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Centre for Regulatory Strategy, Asia Pacific

2021 Asia Pacific Financial Services Regulatory Outlook





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Global Foreword

The world continues to face a formidable common challenge in the Coronavirus Disease (COVID-19) pandemic. Yet the economic implications of the pandemic – along with government and regulatory responses – are increasingly variable between regions. Regulators and firms have naturally prioritised financial and operational resilience, and navigating these critical immediate challenges is no mean feat, particularly amid a continuing degree of regulatory divergence between jurisdictions.

Thus far, regulators have worked closely with financial services (FS) firms to ensure they are a key part of the solution in pandemic responses [Figure 1]. Firms will understandably want to preserve this role. First and foremost, this means fulfilling the industry's primary function: to channel credit and investment to where they are most needed. But FS firms will also need to deliver in three important areas: the increasingly urgent need to progress against sustainability objectives, fostering cultures that deliver good outcomes for customers and society, and making meaningful progress on the imperatives of diversity and inclusion.

These global issues form the context of our *Regulatory Outlook 2021*, which we expand on in this foreword, before turning to our respective regional concerns.

Financial resilience amid a bleak economic outlook

Following sharp drops in Gross Domestic Product (GDP), 2021 will see a return to growth around the world, albeit at variable rates. GDP in the Asia Pacific (AP) region is forecast to grow by as much as 6.9% this year,¹ though the US and parts of Europe will continue

to grow more slowly. Even with this growth, world GDP will nevertheless remain below pre-pandemic forecasts [Figure 2], and the road to recovery remains extremely fragile. Though Jay Powell, Chair of the US Federal Reserve, characterised progress on vaccines as 'good and welcome news', he noted that it remains too soon to assess the implications for economic recovery.² The challenge facing policymakers is bridging the gap until vaccination is further advanced and the recovery can build its own momentum.³ In many countries, interest rates look set to remain low – or go negative – for a further indeterminate period [Figure 3], compounding existing profitability challenges for FS firms.

The market turmoil in early 2020 left central banks with little choice but to respond decisively to restore stability and order to financial markets, but thereafter the defining feature of central bank responses to the pandemic has been the increase in credit provided to the non-financial private sector, and the levels of public sector assets held [Figure 4]. Central bank actions coupled with widespread government fiscal support measures have helped cushion the blow to the real economy and financial markets, albeit raising concerns about elevated (and in some cases unprecedented in peacetime) sovereign debt levels [Figure 5].

Many challenges lie ahead, with significant credit losses appearing inevitable in 2021 as governments unwind their support measures. We expect bank supervisors to take heed of lessons learned the hard way in Europe in the last decade and encourage timely recognition of impairments. We also expect a continued emphasis on the ability and willingness of the insurance industry

to contribute to economic recovery by paying out pandemic-related claims where there are reasonable grounds to do so, with policymakers in jurisdictions including the UK and the US pushing for insurers to pay out COVID-19 related business interruption claims.

The prudential regulatory reforms that followed the Great Financial Crisis (GFC) have undoubtedly helped firms weather the initial storm, and have so far passed their first real test. Stress tests around the world^{4,5,6} suggest that as a whole, the banking sector will be able to withstand very significant pandemic-induced losses. Nevertheless, it is likely that some firms will fail, particularly at the smaller end of the spectrum.⁷ While the insurance sector remains resilient at the aggregate level, the level of uncertainty is high, particularly in relation to pandemic-related claims pay-outs. In certain more severe scenarios, credit and valuation losses, combined with continued unprecedentedly low interest rates, could put some insurers' capital positions under substantial pressure.⁸

When it comes to appraising the effectiveness of the regulatory framework through the pandemic, attention will focus once again on systemic scope and resilience, the perimeter, and any threats posed by the non-bank financial sector to financial or market stability. To this end, as legislators, central bankers and regulators reflect on the resilience of markets to disruption and the effectiveness of their toolkits, more stringent regulation of certain types of investment funds and other non-bank financial institutions is in prospect.⁹

Operational resilience in a post-pandemic digital world

The global financial system may have coped well with the operational disruption caused by the pandemic, but supervisors will not allow firms to rest on their laurels, reiterating the message that the pandemic does not represent the most severe form of operational stress for which firms should prepare. Anticipated acceleration of firms' digitisation and automation activities due to cost pressures and changing customer demands also put operational resilience front and centre. Cloud migration remains a key enabler for digitalisation, but as more firms move to the cloud, long-standing regulatory concerns around the systemic importance of cloud services providers will become more pertinent than ever, necessitating early and proactive engagement with supervisors.

We expect regulatory initiatives on operational resilience to accelerate worldwide at the international and national level in 2021. Cross-border groups that implement a global approach to operational resilience will therefore need to accommodate differences in emphasis – and potentially in substance once embedded in supervisory practices – between national regimes, adding cost and complexity to the process.

Dealing with divergence

Indeed, despite the common strategic and regulatory challenges facing the FS sector worldwide, divergence in the regulatory detail is increasingly the norm. 91% of respondents to a recent Deloitte survey have observed at least some regulatory divergence across global jurisdictions that has affected day-to-day operations. For many firms operating in Asia Pacific, coping with divergence is part of business as usual, but elsewhere there are new divisions for firms to deal with (most notably EU/UK divergence through Brexit).

The pandemic has effectively provided an ongoing stress-test of the regulatory framework developed

since the GFC. Legislators and regulators will inevitably consider the effectiveness of those reforms, alongside their temporary pandemic response measures. There is an opportunity here to avoid divergence through global coordination, but the prospect of this may be slim, particularly given that the rollback of temporary measures will depend on local economic conditions, which will vary regionally.

Looking forward

Looking ahead, FS firms will continue to have to make difficult decisions due to the highly uncertain economic outlook. Yet they will also seek to play their role in the economic recovery. Insurers and investment management firms in particular will want to contribute long-term capital towards supporting small and medium-sized enterprises (SMEs) and infrastructure projects, providing funding to certain illiquid assets that create real long-term value. Banks will also be looking to maintain the flow of credit to the real economy.

In fulfilling these roles, however, we see three crucial areas in which we expect regulators as well as society to scrutinise the performance of FS firms. For FS leaders to continue to be regarded as part of the crisis solution, they will need to demonstrate progress in addressing these challenges.

Supporting sustainability objectives: FS firms have an opportunity to help society tackle climate-related risks in their role as investors, advisers, lenders to the real economy and insurers of catastrophic risks. Authorities will want to enable green finance to help 'build back better' and accelerate the transition to a net zero economy. The taxonomies being established

in jurisdictions such as Canada, the EU, and China will provide a useful starting point to support FS firms investing sustainably. Environmental, social and governance (ESG) disclosure requirements are also becoming more prominent, and increasingly mandatory, though any convergence towards a coherent set of global standards will be slow.

Creating cultures that deliver good customer

outcomes: regulators will pay increasing attention to firms' treatment of customers experiencing financial distress as the effects of the pandemic linger, particularly as support measures are withdrawn. To continue to be regarded as part of the solution, firms will need to be flexible in dealing with their customers, considering the appropriateness of further forbearance and engaging with customers proactively before payment breaks end. The extent to which FS cultures deliver good customer outcomes through the next phase of the pandemic will bear heavily on judgements about how FS firms have performed and behaved throughout.

Diversity and inclusion: diversity and inclusion rose rapidly up the agenda around the world in 2020, prompted in large part by the Black Lives Matter movement. In the US, the Federal Reserve Board has devoted considerable attention to addressing social injustice issues and reducing racial inequalities. In Europe, regulators are reinforcing commitments to diversity and inclusion as a means of improving governance, culture and practical decision-taking in FS. Firms will need to demonstrate to regulators, including through data and management information (MI), their progress towards achieving more diverse and inclusive governance and workplaces.

This, then, is the backdrop for 2021. Economic prospects remain highly uncertain and variable between regions, while significant downside risks remain. For regulators, ensuring the ongoing financial and operational resilience of FS firms so that they continue to meet the needs of their customers and the economy overall will remain paramount. But the industry will also need to prioritise progress on sustainability, culture, diversity and inclusion if it is to play its full role in helping customers and society navigate this unprecedented environment. We cannot understate the magnitude of the tasks facing firms in 2021, but therein lies an opportunity for firms to lay the foundations of their future success.



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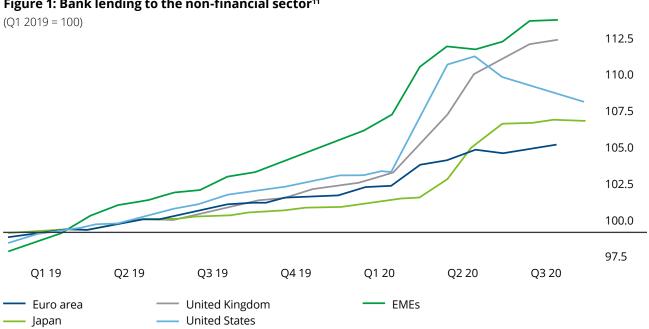


Figure 1: Bank lending to the non-financial sector¹¹

Figure 2: World GDP¹²



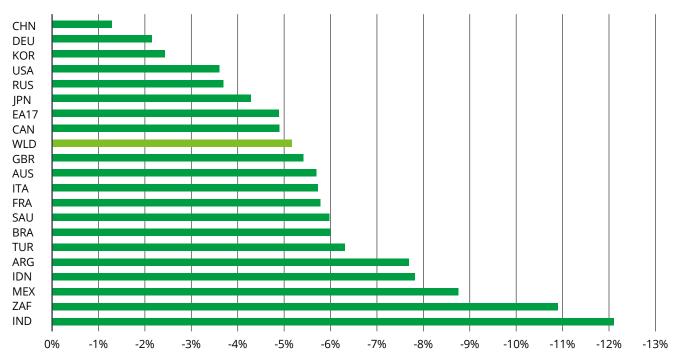


Figure 3: Central bank policy rates - global

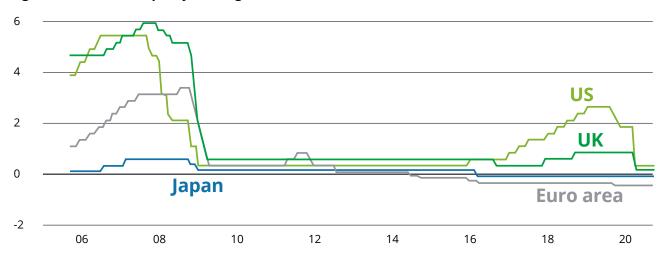


Figure 4: Features of central bank responses to the pandemic¹³

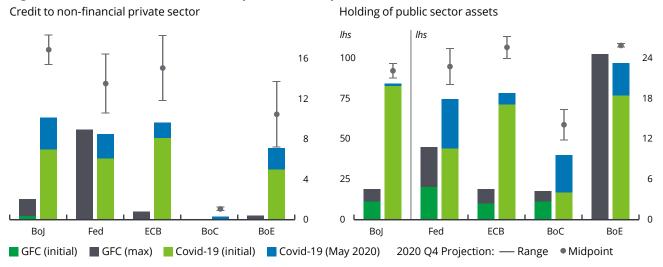
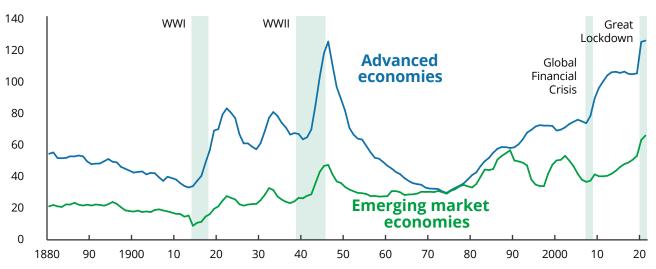


Figure 5: Historical patterns of general global debt



Asia Pacific Foreword

As 2021 opens, Asia Pacific is in a unique position as compared to North America and Europe. While the COVID-19 pandemic has not yet reached its conclusion, ongoing infection and fatality rates appear to be better controlled than their global equivalents and vaccination programmes have commenced in multiple jurisdictions around the region.

However, as impactful as the pandemic was in 2020 and will continue to be in 2021, there are a number of other forces that will shape the business environment for FS firms in AP in the coming year. These include macroeconomic developments (such as low interest rates and fiscal policy support); geopolitical tensions and rising national sentiment; the accelerated uptake of technology; cost pressures; and, the consequential impact of the above forces on talent models.

Our 2021 Outlook considers all of these factors and presents a 'deep-dive' on nine topics that we believe will be important across financial services in AP this year:

- Financial and Systemic Resilience
- Role of Financial Services in the Recovery
- Holistic Approach to Non-financial Risk Management
- Business Model Transformation
- Operational Resilience
- Digital Risk
- Cyber Security
- Financial Crime
- Climate Change

Macroeconomic environment

With its economies having outperformed the world in 2020, the AP region enters 2021 with greater momentum than the world economy as a whole. The key to this relative strength has been the effectiveness of the public health response, which has allowed a number of major AP economies to resume economic activities to an extent that the rest of the world has struggled to accomplish. Moreover, the advent of vaccines suggests the potential for business conditions to look considerably better 'after vaccines' than their current 'before vaccines' status. Therefore, we believe that the medium term implications of COVID-19 for the AP region may have less to do with economic conditions and more to do with lingering changes to the business landscape.

Lower interest rates and fiscal policy

Interest rates have been on a downward trend across both the region and the globe for decades, with 'lower for longer' interest rates now the expectation. COVID-19 has exacerbated this trend, which has left policy makers with little monetary policy space to address any future economic downturns and the possibility that sovereigns may need to rely more heavily on fiscal policy. For the foreseeable future, fiscal policy in AP will need to be more agile than it has been in times past.

In addition to agility of application, the economic recovery from COVID-19 in the AP region will also depend on the amount of fiscal headroom left in AP geographies. The ability to continue to extend support will be mixed within the region. We expect

that geographies such as Australia, New Zealand, China mainland, South Korea, Taiwan, Hong Kong Special Administrative Region (SAR), and Singapore will have relatively more headroom as compared to Japan (which is constrained by its already high sovereign debt level and previously mentioned low interest rates) or Thailand, Indonesia, and the Philippines (where the capacity of the state to effectively implement policy is comparatively weaker).14 Moreover, the degree to which policy makers can remain aligned on how to deploy this fiscal support will also be important. Finally, the fact that AP jurisdictions may be able to resume normal economic activity and roll back extraordinary policy support measures before other regions may help AP geographies better manage and perhaps minimise build-up of sovereign risks.

As noted in the Global Foreword, 'lower for longer' interest rate environment puts put pressure on individual firms' business models that rely on investment income to fund day-to-day activities. In addition, the shift to lower interest rates and the necessary shift towards the use of fiscal policy to combat economic downturns will begin to factor into the decisions of households and corporates, such as balancing spending, investment, and saving. Financial supervisors and central banks are well aware that 'lower for longer' rates and more expansive fiscal policy could encourage excessive risk taking, and that poorly timed monetary or fiscal tightening could cause recovering economies to stumble.

Accelerated uptake of technology and cost pressures

This *Outlook* will also explore the rapid uptake in technology to facilitate continued business operations under pandemic conditions. FS firms have made

significant investments in technology and accelerated initiatives that may have originally been planned as multi-year projects. This has raised many questions about whether risk management has been enhanced commensurate with rapid digitalisation (for example, the greater threat to cybersecurity from tighter testing and implementation timelines, or increased conduct risk of having large groups of staff working remotely). On the other hand, these investments have also opened up significant opportunities, particularly as regards where talent can sit in the region – to a certain extent, if you can work from home, you can work from anywhere.

This rapid uptake of technology has also meant significant expenditure. When added on to the revenue pressures of a low-interest rate environment, an uncertain economic recovery, as well as the rollback of government support (which has often been contingent on firms retaining employees while receiving this support), the result may be that many FS firms will be looking to undertake large cost cutting and rationalisation programmes in the second half of 2021 and beyond. Cost pressures also raise questions about the sustainability of the current business model of many FS firms. Hence, we expect there to be interest from both FS firms and their supervisors on how the industry will evolve and adapt to meet this challenge.

Geopolitical tensions and rising national sentiment

One of COVID-19's effects in 2020 was to amplify the already brewing geopolitical tensions that existed pre-pandemic, which, in turn, has led to a greater amount of 'balkanisation' globally as well as within AP. Certainly, there has always been a great deal of diversity between jurisdictions within the region,

but the past few years have seen rising geopolitical tensions and several key areas where policy approaches are simply very different.

These differences have made cooperation between jurisdictions more difficult and has increased scrutiny on cross-border activities like foreign direct investment. There have been notable examples around the region where political tensions have spilled over into economic backlash in 2020, which are likely to continue into the future.

From a policy development point of view, legislation around data privacy is an excellent example of the diversity of opinion; many jurisdictions are deeply concerned with what kind of data is collected on their citizens, where it is stored, how it is used, and potentially how it is transferred (or not transferred) across borders. Within FS regulation, we have seen similar phenomena play out over issues such as re-onshoring of key services or supervisory concerns about where accountable senior leadership should be located.

Impact on talent models and AP as a competitive region

The above forces will impact how FS firms source and grow talent in 2021 and beyond. On one end of the spectrum, many of the growing areas for FS firms on the horizon such as green/sustainable financing or developing China mainland's capital markets will require FS firms that have a strong regional and international network that they can leverage to deliver

large-scale, meaningful changes. On the other end of the spectrum, rising national sentiment and legislation on data use and technology, as well as regulatory concern about the location of key accountable figures and booking models, will limit FS firms' ability to work cross-border.

The ability to attract talent is, in turn, a key component of the competitiveness of financial centres (of which there are many in AP), alongside the strength of the rule of law and robust, transparent regulatory environments. How these forces dovetail with increased digitalisation and technological adoption will also have profound implications on the types of talent that are attracted and developed. It will be of great interest to see how individual AP cities will continue to remain or strive to become competitive over time and what that will mean for the region overall.

Key themes in 2021

Against this backdrop, it perhaps comes as no surprise that many of the themes in this *Outlook* have to do with resilience and sustainability, as in the ability for FS firms to respond with agility to a changing landscape; to weather market events with minimal service disruptions; and to work towards long-term sustainability of their business models. On top of this, we overlay questions about the role that FS firms should play as key actors in society – the high expectations and the need to preserve and strengthen their social licence to operate, as discussed in our *2020 Outlook*, are even more relevant today.

This *Outlook* covers nine distinct but very much interrelated topics. As we collectively reflected on these topics, a number of overarching questions became apparent. For example:



 How is the risk landscape changing for financial services? Given that many of the emerging areas affect the industry as a whole, how can FS firms look within and beyond their current ecosystem to understand how the world is changing, and their evolving role within it?



 How do organisations manage issues around data ranging from its sourcing, quality, and use, as well as privacy and security of both the data and the underlying individuals?

What does it mean to take a

proactive approach to managing risk? How can this be enabled by technology; what are the current limitations and/or constraints?



 How do organisations source and nurture talent that can understand and manage intersectional areas of risk? i.e. how can organisations ensure there is both sufficient capability and capacity to handle current and emerging risks?

For example – in a world where demand for Board and Senior Leadership ownership and engagement on key topics (e.g. climate change, culture and conduct) is at an all-time high, how do the role, responsibilities, and activities of the Board and Senior Leadership need to change?



 What can organisations expect in terms of supervisory intensity and priorities, particularly given that supervisors are in various stages of their pandemic management efforts (or rollback thereof)?



 How can organisations meet increasing expectations arising from their social licence to operate while still maintaining stability and profitability?



 How do organisations adopt iterative approaches to managing risk where industry practice is either not available or still nascent?



 What role are FS firms able to play in solving collective action issues in the market such as creating common data repositories, sharing taxonomies, and promoting meaningful discussion between market participants? AP is a dynamic region that is starting 2021 in better shape than its global peers, but this does not mean the road ahead will be easy. We expect financial regulators to be hypervigilant in the year(s) to come and FS firms will need to adapt to meet rising challenges.



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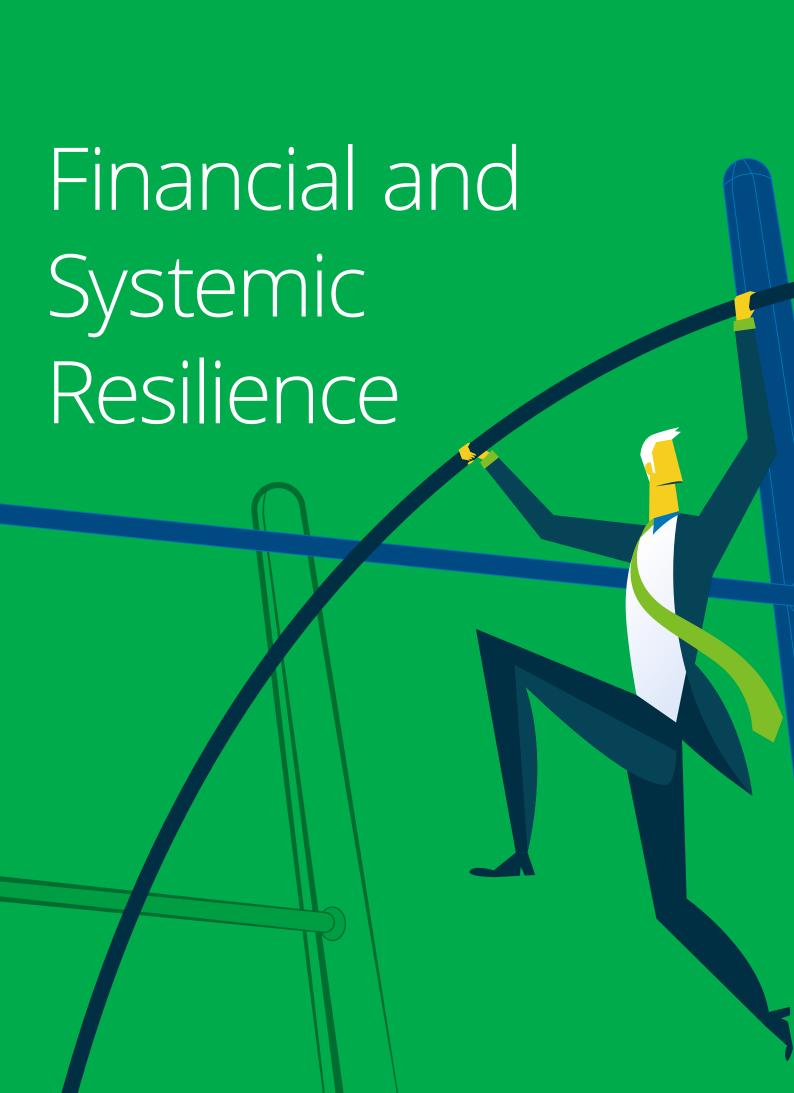
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At the end of 2020, there was a general consensus among international bodies, such as the International Monetary Fund (IMF), the Bank for International Settlements (BIS), the Financial Stability Board (FSB), central bankers, and financial regulators that the post-crisis framework "held up well". As Andrew Bailey, Governor of the Bank of England, noted at the 2020 European Central Bank Forum on Central Banking "[w]e wanted a banking system that supported our economies, not economies that supported the banking system, and I think we have seen that". Is

The financial system and the economy more broadly was buttressed by unprecedented monetary and fiscal policy measures. As of September 2020, US\$ 11.7 trillion (12% of global GDP) of fiscal measures had been announced and global public debt levels are close to 100% of GDP and are at their highest levels since the Second World War.¹⁷

Finally, FS firms benefitted from a generally accommodative, though ultimately temporary, regulatory stance. Financial supervisors across AP swiftly picked up recommendations from international bodies like the Basel Committee on Banking Supervision (BCBS) to delay the

implementation of international standards. They also provided more localised guidance on topics such as provisioning and non-performing loans, payment holidays for loans (often in conjunction with local governments/policy makers), supervisory reporting etc. to allow FS firms to support the wider economy.

At the time of writing, the world is passing through some key political and public health milestones that will have an impact on uncertainty levels and on how it recovers from the COVID-19 crisis in 2021, such as the efficacy of different COVID-19 vaccines and the logistics of vaccination programmes globally (with a particular eye to the equity of vaccine distribution between geographies); the transition to a new administration in the US; and the new post-Brexit reality. However, new outbreaks of the virus, as well as the reoccurrence of strict lockdowns at the start of 2021, have shown that in no sense is the world out of the COVID-19 woods.

Maintaining financial and systemic stability will be top of mind for both financial regulators and other policy makers throughout 2021. They must face the difficult challenge of balancing the level and duration of support described above against the build-up of risk this may introduce to the financial system.

As 2021 opens, some key areas of concern may emerge:



Corporates

- · High corporate debt could lead to resource mis-allocation in the mid-term or insolvency
- SMEs likely to see higher insolvency rates due to lack of access to capital when policy support is rolled back
- Increase in zombie companies due to prolonged policy support



Individuals

- Increase in defaults; may be concentrated in certain geographic areas or vulnerable populations (concentration vulnerability)
- Customers may not sufficiently understand mortgage or other payment holidays (e.g. continued interest accrual, impact on credit profiles, etc.)



Sovereign vulnerabilities

- Historically high levels of debt could introduce sovereign vulnerability such as the need to restructure debt or create burdensome debt servicing obligations
- Potential sovereign credit downgrades
- A lack of fiscal space or political will/capital to continue with stimulus could hamper economic recovery



FS firms

- Capital buffers may have been drawn down too much to withstand the full length of the crisis (tailend insolvencies under IMF world economic outlook stress tests)
- Credit downgrades could stress bond markets (e.g. some asset managers may be contractually obligated to sell below investment grade bonds)
- Excessive risk taking in 'lower for longer' interest rate environment



Non-bank financial institutions (NBFI)

- The FSB notes that NBFI have steadily become more integral in the provision of both credit and liquidity as post-GFC reforms required banks to hold more capital¹⁸
- There are concerns about how integrated NBFI are with banks and how both will be impacted by, for example, increased corporate defaults in 2021
- The low interest environment creates challenges for NBFI that are dependent on interest income (e.g. insurance companies, pension funds)
- The FSB has announced a workplan to study the impacts of this trend

Timing of the rollback of policy support

The real test to financial and systemic stability will be as policy support is gradually rolled back. Important areas to monitor are:

The ability and appetite of sovereigns to

continue with policy support to the real economy – This is a question both of fiscal space as well as political will. Developing economies may struggle with high debt burdens and potential limited ability to restructure debt, particularly foreign currency debt. As well, the political appetite to continue high levels of stimulus may wane as the crisis drags on into 2021.

AP context – The first-order effects of this may be mixed around the region. GDP growth forecasts for 2021 are fairly robust, as economies in AP have been, generally, less impacted by the crisis compared to other parts of the world due to swift public health responses. In addition, there seems to be a fair amount of headroom remaining to provide needed fiscal stimulus. However, second-order effects brought on by economic downturns in North America and Europe, or even developing economies outside the region, may impact AP operations of FS firms and corporates.

O2 The timing of the rollback – The IMF has warned sovereigns to carefully consider the timing of policy support, something which is echoed by central bankers who stress that the policy support is a bridge towards the eventual control of the COVID-19 pandemic.¹⁹

AP context – The rollback of stimulus will be uneven in the region as different geographies exit the crisis from both a public health and economic perspective. AP is in a unique position as the rollback of support could potentially happen in this region before the rest of the world. The region will therefore face the challenges (but also reap the benefits) of being first movers. FS firms will need to carefully track developments across many geographies, which could stress data gathering capabilities.

Mis-matched risk appetite between policy makers and financial regulators/central

banks – In general, financial regulators, central bankers and policy makers in individual jurisdictions have worked closely throughout the crisis but no alliance is perfect, and messaging from official sources has at times been muddled. Prolonged fiscal stimulus and a loose monetary policy could lead to a build-up of risk in the financial system and differing opinions or risk appetite could trigger uncertainty in the first half of 2021.

AP context – Similar to the timing of stimulus rollback, any disagreement or lack of consistency between policy makers will be exacerbated by the number of geographies in AP.



Key takeaways

Financial and systematic stability will be closely watched by financial supervisors in 2021. If FS firms are overly aggressive while governments are pulling back support, there could be excessive leverage and a risk of an increase in zombie companies. If FS firms are overly conservative and pull back even while governments would like to continue to support the economy, this could trigger a self-fulfilling prophecy of a downturn. It will be important, therefore, to pay attention to the following:



Understanding the shifting landscape

- Is your organisation able to closely track the rollback of policy support around the globe/ region as this happens in a staggered manner?
- AP geographies may be among the first to begin this rollback. Does your organisation have a plan to take advantage of first mover opportunities (e.g. implying a stronger

economic recovery relative to the rest of the world) and mitigate any disadvantages? (e.g. policy makers in the region will have less opportunity to learn from actions of global peers, which could lead to some missteps in rollback)



Build up of risk

- How is your organisation tracking the potential build-up of risk across multiple market actors?
- How is your organisation investigating and accounting for areas of weakness that may currently be masked by policy support?
- How is your organisation communicating and working with financial supervisors to address
- concerns about the potential build-up of risk in the financial sector?
- Does your organisation have a good understanding of how it is interconnected with other FS institutions and where areas of vulnerability may reside should market conditions change?

Role of Financial Services in the Recovery



Throughout this *Outlook* we note that due to the exigent nature of the COVID-19 pandemic, and the swift action taken by policy makers to support both the financial sector and the wider economy, FS firms are entering 2021 in a relatively strong position, ready and able to support a post-COVID recovery.

But what role have FS firms been playing thus far, and how will that change over the course of the year? FS firms may be expected to contribute to the recovery in ways beyond their usual practice, wish the nature and shape of this contribution continuing to be difficult to define. Financial regulators, government policy makers, shareholders, customers, and wider society have a variety of expectations. At the close of 2020, many of these expectations remained closely aligned - to do 'whatever it takes' to ride out the pandemic. However, the 'whatever it takes' mantra is not an indefinite solution, and eventually the unprecedented policy support will be tapered and crisis operational measures will need to be normalised. As 2021 wears on, we may see expectations drift apart, and perhaps even come into direct opposition.

The first hurdle, as discussed previously in the context of financial stability, is that tapering will be uneven and localised – certainly by jurisdiction, but possibly also by region or even city. Tapering will also vary by economic sector. Those sectors most impacted (such as tourism, food and beverage, and travel) are likely to continue to receive direct support over a longer timeframe.

The second hurdle will be to ensure support for vulnerable customers. Ensuring customer protection is a keystone of the remit of regulators; this remains unchanged in the general, but is malleable in the specific. Who are the customers that need to be protected? In what way? Will these groups change throughout 2021? And, could an inattentive firm run afoul of changing societal needs or government and regulatory expectations?

This will put a premium on agility. Firms will need to watch economic and policy developments around the region closely to identify emerging trends and expectations as well as how these could impact vulnerable customers. FS firms will need to understand new risks and uncertainties in order to be prepared to take a differentiated approach across geographies and industry sectors.

Treating customers fairly

'Vulnerable customers' does not have a static definition. There are two axes along which FS firms operating in AP will need to understand vulnerability – jurisdiction-specific concerns and time-bound vulnerabilities.

Jurisdiction-specific concerns

Our region is home to a wide range of economies and demographics. Vulnerable groups will vary by background and country. For example, an asset rich Japanese pensioner will have very different needs and experiences from a young woman living in rural India; however, both may still be considered vulnerable customers.

There are of course categories of vulnerability that cut across country borders and economic class; some examples include age, gender, rural versus urban, access to technology, physical and mental health, language group, immigration status, etc. There will be similarities and differences in how jurisdictions respond to the needs of these groups. Singapore and Japan, for example, have aging societies that prioritise ensuring elderly access to financial services and combatting elder abuse. In Singapore, there have been initiatives to empower seniors with the digital skills to access financial services like mobile banking applications and electronic payments.²⁰ In Japan, the Japan Financial Services Agency (JFSA) is working to solve the problem of access to funds, and has urged action on the part of FS firms such as banks allowing relatives, care workers, or government officials to withdraw funds if it is clear that they will be used on behalf of the principal.²¹

Time-bound vulnerability

A person may also enter into a period of vulnerability – often this is prefaced by an incident such as a job loss or illness. This is also true on a wider scale for customers such as small businesses that have been through various stages of lockdown and reopening during the course of the pandemic and will continue to face uncertainty into 2021.

Indeed, the Australian corporate regulator, the Australian Securities and Investments Commission (ASIC), recently reminded FS institutions of how the impact of the pandemic has engendered an uptick in customers experiencing time-bound vulnerability:

"2020 has left many more people financially vulnerable than at any other time in our recent history. And the toll is not only financial – people are under emotional and cognitive strain too, which makes it even harder for them to seek help, make decisions and navigate processes".²²

What might these vulnerabilities look like in 2021?

Firms will need to give significant thought to the different lenses (or combinations thereof) that will be required to properly, sustainably, and safely serve different groups of vulnerable customers. Some important issues include:



Ensuring correct distribution/allocation of government stimulus

A common experience for many FS firms has been to act as a conduit to deliver relief programmes such as direct financial assistance to individuals, wage support programmes, government-backed loans to businesses, loan payment holidays, etc.

Firms may be seen in a good light if they have been able administrators, but competently navigating this role is not without challenges. Firms could be left to administer against unclear guidelines resulting in potential delays and inaccuracies in the roll-out of stimulus, and customers may also misunderstand the relief programmes, leaving FS firms exposed to significant reputational risks.



Understanding which customers may be entering a period of vulnerability

As noted previously, government stimulus in response to the pandemic has been swift and wide-ranging in many locations in AP. Within policy packages, many jurisdictions have implemented wage support schemes that focus on keeping individuals in their current jobs, with the government subsidising a certain percentage of their salaries.

For good or ill, this has masked the true employment situation of many individuals and the financial health of many companies. As these subsidy programmes are rolled back in 2021 there is likely to be a subsequent spike in bankruptcies and unemployment. In addition, bankruptcy moratoriums in Australia, New Zealand, and Singapore may also add to this opacity.

The structure of the relief measures and their rollback will also have implications on the peak and tail of the resulting impact. For example, clawbacks of financial relief through increased tax burdens may disproportionally impact vulnerable customers.



Managing conduct issues within their own organisations

With customers facing difficult circumstances, the actions taken by FS firms will be more important (and come under closer scrutiny).

Issues such as mis-selling or market abuse could be more common if employees feel pressure to meet targets in a difficult economy; this could also be unintentional if neither the financial advisor nor the customers themselves understand potential unanticipated changes in circumstances.

There may also be a significant uptick in cases where firms may need to make a judgement call – for example, how long should they continue to extend credit relief to a customer who is unlikely to be able to repay? In this case, what does it mean to act in the customer's best interests? To what degree can the bottom line be managed to protect client relationships?

As these types of situations increase, so too does the potential for misconduct to occur, intentional or otherwise.

How can firms respond?

FS firms will need to have a wide view of the changing circumstances across the region in order to meet the challenges of evolving expectations. The importance of agility cannot be overemphasised – as mentioned previously, we expect that the rollback of policy support will be uneven across the region and as vulnerabilities in the market and the organisation are uncovered, FS firms will need to respond quickly and have targeted approaches around the region.

This means paying close attention to developments outside of the FS sector. Tracking changes in government policy will be critical, but firms must also pay close attention to events in different economic sectors, shifts in public sentiment, and further developments in the public health situation. Differing opinions between government bodies may also appear – for example, financial regulators may be more averse to risk build-up from the current stimulus than other policy makers and this could lead to mixed messaging from official sources. FS firms should consider how to augment their horizon-scanning and government relations teams to help track the above developments.

Closer to the ground, staff need to be equipped with adequate information and training to navigate what may be yet another challenging year. Navigating the balance between managing financial and operational risks alongside customer outcomes will not be simple. Have front-line staff been given the tools they need to make tough calls on when to limit a customer's

access to credit? Do they understand how government support programmes may change and how to explain these changes to customers? Do they know how to identify, and feel empowered to report, misconduct from within the organisation? Do they know how to address anxiety among customers dealing with uncertainty and red-tape at a difficult time?

Firms will also need to recognise that mistakes may be made due to operating in a high-intensity environment amidst the complexity of the dynamic situation. Decisions made in the course of business, such as those to end credit extensions or to reinstate payments when payment holidays expire may be picked up by the media; firms will need to be able to justify and defend their policies as well as manage their brand and reputation. Is there a plan in place should things go wrong?

Hope for the future

The above is, in some sense, table stakes for firms to retain their social licence to operate in 2021. However, firms also have a unique chance to strengthen their social licence by taking an active role in reconstruction, in line with 'building back better' and/or 'building back green' government stimulus programmes (e.g. green financing/infrastructure programmes, investments in education, research and development of social services). The landscape in 2021 will be dynamic and FS firms may need to play a more active role in the conversation about understanding and meeting societal needs.



Key takeaways

FS firms will be expected to contribute to the recovery in a meaningful way, potentially beyond business as usual. It is therefore important for FS firms to have a good grasp as to what is expected of them and where they are best positioned to make an impact.



Scope of expectations

- It will be challenging to articulate the scope of this contribution and there will likely be competing expectations from customers, governments, regulators, shareholders, and the public at large
- Opaque expectations will therefore pose a challenge to tracking changes in the wider landscape – 'too wide' and the information intake is unwieldly, 'too narrow' and critical information may be missed; effort must be expended to find the 'just right'



Reading the changing landscape - important place to start

- Closely track the pace of recovery around the globe/region as it will be uneven and official messaging may be mixed
- Focus on agility can your organisation successfully pivot when new information becomes available or expectations change?
- Where possible, adopt a coordinated approach throughout your organisation to monitor the landscape. Important areas will be:
 - Understanding developments outside the traditional financial services ecosystem
- Relationship building with financial regulators or other policy makers/government departments



Preparing for difficult fallout

- Financial risk will need to be balanced against customer outcomes; your organisation will need to prepare for an increase in defaults as well as pay close attention to capital provisioning. However, continued support for customers and deferral of shareholder distributions (perhaps
- beyond regulatory expectations) may also need to be considered
- Hope for the best but plan for the worst is there a plan in place if something should go awry? How have the needs of vulnerable customers been accounted for?



Impact to business model

- The environment and changing expectations put pressure on the traditional business model; this is an important time to invest in the right capabilities and tools to transform.
 Your organisation will need to invest in the right
- capabilities and tools while being pragmatic about what change is practicable. It will be important to give thought to long-term business model sustainability

Holistic Approach to Non-financial Risk Management



As the industry has become more adept at managing financial risks, regulators have been increasingly interested in how firms are managing their non-financial risks (NFR). The BIS identified the management of NFR as a relative weakness of FS institutions in 2009,²³ but only limited progress has been made.

NFR management remains a challenge for FS firms as COVID-19 and the resulting responses have

exposed vulnerabilities that need to be addressed urgently by regulators and firms alike. We expect that 2021 will see an acceleration of programmes already in place to better manage NFR. Especially when considering that many of the emerging risk management priorities for firms are non-financial in nature (for example managing the risks related to climate change), investments in NFR management now will likely pay dividends into the future.



As a brief primer, non-financial risks...

Often originate outside the financial sector and connect across multiple sectors

Practices around cybersecurity, technology, data, privacy, remote working, conduct, third party, outsourcing, climate change among other areas are not unique to financial services, but are an important part of FS firms' risk management strategy.

Moreover, FS institutions cannot address these issues independently as NFR often stem from external parties such as service providers or even customers and clients.

Remain difficult to codify and quantify

Taxonomies of NFR are under development or being revised in many firms and jurisdictions.

As well, the transmission mechanism or relationship to a firm's prudential risk metrics (e.g. capital ratios) remains difficult to directly establish.

The lack of a common taxonomy and diversity of practice means that NFR management remains mostly qualitative and backward looking.

Are data hungry and insight starved

This is a nested challenge – actionable data may or may not exist, and/or may not be readily available in a usable format. With NFR it is also difficult to define what data should be captured and how it should be tracked.

In addition, relationships between observed data and outcomes can be indirect, difficult to establish, and are likely multivariate and nonlinear in nature. It is therefore challenging to produce insights in an accurate, consistent, and auditable manner.

Require an integrated and collaborative approach

Non-financial risks cannot be solely managed by a second line risk function. Nor can they be fully outsourced to a specialist but isolated team (e.g. housing ESG and climate change issues under the auspices of corporate social responsibility).

Good practice has seen all three lines of defence along with Senior Leadership actively involved in developing the risk taxonomy to provide an effective awareness and understanding of NFR across the organisation.

Regulatory approaches to NFR management are likely to remain non-prescriptive, with no truly common definition of 'sound' and only leading/ recommended practice. This compounds the above issues as standard practice is more difficult to establish and requires significant tailoring within a firm at the country, division, speciality, and, perhaps even at a team level.



NFR comprises a diverse and complex set of risks with the potential to trigger substantial financial and reputational damage to FS institutions. Supervisory authorities are increasingly focused on the importance of effective management of specific categories of NFR, such as cybersecurity, climate, and conduct risk.

To meet these increasing supervisory expectations, FS institutions need to implement an integrated framework for managing NFR, requiring investments of time and capital. Moreover, the process itself is likely to be iterative

and requires commitment to a trial and error approach. In 2021, FS institutions are undertaking these initiatives to enhance NFR management at a time of exceptional volatility and uncertainty in the business, regulatory, and risk management environment. Therefore, they will need a comprehensive and coordinated approach to managing NFR that includes alignment with the risk appetite statement; roles of the lines of defence; and interconnectedness and correlations among NFR, controls, and reporting.

Areas of interest to regulators when supervising non-financial risk - ruminations for 2021



Building a picture of non-financial risk management on a firm level Higher regulatory expectations and the range of banking practices have seen regulators require accountability and attestation from Senior Leadership. We expect regulators will continue to refine these expectations, building a holistic picture of a firm's, and perhaps the market's, NFR management.

Key enablers

Well-organised and contextualised data inputs that can be easily digested. Data can be structured or unstructured, but how it is collected and assessed will depend heavily on the capabilities and ambitions of regulators and firms.

Implications for firms

Regulators may look to strengthen data already collected through current regulatory reporting.* This could imply greater scrutiny on data collection and processing. If reported data is part of a qualitative assessment, then the underlying logic and rigour is likely to be challenged. These regulatory obligations also create a natural enhancement of management reporting. Thus, firms should look to harmonise internal and external expectations.



Demonstrating commitment to the approach

The focus on NFR drives a need for firms to develop relevant competence and expertise. As well, NFR management requires a mind-set that looks beyond the borders of traditional financial services. We expect regulators will be looking to see that firms are developing additional skills among their employees to address NFR, as well as to build a culture (led by Senior Leadership) where employees throughout the organisation recognise the importance of managing NFR.

Key enablers

An iterative approach that engenders ownership of NFR and allows for trial and error as well as the time required to upskill. Talent will need to be supported by the right mix of technology, data, and qualitative assessments. Hiring, training, and organisational structures will need to support this shift to include the right expertise, responsibilities, and accountabilities.

Implications for firms

Understanding the iterative, long-term nature of this process. For example, the embedding of technology risk management into operating models has taken a decade's worth of steady work and continued regulatory pressure to see success. Introducing other areas of NFR into this environment may require similar investments of time and commitment.



Board & Senior Leadership structure, capability, and engagement Boards and Senior Leadership are ultimately responsible for risk management in a firm; however, given the dynamic nature of NFR, organisations may struggle to respond to and manage NFR in an effective and timely manner. We expect regulators will increasingly look to see Senior Leadership that is equipped with the competence, capability, and information to ask tough questions and respond appropriately.

Key enablers

A governance structure that is conducive to managing NFR.
Management information that is actionable and forward looking (e.g. signal scanning, risk metrics, and comprehensive event logs). Training and hiring to develop the relevant competence and expertise.

Implications for firms

Changes to the management structure and committee composition as well as investment in training for Senior Leadership may be required. Regulators will continue to be concerned about individual accountability, but the focus may shift towards whether the accountable person is actively working to make things better and not just to prevent things from going wrong. The required expertise may not be available within organisations from the onset, creating the need to actively engage external experts (perhaps outside of the financial sector), including independent directors to raise sensitivity and understanding of NFRs.

^{*} The Supervisory Review and Evaluation Process (SREP) is an example of how regulators are putting internal controls to the test.

Examples from the region

The Australian Prudential Regulation Authority's (APRA) Probability and Impact Rating System (PAIRS)/Supervisory Oversight and Response System (SOARS) evolves into Supervision Risk Intensity (SRI) Model:²⁴ Non-financial risks are already a part of APRA's risk assessment model (PAIRS/SOARS). With the move to the SRI Model (which will be applied to all APRA regulated entities), APRA looks to elevate NFR while preserving the importance of financial resilience. Under the new system, which is planned to be fully implemented by June 2021, all FS firms can expect greater scrutiny on their NFR management, particularly on how data is being collected to inform the scoring under the SRI model.

Monetary Authority of Singapore (MAS) Guidelines on Individual Accountability and Conduct²⁵: MAS has been focusing on culture and conduct in FS institutions to achieve two key outcomes: (i) ethical business practices that safeguard customers' interests and ensure fair treatment; and (ii) prudent risk-taking behaviour and robust risk management that support FS institutions' safety and soundness. The guidelines do not impose additional reporting requirements but it is likely that MAS will more closely scrutinise existing reporting against the stipulated two key outcomes.

Examples from the region

Climate-related risk stress testing (APRA, Hong Kong Monetary Authority (HKMA), and MAS): Proposals to integrate climate-related risks into stress testing at banks and insurers will be an example of this iterative process. From the outset, there will need to be a certain amount of trial and error for both firms and regulators to understand what technical limitations exist (e.g. data gaps) or what constitutes good practice – lines of communication between firms and regulators should be open and robust.

Talent across many functions will need to be trained in the 'what' and 'how' of climate-related risks and their management. Technology will be needed to gather and interpret the large quantities of data required for modelling climate-related risks. It will also be needed to generate dashboards such as ESG heat maps to support investment teams or as MI for senior leaders to inform strategy discussions.

MAS 644 Cyber Hygiene:²⁶ There are also examples of regulators taking incremental and iterative approaches, such as MAS' work on cybersecurity.

Effective August 2020, MAS identified six elements FS firms must follow to reduce the risk of cybersecurity threat: ensuring robust security for IT systems, ensuring systems flaws are fixed quickly, deploying security devices to restrict unauthorised network traffic, working to prevent malware infections, securing system accounts with special privileges and strengthening user authentication.

MAS also conducts bespoke cybersecurity stress tests of the firms it regulates. MAS is considering whether to integrate cybersecurity risks into its future thematic stress tests to encourage FS institutions to further develop risk management expertise in this area.

Examples from the region

Australia (New role creation): Large banks in Australia are experimenting with new governance structures and establishing risk committees specifically to tackle NFR or spinning out some of the duties of the chief risk officer (CRO) to create a senior role that looks specifically at NFR – such as the creation of chief financial risk officer (CFRO) and chief non-financial risk officer (CNFRO) roles.

Japan: The JFSA has been focussing on this topic through supervisory conversation on a need to enhance compliance risk management, including management attitudes, business model/strategy, and corporate culture.

Singapore: The following governance models are gaining momentum:

- Chief Risk Officer (CRO): Centralise the management of all risks, except compliance and conduct risk, under the responsibility of the CRO
- Chief Compliance Officer (CCO): NFR categories such as compliance and conduct risk are placed under the CCO, which demands a differentiated set of skills and specialisation
- Chief Operating Officer (COO): Oversight by the COO who focuses primarily on process efficiency in managing risks



Key takeaways

Preventing operational losses, adhering to regulatory expectations, and identifying strategic value opportunities are three major drivers of robust NFR governance. Raising awareness and initiating change in an organisation may require a self-assessment, which may include, but is not limited to, the following considerations:



Governance

- Are NFRs being integrated into the overall strategic planning process? Is the Board of Directors conscious of NFR?
- Does Senior Leadership receive adequate information to make informed decisions, including perspectives or views from outside experts?
- Does Senior Leadership have the right skillset/ training to make informed decisions?
- Is there commitment at the Senior Leadership level to make the necessary investments (e.g. data, skills) to improve NFR management?



Iterative approach to NFR management

- Is your organisation equipping its people with the right skills?
- Is talent able to adjust NFR management as needed – is there room for them to experiment as needed?
- Does your remuneration system reward or punish an iterative approach?
- Are you looking for clusters or places of overlap (e.g. cybersecurity, conduct and financial crime)?



Risk management

- Do you have an NFR risk inventory?
- Is there an existing Risk Appetite Statement approved by the Board for NFRs? Is it linked to strategic objectives?
- Is the Board and Senior Leadership aware of and involved in management of NFRs?
- Have you defined a three line of defence model for managing NFRs?
- Have you differentiated the management structure for financial risk management and NFR?
- Have you established a methodology for the measurement and monitoring of NFRs?



Data

- What data do you need, what data do you have Is it feasible to capture new data with current access to and where are the gaps?
- How can you better connect the data you already have – is your data feeding into the right management systems/structures?
- systems or is a new solution needed?
- Does your event log capture NFRs? Does it include external sources of data?

Round-up: Key publications/developments from 2020



Australia

Expansion of Banking Executive Accountability Regime (BEAR) to Financial Accountability Regime (FAR)



Strengthen CPS 220, CPS 510 and CPS 520 to transform governance, risk culture, remuneration and accountability across all regulated FS institutions (APRA)



New model to assess risk and determine supervisory intensity (APRA)



New SRI model to assess risk and determine supervisory intensity (APRA)





Malaysia

Exposure Draft on Responsibility Mapping (BNM)





Japan

The JFSA released the results of their work to monitor customeroriented business conduct of investment trust distributors/ inclusion as policy priority (JFSA)





Act (Customer Protection in Peer to Peer Lending)

Online Investment-Linked Finance

South Korea



The Financial Consumer Protection Act (Customer Protection more generally across Financial Services)



Government to support educational programmes to cultivate digital finance specialists (SK FSC)



Hong Kong SAR

Report on Review of Self-assessments on Bank Culture (HKMA)

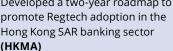
Stocktake of potential talent

gaps in the banking industry



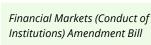


(HKMA) Developed a two-year roadmap to









New Zealand



Disclosures)



Plan to work with industry and other stakeholders to tackle the major skill gaps in the coming 5 years (HKMA)



Financial Services Legislation Amendment Act (Code of Conduct/





Guidelines



Initiative



Regulation



Strengthening or evaluating regulatory structures on conduct



Talent/ skill investment









Singapore

Guidelines on Individual Accountability and Conduct Information Paper on Culture and Conduct Practices of Financial Institutions (MAS)



Strengthening Capital Markets Intermediaries' Oversight over AML/ CFT Outsourcing Arrangements (MAS)



Consultation Paper on Review of Anti Commingling Framework For Banks (MAS)



Consultation Paper on Draft Standards for Operational Risk Capital and Leverage Ratio Requirements for Singaporeincorporated Banks (MAS)



Consultation Paper on Draft Notices on the Competency Requirements for Representatives Conducting Regulated Activities under the Financial Advisers Act and Securities and Futures Act (MAS)



MAS 610 Submissions of Statistics and Returns (MAS)



Research institute dedicated to green finance research and talent development, to equip professionals with skills in climate finance and applied knowledge in Asian markets, offering an array of courses across various levels (MAS)



New Asian Institute of Digital Finance to spearhead FinTech education and research (MAS)



Committed S\$250 million to accelerate innovation and technology adoption in financial sector (MAS)





Taiwan

Corporate Governance 3.0 – Sustainable Development Roadmap (TW FSC)



The TW FSC is to issue an amended Required Qualifications for Foreign Special Professionals with Specific Financial Expertise and Principles for Recognition of Qualifications (TW FSC)



Consultation

Guidelines



Initiative



Regulation



Strengthening or evaluating regulatory structures on conduct



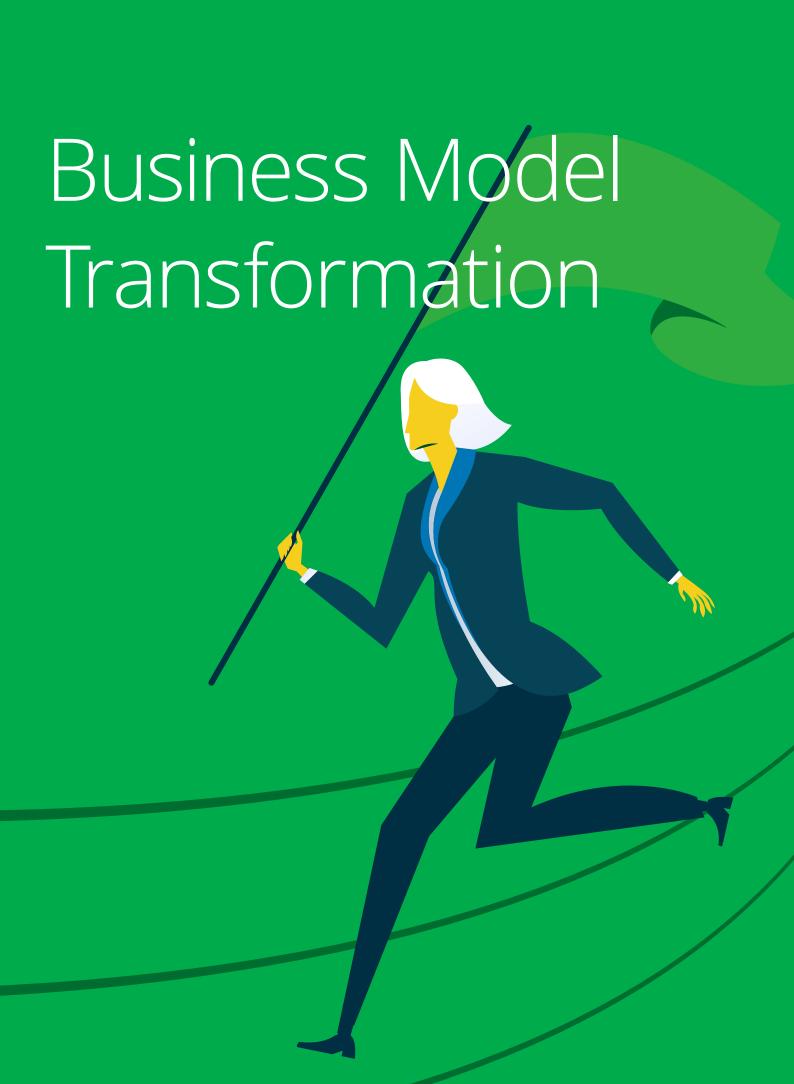
Talent/ skill investment



Legislation







If the COVID-19 pandemic has a silver lining, it is that the sharp break in the everyday rhythms of life presented an opportunity to revaluate what people took to be 'normal'. The shock can serve as a catalyst for changing what constitutes 'business as usual' (BAU).

As 2021 opens, thinking on this topic has shifted from 'what do we do now', i.e. a focus on

responding to the pandemic, to 'what comes next', i.e. considerations of recovery measures that can set up the organisation to succeed and thrive. For FS firms, this means considering the rapid changes to their operations in response to the pandemic, and what this bodes for their BAU activities going forward. Pressures on FS firms to transform their business models are not a new issue, but long-term trends have been accelerated.

Three challenges to financial services business models pre-pandemic:

Low interest rate environment

Historically low interest rates were already a challenge for traditional business models in financial services. A low interest rate environment reduces funding costs and increases asset values, but narrow spreads exert significant pressure on margins, which, in turn, are further exacerbated by scrutiny on fees and commissions given lacklustre returns.

For good or ill, economic recovery in 2021 will require the continuance of 'lower for longer' interest rates, further tightening the vice on profitability.

In AP, these pressures may be dampened by a generally more robust recovery as compared to the rest of the world, but any optimism may be offset by sovereign debt issues in emerging economies.

Challenge from new entrants

The rise of BigTech, FinTech, and other non-traditional players in financial services has put disruptive pressure on incumbent business models.

Large FS institutions are facing competition by specialist providers on multiple fronts. In banking, competition in payments and retail banking services eat into profit margins; in insurance, aggregators put pressure on agent-based product distribution; in asset management, robo-advisors do the work of fund managers at a lower cost.

The 'digital first' tenet of new entrants and the pandemic have exposed a significant competitive vulnerability of traditional FS firms in their tendency to rely on manual/physical processes and a smorgasbord of legacy systems.

In AP this is compounded by the use of technology to reach untapped and under-served segments of the population, as well as a generally receptive regulatory environment looking to encourage innovation in financial services to make markets more competitive and improve financial inclusion.

High cost of compliance

The post-GFC reforms have made banks better capitalised than in 2007-2008 and better able to weather the current crisis.

This strength came through significant investment in the development and upkeep of risk management and compliance capabilities. Recent years have seen FS firms review costs in favour of digitalisation and efficiency. However, as explored previously, the changing risk and regulatory landscape will warrant further commitment of time, money and resources, which is likely to be during a time of heightened volatility and uncertainty.

Even though regulators have been forthcoming about allowing sufficient runway to rebuild capital reserves that have been drawn down, profits will need to be (or have already been) set aside in anticipation of growing defaults in 2021 as fiscal stimulus is rolled back.

In AP, market fragmentation adds another layer of complexity. To the above point, fiscal stimulus is expected to be rolled back unevenly across the region. Therefore, horizon scanning and talent development may prove especially challenging for internationally active banks to manage diversified and dynamic regulations across AP.

In 2021, we see three areas where firms in AP may look to adapt their business models:



Team location

Right skills in the right location at the right cost

Physical location is less of a technical barrier than it was before COVID-19. Cost pressures as described previously as well as competition for top talent with new challengers like FinTech/BigTech may also provide impetus for firms to revisit their outsourcing and best-shoring designs. Finally, firms should consider how the location of their talent helps or hinders their operational resilience.



Ways of working

Three areas where we may see this occur are:

- The facilitation of remote working/meetings: digital infrastructure has the potential to improve governance. Virtual meetings and the greater autonomy allowed by technology may create a more flexible and effective environment
- The backbone of new products and services: artificial intelligence (AI), machine learning (ML), and other tools can act as the engine that drive new and/or differentiated offerings
- An 'x-factor' that improves the effectiveness of BAU activities: digitalisation
 may be particularly impactful for developments in the future of risk and compliance
 monitoring, the automation of controls and real time audit and assurance, and financial
 inclusion



Operating model shifts

Asset light model

An asset light model that makes increased use of outsourcing; pay per use; partnering in the marketplace, licencing, white labelling or franchising; and utility sharing arrangements could reduce costs, allow for greater agility, and provide a better return on equity.

The appetite to embrace any or all of the above, however, will be firm dependent. Based on a recent Deloitte survey, we anticipate this appetite to change how services are provided in AP.*

^{*} In a recent Deloitte survey, when asked how COVID-19 had impacted digital transformation efforts, 57% of firms in AP (North America (NA): 51%; EU: 40%) responded that their inclination to outsource had increased 'somewhat' or 'significantly'. In fact, across all the categories surveyed (build, buy, offshore, outsource, partner) AP firms responded with a greater inclination to change how they were currently doing things by greater margins than their North American or European counterparts.

Regulatory challenges

Location may still matter for some roles

Critical functions or positions may need to be located within a specific geography.

For example, Australia's BEAR (soon to be FAR) regime does not require an accountable person to be located in country. However, given the emphasis that the Australian regulators place on accountability, do firms feel that their senior leaders can exercise effective oversight while out of country? Firms will need to be able to explain to regulators why this structure is appropriate and effective in achieving the desired outcomes.

Certain activities may be location-bound as well. Where trades are being executed or where products are being sold (vs. where the risk is booked) still matters – some regulators may be more concerned about this than others. Firms need to have a good understanding of the rationale of their own operating models, as well as of the regulatory appetite to accommodate such models.

Finally, location is important not just to people but also the data they are using. Firms should consider how relocating roles and systems may run afoul of data localisation requirements such as if activities that were based in one jurisdiction are now cross-border or if the footprint of cross-border activities has changed.

Regulatory challenges

Ensuring good outcomes in an understandable way

Firms should consider the questions regulators will ask as they integrate new technology into their BAU. Some examples include:

- **Efficacy of the technology solution** does the technology solve a problem or deliver better outcomes than the current process? What is being lost or changed by adopting the new solution?
- **Ethical use of technology** are you using data ethically? How are you ensuring the proper outcomes for customers? Is there proper governance in place?
- **Auditability of technology** is the process you are using explainable and auditable? Do regulators understand/supervise the new technology that you are using effectively?
- **Data sharing concerns** is there significant divergence of opinions/approaches to issues such as cross-border data flows and customer privacy?
- **Digital onboarding** how are firms onboarding people in a fully digital space are employees getting the right training and absorbing the appropriate culture to operate in the organisation, and are customers adequately screened? Are there sufficient controls in place?

Regulatory challenges

Resiliency

As firms move towards structures where the use of third-party providers is integrated into the operating model, a build-up of concentration risk starts to occur – convergence around a small number of service providers. For example, there are only three major third party administrators and master custodians servicing the Australian superannuation industry.

Firms will need to be able to answer questions about their third (and fourth) party risk management and how they plan to address any disruption to service. This is especially the case in jurisdictions that may take a more conservative approach to third party risk management (TPRM).

For example, the need for third party providers to use encryption techniques that enable datasets to remain in one geography to comply with local privacy laws often expensive and sometimes, for a multi-jurisdictional provider, not practicable. How then can firms and their service providers meet regulatory expectations where requests are cost prohibitive or technologically unfeasible?

On the other hand, regulators will need to consider how they supervise service providers, whether directly or through the primary FS institution. We expect there will be attention on what governance structures are in place to ensure proper due diligence of partners as well as rigorous formulation and testing of contingency plans.



FS firms are already operating in a difficult environment and face increased pressures to transform business models. There is a need to assess how things have already shifted and how the use of new technologies and operating models will interact with the web of regulatory requirements and expectations.



COVID-19 changes

- Does your organisation fully understand the changes to your business model brought on by COVID-19, and what areas need to continue to transform? How has it changed your previous transformation plans? What new opportunities have emerged?
- · What is the purpose of your organisation under the new normal? Is this a change compared with the pre-pandemic strategy?
- Have the risks associated with how your business model has already changed due to COVID-19 been assessed and managed?
- What are the risks involved with further changes? Do you understand what pushback your organisation may receive from regulators? Do you understand what this pushback will look like in different geographies in the region?
- How are you thinking about long-term sustainability of the business model - both from a profitability and risk management perspective?



Wide scope of potential changes

- Do you have the resources in place to accurately
 How are you looking at and addressing capture and understand the appetite for regulators to sign-off on significant changes to your organisation's business model? Have you considered systemic stability or resilience issues? And how is continued access to services for vulnerable customers ensured?
 - regulatory concerns what is the plan to 'bring the regulator along'?
 - How are you understanding the different approaches across different jurisdictions - can your new model work in all the geographies in which you operate?

Round-up: Key publications/developments from 2020



Australia

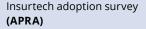
Expansion of BEAR to FAR (people)



Expansion to BEAR to FAR (data and privacy regimes)



Announced intention to translate 2020-2024 Cyber Security Strategy into an actionable program of work and mobilise resources for execution (APRA)







Singapore

Individual Accountability and Conduct Guidelines (MAS)



Revised the Outsourcing Notice (MAS)



Published updates to TRM and Business Continuity Plan (BCP) Guidelines (MAS)



VERITAS - phase one, fairness metric (MAS)





Hong Kong SAR

Cybersecurity Fortification Initiative (HKMA)



Bounding the use of external electronic data storage providers (HK SFC)



Regtech and supervisory technology adoption case studies (HKMA)





China mainland

Data Security Law



Personal Information Protection Law





Passage of the Cybersecurity Bill has been postponed until 2021





Japan

Released reports on IT governance and cybersecurity (JFSA)



Act on sales of financial products aiming to improve convenience and protection of financial



services users







Initiative

Legislation



Regulation











Regulatory priority



Macau SAR

Cybersecurity law came into effect December 2019





Malaysia

Thailand

Financial Sector Technology and Innovation Scheme (MAS)



Revised Outsourcing Notice (MAS)





Taiwan

Plans to establish a national cybersecurity team to provide solutions in targeted areas

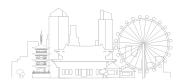


Expects to establish a cybersecurity excellence centre by 2022



Set up the 'FinTech Co-Creation Platform'





South Korea

Regulatory Reform for Big-Data Economy



Enforcement of Personal Data Protection Act delayed until



Fintech and Digital Finance Policy for 2020 (SK FSC)





Consultation



Initiative



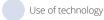
Regulation













Guidelines

Legislation



Regulatory priority

Operational Resilience

Operational resilience has been a regulatory focus area well before the COVID-19 pandemic and will remain an important topic in 2021 and beyond. As it is still uncertain how long the public health situation will continue, regulators will be closely monitoring firms' ability to manage continued disruption to operations and their ability to adjust to changing circumstances.

Regulators across the world have announced intentions to either revisit current regulations governing operational resilience or extend/delay open consultations to suitably understand and incorporate the lessons learned from the pandemic.

Examples of key open consultations and legislative activities to watch in 2021



Supranational

- Revisions to the Principles for the Sound Management of Operational Risk (BCBS)
- Principles for Operational Resilience (BCBS)
- Consultation on outsourcing principles to ensure operational resilience (International Organisation of Securities Commissions, IOSCO)

Principles will likely drive a certain amount of harmonisation but remain high-level and allow geographies significant flexibility.



UK/EU

- Open consultation *Operational Resilience: Impact tolerances for important business services* by the UK Prudential Regulation Authority (PRA)
- Draft *Digital Operational Resilience Act* (DORA) published by the European Commission

The UK has a maturing operational resilience framework that is more centralised and defined than most jurisdictions. The PRA is expected to finalise its approach in the first half of 2021 and its direction will be closely watched by peer regulators.

DORA is expected to be negotiated over the next 12 to 18 months, aimed to expand supervisory focus beyond financial resilience to information and communications technology (ICT) management and operational resilience.



Singapore

- Delayed revisions to Business Continuity Management Guidelines (MAS)
- Consultation on revised Outsourcing Notice (MAS)

MAS is enhancing guidance to address the increased reliance on technology and cloud, and interdependencies between people, process and technology across the organisation.



Australia

- APRA announced their intention to set overarching expectations for the management of operational risk and other non-financial risks
- Expects to consult on/refresh *Outsourcing* and *Business Continuity* prudential standards (APRA)

APRA has noted that sound remuneration policies that strike a balance between financial targets as well as risk management/good conduct is an important part of long-term resilience. To that effect, they have released an updated consultation on their remuneration standards.²⁷ As APRA looks to consult on other topics, firms should expect to see a continued focus on promoting sound culture and conduct as a key part of proposed revisions.

Operational resilience from an AP perspective

Due to a mix of government and public responses to the pandemic, parts of Asia may not experience the same level of recurrence of widespread outbreaks as compared to other parts of the world. Therefore, Asia may avoid some of the difficulties associated with intermittent lockdowns. This being said, as with the rest of the world, the massive digitisation effort in response to the public health crisis has created an environment of heightened digital, cybersecurity, and financial crime related risks, which are likely to be of immediate interest to regulators in 2021.

In addition, regulatory guidance on operational resilience remains relatively fragmented in the region. In most cases, this is a structural issue as some jurisdictions have a sectoral approach to supervision which creates differing operational resilience compliance obligations for banks, insurers, asset managers, etc. There is also the question of how operational resilience requirements are organised – many AP jurisdictions organise these around specific areas such as technology and cybersecurity resilience, third party risk management, and business continuity management, which are then supervised by individual functions within regulators.

While there is arguably a global leading practice developing around taking a holistic, group-wide approach to operational risk management led by the BCBS and the UK, in AP this remains something of a mixed bag. Firms in our region may find the differing approaches challenging – all supervisors have emphasised that it is critical to look at operational resilience but the degree of urgency or coordination among regulators will differ across jurisdictions. It is

also worth reflecting upon how regional regulators pay close attention to the work of global bodies like the BCBS. We expect that regulators in AP will look to these emerging international practices when formulating their respective approaches.

This confluence of circumstances may turn out to be to the advantage of firms with AP operations. If public health conditions in AP remain relatively stable, talent may be comparatively better positioned in this region than others to proactively address operational resilience issues. Regulatory fragmentation always is, and will continue to be, a challenge in the region but with the proper approach can be successfully managed. Firms in AP can also take advantage of a 'watch and learn' approach as operational resilience regimes develop abroad and apply the relevant lessons at home. Global firms may find that their approaches to operational resilience go above and beyond local requirements and they may be able to work with local regulators to help develop an approach that is appropriate for their geography.

Beyond the regulatory impetus, firms also recognise operational resilience as a key challenge and are taking active steps to address it. In a recent Deloitte survey, 74% of firms in AP (North America (NA): 76%; EU: 80%) agreed that the pandemic had shown firms that they were unprepared to weather this economic storm. In the same survey, 84% of AP firms (NA: 86%; EU:96%) were already enhancing or planning to enhance their existing resilience plans and 88% (NA: 90%; EU: 95%) reported that they were already conducting or planning to conduct more frequent simulation exercises in the next 6-12 months.

Key topics to consider in 2021 when updating operational resilience plans



Risk-based approach to designing a resilience programme

Human beings are often very good at planning for a crisis that has just occurred, rather than preparing for one that may occur in the future.

Currently, many resilience programmes are quite reactive, organised around responding to past crises; even the current pandemic situation could be classified as such. As no person or organisation can conceive of every possible type of crisis event, a forward looking risk measured approach may be needed.

As firms take stock of their current approach to operational resilience they should consider whether they have factored in different scenarios and sources of risk, the agility of their systems, their interfaces with third parties and the market, and the ability of their talent to respond in a period of stress – how flexible is your organisation and how quickly can it pivot as a situation evolves?



The culture of the organisation impacts the approach to resilience

Many of the risks now impacting financial services do not fit neatly into quantitative prudential risk measures – resilience of an organisation can be hampered by an attitude of 'that is not my problem' or adoption of simplistic approaches.

FS firms may also suffer from something of a false sense of security. As a heavily regulated industry responding to an exigent shock, they have managed to navigate through COVID-19 relatively intact. While the vast majority of firms report that they will revisit their resilience planning, they should also be questioning 'are we doing enough?', 'what could we have done better?' and 'what could we do in the future?'



Active involvement of Senior Leadership

Senior Leadership will need to drive the firm's approach to operational resilience.

A key aspect of creating a coordinated approach to operational resilience will be working across organisational silos. This should help ensure a holistic view of the challenges and opportunities facing the organisation, complemented by relevant capabilities.

As well, firms will need to look at how they are generating management information and how this is being used to brief senior leaders and inform decision making.

Supervision of resilience

The topics that comprise operational risk management and resilience are intertwined tightly. For example, with the increased use of outsourced cloud arrangements, it becomes difficult to tease apart third party, technology, cybersecurity or business continuity risks and then manage them independently. While there is diversity in practice, usually supervisors will release separate guidance by topic. Therefore, the shifting risk landscape (as discussed in the NFR article) as well as changes to the business and operating model (as discussed in the Business Model Transformation article) create a challenge for both firms and supervisors to understand how regulatory guidance and risk management practices need to evolve.

The prevalence of third party service providers further raises the question of the degree to which FS firms need to manage the risks of their third (and fourth) party service providers to ensure their own operational resilience. Similarly, regulators are faced with the question of how to supervise these interconnected entities. While we have seen some regulators broaden their remit to directly supervise third party service providers, the more common approach appears to be supervision via the relationships with a FS institution. This in turn concentrates regulatory accountability on FS firms.

As firms and regulators work to enhance their operational resilience programs, we expect questions to be raised around who is regulated, how and by whom.



Operational resilience will remain in focus in 2021. Leading practice in the area is still developing and AP FS firms will need to keep a close watch on international developments as well as evolution of thought within the region.



Regulatory fragmentation in the region

 How do different approaches to operational resilience within the region impact your organisation's ability to create a holistic programme across all jurisdictions in which it has operations?



What is considered operational resilience?

- Are firms able to deal with the tendency of regulators to address operational resilience on a topic-by-topic basis as issues arise? (e.g. technology and cybersecurity risk + third party risk + business continuity risk = operational resilience)
- Has your organisation considered how best to thread the needle for a holistic approach when the regulators themselves may be siloed?



Preparing for the unpredictable

- How can your organisation overcome a failure of imagination in resilience planning?
- What are the key skills needed throughout your organisation to build a nimble approach?

Key developments in 2020



Supranational

Principles for operational resilience (BCBS)



Revisions to the principles for the sound management of operational risk (BCBS)



Proposals to update its existing outsourcing principles (IOSCO)





United Kingdom

Operational resilience: Impact tolerances for important business services (UK PRA)





European Union

Digital Operational Resilience Act ongoing negotiations





Australia

Operational risk as a priority, refresh Outsourcing and BCP prudential standards (APRA)



Move towards new SRI rating model (APRA)



Commencement of APS 115 Standardised Measurement Approach to Operational Risk (APRA)





Malaysia

Recovery planning final rules (BNM)







Singapore

Notices to Banks and Merchant Banks on Management of **Outsourced Relevant Services** (MAS)



Revisions to the capital framework for authorised deposit-taking institutions (APRA)





Enhanced Competency Framework on Operational Risk Management (HKMA)







Consultation



Initiative



Regulation



Supranational bodies/ non-AP regulators



Guidelines



Legislation

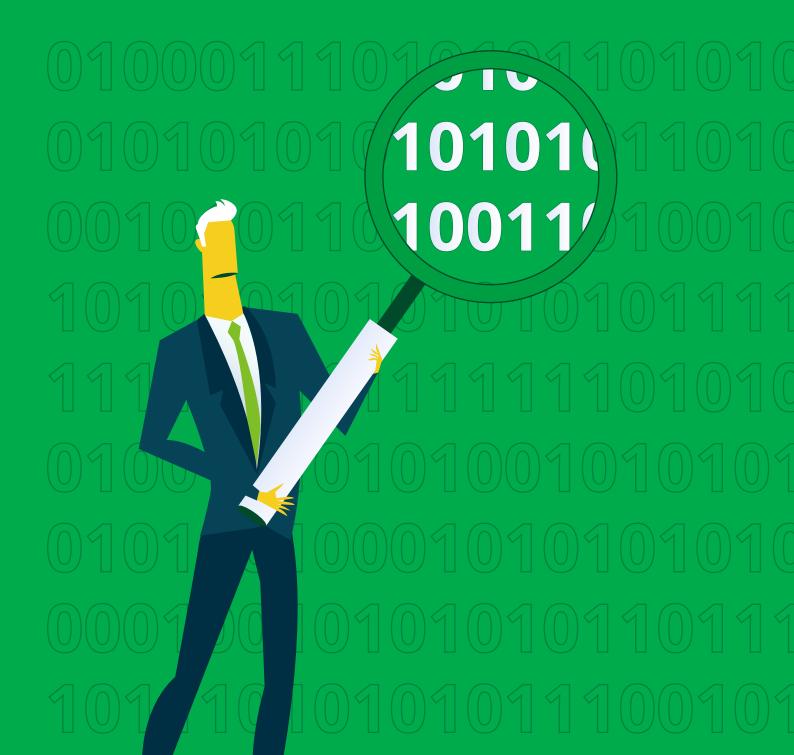


Regulatory priority



AP Regulators

Digital Risk



Digital risk is a broadly defined term that is often used as something of a catch-all. Digital risks commonly refer to those which relate to software and hardware, such as service outages or unauthorised access. But they also include risks related to the application of digital technology. Deloitte's report *Financial Services:*Managing Risk to get fit for a Digital Future explores how digital risk can be found across strategic, financial, operational, regulatory, or reputational risks and perhaps lays out a more coherent definition than could be explored within the confines of this Outlook.

For our purposes, we have limited our analysis of digital risk as it intersects with other key themes in this *Outlook* and have explored it as a part of other articles – for example, in operational resilience (e.g. how has the rapid digitisation of formerly more manual processes as a result of COVID-19 impacted operational resilience?) or in financial crime (e.g. how can new applications for technology, such as Al solutions, be applied to combat financial crime?).

Managing the digital risks associated with operational resilience or new applications of technology will be a challenge in 2021 and beyond. In addition, we expect financial regulators in AP to be particularly focused on digital risks as we have defined them both as a consequence of the impact of COVID-19, but also as a continuation of their previous supervisory work plans.

How then should FS firms respond in 2021? While managing these risks can be daunting, we believe that they are ultimately knowable and many FS firms have the skills to manage these risks within their organisations already. We suggest that

organisations think along three key areas when considering digital risks:

What's old is new again – often something that is packaged as 'new' or 'emerging' is perhaps more of an enhancement to an older concept. For example, cybersecurity encapsulates much of what used to be 'information security'. To this end, many organisations already possess significant institutional knowledge to address digital risk, and require more marginal investment to understand technological evolution than may be apparent at first glance.

Efficacy versus efficiency – organisations may wish to invest in technology to be more effective (i.e. better outcomes) or more efficient (i.e. a faster way to get to the current outcome). Often, the two distinct concepts can become muddled, particularly as advancements in technology have begun to open up exciting new applications. FS firms will need to make careful decisions about what investments should be made at what stage in a technology solution's development relative to the organisation's needs at the time.

Talent with a multidisciplinary skill-set – the above two points suggest that FS firms will need to spend time developing talent that can successfully bridge gaps between old and new skill-sets. Sometimes this means hiring in talent with a wider range of technology skills but also encouraging and providing opportunities for current talent (who already have a good understanding of their mandate as well as the organisation) to pick up new skills.

Cybersecurity



Similar to many of the topics raised in this *Outlook*, cybersecurity was a regulatory priority in AP well before the onset of COVID-19. Increased digitalisation throughout the financial services operating model has ensured that cybersecurity, as part of technology risk management, remains a prominent part of operational resilience. The pandemic has provided further impetus for the rapid adoption and deployment of technology and digital solutions, driving continued scrutiny of this space by both firms and regulators in the coming years.

While COVID-19 has reportedly caused an uptick in cybersecurity-related attacks*, the underlying cybersecurity threats remain the same – malicious actors look to exploit system and human vulnerabilities, often anchored in the belief that people, rather than technology, are the weakest link in cybersecurity.

The rapid deployment of digital solutions along with remote working and split-team arrangements have exacerbated these points of exposure as firms are challenged to roll out solutions with minimal impact to operations while simultaneously educating their workforce. As well, firms' response to cybersecurity events may be strained by the alternate working arrangements, which may separate talent from both each other and the required infrastructure.

Rapid digitalisation and acceleration of plans to invest in technology has also introduced a greater reliance on third party services providers, including outsourcing arrangements. Technological dependencies are also more prevalent, e.g. interlinkages with FinTech and BigTech firms or a small number of third-party service

providers, which raises concerns about concentration risk. Moreover, many of these interlinkages operate through application programming interfaces (APIs), which are in common use across the industry, thereby further exacerbating the aforementioned concentration risk. These elements have enlarged vulnerabilities and exposed firms to higher risk of attacks.²⁸

Taken together, resilience plans have had to, or will have to, evolve to include the commensurate preventative, detective, and corrective cybersecurity measures as the topic remains a priority for financial supervisors even through the pandemic. For instance, the FSB's Consultation on the Effective Practices for Cybersecurity Incident Response and Recovery was held in April 2020 and results were published in mid-October of the same year; the paper was part of the FSB's original 2020 work plan and delivered as planned, even amidst a global pandemic.^{29,30}

Regulatory horizon

Currently, AP is entering a 'second wave' of cybersecurity regulation. The 'first wave' was a call to action to set specific minimum levels of cybersecurity capabilities. This 'second wave' will now hold firms to more robust standards and our expectation is that this will be strongly enforced going forward. Many of these new regulations were in development prior to COVID-19 and are expected to incorporate the learnings from the response to and implications of the pandemic. Furthermore, in keeping with the iterative nature of cybersecurity issues, we expect regulators to take a consultative approach involving dialogue and feedback between supervisors and the industry.

^{*} From our Cyber Intelligence Centre (COVID-19's Impact on Cybersecurity), we have observed a spike in phishing attacks, Malspams and ransomware attacks as attackers are using COVID-19 as bait to impersonate brands thereby misleading employees and customers. This will likely result in more infected personal computers and phones. Not only are businesses being targeted, end users who download COVID-19 related applications are also being tricked into downloading ransomware disguised as legitimate applications.

A few examples of 'second wave' cybersecurity regulatory developments include:



Australia

Security Legislation Amendment (Critical Infrastructure) Bill 2020 – classifies financial services as part of 'Critical National Infrastructure'; focus is on the privacy and consent of customers to the use of their data and ongoing court cases in this area will likely impact regulatory approach in 2021³¹



China mainland

The *Civil Code*, which will take effect in 2021, concerns actively responding to issues such as personal information protection and network data utilisation. *The Data Security Law* ³² and *Personal Information Protection Law* ³³ are expected to be passed in 2021, becoming an important part of China's legal regime for cybersecurity and data protection



Hong Kong SAR

The HKMA launched the *Cybersecurity Fortification Initiative 2.0.*³⁴ Key changes include enhanced version of cybersecurity incident response, threat intelligence changes, and attack simulations



🔒 Japan

The JFSA released the IT and cybersecurity report outlining its aims to improve cybersecurity³⁵



New Zealand

As of 1 December 2020, mandatory breach reporting is now required; the Financial Markets Authority (FMA) also has the regulatory power to look at data usage³⁶



Singapore

MAS is looking to update the guidelines on technology risk management and business continuity management.³⁷ The *Personal Data Protection Act* was also amended to require mandatory breach notification

Cybersecurity and resilience going forward

A key challenge in developing robust cybersecurity practices, which is echoed by the other areas of resilience, is that it is a highly fluid space. Both firms and supervisors alike are working to keep up with developments through the hiring and training of

staff, and the balancing of innovation and established practice. While cybersecurity is sure to draw scrutiny in 2021, it is likely to stay on the priority list for years to come. The challenge over 2021 is managing the fallout from a rapid response to COVID-19. As the dust settles, the areas of consideration that we see are:



New technology use

New technologies such as AI/ML are seeing more widespread adoption, which raises questions around:

- What is the governance of the use of this technology across the enterprise?
- Are the right controls in place for the safe deployment of emerging technology? For example, how can potential bias be managed? How are organisations approaching identity management guidelines?
- How much faith can be placed in unsupervised machine learning?

- Are staff and supervisors sufficiently trained to understand and use these tools?
- What is the balance between cost vs. effectiveness of the tools?
- How does the use of the technology fit into the organisational (and supervisory) risk appetite?
- What are the areas of intersection (e.g. privacy, data use, etc.) and are they managed appropriately?



Regional cooperation

A fragmented regulatory landscape is another point of exploitation for cyberattacks as they often happen across borders.

Recognising this, there has been movement by AP regulators to develop cross-border information sharing about cybersecurity incidents and typologies.

Firms should pay close attention to developments in this area as cross-border information sharing amongst regulators could help to identify cybersecurity trends at a more rapid pace, and could be an important source of data for cybercrime prevention.*



Transparency and consent

Transparency of how data is used and the consent of the data subject will grow in importance as new solutions are leveraged to combat cybersecurity.

There is diversity of thought around the region about what kind of principles should be used to govern data usage and consent as well as which players should be involved in their crafting.

For example, Australia has adopted an approach focusing on the financial sector almost exclusively; in Singapore, multiple supervisors (privacy supervisor, financial supervisor) have partnered with industry to develop an approach; and New Zealand has seen a government-led initiative, which is largely industry agnostic.

There will always be philosophical differences on this topic between jurisdictions in the region; therefore, firms will need to manage both the overlaps and gaps to enable widespread use of new technology.



Data localisation

Data localisation requirements are not a new concern to the region when considering technological developments. For example, digital banks and their third-party service providers have had to contend with local data protection rules. Digital bank licence applicants have entered into discussions with regional regulators to find workable solutions, with varying degrees of success.³⁸

However, the 'new normal' working environment may create added stress on this topic as institutions grapple with a remote workforce that may be located across the region (if not the world) as well as technologies and data relationships that may require information to cross borders to be processed or used.

^{*} The Financial Services Information Sharing and Analysis Center (FS-ISAC) has created the CERES Forum, which is an independent forum for central banks, regulators and supervisory entities. The forum tries to facilitate multi-lateral information sharing, enabling financial authorities to rapidly detect, assess and respond to cyber threats in the financial sector. However, while information sharing at the supervisory level has its merits, sharing at the corporate level remains limited.



Key takeaways

There is likely to be diversity in practice when developing cybersecurity measures as organisations and supervisors in AP are at different levels of maturity. Relatively smaller firms may feel the regulatory burden sooner. However, supervisors may not be able to alleviate requirements given the ubiquity of cybersecurity-related incidents. Hence, the industry will need find the right mix of practices.

Some of the key trends in the space that we expect are:



Increased use of technology and appetite for innovation

- How willing are supervisors to allow FS firms to innovate with regard to cybersecurity?
- How effective are some of the new technologies Is your organisation innovating as quickly as the that are available to monitor the threat landscape? Should they be adopted quickly
- or is there more value in waiting for further developments?
 - attack actors? How can your organisation get ahead of the curve?



Regional coordination and divergence

- How are regulators and industry bodies coordinating their efforts within the region and beyond?
- In areas where there are philosophical differences in regulatory approach, how is your organisation managing compliance requirements?



Upskilling of supervisors, staff, and customers

- What skillsets are needed and how are they being developed?
- Are initiatives in line with industry and stakeholder expectations?
- Which areas does your organisation prioritise when tackling this issue?



Focus on accountability, transparency, consent, and privacy

- As the expectations around accountability, transparency, consent, and privacy evolve and becoming increasingly important, how is your organisation integrating these topics into your operations?
- How is your organisation managing the evolving definitions of these topics?

Round-up: Key publications/developments from 2020



China mainland

Data Security Law Expected to pass soon



Personal Information Protection Law Expected to pass soon

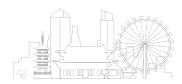




India

Personal Data Protection Bill 2019 Passage delayed





South Korea

Data Security Law Amended in 2020



Regulatory Reform for Big-Data Economy





Indonesia

Personal Data Protection Act Expected soon



Passage of the Cybersecurity Bill has been postponed until 2021





Malaysia

Personal Data Protection Act 2010 Proposal to update law





Thailand

Personal Data Protection Act Delayed until 2021

















Singapore

Security Legislation Amendment (Critical Infrastructure) Bill 2020



Announced intention to translate 2020-2024 Cyber Security Strategy into an actionable program of work and mobilise resources for execution



Financial Sector Technology and Innovation Scheme (MAS)



Revised Outsourcing Notice (MAS)





Japan

Released reports on IT governance and cybersecurity (JFSA)





Hong Kong SAR

Cybersecurity Fortification Initiative 2.0



Bounding the use of external electronic data storage providers





Macau SAR

Cybersecurity law came into effect December 2019





Taiwan

Plans to establish a national cybersecurity team to provide solutions in targeted areas



Expects to establish a cybersecurity excellence centre by 2022





Guidelines





Regulation



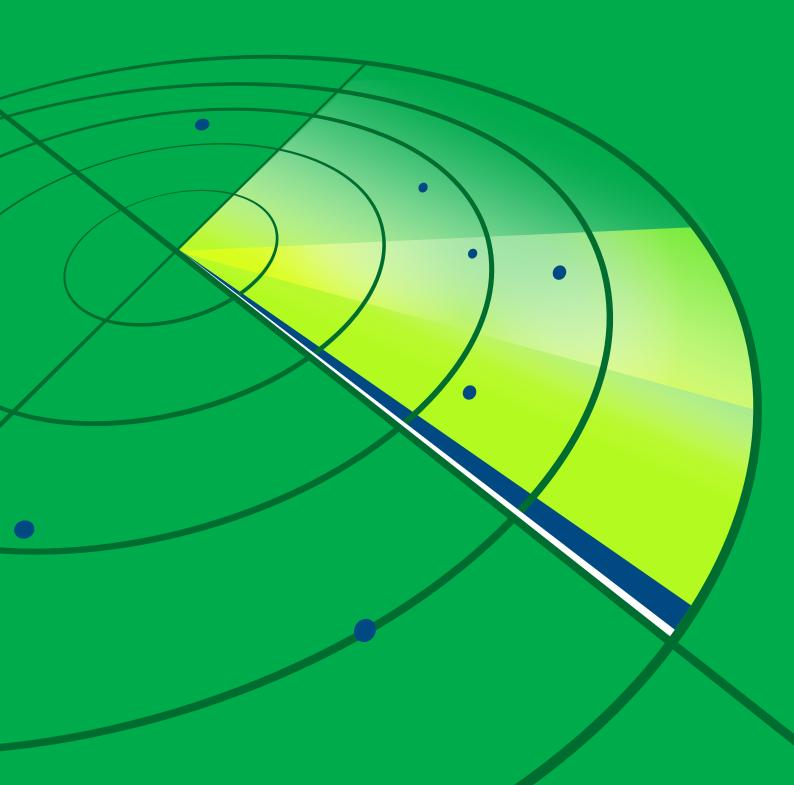


Privacy laws





Financial Crime



Combatting financial crime is a core tenet of corporate responsibility, and therefore permanently in focus for regulators. 2020 has brought a few trends to light that will underpin developments in the AP financial crime landscape in the coming year:

- Operational resilience: Some of the pain points amplified by the pandemic are longstanding issues in managing financial crime; similar to cybersecurity responses, the global pandemic brought rapid change. Firms will need to ensure that their riskbased approach remains robust, yet flexible, in the face of continuing change. This includes reviewing and managing the potential impacts on financial crime risk and compliance of rapidly implementing capabilities such as virtual customer due diligence (CDD) or electronic Know Your Customer (eKYC), as well as ensuring that financial crime surveillance, monitoring, and internal/external reporting remain effective, even under remote or alternative working arrangements. Finally, firms will need to give prominence to detecting changes in financial crime typologies due to the COVID-19 pandemic and maintaining strong defences whilst revising and/or implementing risk management practices.
- Fighting financial crime: Cooperation between regulators across jurisdictions (public to public), between regulators and the private sector (public to private), and among the private sector (private to private) to combat financial crime can be a challenge given the restrictions on information sharing. The rapid uptake of financial crime technologies in 2020 partially as an outcome of the global pandemic has strengthened the case for sharing financial crime data (while still ensuring information security and compliance with data privacy regulation) and forging new partnerships.

Operational resilience and pain points amplified by COVID-19

In 2021, we expect that regulators will consider the management of financial crime risk and compliance more intently from the perspective of operational

resilience. This may be in addition to other existing supervisory requirements and expectations from the relevant financial crime regulators and financial intelligence units.

As firms make revisions to their operating models in 2021, any lasting changes made to processes and technologies must be shown to have beneficial (or at least neutral) impact on levels of financial crime risk. Further, bad actors using the chaos and uncertainty of the COVID-19 situation to their advantage will put pressure on the industry to remain vigilant whilst trying to revise and/or implement their risk management practices. Some important issues that we expect in 2021 include:

Changing typologies

The Financial Action Task Force (FATF) noted in its guidance on the impact of COVID-19 that rapidly changing activities by criminals as well as significant changes in customer behaviour put pressure on FS firms to adapt and respond.³⁹ However, in our view this is not a problem borne of the pandemic - trends such as the convergence of fraud, money laundering, and cybercrime have increasingly exposed the limitations of traditional cash heavy indicators of financial crime.

The pandemic has expedited efforts by FATF and its regional bodies, financial regulators, law enforcement, and FS firms to detect, update, and share new financial crime typologies. For example, Australia's AML/CFT regulator and Financial Intelligence Unit (FIU), the Australian Transaction Reports and Analysis Centre (AUSTRAC), commented that the pandemic facilitated rapid collaboration between AUSTRAC and industry to investigate new financial crime typologies. These typologies were then able to support the detection and mitigation of pandemic-related criminal activity.

However, actionable outcomes arising from such fora cannot always match the speed at which the threat landscape changes. Moreover, rules-based systems can limit industry practice making updating practices such as financial crime typologies something of a Sisyphean task. Therefore, we may see a trend of supervisors phasing out rules-based systems and placing greater emphasis on outcomes. Ultimately, financial crime management remains a topic where both supervisors and FS institutions need to collaborate in order to stay current.

A few examples of 'second wave' cybersecurity regulatory developments include:



eKYC and CDD

At the beginning of the COVID-19 pandemic with much of the workforce and customer base experiencing some form of lockdown and/or social distancing mandate, firms were able to, with regulatory support, quickly shift to digital channels for customer onboarding and identity confirmation to ensure continuity of service.

However, rapid adoption of new technology is not without challenges. Firms operating in jurisdictions that had already made inroads in digital identity confirmation and customer onboarding through national identity databases, digital banking regimes, or open banking may have found this shift less challenging than others. Both existing technical infrastructure as well as properly trained staff enable a relatively cleaner transition.

As regulatory appetite for an 'all-digital' approach to activities like customer identification and onboarding is mixed within the region, the permanence of this rapid digitisation may be varied. Certain jurisdictions may adopt the changes as the standard operating procedure moving forward, whilst others may consider them as temporary fixes. Even within the same firm, there may exist competing preferences that could hamper uniformity in digitalisation across jurisdictions – for example, the availability of infrastructure and the will to transition may have been stronger in some jurisdictions than others.

Regardless, FS firms will have to understand the impacts of increased digitalisation on their financial crime risk and control environment as well as how appetite for such investments may differ.

Additionally, it is important to note that these measures are not limited to the subject area of financial crime. Transitions to identity databases and virtual-only interfaces will have implications on financial inclusion and access to financial services, which has been a key item on the agenda of a number of AP financial regulators.



Use of cognitive technologies

The constantly changing typologies of criminal activity as described above would seem to make the case for the adoption of cognitive technology such as ML/Al. However, the road to full adoption of such technology is long and its effectiveness in tracking suspicious activities, generating insights, or even predicting new crime typologies is an open question.

Firms that are already employing ML/Al to monitor transactions or for predictive analytics may have experienced difficulties with their solutions because of the rapid change in both customer and criminal behaviour brought on by the pandemic. However, this is not an issue limited to the special circumstances of 2020 and will certainly continue to pose challenges into the future. As ML/Al solutions are trained on historical data, they can be confused by rapid changes in data inputs and may therefore generate erroneous results. Past behaviour is not always a good predictor of the future, especially in environments where core fundamentals are changing.

These challenges are not unique to solutions being used to combat financial crime – for example, needing robust data to feed algorithms is a pain point of the technology itself. FS firms already have a wealth of data available to them for use in combatting financial crime (in large part because of increased regulatory requirements); however, it may not be usable in its current state. Data may sit across disparate systems, once identified data may need to be cleansed or reformatted to be usable, and, perhaps most importantly data owners will need to give the requisite approvals to allow the data to be used.

In addition, FS firms will need to stay close to their decision points to ensure strong basis, explainability, and auditability in order to demonstrate to supervisors how the organisation is deploying these solutions and how outcomes are being monitored.

Nevertheless, 2020 has been a watershed year, showcasing the importance and need for digital solutions. Hence, we may see changes in regulatory appetite and competence in the use of cognitive technologies. Clubbed with the increased entries of technology firms into the financial sector, we expect to see considerable development in the field.

Regulatory response to operational resilience and the pain points amplified by COVID-19

In general, regulators around the region have been pragmatic in responding to the pain points amplified by COVID-19. At the beginning of the pandemic, many made special consideration to emphasise the flexibility of their supervisory approach. For example, the HKMA reiterated that its risk-based approach to anti-money laundering and counter-financing of terrorism (AML/CFT) does not expect or require a 'zero failure' outcome. Furthermore, authorities have issued guidance on how to handle remote customer onboarding or customer due diligence as well as relaxing some in-person verification requirements. While these were important actions that allowed for continuity of service as mentioned above, FS firms will need to assess the impact of digital channels on their financial crime risk and control landscape.

For example, in China mainland, the Anti-Money Laundering Bureau promptly provided guidance, noting that the control measures can be suspended for customers who cannot go to FS institutions

branches to update their identity information. On the basis that firms would make full use of the internet, other public resources, and the relevant information held by the firm, the Bureau promoted remote customer identification and due diligence (over the internet, telephone, etc.) to establish a customer account. Thereafter, firms need to conduct paper and related supplementary information collection as well as archival of materials.

Another important question in 2021 will be the regulatory appetite to integrate some of the extraordinary measures into business as usual. AUSTRAC, for example, has clearly stated that many of the current relaxations on KYC processes will be rolled back at the conclusion of the pandemic.⁴⁰ Regulatory practices may differ across the region, depending on a number of factors such as: desire to expand financial inclusion; demands from customers now acclimated to digital-only processes; internal analysis as to the efficacy of the current extraordinary measures; and the regulator's ability to properly supervise and assess current measures.

Fighting financial crime - challenges on the horizon

Similar to our view on cybersecurity, challenges to the prevention and management of financial crime will not be solved in 2021, nor will they fall off the regulatory radar quickly. These are ongoing issues and will

continue to impact firms' operations. In the coming year, firms should consider their role in tackling these challenges as well as their response to developments between government agencies.



Coordination between government bodies

Financial crime is governed by a number of different arms of government. These bodies usually consist of some combination of one or more financial regulator(s), an FIU, and law enforcement.

The challenges this presents are numerous:

- Cooperation between agencies can be difficult; competing interests can limit the coherence of the local regime or enforcement appetite
- Legal frameworks may take some time to catch up with changes in criminal behaviour as well as developments

in product offerings and technology. In some cases this can lead to confusion for firms seeking to meet regulatory requirements or may hamper enforcement efforts

- Certain actions, such as criminal prosecution, may be outside the remit of financial regulators
- In some jurisdictions, new solutions, technology or otherwise, may need the endorsement of multiple government agencies and may lead to delays in uptake and implementation



Appetite for enforcement

There is a spectrum of experience in AP – each jurisdiction will have its own approach to the prosecution of financial crime.

Australia, in particular, has shown an increased appetite for enforcement, stemming from the *Royal Commission into*

Misconduct in the Banking, Superannuation and Financial Services Industry. The 'why not litigate' approach by the conduct watchdog ASIC has seen an increase in enforcement activities and pecuniary penalties on those who fall short of requirements.



Private-public partnerships

One of the main stumbling blocks to the technology adoption and data sourcing challenge mentioned above is the limited information sharing between government bodies and FS firms as well as among FS firms.

Financial crime is often global in scope – a global and coordinated approach between many actors can start by addressing issues around cross-border data sharing and communication.

Incentives to share information, such as case studies (e.g. technology adoption pitfalls) or internal data (e.g. suspicious transaction reports) are currently limited and the value would be unlocked only when there is a high level trust and buy-in between the parties involved.

Another challenge that needs to be dealt with is that regulators or law enforcement agencies may be more limited in the information or data they would be able to share given legal restrictions and requirements.



Capability of global and local governing bodies

In addition to the above, regulators in the region must also contend with developing their own capability and expertise to supervise new technologies.

As mentioned in other parts of this *Outlook*, this skills gap is an area that regulators are endeavouring to remedy. Therefore,

firms should be giving careful consideration to how they are collaborating with regulators to help them understand how current technology is deployed, what outcomes it is driving, and how it is governed.



Key takeaways

Preventing financial crime is a core tenet in the remit of financial regulators and will always be an area of importance. 2020 has highlighted how this field is evolving and how that will continue into 2021.



Rightsizing approach

- Is your approach to financial crime appropriate for your organisation and its footprint?
- Is there a focus on transparency, explainability,
 How are these decisions being governed within and auditability? Being at the knife edge of
- innovation may not be suitable for every organisation
 - the organisation?



Understanding the role of technology

- Are existing technology solutions the right fit for your organisation? Does the current skillset and talent in your financial crime team allow it to effectively evaluate and use new technology solutions?
- Is talent encouraged to think creatively about what insights can be derived from the data and • What is your organisation's plan for monitoring tools that already exist within the organisation? Is exploration and innovation encouraged when working with technology solutions?
- Would the implementation of (for example) an ML/AI solution generate better results than current practice? How would technology solutions support intended outcomes?
- What are the current obstacles to implementing such solutions?
 - and determining the appropriate time for investment/implementation?



Understand the wider role of your organisation in the financial crime landscape

- Are there collective action issues in your geography that make combatting financial crime difficult? (e.g. lack of shared databases or sharing of crime typologies)
- How robust are private-public partnerships in your operating geographies?
- Can your organisation play a role in solving some of these issues; is there appetite for this within the organisation?



Understand the world outside financial services

- Are there sufficient resources devoted to understanding how criminal behaviour is changing or other macro drivers of change in both financial services and the wider local/ global economy?
- Is there a culture of forward-looking analysis?
- Is talent enabled with technology (or alternative process) to undertake horizon and signal scanning?

Round-up: Key publications/developments from 2020

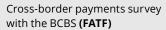


Supranational

Update: COVID19- related Money Laundering and Terrorist Financing (16 December 2020) (FATF)



G20 Leaders support the FATF's work to address money laundering and terrorist financing risks (FATF)





COVID-19-related Money Laundering and Terrorist Financing Risks and Policy Responses (FATF)



Extension of assessment and follow-up deadlines in response to COVID-19 (FATF)



(國)

Committee on payments and market infrastructure report identified steps to enhance crossborder payments (BIS)



Work on virtual assets (FATF)





Australia

AUSTRAC has published a number of COVID-19 updates including AUSTRAC's key initiatives in response to the COVID-19 pandemic and compliance guidance to reporting entities. This is in addition to the amendments to Part 4.15 of Australia's AML/CTF Rules which allowed reporting entities to rely upon alternative proof of identity processes.



Hong Kong SAR

COVID-19-related Money Laundering and Terrorist Financing Risks and Policy Responses (HKMA)





Guidelines for Money Laundering and Countermeasures against Terrorist Financing (JFSA)

HKMA AML/CFT surveillance capability enhancement project (HKMA)



Singapore

Japan

Omnibus Act - AML/CFT enhancements (MAS)



Continued focus on FIs which lack rigorous AML/CFT systems and



AML/CFT Guidelines (HK SFC)



processes (MAS)



Consultation



Initiative



Regulation



Supranational bodies



Guidelines



Legislation



Regulatory priority



AP Regulators

Climate Change



In January 2020, the World Economic Forum (WEF) noted that for the first time in the history of its *Global Risk Perception Survey*, climate change and related environmental issues filled all of the top five spots for the 'likelihood to happen' risk category. In a trend continuing since 2017, climate change and environmental issues took three of the top five spots in terms of 'impact'; in 2020 'climate action failure' even knocked 'weapons of mass destruction' from the top spot in the 'impact' category, which the latter had held since 2017.⁴¹

Keen minds will note that the 2020 WEF report was published shortly before COVID-19 was declared a global pandemic and there was a strong possibility that the 2021 WEF report would see climate issues lose ground to more immediate concerns to do with the impacts of COVID-19. However, while 'infectious disease' took the top spot in 2021 in the 'impact' category, 'climate action failure' had only fallen to second place.⁴² Similarly in the 'likelihood to happen'

category, four out of the top five risks remained environmental in nature, with 'extreme weather', 'climate action failure' and 'human environmental damage' taking places 1-3 respectively. It is notable that in a year as tumultuous as 2020, the existential threat posed by climate change remained at the forefront.

We saw this reflected in the actions of financial regulators in 2020. Even as supervisors scrambled to introduce measures to contain the impact of COVID-19, climate change-related activities did not stop. Among national governments, we now see policy makers emphasising green recoveries from COVID-19 (e.g. 'build back better') and a growing groundswell of support to tackle climate change in 2021. This is particularly the case for our region, given the multitude of carbon net-zero emission commitments, ESG disclosure, and climate risk management requirements announced by AP jurisdictions in 2020.

From the perspective of financial services, there are three key areas to pay attention to in the coming year:



Disclosures

In our 2020 Outlook we noted that there was significant divergence between approaches for corporate ESG disclosures. As well, disclosures are often governed by local stock exchange rules and FS firms' obligation to comply stems from their status as listed companies rather than a regulatory requirement. In the past year, there have been important developments towards standard harmonisation as well as increased participation of financial regulators in requiring ESG disclosures.

Convergence

There was significant momentum in 2020 to standardise ESG disclosures, including announcements by Deloitte and the other Big 4 firms to create ESG accounting standards, a consultation by the IFRS (International Financial Reporting Standards Foundation) on climate-related financial disclosures, and calls by prominent asset managers to standardise disclosures. ⁴³ As noted below, announcements requiring FS firms to release Task Force on Climate-Related Financial Disclosures (TCFD)-aligned disclosures were also numerous in 2020.

Notwithstanding, standardisation is a multi-year project, and it is still unclear which standard will gain most prominence (or whether competing sets of standards will remain).

Governing body

There is an ongoing shift to move the mandate to require ESG disclosures from stock exchanges towards financial regulators or broader public agency consortiums where financial regulators play an important role.

For example, the New Zealand government announced a plan in September 2020 to amend the *Financial Markets Conduct Act* to require TCFD-aligned disclosures from publically listed corporations as well as FS firms as early as 2023.⁴⁴ The Hong Kong Green and Sustainable Finance Cross-Agency Steering Group announced in December 2020 that FS institutions will need to make TCFD-aligned disclosures by no later than 2025.⁴⁵ Both of these developments are similar to an announcement by the UK government in November 2020 that companies across all sectors would need to make TCFD-aligned disclosures by 2025.⁴⁶

While not stipulating the use of TCFD-aligned disclosures, MAS has released guidance requiring all FS firms, regardless of their status as a listed company, to disclose their approach to managing environmental risk on an annual basis.⁴⁷

In Japan, rather than create a new requirement, the Japan TCFD Consortium (made of the JFSA and two other government ministries) has continued to encourage the adoption of TCFD-aligned disclosures across all industries and has achieved the largest number of TCFD signatories in the world, with around one fifth of all new signatories in 2020 coming from Japan.⁴⁸

Given the building momentum in this area, there will be pressure on other geographies in AP to follow suit.

Impact

The shift towards financial supervisors or public agency consortiums requiring ESG disclosures will take place in cooperation with various stock exchanges and may not be a radical divergence from what is already required in a thematic sense, but rather will require more detail and consideration.

For example, a section in an annual report may need to be developed more fully or even produced as a stand-alone document to meet new expectations or requirements (for example, sustainability reports).

Beyond this, FS firms (particularly asset managers and insurance firms) may feel increased pressure to disclose ESG information that could go above and beyond requirements. This pressure comes from both investors and shareholders but also increasingly customers.

As a unified approach for ESG disclosures is still some way off, AP firms may also stand to benefit from being active participants in deciding which standards are adopted around the region. Open communication with and providing feedback to financial regulators and public agency consortiums is an important part of shaping this still developing area.



Risk management

Currently there are a suite of tools for FS firms to manage climaterelated risks – ESG heatmaps, carbon footprint analysis, sector screening, etc., but these have significant limitations when trying to help FS institutions assess and manage the impact of climate-related risks.*

Stress testing

There was a flurry of activity in this space in 2020, with the Network of Central Banks and Supervisors for Greening the Financial System (NGFS) publishing detailed guidance for supervisors on how to undertake climate-related stress testing exercises in their own jurisdictions, sample climate scenarios tailored to use in financial services, and a series of in-depth case studies.

In 2021, the UK and France will undertake climate risk stress testing, while pilot programmes have been announced in Hong Kong SAR and Japan.⁴⁹ Although not yet officially announced, based on communications in 2020, it is likely that both Singapore and Australia may also pilot climate risk stress testing in some form in 2021.⁵⁰

It may also be worthwhile to note that progress on climate change can be led by other parts of the government beyond financial regulators, as is case with Japan where the Ministry of the Environment is acting as coordinator for all types of firms to support TCFD disclosure and scenario analysis. Depending on which body champions ESG there may be a difference in focus (for example, a sectoral view versus an economy-wide view), which firms should pay heed to and adapt strategies accordingly. This will be particularly important to those FS firms operating across multiple jurisdictions.

Impact

AP regulators have released their intentions, but not specific requirements or scenarios for climate risk stress testing publically. The challenges of undertaking climate stress testing broadly fall into three categories:

Climate-specific data – It will be difficult to gather and collate climate-related data to meaningfully undertake a stress test. Furthermore, this is a developing area with no set industry practice. For example, finding the correct transmission mechanism from physical/transition risk to financial risk remains ambiguous. As well, smoothly reallocating portfolios based on the results of a climate stress test (e.g. from coal to renewables) is still a developing art.

Organisational – While modelling and climate-related risk expertise are beginning to converge, in general they are still seen as separate skills and knowledge may be siloed within an organisation. FS firms will need to invest to cross-training, creating diverse teams to undertake climate stress testing. As well, firms may find these skills difficult to acquire in the market if AP jurisdictions move to introduce climate risk stress testing along similar timelines.

AP-specific – Climate change (particularly physical risk) will have an outsize impact on our region, which complicates the two issues mentioned above. In addition, the differing regulatory regimes around the region may challenge FS firms to find a coordinated and holistic approach to managing their obligations.



Government programmes

While outside the realm of regulatory compliance, government policy towards mitigating climate change will have major impacts on FS firms.

'Build back better' and the 'green recovery'

A number of governments in AP and abroad have made commitments to channel COVID-19 economic stimulus into projects to promote a transition towards a more sustainable, low-carbon emission economy. This will encompass a wide range of initiatives such as development of renewable energy and green infrastructure (e.g. South Korea), expanding green finance (e.g. Hong Kong SAR, Singapore), preferential tax treatment for decarbonisation (e.g. Japan), and investment in skills development and re-training for local talent pools.

Net-zero commitments

There have been a number of net-zero commitments made in 2020 in AP – New Zealand (2050); China mainland (2060); Japan (2050); South Korea (2050); and, Hong Kong SAR (2050). With two of the world's largest economies, both of which are heavily dependent on fossil fuels (China as energy generator; Japan as financer), and a growing number of Asian countries signing on to net-zero, we can expect to see substantive development in the region to achieve these commitments.

Impact

FS firms will need to pay close attention to the direction that governments take in this area.

Clarity will likely come early in early 2021 as governments begin to announce budgets and/or stimulus plans. For example, China mainland's 14th *Five Year Plan* for social and economic development is expected to be released in March 2021. Given China mainland's netzero commitment, it is likely to contain significant information about the country's policy approach to the transition away from a carbon-based economy.

There may also be more net-zero or concrete decarbonisation pathway announcements from geographies at the United Nations Climate Change Conference (COP26) in November 2021 (postponed from November 2020 due to COVID-19). National announcements at COP26 are likely to be accompanied by more stringent regulations (especially for carbon-intensive industries) to support decarbonisation.

To fully capture releases from government and policy bodies, FS firms may need to expand their horizon scanning. As discussed earlier in this *Outlook*, FS firms will be expected to play an important role in economic recovery from COVID-19. Being active participants in 'green recovery' schemes will be vitally important in 2021 and beyond.

^{*} Detailed guidance on these trends can be found in our recent report, Climate-related risk stress testing

Creating a diverse skill-set

The changing regulatory landscape, pressure from customers and investors, gaps in talent and competency, and the direction of fiscal policy will only continue to demand more of firms in 2021. Climate change is perhaps the next 'big thing' on the horizon for FS firms, and in many ways mirrors the transformation journey that many firms have embarked on with digitalisation.

As discussed throughout this *Outlook* risk management topics are converging. Firms are pressed to develop talent that has a deep understanding of their own domain but can also manage intersectional concepts. Thinking of climate change specifically, examples might include credit analysts who have a good grasp of how climate risks impact a portfolio's credit profile or climate scientists with a firm understanding of financial modelling.

One of the first areas that may benefit from such expertise is at the Board and Senior Leadership level. A supervisory focus on conduct and culture (specifically individual accountability) may begin to probe how well leaders understand how their organisation is managing climate-related risks. Supervisors may question how ESG data is being integrated (including how it is being used to set strategy and manage risk); how leadership is adapting organisational and reporting structures; what technology is being used to gather and analyse data that informs management reporting; and how senior leaders are offering meaningful challenge and

review. Further down the line, financial supervisors may look to see how these efforts permeate through the whole organisation and connecting to themes like 'tone from above'.

Leveraging FS firms' influence as key players

FS firms are also able to leverage their influence as key players in the market, such as through their relationships with clients and investors. This allows them to encourage other players towards collective action that provides important social goods – for example creating climate risk taxonomies or the public data repositories needed to perform climate risk analysis.

FS firms can also play a more direct role in mitigating climate change. For example, FS firms can help prioritise the financing infrastructure that supports more sustainable economic development such as renewable energy, recycling plants, and energy efficient buildings.

In summary – there is now, more than ever, a need for FS players to define their space in the climate change discussion and decide on their role. FS firms are in a unique position of being able to not only make changes themselves, but also influence collective action. We believe that it is therefore incumbent on industry participants to demonstrate their social utility by playing a stewardship role - with AP leveraging its unique characteristics and regional momentum.



Key takeaways

Climate change is perhaps the next 'big thing' on the horizon in financial services. FS firms will need to understand how to manage the risks of a changing climate, but also what role they will be expected to play in the transition towards a low-carbon economy.



Understand the intensity and the origin of the momentum

- Is your organisation able to effectively monitor Does your organisation understand the various activity across different policy spaces?
- Does your organisation know which government bodies and other stakeholders are driving climate change conversations?
- obligations and expectations what is their plan to manage disclosures, risk management, and other intersectional areas?



Right skills at the right level

- How is your organisation investing to ensure talent and leadership have the appropriate skills to tackle climate-related risks?
- How are climate-related risks integrated into your organisation's governance and strategy?



Making a wider impact

- and opportunities of climate-related risks?
- Does your organisation understand the threats How is your organisation managing stakeholder expectations, which includes public sentiment? How are impact, geographical, and temporal boundaries addressed?

Round-up: Key publications/developments from 2020



Supranational

Stocktake of financial authorities' experience in including physical and transition climate risks as part of their financial stability monitoring (FSB)



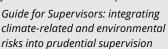
Climate-related financial risks: a survey on current initiatives (BCBS)



The Green Swan (NGFS)

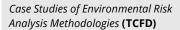


Guide to climate scenario analysis for central banks and supervisors



The macroeconomic and financial stability impacts of climate change: research priorities

Overview of Environmental Risk Analysis by Financial Institutions (NGFS)





Guidance on Risk Management Integration and Disclosure

2020 Status Report

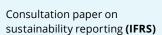
(TCFD)

(TCFD)





Forward-Looking Financial Sector **Metrics Consultation** (TCFD)





Industry intention to work together on a comprehensive corporate reporting system (CDP, CDSB, GRI, IIRC and SASB)



Hong Kong SAR

White paper on Green and Sustainable Banking (HKMA)



Common Assessment Framework on Green and Sustainable Banking (HKMA)



Management and Disclosure of Climate-related Risks by Fund Managers (HKMA)



Released a plan to accelerate the growth of green and sustainable finance in Hong Kong SAR (Hong Kong SAR Green and



Sustainable Finance Cross-Agency Steering Group)



Guidelines





Regulation

















Singapore

Environmental Risk Management Guidelines for Banks, Asset Managers, Insurers (MAS)





Other

Industry intent to work together on unified ESG reporting/ accounting standards (**Deloitte**, **EY**, **KPMG and PWC**)





Australia

Understanding and managing the financial risks of climate change (APRA)





Taiwan

FSC Launches the 'Green Finance Action Plan 2.0' to create a sustainable finance ecosystem in both the public and private sectors (Taiwan FSC)



















Things to watch in 2021

AP regulators

- Results of consultations in Hong Kong SAR; further guidance from APRA
- Initial findings from HKMA climate-risk stress testing pilot with select banks
- Inclusion of climate change into regulatory work plans
- Signalling the introduction of new requirements for FS firms likely either in disclosures or stress testing
- Japanese FSA and Bank of Japan is planning climate risk stress test in fiscal year 2021. Megabanks and major general insurance companies in Japan will participate in and NGFS scenario will be used in this stress test

Government policy

- Updates on 'net-zero' commitments from New Zealand, China, South Korea, Japan, Hong Kong SAR – government policy and spending announcements
- Sector-specific information; for example, sales of new internal combustion engine vehicles are reported to be prohibited by 2030 in Tokyo and by mid-2030s in the rest of the country
- The next *Five Year Plan* to be released by the Chinese government in early 2021

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International bodies

 Updates to NGFS scenarios for financial services; work on research priorities (e.g. collecting/collating robust data for use in stress testing)

Acronyms used

AI - Artificial Intelligence

AML - Anti-Money Laundering

AP – Asia Pacific

API - Application Programming Interface

APRA – Australian Prudential Regulation Authority

ASIC – Australian Securities and Investments Commission

AUSTRAC - Australian Transaction Reports and Analysis Centre

BAU – Business As Usual

BCBS – Basel Committee on Banking Supervision

BCP – Business Continuity Plan

BEAR – Banking Executive Accountability Regime

BIS – Bank for International Settlements

BNM - Bank Negara Malaysia

CCO – Chief Compliance Officer

CDD - Customer Due Diligence

CDP – Carbon Disclosure Project

CDSB – Climate Disclosure Standards Board

CFRO - Chief Financial Risk Officer

CFT – Counter-financing of Terrorism

CNFRO - Chief Non-financial Risk Officer

coo - Chief Compliance Officer

COP26 - 2021 United Nations Climate Change Conference

COVID-19 - Coronavirus Disease 2019

CRO - Chief Risk Officer

DORA - Digital Operational Resilience Act

eKYC - Electronic Know Your Customer

ESG – Environmental, Social and Governance

FAR - Financial Accountability Regime

FATF - Financial Action Task Force

FIU – Financial Intelligence Unit

FMA - Financial Markets Authority (New Zealand)

FS - Financial Services

FSB - Financial Stability Board

GDP – Gross Domestic Product

GFC - Great / Global Financial Crisis

GRI – Global Reporting Initiative

HK / HKSAR – Hong Kong Special Administrative Region

HKAB – Hong Kong Association of Bankers

HKIB - Hong Kong Institute of Bankers

HKMA – Hong Kong Monetary Authority

HK SFC - Hong Kong Securities and Futures Commission

IFRS – International Financial Reporting Standards Foundation

IIRC - International Integrated Reporting Council

IMF - International Monetary Fund

IOSCO – International Organisation of Securities Commissions

IT - Information Technology

JFSA – Financial Services Agency of Japan

MAS - Monetary Authority of Singapore

MI - Management Information

ML - Machine Learning

NA - North America

NBFI – Non-bank Financial Institution

NFR - Non-financial Risks

NGFS – Network of Central Banks and Supervisors for

Greening the Financial System

PAIRS – Probability and Impact Rating System

PRA – United Kingdom Prudential Regulation Authority

SASB – Sustainability Accounting Standards Board

SAR – Special Administrative Region

SK FSC – Financial Services Commission (South Korea)

SME – Small and Medium-sized Enterprises

SOARS – Supervisory Oversight and Response System

SRI – Supervisory Risk Intensity Model

TCFD – Task Force on Climate-related Financial Disclosures

TPRM – Third-party Risk Management

TW FSC - Financial Supervisory Commission (Taiwan)

WEF - World Economic Forum

Endnotes

- Jonathan D. Ostry, "Engines Not Yet in Sync: A Multispeed Recovery in Asia", IMF Blog, 21 October 2020, https://blogs.imf.org/2020/10/21/engines-not-yet-in-sync-a-multispeed-recovery-in-asia/
- 2. Christine Lagarde, "Monetary policy in a pandemic emergency", presented at the ECB Forum on Central Banking, 11 November 2020, https://www.ecb.europa.eu/press/key/date/2020/html/ecb.sp201111~d01e03eb9c.en.html
- 3. Christine Lagarde, "Monetary policy in a pandemic emergency", presented at the ECB Forum on Central Banking, 11 November 2020, https://www.ecb.europa.eu/press/key/date/2020/html/ecb.sp201111~d01e03eb9c.en.html
- 4. European Central Bank, "Euro area banking sector resilient to stress caused by coronavirus, ECB analysis shows", 28 July 2020, https://www.bankingsupervision.europa.eu/press/pr/date/2020/html/ssm.pr200728~7df9502348.en.html
- Bank of England, Financial Stability Report August 2020, 3 August 2020, https://www.bankofengland.co.uk/-/media/boe/files/financial-stability-report/2020/august-2020.pdf
- Board of Governors of the United States Federal Reserve, Assessment of Bank Capital during the Recent Coronavirus Event June 2020, 4 September 2020, https://www.federalreserve.gov/publications/files/2020-sensitivity-analysis-20200625.pdf
- 7. Financial Conduct Authority, "FCA Annual Public Meeting 2020 Transcript", presented at Annual Public Meeting, 24 September 2020, https://www.fca.org.uk/publication/transcripts/annual-public-meeting-2020.pdf
- 3. Bank of England Prudential Regulation Authority, *Insurance Stress Test 2019 and Covid-19 stress testing: feedback for general and life insurers*, 17 June 2020, https://www.bankofengland.co.uk/-/media/boe/files/prudential-regulation/letter/2020/insurance-stress-test-2019-feedback.pdf
- 9. Financial Stability Board, Holistic Review of the March Market Turmoil, 17 November 2020, https://www.fsb.org/wp-content/uploads/P171120-2.pdf
- 10. Nick Strange, "Resilience in a time of uncertainty", presented at OpRisk Europe, 6 October 2020, https://www.bankofengland.co.uk/speech/2020/nick-strange-oprisk-europe-resilience-in-a-time-of-uncertainty
- 11. Financial Stability Board, COVID-19 Pandemic: Financial Stability Impact and Policy Responses, 17 November 2020, https://www.fsb.org/wp-content/uploads/P171120-3.pdf
- 12. Organisation for Economic Co-operation and Development, "Coronavirus (COVID-19): Living with uncertainty", OECD Economic Outlook, Interim Report, September 2020, https://read.oecd-ilibrary.org/economics/oecd-economic-outlook/volume-2020/issue-1_34ffc900-en#page8
- 13. Paolo Cavallino and Fiorella De Fiore, "Central banks' response to Covid-19 in advanced economies", BIS Bulletin No 21, 5 June 2020, https://www.bis.org/publ/bisbull21.pdf
- Deloitte, Voice of Asia: Edition 8, November 2020, https://www2.deloitte.com/content/dam/insights/us/articles/cn114058_apac-voice-of-asia-econ-report/CN114058_Three-themes-likely-to-drive-2021-outlook.pdf
- 15. Randal K Quarles, "What happened? What have we learned from it? Lessons from COVID-19 stress on the financial system", presented at the Institute of International Finance, 15 October 2020, https://www.bis.org/review/r201019d.htm
- 16. Financial Times, "Central bank chiefs upbeat on vaccine boost to global economy", 13 November 2020, https://www.ft.com/content/e3408a0e-8b4c-45c1-ab18-e78f26fdd415
- 17. International Monetary Fund, Fiscal Monitor: Policies for the Recovery, October 2020, https://www.imf.org/en/Publications/FM/Issues/2020/09/30/october-2020-fiscal-monitor
- 18. Financial Stability Board, Holistic Review of the March Market Turmoil, 17 November 2020, https://www.fsb.org/wp-content/uploads/P171120-2.pdf
- International Monetary Fund, Fiscal Monitor: Policies for the Recovery, October 2020, https://www.imf.org/en/Publications/FM/Issues/2020/09/30/ october-2020-fiscal-monitor
- 20. Government of Singapore, Seniors Go Digital, https://www.imda.gov.sg/en/seniorsgodigital
- 21. Japan Times, "Japan FSA seeks improved support to managed older people's finances", 15 July 2020 https://www.japantimes.co.jp/news/2020/07/15/national/social-issues/japan-fsa-seeks-improved-support-manage-older-peoples-finances/
- 22. Sean Hughes, "ASIC's expectations for protecting vulnerable customers", presented at the Financial Services Assurance Forum, 26 November 2020, https://asic.gov.au/about-asic/news-centre/speeches/asic-s-expectations-for-protecting-vulnerable-customers/
- 23. Bank for International Settlements, Issues in the governance of central banks, 18 May 2009, https://www.bis.org/publ/othp04.htm
- 24. Australian Prudential Regulation Authority, Probability and Impact Rating System, February 2018, https://www.apra.gov.au/sites/default/files/2018-02-pairs-guide-ud-external_1.pdf
 - $Australian \ Prudential \ Regulation \ Authority, \ Supervision \ Risk \ and \ Intensity \ Model, 6 \ October 2020, \ https://www.apra.gov.au/sites/default/files/%5Bdate%3Acustom%3AY%5D-%5Bdate%3Acustom%3Am%5D/Supervision%20Risk%20and%20Intensity%20Model%20Guide.pdf$

- 25. Monetary Authority of Singapore, Guidelines on Individual Accountability and Conduct, 10 September 2020, https://www.mas.gov.sg/regulation/guidelines/guidelines-on-individual-accountability-and-conduct
- 26. Monetary Authority of Singapore, Notice 644 Technology Risk Management, https://www.mas.gov.sg/regulation/notices/notice-644
- 27. Australian Prudential Regulation Authority, APRA releases revised remuneration standard for consultation, 12 November 2020, https://www.apra.gov.au/news-and-publications/apra-releases-revised-remuneration-standard-for-consultation
- 28. World Economic Forum, Future Series: Cybersecurity, emerging technology and systemic risk Insight Report, November 2020, http://www3.weforum.org/docs/WEF_Future_Series_Cybersecurity_emerging_technology_and_systemic_risk_2020.pdf
- 29. Financial Stability Board, Effective Practices for Cyber Incident Response and Recovery, 19 October 2020, https://www.fsb.org/wp-content/uploads/P191020-1.pdf
- 30. Financial Stability Board, FSB work programme for 2020, 17 December 2019, https://www.fsb.org/wp-content/uploads/P171219.pdf
- 31. Parliament of Australia, Security Legislation Amendment (Critical Infrastructure) Bill 2020, https://www.aph.gov.au/Parliamentary_Business/Bills_ Legislation/Bills_Search_Results/Result?bld=r6657
- 32. The Diplomat, "China's Draft Data Security Law: A Practical Review", 24 September 2020, https://thediplomat.com/2020/09/chinas-draft-data-security-law-a-practical-review/
- 33. International Association of Privacy Professionals, , "A look at China's draft of Personal Data Protection Law", 26 October 2020, https://iapp.org/news/a/a-look-at-chinas-draft-of-personal-data-protection-law/
- 34. Hong Kong Monetary Authority, *Cybersecurity Fortification Initiative 2.0,* 3 November 2020, https://www.hkma.gov.hk/media/eng/doc/key-information/guidelines-and-circular/2020/20201103e1.pdf
- 35. Japan Financial Services Agency, *Publication of reports on IT and cybersecurity initiatives*, 27 November 2020, https://www.fsa.go.jp/news/r1/20200630.html
- 36. New Zealand Privacy Commissioner, Privacy breaches, https://www.privacy.org.nz/responsibilities/privacy-breaches/
- 37. Monetary Authority of Singapore, MAS Consults on Proposed Enhancements to Technology Risk and Business Continuity Management Guidelines, 7 March 2019, https://www.mas.gov.sg/news/media-releases/2019/mas-consults-on-proposed-enhancements-to-trm-and-bcm-guidelines
- 38. Deloitte, *Digital banks in Asia Pacific:* adding value to financial services?, 2020, https://www2.deloitte.com/cn/en/pages/financial-services/articles/digital-banks-in-asia-pacific.html
- 39. Financial Action Task Force, COVID-19-related Money Laundering and Terrorist Financing Risks and Policy Responses, FATF, May 2020, http://www.fatf-gafi.org/media/fatf/documents/COVID-19-AML-CFT.pdf
- 40. Australian Transaction Reports and Analysis Centre, "How to comply with KYC requirements during the COVID-19 pandemic", 8 May 2020, https://www.austrac.gov.au/business/how-comply-and-report-guidance-and-resources/customer-identification-and-verification/kyc-requirements-covid-19
- $41. World \ Economic \ Forum, The \ Global \ Risks \ Report \ 2020, 15 \ January \ 2020, http://www3.weforum.org/docs/WEF_Global_Risk_Report_2020.pdf$
- 42. World Economic Forum, The Global Risks Report 2021, 20 January 2021, http://www3.weforum.org/docs/WEF_The_Global_Risks_Report_2021.pdf
- 43. Financial Times, "Big Four accounting firms unveil ESG reporting standards", 22 September 2020, https://www.ft.com/content/16644cb2-f0c1-4b32-b44c-647eb0ab938d
- 44. New Zealand Ministry for the Environment, "Mandatory climate-related financial disclosures", 21 September 2020, https://www.mfe.govt.nz/climate-change/climate-change-and-government/mandatory-climate-related-financial-disclosures
- 45. Hong Kong Monetary Authority, "Cross-Agency Steering Group Launches its Strategic Plan to Strengthen Hong Kong's Financial Ecosystem to Support a Greener and More Sustainable Future", 17 December 2020, https://www.hkma.gov.hk/eng/news-and-media/press-releases/2020/12/20201217-4/
- 46. United Kingdom HM Treasury, *UK joint regulator and government TCFD Taskforce: Interim Report and Roadmap*, 9 November 2020, https://www.gov.uk/government/publications/uk-joint-regulator-and-government-tcfd-taskforce-interim-report-and-roadmap
- 47. Monetary Authority of Singapore, *Guidelines on Environmental Risk Management (Banks)*, December 2020 https://www.mas.gov.sg/-/media/MAS/Regulations-and-Financial-Stability/Regulations-Guidance-and-Licensing/Commercial-Banks/Regulations-Guidance-and-Licensing/Guidelines/Guidelines-on-Environmental-Risk---Banks/Guidelines-on-Environmental-Risk-Management-for-Banks.pdf
- 48. Japan TCFD Consortium, "News and Events", 1 September 2020, https://tcfd-consortium.jp/en/news_detail/20090101
- 49. Hong Kong Monetary Authority, Consultation Paper on the Management and Disclosure of Climate-related Risks by Fund Managers, 30 October 2020, https://www.hkma.gov.hk/media/eng/doc/key-information/guidelines-and-circular/2020/20201204e1.pdf
- 50. Deloitte, Climate-related risk stress testing, 4 September 2020, https://www2.deloitte.com/cn/en/pages/financial-services/articles/climate-related-risk-stress-testing.html

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