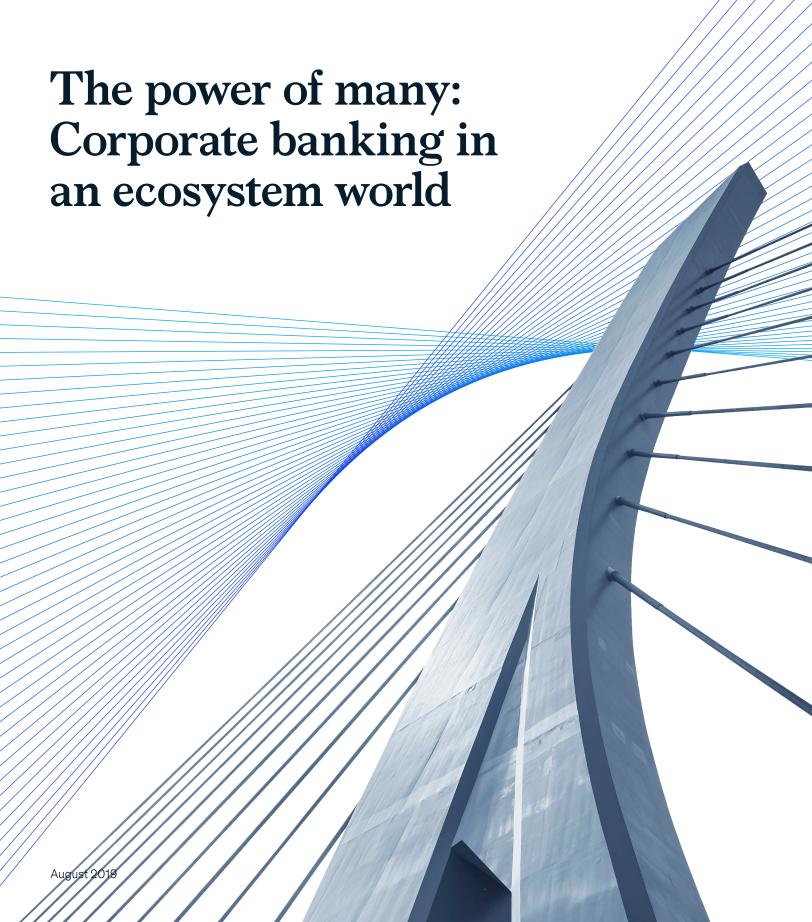
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The authors would like to acknowledge the contributions of Roger Rudisuli, Kevin Buehler, Jacob Dahl, Joe Ngai, John Qu, Andras Havas, Istvan Rab, Fumiaki Katsuki, and Shinichiro Oda to this report.

The power of many: Corporate banking in an ecosystem world

Corporate banking is being transformed by digitization. From core business processes to the way that clients engage and transact, digital has become the sine qua non of almost every action. However, digitization is still in the early stages in corporate banking. As it matures, more fundamental changes will ensue, enabled by the free flow of data between banks, their clients, and third parties. The resulting "ecosystems" will catalyze new operating models and disruption on an unprecedented scale.

Already, tech giants such as Alibaba, Tencent, and Amazon operate ecosystems with multiple businesses. Some already offer financial services, from trade finance, to payments and marketplace lending. The implication of these changes is that the traditional boundaries between corporate banks and the industries they serve can no longer be taken for granted. In an ecosystem context, information, resources, and expertise have coalesced; everything is up for grabs.

Banks in China are already getting involved, with a range of adoption models emerging, from fintech-based platforms, to marketplace ecosystems and partnerships with large companies. European and US banks are also taking steps, with some investing heavily in fintechs and application programming interfaces (APIs).

The benefits of joining ecosystems include expansion into new geographies, markets and products, added value from sharing of intelligence, and in some cases technology, and more effective risk mitigation—partly the result of enhanced access to data across the network.

Incumbents have first-mover advantage, but to thrive in an ecosystem world they must choose the role they want to play, and develop the right strategies, talent, and IT to do so. They need to identify potential partners, and determine which business models work best for them. The task is nuanced and complex, but in a world of increasing competition, it represents an opportunity that cannot be ignored.

Corporate banking's performance challenge

Corporate banking plays a vital role in the wider industry's performance, accounting for around one third of total revenues. However, the segment has come under pressure in recent years, amid intensifying competition, technology, innovation, and weak performance in some markets.

Revenue growth has averaged around 5 percent since 2009 and average return on equity reached 9 percent in 2016. These healthy top-line numbers disguise concerning underlying dynamics. The vast majority of positive performance has come from emerging markets, particularly in Latin America and Asia, while Western Europe has seen return on equity fall far below its cost. There is also significant variance within regions, with leading banks accounting for the lion's share of value creation, while the rest tread water or lose money.

We define corporate banking as banking services provided from a variety of financial institutions to companies with more than \$100 million in revenues and their subsidiares, as well as similar companies that participate in ecosystems.

A particular concern for corporate banking executives is that they have operated over recent years in a "goldilocks" macroeconomic environment—neither too hot, nor too cold—and aided by almost limitless cheap money from central banks. Of course, this is unlikely to last. The financial cycle will turn, bringing higher interest rates and a normalization of credit conditions and risk costs. The effects of the latter are already manifest in some emerging markets. In China, in particular, risk costs have risen sharply, driven by nonperforming loans and unsustainable corporate leverage.

A further pressure is regulation, the roll-out of which is set to continue at pace over the coming years. Banks under the Basel framework must persist in building out their capital buffers, implementing new risk measures, and taking steps to ensure they hold sufficient liquid assets. From 2019, the Financial Accounting Standards Board's Current Expected Credit Loss Model will impose much higher impaired loan provisions on US banks. The alternative International Financial Reporting Standard 9 will lead to an increase in realized earnings volatility. Banks in Europe must also manage the impact of regulation aimed at fueling competition (Europe's PSD2, the UK's Open Banking initiative) and new rules to boost transparency under the Markets in Financial Instruments Directive. By our estimate, global regulation in aggregate has the potential to depress average industry ROEs to a low of 3 percent before mitigation over the coming years.

Finally, corporate banks face competitive headwinds. Fintechs are targeting attractive links in the value chain, including payments, cash management, asset financing, and trade finance. While companies such as ThinCats, Creditshelf, and LendingClub are making a mark in the small and medium size enterprise (SME) lending space, different platforms are already eating away at the corporate business. For instance, FX platforms such as T360 and FXall and payments providers like Ripple are taking away the corporate business. A tough competitive environment is only going to get more challenging in the years ahead.

As the market and economic environment shifts, corporate banks are also under rising pressure to offer faster, more efficient, and more connected services, in line with the trends in retail banking. Clients increasingly expect streamlined experiences, integrated solutions, and value-added services. In addition, as digital disruption softens the borders between industries, corporate

executives may no longer be as attached to the idea that banks are the only source of financial services. It is easy to imagine a situation in which other industries (particularly in the tech space) may have the customer relationships, financial firepower, and strategic intent to compete.

These trends matter to the banking industry because the corporate segment remains key to the health of the wider industry. Corporate-related banking activity generated around \$1.25 trillion in revenues in 2016. Slower growth, more regulation, rising competition, and the critical emergence of ecosystems put that revenue pool in play.

Ecosystems will change everything

Individual digital technologies offer convenience and the ability to work more efficiently and serve customers better. However, the whole is greater than the sum of its parts. The most successful businesses have grasped how digitization enables diversification; that if you can sell books on your platform then you can also sell cars, holidays, and financial services. Companies such as Alibaba, Facebook, and Tencent have evolved into multibusiness behemoths, or ecosystems, that bring together interconnected services to meet a variety of needs in a single integrated experience.

McKinsey estimates that in the next ten years ecosystems will replace numerous value chains globally. We believe that by the mid-2020s they will account for \$60 trillion in revenues and span 30 percent or more of global gross economic output.

In banking, ecosystems offer the opportunity for providers to tap into new customers, markets, and data, leading to the potential for greater scale and more complete resources for managing risk. They are already making waves in the retail segment, where open-banking initiatives are encouraging third parties to get involved. Ecosystem plays are now also starting to appear in corporate banking, with companies, finance providers, incumbents, and technology providers exploring how they can achieve critical mass under a single digital umbrella.

Ecosystems are likely to thrive in the corporate context because there are clear potential benefits for both clients and providers:

 A single gateway means clients get frictionless access to a broader range of products and services than through a conventional linear relationship.

- Partnerships and service integration between companies across sectors create the potential for innovation, cross-selling, and data-sharing, as well as the opportunity to develop new business models and value-added services.
- Ecosystems create an opportunity to expand into new territories (geographic and client segment), broaden ranges of products and services, and overcome the capability constraints inherent to being an individual player.
- More effective risk mitigation is enabled by multi-dimensional data and information available in the ecosystem. Orders, transaction data, logistics, and other information from partners such as tax bureaus and customs will support credit facility and post-loan management.

A particular benefit for corporate banks is the chance to partner with organizations outside banking. For example, companies, banks, and securities houses on a single platform can leverage scale to put together cheaper and more accessible financing packages (Exhibit 1). Ecosystems may also bring technology-based opportunities, such as easier data-sharing, and better information exchange across the front, middle, and back offices. There are also potential operational improvements. Risk management and credit assessment, for example, may be better served with the additional

data that becomes available.

Still, alongside the many opportunities, there are also risks. McKinsey research shows that while digital technology propels some companies to become clear market winners, it depletes corporate earnings and overall value for others. More players naturally increase competition and the threat of disintermediation. There is a well-rehearsed concern among bankers that new technology gateways could create a barrier between themselves and their clients, with other players controlling the relationship. That way lies a utility model that is unlikely to be an attractive end game. In addition, data sharing is itself a double-edged sword, creating business opportunities but also offering competitors the chance to create value from formerly proprietary assets. Finally, there is inherent risk in sharing data with third parties, particularly as banks come under rising regulatory imperatives to protect their customers.

China taking the lead

Local regulation, culture, and business practices mean the development of ecosystems is likely to proceed at different paces around the world. To date the biggest businesses have evolved in China. E-commerce giant Alibaba, for example, offers numerous financial and other services to companies

Exhibit 1

Ecosystems create opportunities for banks and enable better services.

Three key benefits

Cater to diverse needs and address more pain points

Clients can access a more comprehensive range of products and services

Partner with numerous players across sectors, including banks, non-bank financial institutions, fintechs, enterprises, and professional services firms, to offer integrated solutions

Tap into new client segments and geographies

Enable regional players to bring innovative solutions to new geographies and client segments

Enable new business models such as integrated supply-chain solutions based on core enterprise's credit

Accelerate business expansion for regional players leveraging the ecosystem's nationwide online platform

Enhance risk controls

Leverage data from real transactions to enhance risk management

Host-to-host transaction data to validate real trade background and support creditfacility as well as post-loan management

Source: McKinsey analysis

on its platform. Social media platform Tencent has launched a bank that leverages data from platform partners to make loans. Another Chinese ecosystem, Ant Financial (founded in 2014 out of the world's biggest online payments provider Alipay—a subsidiary of Alibaba) runs a money-market fund with \$165 billion of assets under management.

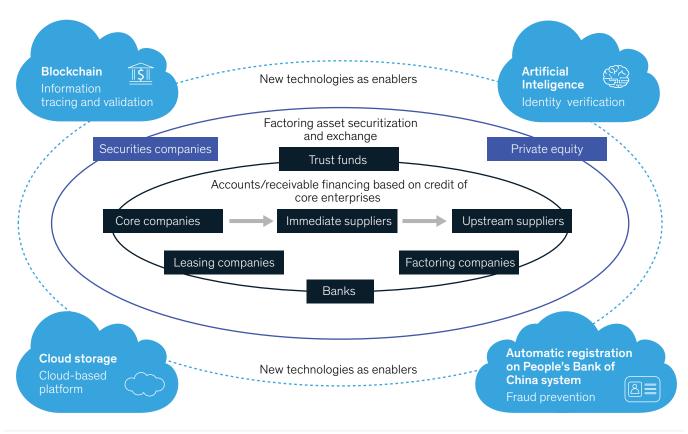
The common theme running through these businesses is that they are sustained because they create a hive effect in which mutual benefits accumulate. For the most part they are orientated toward the retail space and mass market. However, that is beginning to change, and a variety of new models are emerging that are directly relevant to corporate banking propositions:

Fintech or bank-led ecosystems

• Linklogis (backed by Tencent) is a fintech startup that helps banks build blockchain-based platforms on which core enterprises and their supply chains can access asset-based finance. Blockchain technology supports identity checks, asset review, and document management. The distributed ledger forms a tamper-proof "golden record" of transactions in negotiable debt certificates. Financial companies on the platform include banks, trust funds, securities firms, and factoring companies. Core enterprises receive credit lines that can be extended down the supply chain. In bringing together a group of enterprises, Linklogis increases collective bargaining power and boosts the stability of supply chains.

• The banking arm of Ping An Insurance, China's second-largest life insurer, is leveraging a range of technologies (blockchain, AI, cloud computing) to expand its retail-focused ecosystem and build a supply-chain accounts-receivable platform (Exhibit 2). The platform aims to bring together core companies, their suppliers, factoring interests, securities firms, trust companies, and related businesses to enable asset-based financing. The resulting network supports securitization and trading opportunities, and financing can be extended through the supply chain to second-order suppliers and potentially beyond, according to Ping An.

Exhibit 2
Ping An's SAS platform helps corporates and value-chain players obtain financing and value-added services.



Source: Ping An annual report; expert interviews

Industrial enterprise + big bank ecosystem

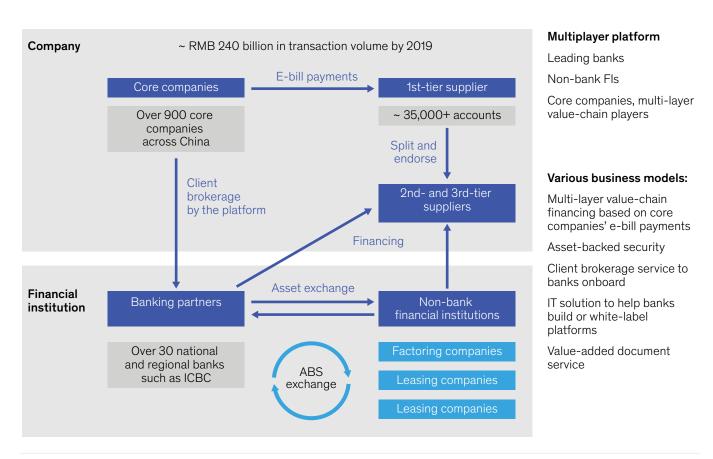
A group of 11 industrial companies, including rolling stock manufacturer CRRC and China Aerospace Science and Technology Corporation, partnered with two state-owned banks (ICBC and PSBC), six local state-owned enterprises, and four privately owned enterprises, to build a trade-finance platform. The CSCC platform (Exhibit 3) includes more than 900 core companies, roughly 35,000 multi-layer value-chain players, and over 20 national and regional banks and non-bank financial institutions. Transaction volume reached approximately RMB 240 billion by 2019, according to CSCC's web site.

The platform incorporates multiple business models, including financing, client brokerage services, and IT solutions to help banks build or white-label platforms. It also offers services such as order and invoice reconciliation and documentary servicing. Companies on the platform can access value-chain financing on a T+0 timeline based on a range of assets.

Marketplace ecosystem

The marketplace model enables a bank to partner with cross-sector players to discover new relationships and expand (Exhibit 4). A leading regional bank is working with banks, non-bank financial institutions, factoring companies, core enterprises, and technology companies to build a platform that enables participants from within and outside the region to access trade finance, asset exchange, payments, and value-added services. The bank gains from cooperation with the factoring companies and by building alliances with other financial institutions. The relationships on the platform are designed to be mutually beneficial; banks obtain high-quality credit assets, factoring companies source new business, and corporates access a wider choice of financing options. The plan is to expand the platform and to grow interbank sharing to include activities such as data exchange for onboarding and know your customer (KYC). During the course of the project, the bank transformed its customer-facing and IT systems. It

Exhibit 3 **CSCC's trade finance ecosystem incorporates a range of models.**



Source: CSCC website

set up a digital innovation garage, bringing together teams from business, IT, and operations.

Regulator + banks + fintech ecosystem

A partnership between China's central bank (PBOC), Standard Chartered Bank, automaker BYD, and Ping An (as technology provider) created the China Bay Area Trade Finance Blockchain Platform (Exhibit 5). Stakeholders include the Bank of China, China Construction Bank, and China Merchants Bank. The aim of the project is to enable participants, and SMEs, to access financing and services including logistics, customs, and tax advisory. Proposed benefits include lower interest rates and much faster loan approvals—20 minutes compared with weeks previously. Orders, logistics, and transaction data are stored on the blockchain ledger, which was launched for testing in September 2018. The platform is also designed to connect with the Internet of Things to enable automated contract execution.

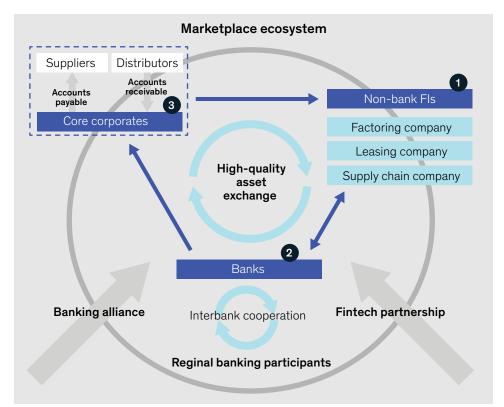
Ecosystems are a game-changer in supply-chain finance, because of the much larger range of

services, business models, and technologies available, compared with traditional platforms. The scale and diversity create significant opportunities for lenders, borrowers, and providers of adjacent services (Exhibit 6).

Banks outside China are innovating

Regulation such as Europe's Payment Services
Directive (PSD2) and the UK's open banking
initiative provide a productive medium for the
cultivation of ecosystems. Both initiatives aim to
open up bank databases to third parties through
APIs. Participants are likely to benefit from
shared data, wider client reach, more numerous
touchpoints, and the opportunity to offer better
customer experiences. Banks in the United States
are also experimenting. Citi, for example, has
launched treasury and trade solution APIs through
its integration platform. The solutions enable
corporate clients to make payments instantly and
access real-time information on FX, accounts, direct
debits, cut-off times, and payments.

Exhibit 4 Marketplace ecosystems enable geographic expansion and create new business models and sources of finance.



- Business expansion
 Leveraging quasi-Fls:
 factoring companies as
 partners, enabling regional
 banks to extend client
 coverage
- Various funding partners
 Partner banks to join the
 ecosystem
 Trust companies, securities
 companies
- Bundling core enterprises
 Holistic industry supply
 chain finance: stabilize the
 chain, optimize financials
 and accelerate turnover
 cycles

Source: McKinsey analysis

A common dynamic across these initiatives is that banks are seeking partnerships that can help them innovate, expand, control costs, and accelerate time to market. In the process, three distinct species of nascent ecosystem are emerging:

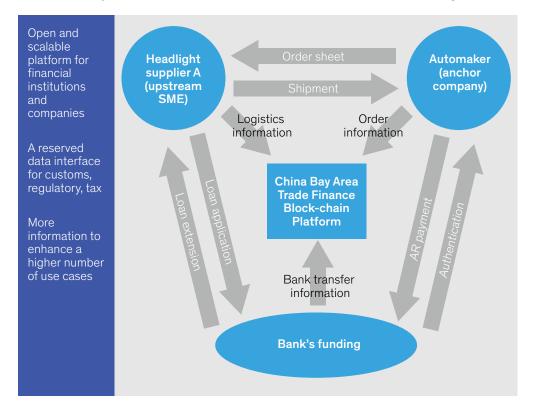
- Investment and M&A in fintech. Bigger banks are investing in fintechs that can help them incorporate new technology and develop use cases. Almost all major banks have taken this approach in some form. In one example, Westpac strategically invests in around 20 fintechs, some of which it has integrated into its business. In another, Bocom International, the investment banking arm of China's Bank of Communications, has partnered with Hong Kong fintech firm FDT-Al to develop solutions from artificial intelligence and big data.
- Banking-as-a-service platform (open banking API). Banks including BBVA, Citi, and DBS,

are leveraging APIs to open data and services to third parties. In one example, BBVA allows third parties to retrieve business user balances and transactions in market-standard format. CitiConnect has processed millions of API calls for payment initiation and data inquiries. APIs connect ecosystem partners, organizations, and clients seamlessly, enabling the integration of capabilities and offering of new products and services across ecosystems. The future of corporate banking is likely to be characterized by ecosystem-like interactions, enabled by APIs and platforms built by clients, banks, and thirdparty providers. Potential API use cases exist in areas such as trade finance, cross-border payments, transaction monitoring, and corporate lending (for example, syndicated loans and credit scoring).

Exhibit 5

People's Bank of China coordinated a new platform leveraging blockchain technology to improve capital efficiency and enable financing.

In September 2018, **China Bay Area Trade Finance Blockchain Platform**, coordinated by PBOC, ran a Phase I trial for accounts-receivable financing



Highlights:

Before



Source: McKinsey analysis

After

Exhibit 6

Ecosystems create significant opportunities for lenders, borrowers and providers of adjacent services.

	Ecosystem platform	versus	Traditional supply-chain finance
Players	Broader types of market players All membership banks Multiple corporates Multiple layers of suppliers and distributors Factoring companies Securities Trust companies		Mainly trilateral parties Only the operating bank Single corporate Immediate suppliers and distributors
Solutions	Various banking solutions and value-added services Extended financing by "e-draft" circulation Factoring ABS exchange Supplier finance Distributor finance		Only two major solutions Supplier finance Distributor finance
Business model	Membership-based trading platform Asset marketplace and exchange Client brokerage IT solution service		Supply-chain finance
Tech enabler	Blockchain Distant/shared KYC recognition Internet		Internet

Source: McKinsey analysis

Strategic alliances. Banks are creating informal
or formal partnerships to share knowledge and
best practices. Rabobank, for example, formed
an alliance with banks in around 40 countries, as
well as NGOs and research institutes, aiming to
expand its network in the agriculture industry.

What's next?

Banking industry executives are attuned to the need to manage the challenges of economic uncertainty, and are preparing for the rise in risk margins that will likely accompany any cyclical downturn. The industry is making efforts to become leaner and more robust, and many large banks have partnered with fintechs to develop and expand their services. However, only a few have formulated a comprehensive strategy for the innovation that is fueling the growth of ecosystems.

Ecosystems create an opportunity for corporate banks to expand into new territories and client segments, launch more products and services, and overcome the capability constraints inherent to being an individual player. In accounts receivable trade finance in China alone, the market has grown at 10 percent a year over recent years to pass RMB 14 trillion (Exhibit 7).

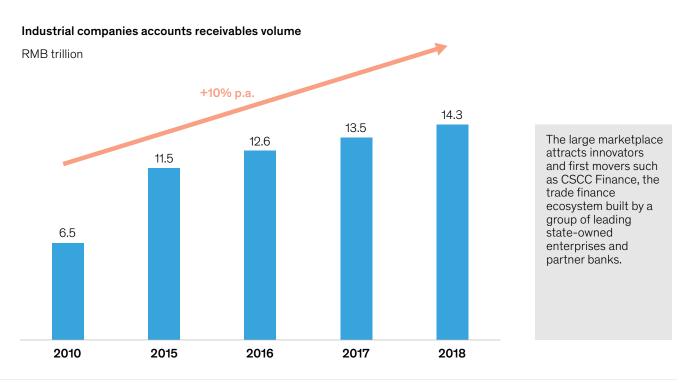
As executives consider how to position their companies, they first need to consider their own market positions, priorities, and levels of ambition. However, there are also rules of thumb that can help guide the choices they make. Larger banks, for example, can leverage their resources to build ecosystems through accelerated investment in fintechs. Regional players are often more constrained, but have much to gain from working closely with peers, clients, and partners. In doing

so they can reasonably expect to reap benefits of scale that include greater client reach, enriched products, and enhanced services. However, the task is complex, and requires a strong sense of mission, as well as budget and technological resources.

McKinsey sees five key actions that may help corporate banks find the right path:

- Start from the top. Commitment from the CEO and board is essential. However, this must go beyond high-level mission statements. There must be ongoing conversations between top decision-makers and those leading ecosystem initiatives. Areas such as data science are relatively new and require investment of time and resources. It may be useful to set up workshops, where directors can ask questions and deepen their understanding. External experts can also play a role, bringing different skill sets to enrichen the ecosystem mindset. Banks must combine technological expertise with businessprocess knowledge and strength in risk and regulation. Finally, the bank's data strategy must be connected to its business goals and core operations, so the proposition creates excitement through the organization.
- Identify your role. Banks must decide how they want to play. For some, it might make sense to orchestrate an ecosystem, taking the lead in bringing the elements together and controlling the point of entry. Alternatively, a bank could join other ecosystems, accessing scale much faster and gaining access to new industries and businesses. One leading US bank has invested billions of dollars in building relationships with hundreds of fintechs, including online brokers, payments providers, and marketplace lenders. Banks must align their roles to their strategic positioning, product focus, and market.
- ecosystems, every member benefits from the involvement of other members. Banks must identify win-win value propositions and clear incentives for their clients and partners. Every company that takes part needs to contribute. In assessing partnership candidates, leaders might consider industries that are changing fast and which offer new sources of value, or are most meaningful in terms of client base. Executives may consider how they can leverage their own data to benefit themselves and others, and how

 $\operatorname{\sf Exhibit} 7$ The market for trade finance ecosystems in China is an estimated RMB 14 trillion.



Source: Wind

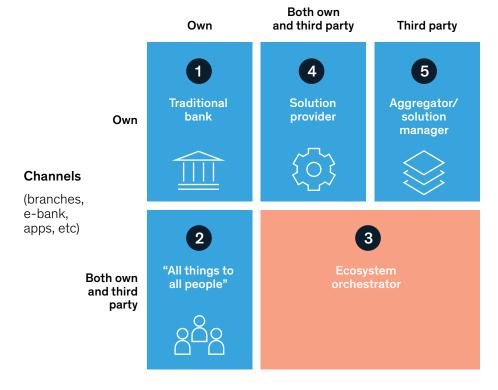
- that will impact internal roles, operating models, and business goals.
- Define use cases. Banking executives must identify the areas early on where they can generate the most value for themselves and their clients. In some regions that may be in trade finance, while in others it may be corporate lending or data-driven applications. The ecosystems with strong early growth in China are the trade-finance platforms that bring together industrial enterprises, national and regional banks, and financial institutions. Potential API use cases are also emerging in trade finance, cross-border payments, transaction monitoring including anti-money laundering and KYC, and corporate lending.
- Get the IT and data right. The lifeblood of any commercial ecosystem is a digital platform and data. This will feed cross-fertilization and enable new insights, more accurate pricing, and innovative services. A critical goal is

data diversity—achieved in part through partnerships—which will enable tailored services and create more value for the ecosystem as a whole. Information from a shipping company, for example, may help banks market trade-finance and FX services. Deeper data insights can establish previously undetected connections between companies, people, and relationships. More extensive data can also support analytically driven scenario planning, helping banks understand how ecosystems may develop, and where data can add value. Still, banks may not wish to share everything—there must be policies about what should remain private. Equally, they must ensure that partners share back any proprietary information they have transformed or enriched. Banks should ask whether there is some target end state for data management that will drive value creation. Technology is an important enabler, with cloud-based databases proliferating and Al applications including natural language

Exhibit 8

Banks can choose one or multiple models depending on product area and market segment.

Products (financial and beyond)



- Traditional banks
 offer principally their own
 products through their own
 channels
- "All things to all people" model prioritizes own products but creates competition on distribution
- 3 Ecosystem orchestrators facilitate collaboration between multiple participants
- Solution providers
 create end-to-end solutions
 by combining best-of-breed
 products, either their own or
 from a third party
- Aggregators and solution managers
 create transparency and promote competition

Source: McKinsey analysis

processing, deep learning and neural networks increasingly available to help banks achieve new insights. Banks must also be willing to review data and application architecture, and to invest and build new capabilities in APIs that will enable external connections.

Corporate banks are specialized providers of sometimes complex financial services, and are therefore relatively protected from the huge ecosystems that are emerging in the retail context. However, it would be a mistake for executives to think they are immune. Already in China corporate banks are taking part in ecosystems in a variety of models. Large European and US-based banks are also engaging, primarily through partnerships with fintechs and exploration of the implications of open

banking. These players understand that in a fast-moving and increasingly competitive environment the whole is greater than the sum of its parts. Ecosystems enable expansion, innovation, datasharing, and new business opportunities. Regional players may benefit in particular from extended reach and scale. Given the range of possibilities, and the chance to create critical mass, ecosystems are likely to be a key disruptive threat to corporate banking over the coming decade. If banks are to catch the wave, the time for action is now.

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