Securing your tomorrow, today.

THE FUTURE OF FINANCIAL SERVICES
A new ‘abnormal’

Dear reader,

We started out this year intending to write a series of papers about the long-term prospects of the financial services industry. Obviously, COVID-19 has changed our plans, as it has upended so many other things, from individual lives and businesses to geopolitics and entire industries. COVID-19 will change many aspects of financial services forever, accelerating trends already begun, creating new trajectories and slowing down or even stopping a number of changes previously underway in their tracks. Therefore, we are asking ourselves: Are we adapting quickly enough, given the environment?

In our recent series, Beyond COVID-19, we examined the impact of the pandemic on banks, insurers, and asset and wealth managers. Those pieces cover in more detail not only how the industry will look as we recover from the pandemic, but, more importantly, the specific steps that individual organisations can take to remain competitive and successful in this new world.

In addition to those publications, we thought it would be helpful to examine some of the macro trends affecting the industry as a whole and their impacts on individual segments. We hope that you find these insights helpful and provocative.

Stay safe, and please feel free to reach out to me and my colleagues with your comments and feedback.

Sincerely,

John P. Garvey
Global Financial Services Leader, PwC US
Where are we now?
The global economy: A severe shock to the system

To understand the future, we must have a sound grasp of the present. Financial services is a critical industry, not only in terms of employment and taxation but also—and perhaps most importantly—as a primary source of finance to support the so-called real economy. Prior to the COVID-19 crisis, most of the industry was extremely well-capitalised, but many firms struggled to earn acceptable returns due to a combination of higher regulatory costs, footprint reductions, a slowing global economy and low interest rates.

In contrast to the global financial crisis (GFC), COVID-19 triggered initial impacts in the real economy and will increasingly manifest itself in a second stage throughout the financial sector. The lock downs and social-distancing measures imposed by governments around the globe to flatten the infection curves have caused significant damage to many industries, all of which are served by financial institutions. Compared with all previous crises—including the GFC, the oil-price shocks of the 1970s or even the Great Depression of the 1930s—COVID-19 will likely have the most substantial impact on the global economy, with a one-year reduction in worldwide GDP of more than 6%.
A few industry sectors—such as food retailing, telecommunications and capital markets—initially benefitted from the crisis, but many others have been negatively affected, including most manufacturing and services-related industries. The key factor in the severity of impact has been the level of decline in demand, from both corporate customers and individual consumers, directly because of imposed restrictions or indirectly because of (temporary) behavioural changes. Passenger transportation, hospitality, entertainment, tourism, and consumer goods and non-food retail are among the hardest-hit industries, with monthly revenues dropping by 50–90% in February in Asia, and with that impact spreading to Europe and the US in March and April. Industries such as automotive and industrial manufacturing faced a similar contraction, and now appear to be headed for a prolonged ‘U-shaped scenario,’ characterised by a substantial, often double-digit reduction in revenues for 2020 and an unclear outlook for 2021.

At PwC, we’ve developed a comprehensive set of econometric models and have analysed COVID-19’s impact on each of the industry sectors, both globally and regionally. Exhibit 1 summarises the results of these analyses.

### Exhibit 1: COVID-19’s impact on non-financial services industries

<table>
<thead>
<tr>
<th>Impact</th>
<th>Industry sectors</th>
<th>Comments (exemplary)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive</td>
<td>Digital platforms, Consumer goods &amp; retail (food), Telecommunications</td>
<td>Increased consumption due to pandemic (e.g., of masks) and increased use of digital platforms and digitisation efforts across industries</td>
</tr>
<tr>
<td>Neutral</td>
<td>Consumer goods &amp; retail (food), Telecommunications</td>
<td>Stable B2C consumption as more consumers work from home and travel is limited</td>
</tr>
<tr>
<td>Slightly negative</td>
<td>Agriculture, Healthcare, Utilities, Pharma &amp; life sciences, Technology &amp; software</td>
<td>Overall reduction in economic activity and GDP drives less consumption. Workforce availability and/or productivity are at risk</td>
</tr>
<tr>
<td>Negative</td>
<td>Chemicals, Industrial manufacturing, Freight transportation</td>
<td>Production stopped or output reduced throughout lockdown, uneven recovery</td>
</tr>
<tr>
<td>Very negative</td>
<td>Services, Consumer goods &amp; retail (non-food), Automotive, Entertainment &amp; media, Passenger transportation, travel, hospitality</td>
<td>Point-of-sale closure and order cancellations through lockdown, time frame and strength of recovery unclear</td>
</tr>
</tbody>
</table>

Source: PwC
Financial services: No crisis so far; a mixed outlook for the future

For the financial services industry, the negative impact from COVID-19 will not be uniform for all segments; rather, some sectors will fare worse than others. Through midyear, even as the pandemic hammered a host of industries, it had a relatively modest and mixed impact on the financial services industry. Insurers have benefitted from consumers staying close to home and the subsequent reduced claims frequency in personal lines. Higher trading revenues due to market volatility have boosted capital markets businesses, while central bank activities and government support of businesses and individuals have so far limited damage to bank balance sheets and prevented the types of contagion we saw during the global financial crisis in 2008. Although volatility remains high, the markets overall have stabilised and recovered quite a bit from the lows experienced in the first weeks after the crisis expanded beyond China.

We would argue that the financial services sector will be hardest hit by so-called second-order effects. That is, the deteriorating credit quality of customers, along with the continued low interest rate environment, as the pandemic and its aftereffects will be felt throughout the real economy over the next several years.

“You might be able to predict your future in the short term, but the longer you look ahead, the less likely you are to be correct.”

Leonard Mlodinow, theoretical physicist and author
Longer term, the economic impacts of the crisis are likely to affect the sector for years to come. We’ve come to the end of a positive credit environment that lasted more than a decade, and we will see increasing numbers of both personal and business defaults. This is already being reflected in first- and second-quarter bank loan loss reserves. In addition, any hope of a medium-term normalisation of interest rates has been dashed as central banks have been forced to further reduce them.

Exhibit 2 summarises the results of our analyses of the short-term and long-term impacts across banks, payment processors, insurers, exchanges and asset managers.

<table>
<thead>
<tr>
<th>Financial service</th>
<th>Short-term outlook</th>
<th>Long-term outlook</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retail</td>
<td>Negative</td>
<td>Mixed</td>
</tr>
<tr>
<td>Commercial</td>
<td>Mixed</td>
<td>Negative</td>
</tr>
<tr>
<td>Investment</td>
<td>Neutral</td>
<td>Positive</td>
</tr>
<tr>
<td>Payments</td>
<td>Neutral</td>
<td>Positive</td>
</tr>
<tr>
<td>Life</td>
<td>Negative</td>
<td>Mixed</td>
</tr>
<tr>
<td>Health</td>
<td>Negative</td>
<td>Negative</td>
</tr>
<tr>
<td>Property and casualty</td>
<td>Positive</td>
<td>Mixed</td>
</tr>
<tr>
<td>Exchanges / clearing</td>
<td>Positive</td>
<td>Neutral</td>
</tr>
<tr>
<td>Wealth management</td>
<td>Neutral</td>
<td>Positive</td>
</tr>
<tr>
<td>Traditional asset managers</td>
<td>Mixed</td>
<td>Mixed</td>
</tr>
<tr>
<td>Alternatives</td>
<td>Positive</td>
<td>Positive</td>
</tr>
<tr>
<td>Office</td>
<td>Neutral</td>
<td>Mixed</td>
</tr>
<tr>
<td>Logistics</td>
<td>Positive</td>
<td>Positive</td>
</tr>
<tr>
<td>Retail</td>
<td>Negative</td>
<td>Negative</td>
</tr>
<tr>
<td>Residential</td>
<td>Neutral</td>
<td>Positive</td>
</tr>
</tbody>
</table>

Source: PwC analysis
Macro trends that matter and their impact in a post–COVID-19 world
Global macro trends

As we shift our attention to the future, it is important to note that although COVID-19 presents significant challenges, other fundamental factors such as geopolitical tensions and evolving regulatory regimes will shape financial institutions significantly in the mid-to long term. We don’t have all of the answers, but there is a set of macro trends that financial institution leadership teams need to understand in order to properly plan for their future (see Exhibit 3).

Exhibit 3: Macro trends with the biggest impact on financial services

1. Low interest rates will continue wreaking havoc on margins and business models.
   - Extremely strong fiscal and monetary interventions
   - Low interest rate levels will endure; rising prices of sought-after asset classes

2. The COVID-19 recession and asset impairments will reduce risk-bearing capacity for regulated industries to support the real economy as it enters the recovery stage over the next year.
   - Required rebuilding of capital buffers
   - Increased RWAs
   - Realisation of credit risk

3. Alternative providers of capital are set to become an even more important part of the global financial system.
   - Banking systems without capacity to fully replace and finance the financial stimuli
   - Increase of nonbank credit providers

4. COVID-19 will not delay—and may accelerate the implementation of current and planned regulatory measures in many countries and regions.
   - No relevant deviations from the regulatory agenda, except for implementation pauses
   - US position subject to change in November 2020

5. Continued de-globalisation will further align the size of financial institutions to the GDP of their home countries while continued offshoring will increase operational risk across the industry.
   - New tendency towards unilateralism
   - Renewed focus on nearshoring and diversification of offshore locations

6. Firms face unrelenting pressure to boost productivity through the digitisation of the business and the workforce.
   - Greater leveraging of AI, analytics and cloud-based technologies
   - Increasing use of crowdsourcing and focus on upskilling

7. The client-driven shift to a platform- and ecosystem-based financial services industry will create a new wave of disruption and disintermediation.
   - Acceleration of digitisation and platform-based industry
   - Advancement of digital currencies
   - Shift from product- to client-centricity
   - Increasing relevance of fintech and big tech

Source: PwC
Low interest rates will continue wreaking havoc on margins and business models.

The response to COVID-19 will likely significantly prolong ultra-low or even negative interest rates, fuelling further margin compression in the short term for the banking sector and asset-price distortions in the long term. As part of their response to the crisis, we are seeing strong fiscal and monetary intervention by governments and central banks, ultimately driving greater indebtedness and incentives to keep interest rates low. This is in addition to the fact that central banks have maintained a low interest rate environment since the GFC, augmented by substantial quantitative easing (QE), which has driven down net interest margins for banks and investment returns for insurers and asset managers. However, lower rates have also pushed investors away from cash, increasing assets under management (AuM) at asset and wealth management firms. We see low interest rates persisting for the foreseeable future, requiring that institutions increase investment in measures to reduce costs, digitise and improve productivity to maintain margins and profitability (see Exhibit 4). In addition to these low rates, depressed asset values and returns have had a negative impact on life insurance prospects and are forcing insurers to look at their business model and the cost of servicing customers via digital channels.

Exhibit 4: Ultra-low interest rates: Effects on net interest margins

Source: BIS, RBA, FRED, World bank; ECB, PwC analysis
The COVID-19 recession and asset impairments will reduce risk-bearing capacity for regulated industries to support the real economy as it enters the recovery stage over the next year.

The asset impairments resulting from the COVID-19 pandemic will ultimately further constrain lending and the risk-bearing capacity of regulated banks and insurers to support the real economy during the recovery phase (see Exhibit 5). This will be particularly problematic in Europe, where companies obtained almost 90% of their new funding in 2018 from bank loans (according to the Association for Financial Markets in Europe 2019 annual report). In any case, most businesses will need to develop a broader choice of funding options and increase the share delivered by capital markets and the so-called shadow banking or alternative financing industry (such as PE funds and sovereigns) over today’s levels. For insurers, a combination of low interest rates, asset impairments, and the potential for increased pandemic payouts for business interruption are all serious concerns regarding the ability to fulfil obligations and underwrite new business. As such, additional risk-reduction efforts, footprint reductions and an increase in run-off books (and, in some cases, insolvency) will be the result of these challenges. Therefore, insurers will need an increased focus on rebuilding capital, rationalising product portfolios and maximising per-client profitability.

### Exhibit 5: Declining core capital ratios limit lending capacity

#### Constrained risk-bearing capacity: Capital impact drivers in European banks

<table>
<thead>
<tr>
<th>Pre-COVID CET1 (YE 2019)</th>
<th>Operating income (contraction)</th>
<th>Credit risk RWA increase</th>
<th>Credit risk impairment</th>
<th>Market risk</th>
<th>CET 1% stressed (YE 2022)</th>
<th>Capital requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>~14.8%</td>
<td>-140 to +270 bps</td>
<td>-250 to -300 bps</td>
<td>-150 to -200 bps</td>
<td>-10 to -90 bps</td>
<td>7.5% to 13.4%</td>
<td>~ 4.3%</td>
</tr>
<tr>
<td>Temporary capital relief</td>
<td>Relieved Supervisory Review and Evaluation Process (SREP) requirement</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Generally, CET1 with sizeable COVID-19 impact; individual effects on banks can be clustered in three types:

- **Type 1: Withstand**
  - Strong capital base with significant loan loss reserves, little to no impact on risk-taking capacity

- **Type 2: Rebuild**
  - Need to rebuild capital base through greater retention of profits, temporary reduction of risk-taking capacity

- **Type 3: Restructure**
  - Reduce footprint, clients, business and sell business and/or raise capital, long-term reduction of risk-taking capacity

Source: PwC analysis

1) Austria, Belgium, Germany, Italy and the Netherlands. Assumptions: U-shaped scenario for these economies (-9.3%, +5.8%, +1.1% GDP change in 2020, 2021 and 2022, respectively); 2) Incl. reduction of administrative Expenses; 3) Combined RWA increase trading book and net trading income decrease
Alternative providers of capital are set to become an even more important part of the global financial system.

As has been well-documented, post-GFC regulation increased the cost differential (and availability) of regulated versus unregulated capital, thus significantly boosting the role of nonbank providers of capital. In fact, the role of alternative financing has been on a dramatic rise since 2010 (see Exhibit 6). For the reasons previously noted, we see this trend accelerating as the rebuilding of the economy post–COVID-19 will require fresh sources of capital. This will be especially true in the small and medium-sized enterprise (SME) sector, which provides the bulk of employment in most countries. For established financial institutions, the rise of alternative capital brings into question their very role as a capital provider versus an intermediary, how the platform economy and various funding models will evolve in the future, and where they should play in this ecosystem. There has also been an increasing role of the government, which has provided both equity and non-equity support for the corporate sector. This shift has several implications: financial institutions need to adjust their business models to a less pronounced role in providing capital (with a corresponding P&L impact) and find new ways to participate in the value chain of intermediation and marketing. To enable alternative financing to flourish, policymakers need to make much-needed regulatory, tax and legal changes. Incentives are also needed, at least outside the US. This will be crucial to the availability of funding to SMEs.

Exhibit 6: Bank vs. nonbank financing

<table>
<thead>
<tr>
<th>Perspective</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Banks’ primary role in providing financing has been further challenged in the last decade</td>
</tr>
<tr>
<td>• In the last decade, private debt has seen tremendous growth with ~11% CAGR</td>
</tr>
<tr>
<td>• Additional measures will need to be taken to improve returns on RWA</td>
</tr>
<tr>
<td>• This trend is fuelled by funds and other financial intermediaries increasingly providing liquidity in the markets</td>
</tr>
</tbody>
</table>

Source: BIS, 2018/2019 Preqin global private debt report, CFA Institute, PwC analysis
COVID-19 will not delay—and may accelerate—the implementation of current and planned regulatory measures in many countries and regions.

Regulation has been, and will be, a significant trend in the industry. Relief measures put in place by regulators as part of the COVID-19 reaction have been modest and temporary in nature, and they will eventually be scaled back. Regulatory initiatives that had been planned or temporarily postponed will be implemented in short order. In fact, the US could even see a wave of new regulation, depending on the outcome of this year’s presidential election. Regardless of the situation in the US, regulation will continue to be a major consideration in such areas as sanctions, anti–money laundering and know-your-customer, IFRS 17 implementation, and LIBOR replacement/reference rate reform, among others. The implementation of Basel IV and tighter capital regulation will continue, challenging traditional lending business models and institutions across the board (see Exhibit 7).

In terms of environmental, social and governance (ESG) criteria, the massive investments put into the real economy to address COVID-19 and support the most severely hit industries and regions—programmes direct spending, equity investments or the provision of financing (capacity)—will increasingly be driven by an ESG mindset. The asset management sector is rapidly adopting this mindset. Already, 90% of the top 50 asset managers worldwide subscribe to the Principles for Responsible Investment (PRI). At the same time, reporting requirements in jurisdictions like the EU will increasingly require detailed disclosures regarding sustainability and other related measures. Finally, as providers of capital, banks and insurers will increasingly serve as a mechanism to transmit—through risk-pricing and funding costs—both the benefits and the costs of sustainability to clients.

### Exhibit 7: Basel IV: A significant impact on margin and RoE

**Constrained risk-bearing capacity: Estimated impact of Basel IV on profitability**

- **Implied decline in RoE (relative)**
- **Required gross margin increase (relative)**

<table>
<thead>
<tr>
<th>Current RWA density</th>
<th>Implied decline in RoE (relative)</th>
<th>Required gross margin increase (relative)</th>
</tr>
</thead>
<tbody>
<tr>
<td>20%</td>
<td>0%</td>
<td>15%</td>
</tr>
<tr>
<td>30%</td>
<td>10%</td>
<td>20%</td>
</tr>
<tr>
<td>40%</td>
<td>20%</td>
<td>25%</td>
</tr>
<tr>
<td>50%</td>
<td>30%</td>
<td>30%</td>
</tr>
<tr>
<td>60%</td>
<td>40%</td>
<td>35%</td>
</tr>
<tr>
<td>70%</td>
<td>50%</td>
<td>40%</td>
</tr>
</tbody>
</table>

**Assumed RWA density**

- **Necessary gross margin increase of 7.5% to maintain current RoE level under Basel IV**

**Perspective**

- Profitability of loan portfolios will be significantly impacted under Basel IV
- Existing cost and margin-improvement programmes are unlikely to fully mitigate impact
- Additional measures will need to be taken to improve returns on RWA

**Source:** PwC analysis
Continued de-globalisation will further align the size of regulated financial institutions to the GDP of their home countries while continued offshoring will increase operational risk across the industry.

In the wake of the GFC, regulation was focused on shrinking the world’s pre-eminent financial institutions (primarily banks), as governments decided that they could no longer backstop a financial system where capital and risk were deployed globally but bailouts were entirely local. As a result, we have seen a striking rise in the size and scope of Chinese institutions, while the relative shrinkage of many European institutions has been dramatic. Collectively, with few exceptions, this amounts to a new financial world order, one that is more aligned with national economic power (see Exhibit 8).

At the same time, cost pressures spurred financial institutions to further separate their front-office operations (located in the US, Europe, Japan and Southeast Asia) from their often outsourced banking operations (typically in India, Central and Eastern Europe, and other low-cost regions or countries). Thus, nearly all international and many national institutions have substantial operations in India, and prior to COVID-19, nearly every one of them had plans to increase their use of Indian resources for both cost and quality reasons.

These operations are now so critical that most institutions realised during the pandemic that if India fails, they fail. The good news is that despite some initial hiccups—and thanks to the often heroic efforts of their teams—Indian employees and outsourced providers of major financial institutions have performed remarkably well during the crisis, despite experiencing one of the most extensive lockdowns in the world. Nonetheless, de-globalisation could lead to a renewed focus on nearshoring and the diversification of offshore locations. At a minimum, we will likely see institutions with scale operations increasingly focused on diversifying within India, particularly if they are adding new capacity. Asset and wealth management that is not viewed as affecting systemic risk has followed a different path, with greater globalisation in some cases, and, in others, more localisation or regionalisation.

### Exhibit 8: World’s 15 largest banks by total assets US$, 2007 vs. 2020

<table>
<thead>
<tr>
<th>Bank Name</th>
<th>2007</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Royal Bank of Scotland</td>
<td>$3.77tn</td>
<td>$4.32tn</td>
</tr>
<tr>
<td>Deutsche Bank</td>
<td>$2.95tn</td>
<td>$3.65tn</td>
</tr>
<tr>
<td>UBS</td>
<td>$2.53tn</td>
<td>$3.57tn</td>
</tr>
<tr>
<td>BNP Paribas</td>
<td>$2.47tn</td>
<td>$3.27tn</td>
</tr>
<tr>
<td>Barclays</td>
<td>$2.43tn</td>
<td>$2.89tn</td>
</tr>
<tr>
<td>HSBC</td>
<td>$2.35tn</td>
<td>$2.71tn</td>
</tr>
<tr>
<td>Citigroup</td>
<td>$2.19tn</td>
<td>$2.68tn</td>
</tr>
<tr>
<td>Crédit Agricole</td>
<td>$2.06tn</td>
<td>$2.43tn</td>
</tr>
<tr>
<td>Bank of America</td>
<td>$1.72tn</td>
<td>$2.42tn</td>
</tr>
<tr>
<td>Société Générale</td>
<td>$1.57tn</td>
<td>$2.25tn</td>
</tr>
<tr>
<td>JPMorgan Chase</td>
<td>$1.56tn</td>
<td>$1.96tn</td>
</tr>
<tr>
<td>ABN Amro</td>
<td>$1.51tn</td>
<td>$1.95tn</td>
</tr>
<tr>
<td>UniCredit</td>
<td>$1.49tn</td>
<td>$1.95tn</td>
</tr>
<tr>
<td>ING Bank</td>
<td>$1.45tn</td>
<td>$1.92tn</td>
</tr>
<tr>
<td>Mizuho</td>
<td>$1.35tn</td>
<td>$1.87tn</td>
</tr>
</tbody>
</table>

Source: Annual reports, S&P Global
Firms face unrelenting pressure to boost productivity through the digitisation of the business and the workforce.

COVID-19, which closed ‘brick and mortar’ options for customers for months, converted even the most technologically resistant individuals to digital channels. It is unlikely that adopted behaviours will revert after the crisis, and digitally enabled solutions will become an increasing differentiator. In a world working and interacting nearly 100% remotely, institutions that made investments in their technology infrastructure and developed digital channels before COVID-19 have fared better in the crisis than those that hadn’t—yet another way that COVID-19 accelerated digital trends and is punishing laggards.

Leading institutions will further digitise their customer-interaction models, strengthen digital sales and service model interaction, and materially cut back on support functions and branch infrastructure that failed to prove their value during the pandemic. This, in turn, will put increasing pressure on legacy infrastructure and the need to accelerate the shift to cloud-based, modern architectures. The post-COVID-19 world creates even more prospects for digitally skilled workers—and greater demand for training.

Exhibit 9: Productivity tracking on the rise, but not yet at the right level

More FS organisations are now tracking productivity: 77% in 2020, versus 62% in 2018

- 77% Track productivity
- 2% Don’t know
- 20% No

US$5bn+ organisations are more likely to track productivity at an hourly level (25%) compared with those under US$5bn (11%), but few do at a meaningful level

- Hourly, at the task level 15%
- Daily 44%
- Weekly 44%
- Periodic studies 25%
- Don’t know 1%

Organisations in China (96%) and India (96%) are more likely to track productivity, compared with organisations overall (77%)

Source: PwC Productivity Survey 2020
The client-driven shift to a platform- and ecosystem-based financial services industry will create a new wave of disruption and disintermediation.

COVID-19 has altered customer behaviour and accelerated the move to digital. The shift to a more platform- and ecosystem-based industry, including more digitised client interactions, will create a new set of challenges and opportunities for the industry. For insurers already grappling with the balance between direct and broker-based distribution models, and for large banks struggling with incursions from new payment platforms and SME lenders competing more and more with crowdfunding institutions, platforms are set to continue their growth in volume, value and importance to the financial services industry.

For example, now that the world has spent several months minimising the use of physical money, the move to cashless economies has clearly accelerated and will continue post-COVID-19. This has spurred the use of electronic payment platforms, including those linked to digital currencies. These cryptocurrencies, perhaps the biggest disruptors in the long term, have only begun to gain acceptance at an institutional level, but there are signs that we are about to witness a dramatic acceleration in adoption. According to the Bank for International Settlements, more than 40 central banks are researching forms of digital currency that they can issue. China is piloting a digital RMB in four areas. Finally, in an environment with big tech companies pushing into arenas formerly exclusively owned by banks (such as payments and credit), increasing client satisfaction and trust with a wider and evolving set of products and services is an important anchoring factor.

Exhibit 10: Are you ready for tomorrow?

Cryptocurrencies move to the mainstream

<table>
<thead>
<tr>
<th>Daily transaction volume</th>
</tr>
</thead>
</table>

Top 10 countries running bitcoin nodes, and number of nodes

- US 2,625
- Canada 402
- France 698
- Germany 2,016
- Russia 276
- China 411
- Singapore 316
- Japan 236
- UK 357
- Netherlands 527

Macro trends

Source: PwC analysis and Leftronic
A new way to think about the future of your business
A world of challenges and opportunities

The post–COVID-19 world brings many challenges and uncertainties, but these can also yield business opportunities for financial institutions. Changes in the geopolitical setting, the structure of the global financial system and a difficult credit environment provide banks, insurers and asset managers with opportunities to support clients in navigating these challenges, adjusting portfolios and developing new investment opportunities. Crises tend to reveal weaknesses in business strategy and execution as well as show the merit of wise strategic choices on where to play and how to win. These include capital allocation and maximising risk-bearing capacity in provisioning credit to individual clients and client segments, as well as potential mergers and divestiture options. Strategic options also include new opportunities for partnerships, better leveraging of technology, more productive use of the industry’s workforce, and various forms of intellectual, cognitive and network capital.
Translating thoughts into action

One of the primary challenges of any organisation is how to best allocate its precious resources to enact the types of changes required to not only manage through the crises of today, but be successful tomorrow.

As you think about the future, it may be helpful to have a structured way to think about your organisation, operating platform and overall business. At PwC, as part of our Future of Industries project, we determined the four key categories and areas of focus to consider as you prepare for tomorrow. Exhibit 11 shows examples of how financial services leaders can use this framework to determine gaps and priorities.

Exhibit 11: Areas of focus for recovery in financial services

Repair
- **Portfolio management**: Prepare for restructuring and workouts
- **Fee-based revenue**: Develop new products, consider acquisitions
- **Trust**: Use the crisis to help regain the trust of society and regulators
- **New business capacity**: Rebuild capital, rationalise portfolios to rebuild capacity

Rethink
- **Management**: Adopt a more agile and less structured organisation and approach
- **Ways of working**: Rationalise real estate footprint, formalise remote working, integrate productivity tools
- **Talent and innovation**: Increase crowdsourcing and use of gig economy, upskill talent
- **Customer and strategy**: Accelerate move to digital channels, align business strategy to new reality

Reconfigure
- **Cost structure**: Drive 25–30% additional reduction
- **Change budget and focus**: Re-evaluate and rationalise to improve ROI
- **Emerging technology**: Drive adoption of cloud and use of AI and SaaS solutions
- **M&A**: As needed to re-establish scale, enter growth markets, exit markets/poor-performing businesses
- **Partnerships**: Increase partnerships with non-traditional providers, technology companies and fintechs
- **Business lines and products**: Align front-office resources, service models and capital to the most profitable products
- **Compensation and Incentives**: Align to new strategies and objectives
- **Digitisation and productivity**: Accelerate digital labour and transformation initiatives

Report
- **ESG**: EU, other mandates
- **State aid**: SME assistance, capital, other support
- **Accounting standards**: CECL, IFRS 17
- **Regulatory**: Supervision and communication
- **Shareholders**: Enhanced disclosure
- **Society**: Purpose and value
- **Taxes**: Increasing transparency of tax contribution and strategy

Source: PwC analysis
Repair the damage

The damage from COVID-19 to the real economy—and, by extension, the financial system—is only beginning to manifest itself in various ways. This damage will require deliberative activities to repair financial institution balance sheets and reputations.

The following repair activities should be top priorities for financial institutions across the board:

- **Prepare for restructurings, workouts and wind-downs:** Post–COVID-19 organisations will need to decide the best route to restructure businesses and portfolios. Most institutions have seen their restructuring talent and know-how retire or move on to other areas. The last decade has seen little need for this capability, but firms should prioritise the rebuilding of this muscle memory.

- **Increase the proportion of fee-based revenue:** One of the fastest ways to repair the balance sheet is to become more capital-efficient by increasing the mix of fee-based versus capital-intensive revenues. This effort should involve both organic and inorganic growth.

- **Accelerate ‘trust-building’ activities:** Consider how the COVID-19 crisis can be used to advance the institution’s efforts to build trust with the community, regulators and shareholders. These include an increase in charitable efforts; actions to assist borrowers, investors; and policyholders and ‘telling the story’ in a consistent, effective manner.
• **Create new business capacity:** History shows that times of crisis are also moments of great opportunity to drive new business and improve market share if you have the financial, human resource and management capacity to capitalise on them. Create these types of capacity as an explicit business goal in all of your activities. For example, insurers can look to close the protection gap by combining traditional and innovative products.

**Rethink the organisation**

Many of the questions about organisational structures and talent that existed before COVID-19—the efficacy of remote working and the productivity of agile teams—have been answered. These and related tools and approaches are now being deployed, and are succeeding, on a massive global scale.

Rethinking the organisation requires a focus on the following priorities:

• **Adopt a modern management approach:** A committed management team can drive the necessary employee engagement that can align people around a common objective. The key to success is managing in a flexible manner with cross-functional teams instead of rigid hierarchies, as well as promoting a modern corporate culture (adapted to each individual institution) in which prudent risk-taking is rewarded, yet failure is allowed.

• **Embrace new ways of working and digital upskilling:** Set out a strategy, and set of goals to support remote working, including tools and techniques to not only facilitate such work but allow for the measurement and management of productivity. This component closely relates to the nature and extent of the organisation’s real estate footprint, which is likely to be very different than in the past. Finally, committing to upskill employees is critical to an organisation's success in a digital world.

• **Crowdsource talent and innovation:** Crises tend to drive increases in innovation in successful institutions. Financial institutions have traditionally lagged the technology and many other industries in terms of leveraging the gig economy for both human resources and innovation. Intense cost pressures and the emergence of new talent platforms (e.g., MBO Marketplace, uTest and others) have created the opportunity for more flexible, less-expensive talent acquisition compared with the traditional employee/contractor model. Medallia’s Crowdicity is one of many collaboration platforms that perform the same crowdsourcing function for ideas.
Redesign the customer journey and strategy:
As both retail and institutional clients increasingly migrate to digital channels, the opportunity exists to take bold moves to significantly reduce or even eliminate non-digital channels (such as branches, physical outlets and travelling salespeople). With the advent of 5G and improved telepresence, the ability to create meaningful virtual experiences will increasingly impact customer-facing strategies.

Reconfigure the business and operating platform
Along with the repair and rethink activities, many financial services institutions will need to reconfigure the business and operating platform, in some cases making profound changes in order to succeed in the future. To be sure, the post-GFC changes were also profound, as the industry grappled with increased regulatory costs by selling businesses, reducing workforces, increasing offshoring and taking many other important actions. The COVID-19 crisis is only accelerating trends well underway in each sector and underscores how much work remains to be done.

There are a myriad of reconfigure activities, but for purposes of brevity, we will highlight the critical areas:

- Double down on cost reduction, digitisation and reshaping the change portfolio: We are sticking with our pre-crisis view that legacy financial institutions will need to reduce costs by 25–50% over the next three to five years to remain competitive. If anything, that timeline has shrunk. The next wave of cost reduction will mostly come from productivity improvement, digitisation and reshaping organisation priorities (as opposed to traditional measures such as reducing discretionary expenditures and making across-the-board headcount reductions).

- Increase cloud adoption and the use of emerging technologies: The acceleration of new partnerships that have been announced between financial institutions and technology companies highlights the extensive efforts to access and deploy cloud and other emerging technologies in order to gain a competitive advantage in the marketplace. The emergence of digital-only players with unique value propositions powered by technology have also shown incumbents the future. Institutions must implement cloud-based solutions, AI, algorithms and coming changes such as 5G and digital currency—or risk being left behind.

- Use M&A to bolster strategic position: For certain institutions, M&A might be a key solution to further spread costs and increase top-line growth (by accessing new markets, optimising the portfolio and creating value), and thus increasing overall efficiency. Despite geopolitical tensions and uncertainty, financial institutions, fintech and technology players around the world continue to evaluate opportunities in both developed countries and emerging markets such as China and southeast Asia. At the same time, a number of partnerships are being formed between banks and fintech players around the

Legacy financial institutions will need to reduce costs by 25–50% over the next three to five years to remain competitive.
Exhibit 12: Current M&A outlook for banking

1. The fundamental industrial logic of consolidation remains: uncertainty, valuation levels and the inability to rationalise workforces are currently showstoppers.

2. Financial investors currently seek deal opportunities and particularly focus on distressed/forced seller transactions (of any kind).

3. However, mergers result in increased CET1 capital—increasing effect—and therefore have a stabilising effect in an emergency, provided that the badwill is recognised by the market and regulators.

- US market consolidated more than the rest of the globe over the last several years.
- M&A discussions globally primarily are focused on distressed assets and firms that may be about to face financial distress.
- As the impact on banks is likely to be still out one or two quarters (until it becomes fully visible), M&A-related considerations centre on nonbank FS or FS-related businesses.
- Non-US firms tend to put more weight on the political impact of country footprint in their M&A decisions.

Price/book value ratios of selected European banks (as of 13 May 2020)

Source: Bloomberg, PwC analysis
- **Partner with nonbank lenders and embrace change in market structures:** We discussed earlier that the role of banks might change, due to a lack of capacity to refinance rescue measures post–COVID-19. We argued that part of the volume will be picked up by nonbank lenders, including ecosystem, effectively reducing the future revenue pool for banks. In this environment, particularly for capital-scarce institutions, finding ways to participate in the value of alternate credit intermediation may be a necessity in the future. In these arrangements, it’s critical that both partners benefit from the jointly created revenue pool. In addition, the partnership needs to be set up in a structural, systematic fashion. Assessing these opportunities on a deal-by-deal basis will not work. Exhibit 13 shows the different methods of participation.

- **Optimise business/product mix and align incentives:** In a world with an even more pronounced focus on profitability and a changing role for banks and their balance sheets, financial institutions need to align strategy with client and product offerings. In addition, implementing stringent service and incentive models aligned to economic client profitability and prudent risk management is key.

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### Exhibit 13: Partnerships with nonbank lenders: Credit intermediation ways-to-play

<table>
<thead>
<tr>
<th>Bank role &amp; rationale</th>
<th>Way-to-play</th>
<th>Source: PwC analysis</th>
</tr>
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#### Balance sheet lending
- **Via secured funding**
  - Traditional low-risk balance sheet lending covered by pledged assets, yet reduced attractiveness under Basel IV

#### New ways of intermediation
- **Via unsecured funding**
  - Value-add transactions with improved risk-return profile for banks without access to ultra-cheap funding

- **Partnerships**
  - Strategic origination partnerships with institutional investors and other nonbank players

- **Investment vehicles**
  - Structured investment products and opportunities for third parties (i.e: facilitation of private debt)

- **Outplacements**
  - Traditional outplacement and securitisation of (self-originated) receivables

#### New perspective on collaboration with nonbank vehicles
- **Origination and lender**
  - Utilise credit spreads
  - New opportunities for corporate credit

- **Origination, structuring and loan servicing**
  - Fee income

- **Origination, structuring and asset management**
  - Fee income

- **Origination and structuring**
  - Capital relief/funding

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Report the results

As various stakeholders demand more transparency and accountability from financial institutions, the focus will increasingly turn to complete and accurate reporting in a range of areas, including financial performance, ESG, regulatory compliance and the like. In addition, it will be critical not to miss perhaps the most important attribute of any successful financial institution in the future: being able to articulate its unique culture, story and value to society.

COVID-19 has led to unprecedented challenges for the financial services industry, creating massive new disruptions and dramatically accelerating others that were already underway. Depending on one’s perspective, the future of the industry could be either perilous or promising. We choose to focus on the latter. Significant upheavals create new opportunities for innovation. The challenge for leadership teams is to look forward, understand the scope of changes underway and be bold in responding to them.

We look forward to helping you and your institution successfully secure your tomorrow, today.
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