

BIG BANKS, BIGGER TECH

Highlights on big tech & banking report

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BIG BANKS, BIGGER TECHS?

How policy-makers could respond
to a probable discontinuity

Report highlights

- BigTech entry at scale into financial services is fundamentally changing the landscape
 - **BigTechs are gaining ground in FS** given their scale and market power, with the aim of creating broader ecosystems. Current BigTech penetration in FS varies but more **visible in China** and niche segments in **Retail & SME banking like Payments**, as well as IT services. Entry is more common in “blue ocean” segments¹ and in customer-facing or analytics parts of the value chain
 - Despite for now a focused presence, this alone **can change economic and power relationships in FS value chains** – we anticipate 3 models are emerging for FS market structures, which will depend on specific product and market characteristics
 - This can create **new risks and challenges for both incumbents and the financial sector**. Many authorities are already taking action to respond to market developments but issues still arise in how different players experience the regulatory framework, creating **areas of “asymmetry”**
 - This exposes vulnerabilities and creates challenges for banks, but also **open doors to opportunities if handled well**. To win, banks should **build on their existing strengths**, make **focused strategic bets on market positioning**, and **be selective in the capabilities they invest**
 - Many **authorities are already taking action** but issues still arise in how different players experience the regulatory framework - to further support an orderly modernization of the sector, regulators should consider defining **clear vision**, **refining existing rulebooks**, and enhancing **institutional architectures and capabilities**

RECAP ON KEY LEARNINGS: WE HAVE INTERVIEWED 60+ PEOPLE ACROSS 10+ MARKETS, INCLUDING IBFED, BANKS, TECH PLAYERS, OW AND AUTHORITIES

“ Irrespective of regulation differences, new players are really good at customer acquisition and fast go-to-market – for example, assessing credit risk on applications made out of adverts, social media, or different banks.”

Director of a European FinTech

“ We are quite confident that neither Bigtech nor banks could be leading on their own – we believe collaboration is on both sides’ interests and can achieve better financial services for all ”

Managing Director of an Indian bank

“ We are monitoring the current market developments indeed... but we also look with enthusiasm at new players and technology trends and the possibilities they can bring to consumers, with adequate management of risks. ”

Head of Fintech of a central bank

“ We need to learn from these tech companies. We like to see more BigTech and banks partnerships. ”

Chief Digital Officer of an African bank

“ BigTechs have the opportunity to increase competition and innovation in a ways FinTechs haven’t managed, which is good for consumers. What is not acceptable is this is done by leveraging dominance in other markets in ways incumbents cannot match – these are the kind of issues that demand more regulatory attention. ”

Expert in competition law

“ Implementing PSD2 has actually been significantly complex and operationally costly for banks... IT talent is a significant issue in the market still. ”

Head of IT Governance of a European bank

5 TO REGULATE THE NEXT EVOLUTION OF THE MARKET, A FORWARD-LOOKING MINDSET SHOULD BE ADOPTED – ACTION COULD BE CONSIDERED ON 3 BROAD AREAS

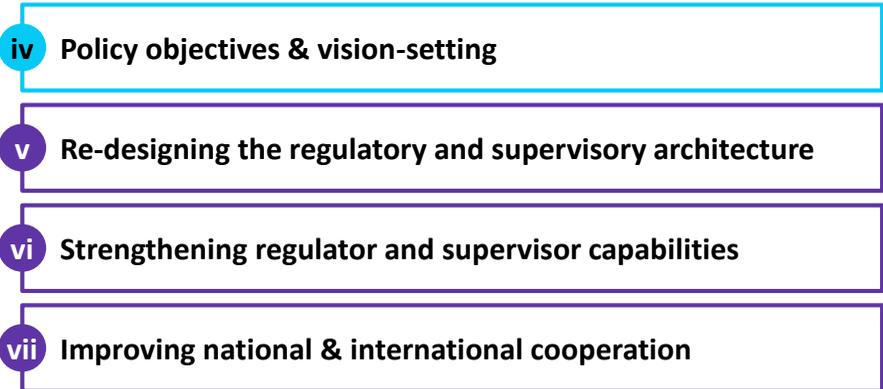
A forward-looking mindset is needed to ensure:

- New and complex risks are quickly understood and brought into within the regulated perimeter as they develop, where appropriate
- Activities by different players along the same value chain stay within the same regulated perimeter, where appropriate
- Activities are subject to a regulatory and supervisory framework commensurate with their risks
- There is a level playing field for all market participants, in line with countries’ policy objectives – acknowledging this requires some adaptations, but not a “blanket application” of all regulatory requirements across all entities and activities

Action could be considered in 3 broad areas of regulation...



...supported by a clear vision in line with policy objectives and some key “enablers”



Source: OW-IBFed report, Oliver Wyman analysis

5

ACTION COULD BE CONSIDERED ON 3 BROAD AREAS OF REGULATION....

Details on the 3 broad action areas on regulation

Area	Explanation (example actions)
<p>Revise measures within financial regulation</p> <p><i>(as appropriate)</i></p>	<ul style="list-style-type: none"> • Update or expand the rulebook for new products & services (define criteria to assess what to include) • Decide on the regulatory format for new tech / distribution mechanisms (e.g. strictly rules based vs. guidance) • Improve proportionality of rulebook across entities and activities (identify and isolate activities and their risks, and define criteria to judge the appropriate sets of rules) • Improve consumer awareness on levels of protection across products & players (increase obligations on all customer-facing providers, embed in product delivery)
<p>Strengthen policy response on themes that cut across industries</p>	<ul style="list-style-type: none"> • Closer cooperation and coherence of the rulebooks enforced in finance and other key economic sectors • Competition (broaden view of “market dominance”, regulate monopolistic practices irrespective of entity) • Financial and economic stability (define threats and “systemic” activities more broadly, where appropriate) • Data protection & exchange (foster common principles and standards across industries, define rules for financial data) • Taxation (supra-national arrangements to ensure fair taxation over global digital players) • AML/CFT (ensure clearer mandates and regulations in non-financial sectors)
<p>Extend finance-specific regulations to other industries</p> <p><i>(as appropriate)</i></p>	<ul style="list-style-type: none"> • Consumer protection (assess and select the appropriate rules to be applied consistently across sectors) • Corporate governance (embed and enforce standards of banking and markets for institutions or activities outside finance) • Operational resilience (assess minimum requirements across sectors and specific entities e.g. non-banks, cloud providers)

Source: Oliver Wyman-IBFed Report, Oliver Wyman analysis

5 ...SUPPORTED BY A CLEAR VISION IN LINE WITH POLICY OBJECTIVES AND SOME KEY “ENABLERS”

Details on the vision and key enablers

Area	Explanation
<p>Policy objectives & vision-setting</p>	<ul style="list-style-type: none"> • Build awareness and expertise regarding technology impacts (e.g. internal research, PPP) • Decide on a vision for market structure and the role of regulation/regulators(e.g. when to intervene) • Prioritise and harmonise across policy objectives (e.g. competition vs. efficiency vs. privacy) • Define appetite for promoting “public goods” in industry (e.g. centralised platforms)
<p>Re-designing the regulatory and supervisory architecture</p>	<ul style="list-style-type: none"> • Analyse and assess the adjustments required to legal mandates and powers • Assess potential for reducing regulatory fragmentation when revising mandates • Decide on the need for new regulatory authorities (e.g. for technology players, payments providers) • Align resources and budgets to new institutional set-up
<p>Strengthening regulator and supervisor capabilities</p>	<ul style="list-style-type: none"> • Review organisational structures and workforce (digital skills, ways of working) • Improve risk identification and monitoring (e.g. early warning indicators, “dashboard” views) • Increase internal use of analytics for automation and efficiency (e.g. data, AI, Suptech)
<p>Improving national & international cooperation frameworks</p>	<ul style="list-style-type: none"> • Define new institutional arrangements for cross-industry cooperation and policy harmonisation (e.g. data commissions across regulators) • Establish global standards for systemically important topics (e.g. data, cybersecurity) • Strengthen legal basis for cooperation (e.g. data sharing, shared mandates for enforcement, crisis mgmt.) • Cooperation and knowledge sharing across public and private sector for key “horizontal” topics (e.g. cyber, crypto) • Increase forums to exchange best practices and induce practical cooperation (e.g. BIS Innovation Hub, GFIN)

Source: Oliver Wyman-IBFed Report, Oliver Wyman analysis

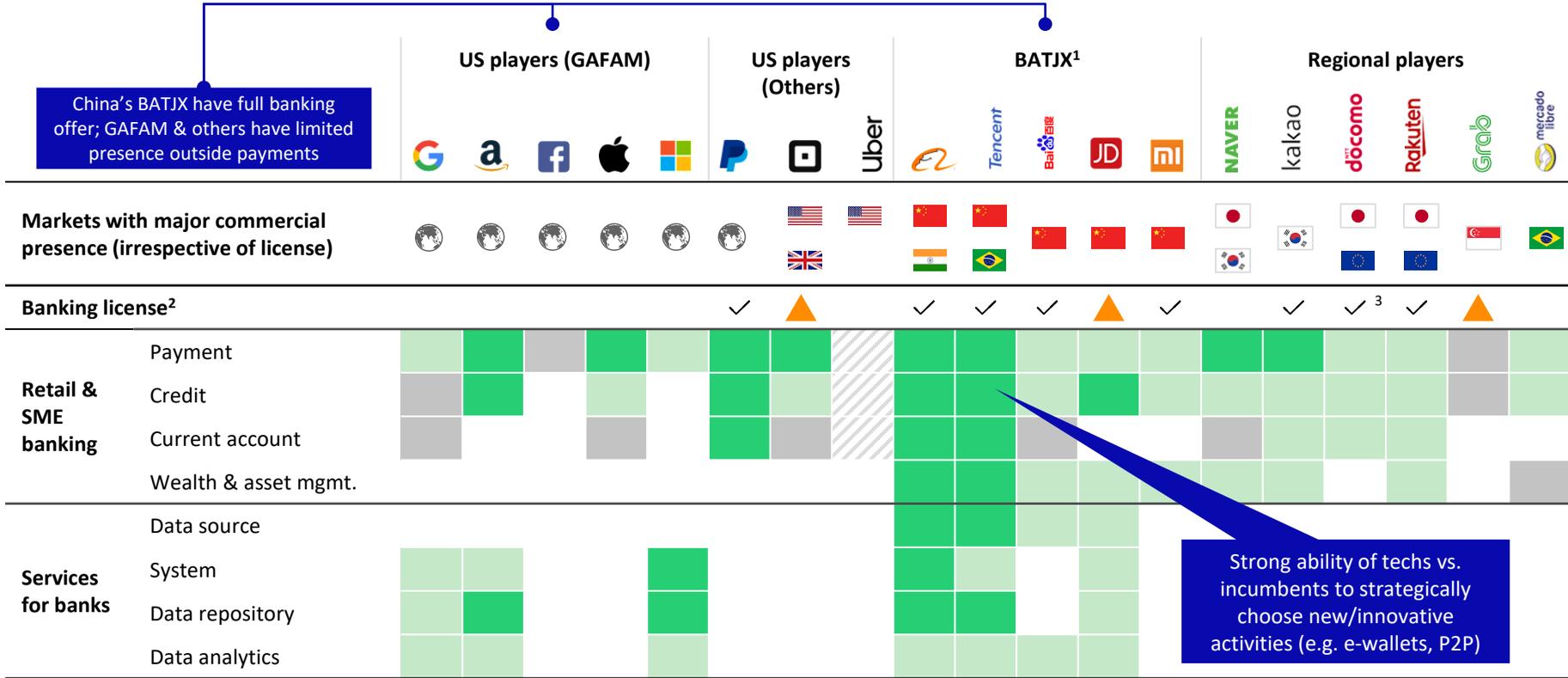
SUPPORTING MATERIAL

EXHIBITS ON KEY MESSAGES

(NOTE: PARTLY SHARED ON IBFED'S BOARD MEETING OF 12TH MARCH 2020)

1 CURRENT BIGTECH PENETRATION IN FS VARIES BUT IS MORE VISIBLE IN CHINA AND NICHE SEGMENTS IN RETAIL & SME BANKING (LIKE PAYMENTS), PLUS IT SERVICES

Current financial service penetration of BigTechs, categorised by product type



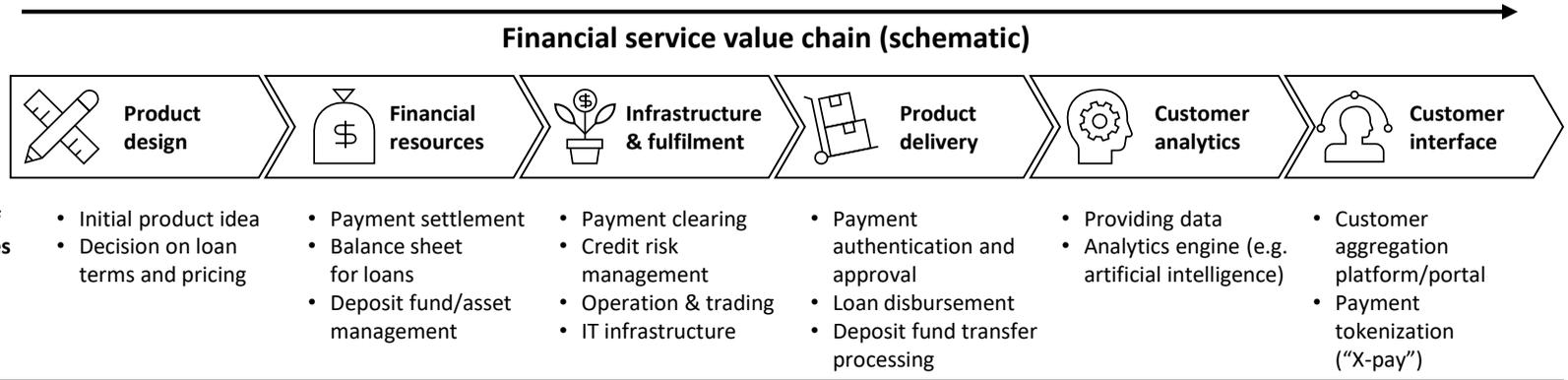
🌐 Global presence
 ■ High penetration
 ■ Medium penetration
 ■ Low penetration
 ▨ To be launched
 ✓ Existing license
 ▲ License under application

Note: Penetration rated qualitatively according to overall scale across the major operating markets of each player, with reference to user penetration, transaction volume, credit balance, etc.

1. Including Paytm in India (owned by Alibaba) and Nubank in Brazil (invested by Tencent)
 2. PayPal holding regular bank license in EU; Square applying for bank license in US; Alibaba, Tencent, Xiaomi indirectly holding privately-owned bank licenses in China via JVs; JD applying private-owned bank license in China via a JV; Baidu indirectly holding regular bank license in China via a JV; Kakao indirectly holding virtual bank license in Korea via a JV; Docomo owning regular bank license in EU; Rakuten indirectly owning digital-only bank license in Japan via Rakuten Bank; Grab applying virtual bank license in Singapore via a JV
 3. Docomo owns Privat Bank 1891 in EU with full banking license, offering online and mobile transaction banking services; but it does not have banking license in Japan

Source: Company disclosures, news and articles, OW-IBFed report, Oliver Wyman analysis

1 BIGTECHS ALSO TEND TO POSITION IN PARTS OF THE VALUE CHAIN THAT PLAY TO THEIR STRENGTHS, TYPICALLY ANALYTICS AND CUSTOMER-FACING FUNCTIONS



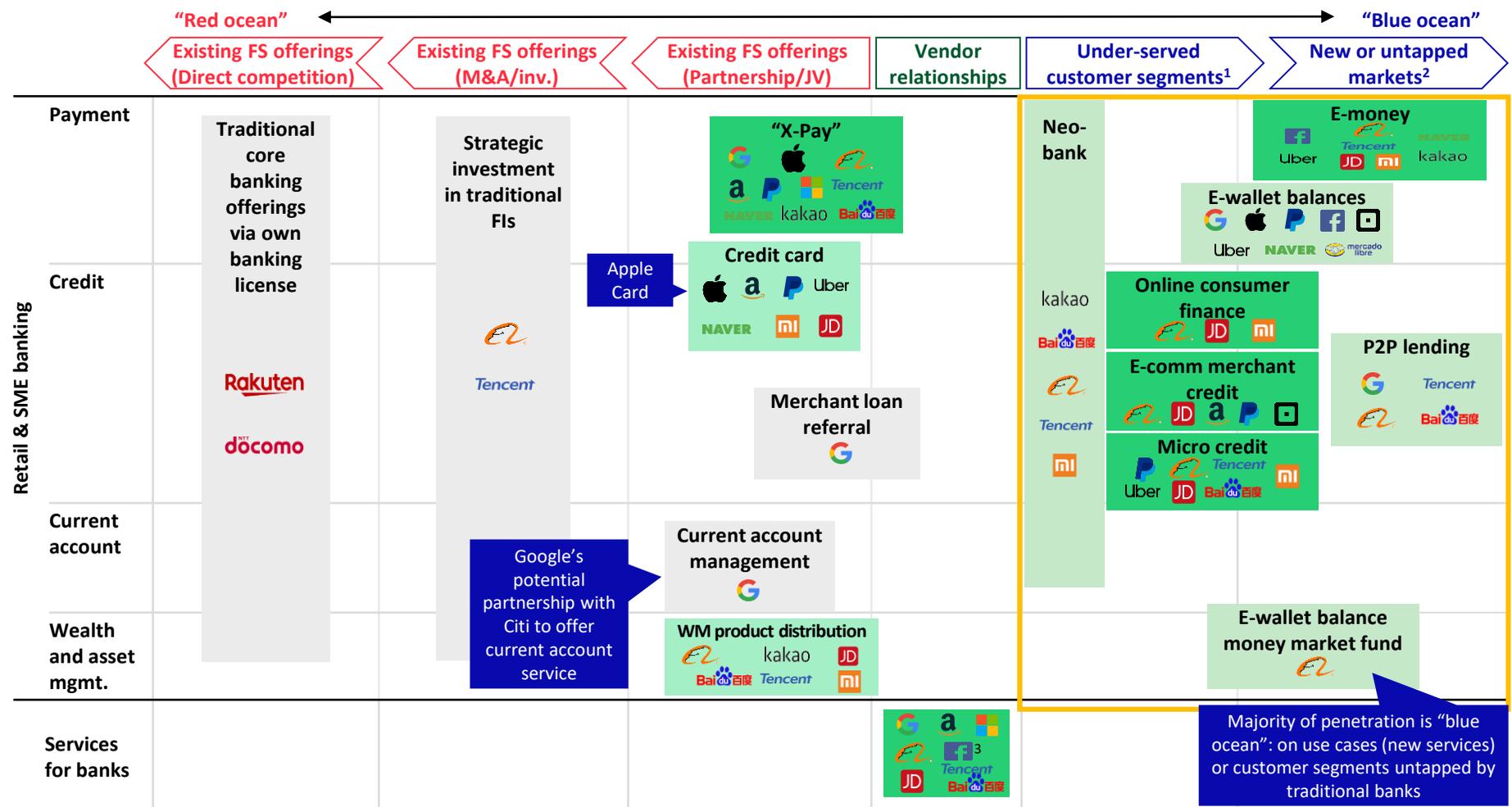
Product	Player	Penetration of BigTechs in each part of the financial service value chain:					
Payment	GAFAM	Medium	Low	High	Low	High	High
	BATJX	High	Medium	Medium	Medium	High	High
	Regionals	Medium	Medium	Medium	Medium	High	High
Credit	GAFAM	Medium	Low	High	Low	High	High
	BATJX	High	Medium	Medium	Medium	High	High
	Regionals	Medium	Medium	Medium	Medium	High	High
Current account	GAFAM	Medium	Low	High	Low	High	High
	BATJX	High	Medium	Medium	Medium	High	High
	Regionals	Medium	Medium	Medium	Medium	High	High
Wealth and asset mgmt.	GAFAM	Medium	Low	High	Low	High	High
	BATJX	High	Medium	Medium	Medium	High	High
	Regionals	Medium	Medium	Medium	Medium	High	High

■ High penetration
 ■ Medium penetration
 ■ Low penetration

Areas where BigTechs have competitive advantages (e.g. customer interface and analytics, IT infrastructure, etc.)

Note: Penetration rated qualitatively according to overall scale across the major operating markets of all players in the category, with reference to user penetration, transaction volume, credit balance, etc.
 Source: Company disclosures, news and articles, OW-IBFed report, Oliver Wyman analysis

1 ENTRY IS MORE COMMON IN “BLUE OCEAN”^{1,2} SEGMENTS WHICH GROW THE PIE FOR ALL PLAYERS – AND PARTNERSHIPS ARE STARTING TO EMERGE



1. Refers to segments that were previously not reached by banks (e.g. unbanked population, online scenario-based financial services) ■ High penetration ■ Medium penetration ■ Low penetration
 2. Refers to new product or services which were not offered by banks before and have low substitutability to existing bank offerings
 3. Partnership is broader than financial services and only recently announced, but could be reflected for instance in Payments via JioPay
 Note: This chart aims to show the aggregated overview of BigTech's presence and penetration globally across all markets (not only the country of license); Penetration rated qualitatively according to overall scale across the major operating markets of all players in the category, with reference to user penetration, transaction volume, credit balance, etc.
 Source: Company disclosures, news and articles, OW-IBFed report, Oliver Wyman analysis
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2 THESE FEATURES ALONE CAN CHANGE ECONOMIC AND POWER RELATIONSHIPS IN FS VALUE CHAINS – WE SEE 3 MODELS EMERGING

Potential future market structure scenarios

	1. Finance in vertical structures	2. Finance in modular structures	3. Finance in tech-led ecosystem
Core features	Finance as “independent” service and provided mainly by “vertically integrated” players that own the majority of the value chain. Most financial services provided outside tech ecosystems.	Finance remains “independent” service for customers, but under intense competition as players position in different parts of (an unbundling) value chain. Some financial services in, some outside tech ecosystems.	Finance as sub-component of big tech’s ecosystem offering; incumbents retain regulated parts of the value chain. Most financial services provided within tech ecosystems.
Value chain ownership	Finance-led	Hybrid	Tech-led
Schematic			
Value chain functions			
Likely products and services	Corporate banking, investment banking, mortgages	Retail segments (current account, wealth management)	Retail segments (payments, SME lending)
Likely market	<ul style="list-style-type: none"> Significant whitespace that allows a diverse set of players to grow Strong response from incumbents 	<ul style="list-style-type: none"> Mature markets with high initial penetration of incumbents Mature and stable regulations, especially in core banking activities 	<ul style="list-style-type: none"> High technology adoption Significant unmet needs by consumers Slow response of incumbent banks

Future model of a given market depends on product and market characteristics, as well as response from incumbents

Source: OW-IBFed report, Oliver Wyman analysis
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3 THESE TECHNOLOGY-LED DISRUPTIONS COULD BENEFIT CONSUMERS AND THE FINANCIAL SYSTEM, BUT ALSO CREATE NEW AND AMPLIFIED RISKS

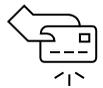
Benefits of BigTechs

VS

Risk of BigTechs



Financial inclusion (e.g. in India, % population with FS account rose from 35% in 2011 to 80% in 2017, supported by tech companies)



Convenience in payments (e.g. in China, non-cash consumer payment rose from 34% in 2016 to 64% in 2019)



Service speed and efficiency (e.g. PayPal is able to approve and distribute SME loans in 10 minutes, vs. typically 3-5 weeks by banks)



Customer returns (e.g. Deposit yield in Yuebao is typically ~2ppt higher than regular bank deposit rate in China)



Trust and acceptance by customers (e.g. >70% of global consumers have high trust on banking with Amazon, vs. <50% on banks in general)



New and enhanced risks (e.g. cyber risks, data privacy, AML/CFT, consumer protection)



Blurring regulatory perimeter with growing cross-border, cross-industry and cross-entity activity, reducing transparency and fragmenting accountability across players



Consumer protection: as consumers may not fully understand the different levels of protection and risk across bank vs. non-bank products



Market power concentration in large platform providers, which may lead to lower price transparency, monopoly of digital talent and R&D, and conflicts of interest across financial and non-financial activities



Risk to financial stability given their global scale, natural network effects, and dominant positions in specific parts of the value chain

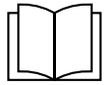
Source: World Bank, GlobalData, company websites, Bloomberg news, 2018 Bain/Research Now SSI Retail Banking NPS Survey, OW-IBFed report, Oliver Wyman analysis

3 MANY AUTHORITIES ARE ALREADY TAKING ACTION, BUT ISSUES STILL ARISE IN HOW PLAYERS EXPERIENCE THE REG. FRAMEWORK – WE CALL THIS “ASYMMETRIES” (1/2)

Issues may arise in how different players experience the regulatory framework



“Blue ocean” space¹ that is not fully classified in existing regulatory framework, causing unclear requirements given entity-based regulations



Activities involving **scope outside the financial sector**, while cross-sectoral regulations still being developed/enhanced (e.g. data, competition)

This is partly driven by



Lack of **established and dedicated regulatory structures** for BigTechs



Differences in the financial regulation perimeter and application **across regions**, with lack of international bodies to promote convergence of standards and dialogue

All these lead to areas of regulatory “asymmetry” (see exhibit next page)

a **Areas of gaps within financial regulation itself**

- New services that are fundamentally financial services but not fully within the perimeter e.g. cryptos, e-wallet money

b **Areas of imbalances across entities and activities**

- Where it may be unclear how to apply proportionality based on activities as value chains “unbundle” across multiple players
- E.g. if BigTechs are front-end for SME credit, Fintechs provide scoring system, and incumbents provide underwriting and funding)

c **Areas of differences in monitoring and enforcement over some common standards**

- E.g. bank vs. non-bank entities), e.g. AML/CFT, corporate governance, or e-commerce

d **Areas of inconsistency across countries and industries**, which becomes a strain as activity becomes global

- Demanding more cross-sectoral or “horizontal” regulation (e.g. data, competition, tax)

Though arbitrage is not Bigtechs’ motivation, asymmetries could rapidly change markets’ risk profiles

1. New products, services or distribution mechanism that are not provided by incumbents previously
Source: OW-IBFed report, Oliver Wyman analysis
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3 MANY AUTHORITIES ARE ALREADY TAKING ACTION, BUT ISSUES STILL ARISE IN HOW PLAYERS EXPERIENCE THE REG. FRAMEWORK – WE CALL THIS “ASYMMETRIES” (2/2)

Regulatory Area	Traditional FS firms	FS subsidiary of BigTechs or FinTechs (under FS license)	BigTech with material FS business (may not be under FS license)
Areas of cross-sector regulations	Competition/Anti-trust	Competition standards are cross-industry but entity-focused, and not adapted to network externalities (e.g. dominance in specific parts of value chain; “closed” platform environments; “data” monopolies)	
	Data privacy/management	Standards existing and enforced in FS; but new, enhanced regulations becoming cross-industry	
	Corporate governance	High standards applied and enforced to financial institutions (with proportionality)	Limited standards applied and enforced
	Economic/financial crime	AML standards applied and enforced to institutions (with proportionality)	Limited AML supervision and enforcement
Areas of FS regulations	Financial systemic stability	Global principles and national frameworks applied for financial stability	Traditional framework excludes non-FI entities (companies, techs)
	Prudential/firm resilience	Stringent capital and liquidity requirements applied and enforced to financial institutions (with proportionality)	Traditional framework excludes non-FI entities (companies, techs)
	Conduct/customer protection	High standards applied and enforced to financial institutions (with proportionality)	Lower standards applied and enforced outside FS sector
Areas of tech-only regulations	Regulations not applicable to traditional FS activities	Regulations targeted to tech platforms	

Legend
 Areas of regulatory asymmetries (bubbles):
 Areas of gaps within financial regulation itself
 Areas of differences in monitoring and enforcement
 Areas of imbalance across entities and activities
 Areas of inconsistency across countries and industries

Source: IBFed 2020 and 2018 regulatory survey, regulator websites, OECD, BIS, UNCTAD, OW-IBFed report, Oliver Wyman analysis

4 THIS EXPOSES VULNERABILITIES IN TRADITIONAL BANK BUSINESS MODELS BUT CAN ALSO CREATE OPPORTUNITIES

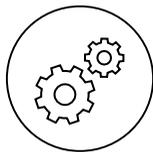
Challenges to banks



To retain customer relationships and profitability in the value chain when competing or cooperating with BigTechs, and reliance on traditional cross-selling model



To identify and compete for digital talents with BigTechs

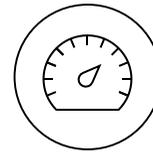


To carry out digital transformation under legacy infrastructure and systems, investor skepticism and constrained budgets



To maintain operation resilience, cybersecurity and management control with increasing demand for 3rd party outsourcing

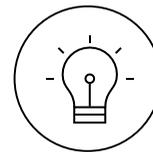
Opportunities for banks



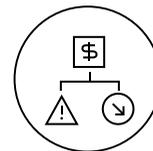
To accelerate shift to digital with support of BigTech's IT capabilities (e.g. AI, cloud)



To access new customer base with the new and efficient channels, including partnerships with BigTechs



To ride on new "blue ocean" markets created by BigTechs



To build on existing strengths (e.g. trust, risk management, compliance) to develop new business models

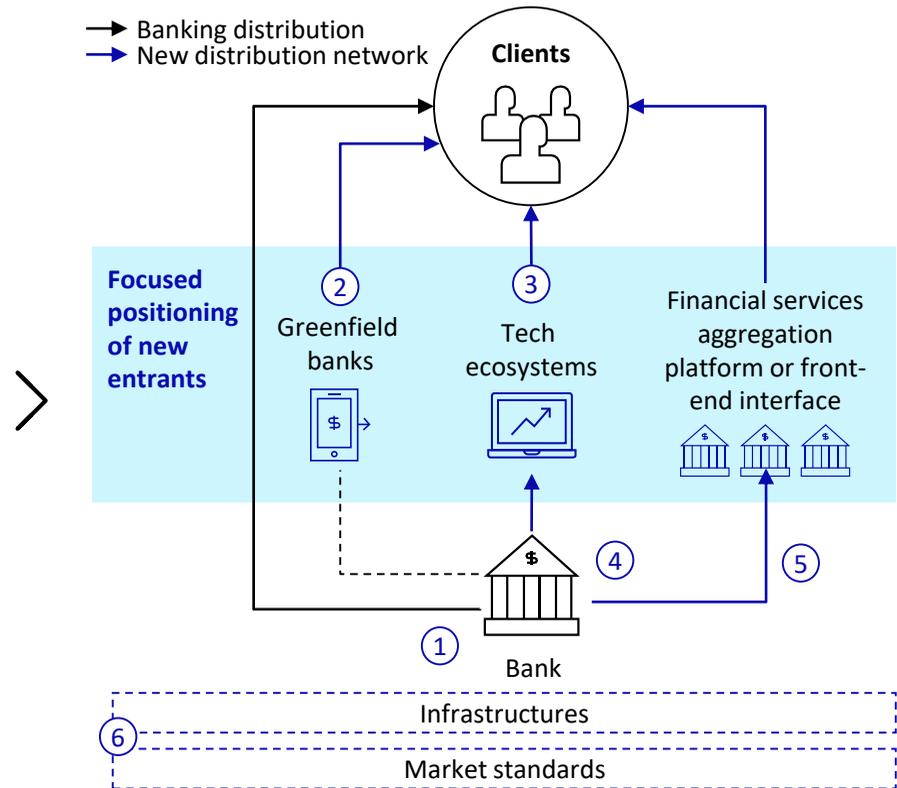
Source: OW-IBFed report, Oliver Wyman analysis

4 IN PRACTICE, THIS WILL RESULT IN DIFFERENT PLAYS AND THE MARKET IS LIKELY TO EXPERIENCE A VARIETY OF MODELS ACROSS INCUMBENTS & NEW PLAYERS

Broad strategic options

<p>1. Continue investment in digitization</p>	<ul style="list-style-type: none"> To improve consumer offerings and efficiency
<p>2. Develop greenfield banks</p>	<ul style="list-style-type: none"> To more rapidly compete with new offerings
<p>3. Partner up with technology players</p>	<ul style="list-style-type: none"> To reach customers via tech ecosystem
<p>4. Make selected acquisitions</p>	<ul style="list-style-type: none"> Acquiring companies with specific complementary capabilities E.g. FinTechs, small banks
<p>5. Focus targeted position in specific market segments/ products/ value chain functions</p>	<ul style="list-style-type: none"> E.g. being the front-end champion, efficient utility provider, etc.
<p>6. Promote inter-bank cooperation or consortia</p>	<ul style="list-style-type: none"> To share costs and risks in areas of competitive strength E.g. to establish market standards and infrastructures such as digital ID, KYC

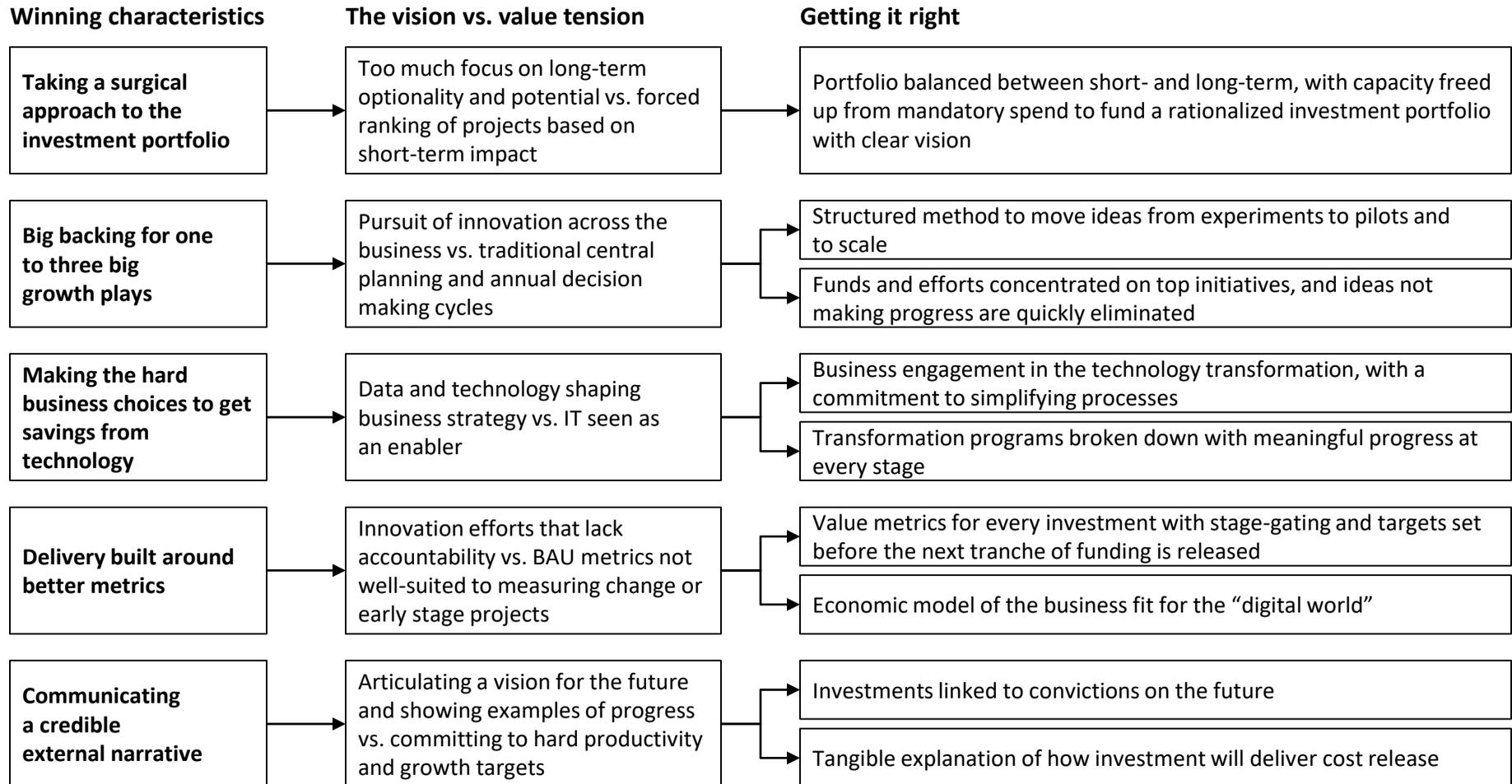
Exhibit 16 of report



Source: OW-IBFed report, Oliver Wyman analysis

4 FOR THIS, BANKS WILL NEED TO BE SELECTIVE IN THE CAPABILITIES THEY INVEST IN – PERSPECTIVES FROM OUR *STATE OF FINANCIAL SERVICES 2020 REPORT*

Where vision and value collide



Source: Oliver Wyman State of Financial Services 2020 report
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