

New rules for an old game: Banks in the changing world of financial intermediation

McKinsey Global Banking Annual Review 2018

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Executive summary

This is McKinsey's eighth annual review of the global banking and securities ("banking") industry. It is based on data and insights from Panorama, McKinsey's proprietary banking research arm, as well as the experience of clients and practitioners from all over the world.

A decade after a financial crisis that shook the world, the global banking industry and financial regulators have worked in tandem to move the financial system from the brink of chaos back to a solid grounding with a higher level of safety. In numerical terms, the global Tier 1 capital ratio—one measure of banking system safety—increased from 9.8 percent in 2007 to 13.2 percent in 2017. Other measures of risk have improved as well; for example, the ratio of tangible equity to tangible assets has increased from 4.6 percent in 2010 to 6.2 percent in 2017.

In the first chapter of this report, we provide a perspective on the industry's current state and valuation. Performance has been stable, particularly in the last five years or so, and when the above-mentioned increases in capital are figured in. Stable, but not spectacular. Global banking return on equity (ROE) has hovered in a narrow range between 8 and 9 percent since 2012. Global industry market capitalization increased from \$5.8 trillion in 2010 to \$8.5 trillion in 2017. A decade after the crisis, these accomplishments speak to the resiliency of the industry.

But growth for the banking industry continues to be muted—industry revenues grew at 2 percent per year over the last five years, significantly below banking's historical annual growth of 5 to 6 percent.

Compared to other industries, the return on equity of the banking sector places it squarely in the middle of the pack. But if we look at banking

from an investor's point of view, we experience a jarring displacement: the banking sector's price-to-book ratio was consistently lower than that of every other major sector over the 2012-17 period—trailing even relatively sluggish industries such as utilities, energy, and materials. This difference persists even when other valuation multiples, such as price-to-earnings ratios, are compared. In part, this report attempts to understand why investors lack confidence in the future of banks.

What do investors know, or think they know, about the future prospects for the banking industry? In part, low valuation multiples for the banking industry stem from investor concerns about banks' ability to break out of the fixed orbit of stable but unexciting performance. Lack of growth, and an increase in non-performing loans in some markets, may also be dampening expectations. Our view, however, is that the lack of investor faith in the future of banking is tied in part to doubts about whether banks can maintain their historical leadership of the financial intermediation system.

Our second chapter examines this system in depth. By our estimates, this financial intermediation system stores, transfers, lends, invests, and risk manages roughly \$260 trillion in funds. The revenue pool associated with intermediation—the vast majority of which is captured by banks—was roughly \$5 trillion in 2017, or approximately 190 basis points. (Note that as recently as 2011, the average was approximately 220 bps.) In part, this report will explore how this \$5 trillion revenue pool could evolve over time.

Banks' position in this system is under threat. The dual forces of technological (and data) innovation and shifts in the regulatory and broader socio-political environment are opening great

swaths of this financial intermediation system to new entrants, including other large financial institutions, specialist finance providers, and technology firms. This opening has not had a one-sided impact, nor does it spell disaster for banks.

Where will these changes lead? Our view is that the current complex and interlocking system of financial intermediation will be streamlined by the forces of technology and regulation into a simpler system, with three layers. In the way that water will always find the shortest route to its destination, global funds will flow through the intermediation layer that best fits their purpose.

The first layer would consist of everyday commerce and transactions (e.g., deposits, payments, consumer loans). Intermediation here would be virtually invisible and ultimately embedded into the routine digital lives of customers. The second and third layers would hinge on a barbell effect of technology and data which, on one hand, enables more effective human interactions and, on the other, full automation. The second layer would also comprise products and services in which relationships and insights are the predominant differentiators (e.g., M&A, derivatives structuring, wealth management, corporate lending). Leaders here will use artificial intelligence to radically enhance, but not entirely replace, human interaction. The third layer will largely be business-to-business; for example, scale-driven sales and trading, standardized parts of wealth and asset management, and part of origination. In this layer, institutional intermediation would be heavily automated and provided by efficient technology infrastructures with low costs.

This condensed financial intermediation system may seem like a distant vision, but there are parallel examples of significant structural change

in industries other than banking. Consider the impact of online ticket booking and sharing platforms such as Airbnb on travel agencies and hotels, or how technology-enabled disruptors such as Netflix upended film distribution.

Our view of a streamlined system of financial intermediation, it should be noted, is an “insider’s” perspective: we do not believe that customers or clients will really take note of this underlying structural change. The burning question of course, is what these changes mean for banks. We take up this question in our concluding chapter, where we describe the strategic options open to banks:

- The innovative, end-to-end ecosystem orchestrator
- The low-cost “manufacturer”
- The bank focused on specific business segments
- The traditional bank, but fully optimized and digitized

The right path for each bank will of course differ based on its current sources of competitive advantage, and on which of the layers matches its profile—or the profile it intends to take in the future.

Looking ahead, we believe the rewards will be disproportionate for those firms that are clear about their true competitive advantage and then make—and follow through on—definitive strategic choices. The result will be a financial sector that is more efficient and which delivers value to customers and society at large. That is a future that should energize any forward-looking banking leader.



The state of the global banking industry

A decade after the financial crisis, the global banking and securities industry (“banking”) has achieved steady improvements in its level of safety. Traditional measures of risk have largely improved. That being said, the performance of the sector has been stable, but unexciting. Furthermore, if we look at banking’s position relative to other major industry sectors, the view is more sobering. Global banking valuation multiples are lower than those of all other sectors. Some of this valuation gap is due to investor concerns about future profitability, growth, and risk. McKinsey’s view is that in addition to these factors, investors are expressing a deeper, almost existential level of doubt about banks’ role in a changing financial intermediation system, and in the face of competition from other financial services firms, non-bank attackers, and technology companies.

A more granular view of the banking industry reveals some remarkable shifts that are masked by global averages. For example, in the past year, the price-to-book ratio of developed markets banks has overtaken that of emerging markets banks for the first time in many years. Average also mask significant variation in performance: pockets of high returns and high value, as well as pockets of underperformance and inefficiency.

In this chapter, we present both wide-angle and close-up pictures of the banking industry to discuss the challenges it faces and the wide variation in performance. That picture, we suggest, points to a set of fundamental forces that could deepen banks’ challenges—but also present new opportunities to create value.

Global banking: Safer, but stuck in neutral

The safety of the banking sector appears to have steadily improved in the last few years. Traditional

measures of risk have improved, largely in response to regulatory efforts to make the banking system stronger in the face of downturns or crises.

In numerical terms, the global Tier 1 capital ratio—one measure of banking system safety—has risen from 9.8 percent in 2007 to 13.2 percent in 2017 (Exhibit 1, next page).¹ Other measures of risk have improved as well; for example, the ratio of tangible equity to tangible assets has increased from 4.6 percent in 2010 to 6.2 percent in 2017.²

In addition, global banking’s market capitalization increased from \$5.8 trillion in 2010 to \$8.5 trillion in 2017. A decade after the crisis, these are solid accomplishments.

That being said, these attributes do not tell us much about whether banking will be able to break out of its fixed orbit of performance to deliver sustainable returns in the coming years. Globally, average banking return on equity (ROE) after tax has hovered in a narrow range between 8 and 9 percent since 2012 (Exhibit 2, next page).

This consistent performance is impressive when the increases in capital ratio requirements during the period are factored in (Exhibit 3, page 10).

Taking a regional view, we see varying levels of performance and differences in the factors that drive that performance (Exhibit 4, page 10).

Taking a business view, we see that growth in investment banking has been anemic in the last five years, while wealth and asset managers grew revenues at 5 percent CAGR in the same time period (Exhibit 5, page 11).

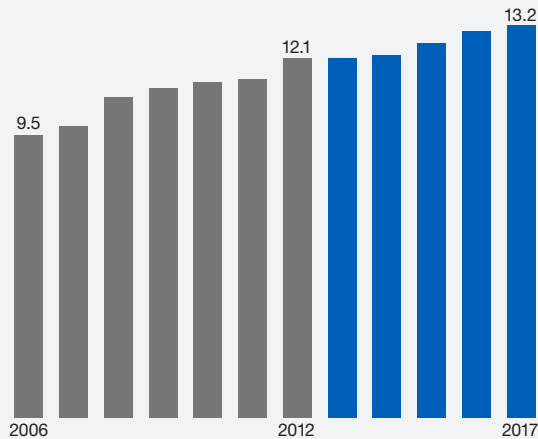
¹ Source: S&P Global Market Intelligence

² Source: S&P Global Market Intelligence

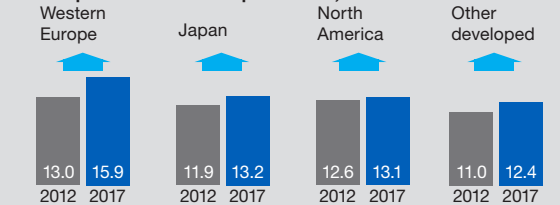
Exhibit 1

The Tier 1 capital ratio has risen consistently over the last five years.

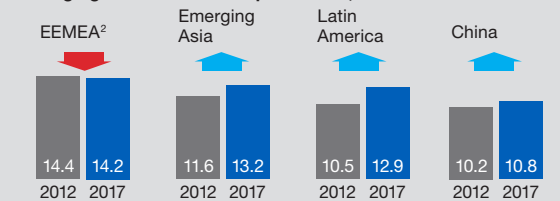
Global average Tier 1 capital ratios 2006-17,¹ %



Developed world Tier 1 capital ratios,¹ %



Emerging markets Tier 1 capital ratios,¹ %



¹ Based on a sample of ~1,000 largest banks globally in terms of assets.

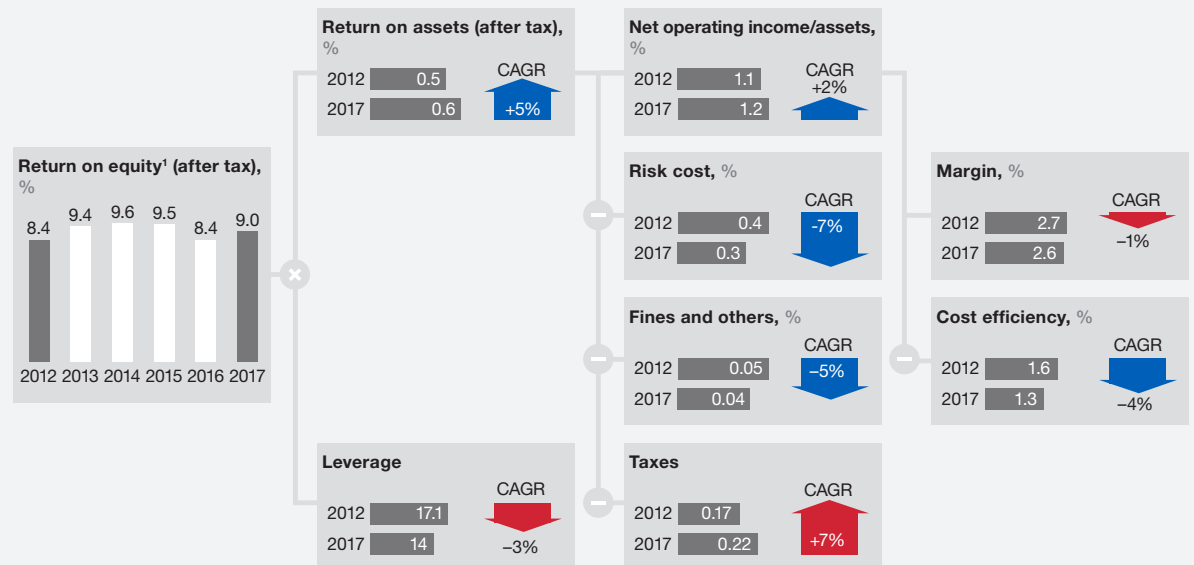
² Eastern Europe, Middle East and Africa.

Source: SNL; Thomson Reuters; McKinsey Panorama

Exhibit 2

Global banking return on equity has hovered in a narrow range between 8 and 9 percent since 2012.

Global return on equity tree 2012-17



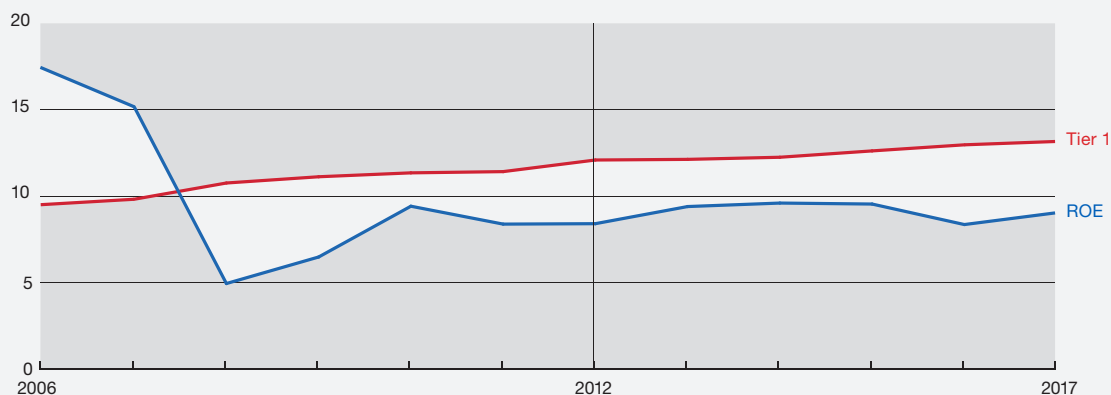
¹ Based on a sample of ~1,000 largest banks globally in terms of assets.

Source: SNL; McKinsey Panorama

Exhibit 3

Banking returns on equity have remained stable despite a steady increase in the Tier 1 capital ratio.

Global return on equity and Tier 1 capital ratios,¹ %



¹ Based on a sample of ~1,000 largest banks globally in terms of assets.
Source: SNL; Thomson Reuters; McKinsey Panorama

Exhibit 4

Global banking margins are declining in most geographies, but cost efficiency is rising.

Global return on equity levers from 2012 to 2017,¹ %

■ Change in lever increases ROE ■ Change in lever reduces ROE

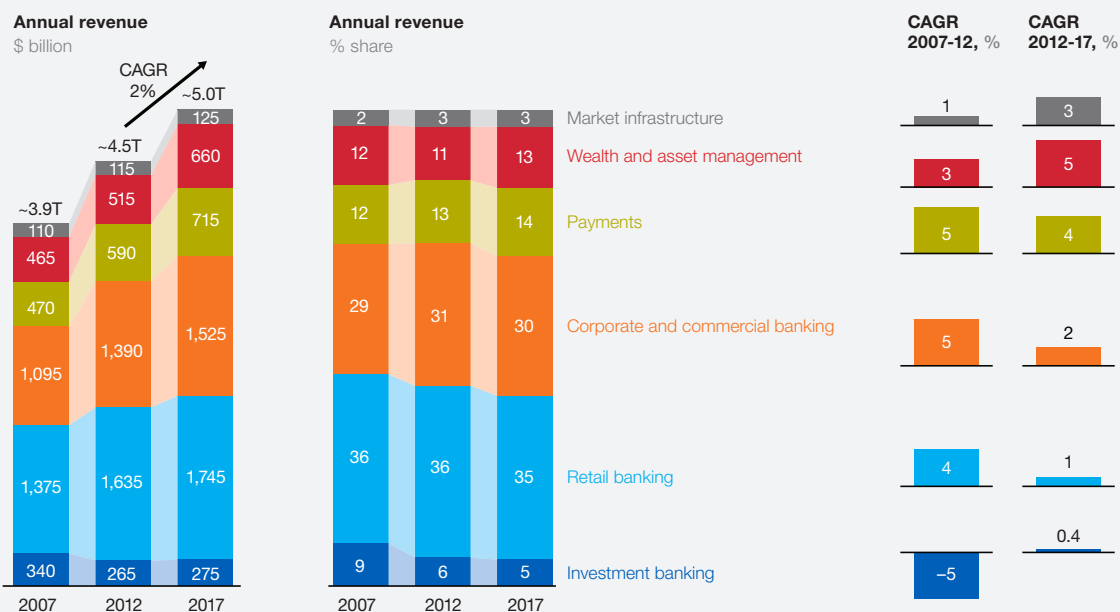
	2012	+	Margin ³	+	Risk cost ⁴	+	Cost efficiency ⁵	+	Taxes ⁶	+	Fines and other ⁷	+	Capital	=	2017 ⁸
Developed															
North America	8.7		-3.5		1.1		5.0		-2.7		0.2		-0.6		8.4
Western Europe	-0.7		-6.5		7.9		4.6		-1.5		4.5		-2.1		6.1
United Kingdom	1.3		4.1		4.6		0.5		-2.0		-3.2		-1.3		4.0
Japan	6.6		-4.3		0.5		2.1		1.4		0.6		-1.0		5.8
Other developed ²	11.1		-6.9		1.4		3.7		0.3		0.3		-0.6		9.3
Emerging															
China	20.5		-10.3		-4.6		7.4		2.6		-0.2		-2.2		13.1
Emerging Asia	15.9		-1.8		-6.4		0.4		1.9		-0.1		-0.8		9.1
Latin America	14.0		2.5		0.1		0.6		-1.5		0.0		-0.4		15.3
EEMEA	17.4		-10.2		-2.3		7.2		1.5		-0.2		-0.8		12.6
Global	8.4		-3.3		1.1		4.7		-0.8		0.9		-2.0		9.0

¹ Based on a sample of ~1,000 largest banks in terms of assets. ² Australia, Hong Kong, New Zealand, Singapore, South Korea, Israel and Taiwan. ³ Operating income/assets. ⁴ Impairments/assets. ⁵ Operating cost/assets. ⁶ Income tax expenses/assets. ⁷ Includes regulator fines, customer redress, impairment of goodwill, gains/losses from discontinued operations, and restructuring charges. ⁸ Numbers do not add up to the ROE level of 2017 due to rounding.

Source: SNL; McKinsey Panorama

Exhibit 5

Since 2012, wealth and asset management and payments have outpaced other banking sectors in terms of revenue growth.



Banking's relative performance

Banking valuations have traded at a discount to non-banks since the 2008-09 financial crisis. In 2015 that discount stood at 53 percent; by 2017, despite steady performance by the banking sector, it had only seen minor improvements at 45 percent (Exhibit 6, page 12).

While banks' valuations have been held down by the post-crisis gravitational pull, other sectors have experienced no such constraints. Most actually saw their average price-to-book ratio improve over the 2012-17 period. And banks are not just lagging behind high-flying sectors such as healthcare, consumer, and technology—the sector's price-to-book ratio was consistently lower than every other major sector over the 2012-17 period—even relatively sluggish industries such as utilities, energy, and materials (Exhibit 7, page 13).

The valuation discount persists when looking at other metrics. Price-to-earnings ratios for the global banking industry have consistently traded at a steep discount compared to other major industries—39 percent in 2017 compared to near equality in 2008.

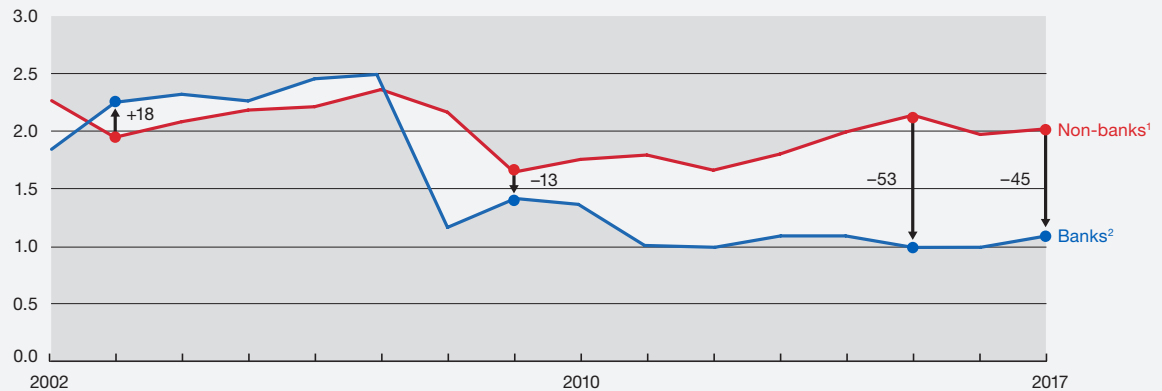
Behind the averages

As is often the case, a closer, more detailed view of the banking industry reveals trends that are masked by global averages. In the past year, the price-to-book ratio of developed markets banks has overtaken that of emerging markets banks for the first time in many years. This is the culmination of a decade-long trend—and reflects the increasing risk cost of nonperforming loans in emerging markets, investor uncertainty in China, and competitive moves from digital firms that have thus far been bolder in emerging markets

Exhibit 6

Global banking valuations have remained structurally low, consistently trading at a discount to non-banks since the financial crisis.

Global price to book value ratios, 2002-17,¹ % difference



¹ Non-bank includes utilities, telcos, consumer discretionary, information technology, consumer staples, energy, healthcare, industrials, and materials.

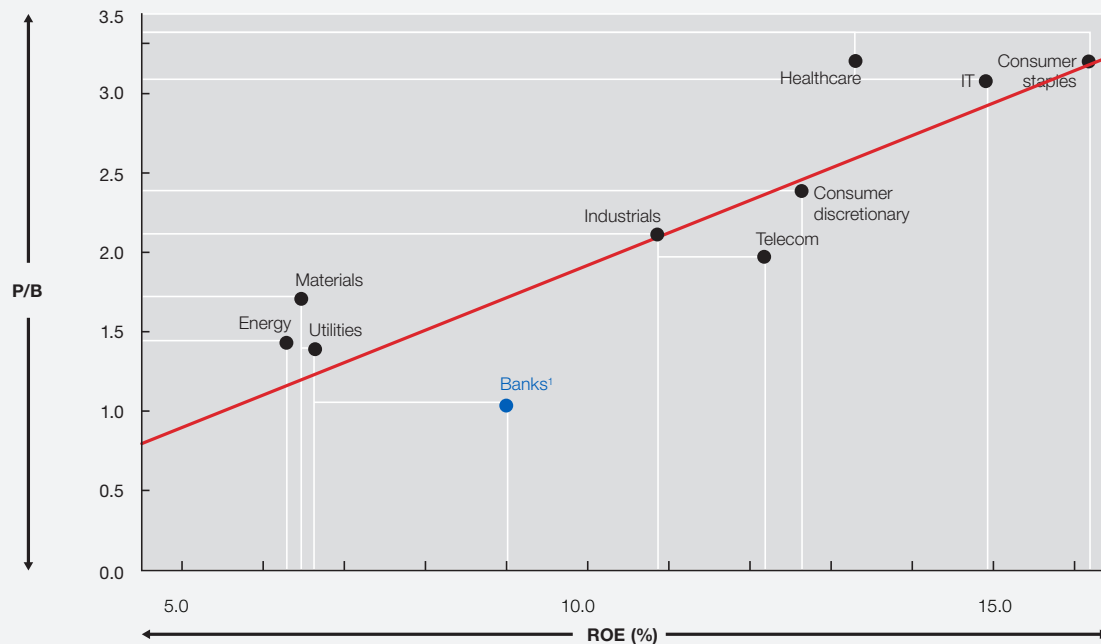
² Based on a sample of ~1,000 largest banks globally in terms of assets.

Source: SNL; Thomson Reuters; McKinsey Panorama

Exhibit 7

On average, from 2012 to 2017, banking valuations lagged those of all other industries.

Global return on equity (ROE) vs price to book value (P/B) by industry, 2012-17,¹

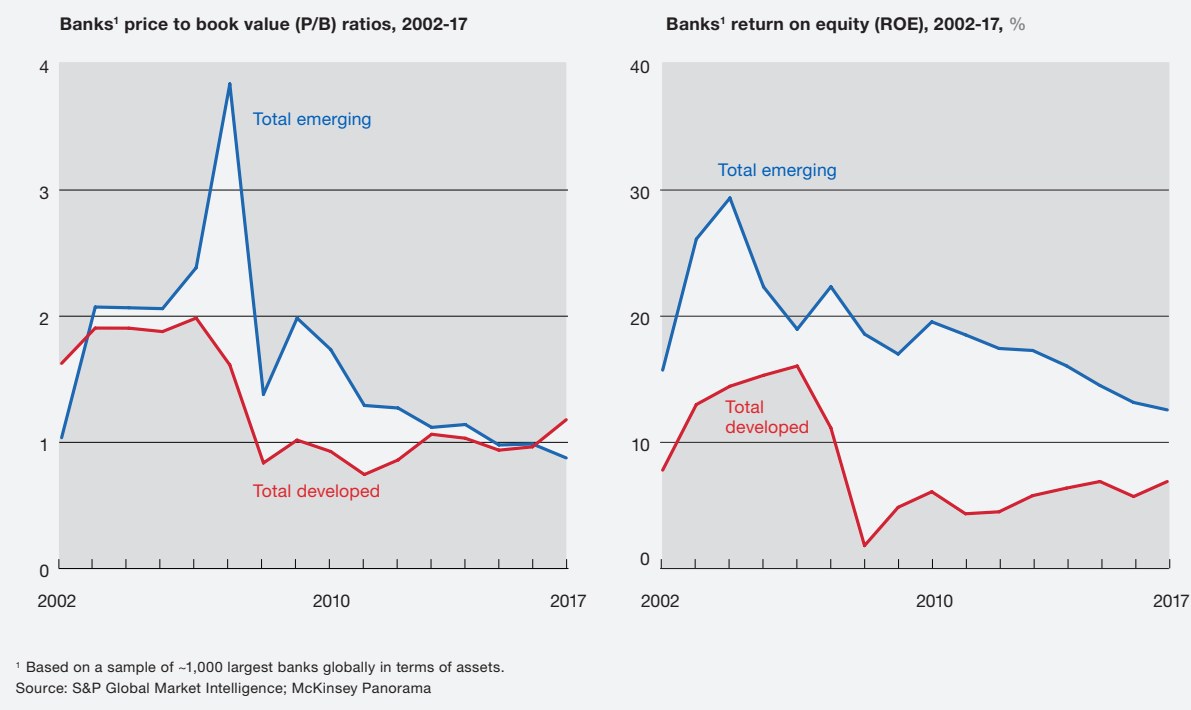


¹ Based on a sample of ~1,000 largest banks globally in terms of assets.

Source: SNL; Thomson Reuters; McKinsey Panorama

Exhibit 8

After a decade of mostly lagging behind, developed markets banks' price-to-book ratios surpassed those of their emerging markets peers.



than in developed ones. We explore this historic shift in more detail later.

A zoomed-in view also reveals significant differences in performance across regions. There are pockets of high returns and high value, as well as pockets of underperformance and inefficiency. About 8 percent of the sample achieved a price-to-book ratio higher than 2. By contrast, the worst-performing 15 percent of banks had price-to-book ratios below 0.5.³

There have also been significant differences in performance between banks of different sizes, as well as those that have built scale in different

segments. Our research also shows that, in the regions and businesses where banking has digitized fastest, the largest banks have achieved bigger efficiency advantages. That, we believe, is a sign of things to come. (See sidebar, “Big bank theory: Does scale matter?”).

A historic shift in banking valuations

For much of the past decade, bank valuations in developed markets have been catching up with those in emerging markets, which have long outperformed them. In 2017, there was finally a lead change: the price-to-book ratio of developed-market banks overtook that of emerging market banks for the first time in many years (Exhibit 8).

³ S&P Global Market Intelligence

Big bank theory: Does scale matter?

What is scale worth today? We looked at more than 3,000 banks around the world, and found a relationship between banks' cost-to-asset ratio and their market share (Exhibit A).^{*} On average, tripling a bank's market share reduces its cost-to-asset ratio by 25 basis points. (The same relationship holds true for cost-to-income and market share.)[†] However, only about 10 percent of the variation in efficiency is explained by the model.

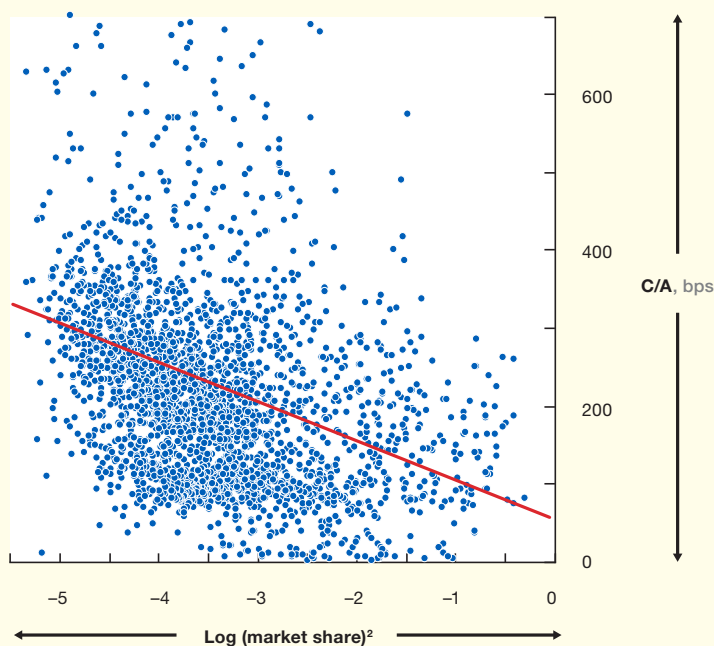
In general, larger banks are more cost-efficient. So far, so predictable. But the research also found that scale effects vary considerably by country (Exhibit B, next page). They are strongest in digitally advanced markets such as Australia and Denmark, where banking is rapidly moving online. In these two countries, the top three banks by market share have a cost-to-asset ratio of around 100 basis points, while the cost-to-asset ratio of the bottom quintile

Exhibit A

There is a clear relationship between a bank's cost-to-asset ratio and market share.

Average cost to assets (C/A) vs log (market share), 2015-17

Linear regression¹
 $Y = 50\text{bps} - 50x$
 $R^2 = 8.2\%$
P-value: 2×10^{-16}



¹ Linear regression based on the sample of ~3,000 banks (all countries included with a sample size larger than 30).

² Market share defined as a bank's asset size divided by the total assets of the banks from the country in the sample.

Source: S&P Global Market Intelligence; McKinsey Panorama

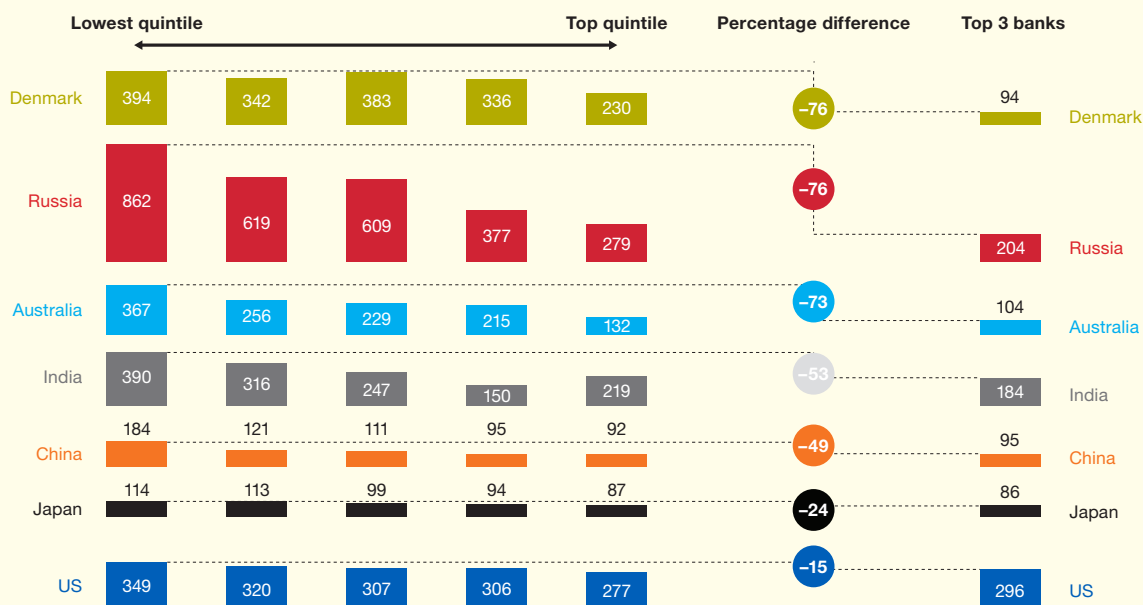
^{*} A bank's asset size divided by the total assets of the banks from the country in the sample.

[†] "Dissecting the benefits of scale," McKinsey & Company, August 2018.

Exhibit B

Scale effects vary significantly by country.

Average cost to assets by country, by market share quintile, 2015-17, basis points



Source: S&P Global Market Intelligence; McKinsey Panorama

exceeds 350. This gap points to the increasingly transformative effect of technology on the competitive landscape in banking. (It should be noted that the even larger scale effect we found in Russia is influenced by factors other than technology: despite the central bank's clean-up program, the Russian banking system is still fragmented, with more than 500 banks, many—particularly those in the bottom quintile—being less efficient.)

In China and India, cost efficiency is associated with scale, but to a very different extent. In China's banking sector, dominated by many corporate banks holding large balance sheets, the top quintile's cost-to-asset ratio (92 bps) is half that of the lowest quintile (184 bps). Yet in India, while some

scale effect is visible, even the largest banks have a cost-to-asset ratio higher than 150 bps. That reflects Indian banks' typically higher cost base: for instance, they must maintain larger physical networks to lend in rural areas.

The impact of scale is less visible in the United States. Approximately 70 bps separate the bottom and top quintiles. This difference is partly explained by the large off-balance-sheet business of the top US banks; all their costs are reported, but their asset base appears smaller than it actually is. But scale effects could be expanding. US banks are on a path of digitization and might soon achieve results akin to those of the largest banks in Australia and Denmark.

The effect of scale is nuanced, varying significantly even within a single asset class.

Effect of scale on sales and trading products

■ Low ■ Moderate ■ High

Equities	Fixed income, currency and commodities	
Cash	G10 credit	G10 rates
Flow derivatives	Investment grade credit	Flow rates
Prime brokerage/services (including clearing)	High-yield credit	STIR - MM/repo
Exotic/structured derivatives	Distressed credit	Exotic/structured rates
	Exotic/structured credit	Emerging markets
	Loan trading	FX
	G10 FX	Rates
	Spot	Credit
	Forwards	Commodities
	Flow derivatives ¹	Listed derivatives (including physicals)
	Exotic/structured derivatives	OTC derivatives

¹ Excludes forwards that are deemed derivatives.

Source: McKinsey analysis

The varied impact of scale is even more pronounced for different segments of the banking business. A nuanced approach is required here; for instance, even in capital markets—where one might assume scale has a pronounced effect—the results are remarkably different by asset class (Exhibit C). For example, equities is a scale-driven business where the top three players account for the lion's share of the value. In contrast, G10 distressed credit and emerging-markets credit are examples of asset classes where scale is not necessarily a differentiator.

The bottom line is that scale matters but it does not control a bank's destiny. In fact, the definition of scale itself is getting more "disaggregated"—whether by region, business, or product. That means that banks will have to be diligent in analyzing the impact of scale on functions, processes, technology, and products. We expect that this will result in banks choosing between a number of different paths—creating targeted scale; defending against scale, potentially through partnerships; or rebalancing the portfolio of businesses. We consider these strategies further in chapter 3.

In part, this shift was due to improved valuations in developed markets. In the US, the average price-to-book ratio jumped from 1.0 in 2016 to 1.3 in 2017. Much of the increase came immediately after the 2016 election, driven by expectations of a shift in regulatory intensity, lower corporate tax rates, and interest-rate increases. In addition, the price-to-book ratio for other developed markets rose from 0.9 in 2016 to 1.0 in 2017—also part of an improvement trend, albeit more modest than in the US.

At the same time, the valuations of emerging markets banks continued a steady decline that has seen their price-to-book ratios decrease by half since 2010. We see four main factors behind this trend:

- Investors expect rising credit losses to lead to ongoing declines in returns
- Emerging markets banks face increased capital requirements due to rising risk costs associated with non-performing loans
- Uncertainty about the balance sheet composition of Chinese banks is causing jitters for investors
- Stiffening competition from digital firms and peer-to-peer companies has thus far had greater impact in emerging markets than in developed markets. In China, for example, almost half of domestic payments flow through third-party platforms.

When we compare the ROE of developed and emerging markets banks, we see a similar

convergence. While the average ROE in emerging markets is still significantly higher than that of developed markets, the gap has been closing, and in 2017 it reached its lowest level since 2002.

Emerging markets are, of course, not homogeneous. In Latin America, banks have seen more stable price-to-book levels than in other emerging markets, despite political and trade uncertainty facing major countries in the region. In addition to high margins (especially in consumer lending), markets appear to have taken note of measures by Latin American banks to tighten risk management and controls, boost efficiency in operations, and optimize their lending portfolios.

All in all, emerging markets still offer tremendous scope to bring financial services to both un- and underbanked customers. Furthermore, although technology is playing a disruptive role in emerging markets banking, facilitating the rapid growth of non-bank competitors, it also offers banks major opportunities.



Despite meaningful improvements across a number of risk measures and safety levels, the global banking sector has not been able to find consistently profitable business models. As a result, banks continue to trade at lower multiples than companies in other industries. Nevertheless, new technologies taking hold in the financial intermediation system may offer opportunities for more profitable growth. We explore this further in the next chapter.



The transformation of financial intermediation

At their heart, banks are financial intermediaries. They sit at the center of a vast, complex system that matches sources of funds—such as corporate and personal deposits and pension and sovereign-wealth funds—with the uses of those funds, including loans, bonds, and other investments. In 2017, such funds totaled more than \$260 trillion globally. Annual revenues from financial intermediation amount to around \$5 trillion, of which banks have long commanded a substantial portion. The shape of the financial intermediation system has remained largely unchanged since the 1950s, and banks' leading position in its core components has gone mostly unchallenged.

All this could change, we believe. Competitors from both within and outside financial services have the financial intermediation system in their sights. It is not inevitable, however, that these competitors will vanquish the incumbents. Firms within the banking system are also harnessing technology and the benefits of scale to transform their competitive prowess—and are using it not just to ward off the invaders, but also to take market share from less sophisticated banks.

In this chapter, we show how rapid advances in technology and data, in concert with shifts in regulation, are triggering far-reaching changes to the long-established market structure. While disruption undeniably lies ahead, these dramatic shifts also create opportunities for banks; the notion that all disruption is unambiguously harmful to banks is false. Yet the path to success in a transformed financial intermediation system is by no means obvious, and there will be at least as many losers as winners. Banks, now more than ever, have the onus of adapting to new market conditions.

The galaxy of financial intermediation

As the adage goes, money—lots of it—makes the world go round. By McKinsey's estimates,

the stock of funds in the financial system was \$262 trillion in 2017 (Exhibit 9, next page).

The sources of those funds include corporate, public and personal deposits (worth a collective \$80 trillion in 2017), as well as banks' bonds and equity (\$47 trillion). Even greater are the sources of funds that are off banking balance sheets: these include the assets of insurance and corporate pension funds (\$54 trillion in 2017), retail investors (\$46 trillion), institutions such as endowments and corporate investments and foundations (\$22 trillion), and sovereign wealth funds and public pension funds (\$13 trillion).

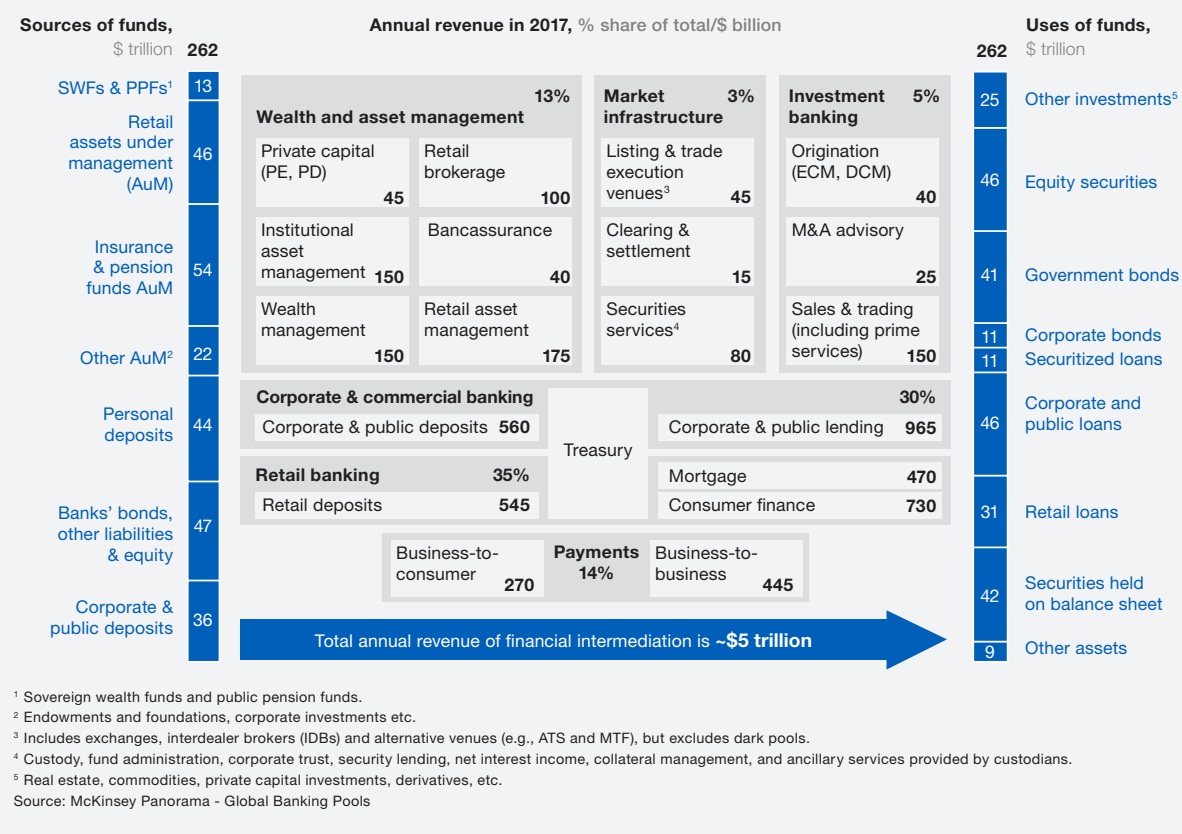
Over many decades, a complex financial intermediation system has developed to store, manage, transfer, lend, invest, and risk-manage for this massive amount of money for uses in both the private and public sectors. Financial intermediation is a rewarding business, with a revenue pool of some \$5 trillion a year (equivalent to about 190 bps).

The 190 bps—which includes non-asset-based revenue sources (e.g., payments)—is of course just an average. (Note that as recently as 2011, the average was 220 bps, which indicates a downward trend in the rewards offered by financial intermediation.) The range is wide, from 60 bps for investment margins to 350 bps for deposit and lending margins. Out of the total 190 bps, about 30 bps is the cost of capital for the system, another 30 bps is the cost of risk, and the rest is the operating cost of the complex physical and technical infrastructure of the intermediation system.

By far the largest components of the intermediation system are retail banking (which accounts for 35 percent of total revenues) and corporate and commercial banking (30 percent). One reason why revenues are so high in these businesses is that banks are taking credit risks, and thus must

Exhibit 9

The complex global financial intermediation system generated roughly \$5 trillion in revenues in 2017.



cover their costly capital reserves. Other sizeable components, each accounting for around 15 percent of revenues, are retail and corporate payments, and wealth and asset management. Investment banking and market infrastructure are the smallest components of the system, with 5 percent and 3 percent of revenues respectively.

The two forces transforming financial intermediation

Banks capture the vast majority of this revenue stream in financial intermediation. That being said, they should not take too much comfort from this picture, as their leadership of the financial intermediation system is being challenged. We

believe that a range of technology and data advances, along with shifts in the regulatory environment for banking, will put incumbent institutions under pressure across the entire financial system. In this section, we take a closer look at each of the forces driving change.

Breakthroughs in data and technology innovation

Data has traditionally given banks a significant advantage over other firms in the financial intermediation system. Indeed, banks have masses of financial data and information—often from millions of customers—at their fingertips. But unless they act decisively, banks could see this advantage erode quickly: the cost of data storage and

processing is falling rapidly, just as the number of data sources is increasing. Greater data availability, along with rapid advances in the capabilities to process this data, is already enabling new competitors to go head-to-head with banks in many segments and regions.

Moreover, rapid advances in multiple technologies have the potential to disrupt the status quo in the financial intermediation system. These include blockchain, cloud computing, the internet of things (IoT), biometrics, and artificial intelligence (AI). AI is already having meaningful impact in shaking up the current market structure. Pockets of disruption can be found in retail banking, where AI is being applied in core lending processes such as credit assessment, structuring, and debt collection. In payments, AI “bots” are being deployed in financial management. In middle- and back-office functions, meanwhile, AI is leading to greater efficiency and effectiveness in areas ranging from the reconciliation of failed trades to the detection and prevention of fraud to reporting.

Not all technology and data disruption has come at the expense of incumbents, however. In the world of institutional investing and cash equities, for example, democratized access to an almost infinitely broader and deeper pool of structured and unstructured data has made “edge” more difficult to come by. That has contributed to a dramatic rise in passive investing. In the US, the passive share of equity open-ended mutual funds and exchange-traded funds (ETFs) rose to around 45 percent in 2017, up from 12 percent in 1998.⁴ This passive tsunami has in turn created unprecedented concentration within the largest asset managers in the US and—as discussed in the previous chapter—has magnified the importance

of scale as a basis of competitive advantage in this sector.

This leads to an uncertain conclusion: advances in data and technology could either reinforce the current market structure or favor new entrants. On the one hand, the commoditization of services driven by democratization of data and next-generation technology is increasing the pressure on fees and costs, making scale more important than ever. On the other hand, reduced information asymmetry in services and the digitization of many existing products has enabled smaller firms to compete more effectively with large-scale banks. Increasingly, these smaller firms can compete in areas of financial intermediation where they historically have not had the aptitude to do so.

This complex interplay between economies and diseconomies of scale creates a strong disruptive dynamic in the market structure of intermediation. The speed and scale of that dynamic varies significantly by geography and business line, however. Additionally, population demographics can influence the rate and degree of change. For example, in areas where banking customers tend to be older, brand relationships tend to have more loyalty and new technology is adopted more slowly. Likewise, change might be less marked in regions or businesses where clients are more risk averse, whether due to cultural norms or legal and regulatory circumstances. By contrast, areas with younger or more cost-conscious customers may see accelerated adoption of new models.

Lastly, the data and technology revolution will also transform the nature of the workforce in banking. According to research by McKinsey

⁴ Mary Fjellstad, “Friend Or Foe? The Remarkable Growth Of Passive Investing,” FTSE Russell, Oct 17, 2017; Amy Whyte, “Passive Investing Rises Still Higher, Morningstar Says,” *Institutional Investor*, May 21, 2018

Global Institute, the banking sector is set to face one of the most pervasive workforce transitions of any industry. For instance, 38 percent of employment in the sector in the US and Western Europe is currently in back-office jobs that are more susceptible to automation; in these roles, the total hours worked will fall by as much as 20 percent by 2030.⁵ In those same regions, by contrast, demand for technology professionals such as software developers and computer systems analysts will show strong growth through 2030. We explore the profound talent implications for banks in more detail in the next chapter.

Regulatory and sociopolitical catalysts

Regulation has been and will continue to be a central force in the evolution of the financial intermediation system, particularly as regulators globally seek to promote transparency and greater competition, and improve the underlying safety of the banking sector. Consider “open banking,” one of the largest global movements toward creating a level playing field between incumbent banks and other firms. Already 22 countries, which together account for 60 percent of global banking revenues, are mandating open banking—although these countries are at different stages of adoption.⁶

In the UK, the open banking mandate requires banks to provide open access to a comprehensive set of application programming interfaces (APIs) to registered financial services providers to enable standardized sharing of data and payments initiation processes. Already, approximately 80 propositions are on the UK’s open banking register, covering personal, small

business, and corporate banking. In addition, there are more than 400 existing firms that could potentially gain the necessary service-provider licenses within a short period of time.⁷

Banking capital requirements have also sparked an increase in lending by non-banking entities that do not face the same capital constraints. In the US, for example, private debt increased about 15 percent per year from 2006 to 2017, compared to about 5 percent for corporate bonds and corporate lending—to be fair, from a much larger base. This trend is even more pronounced in Europe and Asia, where private debt grew about 20 percent and 25 percent per year, respectively, during the same period.⁸

Regulation also enables the widespread application of technology. Consider the example of legislation enacted in 2017 in the US State of Delaware, which approved the use of distributed ledger technology (DLT) for equity issuance and trading. Such steps demonstrate the willingness of regulators to acknowledge new technologies.

We should note that regulation can sometimes have the unintended consequence of further strengthening the current market structure. A case in point is the implementation in early 2018 of MiFID II in Europe. In terms of the new regulations, investment managers are prohibited from accepting “fees, commissions or any monetary or non-monetary benefits paid or provided by a third party,” including third-party research bundled with execution as an inducement to trade. As we discuss in the section below on cash equities, this step is already showing

⁵ *Skill Shift: Automation and the Future of the Workforce*, McKinsey Global Institute, May 2018

⁶ McKinsey Banking Practice

⁷ <https://www.openbanking.org.uk/customers/regulated-providers>

⁸ Preqin; Panorama Global Banking Pools

signs of extending the gulf between the largest broker-dealers and the rest of the pack.

Beyond regulation, there are also broader societal forces that demand sometimes equivalent amounts of capital and leadership attention from banks. The growing emphasis on sustainability, and for banks to go beyond regulatory compliance and strive as institutions to be responsible and “good,” are now a significant aspect of the strategic agenda for banks.

Triggering disruption

Advances in data and technology, along with shifts in regulation, are already triggering significant disruption in the banking ecosystem. The combined impact is even greater than the sum of the parts, and paradoxically affects market structure in two ways:

- **Reinforcing the impact of scale:** In some parts of the financial intermediation system, the commoditization of services driven by democratization of data and next-generation technology and the unintended consequences

of regulation is increasing the pressure on fees and costs; this conjunction of forces makes scale more important than ever. The box on cash equities (see next page) is a case in point.

- **Creating pathways for new entrants:** In many parts of the financial intermediation ecosystem, technology and regulation are paving the way for new entrants to move into the banking space at greater speed and scale, specifically enabling these firms to compete with new weapons such as alternative sources of data to generate customer insights, along with regulatory advantages related to capital requirements or other balance sheet relief. Of note, when we say “new entrants” we are referring not just to “fintechs.” The universe of firms eyeing the financial intermediation system include large non-banking financial institutions, specialist finance providers, retailers, telcos, and technology giants as well. (For more, see following pages for boxes on Swedish consumer finance and payments in China.)

Cash equities: The big get bigger

In cash equities, advances in data and technology, together with changing regulation, are increasingly making scale an imperative—and already leading to greater industry concentration. This is true both on the buy side (traditional asset managers and hedge funds) and the sell side (banks and broker dealers). As touched upon above, this development is a logical outgrowth of:

- A regulatory paradigm that has accommodated electrification and strengthened investor protections
- Technology developments that have improved the quality of electronic trading and enhanced the ability of market participants to store and “crunch” copious amounts of data
- Democratized access to a vastly broader and deeper pool of structured and unstructured data

On the buy side, the ongoing shift from active to passive funds is one of the most visible markers of disruption. While the passive share of US equity open-ended mutual funds and exchange-traded funds (ETFs) has grown markedly from 12 percent in 1998 to around 45 percent during the past 20 years, the corresponding share in Asia is even greater, at 48 percent—and is as high as 70 percent in Japan. The cause of this dramatic shift is clear: average fees for active funds are roughly five times those of passive funds, even though active fees have fallen from around 100 bps in 2000 down to 72 bps in 2017 in the US.* In response to challenges, some active asset managers are leveraging higher-end computing and data to automate or support portfolio management and reap continued efficiency improvements.

As touched upon earlier, the passive onslaught has given rise to unprecedented asset concentration in the asset management industry. In 2016, the three largest asset managers in the US represented the largest shareholders in over 40 percent of publicly-listed companies—including almost 90 percent of the S&P 500 constituents. In 1980, by contrast, the ten largest asset managers collectively owned just 5 percent of the US stock market.† We do not expect this concentration trend to reverse. Scale drives success in the computer-driven index business, making the largest players much more efficient and, in turn, allowing them to attract more flows and develop new products. As for the subscale asset managers, inorganic consolidation may be in the cards.

As is the case with active asset managers, hedge fund managers also face performance pressure and the associated scrutiny from investors. In one analysis,‡ hedge funds pursuing an equity hedge strategy generated 810 bps per annum on average during the 1993-2011 period, only to destroy value at a rate of 200 bps per year during the subsequent 4.5 years. In addition, while quant hedge funds have been around for a long time, an arms race is now underway as the quant footprint expands and moves mainstream. The exponential rise in computing power and storage capacity, together with the explosion in the availability of structured and unstructured data, is enabling hedge funds to apply artificial intelligence in all its manifestations, including machine learning and deep learning.§ One top-tier hedge fund reportedly leverages in excess of 100 teraflops of computing power—capable of performing over 100 trillion calculations per second—to crunch data from more than 10,000 sources.**

* Patricia Oey, “U.S. Fund Fee Study,” *Morningstar*, April 26, 2018; “Passive Investing Rises Still Higher, Morningstar Says,” *Institutional Investor*, May 21, 2018; “Realities of passive investing,” *WorldQuant*, January 26, 2018.

† Itzhak Ben-David, “*Developments in the Asset Management Industry*,” NBER Reporter 2017 Number, July 2017; Jan Fichtner, Eelke M. Heemskerk and Javier Garcia-Bernardo, “Hidden power of the Big Three? Passive index funds, re-concentration of corporate ownership, and new financial risk,” *Cambridge Core*, April 25, 2017

‡ Barclays Prime Services

§ Dr. Jim Liew, “Perspectives - Industry Leaders on the Future of the Hedge Fund Industry,” presented at AIMA event in New York, April 26, 2018

** Nathan Vardi, “Rich Formula: Math And Computer Wizards Now Billionaires Thanks To Quant Trading Secrets,” *Forbes*, September 29, 2015

At this point, it is worth mentioning that the same developments in technology and data that have powered the ascent of quant-driven investment could open the door for potential non-traditional entrants such as fintechs or big tech firms to offer their own investment products and services—should they be open to regulation—or for self-directed asset owners to manage their own portfolios, thereby posing the potential threat of additional disruption to an industry that is already under pressure.

The buy-side dynamics discussed above have already begun to take a toll on the sell side in cash equities. Index managers do not require all the “bells and whistles” of full-service brokerage. They transact via low-touch electronic channels such as direct market access and program/list trading, and do not require research. The story for quant hedge funds is a similar one, as they tend to care most about ultra-low-latency access to markets, efficient post-trade processing, and the requisite financing.

All this translates into significant disruption for the traditional business model of maximizing high-touch commissions to underpin a bundled offering of services—including high-touch execution, written research, analyst access, corporate access, and conference invitations. Between 2009 and 2017, US cash equities commissions fell by 50 percent, driven by the mix of buy-side activity, fee compression, and declining trading volumes.^{††}

The implementation in early 2018 of MiFID II’s research/execution unbundling mandate in Europe, described earlier, has put the high-touch model under further pressure.^{‡‡} Sell-siders across Europe have already experienced a 30 percent drop in equity commissions in 2018 so far. There are also clear signs that the

unbundling mandate is spilling over into the US, as global investment managers gravitate toward a single global compliance standard and asset owners push the US Securities and Exchange Commission (SEC) for regulatory alignment.^{§§}

As most investment managers are “opting” to absorb research costs at the management-company level rather than passing them through to their funds as in the past, their research budgets are shrinking. Consequently, some of the larger investment managers are recruiting research analysts from the sell side with an eye toward developing in-house research capabilities, while also building internal corporate-access capabilities. Freed from the “shackles” of bundling, the buy side can contract with best-of-breed providers of insight and data, while directing their trading flows to those sell-siders offering state-of-the-art trading infrastructures to meet their best-execution obligations.

To be sure, the leading sell-siders anticipated these dynamics early on, doubling down on their trading infrastructure to expand their “territory” and further enhance their ability to siphon flows away from exchanges and internalize them. These firms have scaled up their straight-through-processing capacity and increased front-office alpha by hiring and empowering high-end coders—coders who develop trading algorithms. It is no coincidence that the three leading sell-siders increased their cumulative cash equities revenue share among the top ten firms by almost seven percentage points between 2014 and 2016; and it is reasonable to expect that they will continue to put space between themselves and the rest of the pack.^{***} We expect to see exits and consolidation of subscale players.

^{††} John D’Antona, “Flashback Friday: Equity Commissions Continue Spiral,” Markets Media, July 13, 2018

^{‡‡} Daniele Chiarella, Jonathan Klein, Matthieu Lemerle, and Roger Rudisuli, “Reinventing equity research as a profit-making business,” McKinsey.com, June 2017.

^{§§} Attracta Mooney and Hannah Murphy, “Banks and brokers suffer ‘dramatic’ fall in commissions,” *Financial Times*, June 2, 2018

^{***} McKinsey Banking Practice

Disruption in equity capital markets

While the IPO market has performed well thus far in 2018 on the back of a strong 2017, there is still potential for disruption on the sell side in equity capital markets (ECM) on multiple fronts:

- Direct listings: With the caveat that Spotify did not need to raise capital and was already well-established as a private company (obviating the need for a roadshow), its direct listing in the US (in April 2018) could serve as a blueprint for one or two of the roughly 260 unicorns (private venture-funded companies with valuations of at least \$1 billion) around the world.
- Private markets: Fueled by record capital inflows (e.g., \$453 billion for private equity in 2017) and the desire of companies to avoid quarterly regulatory and public scrutiny (along with punitive SOX compliance costs in the US), this part of the private market will likely grow in size relative to the public market and in importance as an asset class. That being said, the JOBS Act 3.0* targets a more favorable listing environment (e.g., reduced reporting requirements, pooled liquidity, research coverage) in the US. Perhaps even more importantly, given that only one percent of
- realization activity in the US goes down the IPO path, with M&A as the dominant exit vehicle, a spike in interest rates could “force” additional supply into the IPO market.
- Initial coin offerings (ICOs): This channel continues to gain favor with founders, as they do not need to dilute their equity. In the second quarter of 2018, the number of ICOs exceeded the number of global IPOs by 10 percent or so, while raising about 20 percent of the capital raised in the IPO market. Notwithstanding the regulatory uncertainty around ICOs, the high scam rate, and the recent retrenchment of several banks from the bitcoin market, the market’s embrace of crypto-tokens and the underlying technology could lay the foundation for the future tokenization of cash equities and corresponding fiat currencies. Support appears to be building in the US (at least at the state level), with states such as Wyoming passing legislation that extends beyond that of first-mover Delaware. With a new generation of “issuers” that has internalized the notion of dealing directly with investors, ECM bankers could see themselves disrupted should they take their eyes off the ball.

* “JOBS and Investor Confidence Act of 2018.” The Act builds upon the 2012 Jumpstart Our Business Startups (“JOBS”) Act, and on the Fixing America’s Surface Transportation Act (the “FAST Act”), which was enacted in 2015 and is commonly referred to as JOBS Act 2.0.

Swedish consumer finance: Specialist finance providers on the rise

Advances in data and technology are creating opportunities for competitors in consumer finance—one of the fastest-growing and most profitable segments in banking, and a business in which universal banks have long been the incumbents. For a cautionary tale of the disruption that could lie ahead in many markets, banks need look no further than Sweden:*

- Specialist providers have grown their share of the Swedish consumer finance market to around 60 percent in 2016, up from just 20 percent in 2003 (Exhibit D, next page). These providers include attacker banks focused on consumer credit, the financing arms of large retailers, and fintechs.
- To achieve such gains, these firms leveraged digital technologies to improve customer experience. For example, they took advantage of digital authentication methods like BankID to simplify customer sign-up processes. To automate credit approval processes, they leveraged publicly available data such as credit scoring from central bureaus, as well as proprietary data such as online browsing patterns.
- The attackers outpaced universal banks in digital customer journeys, product innovation, aggressive acquisition strategies, and agile operating models.

Consumer finance is a large, fast-growing, and profitable market. In Europe alone, its revenues amounted to \$65 billion in 2016, with an annual growth rate of 11.5 percent between 2012 and 2017. In most countries, universal banks command the majority of the revenue. Nevertheless, the Swedish experience highlights the risk that this attractive market could slip away from incumbent banks.

So, what happened in Sweden? At the turn of the 21st century, specialists such as attacker banks and the financing arms of large retailers spotted an opportunity to build market share in this segment. They launched proactive marketing efforts, using machine learning to identify opportunities for customer activation or cross-selling. They also created convenient, digital distribution channels and application processes—such as mobile apps that provide one-click loan approvals and allow customers to easily make or reschedule payments. To make instant credit approvals possible, these specialist firms developed automated decision engines backed by advanced self-learning algorithms that draw on unconventional sources of credit-rating information, such as online shopping history and social media. This speed of response led to rapid gains by new entrants and a dramatic decline in the market share of traditional banks, which by 2017 held just 40 percent of total outstanding consumer finance volumes in Sweden.

Enabled by a more agile operating model, the attackers led a surge in innovation that led to new products and channels. These have prompted a shift away from traditional account-based overdraft lines, branch-distributed offerings, and credit cards—and a rapid rise in point-of-sale (POS) distribution, non-card-based POS credit, and cash loans (partly driven by debt consolidation). Between 2010 and 2016, Sweden's outstanding balances in unsecured cash loans grew at an annual rate of 7.1 percent, while POS loans grew at 5.6 per annum. By contrast, credit card and overdraft balances grew much more slowly.

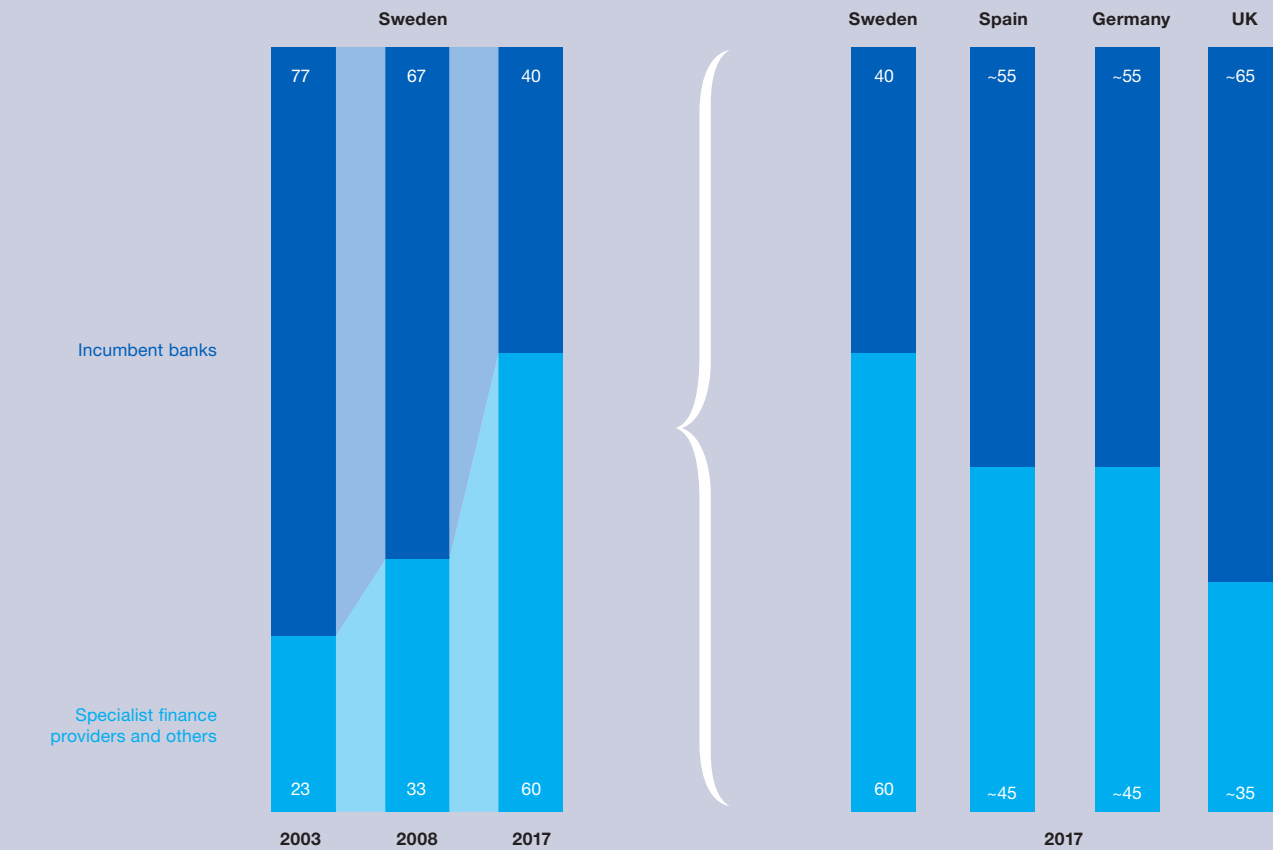
The dynamics in Sweden provide vital lessons for banks in other markets. Sweden's high rate of digital adoption, together with accessible credit scoring data, created

* See “Disruption in European consumer finance: Lessons from Sweden,” McKinsey & Company, April 2018.

Exhibit D

Specialist finance providers have captured a significant share of Sweden's consumer finance market.

Market share by firm type, % of total outstanding consumer finance volumes



NOTE: Incumbent banks include direct consumer finance activities of traditional retail banks, and consumer finance divisions of domestic universal banks. Specialist finance providers and others include independent consumer finance specialists, captives, pan-European consumer finance monoliners, balance aggregators, online credit providers as well as peer-to-peer lenders. Source: National statistics and company filling; McKinsey analysis

fertile ground for new entrants to create winning offerings in consumer finance. Similar enablers are now pervasive in many other markets in Europe and beyond, with digital banking growing fast, and regulation and technology innovation leveling the playing field. Several

countries, for example, are launching their own e-ID schemes, thereby enabling specialists to aggressively pursue consumer finance profit pools in markets ripe for disruption.

Chinese payments: Competition from the tech giants

Globally, the payments market is worth some \$700 billion in annual revenues, and it has long been led by banks. In China, soaring internet and e-commerce penetration has enabled tech giants such as Alibaba, Tencent, Ping An, and Baidu to muscle in on this attractive market, particularly in retail payments. Technology firms grew their market share in Chinese retail payments to almost 50 percent in 2017, up from just 5 percent in 2012 (Exhibit E, next page).

This remarkable growth, which could be a taste of things to come in other markets, reflects two key dynamics:

- The aggressive push by China's tech giants to rapidly increase customer adoption of their own payments platforms—harnessing their agility, economies of scale, troves of consumer data, and customer engagement capabilities.
- Limited regulation by Chinese lawmakers that enabled tech giants to gain critical mass.

China's tech giants took advantage of a gap in the market. A digitally savvy population lacked convenient payments options: credit cards had a low penetration rate compared to other countries, while demand for digital solutions was largely unfulfilled. Indeed, China's consumers have embraced digital technologies with a passion not seen in many other markets. Popular mobile payments apps such as WeChat Pay and Alipay have tapped into that demand (they currently account for roughly 30 percent market share), enabling many Chinese consumers to move straight from cash to smartphone-based payments—leapfrogging checks and cards. That, in turn, has turned many Chinese cities into virtually cashless consumer economies. It is now the norm for consumers to pay for purchases at the point of sale by tapping, swiping, or checking in with a smartphone, or by scanning a QR code.

Keys factors in the tech giants' rapid growth in retail payments were their existing ecosystems and scale

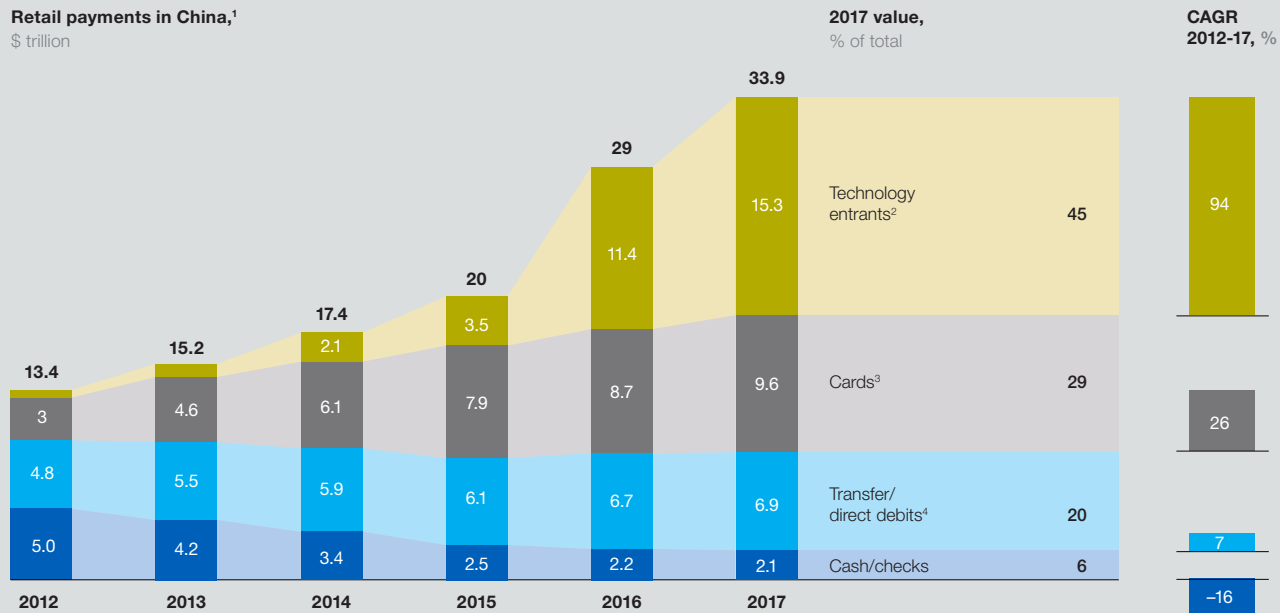
combined with clear use cases. For example, Tencent started with person-to-person payments via its existing WeChat service, while Alibaba created Alipay as an e-commerce solution for its booming online retail business. Both solutions filled a gap that incumbent banks had not managed to fill. Building on their ecosystems enabled these tech firms to accelerate the commercialization and performance of new products and services significantly. For example, it took eight years for Alibaba's Taobao online shopping site to gain 100 million users, but only five for Alipay to reach the same milestone. Similarly, it took 12 years for Tencent's instant messaging software QQ to gain 100 million users, but only 18 months for WeChat and less than a year for Tenpay.*

China's tech giants' success is also a result of innovative business models that enable them to monetize their payments services, even as they provide those services almost free to merchants and customers. Rather than earning transaction fees on payments, the tech firms harvest data on customers and their financial habits, and use it to pitch products such as loans, investments, and insurance. For instance—such data has enabled the rapid growth of Alibaba's Yu'e Bao deposit offering, which has become the fourth-largest money market fund in the world. Another example is Alibaba's Sesame Credit service. This digital credit-rating service takes advantage of consumer data to calculate a credit score based on personal information, ability to pay, credit history, social networks, and behavior.

One important enabler of the rapid growth of mobile and other digital payments was limited regulation, which has encouraged entrepreneurship and experimentation. For example, regulators took 11 years after Alipay introduced online money transfers in 2005 to set a cap on the value of the transfers. More recently, however, the Chinese authorities have tightened regulation on payments (and digital services in general) to reduce misuse and thereby strengthen the digital economy.

* Jonathan Woetzel, Jeongmin Seon, Kevin Wei Wang, et al., "McKinsey Global Institute China's Digital Economy A Leading Global Force."

Technology giants now account for nearly 50% of domestic retail payments volume in China.



¹ All retail transactions by domestic Chinese customers by domestically issued cards and domestic bank accounts across all sectors and use cases.

² Includes pure pass-through wallets and pass-through and staged wallets.

³ Includes only transactions done locally by locally issued credit cards.

⁴ 3PP transaction volume includes both consumption-related and non-consumption related.

Source: McKinsey Global Payments Map, iResearch, PBOC

Temporarily, this might lead to a slowdown in technological developments, allowing incumbents to get up to speed. But, the window of opportunity for incumbents to become part of the booming Chinese mobile payments market is likely to be short.

The threat of big tech giants is also emerging in the developed world. For example, Amazon is disrupting traditional credit card models: its card, offered in partnership with JPMorgan Chase, has no annual fee, no foreign transaction fees, and no earning cap or expiration for loyalty points. In 2017, it launched Amazon Cash, which allows customers to add money to their Amazon account via cash payments at partner retailers. And in 2018, Amazon partnered with Bank of America to issue loans up to \$750,000.

Building on its powerful position in e-commerce and its customer service capabilities, Amazon is also growing its share of the payments market through services such as AmazonPay. It is also providing these services to third-party merchants selling via Amazon—which puts it in a powerful position to compete with banks and other

payments providers among such merchants. That builds on Amazon's long-established merchant lending program: since 2011 it has issued more than \$3 billion in loans to small businesses, ranging from \$1,000 to \$750,000.[†]

Amazon has also been in discussion with big banks about creating a transactional product, akin to a checking account, aimed at younger customers and those without bank accounts.[‡] Recently, Amazon has signaled it could be entering the mortgage market, which would represent a break from its established approach of using financial services to reinforce its own ecosystem.

Whatever Amazon's next steps, it clearly has the power to grow—and potentially disrupt—the market in consumer finance and multiple other segments, given its mountains of customer data and strong balance sheet. Banks should take note and be prepared to respond. They could pursue partnerships with merchants, digital wallets, and other fintech players; and they could develop new products, services, and experiences to boost their relationships with customers.

[†] "Amazon Loans More Than \$3 Billion to Over 20,000 Small Businesses," Amazon press release, June 8, 2017.

[‡] Emily Glazer, Liz Hoffman and Laura Stevens, "Next Up for Amazon: Checking Accounts," *The Wall Street Journal*, March 5, 2018.

Reimagining the future of financial intermediation

In this chapter, we have explored the fundamental forces driving transformation in the financial intermediation system. We have also shone a spotlight on the shifts already underway in the various parts of the banking system.

Where will these changes lead? Although predicting the future is a perilous business, we can take a reasonable guess at how the financial intermediation system will operate in ten years. We believe the system will be radically changed as technology weeds out inefficiencies. Moreover, platform firms and other non-bank competitors

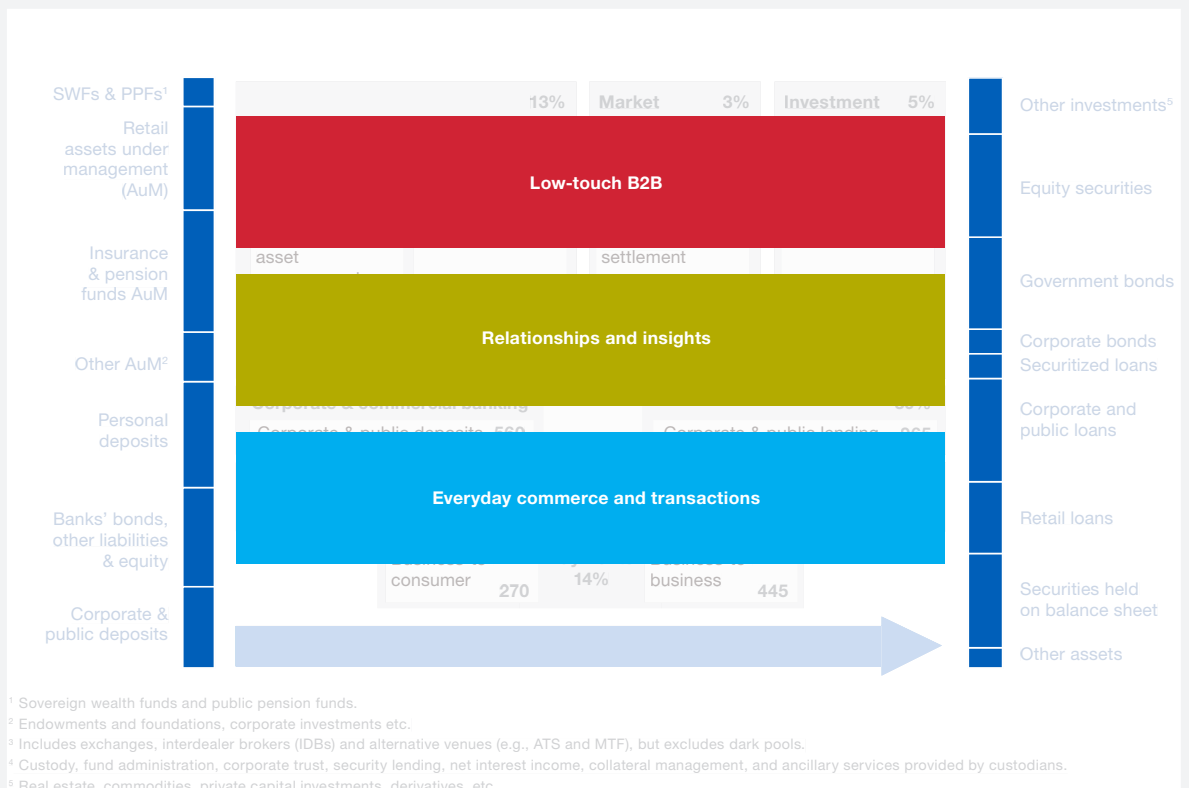
will take on a much larger role. That said, the same technologies behind the transformation will also create opportunities for banks to achieve much greater efficiency, transform customer experience, and build profitable partnerships.

The complex system of financial intermediation we described earlier in this report is likely to be transformed and potentially simplified into three layers, along the following lines (Exhibit 10):

- *A first layer consisting of everyday commerce and transactions, including deposits, payments, and consumer loans. As technologies like face recognition and zero-touch payments*

Exhibit 10

A simpler set of layers will likely replace the current complex system as a conduit for global funds.



advance, such transactions would ultimately become seamlessly embedded into people's day-to-day digital lives. This aspect of the financial intermediation system may become "invisible" to consumers as it is gradually embedded into digital ecosystems.

- *A second layer of the future banking system would consist of relationship- and insight-based services such as M&A, asset management, corporate lending, and mortgage lending.* Again, technology will be pervasive, with AI-driven, semi-automated advisory services integrated into a remote advisory model—with an important role remaining for human interaction.
- *A third layer centered around low-touch B2B.* Institutional intermediation is likely to be heavily automated, with high-performing, cost-efficient technology infrastructures supporting high-volume/low-margin trading—all enabled or enhanced with technologies such as AI, machine learning, and blockchain.

The changes we foresee to the financial intermediation system do not assume that banks will become irrelevant, in any of the new layers. There will always be demand for risk intermediation—for institutions to take on the risk while intermediating (e.g., deposit to loans)—an activity that requires a regulated balance sheet. The question is not then whether traditional banking activity will continue to exist; it is whether banks will be disintermediated from their customers, disaggregated, commoditized, and made invisible; or whether banks can maintain or even expand their role in intermediation, owning customer relationships and creating value on a sustainable basis.

It is also important to note that this layered view of financial intermediation is intended as a tool

for shaping banking strategy, and not a view that represents how customers or clients will think about the industry. Banking executives should take the same interest in this structure that builders take in detailed blueprints that most homebuyers will never see.

And while this vision of a new financial intermediation map may seem overly distant, changes of a similar magnitude have happened quickly. The compression of multiple layers into simplified streams is similar to what happened to "intermediary" businesses in other sectors. Consider the impact of online travel booking and sharing technologies such as Airbnb on travel agencies and hotels, or that of technology-enabled disruptors such as Netflix on film-distribution intermediaries.

As these layers take shape, banks will continue to generate revenues in the businesses in which they operate—but their business models may need to change. In some cases, margins will be compressed under the pressure of disintermediation, and product offerings may need to change to maintain market share. In addition, new entities may attack these businesses based on their advantages in capital requirements, cost structure, or technology skills.

Let us examine each of the three layers of the reimagined end state in turn.

Layer 1: Everyday commerce and transactions

In the not-too-distant future, true zero-touch payments will become reality, thanks to technologies such as face or other biometric recognition. Customers will be able to walk into a store, pick up an item, and walk out without even going past a pay point. That will mean that payment, as an activity, will be an invisible part of commerce, not even noticed by customers. Yet it will continue to be among the most important battlegrounds, as

it provides the most valuable data: what customers buy and when. The competition is already intense. In some countries, such as China, platform firms increasingly dominate the payments business. Subject to local regulation, data owned by platform companies will enable ever-greater levels of personalized marketing to consumers, building on the personalized coupons, vouchers, and location-based offers embedded in broad online-to-offline marketplaces that these firms are already creating. In other markets, as we discuss in the next chapter, banks are stepping up and creating their own payments-driven commerce ecosystem solutions and even leapfrogging their competitors.

As a natural consequence, many other elements of retail banking are already becoming embedded in larger digital, end-to-end ecosystems that are owned by big tech players. As transactions become more invisible in the customer journey, the ecosystem owner—for example, a big technology-driven retailer—will be able to integrate many of the front-end banking services we see today. As the two become integrated into a single experience, the consumer could go directly to the retailer and request a loan—or automatically be offered one—as part of the process. In this scenario, the ecosystem owner would be the unique point of interface with the customer, thus also gaining the power to select the capital provider, whether a bank or a private source, and negotiate the terms of the loan. If big tech firms choose to partner with banks, ecosystem owners would hold the leverage during negotiations to demand lower fees in exchange for the volume they share, compressing value further within the intermediation system. If they instead choose to partner with a private source of capital (such as

a private equity firm or a sovereign wealth fund), the ecosystem owner could provide consumer loans or funding directly. This would be most likely to happen in the case of valuable loans or low-risk customers, leaving only the least-valuable or higher-risk transactions—if any—to banks. Similarly, day-to-day corporate cash management and current and savings accounts could also become “invisible.” Cash will still be held in banks’ accounts, but will become integrated in digital platforms.

In this new world, it is possible that pure banking will become invisible as transactions such as payments are seamlessly embedded into customers’ digital lives. But that does not necessarily mean that banks will disappear: banks could own, or be partners in, digital platforms. Indeed, many banks are already using their data—together with other assets such as rewards programs—to build end-to-end ecosystems themselves. In any scenario, banks will have to add new services to payments and transactions if they want to fight commoditization and invisibility. Their advantages include the ability to build virtual currencies, integrate loyalty programs, and leverage their merchant relationships and small business lending portfolios. In fact, as “neutral parties,” banks are sometimes best positioned to build marketplaces to compete with global giants. This not only enables them to protect their core “everyday banking” businesses but also to attack other, giant ecosystems and bring in significant additional revenues.⁹ Naturally, this is a big bet and only a few banks can succeed alone; typically, they will have a strong retail market share in a particular geography. But many more banks can take strides in this direction, making them more relevant partners in the emerging world.

⁹ Miklós Dietz, Matthieu Lemerle, Asheet Mehta, Joydeep Sengupta, and Nicole Zhou, “The Phoenix Rises: Remaking the Bank for an Ecosystem World, McKinsey Global Banking Annual Review 2017,” October 2017, McKinsey.com.

Layer 2: Relationships and insights

The middle layer of the future intermediation system is likely to evolve differently. In this layer—which consists of advisory-driven services such as M&A, derivatives structuring, wealth management, private banking, corporate lending, and mortgage lending—personalized service is the key differentiator. These are complex decisions, in which multiple customers or clients will still need personalized advice, most likely across multiple touchpoints. Whereas today those touchpoints are often human beings, the most likely endgame in this layer will have a strong AI-driven advisory element; clients will still speak to human experts but only when needed, and then most likely through a remote advisory interface. That will lead to a much more efficient system with less frequent but much more productive human interaction.

For consumer financial services in this layer, the name of the game is true omnichannel—seamlessly integrated client experience across many channels, orchestrated by AI, but with the right human experts always only a few clicks away. This AI will of course be much more advanced than today's robo advisors. Built on deep learning, AI advisors are already passing the Turing test, becoming almost indistinguishable from humans. They, as well as the human advisors above them, will be able to leverage far more data than today. That data will include customers' shopping, spending, and social habits—enabling a high degree of personalization not just of products but also of delivery. The institutions of the future will be able to reach out to every customer with the right message, from the right touchpoint, at the right time, at a cost far below anything that is possible today. Technology in this layer can also empower M&A bankers, enhancing their productivity and freeing them up to focus on value-added activities for their clients.

But AI is not the only technology that can disrupt and enhance advice. Social media could also enable the rise of a community element in advisory, with much greater emphasis on user-generated content. Indeed, many investors already place greater trust in their most successful peers than in professional advisors: advice is becoming a broad, social good that is easily accessible. Today's advisors will have to invest heavily if they are to compete with free and increasingly customized alternatives. On top of that, the emerging digital ecosystems will also reshape many of the individual value chains in advisory services—although in a different way than in the previous layer, as these are major life events, not everyday activities. In more digitally advanced markets, for example, mortgages are increasingly just one small element of a broader end-to-end housing journey, along with finding real estate, getting home insurance, moving in, or renovating the kitchen. As we discuss in the next chapter, firms that can offer advisory across the entire housing journey will provide the mortgage advisory.

Many banks have already made big strides to reinvent this layer, adding more and more services to their traditional relationship model. But big non-bank competitors can disrupt them. For example, large e-retailers like Amazon or Alibaba already have both huge depth of personal information and daily touchpoints with their customers. Add a voice recognition layer, basic AI, and a connection to their budding financial marketplaces, and they can offer something deeply personalized and much cheaper, at scale. Yet banks hold many of the cards in this race. They tend to have significant experience in integrating human advisory into omnichannel models, something most digital-only tech players do not have and may not even want. Regulation, especially on data usage and suitability of advice, can further

strengthen banks' position vis-à-vis tech players. Banks are also ahead of the game in building up ecosystems around big life events, with many already offering end-to-end homebuying journeys or automated, benchmark-based advisory for small businesses. As in the first layer, such moves can enable banks not just to protect margins and gain market share, but also to expand into other markets where they can be disruptive attackers and ecosystem orchestrators. Again, however, only a few banks are likely to master this layer; they will be disproportionate winners, while many banks will have to redefine their roles, becoming partners or suppliers.

Layer 3: Low-touch B2B

This layer consists of scale-driven sales and trading, standardized products in wealth and asset management, and some parts of origination.

Take for example, the world of sales and trading. Given the paradigm shift from low-volume/high-margin to high-volume/low-margin trading, the imperative to play big in scale-driven capital markets such as equities (cash, derivatives, prime brokerage), G10 spot FX and forwards, and G10 flow rates and money market/repo looms ever larger. The low-spread environment mandates an automated, high-throughput execution and processing infrastructure with ultra-low unit costs, balance sheet, and continued significant technology investments (e.g., fast pipes, algos, program trading, global order management systems).

We postulate that an “arms race” is underway that is leading to the rise of “flow monsters”—try as they may, subscale players are simply unable to keep up. For those firms hoping to stay in the business, partnerships may be the only way to create sufficient scale and compete effectively. That said, with regulators driving central

clearing and electronification into more markets, non-bank attackers continue to leverage their low-cost, bleeding-edge auto-pricing/auto-hedging platforms and lower capital requirements to gain share in more products. These attackers are a force to be reckoned with, rewriting the rules of engagement to become top-five market makers in several markets. Furthermore, some have assumed the role of low-cost manufacturer, “renting out” their infrastructure or providing white-label liquidity services to banks.

Notwithstanding the above, there are also a number of other scenarios that could unfold in this layer—some admittedly stretching the imagination. For instance, the end points of the ecosystem could decide to go it alone (e.g., issuers could list on DLT-based or alternative platforms, distributing directly to asset owners who could trade with one another via multiple platform-enabled protocols, including peer-to-peer and time-discrete auctions, while leveraging AI-powered virtual portfolio managers to manage their portfolios). In another scenario, prime brokerage could lose its grip on securities financing. For instance, regulated capital-light entities (acting as agents) could operate margin-lending platforms funded directly by “sticky” deposits of cash-rich third parties (e.g., corporates, sovereign wealth funds), providing an attractive financing alternative to the buy side. DLT-based tokenization of securities/cash would lower risk by accelerating settlement of financing transactions, while increasing efficiency.



It can be easy for incumbents to dismiss any single technology, regulation, or consumer preference as a threat to the status quo. Because banking businesses face competition not only from peers, but also adjacent firms, and even competitors outside of the intermediation system

and beyond (some competition may not even yet exist), it is crucial for banks to assess not only their future but also their true source of competitive advantage. In that process, we believe the

opportunities could be rewarding for those with vision and willingness to make the kinds of strategic and operating model choices we explore in the next chapter.



Reimagining banking in a new world of financial intermediation

In the first two chapters of this annual review, we described a scenario in which competitors harness new technologies or take advantage of new rules to invade the financial intermediation system—one that has long been the preserve of banks. We also described how this system will be radically reshaped by the march of technology and regulation.

In this chapter, we seek to answer the question: How should banks respond to this disruption? In almost all cases, banks will need to rethink their business model, not only to defend against new competition, but also to seize new opportunities. Those who stay ahead of the pack on strategic insights can not only defend their existing businesses but strengthen and expand them.

There is no single strategy for success, however. Each bank must assess how the coming transformation will impact its businesses in specific segments and geographies, its particular strengths and vulnerabilities, and the nature of competition it will face in future—and then make choices about its core offer and other aspects of its strategy. In this chapter, we present four strategic directions for banks: become an end-to-end ecosystem orchestrator; become a low-cost “manufacturer”; focus on specific business segments; or fully optimize and digitize as a traditional bank. These strategic choices will vary by product and by geography, and the implications will vary based on the financial intermediation layer—everyday commerce and transactions, relationships and insights, and low-touch B2B. Later in this chapter, we will also lay out several core imperatives that all banks, regardless of where they operate in the new system, will need to act on: reinforcing trust, resetting the cost base, and renewing talent.

Adding value in a new financial system

This report started with two perspectives on the global banking system: a zoomed-out view that showed banks in relation to other industries, and then a granular view of trends that might be overlooked in a wider view. We’ll now introduce a third perspective, and for banks considering their role in a changed landscape, the most important view all: the look inward. To prepare for an era of disruption, a bank must examine its core sources of competitive advantage, and understand exactly what differentiates it from competitors, both current and potential. This is a challenging exercise for any leadership team, as they must pinpoint their strengths across a range of capabilities: financing and risk, technology and analytical capabilities, brand and distribution models. The goal is a ruthlessly honest self evaluation of the bank’s strengths and their sustainability, along with its weaknesses.

Among the questions banks should consider are the following:

- **Are we equipped to operate at true scale and low cost?** Some banks are well placed to build the scale needed to drive high volumes of transactions or trades at low cost. Banks with strengths in this area are known for their operational efficiency. Their processes run like well-oiled machines, with lightning-fast cycle times, high degrees of accuracy, and low cost.
- **Are our digital capabilities robust enough to compete with platforms and fintechs?** Some banks excel at attracting, inspiring and retaining world-class talent across a range of digital technologies. That puts them ahead of the curve in digitizing both customer interfaces and back-end processes. These banks are also highly adept at harnessing data analytics

to generate intuitive customer insights, personalize their offerings, and “push” high-impact recommendations to customers.

- **Do we stand out as a customer-obsessed institution?** Some banks stand head and shoulders above their peers when it comes to customer focus: their capabilities and culture make them unusually good at attracting, onboarding, and retaining customers. These banks are also masters at product distribution. They deploy relevant products, through the most effective channels, to targeted customer segments—and they constantly improve targeting by generating real-time feedback from customers. Underpinning all these capabilities is a highly trusted, widely recognized brand.
- **Are we masters of capital and risk?** Some banks are distinguished by their strong balance sheets: they enjoy superior liquidity, deep access to low-cost funds, and strong financing abilities. Moreover, they excel at asset and liability-management (ALM), as well as risk management.
- **Can we lead the next wave of innovation—and build the partnerships needed to do so?** Some banks are known for adopting agile ways of working throughout their organizations, making them extraordinarily nimble in responding to customer needs and market dynamics. These banks also attract and excite the most innovative talent, enabling them to identify promising growth opportunities and quickly design and develop breakthrough products. Often those products are delivered through industrial-scale partnerships with non-banks. Banks that excel in this area therefore have best-in-class abilities to identify, build, and sustain partnerships with a diverse set of companies.

Armed with a robust assessment of their bank’s current and future sources of competitive advantage, leaders can focus on deciding which strategic direction best matches their profile (Exhibit 11, next page).

We should emphasize that none of these target states will be reached overnight. Realizing a new business model will require a multi-step approach that starts with a clear articulation of the direction of travel and then identifies the intermediate stops along the way.

Strategic direction 1. Become an end-to-end ecosystem orchestrator

We begin with ambitious option of becoming an end-to-end ecosystem orchestrator. Naturally, few if any banks will be able to compete with the likes of Tencent and Amazon to become full owners of multitrillion-dollar mega-ecosystems. But some banks could build ecosystems on a more realistic scale, placing themselves at the center of their customers’ journeys in an effort to own the relationships—and the associated data.

Such banks would expand their scope to become one-stop shops for all banking-related products and services, focusing primarily on “distribution” and in some cases also “manufacturing” activities. They would deliberately move beyond the traditional banking value proposition and address broader parts of the customer journey, such as housing and home financing. Their open platforms would allow third parties to plug in through APIs and provide additional value-added services for customers.

A bank might choose to orchestrate one of several different kinds of ecosystem—from a large-scale national ecosystem to a local one. Likewise, a bank might choose to aggregate a wide variety of services and providers

Exhibit 11

Strategic options and their implications in the new banking landscape.

Strategic options and implications	Everyday commerce and transactions	Relationships and insights	Low-touch B2B ¹
 Become an end-to-end ecosystem orchestrator	■ Own the next-generation payments landscape ■ Build B2B portals that provide end-to-end solutions for businesses ■ Connect rewards and loyalty programs with retailers and other partners	■ One-off, big-event ecosystems ■ Banks to focus on less day to day engagement but on a few key decision points, leveraging deep, customized advice	■ Electronic platforms ■ Peer-to-peer trading networks ■ At-scale platforms for non-differentiated services
 Become a low-cost manufacturer	■ Embrace "invisibility" by providing reliable back-office services and a strong balance sheet ■ Key success factors will be cost and scale	■ Offer balance sheet for mortgages and corporate lending and manufactured products to wealth management ■ Opportunity to be "human touch" partners for large platforms	■ Offer execution, balance sheet, and/or at-scale technology services ■ For firms already at scale, offer white-label execution
 Focus on specific business segments	■ Focus on a few "everyday" products (eg, high-margin credit cards or consumer loans) ■ Big-tech platforms tend to focus on the "median," leaving plenty of room for specialist offerings ■ Zoom into underpenetrated markets	■ Specialize in specific segments, from private banking to serving professions in their advisory needs ■ Zoom into underpenetrated markets such as equipment leases or commercial mortgages	■ Specialize in specific sectors, in clients of a certain size, or in specific product areas, e.g., focus on a narrow set of vanilla, highly liquid products, for "zero-touch" trading ■ Focus on smaller clients neglected by larger firms
 Optimize and digitize as a traditional bank	■ Sustain current focus but step up performance via digitization and efficiency	■ Sustain current focus but step up performance via digitization and efficiency	■ Sustain current focus but step up performance via digitization and efficiency

¹ Examples are in a capital markets context.

in its ecosystem, or could focus on a niche segment ecosystem.

Let's consider how a bank might become a successful ecosystem orchestrator in each of the three "layers" of the future financial intermediation system. Success in this strategy will depend highly on partnership-building capabilities, a strong customer focus, and a culture and value

proposition that is highly attractive for digital and analytics talent.

Everyday commerce and transactions

In this layer, one strategic approach for banks is to own the next-generation payments landscape in a particular geography. An example is Danske Bank, whose person-to-person (P2P) payments solution is used regularly by almost 60 percent

of the country's population.¹⁰ Banks don't need to go alone in orchestrating a payments ecosystem. In many countries they could join forces with other banks and roll out broad proximity payments solutions that would leapfrog even the best of the big tech platforms—including through zero-touch biometric or face recognition applications. A key opportunity for banks is to lock in the merchant acceptance side of payments, which would allow them to own the most valuable spending data, while also creating daily touchpoints with their customers to deepen engagement.

Another approach in the everyday commerce and transactions layer is for banks to pre-empt competitors on the small and medium business side—in other words, the B2B services ecosystem. They could do so by building broad business portals for their customers; these would link banking with accounting, administration, tax and healthcare services, HR advice, business intelligence, investment planning, and marketing and sales. These portals would offer banks' clients true end-to-end opportunities to run their businesses better. Several banks have already made strides in this direction; for example, RBS offers their SME clients cloud-based accounting (FreeAgent), HR advisory (Mentor) services, as well as regulatory management advice linked to GDPR. These banks have encountered less competition in the B2B services space than they have in B2C, traditionally the focus of big tech platforms.

A third possible direction is for banks to leverage their own rewards and loyalty programs and connect these with retailers and other partners to provide personalized offers, vouchers, and location-based coupons. That would enable

these banks to become the effective operators of the broad loyalty universe, eventually via virtual currencies. Several banks, such as RBC, have market-leading rewards program as well as underlying data technology, which provide an excellent platform for such moves.

The best strategy for banks in the everyday commerce and transactions layer is probably to combine several of these directions.

Banks should not forget however that they're merely one of many attackers heading in this direction, and they will need a combination of extreme agility, sharp entrepreneurship, and humility to succeed. Few banks will be able to walk this path to the end, but many (including smaller credit unions) can make some smart early steps, which are not only in themselves profitable but will also enable them to make better partnership deals with the leading platforms.

Relationships and insights

In this layer, most of the relevant ecosystems are the one-off, "big event" ecosystems, such as home, mobility, or protection. They are focused less on day-to-day engagement and more on a few key decision points, leveraging deep, customized advice. Big tech platforms have just started to attack these, which leaves plenty of room for banks to leapfrog, leveraging their experience in omnichannel, together with the trust that customers place in them for "big decisions."

McKinsey projects that by 2025, housing ecosystems will generate annual revenues approaching \$3.8 trillion globally. In this ecosystem, banks are already leading the transformation across the globe. Some already offer services to help customers select the right neighborhood, find the right home, buy it, get the necessary insurance,

¹⁰ "The Nordics' most popular money transfer app is adding a life-changing feature," nordic.businessinsider.com, March 2, 2017.

and move in—and offer coupons for renovation and even everyday concierge services. Likewise, African bank Absa assists prospective buyers with home searches, places them in touch with agents and mortgage lenders, and lists properties for sale. Not only do these ecosystem plays enable banks to identify clients before mortgage hunting starts, but they also help build long and deep relationship with them.

Similar broad ecosystem moves have been tested by firms in wealth management, auto lending, and business lending. For example, ING is offering automatized, data-driven advisory for its clients' strategic investment plans. But in any such field, it is no easy task for banks to become true ecosystem orchestrators. They face three big challenges:

- Banks will have to make hard choices on whether they compete or partner with other players—such as real estate agents in the case of housing ecosystems. To truly reinvent customer journeys in any given ecosystem, banks may need to challenge the very businesses that are currently providing them with leads.
- Banks need to make true “quantum leaps” in terms of customer experience to really shift customer behavior. As several experiments in robo advisory or home ecosystems have shown, offers that lack deep, granular customer understanding and brave new value propositions are likely to fail.
- Big tech players are not to be underestimated. As mentioned below, a combination of voice recognition interfaces and access to broad data can give them an edge in developing AI-supported advisory services.

Even if those challenges are daunting, banks don't have to go all in on an ecosystem-or-orchestrator strategy. Rather, they can gradually broaden customer journeys with a series of individually profitable and independently testable steps, without committing themselves to an overly ambitious end vision. Still, these platforms will need scale to succeed: in any given geography, only a few banks will eventually succeed as ecosystem orchestrators.

Low-touch B2B

Ecosystems already abound in wholesale banking and capital markets, ranging from exchange groups or other trade execution venues bringing buyers and sellers of stocks and bonds together, to utilities across the value chain linking the operations of multiple participants. An ecosystem orchestrator needs only to bring together existing players in new ways, and in the process, rearrange or even eliminate existing layers of intermediation.

A bank, technology provider, or other firm in capital markets could adopt a number of strategies in this area. For instance, the electronic platforms of banks, if opened up to clients and to fintech and third-party technology providers, can become “mini-ecosystems” of their own. Clients would be able to sample the best research, analytics and services from the bank and other providers, and also interact and trade with one another on these internalized platforms.

Pushing this thinking further, banks could attempt to create peer-to-peer trading networks, perhaps focusing on more illiquid assets. Through time-bound auctions and AI tools matching potential buyers and sellers, they could facilitate trading between end-asset owners in new ways.

Finally, banks, with the help of other partners, could pool their resources together to build at-scale platforms for non-differentiated services in several different areas.

Strategic direction 2. Become a low-cost “manufacturer”

For some banks, the right approach in the face of disruption might be: “If you can’t beat them, join them.” These banks would unbundle their capabilities in areas such as market making and liquidity (in capital markets) and access to capital (in mortgages)—and offer those capabilities to new firms seeking to enter and expand in these markets. In other product areas, these banks would continue to compete with new entrants.

The core of this approach would be to create a low-cost “manufacturing” engine separated from distribution. Banking institutions become low-cost, highly efficient white-label manufacturing engines by consolidating volumes, mastering operational efficiency, and fully digitizing and automating processes. Banks’ partners would include fintechs that have strong customer affiliation and operations in distribution. Banks choosing to become “manufacturers” could also offer platforms to other banks.

Banks with strong balance sheets, deep access to low-cost funds, and strong financing abilities will have the advantage here.

Again, this approach could prove successful for several quite different kinds of banks, in each of the three layers of the future financial intermediation system.

Everyday commerce and transactions

In this layer, banks can positively embrace their “invisibility.” Even if proximity payments fully move to a new rail, there will be a need for companies

to provide reliable, seamless back-office services and a strong balance sheet to run balances and credit lines, for both individuals and businesses. From the perspective of big tech players, this is a highly regulated business with low margins, but it is very close to a core competency for banks. Banks could earn decent (though not staggering) returns from this business—thanks to their large balance sheets, muscular wholesale sales team, sophisticated treasury and ALM, and large amounts of capital already deployed. The key success factors of this model will be cost and scale. Banks with large, fully digital operations will have a constant cost advantage as well as low risks and robustness—enough to win many tenders. The challenge here is discipline: such a strategy will require banks to embrace radical focus and drastic curbing of their activities. That will be a challenge for any organization.

Relationships and insights

There is plenty of need for “manufacturers” in this layer, too. Mortgages and corporate lending need balance sheets, which big tech players will rarely want, while wealth management needs manufactured products. There is also an opportunity for banks to be the “human touch” partner of large platforms, seamlessly integrating into those players’ AI or data layer. In this scenario, banks would take on the less scalable, people-intensive part of the value chain for proper recompense. But again, the driver of success here will be scale and costs; only a few banks can be really successful in this model. They will also face the very hard task of cutting back on many of their more traditional activities—and accepting that they no longer own their customers directly.

Low-touch B2B

A “manufacturer” in wholesale banking and capital markets would need to offer execution,

balance sheet, at-scale technology services—or some combination of these. To succeed, such a firm would need to benefit from a fundamental cost or funding advantage relative to other players; there are probably only a few institutions that could follow this particular strategy.

For a firm that is already at scale and reaching saturation with its own client base, offering white-labeled execution to other banks would represent a way of increasing the scale and efficiency of its own platform and generating additional revenues. Such a firm could do this without having to add to its own salesforce, and would benefit from the “aggregation” that potential clients would conduct on its behalf.

A similar argument would apply to technology and operations platforms. Firms that could offer instances of these services to other, smaller firms could generate recurring revenues for themselves and justify higher levels of technology spend. They would, in many cases, be transforming their own capabilities into the multi-tenant utilities many have long predicted in capital markets.

Despite these options, however, we believe that many capital-markets firms would be better off benefiting from the services of potential manufacturers rather than becoming manufacturers themselves. In that way they could retain key client relationships, integrate various product offerings, and engage in complex structuring of more basic offerings into truly customized solutions. At the same time, they could procure most of these services from truly lower-cost providers much more efficiently than they could offer the same services themselves.

Strategic direction 3. Focus on specific business segments

A third strategic direction would see banks defend against competition from new entrants

by refocusing their priorities. Such banks would become high-touch, relationship-driven specialists competing in narrow business segments. They would focus on niches where highly variable and specific customer needs require bespoke approaches and highly experienced talent, with the key value proposition centered on relationships, trust, reputation, and experience.

This approach might play out in several ways. A bank might concentrate on a narrower set of products, such as corporate loans. It could focus on a limited set of clients, such as providing retail banking for ultra-high-net-worth individuals. Or it could hone a specialized set of capabilities, such as a wholesale bank focusing on client-facing activities such as investor relations and pre-trade.

Let’s consider how a bank might become a focused player in each of the three “layers” of the future financial intermediation system.

Everyday commerce and transactions

There are several options for banks to selectively refocus their business model in this layer. In a digital world, the “everything-to-everyone” financial services model is definitely not the only option. Banks may decide to focus on a few “everyday” products, such as high-margin credit cards or consumer loans, while stepping out of more commoditized activities. Advances in data and technology are also enabling the emergence of more segment-focused offers, whether in retail or commercial banking. It helps that big-tech platforms tend to focus on the “median,” leaving plenty of room for specialist offerings. Big data enables banks and agile fintechs to open segments that were previously considered unlendable. It also enables them to target specific professional groups with truly customized everyday banking offers, in a digital-first, but human-supported model. At the same time, the emergence of a sophisticated

fintech sector will make it increasingly feasible for banks to outsource large swathes of their non-differentiated activities.

We already see several banks and credit unions making conscious choices to focus on a few areas. Credit unions especially have some natural advantages in this direction, due to their strong community connections. However, this approach too will require the strong discipline of stepping away from unprofitable activities, as well as genuine investment in building truly sustainable competitive advantage in the selected niches.

Relationships and insights

The option space is much broader here. Banks can choose to specialize in specific segments, from private banking to serving specific professions in their advisory needs. The emergence of big data enables banks to go much deeper in serving their corporate clients as well with very specific vertical offers targeted at particular industries, as Rabobank has done in agriculture. Other banks can zoom into underpenetrated submarkets, such as equipment leasing or commercial mortgages, building distinctive knowledge and also differentiated distribution. With a digital-first retail or corporate advisory model, small banks can cover specific segments across larger geographies, and thus build real scale in niches. It is important, however, that banks choose their focus areas carefully, and so play to truly sustainable competitive advantages. In our view, too many institutions are trying to build multiple specializations in advisory-heavy businesses—a feat that is hard to pull off.

Low-touch B2B

Focused strategies can succeed in this layer as well and are being actively pursued by a number of institutions. Firms can choose to specialize in specific sectors or product areas, or in serving clients of a certain size.

For example, a set of firms follows niche strategies, actively embracing technological disruption instead of avoiding it. In this context, nonbank market makers build their entire business models around “zero touch” trading at maximum speed and lowest possible cost, and focus on a narrow set of vanilla, highly liquid products. This focus restricts the set of markets in which they can compete, but they become lethally effective in the markets they do enter.

Strategic direction 4: Optimize and digitize as a traditional player

An alternative approach is to remain a traditional bank, but become fully digitized. Banks adopting this direction could aspire to become seamlessly digital local banks, or global-scale corporate or wholesale banks. They would continue to offer their traditional set of products, such as payments or retail banking, but would optimize cost by fully digitizing and automating processes. Moreover, they would make full use of technology to boost revenues where possible.

The banks that succeed with this approach will have robust core strengths, including capabilities in areas such as customer acquisition, underwriting, financing, and servicing. But they will need to build on those strengths and fundamentally optimize their operating models, including through end-to-end digitization.

The resulting “banks of the future” might be quite different in character from those of today—in all three layers of the future financial intermediation system.

Everyday commerce and transactions

In this layer, banks can choose to continue with their current focus and range of businesses, but step up the performance of those businesses dramatically. That will require relentless digitalization and a constant drive to improve efficiency.

The banks that get this right could stay ahead of the curve for many years; and they could use their individual businesses to cross-finance each other to maintain competitiveness. In addition, true customer obsession on the part of banks can delay disruption, especially in markets where churn is traditionally low or customers are conservative. Regulation and natural cycles will also slow the march of attackers and could enable a few banks to run businesses outside of the emerging platform-ecosystems. Yet history suggests that the kind of large-scale commoditization that lies ahead for this layer will leave room for only a few winners.

Relationships and insights

The dual forces of technology and regulation will impact this layer more slowly and more selectively than others, leaving plenty of room for banks to continue improving steadily without really reinventing their business model. Especially in the Western world, banking relationships are deep and long, and the older generations drive most of the advisory-related revenues; in the US, for example, 60 percent of wealth is owned by people aged 60 years and older.¹¹ In these regions, banks have a long window to keep improving their offers within their current borders. But they should not be complacent: most future growth will come increasingly from younger individuals and companies, which are more open to next-generation advisory. Only the truly distinctive banks will be able to maintain differentiation with a universal advisory model in the long term.

Low-touch B2B

Success in this layer revolves around deploying technology across the entire value chain. Firms will leverage a number of capabilities to

“technology-enable” the business end-to-end. They include:

- Investments in e-portals that offer value-added analytics and integrate deeper into client ideation and workflows
- Leveraging proprietary or customized third-party CRM systems to gain deeper insight into client trading and transacting behavior and identifying “next to buy”
- Continuing to improve electronic trading to provide clients with liquidity through the cycle in increasing clip sizes for a host of vanilla products, with even larger tickets handled without human intervention
- Continuing to automate post-trade processes and support functions like risk, finance and legal by leveraging robotic process automation, natural language processing, and machine learning.

While these trends represent a continuation of current trends, they are gradually shifting the operating models of the firms involved. Their businesses increasingly become “platform businesses” focused on scale and efficiency, with small, targeted teams focused on advice, structuring, and complex risk-taking.

To facilitate and accelerate this transformation, some firms are “giving up the ghost” on expensive legacy infrastructure and rebuilding their technology and operations platform from scratch. These greenfield rebuilds gradually replace the existing infrastructure and can drive a step change in efficiency and cost.

¹¹ McKinsey Panorama.

Competing in the new financial intermediation system: Three imperatives

Although banks will make distinct strategic choices on where and how to compete in the new world of financial intermediation, there are several common “must-dos.” We propose three core strategic imperatives that all banks will need to embrace if they are to survive and thrive in a transformed and more competitive system:

Strategic imperative 1: Reinforce trust

Recent headlines in the global media have spotlighted ethical breaches and questionable business practices in a range of sectors—banking among them. It is little surprise that so many people mistrust corporations. In a recent global citizen survey conducted by McKinsey, nearly one third of respondents said big businesses were failing to meet their responsibilities; in countries such as the UK and US that number was close to 50 percent.¹² These findings go beyond public alarm at corporate ethics scandals. They also reflect concern that many companies’ core business practices are skewed in favor of shareholders at the expense of customers, communities, societies, and the environment.

To reinforce trust—and where necessary restore it—banks will need to take a hard look at their role in society and make a visible commitment to create value for both shareholders *and* other stakeholders. That starts with taking an expansive view of their relationship with customers, and putting their needs at the center of banking strategies. The core question that banks need to ask is: *How are we solving our customers’ problems and improving their lives? What is our broader societal purpose?*

For example, one developed-world bank integrated iPad customer-engagement tools with its back-end systems to enable customers to understand their financial needs and options in an intuitive, interactive digital format. An African bank helped solve the social problem of financial exclusion in its home country through a string of innovations—including putting bank branches on the back of Land Rovers to reach remote villages, accrediting small retail outlets as bank agents, and creating a low-cost cell-phone-banking solution.

Just as important, banks need to be mindful of their social and environmental impact. For example, many banks have already joined the United Nations Global Compact, an initiative based on CEO commitments to implement universal sustainability principles and to take steps to support the Sustainable Development Goals.¹³ To be truly effective, such commitments are best enshrined in a clearly articulated statement of a company’s responsibilities to its stakeholders.

Strategic imperative 2: Reset the cost base

As new competition and rapidly advancing digitization put pressure on margins, banks will need to put renewed focus on improving efficiency and productivity—and resetting their cost bases. They have two main levers to do so:

- **Accelerate end-to-end digitization.**

Although many banks have made real progress in digitizing customer journeys, there is still a long way to go in migrating transactions and sales from physical to digital channels and automating processes from end-to-end. There is also a vast gap between the leaders and

¹² *Delivering for Citizens*, McKinsey & Company, June 2018.

¹³ United Nations Global Impact, <https://www.unglobalcompact.org>.

the laggards in this endeavor; banks which are slow to move on this front could see their competitive advantage erode rapidly. The key steps required include making services seamlessly available on digital channels, educating customers about those channels, and pricing digital transactions attractively compared to those in physical channels. Progress can be dramatic in a short period of time: McKinsey's Finalta benchmark on digital in banking shows that the top five most improved banks globally on share of digital sales improved this measure by 7 percentage points per year over a five-year period. Automating core processes from end-to-end must run in parallel with growth in digitization. McKinsey analysis suggests most banks overall run about 600 processes. However, automating the top 50 processes is likely to capture 80 percent of the benefits of digitization. Processes that typically offer disproportionate rewards for end-to-end automation include account opening, mortgage onboarding, personal loan applications, credit card issuing, cash handling, and client enquiries.

- **Improve front-line productivity.** A second key improvement opportunity is in front-line productivity, where banks can leverage analytics and data as a priority. We have seen a number of successful approaches. One bank launched a series of data-driven cross-sell campaigns that achieved conversion rates of around 20 percent, about five times the previous success rate. Other banks have introduced specialists to support front-line staff in selling more sophisticated products, such as investments and insurance. Another institution introduced a service-to-sales initiative encouraging all staff in branches to turn simple inquires or teller transactions

into opportunities to surface client needs and introduce sales opportunities. Banks are also improving productivity by reducing the number of branches—in some cases dramatically reducing the number of tellers at branches.

Strategic imperative 3: Renew talent

Most executives today recognize the competitive advantage of human capital, and yet the talent practices their organizations use are stuck in the twentieth century. Typical HR talent-planning processes (which are too expensive and take too long to implement) are designed for predictable environments, traditional ways of getting work done, and organizations where lines and boxes still define how people are managed.

As work and organizations have become more fluid—and business strategy is no longer about planning years out but about sensing and seizing new opportunities and adapting to a constantly changing environment—companies must deploy talent in new ways to remain competitive. Banks must transform how they acquire, manage, and deploy talent for today's agile, digital, analytical, technologically driven strategic environment.

One imperative in the talent arena is to harness the full power of women's participation. In North America, for example, women account for over half of the entry-level workforce in financial services but still represent fewer than one in five positions in the financial-services C-suite. There is much evidence that achieving greater gender parity will support stronger financial performance. Improved representation of female leaders will lead to a more rounded view of customers. This is particularly critical in financial services, given that more than half of women now control their household finances and are responsible for household savings and investing. Furthermore,

companies that do not focus on gender diversity will find themselves at a disadvantage in the war for talent.¹⁴



Ten years from now, the financial intermediation system could be considerably bigger than it is today. Yet margins could come under considerable pressure. That, in turn, will result in banks without a clear strategic focus losing value and finding it increasingly difficult to compete.

We believe the rewards will be disproportionate for those banks that have a clear sense of their competitive advantage and accordingly make and follow through on a definitive strategic choice. The result should be a financial sector that is more efficient and value additive to customers and society. That is a future that should energize any forward-looking banking leader.

¹⁴ Stacey Chin, Marie-Claude Nadeau, Alexis Krivkovich, "Closing the gap: Leadership perspectives on promoting women in financial services," McKinsey.com, September 2018.

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