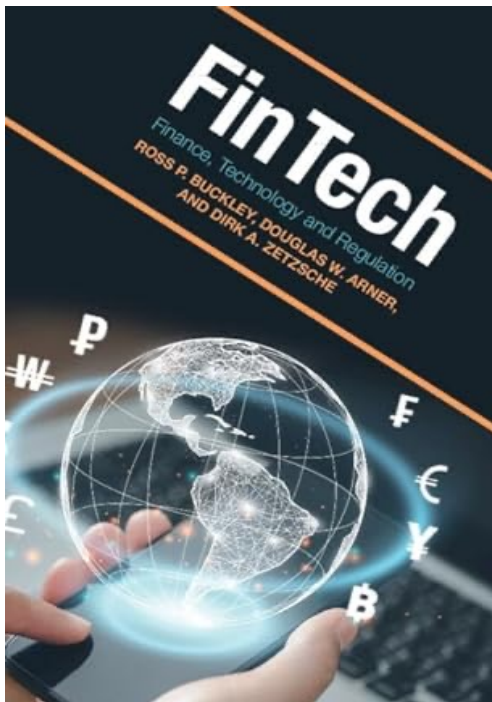


Digital Finance Platforms

www.ssrn.com/abstract=3532975



Thank you!



FinTech book

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More Readings on FinTech

Sandboxes vs Innovation Hubs

<https://ssrn.com/abstract=3455872>



Covid 19, Sustainability Crisis

<https://ssrn.com/abstract=3783605>



AI in Finance: Putting Humans

[www.ssrn.com/abstract=3531711](https://ssrn.com/abstract=3531711)



Digital Finance Platforms

www.ssrn.com/abstract=3532975



TechFin / Data-driven Finance

www.ssrn.com/abstract=2959925



Regulatory Sandboxes

www.ssrn.com/abstract=3018534



FT4FI Roadmap

www.ssrn.com/abstract=3245287



Corporate Technologies (AI etc.)

www.ssrn.com/abstract=3392321



Regulating Libra

www.ssrn.com/abstract=3414401



Distributed Ledgers / Blockchain

www.ssrn.com/abstract=3018214



eID / KYC Utilities

www.ssrn.com/abstract=3224115



Future of Data-Driven Finance

www.ssrn.com/abstract=3359399



Rise of Tech Risk

www.ssrn.com/abstract=3478640



ICO Gold Rush

www.ssrn.com/abstract=3072298

