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**2020 Asia Pacific Financial Services
Regulatory Outlook**
Rebuilding trust in financial services

CENTRE for
**REGULATORY
STRATEGY**
ASIA PACIFIC

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Global Foreword

After a decade of global regulatory reforms defined by the financial crisis and misconduct issues, the regulatory environment is now changing profoundly. The international consensus on regulatory reform is fraying. Political appetite for globalisation is retreating, and trade tensions are mounting. Technological change and social concerns, including environmental sustainability, are rising up regulators' agendas. Financial services firms need to be prepared to respond to these trends.

A Darkening Economic Outlook

We are likely to see weak growth in all regions in 2020, with significant downside risks.¹ Regulators' and supervisors' work programmes are likely to be heavily influenced by their assessment of the economic conditions under which firms will be operating.

Increased trade tensions, especially between the US and China, are likely to fragment markets further, dampen growth and create a harsher business environment for financial services firms.

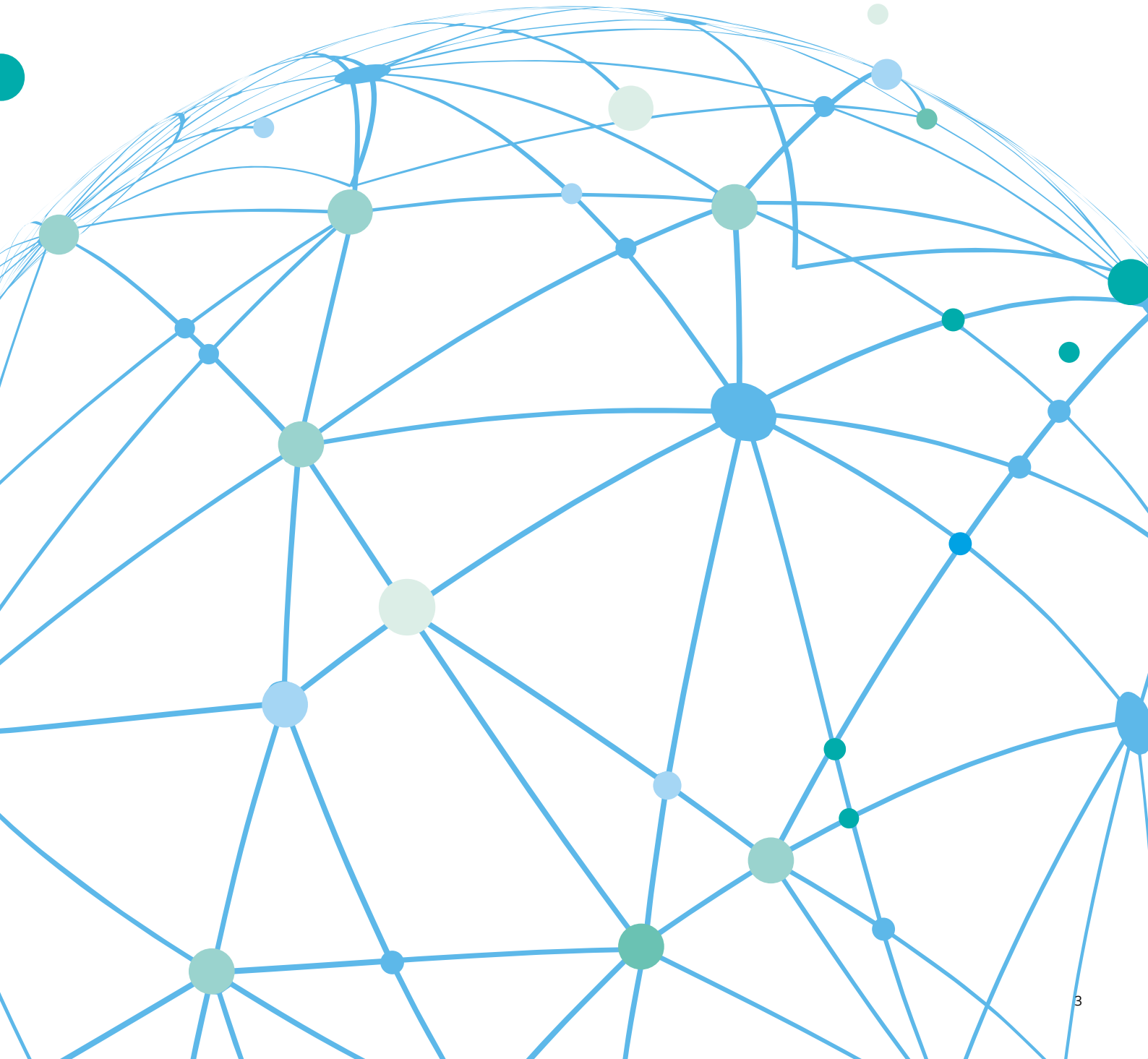
In the US, the yield curve on Treasury bonds was inverted until recently, which has in the past been a harbinger of recession. Equity valuations are high due, in large part, to monetary

easing: the US equity market is more overvalued on some measures than at any point since the dotcom bubble.

Meanwhile in China, growth has continued to slow and gross debt surged from 171% of Gross Domestic Product in 2008 to 299% in 2018.² High debt levels could become unsustainable if growth slows further.

In our view, the risk of a recession is highest in Europe. Growth in Germany is expected to be as low as 0.5% in 2019, partly due to its manufacturing sector's vulnerability to poor export markets, although some recovery is expected in 2020.³ Italy is facing political uncertainty, economic stagnation and resurging financial turbulence, while servicing high public debt.⁴ And the UK faces an uncertain



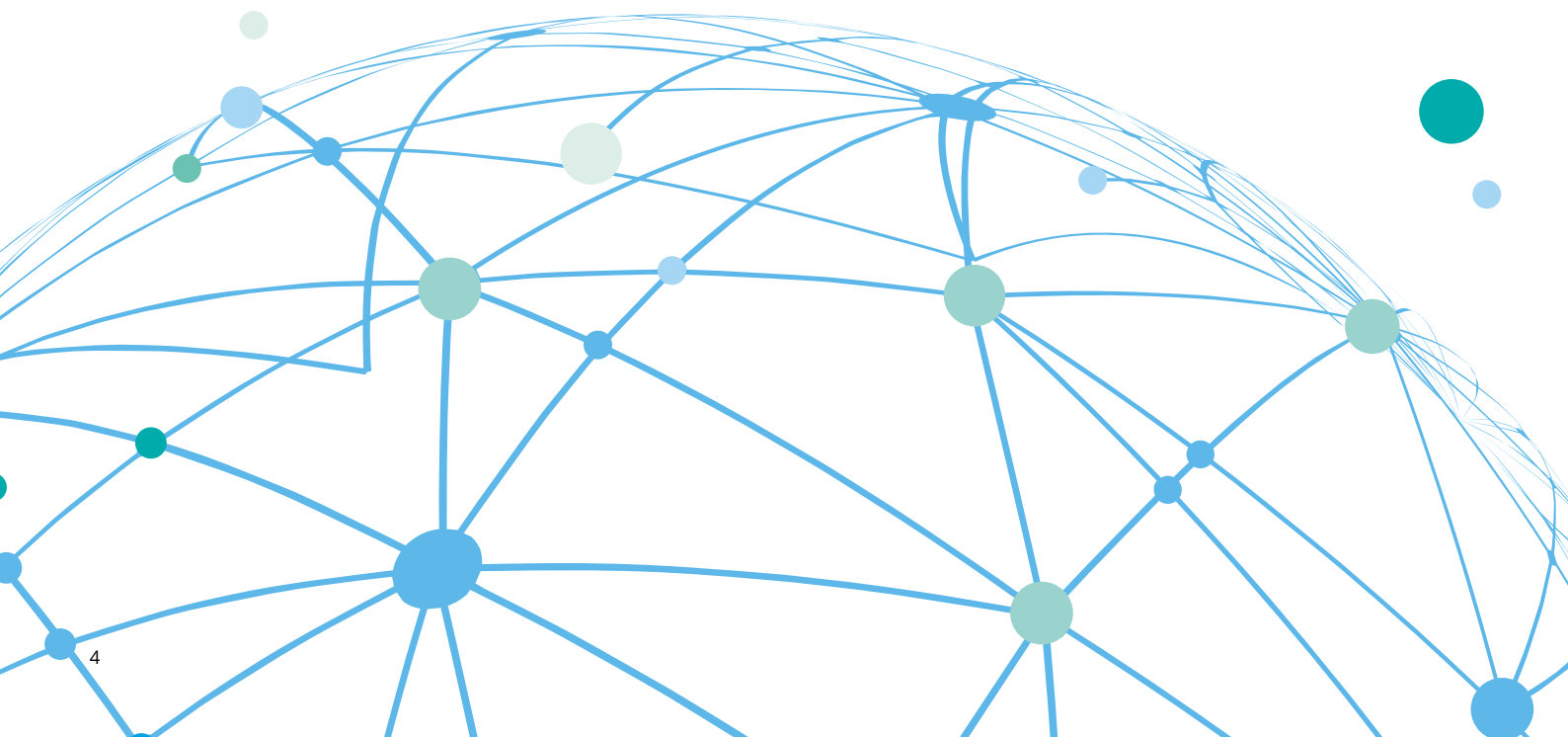


outlook, in part due to Brexit. Therefore, while growth for the Eurozone in 2020 is projected at 1.4%, which is similar to its post-crisis trend rate, significant downside risks remain.⁵

Central bankers are likely to respond with further monetary easing, with the US Federal Reserve Board and the European Central Bank having already cut rates further and renewed their asset purchase programmes. However, with interest rates at an unprecedented low, and with a record amount of sovereign and even corporate bonds trading at negative nominal rates, the effectiveness of such measures in isolation is debatable.⁶ Authorities may consider using macroprudential measures, such as allowing banks to run down countercyclical buffers. Governments are also likely to face pressure to increase spending to stimulate growth, especially given the backlog of infrastructure spending in some countries.

These macroeconomic trends and conditions will put even more pressure on financial services firms' business models, at a time when competition from new entrants and major digital players is also increasing. We expect supervisors to have a heightened focus on business model resilience through stress testing, and on the quality of risk governance and oversight.

Banks may struggle to regain profitability, and even to maintain margins, through their traditional business model in a low, or negative, interest rate environment. For example, Japan has had a zero or negative interest rate policy for nearly two decades. Japanese banks have struggled with low interest margins and face increasing supervisory scrutiny on business model sustainability.⁷ A reduction in cross-border financial flows as risk appetites reduce may also narrow banks' growth opportunities. Banks will need to redouble their efforts to control costs and refocus on more profitable business lines. However, they will need to be mindful of conduct



risk. Supervisory focus on credit risk is also likely to intensify. For example, the Bank of England estimates that global banks retain exposures to over half of the leveraged loan market, and that the global stock of leveraged loans has reached an all-time high.⁸

Insurers, particularly those providing long-term guarantees, are also likely to find it harder to be profitable in a persistently low interest rate environment. In Asia however, the potential for the insurance market to grow in China may help insurers to generate more off-setting revenue.⁹

Investment managers too will likely struggle to perform well in an environment characterised by high asset prices and low growth potential. The increasing scrutiny by investors and regulators of the value generated by active management is likely to drive a continued “search for yield” and encourage investment in more exotic and less liquid markets. We expect supervisors to focus increasingly on how investment managers and distributors satisfy themselves that funds holding higher risk assets meet the needs and risk appetite of their target market.

The Fraying International Consensus

With the post-crisis reforms near completion and the political environment becoming less supportive of international cooperation, global standard-setting bodies—particularly the Basel Committee on Banking Supervision and the Financial Stability Board—have less ambitious plans to introduce new standards than in previous years. Work to implement the remaining aspects of the Group of Twenty (G20) financial regulatory reforms has slowed, with many jurisdictions behind in implementing Basel III final reforms (“Basel IV” to the industry).¹⁰

Given the current economic conditions, political concerns will grow if regulation is seen to impede

competition, new lending or investment. We are already seeing a deregulatory stance from the US authorities, including a limited relaxation of the Volcker Rule.¹¹ Other countries may follow, and we might even see competitive deregulation.

While deregulation might reduce some compliance costs, global firms will face more complexities and expenditure as regulatory standards across jurisdictions diverge in timing and substance. The G20 highlighted market fragmentation as an area of concern in 2019, and the Financial Stability Board has an ongoing work programme in this area.¹² It is unlikely that global standard setters will be able to reverse fragmentation that has already happened, but their efforts could reduce future divergence.

More Accountability for Senior Individuals

In contrast, regulators are increasingly holding senior individuals to account for the compliance, professional standards and culture of their firms. Following the introduction of the UK’s Senior Managers and Certification Regime, similar regimes have emerged, or are emerging, in several other jurisdictions including Ireland, Australia, Hong Kong Special Administrative Region (SAR), Singapore and South Africa. Other jurisdictions are driving increased accountability through different mechanisms. The US Federal Reserve Board has proposed guidance which seeks to delineate the roles, responsibilities and accountabilities of senior management and the board better.¹³ The Belgian Parliament recently announced the introduction of a “Banker’s Oath” similar to that which the Netherlands introduced in 2015.¹⁴ In response to these initiatives, firms will need to foster a culture of accountability through measures such as balanced incentive plans; strong governance and controls; and appropriate monitoring, reporting, escalation, consequence management and disciplinary action.

Regulating technological innovation

Policymakers and regulators will continue to be challenged by the need to respond to the pace and scale of technological change. The financial services regulatory debate will be characterised by issues such as whether to expand the regulatory perimeter, risks associated with increasing use of artificial intelligence, the impact of innovation on operational resilience and cyber security, and digital ethics. These are global issues, but a lack of political will and adequate international bodies in some policy domains will likely hinder efforts to align regulatory approaches.

Cross-sector policies will increasingly affect financial services firms, although these will differ across regions. For example, in relation to data protection, the EU is taking a stricter stance on individuals' right to access and control personal data than the US and China.¹⁵ Globally, the emergence of tighter data localisation requirements will also introduce additional obstacles to cross-border data flows. The growing evidence that ineffective implementation of technological change can increase cyber and operational risk is also attracting regulatory scrutiny. International standard-setters will likely try to establish baseline common approaches for operational resilience, but we expect progress on cyber resilience to be made mostly at the G7 and European levels.

These trends will affect firms' ability to use and share data to innovate, enhance their cross-border resilience, and deliver value and security to their clients.

Regulators and supervisors will also need to accelerate their own digital transformation. Well-resourced regulatory data science and analytics capabilities will be essential to understand and supervise a financial sector characterised by an increasingly blurred regulatory perimeter and greater technological complexity. Part of



the solution may be for financial, security and data protection authorities to share resources, capabilities and insights more effectively. We see efforts in this direction, but more work is needed before regulators and firms can reap the benefits. Progress will more likely be achieved at national than at international level, mainly because of the absence of cross-sectoral global standard-setting bodies.

Responding to Social Concerns

Environmental sustainability is a rising social concern, and in Europe and Asia, a major focus for financial services regulators.¹⁶ In the US, it is not—at least not at federal level. However, even where regulators do not introduce specific requirements, firms will need to consider how climate change and unsustainable business models will affect their asset and liability

exposures, as well as the new opportunities that may arise from the increasing customer demand for “green” products, including green investment funds.

Financial inclusion is another area of focus globally. The World Bank Group estimates that in 2017 there were still 1.7 billion adults without a basic transaction account, primarily in Asia and Africa.¹⁷ It has a goal for all adults to have access to an account to store money and make payments by 2020. In developed countries, regulators are focused on barriers to financial inclusion such as overly complex processes, lack of accessibility for “non-standard” customers, including the elderly or people with disabilities. Firms should expect to be challenged by regulators if their services are unduly hard for certain groups to access.

Conclusion

Although the post-crisis wave of regulatory change is subsiding, there is much to attract regulatory and supervisory attention in 2020 and firms should not expect scrutiny to abate. Against a darkening economic background, there will be increased focus on firms’ financial and operational resilience, how they adapt to technological change and innovation, and how they respond to political and social pressures in areas such as sustainability and financial inclusion. In an environment where boards and individual senior managers are increasingly being held to account for their actions, financial services firms will need to ensure they have the foresight, governance, skills and operational capabilities to adapt and respond effectively.

Asia Pacific Foreword

The *Asia Pacific Financial Services Regulatory Outlook* began its publication in 2016 and in that time we have looked at a broad range of topics. Common recurring themes have been the implementation of the Basel III package of reforms (particularly resilience and market fragmentation), reforming culture in financial services, the roll-out of new governance obligations like individual accountability regimes, and the impact of the uptake of new technologies on the financial services industry.

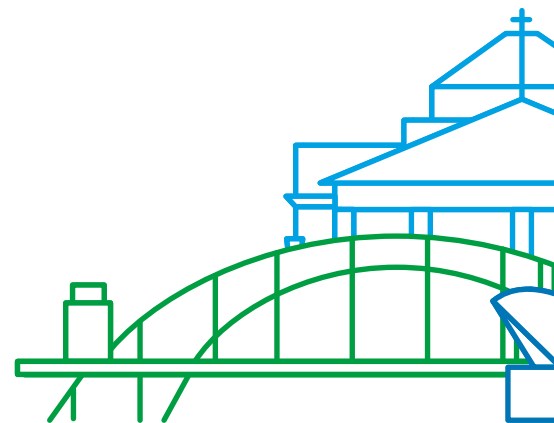
In our 2020 *Outlook* many of these themes appear again—there is still much to say about important topics like culture and conduct, governance, technology, and the implementation of global standards. However, this year's *Outlook* also sees the addition of emerging areas of regulatory concern such as mitigating climate change and improving financial inclusion.

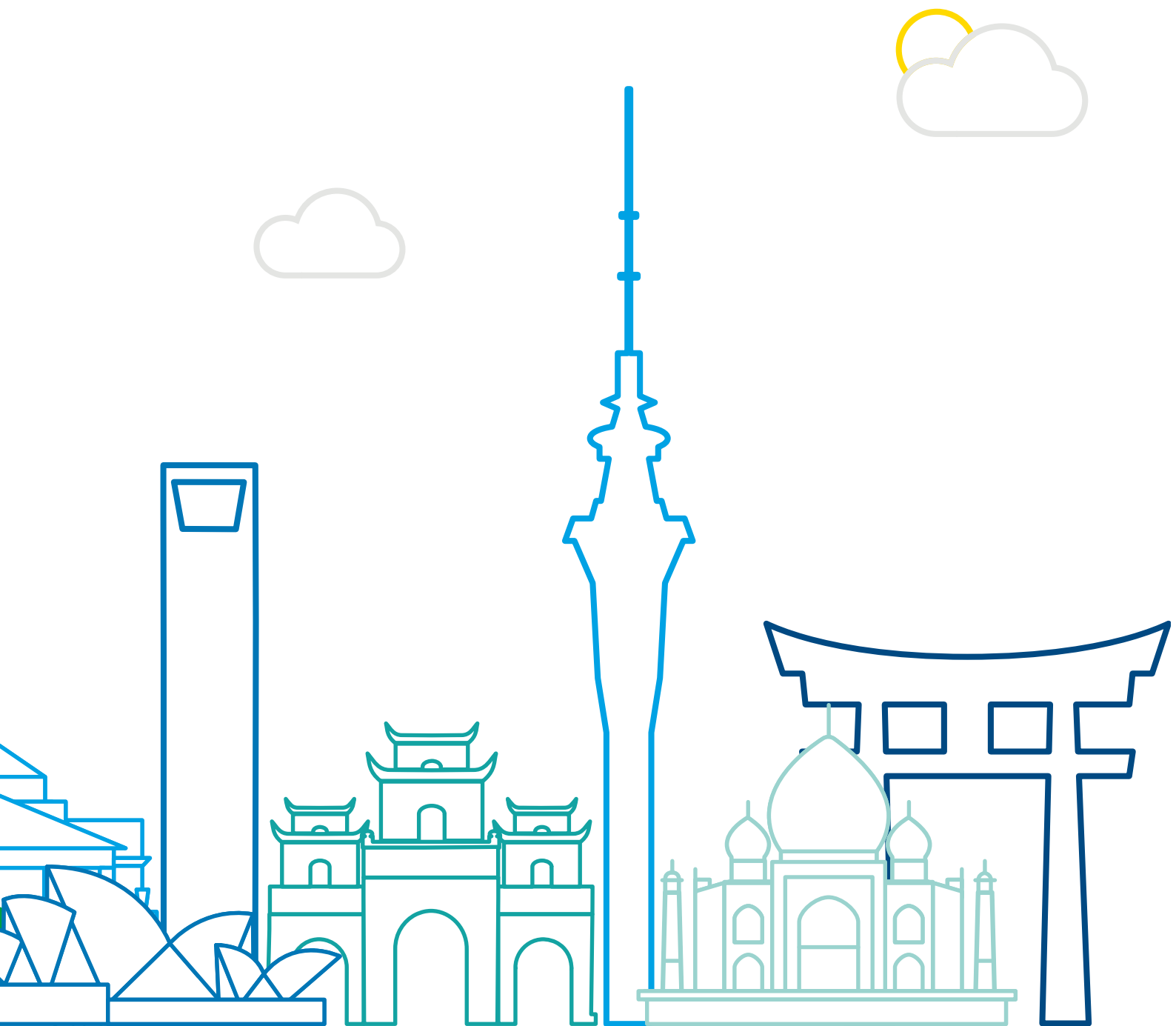
All of this is of course happening in a very different world from when we published our first *Asia Pacific Outlook*. As we discuss further below, the macroeconomic environment is much changed from 2016. Recent years have also seen dramatic political developments—the rise of populism globally, Brexit, and the US China trade war being only some examples.

As we see regulators back away from international consensus, a slowing global economy, and rising political uncertainty, now more than ever financial firms must be forward-looking in their approach to risk management. We have structured our 2020 *Outlook* to look at financial institutions' licences to operate—both regulatory and social—to provide a framework for firms to take on upcoming challenges.

The Economy

Our Global Foreword makes this point but it is well worth repeating for our Asia Pacific readers—the macroeconomic outlook for 2020 has significantly weakened and growth will likely continue to be anaemic globally into the next year.





The International Monetary Fund (IMF) downgraded Asia Pacific's 2019 growth forecast to 5% and 5.1% in 2020 (down 0.4% and 0.3% in 2019 and 2020 respectively, from April) in their Q3 2019 report.¹⁸ This gives Asia Pacific a relatively rosier outlook in 2020 than other parts of the world, but it is clear that the global economic slowdown will continue to impact our region.

Trade tensions between the US and China as well as the Chinese economic slowdown have also had a knock-on effect both within our region and globally. Asia Pacific economies are closely intertwined with the Chinese economy and their growth has been undermined by the slowdown of Chinese domestic demand. Though there are some exceptions (such as Taiwan and Vietnam) where locations are benefiting as alternative exporters, the majority of exports from Asia Pacific economies are slowing down in tandem with China's. As well, the political tensions arising from the trade conflict create additional uncertainty—there is, for example, the risk that should the situation deteriorate, capital inflows would be vulnerable to a flight to safer markets outside of Asia Pacific.

With interest rates at historical lows, there is concern that regional governments may be hesitant to embark on important structural reforms as already loose monetary policies may limit the scope to offset any short-term economic impact from the reforms. This lack of policy space may also make it difficult to deal with other exigent shocks.

Navigating Choppy Waters

Regulators and firms will also have to contend with regulatory fatigue as an uncertain macroeconomic environment may make implementing global standards more challenging. The diversity of jurisdictions in Asia Pacific can be both a boon and a burden. On the one hand, regulators can slow down implementation or even ease some requirements to account for local contexts. On the other, divergent standards and timelines may increase uncertainty and make multi-jurisdictional implementations more complex and expensive for regional and global firms.



Regulatory and Social Licences to Operate

To help financial firms navigate the current climate, we have grouped the themes in the 2020 *Outlook* into two categories—a financial firm's **regulatory** and **social licences to operate**.

Many of the post-crisis reforms (Basel III, "Too Big to Fail", Over-The-Counter Derivatives, etc.) relate to a financial institution's **regulatory licence to operate**—the basic rules and laws within which firms must operate. They are simply what regulators expect of financial institutions. Much work has been done to finalise these requirements and implementation is expected to be completed by 2022.

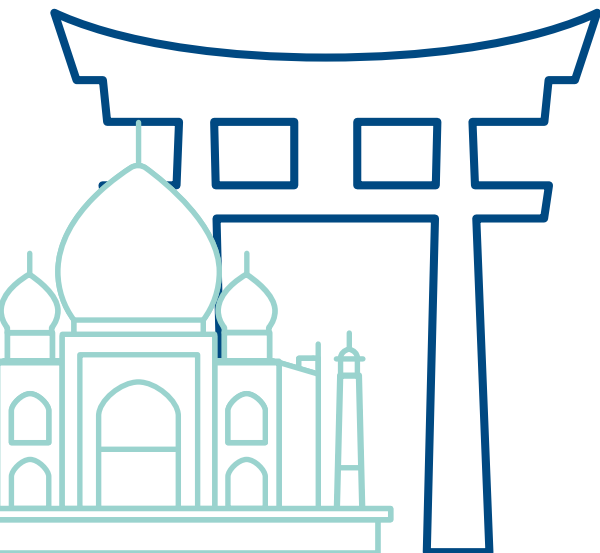
While these higher regulatory standards have helped bolster public confidence in the financial system, trust in financial services remains low. In fact, the 2019 Edelman trust barometer rated financial services the least trusted industry among 15 industries, continuing a decade old trend.¹⁹

This begs the question—why does trust in financial services remain so low, even after so much work has gone into strengthening financial institutions' regulatory licence to operate?

This is because much remains to be done for financial institutions to reclaim their **social licence to operate**.

A social licence to operate relates to building a robust firm culture that drives good behaviour; it also calls for proper governance and accountability within organisations. This means, for example, doing right by customers by properly protecting their personal data and using it ethically as inputs into emerging technologies like artificial intelligence. Finally, it lays out the need to forge stronger communities and societies through forward-looking endeavours like financial inclusion and sustainable finance.

We expect regulators in Asia Pacific to focus on these aspects of financial institutions' social licence to operate in 2020. This will impact firms' internal operations, how they harness technology, and how they engage with their customers and society as a whole.



Regulatory Licence to Operate

Much of the regulatory work post the global financial crisis has revolved around a financial firm's regulatory licence to operate—the basic rules and laws within which firms must operate. This is the foundation on which confidence in the financial system is built. Without the regulatory licence to operate there would not be a financial system, or at least not one we can rely on.

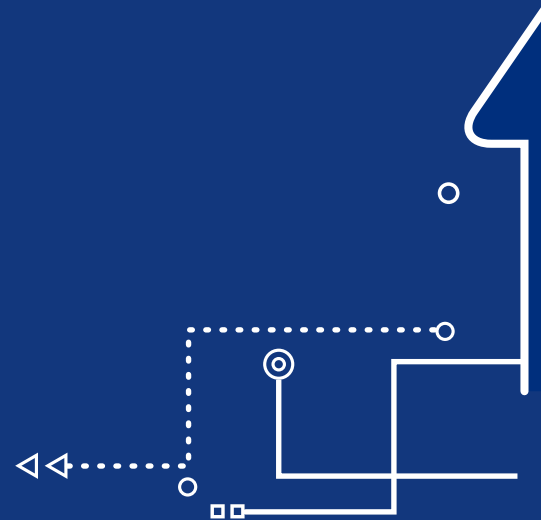
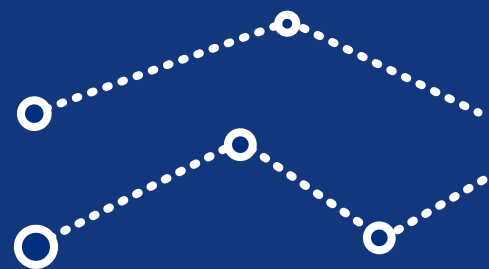
In the last ten years many of the reforms to the regulatory licence to operate have involved translating global standards to the local level—most specifically, the Basel III package of reforms. This has done a great deal to shore up the foundation of the financial system and restore public confidence.

With the finalisation of the Basel III reforms, a chapter is closing on reshaping the regulatory licence to operate. Uneven and delayed implementation of global standards at the local level will always pose challenges and there will be adjustments to optimise standards

going forward. But, much of the "new normal" as regards the regulatory licence to operate is now coming into effect.

Looking to the future, there are emerging areas of global regulatory interest that will impact a firm's regulatory licence to operate—the use of financial technology (fintech) and crypto-assets, mitigating climate change, and operational resilience to name a few.

This section of our *Outlook* takes a deep dive into these topics and explores how firms can strengthen their regulatory licence to operate.





Evolution of International Reforms

Basel III Implementation Progress

In its *Progress in implementation of G20 financial regulatory reforms*²⁰, the Financial Stability Board (FSB) notes that while there has been significant progress towards implementation of the financial regulatory framework called for by the G20, work still remains. Generally, momentum to implement international standards slows as national regulators seek to maintain a level playing field and closely watch other jurisdictions' implementation schedule. Some of the delay is due to a certain amount of global regulatory fatigue, and finally because some reforms were simply more complicated than anticipated. For example, progress in implementing the Net Stable Funding Ratio (NSFR) has stalled; only 11 out of 27 Basel Committee jurisdictions reported on have implemented their final rules, which is unchanged since 2018.

The final revisions to the Basel III package were published in December 2017 with an implementation date of 1 January 2022. Previous experience with delayed and uneven implementation, despite the best faith efforts of member jurisdictions, creates uncertainty about the timing and consistency of

adoption of the final reforms. As the FSB notes, "regulatory and supervisory authorities in FSB members should lead by example in promoting the timely, full and consistent implementation of remaining reforms, which will support a level playing field and avoid regulatory arbitrage".²¹

The national discretions that member jurisdictions have in implementing the finalised Basel rules have also given rise to concern about the consistency of local implementation.

Progress in implementing standards with passed deadlines as of end of March 2019²²

Standard	Deadline	# of Member jurisdictions with draft or final rules	BCBS Asia Pacific jurisdictions without draft or final rules
Net Stable Funding Ratio (NSFR)	1 January 2018	26 of 27 (only 11 are final rules)	
Total Loss-Absorbing Capacity holdings (TLAC)	1 January 2019	19 of 27	Australia, China, India, Indonesia, Korea
Large Exposure Framework (LEX)	1 January 2019	24 of 27 (only 9 are final rules)	Japan
Interest Rate Risk in the Banking Book (IRRBB)	1 January 2019	23 of 27	Australia*

*Pillar I update in progress—draft Prudential Standard APS 117 published in September 2019.



Fundamental Review of the Trading Book (FRTB)

On 14 January 2019 the Basel Committee on Banking Supervision (BCBS) published their final revisions to the market risk framework (better known as FRTB)—14 days after the standard was to have been implemented. The delay to FRTB implementation, announced in December 2017, came on the heels of intense debate at both the national and international level.

In Asia Pacific, there is a general expectation that jurisdictions will follow the January 2022 implementation timeline. At the time of writing, both Hong Kong SAR and Singapore have issued documents on that basis.²³ The Hong Kong Monetary Authority (HKMA) released a consultation paper on market risk

in June 2019²⁴ and has urged local Authorized Institutions to begin working on their firm-specific FRTB framework based on the BCBS framework "given the complexity of the new market risk standards".²⁵ In Taiwan, the Banks Association hosted a discussion group to study the issue and a consultation or guideline is expected to be released in 2020 by local regulators.

Going forward, large banks will need to consider whether or not to implement an "Internal Models Approach" (a more risk sensitive approach that is tailored to the individual firm and requires regulatory approval) for market risk—a key part of FRTB. Financial firms will also need to make decisions about their IT investment plan for 2020-21 as the Basel implementation deadline coincides with the deadlines for other important regulatory projects, such as the London Interbank Offered Rate (LIBOR) transition.

Review and Adjustment of Standards

In 2020, the BCBS is also likely to continue to make adjustments and revisions to current standards as it has for both the treatment of client cleared derivatives²⁶ and disclosure requirements²⁷ for the leverage ratio. The first revision followed an impact assessment on client clearing services provided by banks to allow for a more proportionate treatment on par with the standardised approach for risk-based capital. The second revision was to the reporting frequency of the leverage ratio. Banks were found to be "window dressing" by deliberately reducing exposures around reporting dates. Now they will be required to report quarter-end data and daily average data, which will give a better picture of actual exposure over the reporting period.

Another example is the agreement to push back the implementation deadline of the final phase of margin requirements for non-centrally cleared derivatives. The Basel Committee and the International Organization of Securities Commissions (IOSCO) agreed to extend the timeline to 1 September 2021 "in the interest of supporting the smooth and orderly implementation of the margin requirements which is consistent and harmonised across their member jurisdictions and helps avoid market fragmentation that could otherwise ensue".²⁸

These revisions are welcomed where they address market feedback and any unintended consequences of the reforms. Firms will need to work closely with their regulators to coordinate the implementation of these revised standards with other ongoing reforms.

Market Fragmentation

As a result of uneven progress in Basel III implementation and the review of certain standards, concerns about potential market fragmentation have surfaced. The Japanese

presidency of the G20 made this a specific point of inquiry to which the FSB published a report in June 2019 as a response.²⁹ The FSB report notes that some forms of market fragmentation may be beneficial as differing regulations between jurisdictions can "reduce the transmission of economic shocks between jurisdictions, and increase the resilience of domestic or global financial markets". However, detrimental market fragmentation that reduces global and domestic financial stability, impairs market liquidity, and encourages regulatory arbitrage are also specific concerns.

As a large, diverse region that is home to a number of different regulatory environments, Asia Pacific is particularly vulnerable to market fragmentation. The FSB makes a number of specific suggestions on how regulators can mitigate poor outcomes from market fragmentation; most centre on efficient and effective cross-border cooperation. An example from Asia Pacific would be the Monetary Authority of Singapore's (MAS) agreement with the US Commodity Futures Trading Commission for mutual recognition of certain derivatives trading venues in the US and Singapore to reduce complexity and mitigate regulatory arbitrage.³⁰ Ryozo Himino, Chair of the FSB Standing Committee on Supervisory and Regulatory Cooperation and Vice Minister for International Affairs at the Japanese Financial Services Agency (JFSA) further expanded on the need for cross border cooperation:

"[r]eforms implemented with cross-border discrepancies, overlaps, desynchronisation or competition can have unintended consequences for financial stability by fragmenting markets, reducing market liquidity and trapping pools of capital and liquidity resources. They could make problems worse, particularly during systemic stress".³¹

Financial institutions will need to implement the final Basel rules in line with jurisdictional implementation schedules and approaches. It would be prudent for firms with cross-border operations to follow Basel implementation progress both at home and abroad (particularly if their home regulator is silent on their specific approach) to gain a better understanding of what to expect from Basel implementation going forward. They should also work closely with their regulators to avoid unnecessary divergence while building sufficient flexibility in their implementation plans to cater for differences that are warranted by local contexts and risk considerations.

From Regulation to Supervision

Now that the quantitative regulations for both Pillar I (regulatory capital) and Pillar III (market disclosure) have been finalised, it is expected that international and local regulators will turn their attention to enhancing Pillar II, the supervisory review process. In June 2019, the BCBS released *Overview of Pillar II supervisory review practices and approaches* to this effect; the report provides a range of case studies and examples of supervisory practice. The BCBS notes that the Pillar II framework "does not include prescriptive guidance or directions on supervisory approaches". It is principles based, should be flexible to suit the needs of different jurisdictions, and is meant to encourage an active dialogue between supervisors and financial firms. The BCBS expects to see that local supervisors continue to innovate and develop their approaches over time.

New Areas of Risk and Supervision

International regulatory bodies have shown an increased interest in how emerging risks will impact global financial stability. The growth of financial technology (fintech) as well as the

mitigation of risks related to climate change have been points of recent discussion.

The common approach amongst most international standard setters and national regulators is to encourage the responsible development of fintech as an engine of innovation and economic growth. However, there are technologies for which regulators have taken a more cautious approach. For example, the FSB has included crypto-assets in its *Work programme for 2019*.³² As part of this work programme, the BCBS issued its *Statement on crypto-assets* in March 2019.³³ The BCBS report noted the crypto-asset market's recent growth and its inherent instability. Currently the crypto-asset market is relatively small and banks have limited direct exposures. However, as crypto-assets are not a fiat currency backed by a government, BCBS considers such assets "do not reliably provide the standard functions of money and are unsafe to rely on as a medium of exchange or store of value". Firms were warned to exercise due diligence as well as to have proper governance and risk management for crypto-assets. Firms were also encouraged to work closely with local supervisors on the topic. Furthermore, due to the money laundering and terrorist financing risks that they may pose these new products can attract regulatory scrutiny.

In Asia Pacific, regulators will have different risk appetites for crypto-assets, which will make the location of any operations a key consideration. Singapore has been more receptive of crypto-assets as evidenced by the MAS *Guide to Digital Token Offerings*.³⁴ The guide clarified that crypto-assets that are structured and have the characteristics of capital market products will need to comply with Singapore's securities laws. In addition, the new Payment Services Act (expected to come into effect in early 2020) will

subject all digital payment token intermediaries to Singapore's anti-money laundering and countering terrorist financing regime. MAS also warned the public that there are no regulatory safeguards should they choose to trade on exchanges or invest in digital tokens outside of MAS' remit.³⁵

Mitigating the financial impact of climate change is another emerging issue for global regulatory bodies. For example, the FSB was encouraged by the findings of the *2019 Status Report* of the industry-led Task Force on Climate-related Financial Disclosures (TCFD). The *2019 Status Report* was a major undertaking that covered over 1,100 companies from 142 countries in eight industries over a three-year period. The TCFD also conducted a survey on companies' efforts to implement the TCFD recommendations and users' views on the usefulness of climate-related financial disclosures for decision-making.

The report found that while disclosure of climate-related financial information has increased, it is still insufficient for most investors. This means that the reported data is often not standardised, rarely comparable, which therefore can make it difficult to integrate into investment decisions. As well, companies do not often disclose the scenarios they used to test their resilience to climate change. More clarity of the potential impacts of the risks related to climate change is certainly needed.





Finally, it is likely that we will see regulatory focus turn to operational resilience in the coming year. The BCBS lists operational resilience as one of the last remaining policy initiatives that require finalisation in their current work programme.³⁶ There has been early movement in the UK on this topic – in July 2018 the UK Prudential Regulation

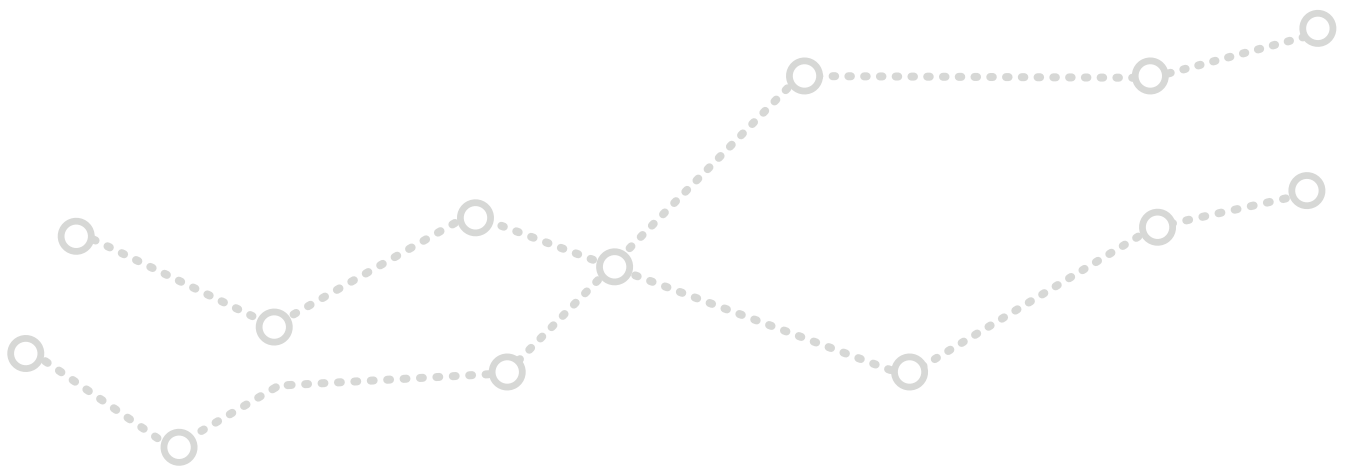
Authority (PRA), the UK Financial Conduct Authority (FCA), and Bank of England released a joint discussion paper titled *Building the UK financial sector's operational resilience*. Such a joint paper is a first for UK financial supervisors and signals regulatory alignment on the topic. Market engagement has been high - the number of responses to the paper was five times the normal rate for discussion papers and is one of the most downloaded documents of its kind from the Bank of England's website.³⁷ In their operational resilience paper, the UK supervisors lay out several key takeaways for senior management: assume disruption will occur, focus on the resilience of their firm's most important business services, set impact tolerances, and test the ability to plausibly stay within those tolerances.³⁸ All three UK supervisors published a series of consultation papers on operational resilience on 5 December 2019.³⁹

The above are only three examples of areas where international financial regulatory bodies have shown a marked increase in interest. The impacts of the exploding fintech scene in Asia Pacific as well as the growing interest in sustainable investing in the region are key areas of interest going into 2020 and will be expanded upon further in this *Outlook*.

Conclusion

The implementation of the final Basel III package of reforms will be challenging for firms in our region given that most will have operations in multiple jurisdictions. The likelihood of delayed or uneven implementation may also exacerbate market fragmentation against which firms will need to remain vigilant. International supervisory bodies are also turning their attention away from the Basel III reforms and towards other topics like crypto-assets, operational resilience, and mitigating the risks associated with climate change. As firms look to secure their regulatory licence to operate in 2020, they should consider the following:

-  **Prepare** to implement the Basel III final rules in line with their home regulators' implementation schedule;
-  **Monitor** the implementation plans in their host jurisdictions, which could deviate from their home regulators' timeline;
-  **Enhance** internal risk management for the risks not captured by the Basel international standards. This includes so-called non-financial risks;
-  **Address** new regulatory requirements as they begin to emerge, such as those associated with climate change or crypto-assets.



Social Licence to Operate—building trust from within an organisation

The social licence to operate, the compact between wider society and a financial firm that allows it to operate, begins within the firm itself.

This aspect of the social licence to operate relates to having a robust culture that drives good conduct that is enshrined within a strong governance framework. Unfortunately, this is also where the social licence breaks down most often—reports of misconduct have done much to keep this topic in the public view.

In Asia Pacific, there has been a great deal of regulatory activity to improve governance structures. The region, for example, has three different individual accountability regimes—those currently in effect in Australia and Hong Kong SAR and one announced in Singapore. In this sense, Asia Pacific firms and regulators have been important voices in the global conversation on governance.

However, while regulators globally have emphasised the need for robust culture in financial firms for some time, there has been less movement on the "how" of building a culture that drives good conduct. The Australian Royal Commission into Misconduct in the Banking, Superannuation and Financial Services Industry has certainly kicked off a conversation in our region about the need for stringent and proactive supervision. It has also shone light on the currently heightened community expectations and the potential need for improvement within the regulators themselves. Both supervisors and firms in our region continue to find the task of nurturing good culture difficult. There may be scope to look to other jurisdictions outside of Asia Pacific or other industries for answers on how to tackle culture reform.

Building trust from within an organisation through a culture that drives good conduct as well as a robust governance framework is at the core of a firm's social licence to operate and will continue to be top of mind for regulators in 2020 and beyond.





Conduct and Culture

Regulatory Constant—nothing new under the sun?

Since the first Asia Pacific edition of the *Financial Services Regulatory Outlook* in 2016, culture and conduct has been a recurrent theme. High-profile market misconduct incidents, significant regulatory activity both regionally and globally to address structural governance issues, and low consumer trust have ensured that culture and conduct never falls off the "to-do" list.

The 2019 Edelman Trust Barometer shows once again that financial services is the least trusted sector for the last decade.⁴⁰ Globally, financial services is "not trusted" in 15 of 26 markets surveyed. In all Asia Pacific countries surveyed by Edelman, half or more of all respondents believe that "[companies] can take specific actions that both increase profits and improve the economic and social conditions of the communities where [they] operate".⁴¹ As a vital part of a firm's social licence to operate, trust borne of a healthy firm culture and good conduct is an imperative for the financial services industry.

Getting culture right—and thereby driving good conduct, has always been difficult; it remains so. This has led to a certain amount of culture fatigue in the industry. The Group of Thirty (G30) noted a desire in financial firms to "get on with business" in their 2018 report *Banking Conduct and Culture*.⁴² In the same report, the G30 also emphasise that culture programmes need to be long-term and fully internalised by an organisation rather than made and then forgotten. Taking the UK as an example, it is interesting to note that the UK Banking Standards Board highlights that despite the genuine investments many UK firms have made, they continue to struggle with the "hard yards" of getting culture right.⁴³ As regulators and firms in Asia Pacific continue to advance their approach to culture they are likely to experience the same challenge.

The questions firms in Asia Pacific need to ask themselves about their culture programmes are similarly difficult—how can we effectively manage the distinction between legal misconduct (things we *definitely cannot do*) from more every day decisions made during business as usual activities (things we *maybe, probably should not do* but technically *can*)? How do we ensure that a good "tone from the top" is penetrating to the middle and lower levels of our organisation? Conversely, how do we ensure an environment that allows

issues to be escalated to senior management? How do we make front line customer-facing staff feel responsible for risk management? How do we move from simple legal compliance towards embracing an approach that takes community expectations and social welfare into account? How do we measure and prove that any change is actually happening? How do we reward doing the right thing?

The Approach So Far

On matters of culture, regulators generally take a principle-based approach. For example, in its 2018 toolkit to strengthen governance frameworks to mitigate misconduct risk (the final piece of their 2015 workplan, *Measures to Reduce Misconduct*⁴⁴), the FSB states that:

*"[i]t is for firms and authorities to determine how best to address conduct issues in their jurisdictions. Therefore, rather than creating an international standard or adopting a prescriptive approach, the FSB is offering this toolkit as a set of options based on the shared experience and diversity of perspective of FSB members in dealing with misconduct issues".*⁴⁵

In 2020, as with the years before, we expect to see continued regulatory focus on improving culture within financial firms. Asia Pacific regulators, like their peers abroad, acknowledge that culture is difficult to supervise. This becomes even trickier when questions about culture, and the (mis)conduct it drives, become wrapped up with, for example, the use of new technology like advanced artificial cognition. This example is something we explore further on in our *Outlook*, but it speaks to a need for regulators to improve their ability to supervise culture. As an example, we have seen a number of regulators both here in Asia Pacific and abroad focus on equipping

themselves to better supervise firms' use of technology and innovation so as to understand the potential risks it creates for firms' culture, the conduct of their employees and the outcomes achieved for customers.

Better Equipping the Regulator

The UK FCA is considering this issue on two fronts—one technical, the other philosophical. On the technical side, they are currently concerned with upskilling their supervisors in relevant areas like cyber security or data science to tackle the huge ethical and social questions these new technologies bring up.⁴⁶

From a philosophical standpoint, the FCA is also considering whether or not their Principles for Businesses can be supplemented by a duty of care or if efforts like the Senior Managers and Certification Regime is sufficient.⁴⁷ The FCA notes that:

*"[S]ome stakeholders have voiced concerns that our regulatory framework, including our Principles, may not be sufficient or applied effectively to prevent harm to consumers and protect them appropriately. Some have said that the introduction of a duty of care could reduce harm by requiring firms to avoid conflicts of interest, as well as supporting longer-term cultural change within firms".*⁴⁸

Both actions look towards making the UK regulators more effective in their supervision of firm culture and employee conduct. There may be scope to look to other jurisdictions outside of Asia Pacific or other industries for answers on how to tackle culture reform.



The Effects of the Australian Royal Commission

The Royal Commission into Misconduct in the Banking, Superannuation and Financial Services Industry (the Royal Commission) of the Australian government shone a light on the failings of the financial services industry that had been progressively building over several years. Failings by the big four Australian banks had become more common. Public trust in the industry was evaporating and the situation reached a tipping point in late 2018 with a letter from the big four banks to the Australian treasury. The letter asked for the Royal Commission to be called in the hope of embarking on the path towards rebuilding trust. However, the extent and level of misconduct and failings within the financial services industry caught not only consumers and regulators off-guard, but rocked the industry itself.

Following 14 months of continuous media coverage and increasingly harrowing headlines, the Commission released its Final Report in February 2019. The six principles of good conduct were repeated by the inquiry's head, Commissioner Kenneth Hayne, and illustrate the paradox of how simple requirements have been disproportionately complex to regulate:

- Obey the law;
- Do not mislead or deceive;
- Act fairly;
- Provide services that are fit for purpose;
- Deliver services with reasonable care and skill; and
- When acting for another, act in the best interests of that other.

The recommendations of the Royal Commission were far ranging, and reflected both the individual failures of each industry sector, as well as the enhancement needed of the capacity and capability of the regulators to adequately supervise and enforce the law.⁴⁹

The final report also called for greater cooperation between the "twin peaks" of the Australian regulators (the Australian Prudential Regulation Authority [APRA] for prudential supervision and the Australian Securities and Investments Commission [ASIC] for markets). It also urged them to shift towards a stricter enforcement regime. ASIC, as the market conduct regulator, has announced and reiterated its new "why not litigate" approach. In APRA's case, the prudential regulator has been allotted AU\$ 150 million over four years to

*"substantially upgrade [its] supervisory capabilities... [by] enhancing the supervisory framework and approach for governance, culture and remuneration applying to all APRA-regulated entities, including through building internal technical expertise and accessing technical specialists outside of APRA..."*⁵⁰

The results of the Royal Commission have kicked off a conversation in Asia Pacific about supervisory approaches to conduct. APRA Chair Wayne Byres noted that the prudential regulator was being asked to do more than was traditionally done:

*"[t]he lessons from the Royal Commission will also require us to review and strengthen our governance (CPS510) and risk management (CPS 220) standards. We will need to devote substantially more supervisory resources to these issues and they will need to become a core competency, just as much as bank capital and liquidity".*⁵¹

Perhaps the greatest outcome of the Royal Commission was not in the recommendations of the report itself, but the ushering in of a new paradigm characterised by more stringent and proactive supervision, higher community expectations, and a renewed focus on core financial services through progressive simplification and demerging.

New Zealand regulators have been closely following developments in Australia. While there has been no outright examination of weak spots in New Zealand's regulatory approach to the supervision of culture, the head of New Zealand's Financial Markets Authority (FMA), Rob Everett, agreed with the International Monetary Fund (IMF) recommendation for the New Zealand and Australian regulators to work more closely together.⁵² He also signalled a change in approach similar to Australia's, warning New Zealand firms against complacency:

"Regulated entities can expect our supervision to be more intrusive, in seeking evidence that attestations are merited and verifying compliance, and that we will intervene and enforce our requirements. We will be more pro-active in holding directors and managers to account, particularly in areas where we have already identified shortcomings".⁵³

Japan and Singapore have taken a slightly different approach—increased dialogue with industry. In May 2019, MAS and the Association of Banks in Singapore announced the establishment of the Culture and Conduct

Steering Group "to promote sound culture and raise conduct standards amongst banks in Singapore".⁵⁴ Similarly to its peers in Hong Kong SAR and Australia, MAS proposed the *Guidelines on Individual Accountability and Conduct* in June 2019. The proposed guidelines do not impose any new legal requirements on financial institutions; rather, they would be monitored as part of MAS' ongoing supervision.

The JFSA has begun to address conduct and culture (or "compliance risk" as they refer to the concepts locally) via their recent policy to adopt effective supervision and inspection through dialogue with financial institutions. In June 2019, the JFSA released *Tendency and Issues on Compliance Risk Management*, in which the JFSA has collated information on compliance risk management based on dialogues with and monitoring of financial institutions.⁵⁵ The report noted that though meaningful progress was made by financial firms as regards compliance risk management, there are still areas where work is needed to develop capabilities, namely areas like the assessment of risk culture, risk management by the first line of defence, and the utilisation of technology.





Regulators looking to innovate

Another area of regulator upskilling in order to better supervise firm culture and conduct may come from insights from behavioural science. Applying behavioural science to policy design was pioneered in 2010 by the UK government's Behavioural Insights Team which was started as a way to inject a more realistic understanding of human behaviour into the policy design process to see if small changes or "nudges" could have an outsize impact in a range of areas like tax collection, pension enrolment, or energy conservation.⁵⁶ One of the first applications specifically to financial services was the work done by the De Nederlandsche Bank, the Dutch central bank.⁵⁷ The IMF in 2018 released a working paper *A Behavioral Approach to Financial Supervision, Regulation, and Central Banking*⁵⁸ to further study the case for adopting behavioural science in financial policymaking. The report states that most of the post-crisis regulatory reforms to manage conduct focused on corporate governance rather than how an individual makes a decision within a structure. A wider application of behavioural science-inspired policymaking, the report notes, could have an impact on understanding and managing individuals' decision making.

ASIC's corporate governance task force has shown interest in using insights from behavioural science to improve conduct at financial services firms. Their recent publication in October 2019 *Director and officer oversight of non-financial risk report*⁵⁹ in part explores how behaviour drives non-financial risk management on boards. MAS has also shown interest in putting similar insights to work and has created

a behavioural science unit to run culture research and empirical studies to, as Ravi Menon, MAS Managing Director put it, "build up our capabilities in this area and support our supervisors with methodologies to get a better understanding of culture and conduct issues in the institutions they supervise".⁶⁰

Another interesting development is the founding of the Global Financial Innovation Network (GFIN) by the UK FCA. First proposed as a global regulatory sandbox in August 2018, the GFIN was formally inaugurated as a network for regulators to collaborate on cross-border regulatory technology (regtech) solutions in January 2019, with its first pilot projects announced at the end of April 2019.⁶¹ Of the 17 GFIN members currently participating in cross-border experiments, four are from Asia Pacific—ASIC, HKMA, the Hong Kong Securities and Futures Commission (SFC), and MAS. A selection of the eight solutions currently being tested includes a tailored automated mapping of regulatory obligations and rule changes across jurisdictions, a way to transfer a digital ID between financial firms, and a predictive behavioural analytics platform to allow users to measure, manage, and mitigate culture and conduct risks. This final project is worth noting as both the HKMA and ASIC are participating in the trial.

While certainly in a nascent phase, this may indicate a level of interest by Asia Pacific regulators in applying behavioural science insights to the problem of managing culture and conduct.

Better Equipping Firms

Just as regulators look to improve their capability to supervise culture, firms must also look to ways to improve their approach to culture. Deloitte's recent paper *Culture in financial services: One year on* takes an in-depth look at emerging trends in supervisory focus outside our region to help firms answer some of the questions posed in the opening of this section.⁶²



Purpose—Looking beyond the mission statement of a firm to see what a firm is trying to achieve in practice. Regulators will be interested to see how a firm's purpose translates practically into customer outcomes, to what extent said purpose is primarily tied to profit, and if there is strict compliance to rules rather than a commitment to act as a good player in society.



"Tone from Above"—Acknowledging the limitations of "tone from the top" as most employees take their cues on culture and conduct from their immediate managers rather than senior executives or board members. There will be growing interest to see that those in management functions at all levels of an organisation are able to reflect and promote key messages from senior management. Often regulators are aware that the "tone from the middle" is more important from a practical, everyday standpoint as a means to embed good culture and conduct at all levels within a firm (for example, the JFSA emphasises and promotes this approach in its *Approach to Compliance Risk Management*⁶³).



Diversity and Inclusion—Who makes up the board and senior management, and who dominates conversation, matters. Regulators are increasingly interested in seeing challenge and rigorous debate, something which is better facilitated by a group with diverse thought and background. This is not only important for top levels of an organisation, but throughout a firm. Deloitte's research has shown that middle-management is key to spreading diversity and inclusion initiatives and is another point in favour of improving the "tone from above".⁶⁴



Open Communication—Creating a culture where employees feel able to share opinions or admit errors without fear of retaliation or overreaction is what allows issues from the lower levels of an organisation to flow back up to higher levels. Fear-based suppression of misconduct keeps boards in the dark and limits the ability to understand and assess what is really going on at the front lines of a business. Regulators may look to test not only employee knowledge of escalation procedure, but also try to understand their opinions on how this works in practice.

Conclusion

While the above are developing trends in culture supervision, it must also be acknowledged that Asia Pacific firms and regulators will continue to have differing levels of ability to manage and supervise culture. In 2020, it will be important for firms operating in Asia Pacific to keep the above in mind, but to also focus on getting core skills right. This includes:

- **Articulating** conduct risk into and as part of a firm's larger risk appetite framework;
- **Securing** board and senior management commitment to managing conduct and ensuring that it is aligned with the firm's business model and strategy;
- **Continuously assessing** the effectiveness of managing conduct through point in time surveys, benchmarking, in-depth interviews, and other granular communication; and
- **Collecting** information about the approach of regulators to misconduct cases both in Asia Pacific and abroad to learn how to better avoid similar situations.

Governance

As with good culture and conduct, good governance helps to build trust and strengthens a firm's social licence to operate. With an increasingly interconnected set of stakeholders across the financial ecosystem, the difficulty in building trust between parties has only grown.⁶⁵ Corporate governance has to take on broader considerations, with concepts such as stakeholder theory becoming the norm, as principal-agent problems remain at the core. This broadening, combined with the persistence of corporate failures and poor customer and community outcomes, has meant the expectations of regulators are evolving to capture a broader set of stakeholders. The idea that the board's only responsibility is to their shareholders is dying, and companies must place their customers and communities on equal standing.

What is corporate governance?

The definition, subject matter, and issue of corporate governance can vary between companies, regulators, and academics. The simple definition is that it involves the processes and mechanisms by which an enterprise is managed. However, this does not capture why issues of corporate governance exist. Several

words underpin much of the discourse, such as transparency, accountability and fairness, but this touches only on the surface of what good governance achieves. Corporate governance is in its essence the set of mechanisms by which trust is facilitated between various organisational stakeholders with competing interests and asymmetrical information.

We see four key pillars as necessary for building this trust:



Board Effectiveness

The composition and accountability of the board of directors and their competency to fulfil their duties.



Risk & Compliance

Processes to identify and manage risk and compliance issues in line with the appetite of the board.



Financial Integrity

The function of audit in assessing the effective operation of internal controls and processes



Disclosure & Transparency

The nature and subject matter of internal and external disclosure to stakeholders on strategy, operations and financial performance.

The spotlight in 2019 in Asia Pacific has been on two key areas of governance: accountability of senior managers and directors and remuneration mechanisms. The growth of senior manager and

Board accountability regimes across the region has accelerated, though no two regimes are the same. As such, this may pose challenges to senior management of cross-border firms in 2020.

Comparison of Accountability Regimes in Asia Pacific

Australia Banking Executive Accountability Regime (BEAR)	Hong Kong SAR Manager-in-Charge Regime (MIC)	Singapore Individual Accountability and Conduct Guidelines (IAC)
Introduced in 2018 for large Authorised Deposit-Taking Institutions (ADIs) and extended to small ADIs in 2019.	Implemented in October 2017.	Guidelines expected to be finalised by early 2020.
Focused on both Directors and senior management who are accountable for specified areas of the organisation.	Focused on senior management.	Covers senior management of the organisation, but also extends to employees as a whole.
Prime focus is on assigning accountability to individuals for core banking activities.	Assigns and clarifies the accountability of senior management.	Covers not only individual accountability of senior management, but extends to the conduct of employees as a whole, particularly those in material risk functions.

Movement in Asia Pacific

In 2019, regulators within the Asia Pacific region made strides in the development of more stringent regulation and supervision of corporate governance within the financial services industry.

The Australian regulatory environment has seen several steps towards stronger regulation of corporate governance, which largely stemmed from the Royal Commission. Last year, ASIC established a new Corporate Governance Taskforce to enhance supervision, particularly of non-financial risks and executive remuneration. From a prudential lens, APRA released a draft Prudential Standard in 2019 on remuneration practices to address several recommendations from the Royal Commission. The draft sets out in a standalone standard and enhances remuneration requirements that are currently in *Prudential Standard CPS 510: Governance*.⁶⁶

2018 saw an uplift to the oversight and regulation of corporate governance in Singapore through the revision of the Code of Corporate Governance, which came into effect from 1 January 2019. The Code focused on strengthening director independence requirements, improving transparency of remuneration, and engaging stakeholders beyond only shareholders. This trend has continued in 2019, with the establishment of a Corporate Governance Advisory Committee to support the regulators by improving standards of corporate governance and strengthening investor confidence. MAS also responded to feedback from its consultation process for the IAC in June 2019. The finalised IAC Guidelines are expected to be published by early 2020 and come into effect one year thereafter.

Towards the Future of Corporate Governance

With heightened expectations on achieving good corporate governance outcomes, there are several trends and themes that organisations will need to adapt to in order to improve the effectiveness of their governance processes.



Board performance

There is an increased focus on the effectiveness of the Board in fulfilling its duties. In particular, Board composition has come under the microscope in regards to community expectations of diversity, independence, and competence. Deloitte's research shows that groups that are diverse both cognitively as well as demographically result in higher performance.⁶⁷ Complex problems require different approaches (Deloitte identifies six necessary frameworks—evidence, options, outcomes, people, process, and risk) which no one person can entirely master and therefore calls for a diverse group with diverse skills. Firms will also do well to assess whether directors with multiple board appointments have the capacity to discharge their responsibilities adequately.



Stakeholder approach

A broadening of the responsibilities of the Board from shareholder returns is already occurring, as regulators focus on the interactions between organisations and their customers and communities. Effective corporate governance in the future will need to consider multiple stakeholders both inside and outside the organisation, and to assess how the company's mission, vision, and values align to their benefit.



Increased use of data

With the responsibility of Board members increasing along with higher levels of accountability, correcting the information asymmetry between management and the Board has never been more important. Data-driven insights and reporting will become paramount to assist the Board in adequately assessing the risk exposure, operational performance, and strategic direction of the organisation. Firms will need to ask—what decisions are the Board making and what data are needed to make them?



Improved disclosure

As societal issues move closer to top-of-mind for consumers and directors alike, organisations will be expected to capture their efforts towards these as part of corporate disclosures. We are already seeing the inclusion of diversity initiatives and organisational response to climate change as part of annual reporting. This will only increase as initiatives like the United Nations Environment Programme—Finance Initiative's *Principles for Responsible Banking and Investing*⁶⁸ gaining traction. Regulators, communities, and investors are seeking more assurance from corporates that these issues are being managed effectively.⁶⁹



Beyond the Board, Risk, and Audit

Corporate governance has traditionally focused on three key parties in facilitating good governance: the Board, Risk and Compliance, and Internal Audit. With the regulatory focus becoming more about conduct failures as opposed to prudential, we will likely see an extension of the remit of corporate governance across the entire organisation to include requirements on management and employees and the effectiveness of corporate culture and conduct.

Conclusion

Societal expectations of organisations and the financial services industry have only continued to rise in the aftermath of the Global Financial Crisis, though with a marked pivot towards conduct and consumer outcomes from prudential matters. In order to keep pace with these expectations, the financial services industry is shifting towards self-regulation of governance. In 2020, in order to maintain their competitive advantage and to preserve their social licence to operate, financial institutions will need to assess whether their actions truly reflect their vision and values and serve their communities.

Social Licence to Operate—doing right by customers

The next section of our *Outlook* covers what are currently some of the most exciting and dynamic topics in financial services—Privacy and Data Usage, and artificial intelligence. As technology becomes core to a financial firm's operations, the need to do right by customers by properly protecting their data and using it ethically as an input for advanced cognitive technology will only grow stronger. A key part of a firm's social licence to operate is now premised on being a good steward and user of customer data.

What is notable about this aspect of the social licence to operate is its malleability—the EU's General Data Protection Regulation, for example, has influenced how both regulators and customers think about data privacy and usage. Different jurisdictions across Asia Pacific are aligned in many aspects of their privacy regimes. However, there will also be areas where regulators will give preference to local norms and expectations in their interpretation of common concepts. In particular, data

flows across borders is a contested space with competing world views on what and how data can be shared.

Many regulators in our region are only just beginning to voice their opinions on how the risks associated with advanced cognitive technologies like artificial intelligence should be managed. As we explore in detail, consideration will need to be given to what data is used to fuel algorithms, how those algorithms change over

time via machine learning, how bias is accounted for, as well as how algorithms can be audited and explained to regulators.

This is an area where we expect to see much regulatory focus in the near term. The evolving nature of privacy, data usage, and artificial intelligence may pose challenges to firms as they work to secure their social licence to operate while adopting new technologies.



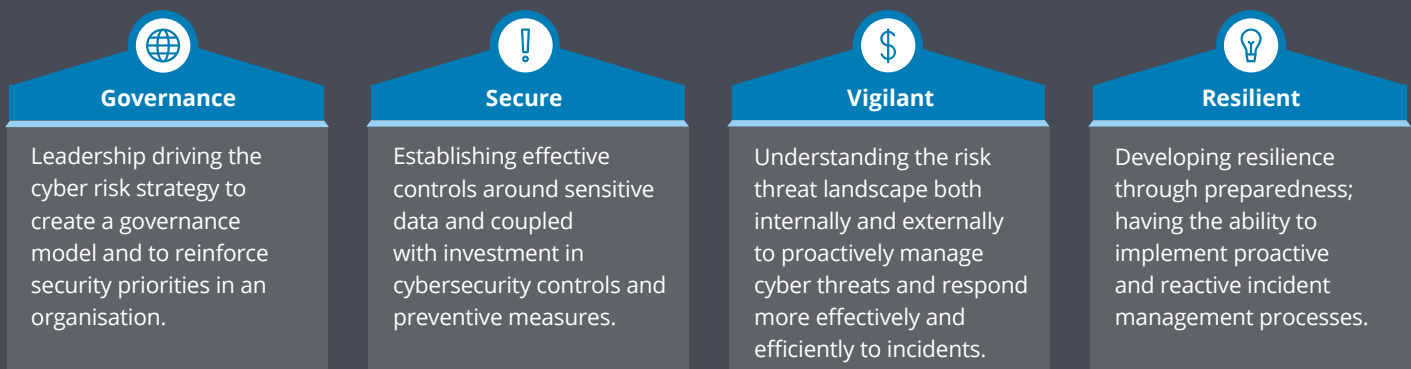


Cyber Risk Management

Many of our *Outlook* articles focus on the balance to be struck between embracing and encouraging innovative approaches but doing so in a way where customers or users are still protected. From the perspective of regulators in the region it begs the question—what does responsible innovation look like?

We explore this question more thoroughly through deep dives on Privacy and Data Usage and artificial intelligence. Both of these topics involve either the use of emerging technologies or the innovative application of existing technologies. Whenever we see the intersection of technology and financial services, it necessitates a conversation about the importance that financial supervisors put on understanding the threat landscape and proactively managing cyber risk.

Deloitte's framework for managing cyber risk



Recent Developments—Cyber Resilience Programmes in Asia Pacific

Cyber resilience programmes offer an excellent example of regulatory focus on cyber risk and responsible innovation in the Asia Pacific region. Cyber resilience is defined as the ability of a firm to effectively defend against or prevent cyberattacks,

limit their severity, and ensure continuity of operations should an incident occur. Some Asia Pacific regulators are in the midst of multi-year plans to improve both their own and regulated institutions' approach to cyber resilience. Examples from the region include:



Australia

As part of their corporate plan for 2019-2023 released in August 2019, cyber resilience was named as one of APRA's key strategic priorities. Their multi-year approach to improving cyber resilience included monitoring the implementation of *Prudential Standard CPS 234 Information Security* minimum standards (effective July 2019). APRA will also look to improve their own ability to assess and respond to cyber incidents that materially impact regulated institutions. As well, they plan to better use data driven insights to analyse cyber resilience data to tailor their supervisory approach and later on to form their baseline metrics.⁷⁰



Singapore

In 2017, MAS established the Cyber Security Advisory Panel with cyber security experts from around the world to advise their cyber resilience approach.⁷¹ MAS' more recent activities include a notice on cyber hygiene (August 2019) that made key elements from the MAS Technology Risk Management Guidelines mandatory requirements for all regulated institutions (effective August 2020).⁷² MAS was also appointed to the chair of the Financial Stability Board's Working Group on Cyber Incident Response and Recovery, which is to develop a toolkit for "effective practices for financial institutions as well as for supervisors ... to support financial institutions before, during and after a cyber-incident".⁷³



Hong Kong SAR

The Cybersecurity Fortification Initiative was first introduced by the HKMA in 2016 with implementation from 2018-2020.⁷⁴ It includes a Cyber Resilience Assessment Framework, professional development programme of study, and an intelligence sharing platform. By mid-2020, around 120 Authorized Institutions are expected to have completed both an Inherent Risk and Maturity Assessment, as well as intelligence-led Cyber Attack Simulation Testing. The HKMA also added an additional six qualification certificates that are recognised as part of their training programme.⁷⁵

Conclusion

Going into 2020, regulatory expectations on cyber risk management will continue to rise as regulators encourage firms to embrace responsible innovation. Firms should:

Shift from Reactive to Proactive—By nature, cyber risk management is often seen as backward looking and reactive, focusing on risks and loss events that have already happened. Capturing losses and identifying near-miss events is important for developing a baseline to quantify the impact of loss events and drawing lessons to avoid similar incidents in future. However, this needs to be coupled with proactive activities such as threat monitoring and detection (tracking unusual activity), gathering internal and external information for real-time reporting, and/or investing in automating risk processes to reduce human error.

Invest in Talent—There is a talent crunch in Asia Pacific in emerging areas like cyber security. Firms should take advantage of education systems being set up by Asia Pacific regulators to educate their workforces in cyber risk management. Firms should make investments in existing teams to improve skills and refresh their talent strategy to attract the top talent that the region has to offer.

Adopt a Common Sense Approach—Cyber resilience guidance from Asia Pacific regulators has been grounded in good, common sense: address security flaws in a timely manner, strengthen user authentication, secure network traffic, define roles and responsibilities, build robust security for IT systems, and so on. Striking a balance between protection and detection measures is important.

Privacy and Data Usage

Appropriate data usage and protection of customer privacy is fundamental to building and maintaining a financial firm's social licence to operate. As the financial services industry continues to digitise, the uses for data will only increase. The common expectation of both regulators and customers is that when a customer shares data with a financial institution it is kept both *secure* and *private*.

Technological innovations and growing consumer acceptance increase an individual's data footprint, expands the uses of data, grows the network of third parties that the data can be shared with, and creates innovative ways to protect data. These developments lead to an evolving notion of privacy.

Current State of Privacy Regimes in Asia Pacific

In our 2019 *Outlook*, we noted that there has been significant regulatory activity in the privacy space in Asia Pacific. Fines of well over € 300 million for non-compliance with EU's landmark General Data Protection Regulation (GDPR) in 2019 (at the time of writing)⁷⁶ is rapidly changing the conversation about privacy. Moreover, after rushing out their data privacy programmes to meet the GDPR deadline, 2019 was a year in which firms started to ask whether these programmes are really sustainable. The GDPR has also impacted the thinking of regulators in Asia Pacific. Since our 2019 *Outlook*, some regulators in the region such as Thailand and India have specifically drawn from the GDPR to improve their own privacy regimes.

While the bulk of major privacy law overhauls have been completed in Asia Pacific, in 2020 we expect to see continued refinements to the

various privacy regimes around the region. Japan, for instance, has a built-in review mechanism to take into account best practices from abroad or changes in technology as the Personal Information Protection Commission of Japan reviews the bill every three years. Similarly, South Korea is looking to make technical updates to its privacy regime to take into account advances in data protection. The South Korean authorities are also currently seeking a GDPR adequacy decision (an acknowledgement by the EU that South Korea's privacy policy provides a comparable level of protection of personal data to the EU) which would put them in company with Japan and New Zealand as the only countries in Asia Pacific to have such an arrangement. Finally, we may also see regulators or governments move towards data localisation, either by requiring a copy of the data to be kept on servers physically located in a jurisdiction or prohibiting data transfers overseas unless certain stringent conditions are met.

Major Regulation Updates Completed—often unifying disparate laws/regulations or fully replacing previous legislation⁷⁷

Australia

The Privacy Act 1988 was amended in 2014 and updated again in 2018 to include mandatory data breach notification provisions.

China

The prevailing law is the People's Republic of China Cybersecurity Law 2017. It broadly applies to normal businesses that have a computer network like an intranet and critical information operators.

In June 2019, the Cyberspace Administration of China published draft regulation on the cross-border transfer of personal information. This gave needed depth to the definition of personal information in the Cybersecurity Law 2017.

Hong Kong SAR

The Personal Data Privacy Ordinance came into force in December 1996 and was revised in 2012 to incorporate new provisions. The Privacy Commissioner's office also released a set of non-binding guidelines for privacy management in 2014 and a guide on preparing for the GDPR in 2016.

Japan

The Act on the Protection of Personal Information (APPI), originally passed in 2005, was revised in 2016 with revisions coming into force in 2017. The APPI is reviewed every three years by the Personal Information Protection Commission of Japan. The findings of an interim report in April 2019 indicates the law may be updated again this year. Japan and the EU have a GDPR adequacy decision which was confirmed in January 2019.

Malaysia

The Personal Data Protection Act of 2010, Malaysia's comprehensive privacy regime, is currently undergoing review to better align with current standards, including GDPR provisions. The Privacy Commissioner has released a public consultation on introducing breach notification rules.

Singapore

The Personal Data Protection Act was enacted in 2012 and came into effect in 2014. In February 2019, the Personal Data Protection Commission released a white paper on data portability and announced its intention to introduce a mandatory breach notification scheme in the future.

Major Regulatory Updates in Progress

India

Draft legislation called the Privacy Bill was first issued in 2011; various updates have been released over time. The most recent, the Personal Data Protection Bill (2018), remains under discussion. On 4 December 2019, the bill secured approval from the Union Cabinet for introduction in the winter 2019 session of Parliament. The 2018 bill includes proposals to strengthen consumer rights and protection of personal information as well as conditions on cross-border data transfers and stringent breach notifications.

Indonesia

To date, there is no law that regulates data protection in Indonesia. The Personal Data Protection Bill, first introduced in 2015, remains under discussion and the timing of its passage remains uncertain.

New Zealand

The final report on the Privacy Bill (to update the 1993 Privacy Act) currently under consideration by the New Zealand Parliament has been published by the Justice Committee. The bill is expected to be passed in a timely fashion and includes mandatory breach notifications and provisions to better align with the GDPR. New Zealand has had a data privacy adequacy decision with the EU since 2012.

A Note About Nuance—Data Subject Rights

As we have noted, the European GDPR has influenced regulatory thinking and privacy laws in Asia Pacific. The Data Subject Rights (DSR) are rights to personal data that are granted to data subjects under the GDPR. Similar concepts exist in Asia Pacific privacy laws and are compared in the table overleaf. While the DSR have very specific definitions within the EU GDPR, they are open to interpretation when regulators from other jurisdictions incorporate them into local privacy regimes. Some notable examples of such differences in interpretation across Asia Pacific include:

Right to Erasure—"right to be forgotten" (India)

As per the draft Personal Data Protection Bill of India (2018), a data principal shall have the right to restrict or prevent continuing disclosure of personal data by a data fiduciary. This means that the right to be forgotten, usually understood to be an individual's right to have their data erased, is different in India. There, the right to be forgotten pertains to an individual's right to restrict the continuous disclosure of their data. Provided that the disclosure has served its original purpose or is no longer necessary, further data use can be limited but data does not have to be deleted.

Mandatory Breach Reporting (Australia)

The Notifiable Data Breaches scheme in Australia is less strict than that of the GDPR. The GDPR requires notification within 72 hours of an organisation first becoming aware of a breach and whether the breach is likely to result in risks to the rights and freedoms of individuals. The Australian scheme, on the other hand, requires breach notification to the individual and the Office of the Australian Information Commissioner within 30 days only in the case of an "eligible data breach" where the event will lead to "serious harm".

Does an equivalent exist in the privacy laws of Asia Pacific countries? ⁷⁸

		AU	CH	HK SAR	IN	ID	JP	MA	NZ	SG	SK	TW	TH
1	The right to be informed	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2	The right of access	✓	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3	The right to rectification	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗
4	The right to erasure	✗	✓	✓	✓	✓	✓	✓	✗	✗	✓	✓	✓
5	The right to restrict processing	✗	✗	✓	✓	✗	✓	✓	✗	✗	✓	✓	✓
6	The right to data portability	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✓
7	The right to object	✗	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
8	Rights in relation to automated decision making and profiling	✗	✗	✗	✗	✗	✓	✗	✗	✗	✗	✗	✗
9	Mandatory breach reporting	✓	✓	Voluntary Notification		✓	✓	✗	Voluntary Notification		✓	✓	✓



Data Usage—Sharing Across Borders

In 2020, we expect to see continued interest in how data is being shared across borders and the political implications thereof. A useful case study is how information flows in to and out of China.

On 13 June 2019, the Cyberspace Administration of China issued the *Measures for Security Assessment for Cross-border Transfer of Personal Information* to solicit public opinion. This round of commentary had been long anticipated and was thought to have been delayed by ongoing trade talks with the United States. The breakdown of said talks in May 2019 likely precipitated the release of the draft regulation.⁷⁹

In general, China has placed strict control over what type of data must be stored within China's borders and what data can be transmitted abroad. The new draft legislation makes some important clarifications and changes⁸⁰:

- **Distinction between "personal" and "important" data:** Previously treated similarly, but now quite distinct. Personal data is identifiable data about individuals and entities while important data relates to critical infrastructure and "public interest".
- **Data transfer:** Data to be transferred abroad must go through a security assessment to determine if transferring the data will impact China's national security, endanger the public, or expose private data. Previously only Critical Information Infrastructure operators were required to undergo this process but now all network operators must undertake the assessment.
- **Contractual approach:** the regulation proposes binding corporate rules that draws from the GDPR to data transfer from domestic to international and allows multinational companies to transfer data between their subsidiaries.
- **Cross border data transfers and transfers to third parties can be terminated or limited:** should the legal environment of the receiving country not be robust or there is overreach as determined by Chinese authorities (for example, with the US CLOUD Act), data transfers can be stopped or limited. It is clear that robustness and overreach are subject to interpretation.

Broader Impacts

This Chinese case speaks to a larger phenomenon—the cultural and political nature of data usage. In its recent white paper, *The Appropriate Use of Customer Data in Financial Services*⁸¹ the World Economic Forum (WEF) acknowledges this challenge; varying stakeholder incentives, regional differences, a lack of common principles for framing issues, and differing government opinions of data privacy will impact data privacy laws and cause fragmentation among regulators. Another key factor is also differing political goals—of all the topics we cover in this *Outlook*, data privacy may be most impacted by the competing world views of the relevant actors.

For example, one of the thorniest issues of the US China trade talks was not just China limiting data transfers out of the country but also the technology transfers that non-Chinese firms entering China are obliged to make to their joint-venture partners.⁸² Heated arguments on both sides of this issue from both the US and China illustrate its complexity. Limiting data transfer or demanding their release can both be means to a political end.

In that vein, the growing trend towards data localisation (governments mandating within which borders copies of specific kinds of data should be stored) is also an important

political and regulatory development to understand.⁸³ This trend is particularly challenging for entities operating in Asia Pacific as each jurisdiction could have a different approach and therefore different storage requirements that firms must comply with.

Pulling another example from Asia Pacific, the proposed Personal Data Protection Bill in India requires that a copy of personal data be held within India, with cross-border transfers to be approved subject to certain conditions. Furthermore, the Indian government can categorise certain data as critical personal data and require that this be processed on servers stored in India.

Within our region there are voices sounding out against this kind of fragmentation—the Asia Pacific Economic Cooperation (APEC) group of 27 countries created a Cross-Border Privacy Rules system to establish effective privacy laws and avoid unnecessary blocks to data flows. Japan in particular has come out strongly against stringent data localisation and has urged commitment to the APEC standards.⁸⁴ These competing visions of data localisation will cause challenges to firms—high costs of duplicated data storage and compliance in multiple jurisdictions as well as having to manage physical servers (which can be difficult in countries with unreliable infrastructure).

How Customers Think About Privacy

We also expect to see a growing need in 2020 for firms to consider how their customers' views on privacy are evolving. Regulatory developments around the region have pushed forward open banking (the right of customers to share their banking data with trusted third parties to access a broader range of financial products) and made open Application Programming Information⁸⁵ frameworks commonplace. However, as firms gather more and more data on customers and share it easily and legally with a growing number of third parties, it becomes imperative to be aware of the risk of triggering the "creep factor"—which the WEF describes as a financial firm "knowing too much about a customer and alarming them".⁸⁶

Deloitte analysis of academic literature finds that the definition of privacy is contextual rather than absolute and can lead to a gap in understanding between customers and firms. A piece of data itself does not exist in a binary state (private vs. not private)—rather, it is the context of its use that is the most important determinant of privacy. For example, a doctor sharing information about a patient's diagnosis with a specialist team in another hospital, an insurance provider, or family member would not necessarily constitute a breach of privacy. However if the same information was shared with the patient's employer, the patient's privacy may be breached.

Customers are concerned about *how* a firm uses their data. A Deloitte survey⁸⁷ on reactions to data usage by companies found that most consumers expect any data they provide to be used ethically—86% of respondents reported they would be very or fairly likely to sever ties with an entity if their data was used unethically. Interestingly, most consumers are willing to part with their data for personal monetary gain (over

67% would be comfortable allowing an insurance company to monitor their social media for a 50% discount in rates) or societal good (61% would share health history to help cure deadly diseases).

Well-publicised changes to privacy regimes abroad, and ongoing regulatory changes in the Asia Pacific region, may also affect customer expectations in the coming year. In a Deloitte survey taken six months after the GDPR came into effect⁸⁸, 58% of respondents both inside and outside the EU⁸⁹ reported taking more care when providing organisations with their personal data after the implementation of the GDPR. Awareness of rights under the GDPR are also high—respondents in the same survey were aware of their right of access (79%), right to opt-out of direct marketing (80%), right to data portability (76%), and right to erasure (76%).

Finally, how a customer defines ethical data use, what data they will be willing to share, and with whom they are willing to share, are culturally informed and will vary from country to country and person to person. The same could be said for regulators in Asia Pacific, as shown in our comparison of data subject rights. While regulators may draw from common benchmarks, their approach to regulating privacy — data use, third party sharing, open banking, open APIs, etc.—can vary from one jurisdiction to another.



Open Banking in Australia

Stemming from the notion of privacy (an individual's right to his or her own data), the concept of open data is still fairly nascent. The purpose of open data is to give individuals greater control over the data they create, through free and open transmission of data upon their request. When applied to the banking industry, this is known as open banking.

In the Australian context, the open banking regime operates by way of the consumer data right, which gives consumers the right to request entities to share their data with other entities within the regime. Open

banking also involves creating transparency around product data. This two-pronged approach intends to remove the traditional barriers to entry and substitution that have resulted from a closed data system and open up competition within the financial services industry.

In the past year, open banking in Australia has seen significant strides, with multiple iterations of the rules being released, and legislation passed through parliament ahead of an implementation date of February 2020. From this date, the big four Australian banks will be required to share customer data, account data, and transaction data with other regime participants upon consent from the customer. Over subsequent years, additional banks will be required to participate in the regime and additional data types will be phased in.

As the regime matures, we expect to see a seismic shift in the way current market forces operate within the financial services industry, with an increasingly level playing field with respect to incumbents and new entrants. Furthermore, the opening up of data could see the development of new services and the enhancement of others.

Conclusion

Renewing Privacy Strategies for 2020 in Asia Pacific



Understand the impacts of Asia Pacific's regulatory diversity: As mentioned in this and other parts of this *Outlook*, market fragmentation is a reality of our region. There are a variety of approaches to privacy laws; each jurisdiction's laws will have their own rights, duties, and benefits. Even as, for example, the GDPR can drive a certain amount of regulatory standardisation in the region, Asia Pacific regulators will continue to make judgements on what data should be stored locally, and what can be transferred overseas. Asia Pacific customers will have diverse expectations of what constitutes data privacy that are shaped by culture as well as developments within and beyond their home locale.



Be aware of how emerging technologies use data: As technology continues to develop, how data is used and how privacy is protected will grow in importance. Artificial intelligence, as explored in the following article, is an excellent case study, but this is similarly applicable to data generated by Internet of Things devices, mobile phones, payment transactions, and so on. In our region, regulatory maturity will impact the approach and legal frameworks of Asia Pacific jurisdictions and can pose challenges for firms.



Privacy by design as default: Creating trust is critical to a mature data privacy framework. Embracing a top-down approach to ensure holistic personal data protection is key. This ensures that privacy by design is front and centre from the beginning of any project, which will have positive benefits for business and organisational outcomes. This also encourages trust that data will not be misused or shared inappropriately.



Be a good steward: Collecting and keeping only the data you need, ensuring its accuracy, sharing and using it only in a way that the customer has authorised (for example—determining whether or not secondary use in data analytics has been consented to) are all key aspects to being a good steward of personal data.



Explore new techniques to protect data: Regulators in Asia Pacific have shown interest in regularly reviewing their privacy regimes and updating them to include new approaches to privacy like new data science techniques. Firms should explore these new techniques and adopt as appropriate for their broader needs.



Improve talent within the organisation: The importance of data and new uses for data will only grow in the future. All levels within an organisation will need to have a firm handle on the legal obligations under privacy regimes as well as the ethical uses of any data collected. Top-level executives, especially the Chief Operating Officer, will particularly need to have capabilities and the right mindset in this area.

Artificial Intelligence

Emerging technologies are helping to drive digital transformation within the financial services industry. With the rise of data as a critical asset now well entrenched, and a difficult operating environment that has required a continuous push towards lower operating costs, firms are looking towards technologies like artificial intelligence (AI) for answers. The introduction of these technologies within the financial ecosystem is not without risks. We are seeing regulators begin to take notice, although with the position of striking a balance between prudent risk management and financial innovation. A principles-based approach has been the protocol to date, and it is expected that the flexibility this provides will continue to be valued by both regulators and market participants alike.

You cannot manage what you do not measure, and you cannot measure what you do not define. This is a conundrum the market has experienced for AI to date, and even now there is little convergence around a universal definition. A simple, functional description of AI is:

Any machine that appears to maintain characteristics generally reserved to the domains of human intelligence.

In practice, this has a variety of applications from internal mechanisms such as credit-decisioning, to new products and customer-facing solutions such as robo-advisors and high-frequency trading. AI largely revolves around three key capabilities, which mimic human intelligence:



Visual Recognition—the ability to identify objects or images and extract meaning, such as classifying identified objects into predefined



Speech and Natural Language Recognition—the ability to communicate with humans by understanding written text (natural language processing (NLP)) and/or creating human speech (natural language generation (NLG)).



Machine Learning—the ability to identify patterns and update predictions based on new information.

The safer state of AI has traditionally been as an internal process-improvement tool (which brings its own risks around resiliency and talent). As products and services built solely around AI become more mainstream, consumer protection matters come into play.

In June 2019, the G20 formally adopted a set of human-centred AI principles:

1. Inclusive growth, sustainable development and well-being
2. Human-centred values and fairness
3. Transparency and explainability
4. Robustness, security and safety
5. Accountability⁹⁰

The points of focus around AI largely resemble the stance of regulators towards more traditional areas of non-financial risk. However, the introduction of AI brings a more complex take on notions like transparency and accountability, where black-box algorithms can lack both.

Key Risks Associated with AI



Accountability and Conduct

Regulators are placing continued focus on the accountability and conduct of senior management in the decision-making process. With the advent of black-box algorithms, explaining the rationale behind the decision-making process of an AI tool becomes difficult, if not impossible. A report by the



Bank of Japan (BOJ) ⁹¹ investigated the legal issues stemming from the use of black-box algorithms in investment management. Two key areas of inquiry were considered: the application of legislation around decision-making driven or performed by algorithms; and how market misconduct perpetrated by AI would and could be regulated. The report provides that existing legislation will need to be adjusted to reflect the unique nature of AI, and this will likely be a common notion in the future. This underpins the necessity of defining clear ownership and responsibility for the outputs of AI models. The HKMA released a circular on 1 November 2019 entitled *High-level Principles on artificial intelligence* that also tackles the issue of ownership, noting that the Board and senior management of banks are accountable for all AI-driven decisions in their organisations.⁹²



Bias and Ethics

There are many ethical dilemmas associated with the use of AI, and in particular the notion of bias within models is at top of mind. There have already been several well-known cases of AI demonstrating bias against certain classes of individuals, and given the already low level of consumer trust within the financial services industry, the reputational impacts can be particularly damaging. Perhaps the Asia Pacific jurisdiction with the most progress in the regulation of AI is the MAS, which released a set of principles in late 2018 to promote fairness, ethics, accountability and transparency (FEAT) in the use of AI and data analytics (AIDA) within the financial services industry.⁹³ The document defines 14 principles to guide the effective governance of AIDA and largely rings true to the basic tenets of good governance, but with greater focus on the ethical and fairness issues that come with AI and any arising bias. The principles complement existing legislation on the appropriate use of personal data, and homes in on the specific algorithmic and outcome aspects of AI.



Data Usage

An algorithm is only as good as the data upon which it is trained. Adequate data is critical to developing an effective AI solution, and bias is often a result of inherent bias within training data. In addition, the use of personal data within an algorithm has its own issues around privacy, further complicating the matter. The HKMA issued a circular in 2019, encouraging all Authorized Institutions to adopt and implement the *Ethical Accountability Framework* released by Hong Kong SAR's Privacy Commissioner.⁹⁴ The framework focuses on the ethical use of personal data within business operations, with particular focus on its use within algorithms and the decision-making process of AI. The framework does not provide explicit guidance on the nature of algorithmic design and outcomes like the *FEAT Principles*, but rather focuses on the 'oil' which drives the algorithmic engine—data. While adoption of the framework is not mandatory, it is an important first step towards a comprehensive regulatory response to the challenges posed by AI in Hong Kong SAR.

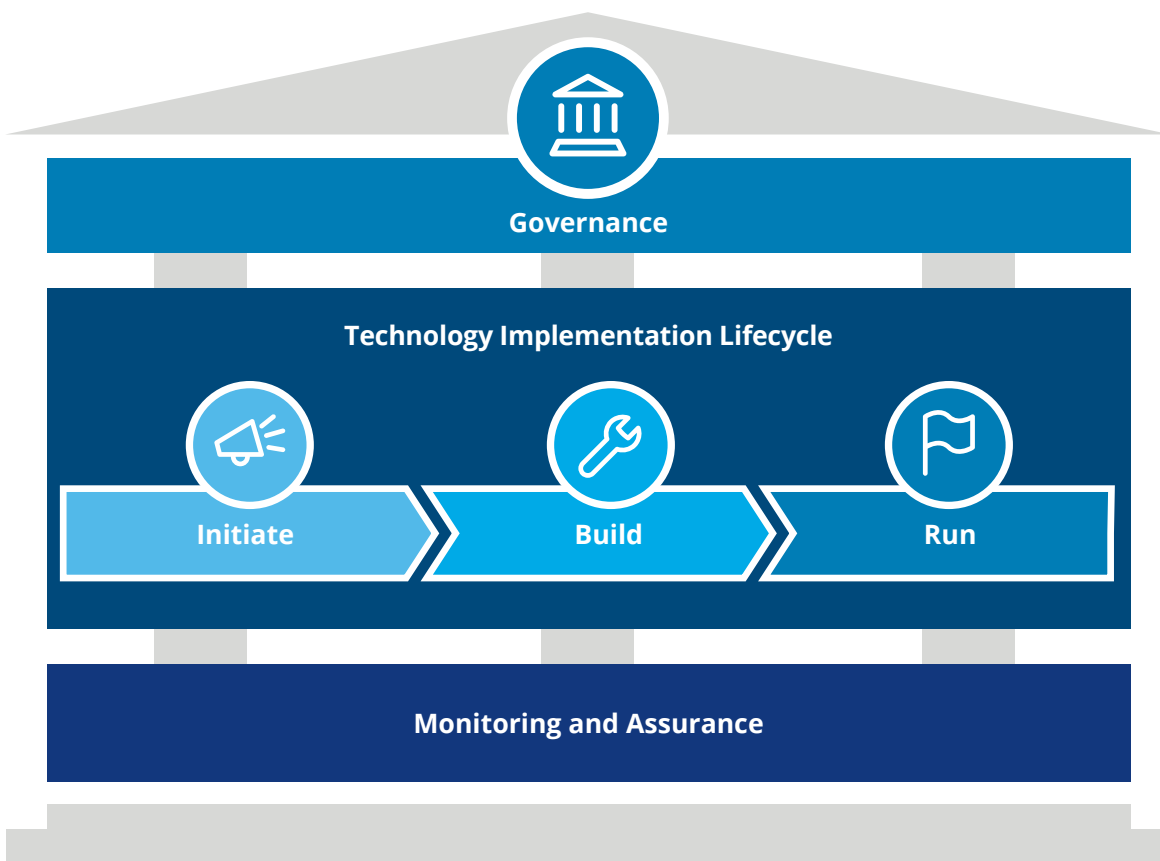
Though regulatory progress to date has been relatively slow, AI is still very much an emerging technology, and it is unsurprising there has been a lack of a coordinated push towards regulation. In Australia, where there has been little discussion over AI by the regulators, the Corporate Plans of the two key regulators, ASIC and APRA, note the environmental shift towards AI; for example, ASIC intends to employ AI as a supervisory tool itself in the near future. Looking ahead, we expect to see a gradual increase in oversight and supervision from both a prudential and consumer protection lens in relation to the use of AI in the financial services industry.

An AI Ready Organisation

Deployment of AI technology within an organisation, whether as an internally or externally facing solution, requires adequate consideration to risk management. The risks associated with AI can be largely mitigated through good governance

and risk management, though with certain intricacies. Central to AI risk management are three areas:

1. Governance
2. The technology implementation lifecycle
3. Ongoing monitoring and assurance



Governance


The effective oversight and governance of new initiatives is particularly relevant to the uptake of AI. Both 'tone from the top' and 'tone from above' are critical, and a first point of call for organisations should be their Risk Appetite Statement (RAS). Introduction of AI solutions may pose challenges for a traditional RAS, particularly around explainability and accountability. Once executive and Board buy-in has been obtained, a formal policy should be implemented to set out the principles by which AI can and cannot

be used in the organisation. A principles-based approach is key to allowing adequate flexibility, and notions of accountability, transparency and ethics should be considered as non-negotiable. Finally, lines of ownership of AI risk should be agreed amongst stakeholders, including through defined escalation channels. With touchpoints across privacy, ethics, model risk, and technology, defining owners from existing roles may be difficult, and in many cases a centre of excellence or formal governance committee may be the most pragmatic approach to assigning accountability and oversight. However, achieving

an appropriately diverse structure requires skills unique to AI, which are becoming increasingly difficult to source in an already under-resourced industry.

 **Technology Implementation Lifecycle**

The introduction of an AI solution needs to be managed at multiple stages across the implementation lifecycle. When considering a new solution or use-case, a risk assessment against AI principles should be performed to identify any zero-appetite risks, and elicit appropriate escalations and approvals. Proximity to customers, model explainability, and AI autonomy are key inputs to this first assessment, and the information captured should allow management to make a clear decision as to whether to proceed. During the build phase and prior to go-live, a detailed risk assessment should be performed against the various domains of AI risk, with the implementation of controls assessed.

 **Monitoring and Assurance**

AI, particularly when underpinned by machine learning, is a living model and can change significantly over time. In order to ensure a model remains fit for purpose and operates as expected, processes to capture, analyse, and report on model performance should be formalised. For example, metrics to identify customer complaint data can be used to identify potential bias, whilst incident and manual intervention data, as well as overall throughput, can be used to measure the accuracy of the AI algorithm. Resilience of the underlying platform must also be considered, and regular service continuity testing should be performed, particularly as business knowledge around previous processes begins to fade. Finally, a robust testing program should be developed and performed on a regular basis, underpinned by a comprehensive AI risk and controls framework.

Conclusion

Though the regulatory response towards AI has been subdued, the industry uptake has not, and it is expected that the use of AI in organisations will only accelerate. Deloitte's *State of AI in the Enterprise* survey⁹⁵ identified an urgency towards the adoption of AI, with 56% of respondents agreeing that AI will transform their business within three years. In the spirit of prudent risk management and anticipation of regulatory change, the financial services industry will need to respond to AI risks in a pragmatic and controlled manner in 2020 and beyond.

Social Licence to Operate— forging better communities

In the final section of our *Outlook* we look at how the social licence to operate is also affected by a financial firm's relationship with the wider community through the lens of financial inclusion and environment, social and governance (ESG) integration. Through this aspect of the social licence to operate, financial firms harness their core activities to achieve broader social, environmental, or economic goals.

Global bodies, local governments, and financial supervisors have taken a keen interest in the past ten years in financial inclusion. While the most prominent goal has been to expand access to a bank account, in Asia Pacific, advances in technology have also spurred the expansion of non-bank payments, digital bank accounts, and digital identify verification to make it easier for financially excluded populations to access financial services.

ESG integration has also been another area of burgeoning interest, and Asia Pacific financial supervisors are paying close attention to how global and pan-

national bodies like the EU are shaping this debate.

As the above topics tend to be directly tied to social and economic development goals, it is understandable that they would be important to regulators and governments. However, it is worth considering how these activities also impact a firm's employees or customers. For example, millennials and gen Zs increasingly prefer to work in “good” companies that emphasise social impact, diversity, and inclusion. The majority of consumers also say they will pay more for products from socially responsible companies.⁹⁶

Forging better communities involves long-term investments, working with new and novel stakeholders, and potentially engaging in activities which may be wholly or partially new to an organisation. Financial firms will need to participate in ongoing conversations to ensure their views are represented in what is still a developing space. Being an engaged partner will help financial firms to secure this aspect of the social licence to operate.



Financial Inclusion

What is financial inclusion?

Financial inclusion is the democratisation of financial services through the delivery of responsible, affordable, and accessible financial products and services. Financial inclusion is often associated specifically with "banking the unbanked"—in fact, 2020 will mark the end of an ambitious 10 year G20 plan to extend universal access to a bank account. The project has delivered major progress worldwide against the G20 goal—the unbanked population has decreased significantly: around 515 million adults opened an account between 2014 and 2017.⁹⁷ However, extending access is not without difficulty; 1.7 billion adults across the world still lack access to a bank account. The three countries with the largest percentages of the world's unbanked are in our own region—China at 13% (225 million people), India at 11% (190 million people), and Indonesia at 6% (96 million people).⁹⁸ The market size for un- and underbanked individuals is similarly large—the estimated market size for Asia Pacific ranges between US\$ 55 billion and US\$ 115 billion, including both individuals and enterprises.⁹⁹

Financial inclusion may begin with an individual's access to a bank account, but becoming "banked" is actually the first step in a longer journey. Financial inclusion should be understood in broad terms—individuals and small-medium businesses having access to a wide range of financial products and services that meet their divergent needs. Transactions, payments, savings, credit, and insurance are only some examples of needed services, all of which should be delivered responsibly and sustainably. Inclusion also encompasses the expansion of services to

a financial firm's current customers or driving awareness and education on how and when to use a certain tool to improve outcomes (for example, using working capital to increase revenue).

Financial Inclusion in the Asia Pacific Context

Financial inclusion has been on the minds of regulators for some time—a 2012 World Bank survey of post-crisis regulatory reforms found that 67% of regulators had financial inclusion as a specific mandate.¹⁰⁰ These are long-term policy

goals that are often seen as an important element driving equitable economic growth. Outcomes that are attractive to both governments and financial supervisors include: stimulating economic activity and growth; reducing poverty and inequality by bringing vulnerable populations into the financial system; and encouraging the development and innovative use of technology. In 2019, the IMF found that raising the level of financial inclusion can have a meaningful impact on a country's economy—moving the least inclusive countries towards the median levels of inclusion in the region could reduce poverty by 4% and also significantly boost GDP.¹⁰¹ Customers also show a preference for socially responsible companies. Taking all these into account, financial inclusion activities can certainly play a role in securing a firm's social licence to operate.

Digging deeper into how this plays out in practice, this *Outlook* has looked at Asia Pacific through the lens of its diversity. Our region is home to a wide range of economies and demographics, and it is often already vulnerable populations who stand to benefit the most from financial inclusion efforts. Vulnerable groups will vary by background and country. An asset rich Japanese pensioner will have very different needs and experiences from a young woman living in rural India, but both could still be considered vulnerable groups as regards financial inclusion. There are of course categories of financially vulnerable populations that cut across country borders and economic class (gender, rural vs. urban, immigration status, etc.). However, firms will need to give significant thought to which parts of Asia Pacific they are operating in as different lenses (or combinations of lenses) will be required to properly, sustainably, and safely serve different groups of customers.

There are also many stakeholders in the financial inclusion space. Leading the global conversation are international bodies like the G20, the UN, and the World Bank. The issue is also within the remit of local governments and financial regulators, financial services providers and their leaders, as well as the customers themselves. A key part of this ecosystem, financial services providers, are increasingly non-traditional players using innovative channels to reach customers. Advancing along the financial inclusion spectrum, mobile money providers, consumer product businesses with financing mechanisms, and inventory/working capital financing organisations all play a role in ensuring more inclusive access to financial products and services in the future.

Managing New Risks

Financial inclusion is a large topic—the breadth of which cannot be entirely covered in this *Outlook*. However, we expect continued regulatory interest in this topic over the coming years. Firms will have to balance new risks with the potential for new value. Key risks include:



Anti-Money Laundering, Anti-Bribery and Corruption, and Anti-Terrorist Financing:

Meeting identification and verification requirements when serving un- and underbanked customers is difficult and any gaps may expose financial institutions to regulatory and reputational risk. In addition, the reliance by un- and underbanked customers on informal channels for executing financial transactions further contributes to the concerns surrounding money laundering, corruption, and terrorist financing.



Difficulty Extending Credit: Traditionally, financially excluded customers will have very little formal financial history (be "thin-file"), and may not have used credit products in the past. This poses a challenge for firms to determine such users' creditworthiness and could unnecessarily keep new customers from accessing credit products.



New Risks to the Customer: When serving traditionally underserved populations, it is even more important to understand and mitigate unintended consequences, as new customers may be less financially savvy and may have less financial buffers to withstand shocks. For example, elderly customers may struggle to understand financial products or make more mistakes in banking transactions;

they may also have physical or mental limitations where they must rely on caregivers who could take advantage of them. Vulnerable groups may also have less savings to buffer themselves against investment losses.



Structural Limitations: The often insufficient understanding of new types of customers and the lack of available data adds difficulty in the design and delivery of relevant products. In addition, existing distribution channels that financial services providers are used to working with may be lacking (for example, how do you provide a credit card to someone if it cannot be sent through the post?).



Technology Risk: It is important for companies to carefully consider their digital strategies to make sure they suit their customers' needs. In some cases, especially for older populations or less financially literate customers, there will need to be a balance between using technology and humans in delivering solutions. Solutions which make use of new technology must also be explainable to regulators from both a technical (how was this built) and purpose (why was this built) perspective. Firms will need to carefully weigh investments into expensive and often emerging technologies in order to take advantage of the potential to reach large swaths of new customers. Any investments in new technology to provide financial inclusion related products come with commensurate technology risk in addition to risk already present when serving customers from vulnerable groups.

Meeting the Challenge of Financial Inclusion

Should firms choose to pursue financial inclusion activities, the following actions will also need to be considered in addition to the risks listed above:



Align: Firms will need to make their purpose explicit, align it with their core strategy, and ensure that plans take regulatory expectations into account. It will be especially important to define attainable and measurable financial inclusion goals that are rooted in an organisation's purpose and is aligned with corporate strategy.



Segment: Customer segments should be identified and prioritised. Financial services providers should, as part of this process, make deliberate, fact-based choices as to which customer segments to focus on.

Demographics are particularly important when operating in a diverse region like Asia Pacific and will inform the challenges firms face in providing services. Firms may also find existing customers on their books who are currently underserved. Women, immigrants, and the elderly may choose not to deepen their existing relationships with financial institutions as a lack of

focus on their needs may have resulted in products which are not tailored for their lives. Finally, ensuring that customers are treated fairly will be top of mind for regulators and financial firms should be particularly careful to control for bias in the segmentation process and observe good conduct practices when serving these customers.



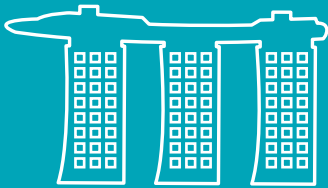
Execute: Often with financial inclusion, traditional business as usual methods are less effective. New models will have to take into account the behavioural shifts that un- and underserved customers will have to make as they enter into the financial system. Technology will be an enabler, but not the only method to reach new customers. Firms will need to balance the benefits of investments into technology with their commensurate risks and consumer acceptance of the technology. Finally, partnerships will be key - players like fintechs, cellular network providers, or micro-finance groups may have closer access or be better positioned to carry out financial inclusion activities than traditional financial services providers.

Conclusion

Asia Pacific represents a large growth area for firms looking to extend services to traditionally un- and underserved customers. Financial inclusion is and will continue to be an area of keen interest for financial regulators—ensuring consumers have access to better financial products and lifting consumers into or keeping them from falling out of the financial system are important levers for furthering economic development and protecting financial system stability. Firms in Asia Pacific that carry out financial inclusion activities should bear in mind the diversity of need that exists for un- and underserved customers in our region. Firms will need to have a nuanced approach that can be adapted to suit the diverse needs of the different vulnerable populations across Asia Pacific.

To better understand what financial inclusion looks like in practice in Asia Pacific, we have taken a closer look at India, China, Singapore, and Japan as representative case studies. All of these countries have unique populations of un- and underserved customers and different government approaches to financial inclusion which will pose different challenges for firms operating in these locations.

Financial Inclusion Case Studies



Singapore

Key data points

- 98% of Singaporeans are banked (2017 Findex—the World Bank survey and database that tracks financial inclusion data)¹⁰²
- SG\$ 500 million invested in fintech in 2018¹⁰³
- 31 fintech co-operation agreements¹⁰⁴

Government Approach/Key Initiatives

While 98% of Singaporeans have a bank account, there remain under-served segments (e.g. small and medium enterprises) and unmet needs (low-cost and easy to understand retirement products). Government initiatives have focused on using fintech to expand the range of financial services at home and grow the economy. These efforts are also aimed at making Singapore a leading fintech hub, which can in turn contribute to financial inclusion in other parts of the world.¹⁰⁵ For example, MAS partners with other regulators and governments, often on fintech initiatives, to improve financial inclusion outcomes.¹⁰⁶

Technology: Spotlight on virtual/digital banking and credit scoring using alternative data

Virtual/Digital Banking

Virtual, or digital, banks deliver retail and wholesale services primarily via electronic channels rather than through brick-and-mortar locations. Digital banks can help solve access issues; so long as a customer has access to a smartphone or computer, they can

access a virtual bank. MAS announced in June 2019 that it will issue up to five digital banking licences. One key tenet of licence application is financial inclusion—digital banks must “*provide [a] clear value proposition, incorporating the innovative use of technology to serve customer needs and reach under-served segments of the Singapore market*”.¹⁰⁷

Credit scoring using alternative data

Alternative credit scoring data can be structured (utilities, mobile phone, rental, and tax payments) or unstructured (email, text messages, audio files from customer interactions, digital pictures, social media and internet usage) but is still “alternative” to data traditionally used in credit scoring. Such alternative data is often used to complement traditional data (e.g. historical financial statements and credit bureau records) to assess the creditworthiness of “thin-file” customers (both individuals and SMEs). Analysis by a US-based credit scoring company notes that alternative data is often less predictive when used on its own, but can help build stronger credit scoring models when used in addition to traditional credit data.¹⁰⁸ Alternative data credit scoring is used both by incumbents and new players like fintechs. There are a number of alternative credit scoring fintechs operating in North America and Europe, but their presence in Asia Pacific is growing with Singapore and the Philippines being two important hubs.¹⁰⁹



India

Key data points

- 11% of the world's unbanked; 190 million people unbanked
- Banked population went from 35% (2011 Findex) to 80% (2017 Findex)
- 90% of residents hold an Aadhaar biometric identification number¹¹⁰

Government Approach/Key Initiatives

India inaugurated the National Mission for Financial Inclusion (NMFII) in August 2014. The initiative aims to provide universal access to at least one bank account per household, improve financial literacy, and expand access to credit, insurance and pension facilities.¹¹¹ One of the most successful aspects of India's work in financial inclusion is the government's 'JAM trinity' (Jan Dhan-Aadhaar-Mobile). Announced in 2014-15, the three-pronged approach includes¹¹²:

- **"Jan Dhan"** (Pradhan Mantri Jan Dhan Yojana)—simple, low-cost savings accounts. Implemented as a way of providing bank accounts to all, they also allow for social benefits to be received directly by recipients, reducing potential losses of benefits through corruption or failure by recipients to claim their benefits.
- **Aadhaar**—a biometric identification system which provides residents with a unique identification number, which may be used for identity verification when setting up accounts and to link identity to Jan Dhan accounts. It can also be accessed electronically (eAadhaar), providing identification

for an electronic know your customer (eKYC) process.

- Rising mobile penetration (expected to grow to 90% by 2020) and rising internet access allows both digital payments and eKYC to grow.

Technology: spotlight on eKYC and digital identification verification

Digital onboarding can make access to banking significantly easier for previously unbanked segments of a country's population. In this vein, eKYC and digital ID verification measures are increasing across the Asia Pacific region. From the customer's perspective, these measures make applying for products significantly easier. On the other hand, such tools can require considerable investment in technology. Furthermore, methods such as facial recognition technology, optical character recognition, and data encryption can require considerable technical expertise.

One example of eKYC expanding financial inclusion can be seen in India where there has been a 90% adoption¹¹³ of Aadhaar. Aadhaar numbers can be used to register online for bank accounts and other financial products. Given that Aadhaar is based upon unique biometric information, the identification numbers can play a key role in meeting anti-money laundering KYC requirements, and can now be used to digitally onboard customers, making it easier to access financial products.



China

Key data points

- 13% of the world's unbanked; 225 million people unbanked
- Banked population went from 64% (2011 Findex) to 80% (2017 Findex)
- 2016 digital payments transaction was US\$ 17.9 trillion; up to US\$ 41.5 trillion in 2018¹¹⁴

Government Approach/Key Initiatives

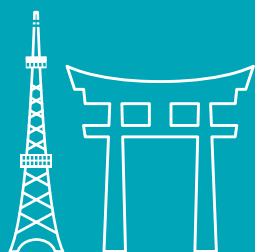
Over the past 15 years, the Chinese government has undertaken a wide variety of policy measures to improve financial inclusion to "support national goals of social harmony and sustainable development".¹¹⁵ In 2015, the State Council issued *The Plan for Advancing the Development of Financial Inclusion (2016-2020)*.¹¹⁶ The plan focuses on using a number of policy levers (improving the legal framework, establishing better metrics to measure progress, improving financial literacy through education programmes, creating a body within the regulator to track progress, improving monetary and credit policy, etc.) to encourage a diversity of financial firms to develop sustainable and inclusive products to extend to excluded individuals and small and medium enterprises.

Technology: spotlight on non-bank digital payments

China provides the most famous example of the rapid growth of non-bank digital payments in Asia Pacific. The most prominent platforms—Alipay (Ant

Financial) and WeChat Pay (Tencent) were developed in the mid- to late-2000s. Alipay was built to facilitate business to business and customer to business payments on e-commerce sites owned by Alibaba (Taobao, Tmall etc.) while WeChat Pay was integrated into the messaging application WeChat and is used mostly for in-person retail transactions. Money is loaded into the system to digital wallets via bank transfer or accounts are simply connected to bank accounts. Each unique entity is assigned a Quick Response (QR) code that is scanned by one party in the transaction.

What has made the QR code system so convenient is that it does not matter if it the customer or merchant scans as only one party needs to be connected to the internet. The volume of payments has grown precipitously—the PBOC reported that the volume of transaction more than doubled to US\$ 41.5 trillion in 2018 from US\$ 17.9 trillion in 2016. Interestingly, non-bank payments were able to grow so large in China not only due to their comparative affordability (low transaction costs for merchants and customers), convenience, and integration into other social media platforms but also because, as the World Bank notes, Chinese regulators adopted a "wait-and-see" approach. Regulators allowed the technology to develop before setting forth capital/investor protection requirements in 2010 and customer identification and AML/CFT rules in the 2015 *Administrative Rules for Network Payment of Nonbank Payment Institutions*.



Japan

Key data points

- 98% of adults (aged 15+) have bank accounts
- Life expectancy in Japan was 84.2 in 2017¹¹⁷
- 2/3 of assets in Japan are held by those aged 60 years and above¹¹⁸
- 2.3% of the population has dementia, expected to be 2.8% by 2037¹¹⁹

Government Approach/Key Initiatives

Japan has one of the highest median ages in the world—just over 47 years.¹²⁰ With a high life expectancy, high level of development, and high level of access to financial services, financial inclusion is not about increasing participation in a system. Rather, it is focused on ensuring that members of society do not fall out of the banked population as they age. Japan, with its rapidly aging society and low immigration, will be one of the first countries to fully face the problem of financial inclusion for an aging population. To tackle this issue, the JFSA has two advisory groups studying the issue and held a symposium on the topic in June 2019 in partnership with Global Partnership for Financial Inclusion (GPII).¹²¹ Financial inclusion for aging populations was also included in the 2019 Japan Presidency of the G20. *The G20 Fukuoka Policy Priorities on Aging and Financial Inclusion* issued jointly by the GPII and the Organisation for Economic Co-operation and Development (OECD) under this mandate found that elders will struggle with low digital and financial literacy, cognitive and physical decline, fixed incomes

and lack of relevant products, increased reliance on financial professionals or family members, social isolation and difficulty accessing sound financial advice—all of which will prove to be major challenges as societies age.¹²²

Technology: spotlight on preventing elder abuse

The abovementioned GPII and OECD report notes there is a need to balance technological advancement with the needs of older customers who may have less access to mobile phones or the internet, lack confidence or digital literacy, or may simply be more used to traditional forms of financial services. Older adults are also at greatest risk of fraud¹²³ by firms, scammers, or even being taken advantage of by relatives. Technology may be able to serve older customers in this instance—for example, AI algorithms could be used to find and prevent potentially fraudulent transactions and prevent or even highlight and escalate cases where a customer may have misunderstood something or simply made a mistake in their banking.¹²⁴

Understanding and Integrating ESG

In recent years, sustainable investing has become an increasingly global and all-encompassing topic of conversation. Participants include national and supra-national government bodies, corporates and financial institutions, non-governmental organisations and civil society, as well as average citizens.

While there are many ways to pursue sustainable investing and many players in this ecosystem, this final section of our *Outlook* will focus on a subsection of this larger topic—the integration of Environmental, Social, and Governance (ESG) activities into a financial firm's core functions, both in terms of its business-as-usual operations and risk management processes (ESG integration), as well as the subsequent reporting of this information to financial and other supervisors and in some cases the wider market (ESG reporting).

In addition, we will further narrow the topic to look specifically at ESG integration through the lens of mitigating the risks of climate change. While ESG integration still very much applies to the Social and Governance aspects of the acronym, governments and financial regulators have made considerable efforts in recent years to 'green' financial services through policy programmes and is therefore a prescient topic worthy of attention from financial firms.



What is ESG?

ESG considerations can be defined as follows:

- **Environment**—the impact on the physical environment and resource consumption such as emissions, waste, and the use of energy or water;
- **Social**—the societal and community issues such as health and safety, labour rights, and diversity and inclusion; and
- **Governance**—the overall management procedures and systems such as stewardship, accountability and performance management.

ESG integration is how a corporate or financial firm incorporates, quantifies, and embeds these concepts into its own organisation and/or risk management processes.

ESG integrated investing is how a financial institution incorporates, quantifies, and embeds reported ESG data into its investment and capital allocation decisions.

ESG reporting is the communication of these activities through sustainability reports/metrics by corporates and, increasingly, by financial firms.

The current ESG ecosystem/landscape

Players in the ESG ecosystem



Corporates

Corporates are responsible for integrating ESG activities into their operations; listed corporates of a certain size are also often required by stock exchanges and corporate regulators to report data on their ESG performance. For the purposes of this *Outlook*, we will focus on those belonging to the financial services industry.



Financial institutions, investors, asset managers

Financial institutions, investors, asset managers direct capital either through investment themselves or by setting specific criteria for third-party managers. Financial institutions will use reported ESG performance data by corporates to make investment decisions. Increasingly, financial firms are being required to integrate ESG into their business-as-usual operations and risk management processes; for example, mitigating the risks of climate change.



Asset owners

Asset owners set ESG criteria for their assets; the most influential asset owners as regards ESG are institutional investors like pension or sovereign wealth funds.



Rating agencies

Rating agencies are the ESG specialists who help translate the corporate ESG performance data into ESG metrics and/or ratings used by the financial institutions, investors, or asset managers.



Regulators

Regulators are responsible for creating and enforcing regulations to encourage ESG integration into the ESG risk management and reporting processes of both corporates and financial institutions, investors and asset managers. Apart from their respective national remits, regulators also take part in many supra-national initiatives in this space on a regional or global basis.

Why integration of ESG activities into business-as-usual and risk management activities is important for companies

Companies with ESG strongly integrated into their business-as-usual and risk management activities are likely to be more financially resilient. Companies are quickly realising that seemingly non-financial risks such as climate change are translating into financial risks. For example, the IMF notes that Asia Pacific witnessed 50% of the world's natural disasters in 2018. These disasters affected 50 million people and cost the region US\$ 56.8 billion. Given this, the IMF concludes that it is unsurprising that natural catastrophes and extreme weather events ranked first and fifth respectively in their report, *Regional Risks for Doing Business 2019*.¹²⁵ As such, it is important for both corporates and financial firms to identify and manage material exposures to ESG risks to ensure long-term financial resilience.

Companies can benefit in a number of ways from integrating ESG appropriately; for example, it has been demonstrated that doing so:

- Can **enhance** risk-adjusted returns;
- Can **lower** the cost of capital;
- Can **attract** alternative or diversified sources of capital and assets under management; and
- Can help companies **manage and mitigate** financial risks.¹²⁶

Why ESG integration is becoming an important investment consideration and its impact to the financial sector

Increasingly, integrating ESG activities into business-as-usual operations is not simply seen as the 'right thing to do', but also as a key factor in an organisation's business value. This has been true for some time for corporates and is increasingly the case for financial services firms. Important players in the financial ecosystem make investment decisions based on the extent of ESG integration within an organisation.

This is evidenced by the growth of the broader category of sustainable investing—the 2018

Global Sustainable Investment Review reported the total amount of sustainable assets under management to be US\$ 30.7 trillion.¹²⁷ This marks a 34% increase in the two years since the last report was issued in 2016. Within this figure, the managers of a combined US\$ 17.5 trillion in assets globally use analysis of ESG integration as an investment strategy. This is the most popular investment strategy in the US, Canada, Australia and New Zealand, and a close second in Japan.

Institutional investors such as pension or sovereign wealth funds have driven much of this growth. As long-term investors, these funds work are beholden to stakeholders who demand responsible ownership of public assets, such as a commitment to integrate analysis of ESG factors into the investment process. As many governments face pressure from constituents to mitigate the risks of climate change, one important policy lever has been to direct public assets towards more sustainable investments, which involves taking ESG integration into account.

In Asia Pacific, the clear leader in responsible ownership is the Japanese Government Pension Investment Fund (GPIF). The GPIF, the world's largest retirement scheme with approximately US\$ 1.5 trillion in assets, has paved the way for ESG integrated investing in Japan, and arguably Asia Pacific. The fund's pivot to ESG integrated investing was the main contributor to a 307% growth in sustainable assets in Japan during the 2016-2018 period.¹²⁸ This investment approach was spearheaded by the fund's Chief Investment Officer, Hiromichi Mizuno, when he took the helm in 2015. Mizuno was also responsible for the fund signing the UN Principles for Responsible Investing (UNPRI) in September 2015 and was subsequently elected to the UNPRI Board of Directors in 2016.¹²⁹ Mizuno notes that a driving factor in this decision was the unique time horizons of pension funds: "we are a classic universal owner with intergenerational responsibilities and thus have an inherently long-term view".¹³⁰

How financial regulators are looking at ESG integration. Why is ESG integration considered to be beneficial, particularly from the perspective of mitigating the risks of climate change?

While requirements for corporates to report ESG performance has become more developed in the past few years, for the most part, ESG performance reporting requirements have been applied by stock exchanges and corporate regulators to companies above a certain revenue threshold that are listed publicly. As such, some larger financial institutions may have had to report ESG performance as it relates to their own activities as a publicly listed organisation rather than their investments.

However, this is beginning to change; there has been significant and coordinated movement at the supra-national level to improve how financial institutions integrate ESG into their risk management processes. Financial regulators tend to take the view that the integration of ESG by financial firms into risk management is an important way to improve firms' resiliency to exigent market shocks, like the risks associated with climate change, thereby helping to ensure the long-term resilience and stability of the financial markets as a whole.

A key global forum for financial regulators on this topic is the Network of Central Banks and Supervisors for Greening the Financial System (NGFS). Their stated aim is to green the financial system and strengthen the efforts of the financial sector in achieving the Paris climate agreement goals.¹³¹

In April 2019, the NGFS published *A call for action: Climate change as a source of financial risk*¹³², which included six specific recommendations for greening the global financial system:

Four recommendations for supervisors and central banks

- Integrate climate-related risks into micro-supervision and financial stability monitoring;
- Integrate sustainability factors into central bank portfolio management;
- Bridge data gaps; and
- Build awareness and intellectual capacity and encourage technical assistance and knowledge sharing.

Two recommendations for policymakers

- Achieve robust and internationally consistent climate and environment-related disclosure; and
- Support the development of a taxonomy of economic activities.

It is easy to see how these recommendations will ultimately flow down to the regulated community as requirements to comply with; indeed, we have begun to see the results of this work in Asia Pacific. For instance, MAS makes specific reference to working through both the NGFS and the Sustainable Insurance Forum to enhance global practices in environmental risk management and the disclosures of financial institutions. In this vein, MAS looks to issue Environmental Risk Management guidelines across banking, insurance, and asset management sectors to set standards on governance, risk management, and disclosure. A consultation paper on the guidelines is expected to be issued in Q1 of 2020.¹³³

In Hong Kong SAR, the HKMA has made similar reference to their support for and participation in the work being done at the NGFS and how it will inform their activities in Hong Kong SAR.¹³⁴ For example, in May 2019 the HKMA released three measures to promote green and sustainable finance in Hong Kong SAR. The measures includes work to develop a common framework to assess the existing baseline of individual banks to establish how 'green' they are; consultation with the industry on whether supervisory requirements are needed and how the HKMA should develop such supervisory expectations or requirements; and finally, once the first two are developed, the HKMA will focus on implementation, monitoring and evaluation of these activities.¹³⁵

How ESG performance by corporates is currently reported. How will this impact how financial regulators look to shape ESG reporting requirements for financial firms?

Reporting ESG data (either about

performance from corporates or how it is integrated in the risk management process for financial firms) ultimately links all the different parties in the financial ecosystem together as it creates standard definitions and aligns the taxonomies of ESG activities.

To better understand how financial regulators may approach requirements for reporting ESG integration into the risk management process by financial firms, and what challenges financial firms may face from new requirements, the ESG performance reporting guidelines for corporates (which have existed for longer than the regulations issued by central banks and supervisors) provide an important insight.

Currently, there are many different reporting frameworks corporates may use to disclose their ESG performance but there is no clear global, or Asia Pacific, leading standard. A variety of global and local corporate reporting frameworks are in use, and each have different approaches and affiliations.

On top of these variant global standards are the similarly variant approaches of Asia Pacific jurisdictions - Singapore has adopted comply-or-explain obligations for corporates, while Australia, Japan, Malaysia and Thailand have voluntary reporting. In December 2019, Hong Kong Stock Exchange has stipulated a mandatory disclosure requirement of board statements as well as general disclosure of measures to identify and mitigate significant climate-related issues which have impacted and may potentially impact listed companies. China is working towards a more complete environmental disclosure regime. Often, the country-based guidelines also allow corporates to adopt a global standard that best suits its operations on top of (or occasionally instead of) local standards. Another point of consideration is that, while there seems to be a shift towards mandatory disclosures for listed companies above a certain threshold, many companies in our region may fall outside these requirements because of their smaller operations.



Moving towards standardisation for ESG performance reporting

There is movement to create a global corporate ESG performance reporting standard. A prominent example of this is the release of the draft *Guidelines on reporting climate-related information* by the EU Commission in June 2019 as part of its Sustainable Finance Action Plan. The EU requires that large companies with over 500 employees¹³⁶ disclose certain non-financial information. The 2019 *Guidelines* are meant to help standardise reported data by "provid[ing] companies with practical recommendations on how to better report the impact

that their activities are having on the climate as well as the impact of climate change on their business". It is notable that the 2019 EU *Guidelines* also incorporate the recommendations of the FSB's Task Force on Climate-related Financial Disclosures, an industry-led supranational body which is another attempt to create ESG data that is consistent, comparable, reliable, clear, and efficient to "provide decision-useful information to lenders, insurers, and investors".¹³⁷

Global Reporting Standards

	Global Reporting Initiative (GRI)	Sustainable Accounting Standards Board (SASB)	Integrated Reporting (IIRC)	Task Force on Climate-Related Disclosures (TCFD)
Year Founded	1997	2011	2011	2015
Approach	Specific metrics and disclosures	Specific metrics and disclosures	Principles-based	Principles-based
Important Affiliations	United Nations Environment Program	Financial Accounting Standards Board (US)	UK government	FSB
Audience	Stakeholders	Investors	Investors	Stakeholders

GRI and SASB are the two most dominant frameworks and have announced an alignment program, which will also include the TCFD.¹³⁸

In Europe, ESG disclosures are required to be independently audited in some jurisdictions; this is not the case in Asia Pacific.

Asia Pacific Country Approach Comparison of Corporate Disclosure Regimes

	Disclosure Obligation	Issuing Bodies	ESG Guidance
Australia	Voluntary	Financial Services Council and Australian Council of Superannuation Investors (Response to Australian stock exchange recommendations to disclose ESG data)	<ul style="list-style-type: none"> ESG Reporting Guide for Australian Companies
China	Voluntary	Shanghai Stock Exchange Shenzhen Stock Exchange	<ul style="list-style-type: none"> Notice on Strengthening the Social Responsibility of Listed Companies and the Issuance of the Guidelines for Environmental Information Disclosure of Listed Companies Guidelines on Standard Operating of Listed Companies
Hong Kong SAR	Mandatory	Hong Kong Stock Exchange	<ul style="list-style-type: none"> Environmental, Social, and Governance Reporting Guide
Indonesia	Comply-or-explain	Financial Services Authority (Otoritas Jasa Keuangan)	<ul style="list-style-type: none"> Environmental, Social, and Governance Reporting Guide
Japan	Voluntary	Ministry of Environment Ministry of Economy, Trade and Industry	<ul style="list-style-type: none"> Environmental Reporting Guidelines Guidance for Integrated Corporate Disclosure and Company-Investor Dialogues for Collaborative Value Creation
Malaysia	Voluntary	Bursa Malaysia (stock exchange)	<ul style="list-style-type: none"> Sustainability Reporting Guide
Singapore	Comply-or-explain	Singapore Exchange	<ul style="list-style-type: none"> Sustainability Reporting Guide
Thailand	Voluntary	Stock Exchange of Thailand	<ul style="list-style-type: none"> Guidelines for Sustainability Reporting

The many and varied ESG performance reporting standards for corporates paint a vivid picture of the landscape that financial firms may be faced with from the perspective of requirements from financial regulators. As financial regulators look to increase the transparency of financial firms' integration of ESG into their risk management processes, listed financial firms of a certain size may be faced with differing layers of ESG reporting and disclosure requirements as both a corporate and as a financial firm. This will be compounded by the fragmentation of the Asia Pacific market as there may be a great deal of variance across

different jurisdictions. Finally, there may also be differences between regional and supra-national approaches.

As has been a constant refrain within this *Outlook*, the market fragmentation in Asia Pacific and differing requirements of local regulators may be difficult to harmonise across the region. From a more macro perspective, failure to achieve harmonisation could undermine the effectiveness of ESG integrated investing and risks undermining capital flows to and within Asia Pacific.

Conclusion

As financial regulators in Asia Pacific begin to adopt ESG reporting requirements for financial firms, it will be important for financial firms to prepare for these more stringent requirements by fully integrating ESG into their core business model, offerings, and risk management processes. Firms should:



Review their current ESG policies, procedures and practices. This will also mean taking a close look at the current capabilities of talent to carry out ESG activities.



Ensure commitment of the Board and top management to guarantee that ESG considerations are given attention throughout the organisation.



Map reporting and disclosure obligations within and across all the jurisdictions they operate in. Close consideration should be given to the differences between any reporting currently done as a corporate and future reporting as a financial firm.



Understand what kind of ESG data and metrics are currently available within the organisation, and where any gaps may exist.



Integrate ESG activities fully into business as usual and risk management processes. This is an important exercise to increase resilience to non-financial risk and put firms in good stead for any reporting requirements and exercises. Good ESG integration and reporting is not a tick-box exercise.



Where possible, seek to **influence or participate** in harmonisation efforts—currently, Asia Pacific lags behind other jurisdictions like the EU in creating a harmonised approach to ESG reporting; the specific needs of our region may not be met without the active participation of local financial supervisors and firms.

Acronyms Used

ADI—Authorised Deposit-Taking Institution	IOSCO—International Organization of Securities Commissions
AI—Artificial Intelligence	IR—Integrated Reporting
AIDA—AI and data analytics	IRRBB—Interest Rate Risk in the Banking Book
AML/CFT—Anti-Money Laundering/Counter-Financing of Terrorism	JFSA—Japanese Financial Services Agency
APEC—Asia Pacific Economic Cooperation	LEX—Large Exposure Framework
API—Application Programming Interface	LIBOR—London Interbank Offered Rate
APPI—Act on the Protection of Personal Information (Japan)	MAS—Monetary Authority of Singapore
APRA—Australian Prudential Regulation Authority	MIC—Manager-in-Charge Regime (Hong Kong SAR)
ASIC—Australian Securities and Investments Commission	NGFS—Network for Greening the Financial System
BCBS—Basel Committee on Banking Supervision	NLG—Natural Language Generation
BEAR—Australia's Banking Executive Accountability Regime	NLP—Natural Language Processing
BOJ—Bank of Japan	NSFR—Net Stable Funding Ratio
CBK—Central Bank of Kenya	NMFI—National Mission for Financial Inclusion (India)
DSR—Data Subject Rights	OECD—Organisation for Economic Co-operation and Development
eKYC—Electronic Know Your Customer	PBOC—People's Bank of China
ESG—Environmental, Social and Governance	PI—personal information
EU—European Union	PIPA—Personal Information Protection Act (South Korea)
FCA—Financial Conduct Authority (UK)	PPC—Personal Information Protection Commission (Japan)
FEAT—Fairness, ethics, accountability and transparency (Singapore)	PRA—Prudential Regulatory Authority (UK)
FMA—Financial Monetary Authority (New Zealand)	QR—Quick Response
FRTB—Fundamental Review of the Trading Book	RAS—Risk Appetite Statement
FSB—Financial Stability Board	SAR—Special Administrative Region
G20—Group of Twenty	SASB—Sustainable Accounting Standards Board
G30—Group of Thirty	SFC—Securities and Futures Commission (Hong Kong SAR)
GDP—Gross domestic product	SME—Small and Medium-sized Enterprise
GDPR—General Data Protection Regulation	TCFD—Task Force on Climate-related Financial Disclosures
GFIN—Global Financial Innovation Network	TLAC—Total Loss-Absorbing Capacity
GPFI—Global Partnership for Financial Inclusion	UK—United Kingdom
GRI—Global Reporting Initiative	UN—United Nations
GPIF—Government Pension Investment Fund (Japan)	UN PRI—United Nations Principles for Responsible Investment
HKMA—Hong Kong Monetary Authority	UN SDG—United Nations Sustainable Development Goals
IAC—Individual Accountability and Conduct Regime (Singapore)	US—United States
IIRC—International Integrated Reporting Council	WEF—World Economic Forum
IMF—International Monetary Fund	

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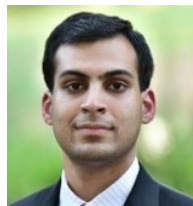


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