



2025 Global Outlook for Banking and Financial Markets

*Elevate banking performance
in the age of AI*

IBM





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Modern financial institutions demand modularity, security, openness, AI-driven capabilities, and collaboration on a hybrid cloud. At IBM, we empower you to elevate customer experiences, modernize core banking infrastructures, pioneer innovative payment solutions, and transform enterprise risk management. Learn more at ibm.com/industries/banking-financial-markets

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As we enter 2025, the banking sector faces a critical juncture, balancing a unique confluence of new challenges and opportunities that will define its evolution over the next decade. Over the past 15 years, the aftershocks of the 2008 Global Financial Crisis, ever-tightening regulatory pressures, low interest rates, and fierce competition from both traditional and nontraditional rivals have constrained banks' degrees of freedom. This convergence has created an environment where profitability is under pressure, cost-to-income ratios are elevated, and price-to-book ratios remain strained.

As macroeconomic conditions fluctuate with sudden interest rate hikes and heightened trade tensions, banks across the globe are experiencing disparate outcomes. While European and Indian banks are reaping the rewards of rising interest rates, North American institutions face a mixed bag of results with outcomes more polarized. Japanese banks have just begun to show signs of recovery, while Chinese banks continue to face ongoing economic headwinds. The stage is set for a showdown: banks able to adapt will thrive, while others risk being left further behind.

Yet, in the midst of these challenges, one undeniable trend is emerging as the game changer: artificial intelligence. AI is no longer just a buzzword. It is rapidly becoming a key foundation of banking strategies, enabling operational transformation and the reinvention of business models in the pursuit of healthier financial outcomes while addressing risk and compliance requirements. However, success will not come easily. Only those banks that align their technology investments with robust reinvention supported by digital infrastructures and a deep-rooted culture of AI risk management will effectively scale these innovations across their entire organization.

The *2025 Global Outlook for Banking and Financial Markets* offers key insights into these pivotal shifts and provides the framework for strategic action to achieve successful financial outcomes in this rapidly changing landscape.

For banking leaders, this is more than just a guide—it is a call to action. The decisions made today will determine which organizations win and lose in the age of AI. Through careful examination of regional variations, technological innovations, and emerging trends, this report offers both the data and the inspiration needed to steer institutions toward long-term success in an increasingly complex and competitive global marketplace.

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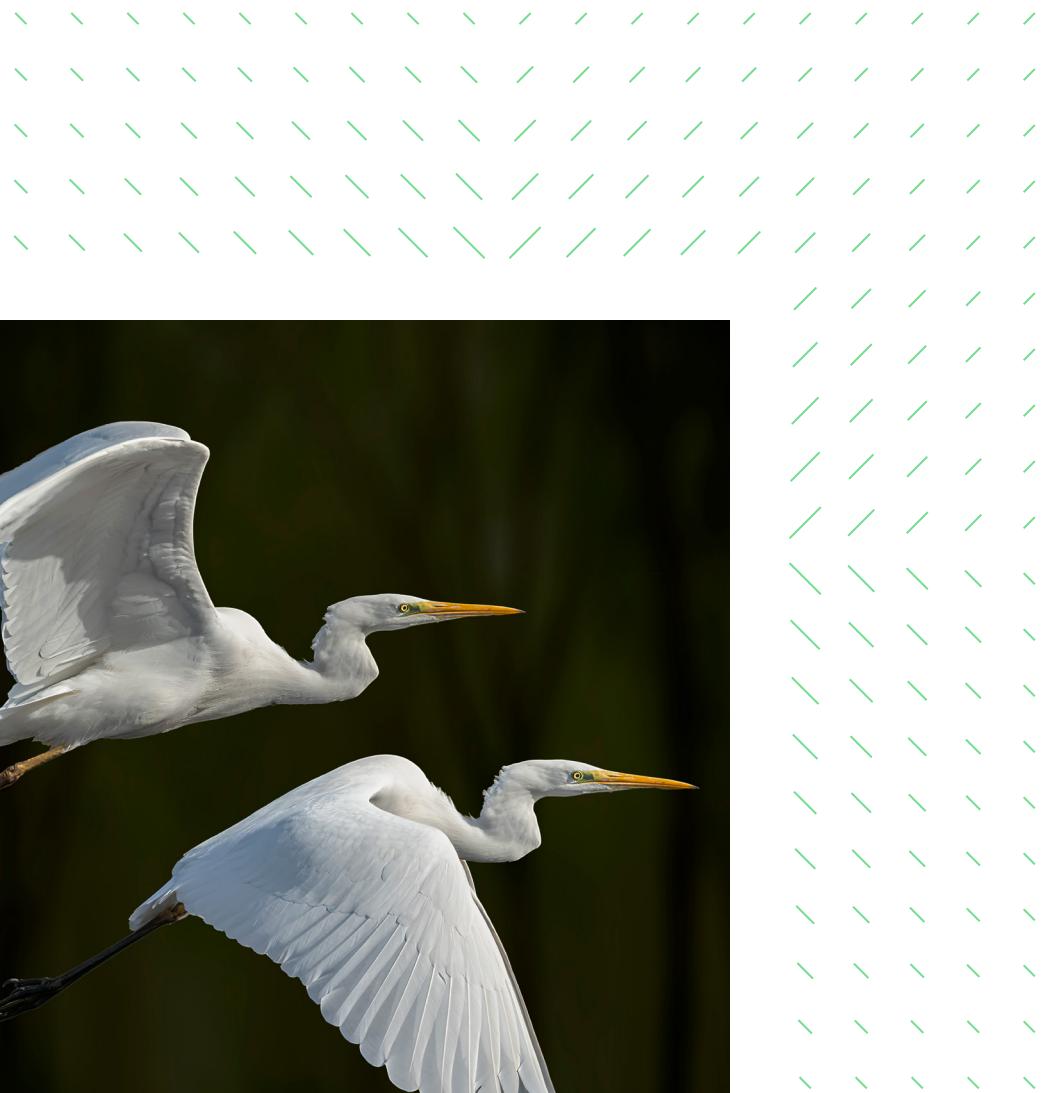


Key takeaways

Achieving enterprise-wide scalability of AI innovation demands a renewed risk management culture—one where every banker becomes an AI risk manager.

- **Steady banking convergence has given way to contrasting financial performance.**
In an era of rising economic and political uncertainty, banks with strong tech foundations and enterprise-wide AI adoption, integrated business models, global scale, and/or local market dominance are poised to seize market power and outpace rivals.
- **Over 60% of banking CEOs are willing to undertake substantial risks to harness automation advantages and enhance competitiveness.¹**
Achieving enterprise-wide scalability of AI innovation demands a renewed risk management culture—one where every banker becomes an AI risk manager.
- **Generative AI adoption is set to soar.**
Only 8% of banks were developing generative AI systematically in 2024, and 78% had a tactical approach.² As banks move from pilots to execution, more are redefining their strategic approach to service expansion, including agentic AI.
- **Neobank profitability is reshaping fintech rivalry.**

Already, while over 16% of clients worldwide are comfortable with a branchless, fully digital bank as their primary banking relationship, competition is shifting from mass market digital offers to higher-value services, including embedded finance and advisory services to affluent investors and small and medium-sized enterprises (SMEs).³



CEOs, confronted with profitability challenges for over a decade, have been entrusted with conflicting responsibilities: rejuvenating their institutions' risk-taking capabilities while nurturing financial prudence.

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15 years of banking convergence

Banking is a highly regulated industry whose economic margins are traditionally tied to the level of interest rates, volatility in capital markets, broader economic cycles, and risk management of financial exposures. As interest rates lowered sharply after the 2008 financial crisis, depleted interest rate margins exposed structural weaknesses in the Cost-to-Income Ratio (CIR) for most lending institutions.

During this period, intermediation revenues were also reduced by the regulatory simplification of financial derivatives and the race-to-zero fees championed by passive investing. Regulators significantly stepped up Core Equity Tier 1 (CET1) ratios, increasing the cost of capital to de-risk systemic lenders and maintain a bank's risk appetite within sustainable parameters, adding to the macroeconomic factors that further constrained the financial performance of many banks.

CEOs, confronted with profitability challenges for over a decade, have been entrusted with conflicting responsibilities: rejuvenating their institutions' risk-taking capabilities while nurturing financial prudence.

Market volatility is generally perceived as a boon by bankers, as it presents opportunities to price financial products and cater to client needs. However, the abrupt surge in interest rates, triggered by the unexpected onset of inflation in major advanced economies in 2022, proved to be a double-edged sword. On one hand, the disparity between lending rates and borrowing costs widened, thereby boosting banking profits. Conversely, the reversal of accommodating monetary policies imposed stress on the resilience of world economies that were already grappling with political uncertainty, intensifying military conflicts, and global supply chain fragmentation. As economies suffer, credit risks increase, threatening the long-term reliability on recent profit gains.

Banking performance is becoming more dispersed

While banks' financial performances generally became more constrained and homogeneous until 2022, heightening disparity emerged from the pandemic across geographies and even within jurisdictions (see Figure 1).

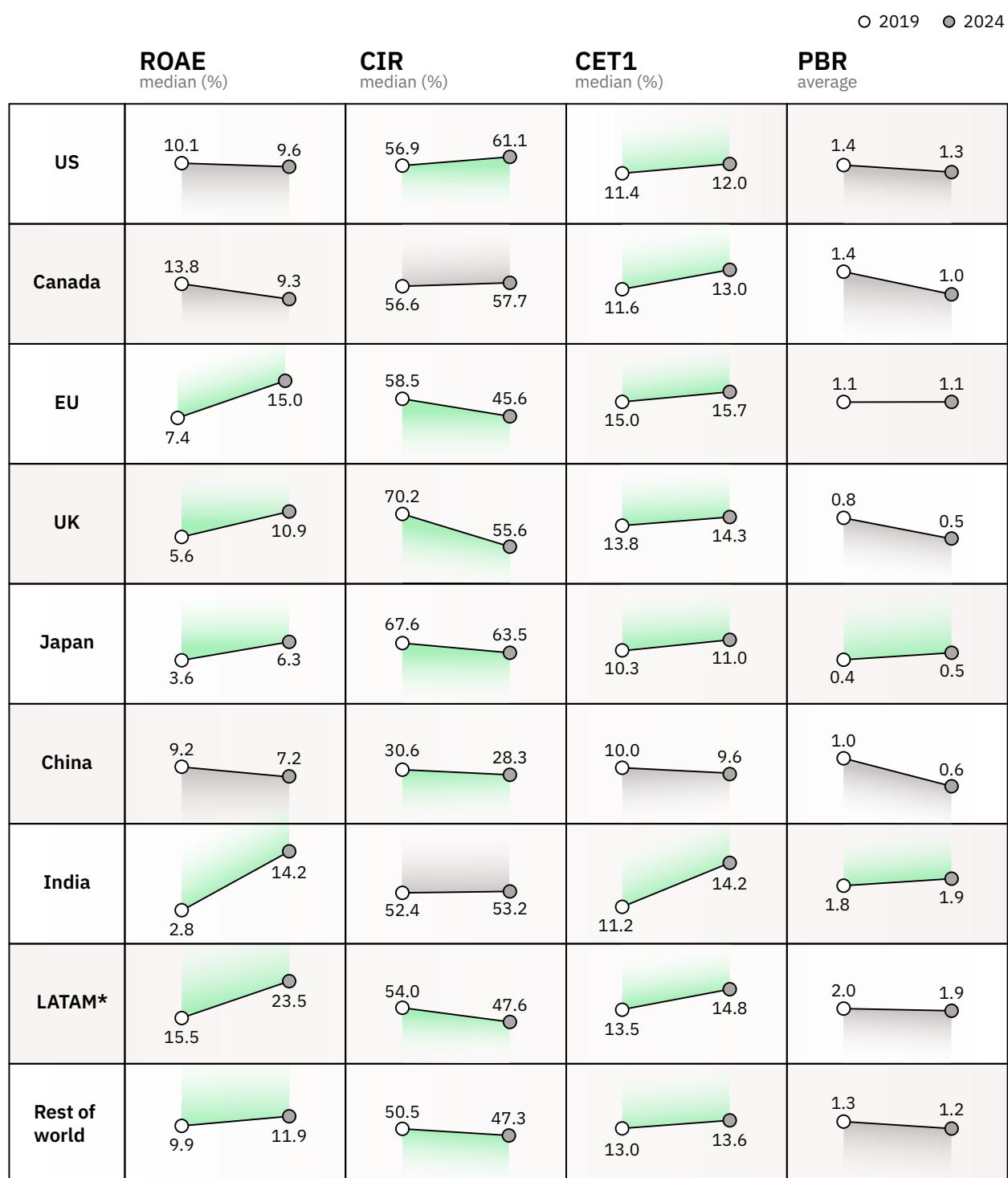
As interest rates surged in 2022, macroeconomic benefits were not equally realized. European banks, largely constrained by a decade of negative rates, reaped significant revenue, increasing their return on average equity (ROAE). The performance of Indian banks also rebounded from their historical low in 2020, when interest rates were less than half their 2011 peak. Conversely, Chinese banks found themselves entangled in the deterioration of domestic credit conditions as their economy began to cool (see Figures 2 and 3).

In the US and Canada, financial institutions displayed contrasting outcomes. Some institutions achieved exceptional results: the largest US banks owning investment banking operations capitalized first on fast-rising rates and then increased bond-trading volumes as rates started to decline in 2024. In a world where digital banking enables faster money movement to safer institutions or higher-yield accounts, smaller banks encountered an expedited repricing of their borrowing costs that limited profit taking. The collapse of Silicon Valley Bank in 2023 served as an alarm, also warning of transformed systemic risks between sell-side and buy-side. Many institutions had to post higher provisions, saving for potential credit losses through the uncertain economic cycle. The median ROAE of US and Canadian banks decreased, while the dispersion around it expanded. In the US, the largest banks profited more than smaller institutions: the 10 largest banks by total assets accounted for more than 50% of industry's profits—the highest share since 2015.⁴ Overall, the dispersion of ROAE increased in most markets.

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Figure 1

CET1 strengthened overall since 2019, while performance diverged in major advanced economies and the outlook remains challenging with low price-to-book ratios (PBRs).



*LATAM is defined as the aggregation of its three largest economies: Brazil, Colombia, and Mexico—with Argentina not included.

Source: IBM Institute for Business Value analysis of S&P Global data.

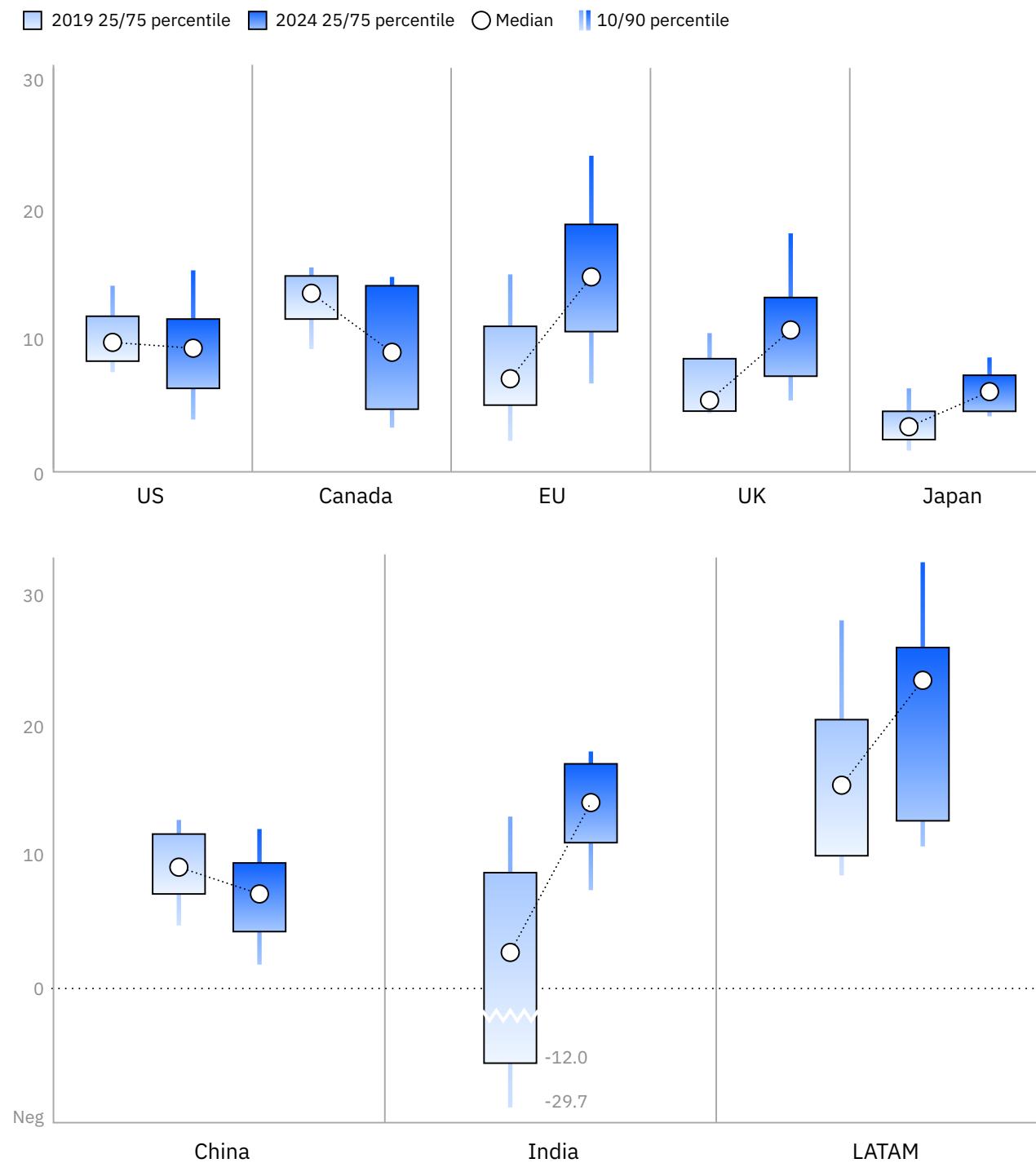
While macroeconomic conditions and consumer habits change, affecting banks' profits, the efficiency of their operating models remains weak around long-term averages. CIR remained elevated after the Global Financial Crisis (GFC), particularly in major advanced economies. The largest US banks by total assets exhibited an average CIR of 61.6% in 2024 compared to their EU counterparts at 53.6%, while CIR of major banks was 47.1% in LATAM and 30.9% in China.

Additionally, technology has reignited competition—even under adverse operating environments. A select group of fully digital banks (neobanks) finally reached profitability, demonstrating that their operating models are more resilient than many bankers anticipated. Consequently, fintech unicorns are now expanding their reach from payments and consumer banking into less commoditized business domains, such as SME banking and wealth management, where established institutions still dominate client relationships. However, these institutions are still entrenched in the process of rejuvenating their technological foundations. When asked what prevents banks from competing in SME markets with new banking services, 65% of bankers identified incomplete journeys to cloud, and 57% advocated for making core banking architectures modular and flexible.⁵ Many are still wrestling with the basics.

A select group of fully digital banks (neobanks) finally reached profitability, demonstrating that their operating models are more resilient than many bankers anticipated.

Figure 2

ROAE from 2019 to 2024: Dispersion has grown in most economies.



Source: IBM Institute for Business Value analysis of S&P Global data.

AI becomes a core enabler of banking transformation

The pace of technological innovation has significantly accelerated, with the advent of generative AI being particularly noteworthy. The commercial release of large language models (LLMs) made AI usage more accessible than ever before. Large reasoning models (LRMs) are now poised to further enhance AI's capabilities through their ability to comprehend, create, and process text analytically. Paired with agentic AI, which is primed to expand innovation from task automation to autonomous decision-making, these models can transform an area where banks need the biggest boost: complex financial decision-making with enhanced analytical precision.

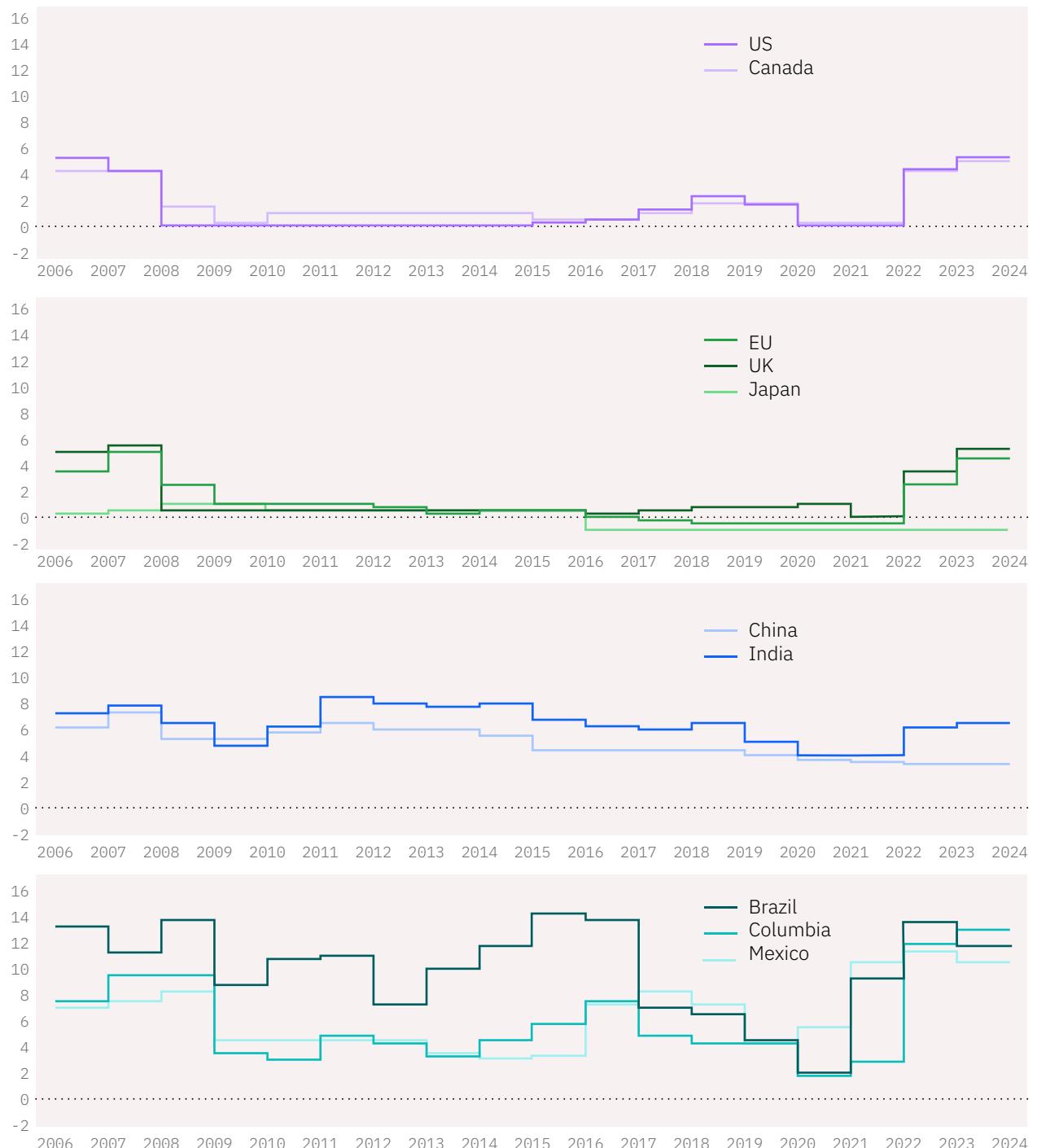
While the remarkable speed of AI innovation has sparked the public's imagination and stimulated boardroom discussions, banking executives are confronting skill gaps and friction in changing business culture. More than 60% of CEOs in the financial services sector have expressed their willingness to undertake substantial risks to harness automation advantages and enhance their competitiveness.⁶

At the same time, more accessible AI models are not a panacea. Only banks that invested strategically to reconfigure their architectural foundations and business culture in recent years will be able to leverage third-party AI services successfully. Achieving secure, enterprise-wide scalability demands a renewed risk management culture—one where every banker becomes an AI risk manager.

Yet, according to IBM Institute for Business Value (IBM IBV) research, only 8% of banks in 2024 demonstrated a strategic approach to leverage generative AI enterprise-wide, while 78% acted tactically.⁷ Can this 8% flip to 80% in 2025?

Figure 3

Central banks' policy rates are an important driver of most banks' profitability.



Source: IBM Institute for Business Value analysis of S&P Global data.

Despite most institutions pressing forward with digital transformations and AI innovation, industry-wide hesitance to pair technological investments with corresponding adjustments in business models has diminished the full extent of technology's impact on financial performance.



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Regaining momentum in capital markets

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Striking a balance between innovation and risk

Despite most institutions pressing forward with digital transformations and AI innovation, industry-wide hesitance to pair technological investments with corresponding adjustments in business models has diminished the full extent of technology's impact on financial performance. This fact is not lost on financial analysts.

On average, banks have been trading with PBR below or near 1 for over a decade, signifying muted market confidence in their ability to drive sustained profitability in the future (as depicted in Figure 4). In contrast, insurance companies boast twice the PBR—a sign of their stickier price-wielding power with clients—while payment providers consistently outperform all industries (see Perspective “Payments” on page 18).

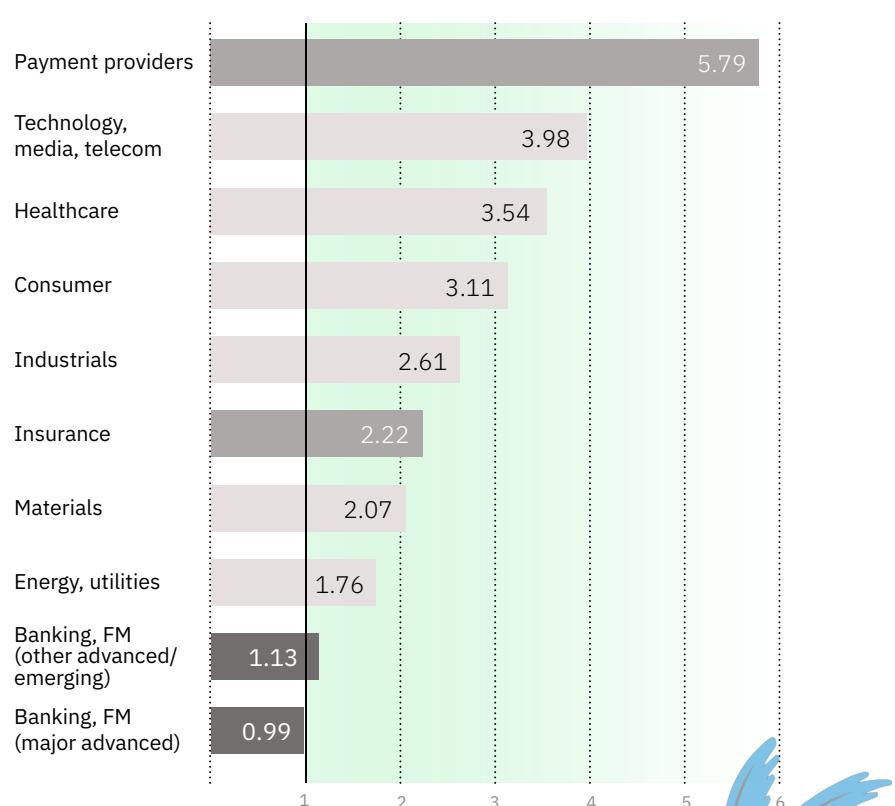


Figure 4

Banks exhibit lackluster PBRs compared to other industries.

Source: IBM Institute for Business Value analysis of S&P Global data.

Still, it is not surprising that banks' PBRs remain unlikely to compete with the market's top performers such as technology firms. The imperative for prudent risk management inherently tempers banks' upside potential, a necessity underscored by the lessons of the GFC, where excessive leverage yielded unsustainably high returns at the cost of systemic stability. Nevertheless, significant opportunities for improvement exist within a prudent approach. By striking the right balance between caution and innovation, banks can unlock untapped potential while maintaining the resilience and integrity that underpin their long-term success. This is a compelling avenue for CEOs in a sector experiencing further consolidation: they must enhance their institutions' market appeal and strengthen their competitive positioning.

Notably, some banks are already positioning themselves for higher valuations (see Figure 5), a trend that extends beyond the neobanks known for their leaner operating models and significant growth trajectories. For instance, several European banks with a strong emphasis on wealth management are skillfully navigating favorable market conditions—provided bullish sentiment persists and product fees remain unchallenged. In addition, embedded finance is growing amidst intensifying regulatory scrutiny, presenting a unique opportunity for banks to solidify their market presence beyond traditional channels.

Considering all-time high CET1, temporarily improving ROAE, disappointing PBR, and accelerating AI innovation, banks find themselves at a pivotal juncture to regain momentum in capital markets. However, there is no universal approach for institutions to secure a competitive edge, given the widening differences across banking jurisdictions in terms of regulatory requirements, interest rate levels, capital market dynamics, organizational structures, and clients' digital adaptation.

Banks must articulate their business strategies clearly to distinguish themselves from competitors globally and locally—technology alone is not enough. Only institutions that effectively pair business and technology innovations will lead further expansion as global or national players. Others will focus on generating greater value for money in local markets or specific client segments. In an industry that is historically characterized by inorganic growth, the remaining institutions will be vulnerable to new waves of consolidation, especially in the US and Europe.

Positioning institutions globally on a banking performance quadrant

To better understand the intricate relationship between technology and business strategies across geographies, and its diverse impact on financial performance, we analyzed the annual reports of over 600 listed banks with more than \$10 billion in total assets. Each bank's ROAE is plotted against its PBR on a banking performance quadrant (see Figures 5 and 6).

What we observe is that banks tend to cluster in the lower-left section of the quadrant, where PBR is around/below 1, and ROAE is muted. Overall, Japanese and Chinese banks operate in a much more constrained environment compared to their international peers. The median ROAE of Japanese banks is half that of the US and more than three times lower than in Europe. Banks in North America trade with higher PBR compared to their peers in major advanced economies, with an average equal to 1.6 in Canada and 2.0 in the US.

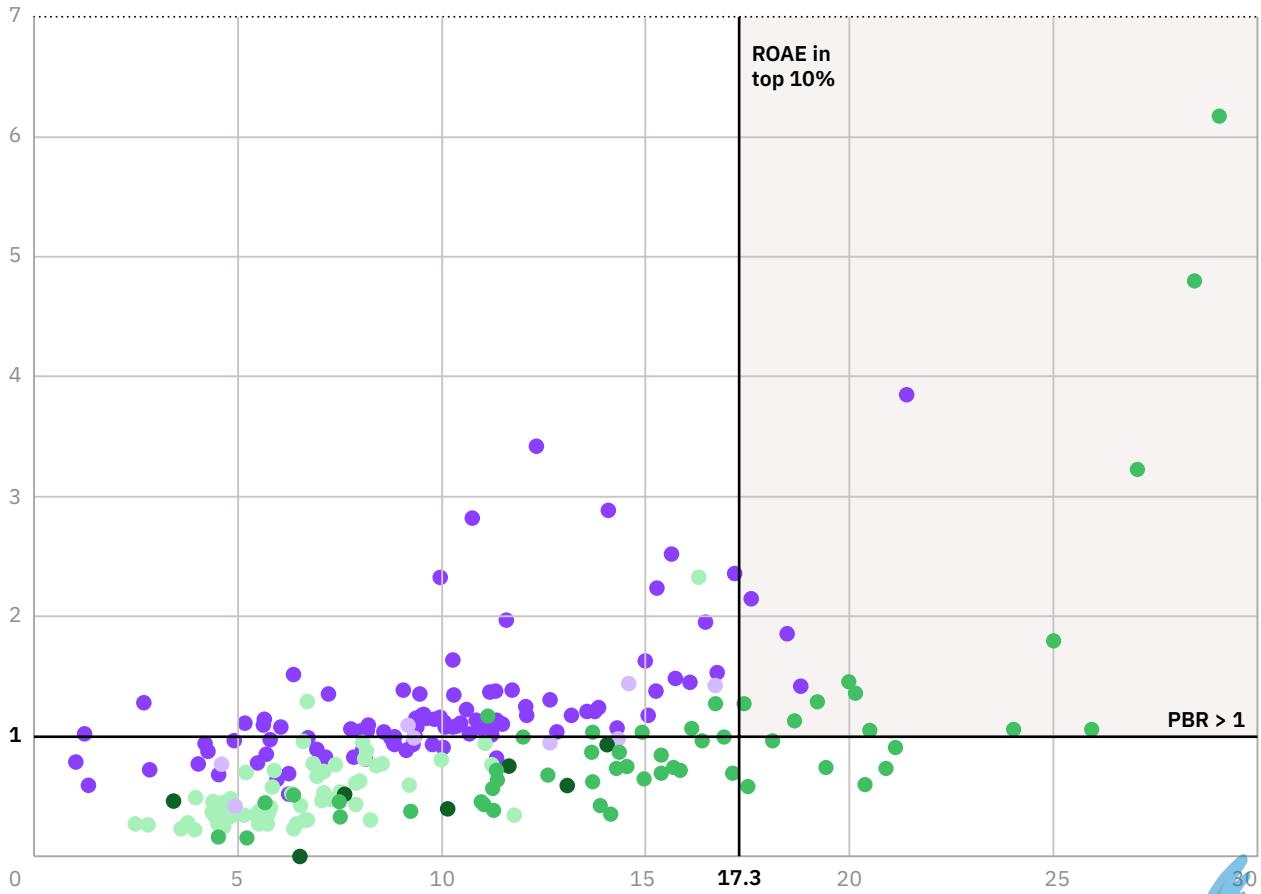
Figure 5

Banks in major advanced economies (total assets > \$10B).

Banks tend to cluster in the lower-left area, while in the upper-right we find institutions that pioneer wealth management, lead in local markets, or leverage economies of scale aggregating diverse business models and operations.

US Canada EU UK Japan

PBR 2024



Source: IBM Institute for Business Value analysis of S&P Global data.

Conversely, while European banks trade at lower PBR (0.8 on average), their ROAE is more dispersed. This is due to structural differences in the economies across Europe (such as Eastern Europe, which proves more dynamic than Western Europe). Moreover, when compared to other markets, higher fees embedded in investment and insurance products allowed some institutions to more than replenish depleted interest rate margins. A prime example is Italy, where bancassurance became a reference model.⁸

Regarding other advanced and emerging economies, country-specific macroeconomic conditions define heterogeneous banking trends that are harder to consolidate in a single view. In the context of this study, we focus on three major areas: China, India, and LATAM (defined as the aggregation of its three largest economies: Brazil, Colombia, and Mexico—with Argentina not included).

Chinese financial institutions feature weak ROAE and constrained PBR, given deteriorating quality of credit portfolios. The competitive pressure from fintech unicorns remains intense in China, more so than in other parts of the world. This has led to significant erosion of key revenue streams, particularly in payments and lending, as fintech firms leverage ecosystem platforms that are increasingly capable of addressing customer needs seamlessly and at any given moment.

The Indian banking sector faced a significant decline in profitability, with interest rates reaching their lowest point in 2022. However, with the recent upward trend in interest rates, the banking sector's outlook appears favorable as the economy features sustainable room for further financial inclusion and service expansion targeting the middle class. Indian banking PBR surpasses global banking averages.

LATAM banks demonstrated resilience in maintaining ROAE levels that outperform global counterparts. This achievement was particularly noteworthy, considering the challenges posed by the pandemic, as government-sponsored relief was less prevalent than in major advanced economies. However, these markets also face intensifying fintech competition. In Brazil, for instance, 29% of consumers already consider neobanks to be their primary banking relationships.⁹

Investment convenience—fees and expenses scorecard of investment funds in 2022

Top	Above average	Average	Below average	Bottom
Australia	Korea	Belgium	Canada	Italy
Netherlands	Norway	Denmark	China	Taiwan
US	South Africa	Finland	France	
	Sweden	Germany	Hong Kong	
UK	India		Mexico	
	Japan		Singapore	
	New Zealand			
	Spain			
	Switzerland			
	Thailand			

Source: IBM Institute for Business Value analysis of S&P Global data.

Navigating the banking performance quadrant

Shift ROAE right and PBR up

Looking ahead to the next five years, financial institutions need to not only increase ROAE shifting right on the banking performance quadrant, but also to shift upward by capturing healthier PBR.

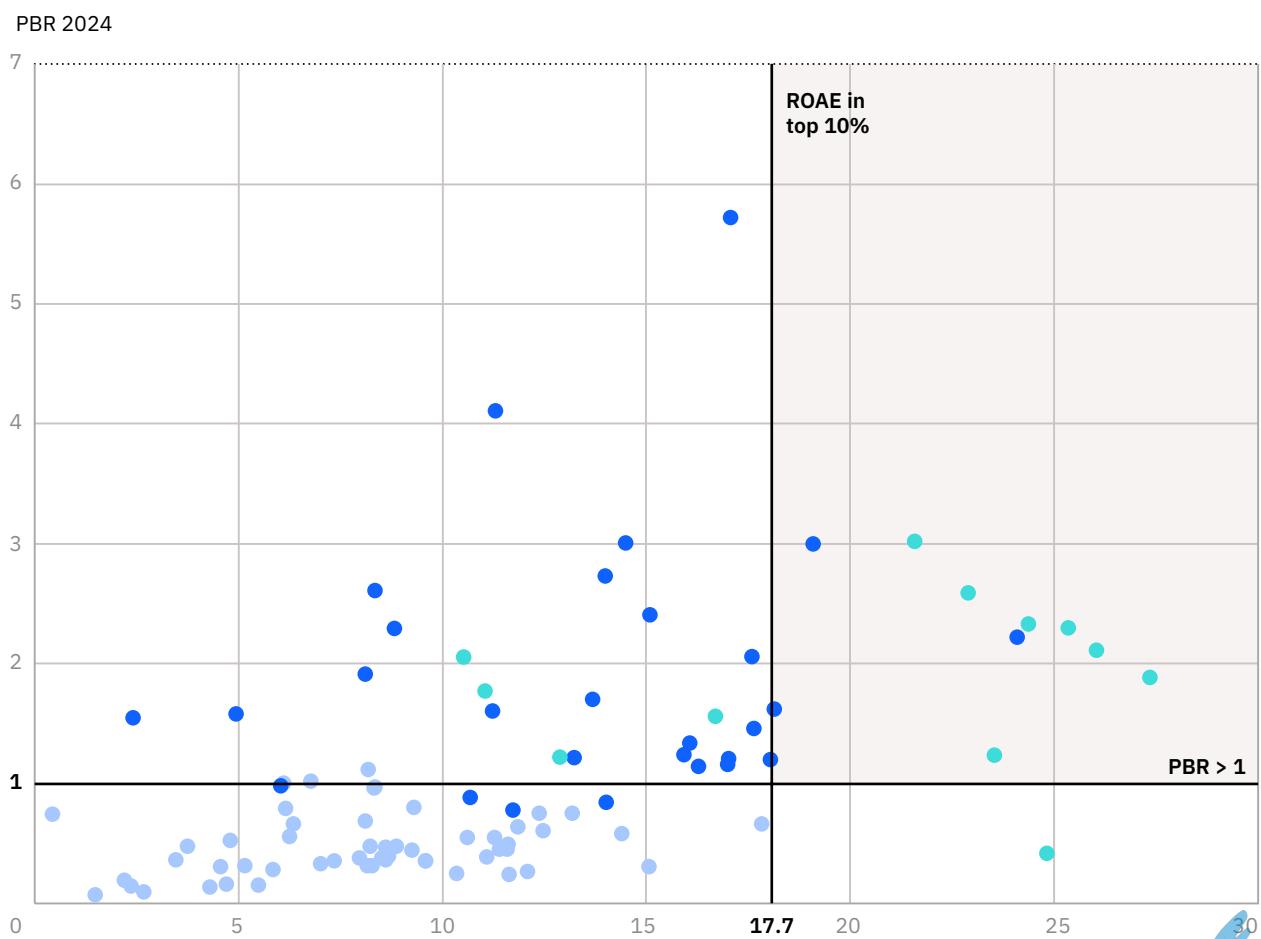
How can banks increase profitability, capture new revenues, and lower the cost to serve—thus attaining healthier ROAEs? How can banks transform their business—thus gaining higher PBRs? *They need to transform and literally bank on artificial intelligence.*

Figure 6

Banks in other advanced and emerging economies (total assets > \$10B).

Banks tend to cluster in the left area, with banks with higher PBRs corresponding to markets with above-average growth potential.

● China ● India ● LATAM



Perspective

Payments

Payment markets today are largely dominated by a handful of major players wielding significant market power, reflected in much higher average ROAE and PBR compared to banking services.

While fintech entrants have made notable strides, international card schemes could mitigate margin compression facilitated by a steady growth of transaction volumes powered by expanding consumer preference for e-commerce. However, this dominance may face swift disruption in the coming years.

The rise of instant payments and digital wallets is reshaping payment schemes in some parts of the world—such as China, India, and Brazil—faster than others. And the expected introduction of Central Bank Digital Currencies (CBDCs), such as the e-Yuan and the digital euro, aims to fundamentally redefine the movement of money not only in retail markets but also across borders. These innovations can challenge the status quo and allow redistributing market power to those banking innovators that can redesign their contribution on platform economies.

First, banks can benefit if they no longer see payments as a cost center but as a key opportunity to redefine client engagement across varied ecosystems made of new consumer habits and SMEs' evolving needs. This is already happening in China, India, and LATAM as banks and new entrants launched nonbanking platforms with digital wallets at their core.

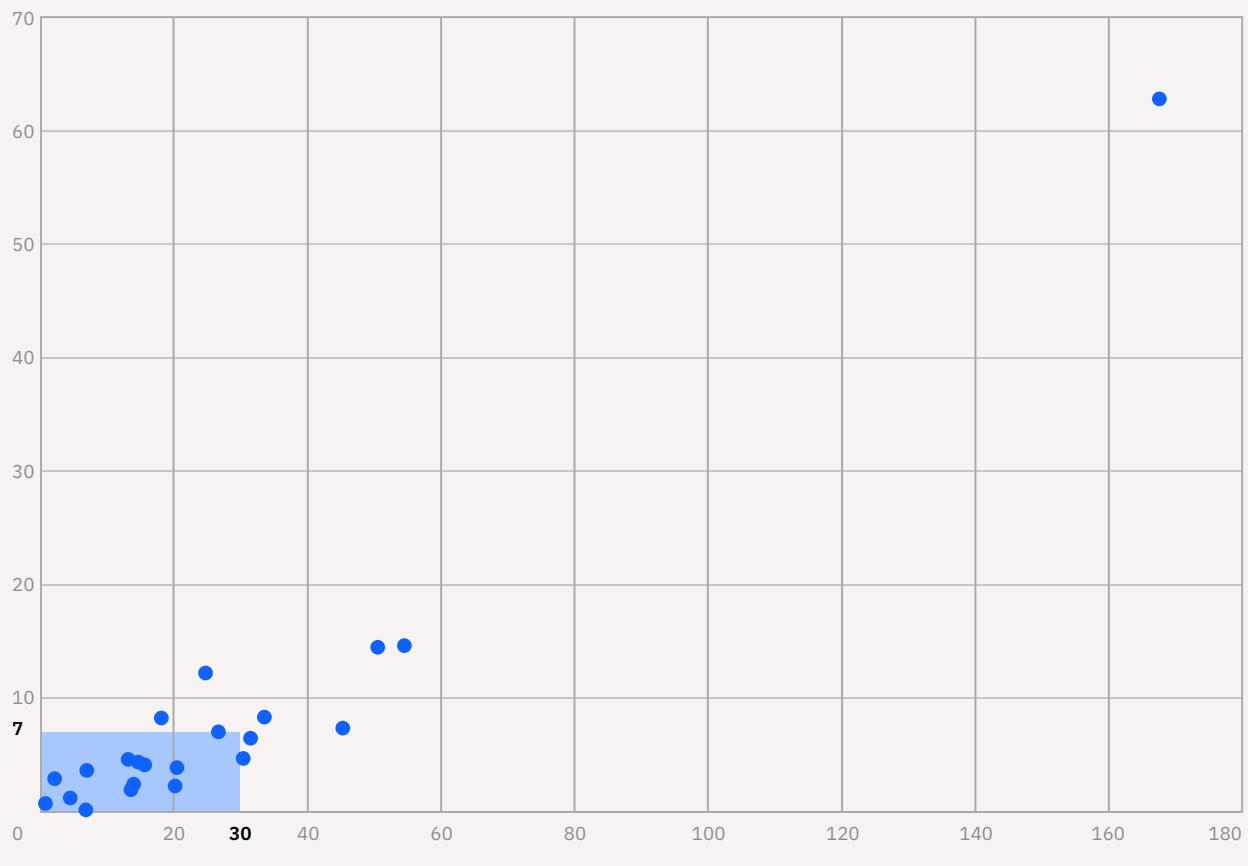
According to IBM IBV research, tapping mobile wallets is already the payment preference of 46% of consumers when dining out in other advanced and emerging economies, while US consumers still swipe plastic cards (72%) more frequently than other methods.¹⁰

When it comes to European payments, local card schemes (once the backbone of their respective domestic banking systems) have been progressively losing ground to international schemes dominated by US cards—down more than 20% in Italy since 2017, and more than 15% in Germany.¹¹ Furthermore, the introduction of the digital euro—whose development is still under evaluation—poses an opportunity to redesign retail payment infrastructure and rethink how European banks can regain relevance in payment ecosystems with the advent of digital wallets.



Area of the financial performance quadrant occupied
by banks' ROAE and PBR as in Figure 5 and Figure 6

PBR 2024

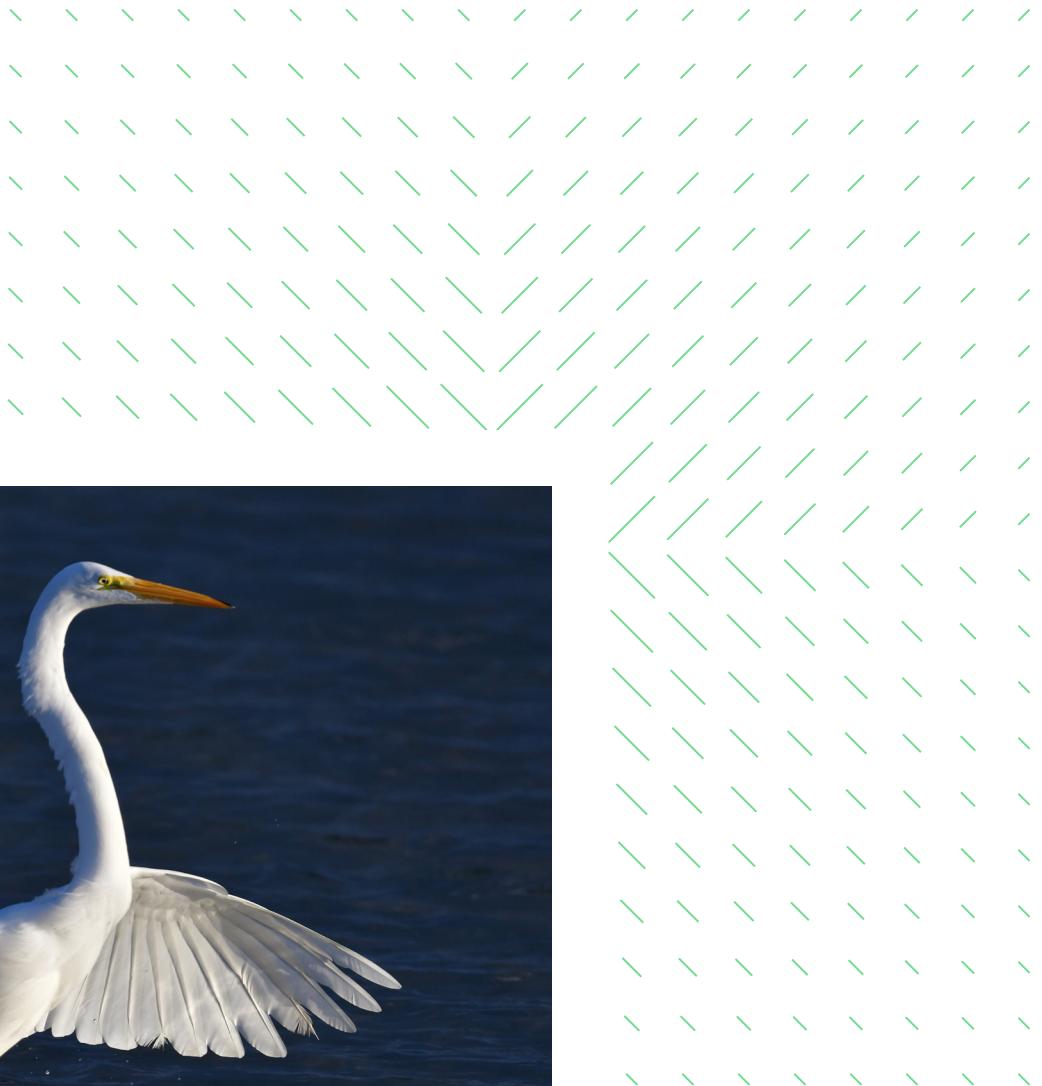


Source: IBM Institute for Business Value analysis of S&P Global data.

ROAE 2024

Banks can benefit if they no longer see payments as a cost center but as a key opportunity to redefine client engagement across varied ecosystems made of new consumer habits and SMEs' evolving needs.

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In the age of AI, how can bankers reduce costs and improve profitability?

Despite substantial investments in cost reduction initiatives over more than a decade, many financial institutions did not meaningfully lower their CIR. This persistence can be attributed to several factors.

First, the margin compression that suppressed banks' ROAE since the GFC often counterbalanced the benefits of cost-cutting initiatives. Indeed, the rate hikes of 2022–2023 led to an effective interest income increase and thereby reduction in CIR—all other factors remained constant. *But free rides don't last forever.*

Second, efforts to redesign complex operations for greater efficiency have frequently been limited to noncritical workloads. Some banks worked on HR systems, others created a dichotomy between new and existing clients. Addressing this challenge requires a dual focus: simplifying offerings to make them fit for digital engagement, while streamlining processes with generative AI. *Simplicity can fuel innovation.*

Third, cloud migration costs have often been underestimated due to several critical factors. These include the complexities of managing application dependencies, the implications of regulatory compliance, the need for cross-departmental collaboration, the extensive efforts required for application rearchitecting, and the reliance on skilled external contractors.¹² Recent advancements in generative AI offer promising solutions to mitigate some of these challenges, enabling a more comprehensive analysis of application dependencies, facilitating the automated re-architecting of applications to reduce migration-related costs. *Designing for hybrid cloud is essential.*

Fourth, the largest share of banks' operating costs is attributed to HR. Between 2007 and 2023, the proportion of operating expenses allocated to workforce salaries and benefits increased globally from 50% to 54.6%, while spending on technology and telecommunications rose from 6% to 6.6%.¹³ This underscores the need for a holistic approach to cost management, integrating AI automation with well-defined augmentation strategies to promote new ways of working. *Automation is blind to the color of bankers' collars.*¹⁴

To capitalize on the promise of AI, bankers must embrace a strategy that addresses horizontal, vertical, and foundational dimensions.

Horizontal—across functions and operations. Critical functions can be centrally transformed to cohesively support multiple lines of business with AI. For example, anti-money laundering (AML) can be rearchitected as a service for both retail and commercial banking.

Vertical—inside business segments. Further, each business segment presents unique opportunities for optimization. For instance, insurance departments can leverage generative AI to reduce the processing time of claims.

Foundational—technological enablement. Whether horizontal or vertical, technology serves as the foundation that drives all transformation. For example, banks can automate the software development lifecycle, from systems design and coding to the rapid migration of legacy technology stacks.

Using AI today to create the future of banking

While 2024 was the year of generative AI pilots, 2025 will be the year of LLMs and LRM transcending beyond narrow use cases. Focus should center on enterprise-wide transformation that targets labor-intensive and cost-heavy operations, processes involving frequent document handling, and workflows susceptible to delays due to outdated methods or complex interdependencies.

Reduce cost-to-serve to increase ROAE on the performance quadrant

Operational efficiency and cost reduction. Banks can optimize workflows with AI by identifying bottlenecks and predicting demands. By applying reasoning during inference, bankers can leverage LRMs to make operations more efficient and responsive through more effective resource allocation. In a 2023 survey about the most important priorities in skills and talent, we found that pure STEM and IT skills have decreased in importance since 2016 when compared to capabilities supporting efficient time management and ability to effectively prioritize.¹⁵

While 2024 was the year of generative AI pilots, 2025 will be the year of LLMs and LRMs transcending narrow use cases.

Redesign core banking. A modern business architecture is a precondition that allows banks to interlock with external ecosystems and adjust offers as market conditions and client expectations change. Bankers can leverage AI to navigate the valuation of complex architectural dependencies and accelerate application modernization. When we asked banking executives which challenges are having the most adverse effects on their business strategies, such as fostering embedded finance, we found the issues were often foundational. Insufficient modularity of core banking systems (53%), inadequate API standards (52%), and lack of funding commitment for long-term strategies (40%) are the top constraints holding many banks back.¹⁶ As Maximiliano Damian Rodrigues, General Manager of SME Business at Nubank, reminds us, “*A key advantage is that we operate our technology in a greenfield, allowing us to innovate freely. Our modern technology stack is very attractive.*”¹⁷

Transform profitability to improve PBR on the performance quadrant

Customer insights and predictive marketing. Banks are seeking new ways to decode customer behavior. By applying LRM techniques on the same data-rich platforms as LLMs, banks can better understand future needs and offer timely services, transitioning into proactive partners for their clients’ financial journeys. Chief Marketing Officers (CMOs) are enhancing their analytics with generative AI for content creation, breaking beyond traditional segmentation. For example, in 2024, 78% of CMOs already expected to use generative AI for conducting data analysis and capturing insights from digital channels—up from 36% the previous year. And 86% of CMOs say they plan to use generative AI to analyze customer insights by the end of 2025.¹⁸

Personalized advisory services. Banks need to deliver targeted investment strategies that align closely with clients’ goals and risk preferences. They can analyze market data and individual client behavior while simulating investment scenarios using pretrained LRMs. IBM IBV research finds a 27% greater chance that retail clients choose an institution to make investment decisions if personalized conversations are available with financial advisors, and a 24% greater chance if they are offered advice in the context of financial planning and risk simulations.¹⁹ At the same time, SMEs indicate access to financial and business planning tools is the most important banking service to help them grow in efficiency.²⁰ As Franco Fasoli, Head of SME Banking at Santander Brazil, observes, “*We realized that customers are interested in more than just financing; they want to see how their business is prospering.*”²¹

In the age of AI, how can banks manage risk and compliance as a catalyst for innovation?

While working to improve CIR and strengthen ROAE, bankers must carefully manage risks and improve their risk-taking capabilities by enhancing risk analysis with new data and insights. Banking has always been a data-centric industry, but generative AI is redefining how data is sourced and utilized, including online repositories, public datasets, APIs, surveys, and partner contributions.

This shift profoundly impacts data management practices, bringing previously peripheral risks to the forefront—such as those related to confidentiality, integrity, and availability. A 2023 survey of banking executives revealed that more than 60% identified AI-related risks as detrimental to economic viability without proper governance. These include vulnerabilities in cybersecurity (76%), legal uncertainties (72%), challenges in ensuring outcome accuracy (67%), and risks of model bias (65%).²²

Bankers also need to maintain a high level of risk management oversight. Notable applications of generative AI include the automation of identification, investigation, and remediation of data breaches, showcasing AI's ability to address complex challenges with precision and efficiency.

Using AI to disentangle risk and compliance complexities

Risk analytics can be enriched with AI to increase banks' competitiveness by meeting the evolving needs of a highly interconnected and digital world within a risk-oriented framework. At the same time, risk management can be bolstered to better address evolving cyberthreats, often fueled by AI-powered fraudsters.

Strengthen risk management to preserve and improve ROAE on the performance quadrant

Fraud prevention and detection. Banks vigilantly defend against financial crime as the surface of vulnerability expands with high levels of digitalization of operations and customer engagement, threatening the sought-after advantages. With LRMIs, they can conduct real-time behavioral analyses that utilize previously trained LLMs to flag anomalies. According to IBM research, the average cost of a data breach involving more than 50 million records stood at \$375 million in 2024. The financial services industry ranks second highest in terms of costs of data breaches, following healthcare. In 2024, 46% of breaches involved customer personal data and 51% malicious attacks, 25% IT failures, and 24% human errors. On average, it took 168 days to detect and 51 days to contain the discovered breach. Yet only 28% of financial organizations have extensive use of security AI and automation, even though these are key to protecting trust.²³ As Jane Larimer, President and CEO of Nacha, notes, “*It seems that SMEs become more aware of security concerns once they've had an issue ... More education is needed for businesses to become more proactive with security measures.*”²⁴

Credit scoring and risk assessment. Improved risk management capabilities are needed to expand digital operations, especially beyond banking, in search of healthier ROAE and higher PBR while avoiding excessive leverage. Traditional credit scoring models rely on structured data not always available for important customer segments, such as SMEs. With LRM, banks can employ reasoning techniques on new datasets to weigh unique borrower risks against broader economic indicators, enabling more astute lending decisions. Already banks have expanded their traditional risk models using machine learning to analyze cashflows of SMEs. Davide Alfonsi, Chief Risk Officer of Intesa Sanpaolo, tells us, “*Improving the accuracy ratio through machine learning has been the enabler that makes our risk management approach fit for a digital multichannel world.*”²⁵

Reduce compliance costs to improve ROAE on the performance quadrant

Regulatory compliance and reporting. Compliance costs have soared after the GFC, weighing on banks’ profitability. As financial services become more digital and embedded inside nonbanking ecosystems, new data and client interactions are generated faster than ever and farther away from traditional premises. This presents a major challenge to compliance and reporting that can hinder innovation. Already, banks are using AI to analyze transaction data in near real time. LLMs can make data processing faster, while LRM can help simulate the implications of potential regulatory changes, helping banks remain agile and compliant. Andy Nam, CIO for Asia and Oceania of Mizuho Bank, highlights, “*For banks, it’s essential to own an end-to-end architectural view that can reconcile internal processes and compliance requirements with the external need for openness and responsiveness.*”²⁶

Artificial intelligence

The time is now

In this new frontier of AI, success transcends LLM language mastery—it hinges on the LRM ability to simulate reasoning at inference time. The business potential in the banking industry is largely untapped, and the realization of value will differ across banking jurisdictions given the growing macroeconomic and regulatory differences—further investigated in our regional and country highlights on page 26. Whatever their business focus, only with robust, enterprise-wide AI foundations can financial institutions accelerate business strategies geared at shifting ROAE right and PBR up on the banking performance quadrant.

Whatever their business focus, only with robust, enterprise-wide AI foundations can financial institutions accelerate business strategies geared at shifting ROAE right and PBR up on the banking performance quadrant.

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Since the 1980s, the number of commercial banks in the US has declined at an average rate of 4%-6% annually, with a significant portion of the targeted banks having total assets of less than \$100 million.²⁷ Currently, the five largest banks own 71% of total assets compared to 52% in the EU.²⁸

The number of bank branches decreased by more than 10% in the last 10 years as institutions sought to reduce costs and adapt to a growing client preference for online banking.²⁹ As tech-savvy customers increasingly move their funds between providers to secure better savings rates, deposit mobility increases. This trend became particularly evident as interest rates escalated, and notably during the 2023 California banking crisis as clients looked for risk shelters.

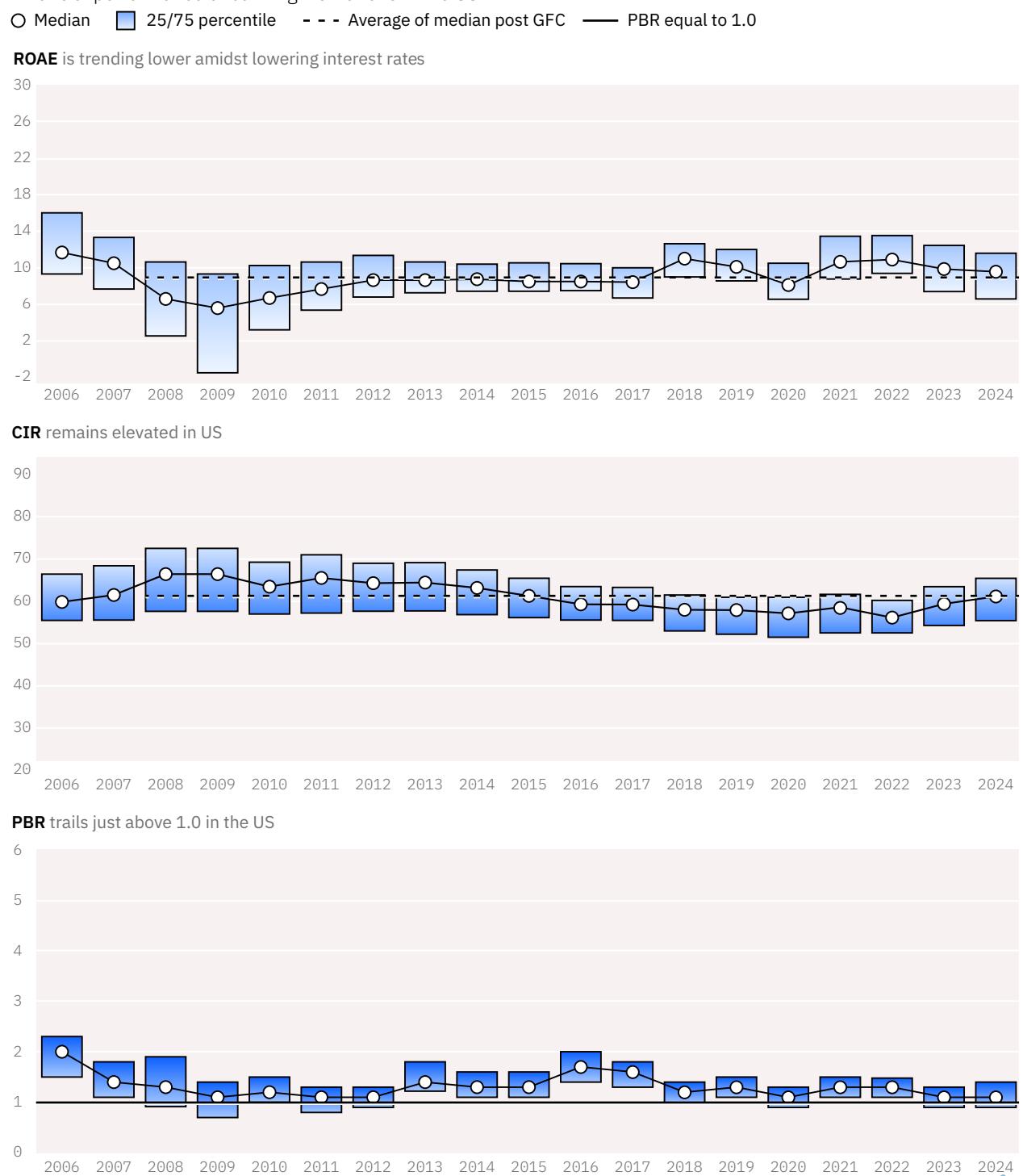
While mergers and acquisitions are expected to increase in 2025, positioning the largest banks as potential buyers, most of the recent consolidation and rationalization activity occurred at state level. Yet, as local banks redefined their presence, federal-level banks already saw an opportunity to open new branches, reconnecting with local communities such as SME ecosystems.

In 2023, the Consumer Financial Protection Bureau (CFPB) approved the open banking rule under Section 1033 of the Dodd-Frank Act, bringing the US in line with similar regulatory frameworks in Europe. This initiative aims to foster competition and innovation within the financial services sector by granting consumers greater control over their financial data and potentially allowing for secured access and sharing with third-party providers of embedded financial services.

According to IBM IBV research, the majority of SMEs already express a strong demand for access to business platforms with embedded banking services.³⁰ In the US, they also look for support to collect delinquent receivables, as 20% of SME payments are still handled by checks.³¹ And they value guidance for credit-scoring improvements and financial risk hedging more than other jurisdictions.

Figure 7

Financial performance of banking institutions in the US



Source: IBM Institute for Business Value analysis of S&P Global data.

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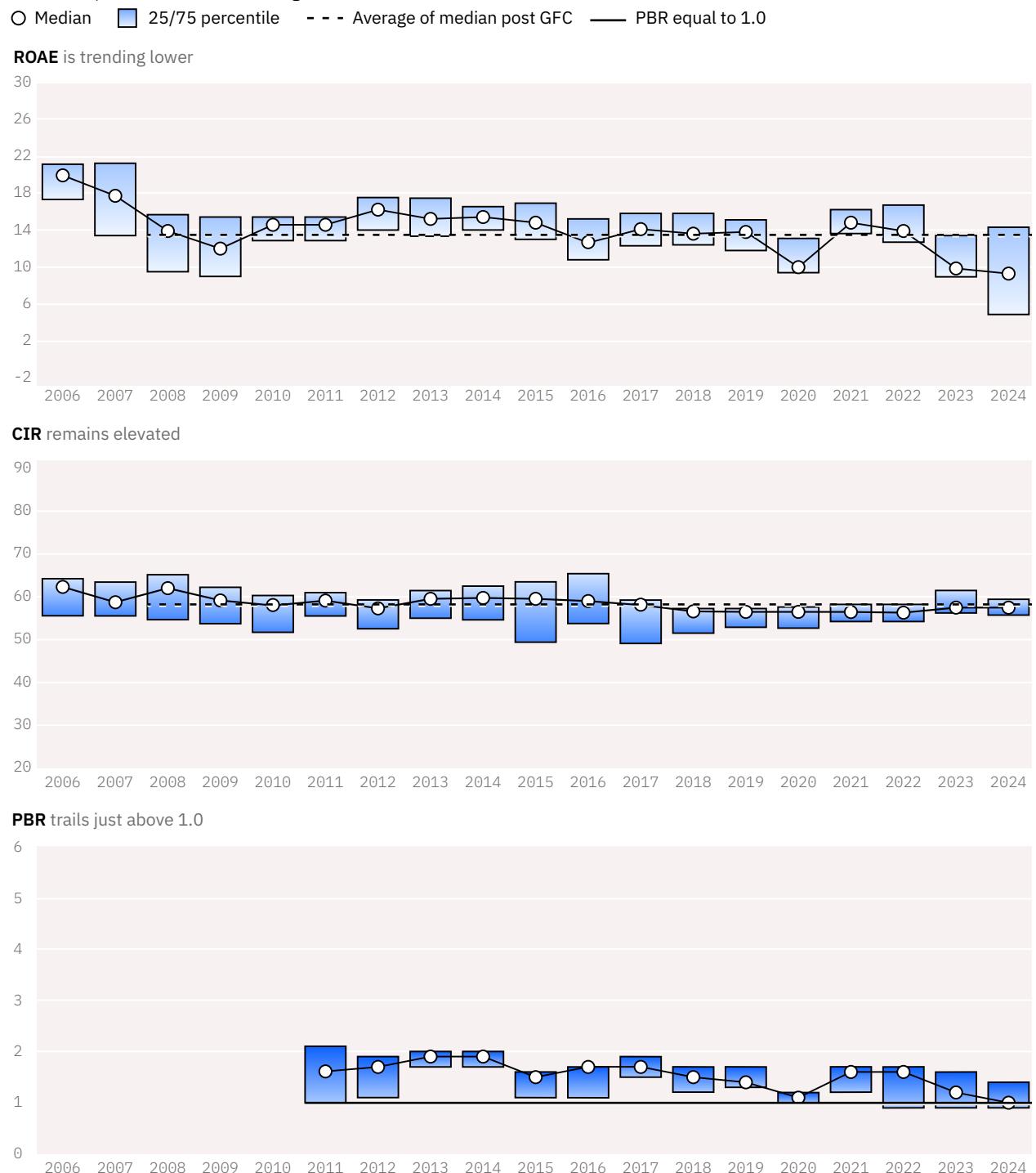
Canadian banking is highly concentrated and has been stable for decades, with the largest six banks exerting relevant market power. Yet, profitability hit an inflection point in 2023. Credit cards and auto loans remained riskier after the pandemic, prompting banks to more cautiously manage their balance sheet. The economy is more sensitive to interest rates compared to the US, in large part because Canadian mortgages have shorter terms.³² Although economic growth is forecast to strengthen in 2025 as interest rates gradually ease and the confidence of households and SMEs rises,³³ organic growth may be modest given market concentration—reflected in PBRs that are lower on average than in the US.

Canadian banks have been looking overseas to differentiate and expand profitability, especially in the US market. However, recent regulatory strains could limit their ambitions in 2025.

A study by the Canadian Bankers Association shows that Canadians expect to increase the use of banking technologies in the next five years and confirms the shift in preference from using online banking to mobile banking apps.³⁴ According to IBM IBV research, 80% of consumers across ages and global markets already favor online access for virtually all basic transactions, with 62% using mobile and 12% using a website.³⁵ In 2023-2024, cyberattacks against Canadian financial institutions increased in both frequency and sophistication.³⁶ It is not surprising that 75% of Canadian consumers reported they would turn to their bank for advice on how to avoid being scammed.³⁷

Figure 8

Financial performance of banking institutions in Canada



Source: IBM Institute for Business Value analysis of S&P Global data.

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EU banking

According to the European Central Bank (ECB), vulnerability for sovereign debt could surge in 2025, reminiscent of the turmoil a decade ago. Elevated debt levels, sluggish growth, fiscal slippage, and geopolitical tensions could converge into a perfect storm.³⁸

Interest rates are expected to come down as inflation cools off, benefiting the quality of loan portfolios. However, European banks may have difficulty adjusting once again to a low-rate environment after they enjoyed some of the heftier profits over the past few years. Banks relying on fee-based income such as wealth management are somewhat better positioned, as long as capital markets remain bullish. This is reflected in their higher ROAE and PBR. Mergers and acquisitions are also expected to gain tailwind, as banks look for opportunities to shore up profits, including cross-border deals that align with the EU Commission's ambitions to build a single market for capital and banking services.

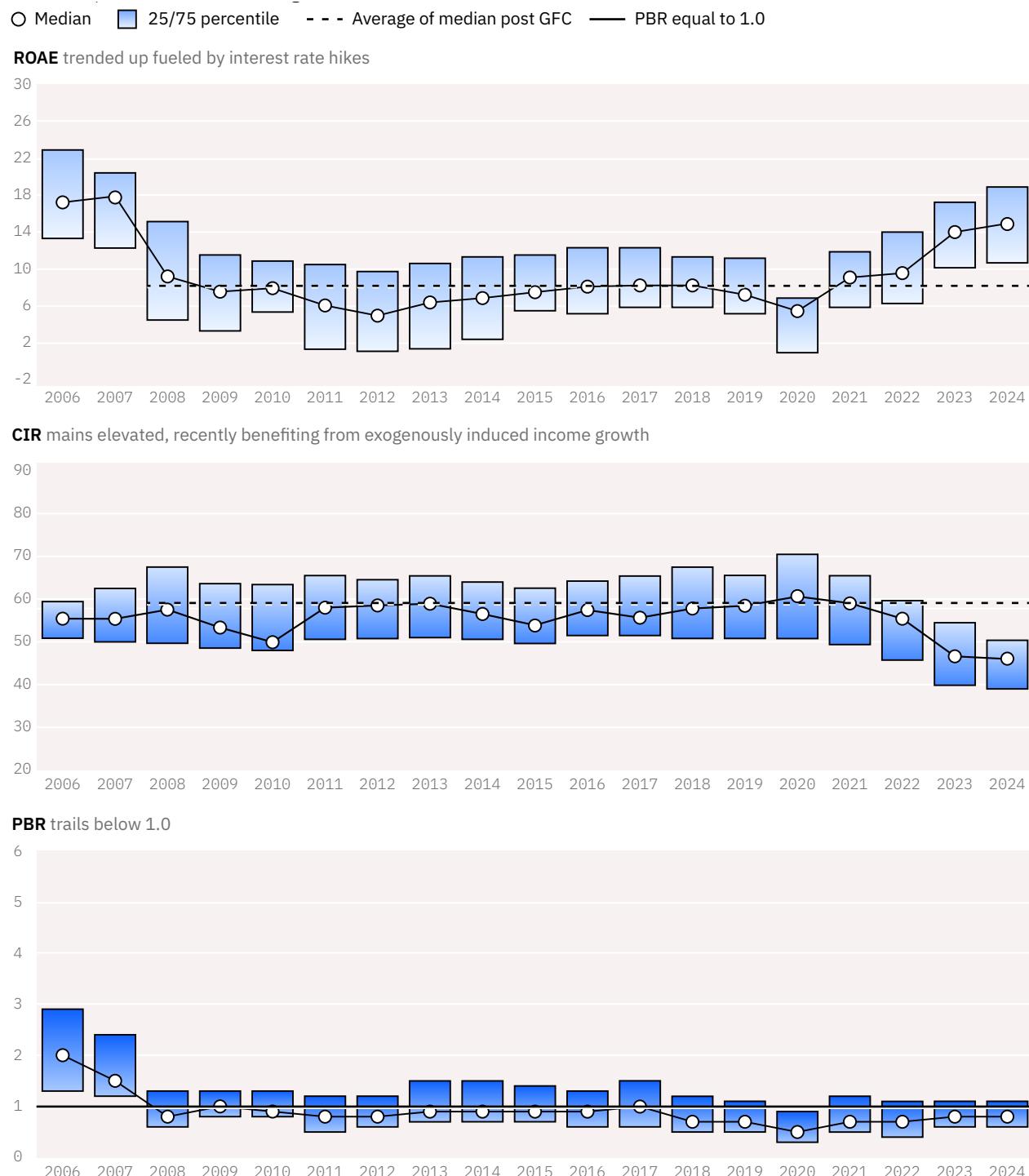
The EU was an early adopter of open banking regulation, such as PSD2/3, to foster more diverse and accessible financial services. While fintech providers tend to prioritize customer convenience and growth, they did not always demonstrate sufficient attention to robust risk management practices, opening the door for more regulatory action. The EU's Digital Operational Resilience Act (DORA) came into effect in January 2025, further increasing the complexity of the regulatory environment, yet promoting higher banking resilience in the face of heightened systemic risk.³⁹

2025 will be a turning point for European payments as the Governing Council of the Digital Euro is expected to make decisions for the potential launch of a next phase: implementation of a pan-European retail digital payment solution. According to the ECB, while domestic payment schemes and private initiatives are competing with international card schemes, the increasing popularity of digital wallets provided by firms incorporated outside of the EU creates dependence and potential vulnerabilities in payment resilience.⁴⁰

Overall, banks will look for cross-border economies of scale, stronger wealth management propositions, higher market share in SME markets, and more embedded finance.

Figure 9

Financial performance of banking institutions in the EU



Source: IBM Institute for Business Value analysis of S&P Global data.

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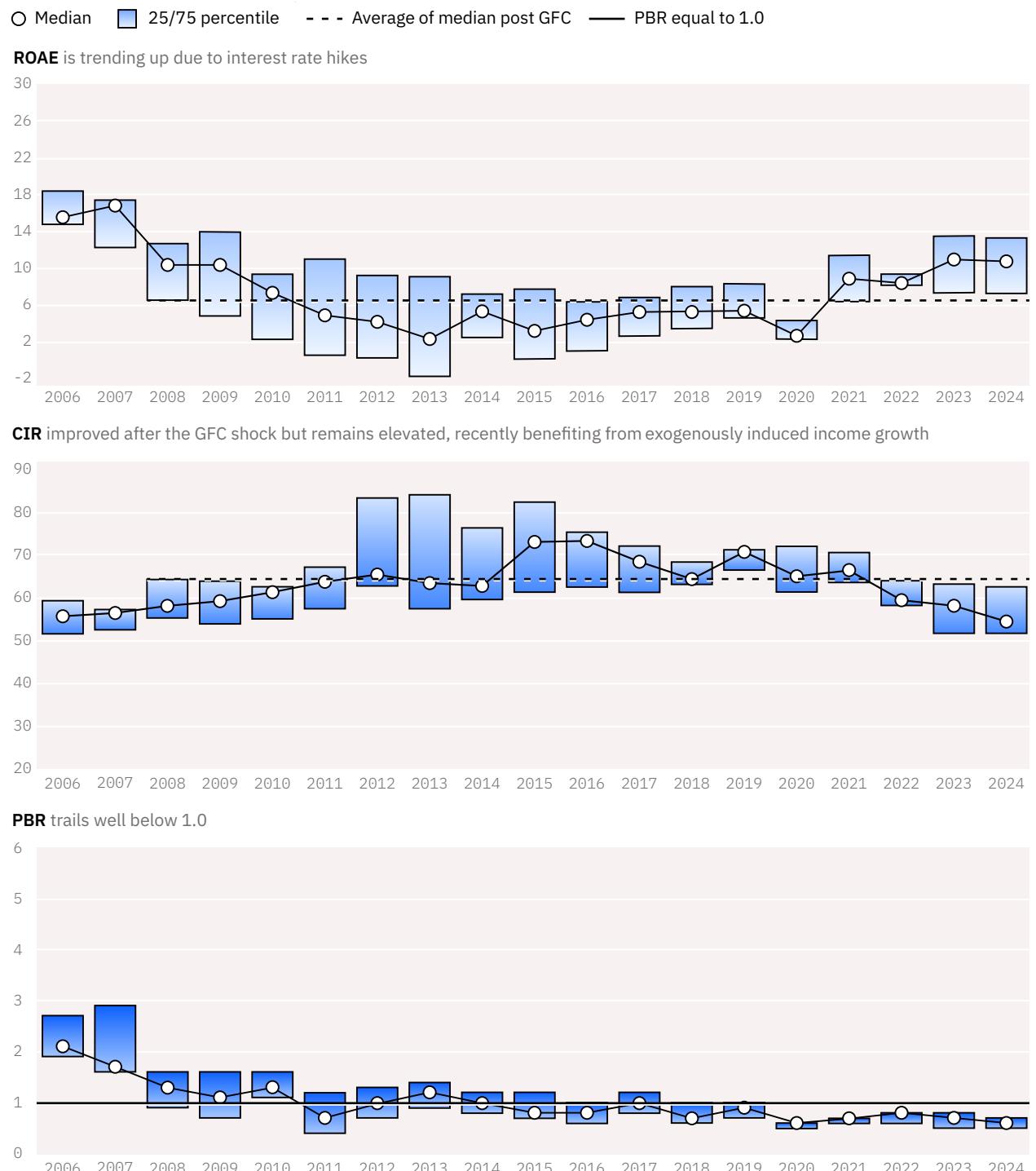
Rising interest rates in 2023 have bolstered bank profitability, and despite the higher cost of borrowing, the number of households and businesses unable to meet their payment obligations has remained relatively low. The UK banking system, second only to the EU in terms of CET1, is assessed by the Bank of England as having adequate capital buffers and liquidity to absorb potential losses from lending or cash outflows, even in worse-than-expected economic or financial conditions.⁴¹ However, the average PBR remains one of the lowest in Europe, underscoring persistent challenges in banks' abilities to deliver shareholder returns independent of interest rate fluctuations. This situation highlights the need for AI-driven transformation of traditional business models, focusing on reducing service costs, leveraging embedded finance strategies, and enhancing value creation within advisory processes.

Since the 1990s, the number of bank branches in the UK has been steadily declining, while the number of building society branches has remained relatively stable. Overall, the combined total of bank and building society branches in the UK has decreased by more than 60%, with post offices increasingly serving as an alternative.⁴² Amid ongoing banking consolidation, it is unsurprising that UK SMEs rank branch proximity among the top three priorities when identifying features of their ideal primary bank—significantly higher than the global average. As UK neobanks became the first globally to achieve profitability in 2023, traditional banks face growing pressure to enhance service quality. This includes providing more robust financial and business planning advice, a capability strongly demanded by SMEs—as IBM IBV research further reveals.⁴³

Generative AI is set to integrate wealth management offers by enabling the delivery of more contextualized and personalized advice to clients. This innovation is particularly critical in an industry where investment fees are among the lowest globally and firms have increasingly shifted toward advisory-focused models. To navigate the challenging economics of the sector, achieving greater scale and delivering higher-value services will be essential.

Figure 10

Financial performance of banking institutions in the UK



Source: IBM Institute for Business Value analysis of S&P Global data.

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Japan's financial performance has been the most constrained among major advanced economies since the GFC erupted. This is primarily due to a massive monetary stimulus by the central bank, including negative interest rates. However, in March of 2024, Japanese institutions experienced a turnaround when the Bank of Japan changed its monetary policy, leading to normalization of interest rates. Additionally, Japanese banks operating abroad benefited from an international increase of interest rates, such as in the US, boosting returns when earnings from abroad are repatriated and further profiting from a weaker yen.⁴⁴

In the context of an aging population and a protracted stagnant economy, deposits have become a critical asset for Japanese lenders seeking to expand their net interest margins amid rising interest rates. However, Japan's digital banks are outpacing the nation's leading traditional banks in deposit growth, achieving a 17% increase compared to 5% for major banks, albeit from a much bigger base. They are capturing customer attention at a pivotal moment when the normalization of monetary policy is anticipated to drive increased retail lending demand.⁴⁵

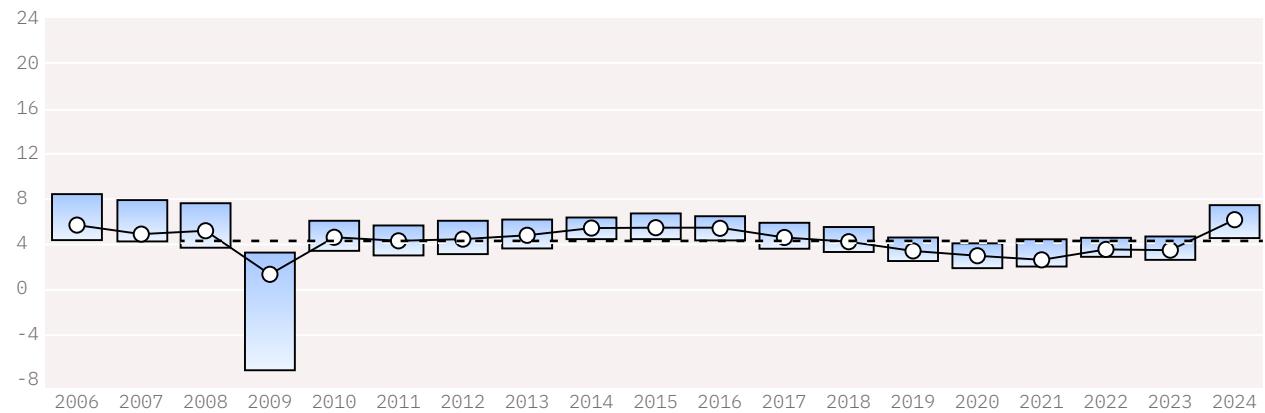
Yet defaults increased in 2024. Over the long term, a further decline in business loan demand could become structural, weakening banks' profitability once more, already discounted in very low PBRs compared to their international peers in major advanced economies. If banks don't course-correct this trend with international expansion, improved cost-to-serve via AI automation, and restructured business models to capture fee business, they will face a contraction in financial intermediation. They could also risk overheating in the excessive pursuit of higher yields.⁴⁶

Figure 11

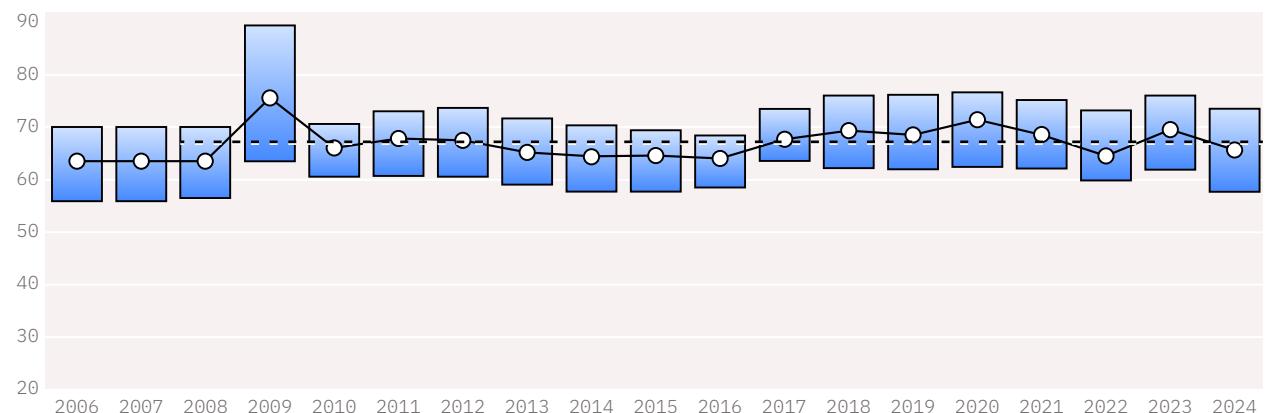
Financial performance of banking institutions in Japan

○ Median □ 25/75 percentile - - - Average of median post GFC — PBR equal to 1.0

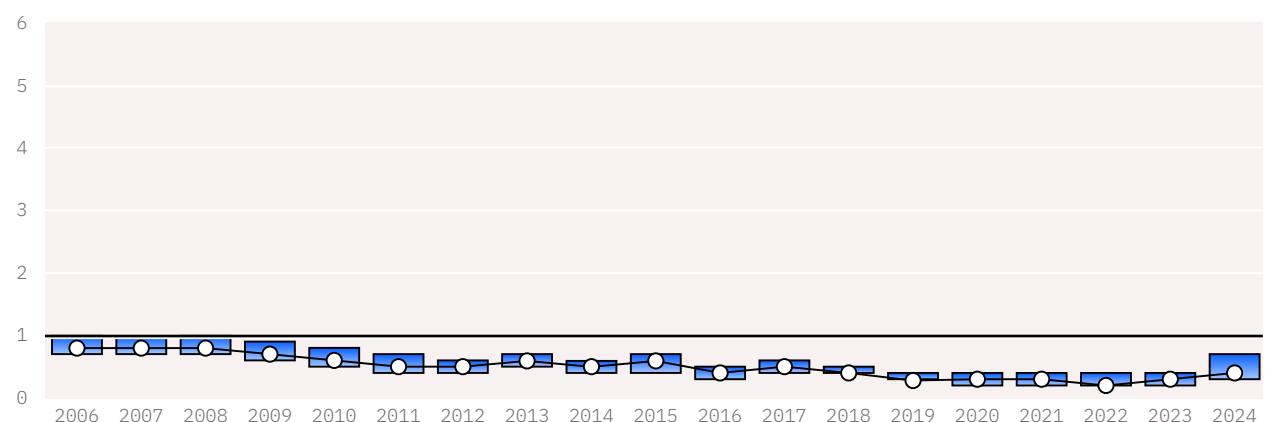
ROAE has been muted for two decades



CIR remains elevated



PBR trails well below 1.0



Source: IBM Institute for Business Value analysis of S&P Global data.

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Chinese banking

The years 2023 and 2024 presented significant challenges for banks, as performance was impacted by a sluggish macroeconomic environment, driven largely by a downturn in the property market. While exposure to the housing sector has declined, risks associated with local government financing remain a persistent concern.

Profitability in the banking sector weakened due to declining lending rates and narrowing interest margins, leading to the lowest ROAE levels in over a decade. However, newly implemented capital regulations are anticipated to release additional capital for banks with substantial mortgage exposure, providing some relief amidst these pressures.

Simultaneously, fintech competition has moderated following the introduction of new regulatory measures by the Chinese government in late 2020. These regulations directly targeted major Chinese technology firms, leading to a significant decline in their market capitalization from prepandemic peaks. The establishment of the National Administration for Financial Regulation (NAFR) in 2023 marks a critical step in enhancing oversight, aligning with the objectives outlined in the 2022–2025 Fintech Development Plan that addresses emerging industry challenges.⁴⁷

These challenges encompass the digital divide, which refers to the unequal access to and use of digital technologies across various regions and demographic groups, particularly among the elderly. Another key issue is the disparity in intra-regional financial development, with some regions possessing more advanced financial systems than others. In response, China has outlined a strategic vision aimed at fully recognizing data as a factor of production. This includes strengthening fintech governance, fostering the development of comprehensive digital infrastructure, accelerating the application of key technologies, and driving the high-quality digital transformation of the financial sector, such as implementing a central bank digital currency (CBDC).

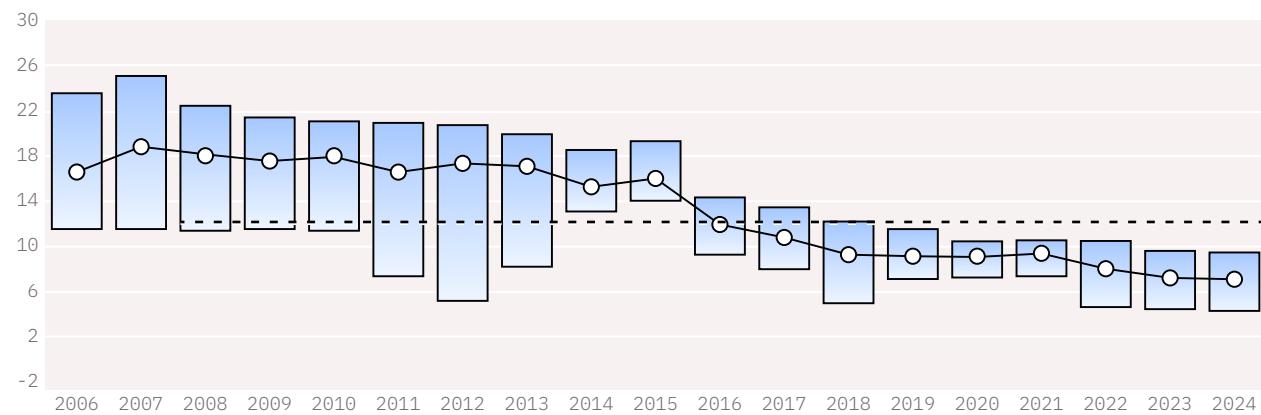
Notably, the Digital Yuan has seen growth in retail payment volume since its launch in 2022. However, the scale of transaction throughput remains modest relative to China's large population and the dominant role of major technology companies in payment processing.

Figure 12

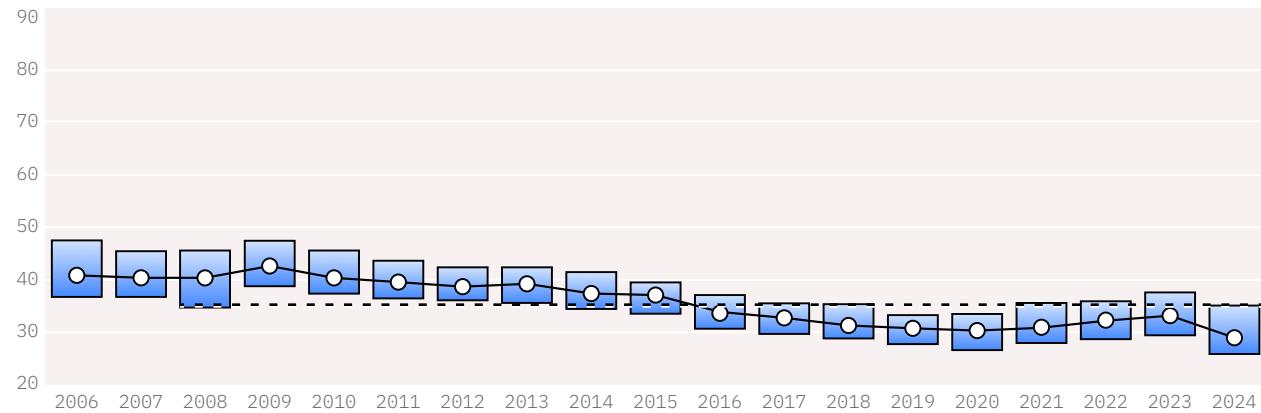
Financial performance of banking institutions in China

○ Median □ 25/75 percentile - - - Average of median post GFC — PBR equal to 1.0

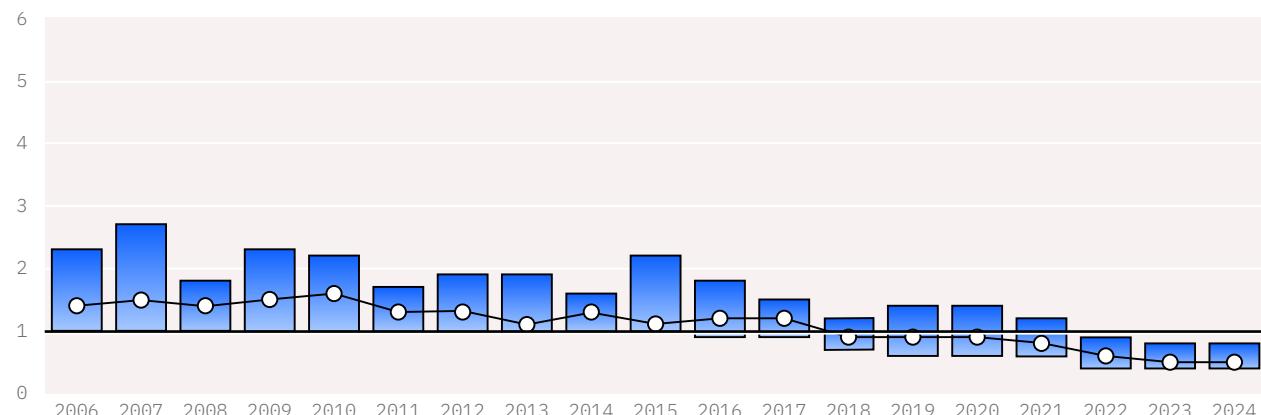
ROAE is trending up due to interest rate hikes



CIR improved after the GFC shock but remains elevated, recently benefiting from exogenously induced income growth



PBR trails well below 1.0



Source: IBM Institute for Business Value analysis of S&P Global data.

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Indian banking

Despite challenging global conditions, India remains one of the world's fastest growing economies in 2024.⁴⁸ Bank deposits more than doubled since 2016⁴⁹ and digital payments skyrocketed since the 2009 introduction of Aadhaar digital identity, which covers 1.3 billion Indians,⁵⁰ and the Unified Payment Interface (UPI) in 2016. UPI is a mobile-based instant payment framework connecting over 400 million users and representing a whopping 46% of all digital transactions worldwide in 2022.⁵¹

The number of investor accounts consistently increased over the past decade, although approximately 40% of the country's wealth is held by a mere 0.07% of its 330 million households.⁵² India's Assets Under Management (AUM) has more than doubled in the past five years, now accounting for over 30% of the country's Gross Domestic Product (GDP). This figure is significantly lower than China's AUM-to-GDP ratio of 60%, presenting a unique opportunity for the digital development of personalized wealth management services at a time when the regulatory landscape in India is shifting toward advisory-led models.⁵³

However, recent data from the Reserve Bank of India indicates that net household savings have reached a 47-year low. Household annual borrowings, which stood at 5.8% of GDP in 2023, are the second highest they have been since the 1970s. Farm and business loans make up more than half of these borrowings, highlighting the importance of SME advisory services.⁵⁴ Already, IBM IBV research shows that a vast majority of SMEs demand support from their banks to execute on financial and business plans.⁵⁵

The government-led initiatives to advance the digital adaptation of society at all levels also accelerated the digitalization of banking operations and access points. Yet, compliance gaps also emerged in the fast-expanding fintech ecosystems as digital banking continues to grow, and cybersecurity threats have increased.

In a first-of-its-kind move, India's central bank is set to launch a pilot program to offer financial firms local cloud data storage that is aimed at reducing costs and creating a sovereign cloud environment.

Figure 13

Financial performance of banking institutions in India



Source: IBM Institute for Business Value analysis of S&P Global data.

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Banks in Latin America were particularly vulnerable to the pandemic crisis, as government intervention was less pronounced than in major advanced economies. Over the past two years, the region has seen divergence in macroeconomic policy approaches. Chile and Peru have implemented substantial interest rate cuts, supported by manageable inflation levels, while Colombia and Mexico have been more cautious in reducing rates.⁵⁶ Despite significant progress in economic stabilization over recent decades, growth in the region has recently stalled.⁵⁷

While Mexico and Brazil have implemented open banking and API regulations to enhance competitiveness and data transparency, countries such as Colombia are still in the process of developing their regulatory frameworks.

And neobanks are emerging as formidable competitors. As highlighted in recent IBM IBV research with Maximiliano Damian, Head of SME Business at Nubank⁵⁸ (the largest and most profitable neobank outside of Asia, with over 100 million clients), this shift underscores the growing role of neobanks in transitioning from commoditized consumer services to the traditional stronghold of banking relationships—SME banking.

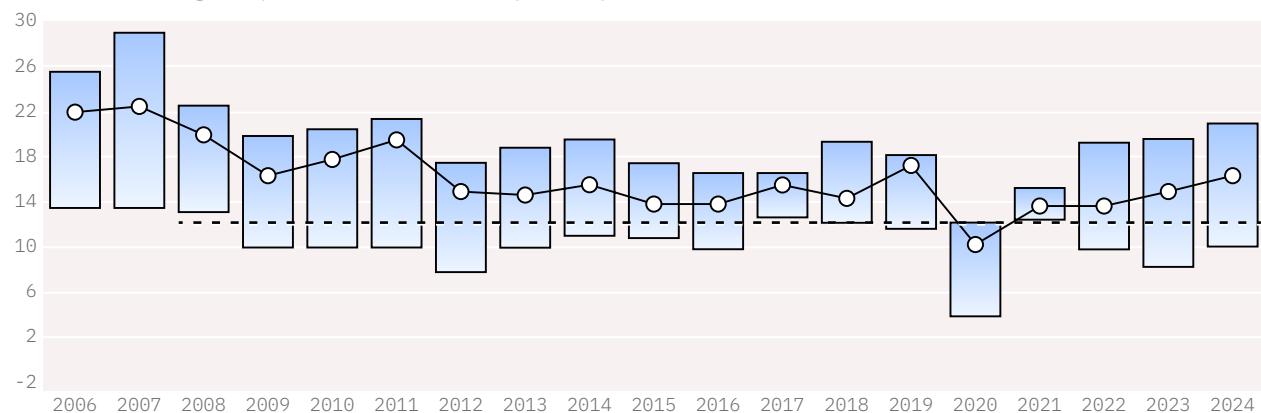
Latin America is not only home to the world's fastest-growing neobank but also one of the most successful instant payment systems. In 2020, the Brazilian Central Bank launched Pix, an instant payment platform enabling secure, real-time transfers 24x7. Users can make payments effortlessly using a QR code or a unique Pix key, simplifying transactions across various channels. By the end of 2023, Pix had amassed over 167 million users and processed 42 billion transactions—a remarkable 75% increase from the previous year. In 2024, Pix surpassed credit and debit card usage, becoming Brazil's most popular payment method for both e-commerce and in-store purchases, cementing its role as a transformative force in the digital payments landscape.⁵⁹

Figure 14

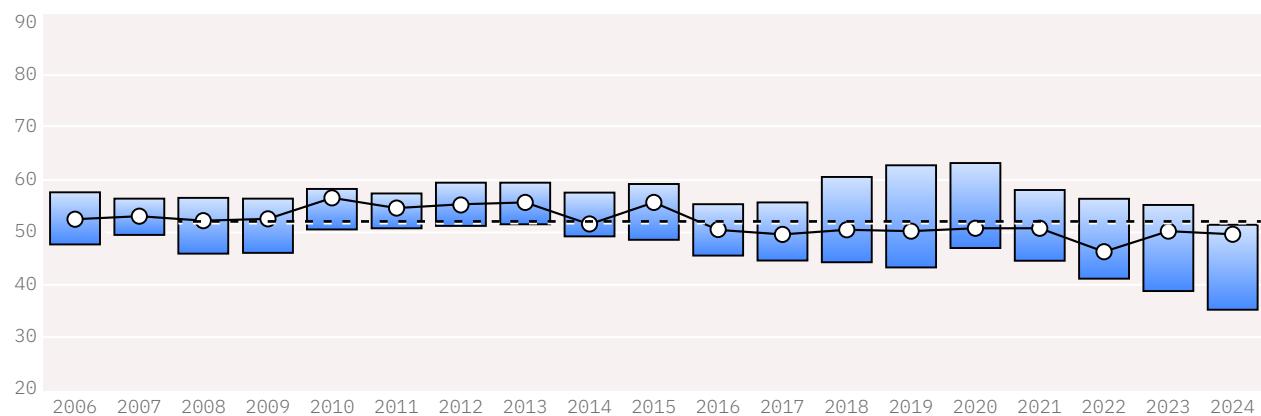
Financial performance of banking institutions in LATAM

○ Median □ 25/75 percentile - - - Average of median post GFC — PBR equal to 1.0

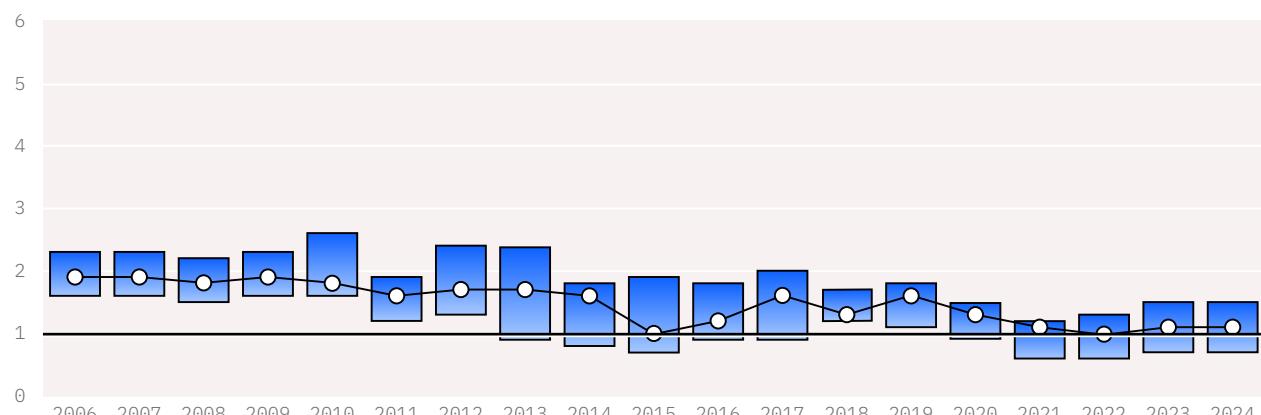
ROAE is rebounding from pandemic, still muted compared to pre-GFC



CIR remains elevated, yet below industry average



PBR trails just above 1.0



Source: IBM Institute for Business Value analysis of S&P Global data.

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The financial performance of banks is diverging both inside and across banking jurisdictions, and some institutions will set themselves apart in the coming years. Will yours be one of them?

As we conclude our *2025 Global Outlook for Banking and Financial Markets*, we reflect upon five business and technology actions. They position your institution to accelerate initiatives geared at elevating financial and operational performance at the intersection of enterprise-wide transformations.

1. Adjust the business model to take advantage of the digitalization of financial services.
2. Drive operational efficiency leveraging AI.
3. Renew your risk management culture—one where every banker becomes an AI risk manager.
4. Implement savvy education programs that keep pace with technological advances.
5. Lead with AI or be left behind.

1

Adjust the business model to take advantage of the digitalization of financial services.

Banking business models aren't keeping up with client demand and AI-led innovation. Revise your business strategies by transforming how you cater to clients. Expand your capability to serve clients with embedded finance, allowing them to do banking anywhere, anytime. Enhance advisory propositions with AI to capture new service fees, both for consumers and businesses. Reconsider payment initiatives as the backbone for new data to fortify AI-powered risk management across ecosystems.

"Until last year, we were operating a more traditional model based on physical branches This model used to work well until recently. The pandemic accelerated digital adoption and today clients don't visit branches like they used to Therefore, we felt it was time to innovate our approach."

Franco Fasoli, Head of SME Banking, Santander⁶⁰

2

Drive operational efficiency leveraging AI.

Despite efforts to control costs, banks' efficiencies remain weak. Focus on high-impact workloads to streamline and enhance offerings, making them seamlessly digital-friendly. Embrace AI to reimagine processes end-to-end, driving efficiency and innovation. Design for hybrid cloud to optimize costs and simplify operations. By reimagining your cloud approach, you can effectively address application dependencies, help ensure compliance with regulatory requirements, and unlock the benefits of cross-departmental collaboration, transforming how your teams work in the cloud environment. Generative AI serves as a valuable ally, enabling automated app re-architecting and dependency analysis for smarter, more efficient cloud solutions.

"Large institutions tend to have internal barriers separating retail, wholesale, global banking, and other segments. But the innovation happening in any silo almost always can bring mutual benefit to the others. Only openness can accelerate innovation. As a Chief Digital Officer, full visibility is needed to promote efficiency across the organization and advance new business models."

Shayan Hazir, Chief Digital Officer, ASEAN HSBC⁶¹

3

Renew your risk management culture—one where every banker becomes an AI risk manager.

Banking profits rely on adept risk management. Accelerate software development with AI, but don't overlook the risk of increased complexity—invest in clear platform governance to manage security, compliance, and resiliency as innovation scales. Prioritize data governance to safeguard confidentiality, integrity, and availability, ensuring AI models are built on robust frameworks to mitigate risks like data breaches, legal uncertainties, and model biases. Make risk management a core responsibility for every employee, from approving loans to managing IT operations, focusing on creating sustainable, risk-adjusted value with every decision. Adherence to industry architectural standards mitigates the risk of unnecessary customization and enables more seamless ecosystem participation across borders.

"Learning how to use external data to improve the risk scoring could be very interesting, but the client consent to use their data is critical and needs to be managed. It could be very interesting for the partner because they will have more satisfied customers. It could be very interesting for the final clients, because they will get more opportunities to finance their goods And, of course, it's advantageous for the bank, as it drives more business."

Carmela Gómez Castelao, Head of Open Banking, BBVA⁶²

4

Implement savvy education programs that keep pace with technological advances.

Automation is blind to the color of bankers' collars. Our perspective is that AI is an automation advantage as well as an augmentation opportunity—empowering bankers to reimagine their contributions in a digitally transformed industry. This equally applies to both business domains and technology departments. Banks might find it difficult to find the skills required and cannot postpone investments to reskill a workforce that is too often trapped in routine tasks and can't always evolve with the speed of innovation.

"A key advantage is that we operate our technology in a greenfield, allowing us to innovate freely. Our modern technology stack is very attractive. On the contrary, banks might find it more difficult to find the skills required to transform the way they code and develop."

Maximiliano Damian Rodrigues, General Manager, SME Business, Nubank⁶³

5

Lead with AI or be left behind.

AI mastery is a Darwinian process for banks—those that lead will outpace and outlive competitors who lag behind. Banks must articulate their business strategy clearly to distinguish themselves from competitors in the age of AI—technological innovation alone is not enough. Moving from innovating with AI to innovating based on AI demands an “AI-first” approach, where the AI platform becomes central to all business and operational strategies. By scaling through an “AI factory” model, banks can accelerate development cycles, control costs, and embed AI confidence across the organization. The future belongs to banks that position AI as the core driver of innovation, transforming it from a tool into the foundation of their business model.

“What they now understand is that new technology generates new opportunities and business models that can target new segments beyond payments.”

Fernando Freitas, Head of Innovation, Bradesco⁶⁴



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IBM Institute for Business Value.
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<https://ibm.co/2024-banking-financial-markets-outlook>



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IBM Institute for Business Value in partnership with BIAN and with expert contribution of the SME Finance Forum (managed by IFC, member of The World Group).
September 2024.

<https://ibm.co/sme-banking>



Embedded finance: Creating the everywhere, everyday bank

IBM Institute for Business Value in partnership with BIAN and Red Hat.
September 2023.

<https://ibm.co/embedded-finance>

Study approach and methodology

This study is complemented by the financial performance analysis of worldwide banks with total assets larger than \$10 billion. Annual reports are sourced from S&P Global Market Intelligence. Regional comparisons are provided based on the country classification in the International Monetary Fund (IMF) World Economic Outlook database. We distinguish between “major advanced and EU economies” (corresponding to G7 countries, with all EU member states) and “other advanced and emerging economies.”

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