

Banking in an evolving landscape

Banking perspectives 2022

Trends and themes shaping the industry in Jordan

KPMG in JordanJune 2022

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Foreword

I am pleased to introduce the first edition of our Banking perspectives publication from KPMG in Jordan.

The global economic recovery apace, banks are working to recalibrate their operations to new methods of working, evolving regulatory policies and some lasting effects of the pandemic on global trade. Banks in Jordan were on the front line of implementing financial support measures instigated by the government and the Central Bank of Jordan (CBJ). As support measures come to an end, expectations of the banking industry will remain high—both for its continued success and its integral role in promoting economic growth.

In this report, our financial services team explores a range of topics of critical importance to the banking industry. For their continued success in the new working reality and as they face new forms of competition, banks must continue to modernize their operating strategies. This must happen alongside a commitment to environment, social and corporate governance (ESG) programs, which is becoming more and more important to customers and other stakeholders.

Regulators in Jordan and globally have never been more critical to economic success than over the last two years. On the other side of the coin, banks face some compliance uncertainty amidst an unprecedented year for their accounting and governance, risk and compliance (GRC) functions. They would be best served by embracing technology in these areas.

The fintech industry is chipping away at the traditional banking sector's market share. Banks need to respond innovatively, but not defensively, as they will be most successful by collaborating with and learning from their nimble new competitors.



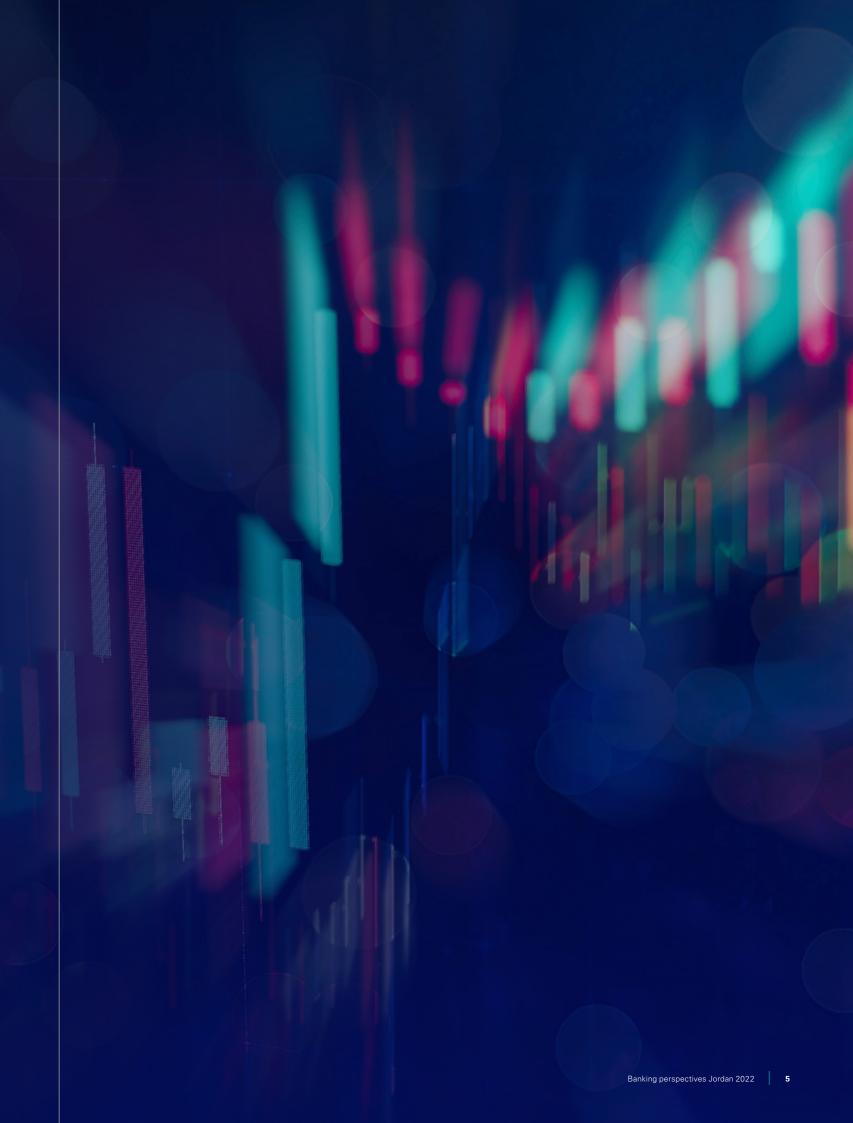
Regulators in Jordan and globally have never been more critical to economic success than over the last two years.

Operational resilience was one of the keys to adapting quickly to pandemic-related challenges. Incorporating the lessons of the last year and a half into their resilience strategies will lead to positive changes within banks. The same can be said for cybersecurity.

I hope you find this publication thought-provoking. Our Financial Services team would be glad to discuss the views outlined, and explore ways to assist your organization to leverage potential opportunities.



Hatem Kawasmy Managing Partner KPMG in Jordan



Executive summary

1900,59

Banks have weathered the storm of the pandemic and now have the footing to move forward with new lessons and strategies for success. Some of those strategies—like digitalization—were in fact helped by the pandemic's disruptions to business as usual. Also helping have been regulators, whose decisive and far-reaching actions have supported the economy. Banks continue to persevere in an environment characterized by low interest rates and having to deal with uncertainty around creditworthiness and provisioning.

Future of banking

Growing importance of environmental, social and governance priorities

While the pandemic may have slowed ESG progress initially, it is clear that banks across the globe now recognize that ESG agendas are a tool for returning to prosperity, as well as a deciding factor for many would-be customers and investors. New ESG-tied products and models are being developed, tested and commercialized. The bottom line is that banks can no longer afford to overlook ESG and must embrace it to avoid constrained growth and increased regulatory and public scrutiny.

The future of assurance

Pandemic lockdowns forced auditors to switch from performing on-site visits—a crucial part of the audit process—to virtual audits. Though this was a large change in the audit process, prior to covid-19 the winds were already changing. Auditors had already been experimenting with new technologies and working with big data to perform higher quality and more efficient and focused audits. Digital innovation is now being built into its audits through such things as data and analytics (D&A), advanced technology enabled risk assessment tools and rules-based anomaly detection.

Future of banking demands digital leadership

Digital banking and the emergence of flatter organizational structures in the new working reality requiring every employee virtually, regardless of hierarchy within the organization and across the front, middle and back offices, to function as digital leaders. A new leadership model is emerging that pivots away from the traditional qualities of corporate leadership. Old economy skills of management and supervision are being replaced with new technologies that are augmented alongside humans with the skills and empowerment to make the new models work.

Fintech makes its mark

The fintech industry witnessed a remarkable boom during the pandemic as consumers shifted commerce even further online. It's staying power—or, rather, how quickly it becomes universally adopted—will

depend on a number of factors. Regulators would be wise to promote the fintech sector, lest their countries digital champions fall behind regional and global rivals who have more accommodative and supportive legislation. It is recommended for traditional banks to introduce their own digital products to both compete and collaborate with fintechs. Doing so will promote healthy competition and will allow banks to remain relevant in the digital future.

Regulatory and compliance

Evolving role of regulators

Central banks and regulators have had to be on their toes for the last year and a half. The banking sector—and the public—have been turning to the public sector for support and guidance, and the response has been unprecedented. CBJ has stepped up to the game by providing support through various means and measures to drive the fintech industry to grow.

Mitigating risk

The risk profile for banks has evolved along with the vast changes in consumer behavior and the economy over the last two years. Business continuity planning proved a key tactic for mitigating risk. However, there are notable differences between traditional business continuity planning and pandemic planning—successful banks will take note. The dual forces of the pandemic and technological advancement have brought new risks to banks. Making sure these risks are managed—with agility and flexibility—will allow banks to reap the benefits of technology without adding significant risk. Additionally, governance, risk and compliance technologies-if properly implemented—improved banking risk management at a time of uncertainty.

Transfer pricing introduced

For banks and entities operating in the financial services industry, this has the following implications. In case you are operating through a branch in Jordan with head office outside Jordan, or with subsidiaries group entities under common control in or outside Jordan, then you will be subject to transfer pricing reporting obligations in relation to cross-border related party transactions.

Technology and environment

Impact of Covid-19 on credit

One of the biggest challenges for banks after the immediate disruptions of the pandemic has been assessing credit risk and other factors like probability of default (PD) and granting policies. In each case, assessments that rely on previously-relevant forecasting models may not be appropriate. Banks should develop morenuanced forecasting models that consider some idiosyncrasies of an individual company that may not have been previously considered.

Banks need to consider qualitative factors when assessing credit. For example, changes in customer behavior or requests for payment holidays or credit limit increases may indicate SICR or credit impairment. Consideration should be given to tailored payment holiday packages granted as these packages are granted by the banks after analyzing the customers financial positions.

Cyber in the front and center

Cybercrime has had a heyday during the pandemic. With much of the banking sector digitalized, it can be vulnerable to attack. Luckily, the sector has broadly invested in cybersecurity and is better prepared than other sectors for new threats. Five key themes are shaping cybersecurity in the banking sector: open banking, cyber in the audit (CitA), data privacy, penetration testing and red teaming, and secure DecOps.

Tax technology

Digitalization is impacting nearly every facet of a bank's operations, including tax accounting. Banks hold an immense amount of data about their customers—both retail and commercial—and the effective use of tax technology depends on a bank's ability to organize and use that data. In Jordan, e-invoicing is a big part of the tax technology equation. If e-invoicing becomes mandated, the resulting system will be ripe with opportunity—particularly within the vast amount of data being captured. This data can be used to gain new insights about customer activities and to optimize a bank's operations. Banks that utilize their data the best will gain a huge competitive advantage.

Operational resilience put to the test

The pandemic has tested banks' operational resilience and required unprecedented support from regulators. Maintaining such an environment—where operational resilience is jointly held by banks and regulators—will be key to the banking sector's stability moving forward. Additionally, the pandemic provides valuable lessons for improving the banking sector's operational resilience under pressure. Faced with an increased threat landscape, banks need to accept that it is impractical and too costly to prevent all disruption. Instead, their whole organizations should be ready to limit, respond to, recover and learn from a wide variety of events.



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Cautious recovery for banking sector while global outlook continuous to present challenges

A bracing emergence into the unknown, while surviving the staggering post Covid-19, experts' best bets have yet to unleash the future-gazing analysis for Jordanian banks. However, as we take a closer look at 2021 figures, results could be paving the way for a full recovery.

As we will go in a deep dive comparing banking industry results of 2021 with 2020, we will notice the recovery achieved during the later year. In 2021, an organic clawback has occurred in banks net income by 79.87%, mainly derived by the decrease in the expected credit losses (ECL) of 28.27% resulting primarily from improvements in customers' credit risk and reversal of ECL overlays. On the other hand, the average market rate for current, saving and term deposits decreased by 0.21%. The average market rate on lending decreased by 1.42%, and there was an increase in the total loans by 18.97% noting that

due to the Central Bank of Jordan (CBJ) support scheme, with total granting of around JD750 million effective between 2020/2021 with a marginal rate of 2%. More restoration and growth are expected for Jordanian economy in the foreseeable future. The World Bank estimates the GDP growth rate in Jordan to be 2.3% for 2022, which could lead to all around more favourable economic conditions, including a lower unemployment rates, an increase in disposable income, higher business risk

appetite, and more local and

expectations would support

in diluting the predictions of inflation increase by 1.5%.

Despite the positive future look,

we should all keep in mind that

predictions considered fragile and significantly sensitive to

unexpected and emerging

at this point of time the inflation

international capital injections

in the economy. These positive

part of the increase in the loans is

geopolitical instabilities that are affecting global supply chains and international business integrations, resulting a dramatic increase in the cost of ready products, raw materials and shipping internationally. This is likely to increase demand on financing, however it could also increase risks to levels that are unknown before.



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Financial performance Industry highlights



Net profit after tax

179.87%

YE – 2021 net income JD585.88 million (YE – 2020: JD325.73 million)



Total assets

13.79%

As of YE – 2021 JD84.39 billion (YE – 2020: JD74.17 billion)



Total customer deposit

16.60%

As of YE – 2021 JD57.69 billion (YE – 2020: JD49.48 billion)



ECL charge for the year

-28.27%

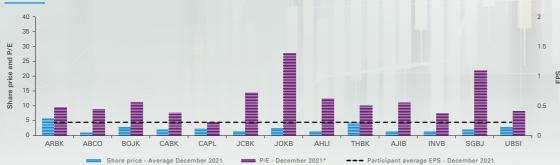
YE – 2021 JD589.83 million (YE – 2020: JD822.27 million)

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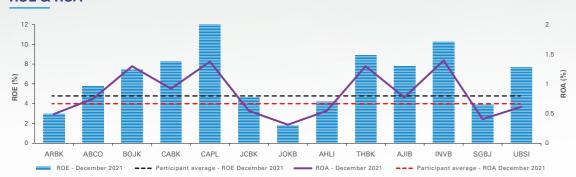
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Performance highlights

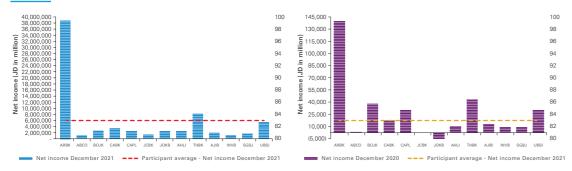
Share price, P/E & EPS



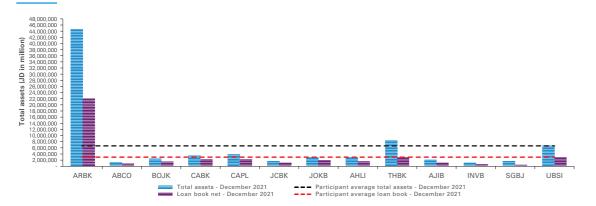
ROE & ROA



Net income



Total assets & Total loan book



Legend:

Arab Bank Arab Banking Corporation Bank of Jordan Amman Cairo Bank Capital Bank ARBK ABCO BOJX CABK CAPL Jordan Commercial Bank
Jordan Kuwait Bank
Ahli Bank
Ahli Bank
Housing Bank forTrade and Finance
Arab Investment Bank
AJIB

INVESTBANK
Societe Generale
Itihad Bank

INVB
SGBJ
UBSI

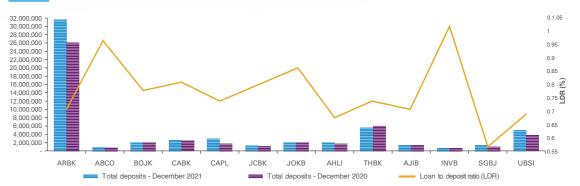
Net expected credit losses



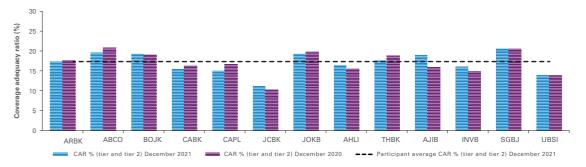
NPL coverage ratio



Loan to deposit ratio



Capital adequacy ratio



Glossary:

P/E ratio is calculated as the average closing price (as derived from the Amman Stock Exchange) divided by the earnings per share (EPS). **ROE** is the ratio of net income for the year ended 31 December 2021. **ROA** is the ratio of net income for the year ended 31 December 2021. **Coverage ratio** is the ratio of total ECL for loans and advances to total NPL. **Loan to deposit** ratio is the ratio of total financing and advances to total deposits.



Growing importance of environmental, social and governance priorities



The banking sector plays an essential role in supporting the global transition to greener, low carbon and resilient industries by enabling the movement of capital to these new trends. Banks are increasingly choosing to finance companies with strong ESG performance, advancing their agendas beyond their own doors.

Banks are increasingly recognizing ESG the importance and relevance of risk assessments in establishing their policies and products. They have become key drivers for discussions with their customers and investors that are sustainability driven. New ESG-tied products and models are being developed, tested and commercialized. The bottom line is that banks can no longer afford to overlook ESG and must embrace it to align with the global growth of the sustainable finance market and meet the increased demand from regulators and stakeholders on the integration of sustainability into financial products.

ESG in Jordan

In our KPMG Jordan CEO
Outlook 2021, 76% of CEOs in
Jordan stated that their focus
has shifted towards the social
component of their ESG program.
A key area of focus for Jordanian
banks' ESG programs is gender
diversity—helping tackle the 'S',
or social, aspect of ESG. A healthy
competition has developed among
many banks to boost female
employment. Several banks

have made significant efforts in female employment and are being spurred to push higher by their competitors. The next step for banks is to increase female employment at the middle- and senior-management level.

The banking sector as a whole is changing to make both its operations more sustainable and its financing more directed towards sustainability-related projects. The findings of our CEO Outlook reflect that business leaders in Jordan are looking to devote significant capital to becoming more sustainable, with 56% planning to invest more than 10% of their revenues towards their efforts of becoming more sustainable. Banks will play a critical role in the financing of such ambitions, while banks have also formulated wide-ranging commitments to renewable energy usage within their organization.1

Pressure for change

Pressure from regulators, investors and the public for greater adoption of ESG is on the rise. Prudential and conduct risks are on the rise — both in terms of the direct risks (i.e., the physical impact of climate change on assets) and the transition risks (i.e., the challenges inherent in a wholesale move towards a low-carbon economy).

Governments will prioritize the effectiveness of ESG-related regulations in reaching climate change goals over the difficulties faced by banks. Jordan has launched a 10-year national energy sector strategy to improve its energy mix and reduce carbon emissions by 10% in 2030.² Banks play an important role in supporting the global transition to greener, low carbon and resilient industries.

Investors are ramping up pressure on banks to promote ESG but want to ensure they can continue to earn a return on their investment. Those two goals are achievable together. An analysis by S&P Global of 26 large ESG exchange-traded funds and mutual funds showed that 19 of those funds performed better than the S&P 500 from March 2020 – March 2021. Those outperformers rose



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between 27.3% and 55% over that period. In comparison, the S&P 500 increased 27.1%.³ Stock exchanges' focus on sustainability and ESG disclosures is increasing aligning with investors demands. The Amman Stock Exchange has joined the Sustainable Stock Exchange Initiative and has voluntarily committed to promote the integration of sustainability. The stock exchange has published a voluntary guidance on sustainability reporting for its listed issuers.

At the same time, banks are also starting to feel pressure from their customers and from the public at large. Customers want to bank with a firm that reflects their views and beliefs; younger people, in particular Generation Z, are said to be choosing their bank based on their ESG credentials.

Measuring ESG

Traditionally, investors have used companies' annual reports to judge their ESG agendas. Having few reliable reporting or rating

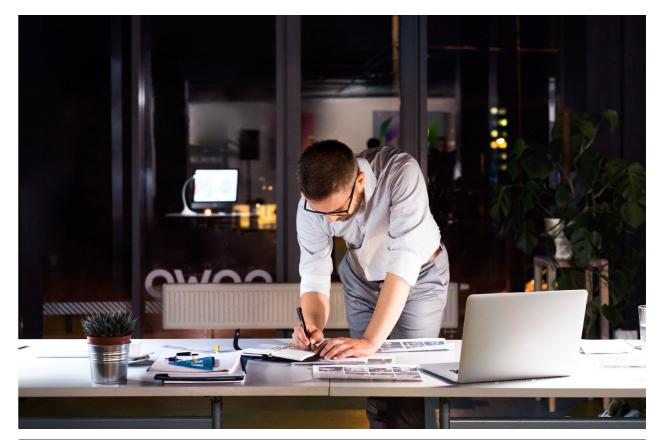
mechanisms for ESG programs, there has been little incentive for companies to be overly forthright about the impact – or lack thereof – of their ESG programs.

The introduction of ESG ratings systems and stock indexes of companies with leading sustainability programs have changed the ESG investment paradigm. ESG ratings support investors gain a broader view of a company's ability to manage current and future ESG risks and opportunities, and guides them in their decision making process.

In the ratings field, Morningstar's Sustainalytics is driving innovation through its 'ESG Risk ratings,' which takes a quantitative approach to gauging a company's effort allocated to ESG initiatives. Dow Jones, MSCI, and other rating agencies have introduced sustainability indexes, which have boosted appeal for the stocks of companies with strong ESG programs.

Several banks in Jordan use Global Reporting Initiative (GRI) standards to report their ESG activities. The GRI standards represent the global best practice for reporting publicly on a range of economic, environmental, and social impacts. Sustainability reporting based on the standards provides information about an organization's positive or negative contributions to sustainable development.

There is some variation in the rigor reporting using GRI standards used by banks-the 'core' option being less rigorous than the 'comprehensive' option. Jordanian banks are increasingly using the comprehensive option, which places pressure on core option users to join them, thus enhancing the overall ESG reporting environment in the country. Although several banks have issued sustainability reports, they are currently not assessed by international rating agencies.



¹ https://www.arabbank.com/docs/default-source/sustainability-reports/susreport2020en

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https://www.worldbank.org/en/news/feature/2022/05/24/countries-on-the-cusp-of-carbon-markets

³ https://www.spglobal.com/marketintelligence/en/news-insights/latest-news-headlines/esg-funds-beat-out-s-p-500-in-1st-year-of-covid-19-how-1-fund-shot-to-the-top-63224550



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Embedding an ESG strategy

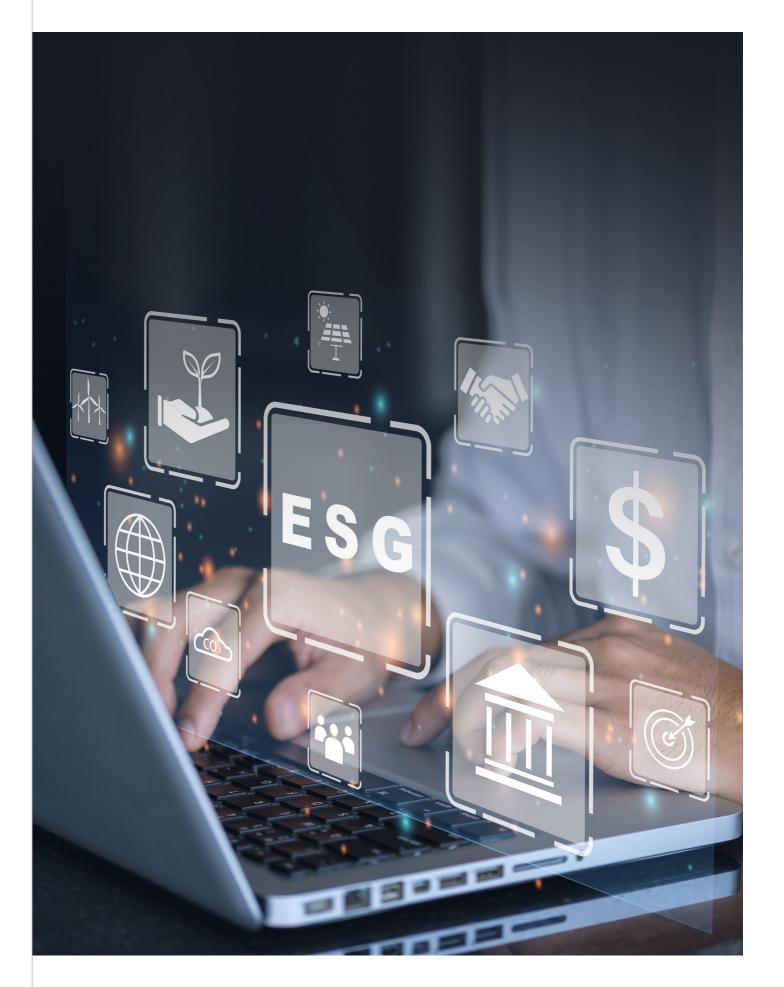
So, what could banks be doing to embed ESG into their strategy? KPMG member firms' work with banks and other organizations across the financial services ecosystem suggest there are four key actions that bank executives should be addressing today.

- 1) Understand your current baseline. More than simply quantifying the financial risks and probabilities, banks should create an understanding of common ESG expectations of key stakeholders and build awareness of leading ESG practices, in particular amongst senior management and board members. This includes taking time to understand their current practices and exposures, including whether they have the right data, the right capabilities and the right processes to monitor and manage ESG appropriately going forward.
- 2) Explore ESG global trends.
 Looking towards international and regional peers and their performance provides an overview for the banks position and enables them to identify enhancement opportunities.
 This should not be limited to ESG disclosures, but includes products such as green bonds, sustainable bonds and green loans

- 3) Know what's expected. While regulatory and supervisory authorities are exploring approaches as to how they might provide specific targets or expectations, bank executives should be talking to their regulatory authorities to understand what is expected of them and how those expectations may change over the short to medium-term. They should also be working proactively with their regulators and authorities to seek out facts. develop standards and identify solutions.
- 4) Put it on your risk radar. For many banks, ESG factors remain a reputational risk. But they need to be more than that. Bank executives (and particularly boards) should be ensuring that ESG risks are a lens through which all decisions are made, especially in relation to credit and valuation risks in their portfolios, reflecting the strategic nature of these risks. Develop a strategy. ESG risks cannot be managed off the side of a desk. It requires banks to develop a robust strategy that is integrated into the overall business strategy for the organization. While the strategy must retain a level of flexibility, it must also be actionable and measurable.



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The future of assurance



New realities emerging from economic upheaval have changed the role independent auditors play in the economic recovery. The pace and importance of technology adoption in the audit process has increased which will permanently alter auditing, even after the pandemic.

From physical to virtual audits

Globally, pandemic lockdowns quickly prevented auditors from performing on-site visits—a crucial aspect of the audit process. On-site visits, during which auditors interview management and those charged with governance, observe processes and count inventories (in the case of a bank, cash), give auditors a qualitative understanding of a bank's operations. It also gives them a chance to understand an organization's culture and assess the reasonableness of representations being made.

When on-site visits were replaced by virtual audits, the personal element of the process was diminished, which required clients and auditors to adapt to maintain the ongoing audits and start new ones with minimal disruptions. Virtual audits don't simply entail video and teleconferencing; they require clear documented evidence; otherwise an audit is not an audit, it's a conversation.

Prior to Covid-19, the winds were already changing. Accountants

had already been experimenting with new technologies and working with big data to perform higher quality and more efficient and focused audits. KPMG became an early adopter and has been embedding digital innovation into its audits through such things as data and analytics (D&A), advanced technology enabled risk assessment tools and rules-based anomaly detection for more than a decade.

High uncertainty and lower predictive value of historical information

Economic uncertainty and a changing risk profile have required auditors to approach their work with a greater degree of professional skepticism and challenge. While banking business models are largely intact, many of their customers are going through transformation. The complex risk models used by banks to assess these business models rely heavily on historical trends along with scenario analysis of future events.

Accounting judgements or estimates that rely on forecasts or

planned future activities are much harder to assess as the historical track record is no longer the yardstick of what the future might hold. Auditors need to dig deeper into new data and ask tougher questions of their clients. This has widened the understanding gap as to what is expected of assurance providers.

The main accounting impacts of Covid-19 are related to the general uncertainty over what the future holds for companies. For banks, expected credit loss (ECL) estimates have come under scrutiny from regulators and auditors because of their importance in ensuring banks are adequately capitalized for future pandemic-related defaults.

Reliance on specialists

Demand for IT auditors and specialist supporting auditors in financial risk management, valuations and cash flow analysis has increased, resulting in a significant change in the required talent profile. The mix of team members now requires more code writers, data scientists and IT security specialists as part of core audit team. While this means additional costs at a time when many clients' ability to pay normal audit fees has decreased, this has great promise of transforming the audit profession to take it to new heights.

KPMG Clara

In recent years, technology has been reshaping the audit to make it more efficient and more relevant—allowing for betterinformed business and investment decisions. In particular D&A is defining the future of audit. With D&A, audits become more aligned with business agendas, more real time and more precise; it also brings exciting opportunities for benchmarking.

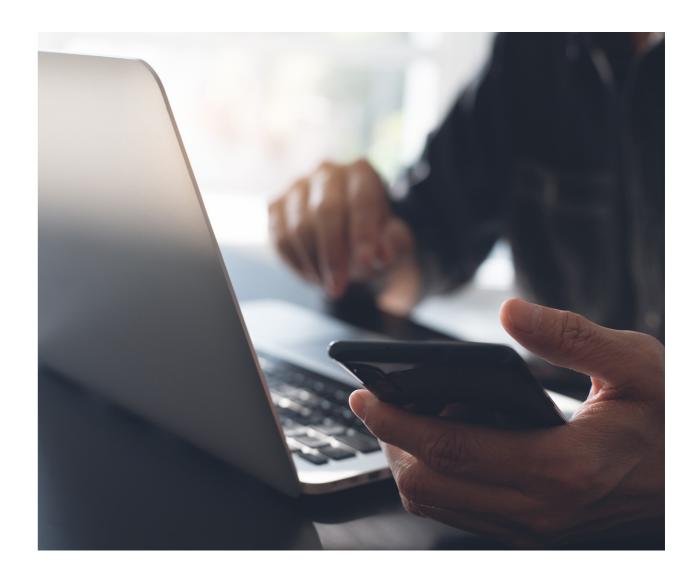
For banks, vast new regulation demands robust financial assurance processes and massive amounts of data across a wide range of operational areas. The new standards for bank data quantity and quality require a model of assurance that is moving from 90%-95% confidence levels to something much higher, these capabilities can analyze a full population, rather than applying sampling techniques. By developing algorithms that use statistical sciences that are similar to sampling today, but consider other data points as well, KPMG's analytical procedures are more robust.

Clara, KPMG's smart audit platform, uses powerful D&A tools which are integrated into a secure and encrypted web-based platform. KPMG Clara is a digital connection to KPMG firms, providing one coherent, interconnected ecosystem. It's a collaborative and interactive environment in which two-way and interactive communication between clients and the audit team is hugely enhanced. Importantly, KPMG Clara allows for real-time access to information, insights and alerts from the auditing team, decreasing the chance that issues become events.

KPMG Clara provides clear, understandable visualizations of unusual activity in a banks' financial data. By focusing more on the exceptions and outliers for a business, Clara enables more focused conversations about risks and what they mean for the audit and a business.

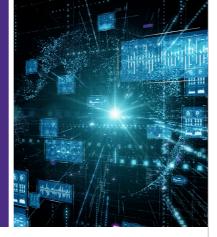


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For banks, vast new regulation demands robust financial assurance processes and massive amounts of data across a wide range of operational areas.

Future of banking demands digital leadership



Digitalization can either take an industry by storm or take it for a ride. In the former case, digital practices quickly become the norm, and the industry melds into a mix of early adopters as well as disrupters. In the latter, the industry is supplanted by competitors with digital business models that replace, rather than transform, the market.

Broadly, the banking sector has been quick to adopt digitalization – it has, in a sense, been taken by storm. Stable and well-capitalized – unlike many industrial sectors – the banking sector steadily introduced digital products to its customers and digitalized its own processes. However, with fintech companies taking up a growing share of the banking pie, banks are realizing that their digital progress may not be quick enough.

Stepping up to the plate

The Covid-19 pandemic has been an accelerant for this mindset shift around speed and urgency as organizations work to achieve timely, efficient recoveries. There simply is not time for business as usual. Extraordinary situations require extraordinary people with extraordinary ideas – digital transformation is no different.

The emergence of flatter organizational structures in the new working reality require virtually every employee, regardless of hierarchy within the organization and across the front, middle and back offices. to function as digital leaders. The role is no longer reserved just for the CTO or CIO. However, the true mavericks-whose unconventional mindsets remain untouched by the attritional antivalue of conformity—still seem to be found at the lower levels of most organizations, and that's a really important facet of the new digital determinism. It's not just about emphasizing what leaders are accountable for, it's about what leaders actually need to be capable of.



The profile of a digital leader is increasingly skewing toward a worldview that, like the new business environment, is relatively unstructured and less predictable. We are seeing the unrelenting rise—and more importantly the mass adoption—of a digital maverickism.

Four main drivers are motivating corporate leaders to embrace the digital maverick philosophy in an effort to ensure their organizations don't get left behind in the digital age:



Complexity

Thinking far bigger about how to architect and build digital



Culture

Pushing boundaries and forcing people and teams to transcend



Connection

Crushing needless structures and engendering purpose



Customer

Customer obsession across the value chair

Attracting talent

Unlike in other sectors, the banking sector has a large amount of digitally-minded talent contained within the broader industry. Banks often draw from the same talent pool as fintechs. In industrial sectors this is often not the case – talent interested in digitalization often shun industry for sectors that are adopting digitalization at a faster pace.

Banks, along with many other corporates, have started adopting workplaces they see as attractive to young, digitally-minded talent. Gone are cubicles; in are open offices, free food, and wellness seminars. With remote work a defining feature of the new reality, no longer can they use office perks as a way to attract tomorrow's digital leaders. Banks instead must change the nature of their work and operations to attract talent.



Evolving skillset

Against this inevitable digital backdrop, a new leadership model is emerging that pivots away from the traditional qualities of corporate leadership. Old economy skills of management and supervision are indeed being replaced with new technologies that are augmented alongside humans with the skills and empowerment to make the new models work.

Of course, traits such as integrity, vision, commitment, and passion remain important, but the profile of a digital leader is increasingly skewing toward a worldview that, like the new business environment, is relatively unstructured and less predictable. Indeed, we are seeing the unrelenting rise—and more importantly the mass adoption—of a digital maverickism.

Changing of the guard

As leaders plan their banks' digital futures, they need to recognize the evolving nature of customer needs and expectations around speed, efficiency and personalization that will shape the future of commerce. Looking internally, digital leaders need to also recognize the changing needs and desires of their employees – especially the defining characteristics of digital talent.

Organizations should develop strategies that examine

the evolving needs of the individual—behaviors, motivation, perceptions, attributes, attitudes, etc.—as well as consider the massive societal, geopolitical, economic, legal/regulatory, and environmental changes the world is experiencing.

The digital maverick mindset—multimodal thinking

Intellectually and practically, digital mavericks have a unique capacity for interoperating in a multimodal fashion. As leaders, this makes them inherently agile and highly adept at designing and building solutions to complex problems—if placed in a conducive environment.

A practical framework defines four distinct, interconnected modes of thinking:

Mode 1: From strategy to solution
This mode is about recognizing
that digital is about doing. There's
a place for big thinking, of course,
but true value is found within
the deeper "solutioning" work.
This is an exercise in ensuring
all the new moving parts fit
together at a pace and scale never
previously achieved. It's also about
establishing a digital strategy,
getting inside and understanding
that strategy, and ensuring it is

Mode 2: From production to purpose Here, digital leaders must think about generating positive,

incremental and flexible.

sustainable and repeatable outputs and that means inspiring everyone to think and act digitally. This mode is about defining and exhibiting different activities across the entire enterprise. The focus is on product development and ideas that ultimately become business lines or enable improved business efficiency in existing business lines.

Mode 3: From champion to spark
Tomorrow's digital leaders must
assume the role of evangelist,
motivating and inspiring the
organization as a whole, at every
level, to move from awareness
to action. The champion works to
help people understand their roles,
the company's technology stack,
and the operating model that will
move the organization's digital
transformation journey forward.

Mode 4: From marshal to ethicist
While digital mavericks may
have disdain for governance as
a relic of old-guard corporate
thinking, they must acknowledge
the importance of the ethical
ramifications and inherent risks
in everything the organization
does from a digital perspective.
This realization enables them
to collect and organize different
perspectives and then determine
how to most effectively secure
the relevant resources to keep the
transformation on track.



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Fintech makes its mark



Prior to the Covid-19 pandemic, the 2020s were already being billed as the decade for digital bank transformation. Financial institutions had been investing big to deliver innovation including seamless, hyper-personalized user experiences. Alongside, or pushing, this transformation have been fintech companies, which have been building their own, new markets as well as eating away at some of the traditional banking sector's market share.

The challenges and disruption caused by the pandemic and changes in consumer behavior has accelerated this focus on digital transformation and has been a boon for fintechs. With both banks and fintechs emerging from the pandemic stronger than before, and regulators more poised than ever to promote digital banking, expect to see a flurry of activity both in markets where fintech is established and where it is nascent.

Collaborators or competitors?

Collaboration between banks and fintechs is natural. Banks turn to nimbler, more focused fintech service providers to support them with their digital transformation activities, and fintechs look to banks to help integrate them into the financial system.

In Jordan, Arab Bank provides a good example of collaboration with the fintech ecosystem. The bank has two initiatives, AB iHub and AB Accelerator, focused on fintech collaboration. AB iHub

builds rapid prototypes and uses fintech ecosystem collaborations and bootcamps to work directly with fintechs and individuals in the ecosystem. The AB Accelerator program focuses on the adoption of emerging fintech technologies into Arab Bank's infrastructure and network. The program conducts proofs-of-concept with startups to validate their product-market fit within Arab Bank's environment and it invests in fintech startups strategically aligned to the bank.⁴

A key difference between fintechs and banks is where they are able to compete. Most fintechs refrain from seeking banking licenses to avoid compliance costs, so they cannot compete in many of the spaces where banks can. However, fintechs seek out profitable businesses of banks where a license is not needed, such as in peer-to-peer transactions. In these areas, fintechs are often much more customer-focused and have vigorous growth models, and are competing well with banks.

Investment landscape
Though mandated loc

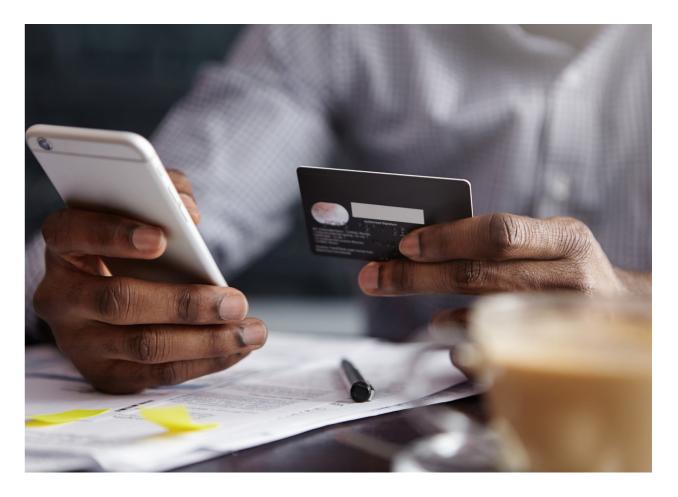
Though mandated lockdowns will soon be relegated to the history books, the 'new normal' is here to stay. As a result, organizations have been accelerating investments in digital channels and related enablers in order to meet customer needs. This acceleration will drive fintech investment from corporates in customer-orientated digital technologies and in the backoffice space as a means to improve operations and better manage costs.

Fintech investors have been focused on big bets and safer deals recently, making it difficult for smaller fintechs, even those with good business models, to raise funding. Some of them won't have the liquidity they need to make it through the current crisis. Emerging from the pandemic there is likely to be more consolidation and more opportunistic investments.



With both banks and fintechs emerging from the pandemic stronger than before, and regulators more poised than ever to promote digital banking, expect to see a flurry of activity both in markets where fintech is established and where it is nascent.





MENA and Jordan

Fintech startups in the MENA region raised over US\$1 billion in 2020, a record for the industry. Looking at transaction figures, the MENA region was the world's fastest growing fintech market last year, growing 40% according to the World Bank. Jordan's fintech market is sizeable in relation to its population—despite representing less than 2% of the MENA population, estimates put Jordan's share of the MENA fintech pie at around 7%.5

While, like much of the industry, growth has been largely driven by entrepreneurs and private capital, the Jordanian fintech market also has public support. The ISSF (Innovative Startup & SMEs Fund) launched a US\$100 million fund focused in part on the fintech industry. Such initiatives help build the startup ecosystem and spur investment from the private sector. A case in point was last year's US\$400 thousand joint

fundraising between the ISSF and Jordan Ahli Bank in technology startup Whyise.

Jordan's fintech regulatory sandbox, organized by CBJ, has proved an effective tool in other markets for developing a fintech industry alongside a dynamic regulatory system. The sandbox acts as an incubator for entrepreneurs in the fintech, encouraging competition while without jeopardizing the integrity and stability of the financial system, keeping data of financial consumers protected.

The development of the Jordanian fintech market tracks the development of more advanced markets. Right now, payments and remittances are the most important sub-sectors of the fintech market in Jordan. Those sectors follow growth in the e-commerce sector, as the two are complimentary.



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⁵ https://www.abaccelerator.co/the-rise-of-fintech-in-mena/



Evolving role of regulators



Global authorities enacted extraordinary measures to mitigate the economic impact of the Covid-19 pandemic. The Central Bank of Jordan (CBJ) launched a vast program to stabilize the economy, parts of which have been extended as the pandemic wears on. Social distancing forced authorities to change e-payments regulations, which has solidified the sector's place in the Jordanian economy.

Economic support program

The immediate government response to mitigate the impact of the pandemic on the economy was sizable in Jordan and amounting to around 2.5% of GDP in 2020. CBJ played a large role in this response, enacting a range of short- and medium-term plans. CBJ injected US\$2.1 billion to increase liquidity in the banking system and lowered the lending rate by 1.5%. Additionally, it introduced a US\$706 million loan guarantee program to help SMEs resume their operations and pay operational costs. CBJ also raised credit ceilings for the tourism sector and encouraged banks to reschedule and defer loans for those affected by the

Extension of support programs

Authorities are extending some of the economic measures as the pandemic wears on. The extensions are related to tax deferrals, reduced fees on government services and social assistance programs and business financing schemes.

In March 2021, reflecting the success of the program and continued need of Jordanian SMEs, the CBJ decided to increase the SME loan guarantee program to US\$988 million. It also extended the loan terms for one year and increased the ceiling of loans granted to some sectors to US\$5.6 million (up from US\$4.23 million).

Later, in April 2021, Jordanian authorities announced a new stimulus package worth around US\$630 million aimed at supporting struggling sectors of the economy, boosting social protection programs, protecting existing jobs in the private sector, stimulating employment and mitigating the pandemic's impacts on the public transport sector and investment activities in development zones. Additionally, the measures aim to ease the public funds collection burden on individuals and businesses and to defer installments owed to public credit funds until the end of the year.

External support

Multilateral institutions have been vital to allowing countries to implement economic recovery packages despite domestic fiscal constraints. The IMF's extended fund facility (EFF) has been one of the primary tools to facilitate aid, including for Jordan. In June 2021, the IMF completed the second review of Jordan's program supported by the EFF and made an additional US\$200 million available. This brings total IMF disbursements to Jordan since the start of 2020 to around US\$900 million.

Given the economic toll inflicted by the pandemic, the IMF has relaxed the fiscal targets that are tied to its aid. Flexible fiscal targets granted for 2020 have been extended into 2021 to accommodate higher-thanexpected COVID related spending up to 0.5% of GDP. The program can accommodate higher social protection spending if Jordan can secure additional budgetary grants. To help Jordan meet its large financing needs in the wake of the pandemic, some of the IMF's planned disbursement under the EFF has been frontloaded to 2021-22.6

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CBJ promotes e-payment usage through expanding the number of payment types possible through e-wallets, including salary transfers and payments from the National Aid Fund.

E-payments spurred by pandemic necessity

Prior to the pandemic, public and private sector participants had long been building and promoting an electronic payments system in Jordan. Catalyzed by social distancing and the mitigation of contact between individuals, CBJ rolled out new regulations aimed at streamlining previously cumbersome processes.



Previously, mobile money and e-payment operators required customers to present their national ID cards for in-person verification, after which payment service providers copied IDs and sent off documentation to complete the verification process. More broadly, uptake of e-payment systems was largely only among younger, more internet-savvy individuals and was far from the critical mass necessary for a healthy system.

When lockdowns began being enforced, CBJ resultingly passed a raft of new measures aimed at making e-wallets easier to open and use. Starting in March 2020, CBJ began allowing customers to open e-wallets remotely using a PSP app on which they could scan their IDs for verification. Additionally, limits on the type and value of transaction that could be made using an

e-wallet were lifted and interchange fees on transactions were reduced. After the end of the first lockdown, CBJ chose to make these regulation changes permanent. To further promote the e-payments sector, CBJ launched a challenge fund for PSPs, which intends to increase adoption of digital payments at merchants.

The CBJ also promoted e-payment usage through expanding the number of payment types possible through e-wallets. The regulator began encouraging employers to begin making salary payments through e-wallets and, in cooperation with the Jordan Payments and Clearing Company (JoPACC), began allowing transfer payments from the National Aid Fund (NAF), which serves almost 10% of the population, to be completed electronically.



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⁶ https://www.imf.org/en/Countries/JOR/FAQ#Q5

Mitigating risk



Banking risk management has been significantly altered by the pandemic. Similar to the changing nature of the coronavirus, the risk profile evolved as consumer behavior and the economy changed. Several practices, like business continuity planning; governance, risk and compliance technologies; and technology risk management have become crucial to banking internal controls.

Business continuity management

The pandemic laid bare the need for banks to practice sound—but flexible - business continuity planning (BCP). Flexibility proved key—there are notable differences between traditional business continuity planning and pandemic planning. In particular, many banks' BCPs were not prepared for the duration of the shock to their business model brought on by the pandemic. Insuring continuity of functions such as deposit and lending services, ATMs and payment and settlement services only covered a bank for the initial shock. The lasting effects of the lockdown forced banks to enact continuity plans for more complex functions like counterparty exposure management, financial market operations and workforce management.

In addition to flexibility, a key metric for business continuity success is a bank's level of crossfunctionality in its operations. Particularly, banks that used risk mitigation practices that broke silos within its operations proved the most resilient. Prepandemic silo breaking allowed for greater communication between departments as the crisis ramped up.

GRC technologies

As banks re-evaluate their internal control models to new risks, many are finding their models would benefit from greater cross-functionality and the implementation of governance, risk and compliance (GRC) technologies.



As banks re-evaluate their internal control models to new risks, many are finding their models would benefit from greater cross-functionality and the implementation of governance, risk and compliance (GRC) technologies.

GRC technology-enabled products and services integrate, facilitate, streamline and maximize the efficiency and value of an organization's GRC strategy. Specifically, they provide configurable controls monitoring, access controls/segregation of duties (SOD) analysis, automation of access authorization, periodic attestation of system privileges and transaction analysis.

However, without proper planning, companies may not be using GRC technologies to their full potential. Tools designed to monitor and analyze GRC processes can become nothing more than a repository for documents, failing to support the comprehensive GRC program the company intended. Meanwhile, tools are often implemented in silos and a lack of process leads to conflicting opinions and efforts between business units.

With hindsight of the banking sector's internal controls

failures during the pandemic, banks would be best served by diagnosing their organization's unique issues and building custom roadmaps as they reform their defense systems and implement new technologies.

GRC deliverables and accelerators:

- GRC program implementation roadmap: A clear path for the future is critical to the timely and transparent execution of program activities.
- GRC data rationalization and data migration: Data rationalization and cleaning, as well as a data migration strategy, enable a consistent and repeatable process for the onboarding of all data.
- Testing strategy and evaluation criteria: This includes prioritization of requirements, use cases and fit-gap analysis to provide a link between the business requirements and business process design.

- Deployment and post-production support plan: A successful implementation does not stop after go-live. A proactive approach to post-production support accelerates adoption of the solution and resolution of implementation issues.
- People and change: An effective communication, training, and implementation adoption monitoring ensures that the organization gets the full benefit of the investment.

Technology risk management

The dual forces of the pandemic and technological advancement brought new risks to banks. Remote work exposed organizations to cybersecurity risks which were exploited by cybercriminals. In 2019 and 2020, intrusions threatening organizations grew 400% globally, according to CrowdStrike. That figure, in part, explains technology risk. New technologies—such as those allowing remote workcreate vulnerabilities, especially soon after their implementation before governance is perfected. The remote work/cyber risk

paradigm extends to other technologies, such as those facilitating digitalization in the banking sector.

Banks need to make sure technology risks are managed. Emerging technologies related to banking digitalization and fintech have increased the focus on technology risk management.

In addition to digitalization technology risk, IT risks such as security, outsourcing and disaster recovery are now at the forefront of risk management functions.

C-suite executives are demanding that their information technology departments provide better insight on IT processes and controls, as well as greater anticipation and management of risks.

Artificial intelligence, cognitive computing, internet of things (IoT) and robotics are the top four technologies that will drive business transformation in the coming years. Future technology risk professionals will have to decipher the risks of new emerging technology and develop an agile technology risk framework with enough flexibility

to respond to new risks. Some companies are taking steps to follow through on this objective. For example, we see clients using data analytics, continuous auditing and monitoring to change the way that they manage technology risk.



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The path towards security beyond compliance

The benifits of strong cyber security are clear, but the path to get there is often fuzzy in large organizations. they will need to:

- Focus on embedding pragmatic remote working security controls to deal with threats, including education of employees.
- Act to secure cloud and other ad-hcc collaboration environments and seek assurance on security controls of managed services providers.
- Review and enhance business continuity management frameworks, covering larger, more frequent and globally simultaneous events
- Test robustness of the banks' cyber resilience and optimize controls while reducing cost of ownership.
- Plan to migrate to a security operating model that enables higher levels of automation.

Transfer pricing introduced



New regulations

On 7 June 2021, Jordan published inaugural transfer pricing regulations, which were followed by their implementation guidelines in September 2021. The transfer pricing regulations require multinational enterprises operating in Jordan to transact with cross-border related parties in accordance with the arm's length principle. This means that these multinationals need to deal with a related party as if they are dealing with an unrelated/third party.

For banks and entities operating in the financial services industry, this has the following implications. In case you are operating through a branch in Jordan with head office outside Jordan, or with subsidiaries group entities under common control in or outside Jordan, then you will be subject to transfer pricing reporting obligations in relation to cross-border related party transactions.

In practice, this means that four transfer pricing documents must be prepared and filed with Tax authorities in Jordan; a disclosure form and affidavit, a local file, a master file, and country by country reporting including notifications. Assessing the transfer pricing readiness of banks is becoming critical as the

compliance reporting obligations for the financial year of 2021 are in April 2022.

For banks, critical transfer pricing considerations are in two categories of income and expense: interest and non-interest. For the first, it is important to consider the booking of loans under syndication, loan transfers, and sales credit. For the second, this entails the booking of upfront non-interest income, like upfront fees in relation to advisory projects which may include project finance, mergers & acquisitions, equity capital market, and debt capital market.

Change management

The new regulations call for big change management for taxpayers in Jordan. A review of above-mentioned related party transactions shall guide secure good understanding to how these income- and expense components are split/shared amongst the parties related to the concerned multinational enterprises.

This can be initiated through following simplified steps:



Obtain a related party schedule.



Map the transaction type, nature, and economics of the transactions.



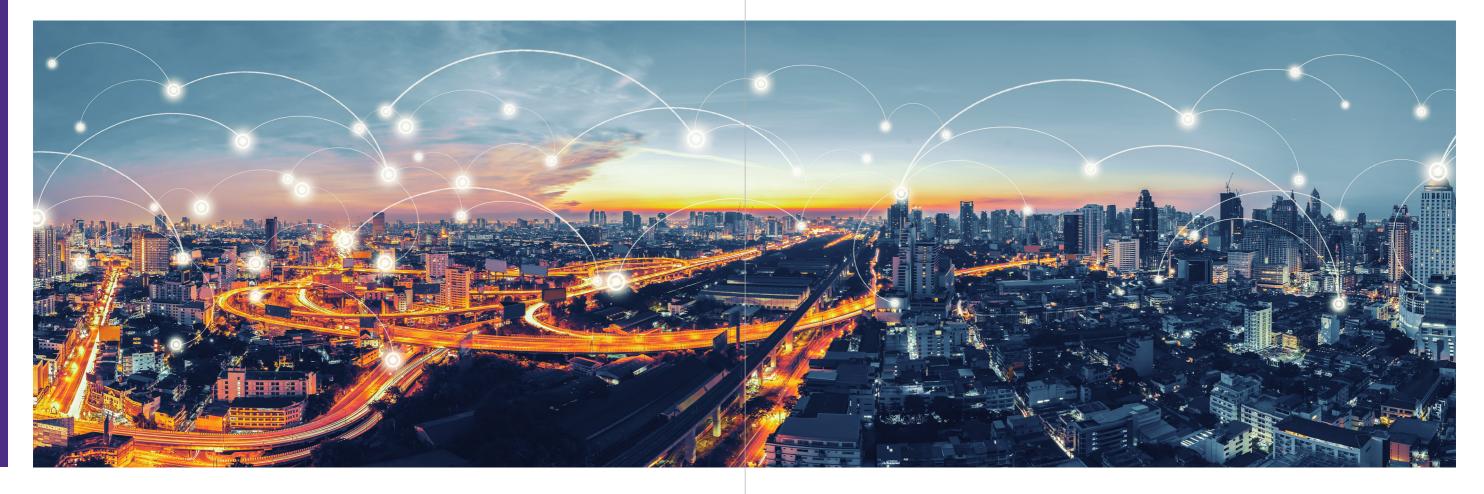
Discuss economics of the transaction with concerned related parties, supplemented by a review of transfer pricing documentation maintained by these related parties (if applicable). It is also important to consider some of the operational aspects like transfer pricing governance, risk management, withholding tax, value added tax (VAT), intercompany billing, settlements, and reconciliations arising by virtue of these related party transactions.

An altogether different scenario can also arise given the introduction of the transfer pricing regulations in Jordan, which may result in the need to establish new framework of policies to ensure related party transactions are carried out in accordance with arm's length principles and the guiding regulations, and setup appropriate transfer pricing governance to actively monitor and risk manage.

To sum-up, Jordan is now fully aligned with transfer pricing international standards and given the inherent complexities of the financial services, it is recommended that businesses start evaluating their current inter-company set-up.



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Impact of Covid-19 on credit



The pandemic presented a test case to Jordanian banks' business continuity management and risk mitigation tools, which were supported by regulatory changes to mitigate the immediate impact of credit risk, the probability of default (PD) and granting policies. Additionally, banks' fair value measurements were affected and business models were revised across the board.

Credit risk

Banks in Jordan should consider qualitative factors when granting payment holidays and before adjusting significant increase in credit risk (SICR). Using qualitative factors and closely examining an individual customer's financial health for a credit risk assessment has been necessitated by the pandemic, which has made such forward-looking analysis tricky due to ongoing economic uncertainty.

During the pandemic, banks approached payment holiday requests on a case-by-case basis. While previously such requests could rely on quantitative comparisons to industry benchmarks, pandemic-induced economic uncertainty necessitated a deeper look at an individual company's cashflow, sales, debt, liquidity and other metrics. Additionally, increased attention has been paid to a customer's industry, as covid-19 had an outsize effect on certain sectors while leaving others relatively unscathed.

Previously, the granting of a payment holiday would trigger an automatic increase in SICR. During

the pandemic the CBJ instructed banks to not consider delayed payments as a reschedule (an SICR flag), meaning that the loans were not reclassified as stage 2. Regulators encouraged banks to develop more nuanced forecasting models that consider an individual company's likely performance during the pandemic.

Such forecasting models are challenging. Incorporating accurate forward-looking information about economic impact of the Covid-19 into the SICR assessment requires a crystal ball and the world's smartest epidemiologists. Most banks don't have either of those at their disposal.

Instead, banks need to consider qualitative factors when adjusting SICR. For example, changes in customer behavior or requests for payment holidays or credit limit increases may indicate SICR or credit impairment. Consideration should be given to tailored payment holiday packages granted as these packages should be granted by the banks after analyzing the customers financial positions.

Probability of default (PD) and granting policies

A similar approach can be taken to avoid arbitrary Covid-19 overlays on probability of default (PD) models. Existing PD models use historical experience to derive links between changes in economic conditions and customer behavior. However, these historical relationships are unlikely to read across to the Covid-19 pandemic. Therefore, adjustments to model results, similar to adjustments made for SICR analyses, could be necessary to reflect the information available at the reporting date appropriately.

Further, such nuanced approaches to appraising a customer's financial health should be applied to granting policies, especially in the current environment of low-interest rates and government-encouraged lending. Jordanian banks injected JOD1,557 billion into the economy during the pandemic and net credit facilities have increased by JOD908 million during the first four months of 2021 to reach JOD29.5 billion.



Consideration should be given to tailored payment holiday packages granted as these packages should be granted by the banks after analyzing the customers financial positions.

Amidst this lending spree—which helped keep the economy afloat during the pandemic—banks revised their policies to take a closer look at corporate clients' financial health, using practices similar to those within their SICR and PD model analyses.

Fair value measurement

During an economic downturn, there may be a significant decrease in the volume or level of activity in the market for a financial instrument compared with its normal market activity. If an entity concludes that the volume or level of activity of an asset or liability has significantly decreased, further analysis of the transactions or quoted prices may be required to conclude that whether quoted prices represent fair value.

Banks should increase the rigor of their analysis to challenge the valuation of Level 3 instruments and the accuracy of risk premiums when based on historical information due to the increased uncertainty resulting from Covid-19.

Uncertainty should imply a risk premium and, in some cases, new

risk premiums can be developed to further assess fair value. For example, industry specific risk premiums are useful during downturns (like the pandemic) that have outsize effects on certain industries. The tourism sector or sectors with an over-reliance on global supply chains could have been earmarked for industry-specific risk premiums.

Key fair value measurement aspects that banks may wish to consider include:

Do some instruments need to move from Level 2 to Level 3? There has been a reduction in quotation for market implied inputs which may lead to vanilla OTC products previously classified as Level 2 to level 3. Some equity derivatives could also need to be reclassified due to an increase in judgement in dividend projections.

Do I need to revise policies or other supporting documentation?
The current crisis may require changes in the existing IPV process, and any valuation methodology changes need to

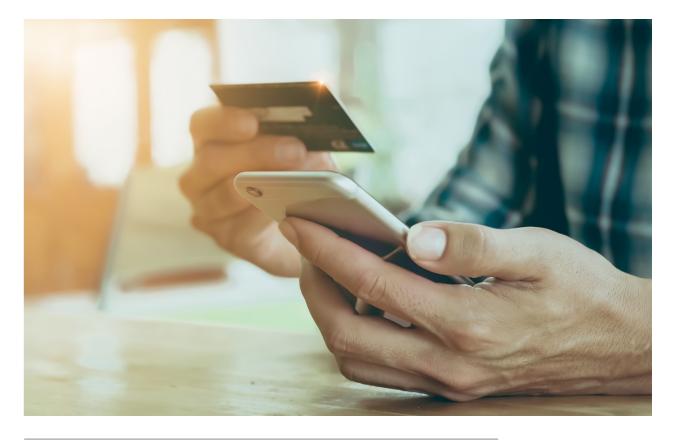
be reflected accordingly. This includes any transition from mark-to-market to mark-to-model approach that will impact levelling of investments.

Have policies around observability been considered in the current context?

Fair Value Hierarchy methodologies based on criteria such as number of market quotes and the dispersion among them would trigger a re-classification in this context due to reduced observability / consistency of market data. In addition, banks may need to consider closely significant intraday movements and decline in price quotations that create additional parameter uncertainty, which may affect the observability of valuation parameters and affect the Fair Value Hierarchy.7

Business model revisions

Banks are currently are straining to meet liquidity requirements, which has led to situations where banks sell or retain certain financial instruments in a manner inconsistent with their adopted business models.



https://home.kpmg/bh/en/home/insights/2020/05/covid-19-implications-on-ifrs-13-fair-value-measurement,



Attention should be given to ensure that entities are complying with IFRS 9 business models. For example, a bank's sale of financial assets at amortized cost might prompt the entity to revise their business model for this class of financial assets, resulting in:

- Further selling of financial assets at amortized cost
- Frequent or material selling of financial assets at fair value for other comprehensive income
- Retaining financial assets classified at fair value through profit or losses for long period of time
- Having potential or actual restrictions permitted or placed on financial instruments

That said, Jordanian banks have maintained high capital buffers and are well-above their liquidity targets:

- Average capital adequacy ratio (CAR) was 18.3% as of December 2020 — sufficiently higher than the minimum requirement in Jordan (12%) and Basel's minimum ratio of 10.5%
- Average liquidity coverage ratio (LCR) was 136.5% at the end of 2020 which is higher than the minimum requirement in Jordan (100%)

Expected credit losses

Under IFRS 9 Financial Instruments, expected credit losses (ECL) are based on reasonable and supportable information that is available without undue cost or effort at the reporting date. This includes information about borrower-specific attributes, past events, current conditions and forecasts of future economic conditions.

Models, by their nature, are expected to be relatively stable and work on the law of large numbers, distribution tails, and calibrations to central tendencies. Most banks would not have developed models that would autocalibrate to changes in the macroeconomic factors, systemic loan payment holidays, loan forbearances, and extreme volatility in financial markets. This therefore renders the following questions: Are risk models still reliable? What actions should be taken given their widespread usage in risk



management, pricing, financial reporting, and business decision-making?

Model validation involves the processes and activities that verify models are performing as intended, and is a core element of model risk management (MRM). For instance, the Basel Committee's minimum standards for internal ratings-based (IRB) institutions require a regular cycle of model validation "that includes monitoring of model performance and stability; review of model relationships; and testing of model outputs against outcomes."

Recent supervisory activities and regulatory guidance indicate that third party model validation is increasingly becoming an area of concern to European supervisors and other regional regulators, requiring banks to comply with heightened expectations. Banks needs to ensure they have adequate in-house knowledge, and to remember that they remain responsible for all activities related to their internal models, including overseeing all risks and managing the outsourcing arrangements. This driven as Banks often have insufficient in-house capabilities to internally manage model validation activities mainly due

to a lack of skilled resources and inadequate IT infrastructure. Therefore, financial institutions may choose to involve a third- party service provider to perform model validation tasks, enabling them to focus on their core business and giving them access to tools and services that are not available in-house. However, it's vital that those third parties validating banks' models understand the related model risks and have the resources, expertise and independence to perform thorough assessments.

In order to maintain sufficient in-house understanding of validation, regulators like the ECB recommend that banks should:

- Understand major model assumptions and risk estimation processes
- Retain access to information provided by borrowers
- Compare any external data used in the validation process with their own
- Understand what definitions of default are being used
- Retain access to all the data needed to perform independent validations
- Establish a change policy covering models developed by third parties; and
- Agree the triggers for, and the processes of, model change with service providers.

In addition, they re-emphasized the responsibility of management bodies for all of their institutions' activities, and reminds banks that they must ensure sufficient resources are in place to oversee all risks and outsourced activities.



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Cyber in the front and center



In line with the acceleration of digitalization and remote work, the prevalence of cybercrime has increased during the Covid-19 pandemic. For banks, the threat is pronounced and growing. Luckily, the banking sector has broadly invested in cybersecurity and is better prepared than other sectors for new threats posed by cyber perpetrators.

There are several key developments that are shaping cybersecurity investments in the banking sector.

Open banking

Open banking is a practice that provides third-party financial service providers open access to consumer banking, transaction and other financial data from banks and non-bank financial institutions using application programming interfaces (APIs). It also allows for greater financial transparency for customers and uses open source technology to build the ecosystem. At each level, cybersecurity measures and policies will determine the success of open banking.

As stakeholders in Jordan develop their own open banking initiatives, they should recognize the importance of security. All third-party providers have to comply with regulator and bank



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data protection rules, which should be focused on customer privacy protection. The provider must inform the bank and the customer what data it intends to use and how it will use it, as well as how long it will remain within their system.

Cyber in the audit (CitA)

CitA provides a framework and guidance for a structured approach and risk-based decision making for assurance.

Traditionally, auditors have tested their clients' general IT controls (GITCs). However, as risks evolve, so too does the role of the auditor. Just as an IT audit supports a financial audit by testing automated controls, CitA supports the IT audit by testing the cybersecurity measures in place to prevent an attack on an IT system.

the controls are designed to provide an assurance on the IT dependencies that a bank relies upon. It gives insight into a bank's cybersecurity controls and makes plans for, in case of a cyberattack or compromise, what steps need to be taken to respond and recover.

Data privacy

privacy journey because of a regulation or as an initiative, privacy is now firmly a sectorwide priority. Full engagement professionals look to embed privacy into the DNA of business operations and customer engagement.

The emphasis for CitA is a forward-looking approach where

Whether a bank started its across the bank is key as privacy

Banks must chart a plan that not only encompasses the immediate regulatory challenges, but also a plan for increasing consumer expectations of greater individual control of data. In creating a sustainable and effective data protection strategy, companies should develop a solid framework of best practices and infuse those practices—both procedurally and culturally.

While data should be viewed as a valuable asset, it should not be seen as such in and of itself. It is what a bank does with its data that gives it value—like creating better customer experiences and offering customized products. Additionally, businesses that proactively manage and protect personal data

the way users expect will come out ahead of their competition. Banks will have to better understand their data practices and the impact of new regulations on their business strategies and business models. Waiting to the last minute is not a viable option, because the goal is building customer trust and loyalty.

Penetration testing and red

Though better prepared than most sectors, the banking sector still lags behind the cyber threats landscape. Hackers will find opportunities to exploit flaws in the way banks currently fund, manage, enable, organize and implement their information protection capabilities. Thus, it

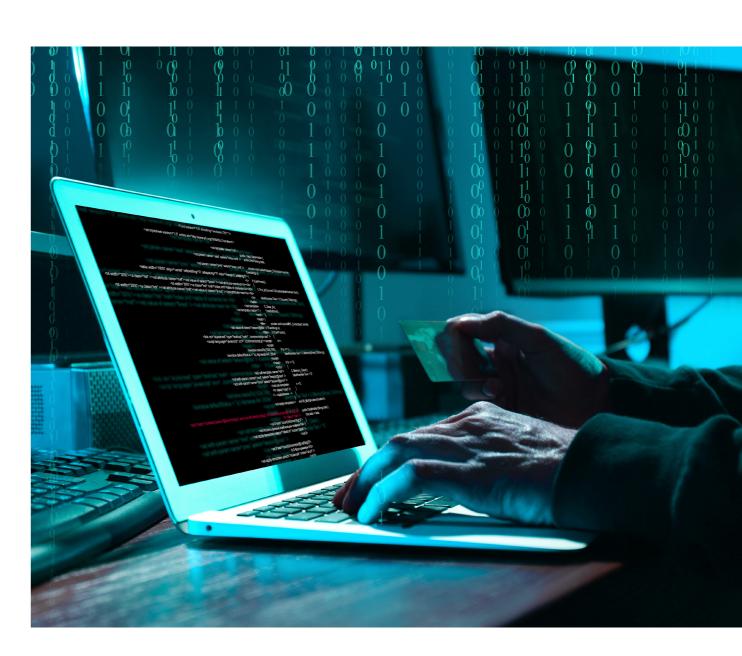
is important to stay ahead of the threat by testing what your defenses are capable of.

Why red teaming

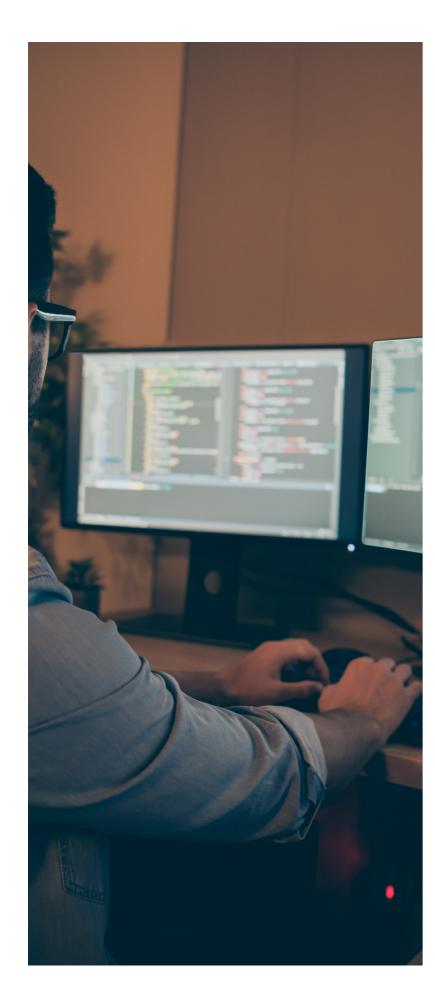
- Your bank has done penetration testing for a few years and you have implemented security monitoring and incident response processes.
- It is time for the next step in your cybersecurity maturity, you want to know how resilient you are against real attacks.

What you need to do

- Simulate real attackers (including phishing and malware).
- Simulate real tactics, techniques and procedures (TTPs)
- Test your incident response and threat management.



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Secure DevOps

DevOps is a philosophy based on combining the traditional roles and responsibilities of development teams and IT operations teams to accelerate the delivery of business value through the two teams. When work flows smoothly through development and IT operations, new software features come to market more frequently and the business becomes more competitive and adaptive in a constantly shifting market.

The central concept of secure DevOps is the integration of security into the development and IT operations teams. By adding security into the original mix, the velocity for security changes increases as well. The likelihood of vulnerabilities being introduced is reduced, and banks are able to more quickly mitigate risks that remain. It is paramount that banks focus on custom implementations for their environment and goals. This includes discussing tangible actions within IT, development and security to enhance the existing culture, processes and technologies in the transition to secure DevOps capabilities. Across the three groups, necessary changes to the cultures of the groups are similar. Because of the vast changes to various processes, the individuals involved must be willing to undertake new programs and processes and different approaches to traditional work. And because of the assortment of new processes and technologies adopted in order to support secure DevOps, it is crucial banks encourage their workforce to share challenges and failures.



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Tax technology



Within the banking sector, digitalization is impacting every facet of a bank's operations, including tax accounting. Banks hold an immense amount of data about their customers – both retail and commercial – and the effective use of tax technology depends on a bank's ability to organize and use that data.

Regulators providing a catalyst for change

Tax administrations around the world are going digital. They are using sophisticated technology tools and platforms that allow them to have full visibility of every step of the supply chain that impact taxation.

Organizations are struggling not only with trying to keep up with global updates but also when attempting to implement the required changes and when trying to create a tax technology strategy that includes e-invoicing and digital reporting. However, banks and other organizations should view tax modernization as a huge opportunity. Vast amounts of new data can be utilized to optimize their operations and the customer experience, and the technology used to gather this data can lead to a more integrated, digitalized operation.

Tax technology

Technology will play a role, but — as with the introduction of any new technology — its effectiveness depends on a bank's capacity to use and manage technologies, both from a people and operating model perspective. Banks need to implement end-to-end operating models for tax before technology introduced. From a governance perspective, it is wise to have a voice at board-level to make sure the needs of the tax team are not ignored when setting up such systems.

Modernizing a bank's tax system often does not mean technology first, but rather the other way around — first modernizing its operating model, then its people, and then the compatible technology. With more changes coming to the tax environment in Jordan, the need for a strong tax operating model to support the management of tax risk is becoming ever more urgent.



Khaled Tuffaha Director, Tax Lead



Technology will play a role, but its effectiveness depends on a bank's capacity to use and manage technologies, both from a people and operating model perspective.

Operational resilience put to the test



Operational resilience has always been an important consideration for banks, as well as for their regulators and supervisors. Usually defined as the ability of an organization to adapt rapidly to changing environments, operational resilience encompasses systems and processes, and is, more generally, the ability of the organization to continue to operate its business when a disruptive event occurs.

To state the obvious, the Covid-19 pandemic has been a disruptive event. It has tested banks' operational resilience and required unprecedented support from regulators. Maintaining such an environment-where operational resilience is jointly held by banks and regulators—will be key moving forward.

Lessons from the pandemic

Jordanian banks proved to be resilient during the Covid-19 crisis. Even so, the pandemic provides valuable lessons for improving the banking sector's operational resilience under pressure. Faced with an increased threat landscape, banks need to accept that it's impractical—and too costly—to prevent all disruption. Instead, their whole organizations should be ready to limit, respond to, recover and learn from a wide variety of events. This means investing in operational resilience.

A bank's operational resilience framework allows it to absorb internal and external shocks, ensuring the continuity of critical operations by protecting key processes and resources

such as systems, data, people and property. To achieve this, an effective framework for operational resilience needs to be:

Enterprise-wide: Moving away from siloed functions to develop an end-to-end view, driven by customer needs and linked to banks' goals

Measurable: Putting operational resilience on the same footing as financial resilience, with specific and quantifiable KPIs, thresholds, stress-tests and reporting

Flexible: Enabling the bank to react appropriately to unknown situations and adapt to changing circumstances, instead of following rigid action plans

Top-down: Integrating operational resilience into overall bank management, starting at the top with adequate attention from senior management

Faced with creating such an operational resilience frameworkand integrating it with existing functions—banks can learn from their experience of strengthening

financial resilience after the crisis of 2008. As well as enhancing financial risk management through monitoring and stresstesting, this involved a structural program to build recovery and resolution planning into day-today management. Institutions can use a similar approach to build the key elements of an effective operational resilience framework:

- Overarching crisis governance including clear roles and responsibilities among senior management, well-defined escalation mechanisms based on measurable indicators, and an effective reporting framework.
- Identifying and prioritizing important business functions, their underlying operational resources and key interconnections and interdependencies.
- Promoting enterprise-wide cooperation and strengthening existing interfaces and communication channels, for example through creating playbooks and performing dry runs.
- Creating recovery and communication strategies to deal with severe disruptions, and performing paper-based and live scenario exercises that put each element—and their interplay—to the test.

Resilience as a business opportunity

In adopting a purposeful and effective operational resilience plan, banks can realize cost savings and can boost their efficiency through effective leveraging of data, data models and systems architecture. Improved operational

resilience often requires convergence, simplification and an end to duplication of regulatory, risk and control frameworks; and rationalizing service and process overlaps. Such gains have the potential to enable headcount rationalization and to unlock a broad range of efficiency savings.

1. Generate synergies across strategic, financial and operational resilience

At the highest level, a firm's overall enterprise resilience can be divided into strategic resilience (the resilience of the firm's strategy and market position), financial resilience and operational resilience. Elevating operational resilience to equal status to strategic and financial resilience should help firms to align their approach to operational resilience with the firm's strategic goals and to anticipate and navigate both the operational and the financial risks that emerge from increasingly complex and inter-connected business models.

2. Enhance customer trust and loyalty

Recovering rapidly to deliver good customer outcomes and retaining customer trust and loyalty in increasingly competitive markets should be a key driver of success for firms. Customer trust and loyalty may be enhanced through the ability of a firm to out-

perform its competitors in terms of both preventing disruptions from occurring and continuing to deliver its key business services as seamlessly as possible when adverse shocks do occur. The alternative is that firms run the risk that the costs of mitigating and redressing disruptive events may be compounded by the potential damage to reputation and customer confidence and a resulting loss of business.

3. Reduce operational risks and the costs of disruption

A greater end-to-end focus on business services, and clearer accountabilities based on such a focus, should enable a firm to reduce its operational risks, reduce both the probability of disruption and the impact of disruptions when they do occur, and thereby drive down regulatory capital requirements and the costs of fines and other regulatory sanctions.

4. Enhance positioning for mergers, acquisitions and moves into new areas of business or new ways of doing business

A clearer understanding and mapping of business services and the people, data, systems and processes on which they depend should enable a firm to undertake mergers and acquisitions more efficiently and

effectively, and enable a firm to move more smoothly into new areas of business or new ways of doing business.

5. Allocate resources more effectively and efficiently

Rebalancing efforts from trying to prevent disruption to focusing more on response and recovery when disruption does occur should enable firms to allocate resources more effectively and efficiently. Basing investment decisions on what is most important to the continuity of key business services, on the results of scenario tests and on whether a service can be recovered within impact tolerance thresholds should reduce costs and contribute to competitive advantage.



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customer trust and loyalty or new ways of operational risks and the costs of disruption

Faced with an increased threat landscape, banks need to accept that it's impractical—and too costly—to prevent all disruption.

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Further reading

Stay tuned for our regular thought leadership on the financial services industry in the region, including publications on banking, insurance, asset management and non-bank financial institutions.

In the spotlight



CEO Outlook Jordan 2021 First edition of annual flagship publication, based on a global survey among business executives

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