KBW **KEEFE, BRUYETTE & WOODS**

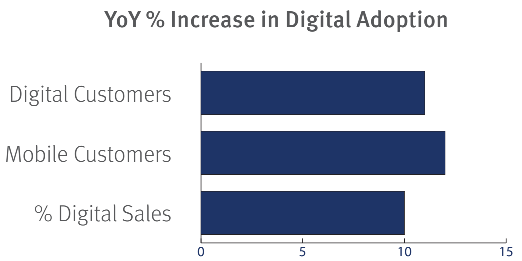
A Stifel Company

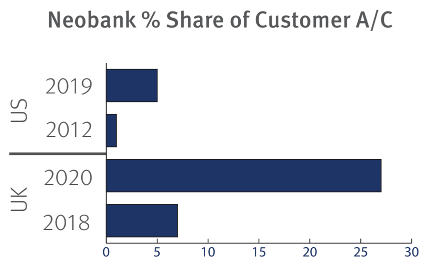
The Race to Keep Pace with Fintech

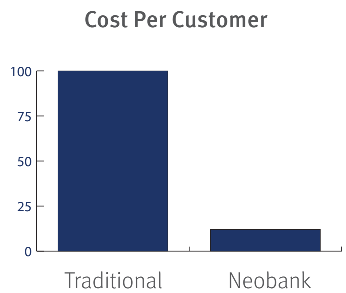
The pandemic has caused a leap forward in the adoption of all areas of electronic financial services. Understanding these changes is crucial for shareholder returns over the next decade and, in our view, as soon as next year.

The pandemic is likely to result in a permanent shift toward digital forms of banking, payments, insurance and asset and wealth management. It has also led to a big reduction in future earnings power for rate-sensitive businesses. Some fintech incumbents have already announced cost-cutting plans, but both shareholders and supervisors are encouraging institutions to go further to improve profitability. For the winners, this likely means adopting new technology (either developing in-house or utilizing third parties) to overhaul high infrastructure costs. For the losers, it means surrendering business to new entrants that can offer superior customer service at a lower cost.

The line between fintech and traditional providers is blurring. New fintech players are building momentum and gaining share. Some are now seen as vendors to incumbents, helping to reduce costs and improve processes for those that embrace change. Others represent direct competition.







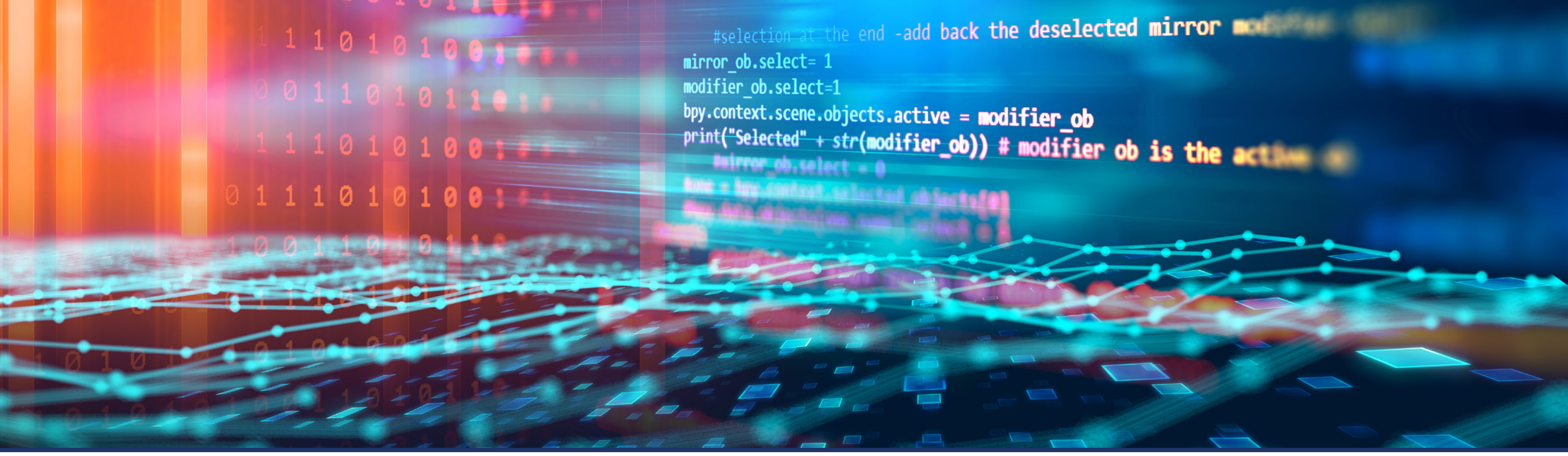
Note: Digital customers and mobile customers sample reflects global large-cap banking retail customers. Cost per customer: Traditional banks reindexed to 100. Neobanks reflects global new entrants (many of which are unlisted) that are gathering customers and deposits at a rapid pace.
Source: Company documents and KBW Research.

Keep Pace with Fintech in Real Time with KFTX

KBW, in partnership with Nasdaq, provides the KBW Nasdaq Financial Technology Index (KFTX), which is a unique index that **allows investors to track and keep pace with the acceleration and interest in fintech through a single index of fintech companies.**

KFTX is an equal-weighted index that tracks the performance of companies that leverage technology to deliver financial products and services. Their distribution is nearly exclusively electronic, with limited or no "bricks and mortar," and their revenue mix is predominantly fee based. Fintech firms leverage new assets, such as advanced data aggregation and analysis, innovative technology, and creative thinking.

Fintech is a relatively new industry designation garnering increasing investor attention. Fintech is not consistently defined, and the term is used to describe many different types of companies classified in various industries. KFTX leverages KBW's financial services expertise and Nasdaq's long history of creating innovative, market-leading, transparent indexes to provide investors with the most precise index representation of fintech available in the market.



KBW is the Thought Leader in Understanding and Evaluating Fintech

KBW believes fintech is 21st century finance, not a type of company or subsector of financials. It refers to a company's state of technological innovation and can be measured quantitatively and qualitatively as business models adapt to technologically based products, services and operational infrastructure. We provide a cross-sector guide on how fintech affects the business models and value of more than 650 financial stocks covered by KBW in Europe and the US.

We believe that demographics, economics, and innovation are at the core of the fintech transformation (Figure 1). Demographics define the evolution of the client base, economics determine the ability of firms to capitalize on their technology investments and manage risk, while innovation represents the successful implementation and adoption of new technologies into relevant financial products.

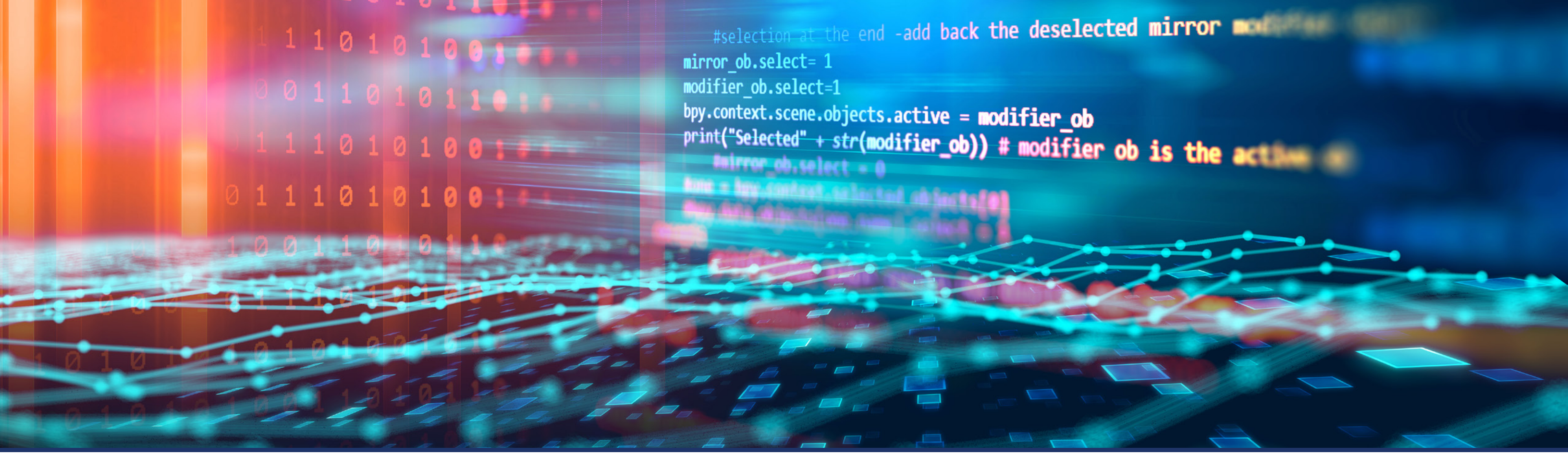
Figure 1: KBW's FinTech Manifesto framework

Forces Shaping Financial Services	Innovation/Technological Enablement	What It Means For Financial Institutions and Start-Ups
Innovation - implementing and adopting new technologies **Demographics** - evolution of the client base **Economics** - ability to capitalize on technological investment and manage risk	Big data and analytics Artificial intelligence and machine learning Distributed ledger and blockchain Digital currencies and crypto-assets Mobile payments and banking Digital lending and wealth management Open banking / PSD2 Electronic execution platforms Prop-tech Digital ecosystems and Internet of Things	Automating the back-office and utilizing big data to generate new sources of revenue Transforming the client relationship and serving the new generations of digital consumers Unbundling of traditional business models and embracing platform/marketplace-based models Capitalizing on the digital commerce and payments opportunity Adapting to new regulation, transparency and mitigating risk

Source: KBW Research.

Key Fintech Industry Themes

Our research into the neobanks in Europe and the US finds that these "small" new entrants are gathering customers and deposits at a rapid pace. Many of them are unlisted, but with implied valuations that are not that different to some better-known and much larger traditional banks. They have superior customer offerings that are generated at a much lower unit cost. We think the traditional US banks need to operate with 20-30% fewer branches in order to optimize a "bricks and clicks" strategy, while in Europe, we think the incumbents need to go much further to become competitive and improve returns.



Banking-as-a-Service is a key theme for the industry as it lowers barriers to entry and allows non-banks to seamlessly offer financial products alongside their core offering. It may also give smaller banks an easy route to providing a digital offering without the need for lengthy and expensive development. US banks that have embraced this have seen a lower customer acquisition cost and higher balance sheet growth. Banks that can leverage these new processes from third parties may be able to cut costs considerably.

Swiss wealth management has been a very traditional area of banking, with personalized, human relationships at the center of the offering for a very long time. Over the next 10 years, we expect greater transparency to transform pricing strategies, products to move away from more traditional forms, and advances in technology to alter the delivery of services. Those up to the task will have capabilities to expand both product range (to non-traditional lending) and service offering (effectively becoming a life manager), while being able to utilize digital platforms to tailor advice and portfolios en masse.

The insurance industry is also being disrupted, and we estimate there has been $19 billion invested into the insurtech sector already. We believe the bundled, integrated nature of insurance is ripe for disruption. “Point innovator” insurtech firms want to be the niche competitors or, similar to the banking system, potentially partners. For incumbents, our view is that the successful central management teams will be those who can coordinate change management of the existing business with practicing innovation and preparing for disruption.

In **payments** we see point of sale (or point of need) finance continuing to flourish as the fastest-growing segment within instalment loans. New players such as Klarna have led the way, with more traditional firms such as American Express reacting to compete. We see the overall segment growing, allowing a benefit to both traditional and new firms. Meanwhile, new tech payment service providers (PSPs) are disrupting the status quo through modern technology architectures that are designed to simplify the experience for merchants and ultimately help improve conversion rates. PSPs that remain too reliant on legacy methods and infrastructure are most at risk of losing share.

Capital markets have arguably already seen a greater level of disruption than the rest of the financial markets. Innovation in this segment has been scaled up, with many asset classes already seeing the majority of volumes traded electronically. Segments that were later to adopt electronification are catching up quickly—in particular corporate bond trading. Asset managers have become much larger over the past 10 years, partly through consolidation, allowing fixed costs of development to be spread across more assets, lowering marginal costs and helping to protect profits even as pricing falls. Exchange-traded funds (ETFs) and investing in new ESG (environmental, social and governance) products are all part of the future for asset managers in Europe and the US.

PropTech. Real estate technology is challenging the industry status quo. Over the last decade, billions of dollars of capital have flowed into the sector, fueling the emergence of disruptive “PropTech” startups and other trends that are digitally infusing every aspect of the real estate value chain. Private investment in the sector has surged in recent years, growing at a five-year compound annual growth rate (CAGR) of 35%, while estimates of cumulative funding over the last decade range from $20 billion to $75 billion. Despite this, we believe the sector remains in its infancy. Consolidation has accelerated recently and we expect this to be an ongoing theme. Finally, as the sector matures, we expect the existing public landscape of real estate technology companies to grow.