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**Financial Services
Regulatory Outlook 2018**

Facing the future:
an evolving landscape

CENTRE *for*
**REGULATORY
STRATEGY**
ASIA PACIFIC



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Global foreword

Uncertainty unclarified

Another year has passed, so what has changed? This time last year we expected 2017 to be a period of uncertainty for financial services regulation. Financial services firms were challenged by the continuing lack of clarity over the final shape of post-crisis reforms, the implications of Brexit and a new US political administration. We also saw significant pressures on the banking and life insurance sectors from sluggish economic growth and low interest rates in Europe and the US, and competition from new entrants (particularly 'FinTechs'). During 2018, most of these challenges and uncertainties will remain.

Economic growth, but how robust?

Global growth prospects improved through 2017 and continue to be broadly positive, albeit more subdued than in the period before the financial crisis. China, Europe, and Japan have all been outperforming expectations, and although India's economy has slowed lately, the long-term outlook is upbeat. There are now signs that the extraordinary monetary easing of the last ten years is starting, slowly, to unwind in Europe and the US, although this stands in contrast to the situation in China and Japan.

There are reasons for caution. Asset markets and prices have seemed impervious to the prospect of tighter monetary conditions and geopolitical tensions. This has left many commentators worrying that markets are in the grips of a bout of irrational exuberance. There are also signs of price bubbles in commercial and residential property markets, as well as leveraged finance markets, and of elevated levels of consumer indebtedness, particularly in the advanced economies.

Supervisors across the globe are very alert to the financial stability risks posed by the political and economic climate, and we expect them to focus on the ability of financial institutions in all sectors to deal

with the downside risks of an abrupt shift in market sentiment and any increase in asset price volatility, irrespective of the trigger. Boards are expected to keep their risk appetites under review, and will also need to engage closely with stress testing, whether prompted by supervisors or carried out internally.

What does this mean for the regulatory agenda?

Last year we predicted that there would be no wholesale rolling back of the post-crisis regulatory framework, and this remains our view. The consensus in the US is that there will be some meaningful adjustments to the Dodd-Frank Act, but no large-scale repeal or re-write. In the EU there remains a considerable volume of legislative work ongoing; and even where there is no new legislation, there is a great deal of 'fine tuning' of existing rules. The Asia Pacific region faces a long tail of implementation work, and must also deal with the impact of regulation from outside the region.

At the international level, the Financial Stability Board (FSB) has shifted its primary focus towards a post-implementation evaluation framework, which will be "progressively applied" in the coming years¹. This is part of a rebalancing away from

introducing new rules towards assessing the effectiveness of what has been done over the past decade. Boards will need to be ready to demonstrate to supervisors that they have embedded change and that this is leading to the desired outcomes.

One major area in which there remains a number of significant unanswered questions is bank capital requirements. The Basel Committee on Banking Supervisions (BCBS) has reached a final agreement on the Basel III package, albeit almost a year later than expected. This is undoubtedly a significant achievement, but it will not provide banks and their investors with certainty about the 'final' shape of the rules, given that much depends on national and regional implementation of international standards. We do not see any major economies as being in a hurry to introduce yet more legislation, and we also see those economies being more willing to depart from the letter of global standards where they conclude it is in their interest to do so.

As a consequence, financial services firms need to be prepared to deal with the challenges of diverging regulatory frameworks. At a minimum they will need globally coordinated approaches to understand overlaps, incompatibilities and potential synergies.

Supervisors are turning more attention to long-term structural issues

Technological innovation, ageing populations, and climate change have all caught the attention of the regulatory and supervisory community as emerging risk areas. We expect some supervisors to begin to challenge boards, risk committees and senior management to demonstrate that they understand the impact on their

customer bases, business models and risk profiles, and are set to take effective mitigating actions where needed.

FinTech:

While new technologies present opportunities, regulators want to understand the potential risks and the likely impact on incumbents' business models. The FSB has a clear interest in the subject. The European Commission is expected to deliver a FinTech "Action Plan" in January. Similarly, US regulators are considering the implications of new technologies, including third-party relationships among FinTechs and banks, and are even exploring special purpose bank charters for FinTechs.

Climate change:

The FSB has taken the lead internationally with its Task Force on Climate-Related Financial Disclosures (TCFD), which made its final recommendations in June 2017. A number of regulators in the Asia Pacific region are instituting policies to encourage green finance. The Bank of England is also researching climate change and the EU recently proposed to integrate environmental risks into the mandates of the European Supervisory Agencies as part of its action plan on sustainable and green finance.

Ageing populations:

Ageing populations worldwide will create a widening pool of potentially vulnerable customers and influence demand for different types of financial services, as well as the way in which financial institutions engage with their customers. At the international level, the International Organization of Securities Commissions (IOSCO) is taking forward work on ageing populations.

This will put a premium on firms maintaining strategic flexibility, while at the same time adopting new technologies to react to the threat from 'challengers', improve their customer service and outcomes, better manage their risks, and help control costs.

Leadership changes

Lastly, we note that by the end of 2018, the most senior leadership of many of the world's most important regulatory bodies will be starkly different from what it has been for the majority of the post-crisis regulatory reform era. Mark Carney's term as Chairman of the FSB has been extended through to December 2018, lending some additional continuity to reform efforts, but this will be his final year at the top of the FSB. We expect Stefan Ingves to stand down as Chair of the BCBS in the near future. There is also a great deal of change in senior leadership across national and regional regulatory bodies, particularly in the US. It remains to be seen how far new leaders will uphold the key tenets of the international supervisory agenda of the last decade, particularly its emphasis on cross border coordination, or whether supervisory priorities will tilt more towards promoting the competitiveness of individual jurisdictions.

On balance we think that these new leaders will emphasise practical supervisory initiatives over (new) rule-making, as well as the need for firms to demonstrate that they are financially and operationally resilient

to a range of threats, both old and new. New leaders will be keen to consolidate the outcomes and achievements of the prudential policy agenda that has dominated the last ten years and focus their tenures on continuing structural challenges as well as emerging risks and issues.

Acting in the face of uncertainty

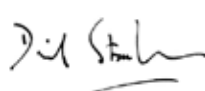
While we expect some greater clarity about the regulatory outlook to emerge in 2018, the overriding challenge for firms remains coping with uncertainty, including from the global impacts of Brexit and how markets in Europe and elsewhere will be reshaped by the Markets in Financial Instruments Directive II (MiFID II). This will put a premium on firms maintaining strategic flexibility, while at the same time adopting new technologies to react to the threat from 'challengers', improve their customer service and outcomes, better manage their risks, and help control costs. With yields and income levels, and hence return on capital, still under pressure, cost control will continue to be important: even though interest rates rises are under way, they will be neither quick enough nor big enough to alleviate pressure on incumbents' business models.




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Asia Pacific executive summary

2017 marked two significant anniversaries for the financial services industry (FSI) in Asia Pacific: 10 years since the beginning of the most recent global financial crisis and 20 years since the Asian financial crisis. These anniversaries are a reminder of the origin of much of the regulation that has evolved across Asia Pacific over the past two decades.

During this time, financial services regulation has become more complex and supervision more intense, leading to cost pressures for firms. New challenges have also emerged as a result of digital disruption, as well as more recent concerns about the repercussions from a slowdown in the Chinese economy. Growth and profitability remain difficult for some firms in the region. Nonetheless, financial services is an important and growing part of Asia Pacific economies and regulators will continue to keep a close watch on the industry.

With the finalisation of Basel III, and while local implementation still has yet to happen, regulatory agendas around the world will now become firmly focused on the future. In this report, we outline our view of the top 10 themes that will shape financial services regulation in Asia Pacific during 2018. These 10 themes are summarised in Figure 1.

Given the great diversity within the region, we do not undertake a granular assessment of specific rules and regulations. Rather, our aim is to 'rise above the noise' and provide a framework for discussions and to build out more detailed regulatory programs.

While the significance of each of these 10 themes will vary across different jurisdictions, industry sectors and institutions, we consider all areas identified to be relevant to financial services firms operating in Asia Pacific to some degree.

Figure 1: Top 10 Asia Pacific regulatory themes for 2018

The future of global regulation

01 / Dealing with divergence and uncertainty

The combination of regulatory fatigue and the political trend in many countries around the world away from a globalist approach to policy making has raised questions about the future of globally agreed standards for financial regulation. While an element of uncertainty will remain, we predict a slowing in the pace of regulatory integration (rather than a full scale reversal) and a focus on supervision (rather than new rule-making).

02 / Managing the long tail of implementation

Although most of the large pieces of global regulatory reform have been finalised, and there will likely be a slowdown in new international rulemaking, there is still a long tail of implementation work ahead for Asia Pacific firms. Recovery and resolution planning, IFRS 9, and recent refinements to the Basel III framework will be particularly challenging in 2018.

03 / Understanding the reach of foreign regulation

Even if global standard making and regulatory harmonisation slow, the internationally integrated nature of the financial system means that rules made in significant economies have an impact beyond national borders. For example, many firms in Asia Pacific have been struggling to understand how the EU's MiFID II will apply to them.

Culture and conduct

04 / Strengthening individual accountability

Some significant steps have been taken to enhance individual accountability in Asia Pacific and these will need to be embedded within firm governance frameworks. This is part of a global trend to increase individual accountability and responsibility for conduct, particularly for senior management.

05 / An increasing emphasis on industry codes & professionalism

Reforming culture within FSI has been a priority for regulators across Asia Pacific and will continue to be in 2018. Alongside regulatory initiatives, 'soft law' techniques are being enlisted, such as 'naming and shaming', promoting compliance with 'voluntary' industry codes and encouraging greater professionalism within industry.

06 / Building a customer-attuned business

Many regulators have expressed the view that prioritising customer outcomes is at the heart of improving culture and conduct. There is a focus on providing suitable products and services, appropriate to circumstances. Firms may also be expected to play a role in enhancing financial literacy. At the same time, regulators remain vigilant about strong anti-money laundering and counter-terrorism financing (AML/CTF) and customer due diligence.

Data and digital disruption

07 / Knowing your data

In 2018, knowing your data will be as important as knowing your customer. Regulators continue to be disappointed with risk data capabilities within the FSI. Regulators also want industry to be far more open and transparent with its data, but simultaneously are putting pressure on firms to have robust data protection and privacy programs in place.

08 / Responding to the influence of TechFins

Harnessing opportunities and managing risks brought about by innovation in financial services has been a regulatory priority for the past few years; this will not change in 2018. The discussion is moving to the impact of the technology and e-commerce giants that have diversified into financial services ('TechFins'). Understanding and managing prudential and consumer risks, as well as preventing market abuse, will be on the minds of regulators.

09 / Constructing a cyber resilient system

Regulators have expressed concerns about a cyber crisis in the system. Cyber resilience within individual firms will continue to be important for regulators in 2018, but resilience in the system as a whole will take on more prominence.

Emerging structural risks

10 / Assessing the impacts of ageing populations & changing climates

Regulatory attention has turned to two looming developments: ageing populations and climate change. At first, these would not appear to be concerns with which financial services regulators have traditionally grappled, but they will, increasingly, be considered in supervisory approaches and work plans. Here, there are both risks to manage and opportunities to harness for firms.



The future of global regulation

The past 10 years has been a period of ongoing international regulation making for FSI. While the tide seems to be turning against global standard setting, there is still a long tail of implementation ahead for Asia Pacific firms, and regulation made abroad may also have significant impacts for local firms.

01 /

Dealing with uncertainty and divergence

Turning inward and trouble in reaching consensus

Brexit, the US administration's review of global standards and domestic financial regulation, and the difficulty in reaching agreement on final calibrations to Basel III, suggest a diminishing appetite for harmonised regulation and global coordination, and a trend toward regulatory fragmentation and home-biased rulemaking.

The debate over revisions to the treatment of credit risk, operational risk and capital floors under the Basel III regulatory capital framework (aka 'Basel IV') underscores the reality of this trend. The original target date for Basel III's finalisation was end of 2016, although this date passed without agreement being reached. Throughout 2017 the BCBS reiterated the importance and imminence of consensus, however this proved difficult and only occurred on 7 December 2017.

Tired of making new rules and timelines slipping

A sense of 'reform fatigue' has emerged, following a decade of intense rulemaking and as the financial crisis of 2007/08 becomes a distant memory. Support is also growing for a simplification of the regulatory framework and a more proportionate approach to its application, particularly among developing markets and financial institutions with only local operations. Indonesia's Otoritas Jasa Keuangan (OJK), for example, has requested practical and adaptable Basel III capital regulations due to infrastructure limitations in that country. The FSB's project to evaluate whether the

post-crisis regulatory reforms are achieving intended outcomes and to identify material unintended consequences is a further indication that enthusiasm for global regulation, at least for new rulemaking, may be receding².

In Asia Pacific, slipping implementation timelines have also raised questions over the future of globally agreed standards. Japan has not published proposals on the BCBS' standardised approach to counterparty credit risk (SA-CCR), which was due to be implemented in January 2017, and has also decided not to implement the net stable funding ratio (NSFR) on 1 January 2018 as planned. The Hong Kong Monetary Authority (HKMA) decided to shift the implementation timeline for new standards on interest rate risk in the banking book (IRRBB) from 2018 to 1 January 2019³. During 2017, Australia, Singapore and Hong Kong all announced postponed implementation of the BCBS' minimum capital requirements for market risk (aka FRTB), originally scheduled for 1 January 2019 but also formally delayed to January 2022 by the BCBS in light of implementation difficulties in most jurisdictions.

Dealing with uncertainty and divergence

This questioning and piecemeal adoption of global standards could mean an uneven playing field for firms operating in different parts of the globe and puts limits on market access and growth for others. It may also weaken resolve around other areas of emerging supranational regulation, for example, global insurance capital standards and in relation to asset management.

We see a slowing in the pace of regulatory integration, rather than a full-scale reversal. A focus on implementation and supervision, rather than developing major new supranational rules or reforms. Reflecting on and refining rules already made, rather than their wholesale abolition

Despite these trends, governments and regulators in Asia Pacific have broadly expressed support for globalisation, regulatory harmonisation, and faithful implementation of post crisis reforms. Managing Director of the Monetary Authority of Singapore (MAS), Ravi Menon, has urged the importance of global consistency and cooperation on financial regulation, saying “global harmonisation of regulation enables fair competition and minimises regulatory arbitrage⁴”. Chairman of the Australian Prudential Regulation Authority (APRA), Wayne Byres, in 2017 commented “it is worth reminding ourselves why something as basic as international standards are a good thing...a highly connected system is only as strong as its weakest link, so to strengthen the system it is necessary to lift standards across the board⁵”. New Zealand, which is not a member of the BCBS, is planning to step up its compliance with BCBS standards to facilitate its further integration into the global financial system, and to follow an International Monetary Fund (IMF) assessment that benchmarked to global approaches⁶.

While regulatory fragmentation will

continue to be a hot topic, there is unlikely to be a major deregulatory push in Asia Pacific. We see a slowing in the pace of regulatory integration, rather than a full-scale reversal. A focus on implementation and supervision, rather than developing major new supranational rules or reforms. Reflecting on and refining rules already made, rather than their wholesale abolition. As such, firms should not react to this uncertainty by putting on hold programs for implementation of already agreed international standards. As programs are rolled out, firms should keep an open dialogue with supervisors to inform regulatory projects that are assessing the impact of post crisis reforms, including on the need for any adjustments because of unintended effects.

It is worth noting that global regulation has always faced some adjustment to suit local environments. In addition, Asia Pacific firms have long had to deal with financial supervisory and regulatory fragmentation, having no market or regulatory, political or legal, integration. As such, firms that have been operating across the region are probably better placed to deal with any divergence in the regulatory ecosystem⁷.

02

Managing the long tail of local implementation

Although most of the major pieces of global regulatory reform have been finalised, and there will likely be a slowdown in new international rulemaking, there is still a long tail of implementation ahead for Asia Pacific firms (see Figure 2). Operationalising and embedding recovery and resolution planning, adjusting to IFRS 9 and preparing for 'Basel IV' will be important for firms during 2018.

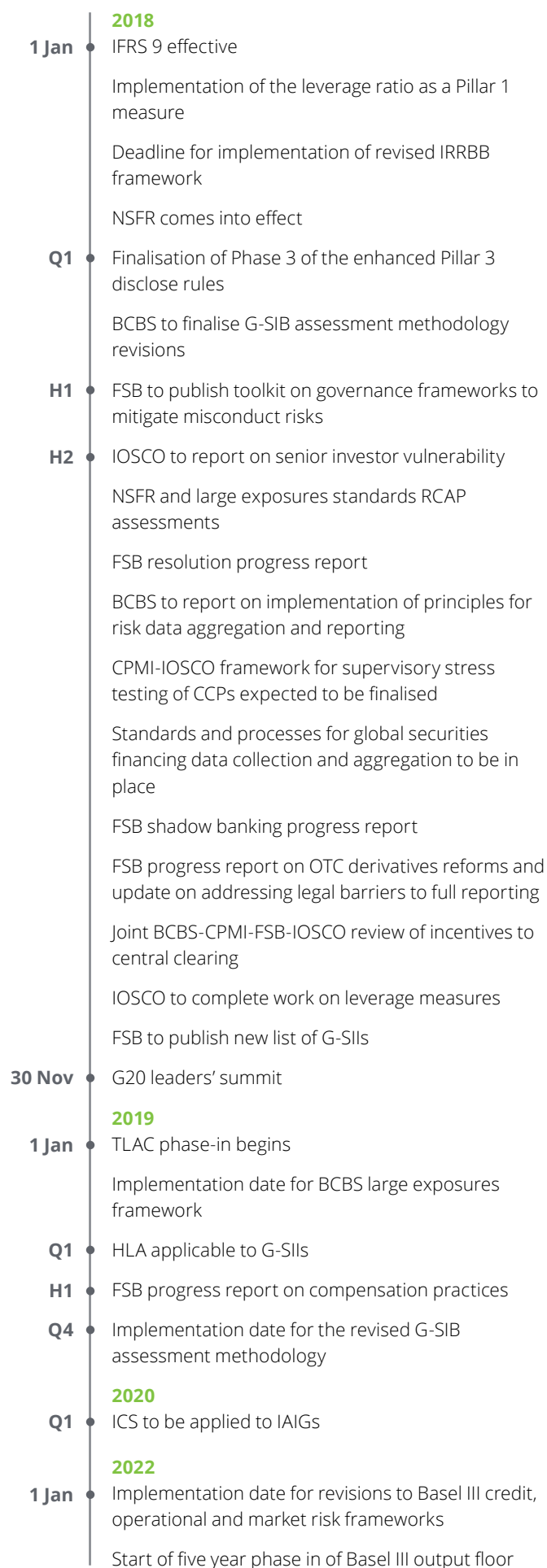
Operationalising and embedding resolution and recovery planning

Resolution and recovery regulation aims to minimise the impact of firms in distress and ensure that failures occur in an orderly fashion and support the continuity of vital economic functions, without causing general market upset or contagion. Another core goal is to prevent government (and taxpayer) 'bail outs' of institutions seen as 'too big to fail' because of their systemic importance – a situation often criticised as giving firms the comfort to take on inappropriate risk.

The FSB's Key Attributes of Effective Resolution Regimes for Financial Institutions (Key Attributes)⁸ and associated guidance provides the standards that national regulators have been implementing into local regimes. The Key Attributes propose a variety of tools, including recovery planning by institutions, resolvability assessments, 'bail in' mechanisms (powers to convert debt to equity), and cross-border cooperation agreements to give effect to foreign resolution actions.

China and Japan, being home to global systemically important banks (G-SIBs), have established recovery and resolution planning regimes and their large institutions are already preparing and filing plans. However, 2017 saw a lot more regulatory activity throughout Asia Pacific, which

Figure 2: Upcoming global regulatory events



has laid the groundwork for increased supervisory scrutiny during 2018 (see Figure 3). The FSB has also set a busy 2018 work plan that includes the launch of central counterparty (CCP) resolution planning and resolvability assessments, a consultative document on the execution of bail-in, and the development of robust resolution plans for all global systemically important insurers (G-SIIs)⁹.

Given these developments, resolution and resolvability will become far more tangible for Asia Pacific firms during 2018. Supervisors will expect operationalisation of new frameworks and the incorporation of recovery and resolvability into risk management practices. Firms will need to show that they have credible arrangements in place, not just a plan on paper. Robust governance arrangements, asset valuations, good data, and regular testing and review will all be important. Reforms may also drive structural change within enterprises, such as the creation of shared service entities and business unit separation, with a view to sequestering critical from non-critical services.

Adjusting to IFRS 9

One of the more challenging pieces of global regulation that firms will need to manage during 2018 has not emanated from a financial services standard setter but rather from the International Accounting Standards Board (IASB): IFRS 9 Financial Instruments (IFRS 9). IFRS 9 will be effective for periods beginning on or after 1 January 2018 and ushers in new requirements for classification and measurement of financial instruments, hedge accounting, and impairment.

Changes to the methodology for calculating impairment will be particularly significant. IFRS 9 requires a shift from the current incurred loss approach to an expected credit loss (ECL) approach. This means firms will not only have to recognise losses that have already occurred in loan portfolios, but also recognise losses that are expected to occur, effectively bringing forward the point at which provisions for loss will need to be set aside. Provisioning for loans at risk of default will also need to match losses over the life of an asset (as opposed to 12 months).

Figure 3: Asia Pacific resolution and recovery planning - developments during 2017.

Australia

- Recovery and resolution planning a top priority in the coming years.
- Expectations for appropriate recovery planning for the life and general insurance industries developed.
- A framework for resolution planning (including the initial methodology for identification of critical functions in regulated entities) developed¹⁰.

Hong Kong

- Commencement of cross-sectoral resolution regime for financial institutions, with the HKMA, the Insurance Authority (HKIA) and the Securities and Futures Commission (SFC) as resolution authorities.
- HKMA released its approach to resolution planning¹¹.
- HKMA announced 'wave three' of its recovery regime, covering overseas-incorporated authorised institutions with branch operations in Hong Kong and smaller, less complex, locally-incorporated institutions¹².

India

- The Financial Resolution and Deposit Insurance Bill 2017 was introduced to establish a Resolution Corporation to monitor financial firms, anticipate risk of failure, take corrective action, and resolve firms in case of failure.
- Firms classified as having a 'critical' risk of failure to be managed by the Resolution Corporation and resolved within a year (e.g. through transfer of assets, liabilities and management to a temporary firm).
- The Bill requires financial firms to pay fees to the Resolution Corporation¹³.

Indonesia

Regulations passed:

- Requiring systemically important banks to prepare recovery plans, have them approved by the board and submitted to the OJK.
- Setting three incremental levels of supervision to which commercial banks may be subjected (normal, intensive and special), increasing in intensity as the institution's difficulties grow and if it is systemically important (e.g. a non-systemically important bank under normal supervision will only need to submit an action plan to the OJK, while a systemically important bank under special supervision might have a receiving bank appointed).

Singapore

Legislation passed to align with Key Attributes and MAS publishes monograph outlining:

- When crisis management powers may be invoked (e.g. if a financial institution is classified as 'viability threatened').
- When resolution measures will be considered (e.g. if failure is assessed as having systemic repercussions).
- Obligations around recovery planning by systemically important financial institutions (e.g. overseen by executive officer, recovery triggers, a menu of credible recovery options, regular testing).
- Resolution tools available to MAS (e.g. transfer of shares to acquirer, bail-in, run-off).
- Recovery and resolution regime for financial market infrastructures
- The framework for financing the regime (e.g. resolution costs to be borne by the financial institution)¹⁴.

IFRS 9 will result in an increase in loss provisioning for many firms, with some global banks estimating increases of up to 50%¹⁵. This will likely translate into lower reported earnings and dividend payouts (not something investors will welcome). Common Equity Tier 1 (CET1) ratio and total capital ratio will also be impacted by IFRS 9. The European Banking Authority (EBA) for example has estimated decreases of 45 basis points (bps) for CET1 and 35 bps for total capital ratio¹⁶. Parallel runs of ECL models also suggest the potential for significant volatility in earnings between reporting periods. To manage potential quarter-to-quarter volatility some firms are adopting strategies to minimise impacts of future shocks, such as pushing borderline assets into the expected loss category, or building buffers and incremental increases in provisioning while the loan is still considered healthy.

IFRS 9 impacts will, of course, vary between individual firms and will be shaped by a number of internal and external factors, such as predicted changes in macro-economy, business model, loan portfolio characteristics, local regulatory requirements and existing provisioning practices. For example, firms offering consumer lending products, where default rates can be high and deterioration hard to gauge, may struggle. Firms operating in jurisdictions where regulators have already set minimum provisioning requirements, such as China, may not experience major impacts on their financials¹⁷. Predictions of a general economic downturn may see upswings in provisioning across the industry.

Some firms have struggled to finalise IFRS 9 implementation programs. As late as November 2017, New Zealand's Financial Markets Authority (FMA) observed that "many entities still haven't started a proper assessment of the potential impact, or considered an implementation process"¹⁸. Those firms who are well prepared may still need to adjust frameworks as issues surface or more regulatory guidance is released over the next few years. As IFRS 9 is a principles based piece of regulation, which calls on the exercise of judgement in many cases, interpretations and implementation may also vary significantly.

One of the biggest challenges, for banks at least, will be reconciling IFRS 9 requirements with current regulatory capital requirements. There are some important differences. For instance, significant stress and downturn scenarios need to be considered under the regulatory capital framework, while IFRS 9 requires a reasonable estimate forecast. BCBS capital requirements generally apply to internationally active institutions, while IFRS 9 applies to all firms. IFRS 9 places a heightened focus on internal modelling at a time when the BCBS has moved toward a standardised approach. These inconsistencies will add complexity to modelling practices and will pose difficulties for developing consistent metrics and reporting.

Smooth implementation and ongoing compliance with IFRS 9 will require systems, processes and modelling tools that can be forward looking, iterative and adaptive to changing rules and circumstances. They will need to accommodate the ECL approach and be capable of running various scenarios simultaneously. More intense initial data collection and more active ongoing portfolio management will also be necessary. A cross-functional approach should be enlisted, where risk, finance, financial reporting and IT closely collaborate. Well thought through investor communications plans are also recommended.

Preparing for 'Basel IV'

At the end of 2017 the BCBS announced that agreement had been reached on final calibrations to the Basel III post-crisis bank capital framework – reforms widely dubbed 'Basel IV'. The most recently announced updates have focused on the treatment of credit risk, operational risk and capital floors. They will be rolled out along with revisions to the capital requirements for market risk, also known as the 'fundamental review of the trading book' (FRTB)¹⁹. While bringing a welcome end to much of the uncertainty surrounding Basel III, regulators and firms now need to plan and prepare for implementation.

The measures introduced by 'Basel IV' aim to strengthen the credibility of the way risk weighted assets (RWAs) are calculated, and improve consistency and comparability of capital calculations both across firms

using internal models, and between those using internal models and standardised approaches. The removal or restriction on the use of internal models for certain regulatory capital calculations is a key change in this regard, and designed to address what the BCBS has described as “unwarranted and unwanted variation” in RWAs²⁰. Much of the debate during the final stages of negotiations centred on the standardised output floor. This sets a minimum for the level of capital output that a bank’s own internal models can deliver as against standardised approaches, and has been set at 72.5%. Although a spotlight has been placed on the output floor, the package of reforms is much broader and is summarised in Figure 4.

One of the more challenging pieces of global regulation that firms will need to manage during 2018 has not emanated from a financial services standard setter but rather from the International Accounting Standards Board (IASB)

While negotiations were on foot, several banks and regulators expressed concerns that increased standardisation under ‘Basel IV’ would lead to a loss of risk sensitivity and excessive capital increases. However, the standardised approaches have been made more risk-sensitive, and the BCBS has said that any significant increases in capital will be felt by banks which are “genuinely outliers”²¹. Firms in Asia Pacific are generally less leveraged than EU and US counterparts, which means hikes in capital will perhaps be less of a challenge in the region. Nonetheless, the decision to introduce a leverage ratio buffer for G-SIBs of 50% of their existing risk-weighted G-SIB buffer will be capital constraining for these firms, and banks with large mortgage books will likely need to boost capital buffers. In addition, IFRS 9, discussed above, will require more provisions to be set aside for expected credit losses (as well as incurred losses), which will mean diminished capital ratios as loan loss reserves will consume more of a

firm’s retained earnings.

Even with new restrictions on the use of internal models for the purpose of calculating regulatory capital, firms will still be expected to develop their own modelling for risk management and pricing purposes. What is more, and as noted in the previous section, IFRS 9 places an emphasis on internal modelling. Standardised approaches have also become more granular and detailed, which some firms in Asia Pacific may struggle with as sourcing historical or comprehensive data can be a challenge in parts of the region. For all these reasons, internal modelling will continue to be a complex undertaking and require significant investment.

The start date for most of the new ‘Basel IV’ standards is 1 January 2022, although the output floors will be phased in over five years (starting at 50% in 2022 and gradually rising to 72.5% in 2027). These longer transition times will certainly be welcome by firms who need to build up capital or significantly adjust systems and infrastructure to meet new requirements. Lengthy transition times could, however, also provide a window for the new rules to be watered down during the process of translating them into local law and regulation.

Legislatures in both the US and the EU are likely to adjust the agreement reached in Basel to suit local priorities, although Asia Pacific regulators have historically been prompt adopters of BCBS rules. In Australia, APRA has said its own approach to revised capital framework will accommodate the final Basel III framework and that local banks are still expected to be “following strategies to increase their capital strength to exceed the unquestionably strong benchmarks by 1 January 2020”²².

Despite possible delays and adjustments to ‘Basel IV’, the potential for major framework changes means firms should be giving early consideration to implementation of the revisions. Firms should undertake, sooner rather than later, a quantitative impact study to understand how the new standard will affect capital adequacy, operations, and the sustainability of products and business lines, as well as prepare a roadmap to the required future state.

Figure 4: Key revisions to the Basel III bank capital framework

Revised standardised approach to credit risk

- Flat risk weights replaced by a more detailed risk weighting approach (e.g. risk weights for residential real estate to vary based on loan to value ratio of the mortgage, a look-up table with specific risk weights for exposures to small and medium-sized enterprises, more granular and differentiated treatment for retail exposures).
- Reduced reliance on external credit ratings (e.g. sufficient due diligence when using external ratings, detailed non-ratings-based approach for jurisdictions that cannot or do not wish to rely on external credit ratings).

Revised internal ratings-based (IRB) framework for credit risk

- No IRB approach allowed for equity exposures.
- Removal of the option to use the advanced IRB approach for exposures to financial institutions and large corporates.
- Where the IRB approach is retained, minimum levels are applied on the probability of default and for other inputs.

Revised credit valuation adjustment (CVA)

- Firms can only use the standardised approach, basic approach, or, if have an aggregate notional amount of non-centrally cleared derivatives of less than or equal to €100bn, a simple multiplier of counterparty credit risk charge.

Revised operational risk framework

- Removal of option to use internal models.
- A single standardised approach replaces four current approaches.
- Single standardised approach to be based on a measure of a bank's gross income and internal loss history over 10 years.

Revised market risk framework (FRTB)

- Specification of instruments to be assigned to the trading book (e.g. short-term resale, locking in arbitrage profits) and to the banking book (e.g. unlisted equities, real estate holdings).
- Supervisors able to remove internal model approval at desk level and based on passing an ongoing profit and loss attribution test.
- Capital add on for risk factors that cannot be properly modelled because of insufficient data.
- Revised standardised approach to incorporate risk sensitivities across asset classes and to align with front office pricing and models.
- A move from value-at-risk (VaR) to an expected shortfall measure of risk under stress, and incorporation of varying liquidity horizons.

New G-SIB buffer

- Each G-SIB to have a leverage ratio buffer of 50% of its existing risk-weighted G-SIB buffer.

New output floor

- Calculations of RWAs generated by internal models cannot, in aggregate, fall below 72.5% of the RWAs computed using the standardised approaches.

03

Understanding the reach of foreign regulation

Even if global standard making and regulatory harmonisation slows, the internationally integrated nature of the financial system means that rules made in significant economies will have an impact beyond national borders. Many firms in Asia Pacific have been struggling to understand how the EU's MiFID II will apply to them.

About MiFID II

MiFID II revises an existing 2007 framework, and went live on 3 January 2018. It is one of the most significant pieces of EU capital markets regulation, widely viewed as transforming the trading landscape, as well as creating strategic and operational difficulties for firms. The biggest changes will be felt in derivatives markets, as many components of MiFID II seek to implement the G20 over-the counter (OTC) derivatives reforms (which aim to bring transparency to these markets and enhance risk management practices).

MiFID II, together with associated regulatory measures, is an extremely complex package of regulation that has been the subject of a dizzying number of thought leadership pieces and detailed analysis. Some important elements include:

- A shift to more transparent trading venues, including the introduction of an 'Organised Trading Facility' which subjects trading in non-equity instruments to heightened regulation.
- A significant increase in transaction reporting requirements, such as:
 - more products qualifying for reporting
 - more data fields needing to be reported (e.g. details of person executing transaction, a field to identify short sale)

- placing obligations on counterparties that initiate the transaction (not just sell side)
- trading venue operators to make pre-trade and post-trade transparency data available to the public free of charge within 15 minutes of publication (reducing to 5 minutes from 2020)

While we talked earlier about a trend toward regulatory fragmentation, MiFID II's impact on Asia Pacific demonstrates that a degree of regulatory harmonisation can arise, in some cases, without intentional international coordination.

- New provisions for automated trading (e.g. reporting trading strategies to regulator, testing algorithms, pre-trade filters and controls).
- New provisions for commodity derivatives (e.g. emissions allowances to be classed as financial instruments, limits on the size of the net position which a person can hold in commodity derivatives traded on an EU venue, trading venue weekly publication of aggregated positions).
- Strengthened investor protection rules, including:
 - 'target market' requirements on manufacturers and distributors (e.g.

products must be designed to meet the needs of an identified target market of investors and reasonable steps must be taken to ensure distribution to the target market)

- enhanced product intervention powers for regulators
 - a ban on offering or receiving prohibited inducements
 - requirements to unbundle research payments from execution
 - new client categorisations reflecting different investor sophistication and experience
 - new requirements on the identification, management and disclosure of conflicts of interest
 - a tougher best execution threshold (must take “all sufficient steps” instead of “all reasonable steps”).
- Introduction of a third country regime, which allows non-EU firms to provide services to EU professional clients and eligible counterparties, so long as the non-EU firm is subject to equivalent national regulation and is registered with EU regulatory bodies.

MiFID II in Asia Pacific

MiFID II applies to EU firms and is not explicitly extra-territorial. However, Asia Pacific firms may be affected, both directly and indirectly (see Figure 5). MiFID II's application to Asia Pacific firms is not

straightforward. Firms in the region will need to map their interactions and business with the EU as a starting point to assessing if and how they are caught, and for designing appropriate responses.

Even if MiFID II turns out to have a minimal impact on an Asia Pacific firm, very often what happens in EU regulation turns up, eventually, in Asia Pacific regulation. China, for instance, is reportedly modelling financial reforms on MiFID II “to attract interest and liquidity from outside the country”²³. Australia's proposed new design and distribution obligations also closely reflect MiFID II “target market” consumer protection provisions²⁴. Further, if countries wish to benefit from the equivalence provisions noted above, then they will have to introduce regulation similar to MiFID II.

While we talked earlier about a trend toward regulatory fragmentation, MiFID II's impact on Asia Pacific demonstrates that a degree of regulatory harmonisation can arise, in some cases, without intentional international coordination. As MAS' Revi Menon has observed: “All countries today are smaller than they used to be, or smaller than they think they are. Smaller in the sense that what happens outside our borders has an increasingly larger impact on what happens inside”²⁵. In summary, as Chinese President Ji Jinping has said: “Whether you like it or not, the global economy is the big ocean that you cannot escape from”²⁶.

Figure 5: Nine ways MiFID II could impact Asia Pacific firms

Branches and subsidiaries of Asia Pacific firms that operate in the EU will be directly subject to MiFID II obligations.	Commodity positions of an EU firm's non-EU end client may need to be reported to ensure position limits are not exceeded.	An Asia Pacific firm dealing with an EU counterparty may be required to provide specific data and disclosures so that the EU counterparty can meet their own MiFID II reporting requirements.
Asia Pacific firms may need to obtain a Legal Entity Identifier (LEI) for any dealings with an EU counterparty.	Non-EU firms that wish to have direct market access to an EU trading venue must be authorised under MiFID II, Capital Requirements Directive IV (CRD IV) or deemed equivalent rules (i.e. essentially MiFID II compliant).	An EU firm that has outsourced an important function to an Asia Pacific firm may require MiFID compliance by the Asia Pacific firm as part of the outsourcing agreement.
An Asia Pacific firm offering products or services to an EU-based client through an EU based placement agent may be required to provide certain information so that the agent can meet MiFID II product governance requirements.	Asia Pacific firms that provide research and execution services to EU firms might need to carve out research fees, as the EU firm will be prohibited from receiving the services in a bundle.	Asia Pacific trading venues have to be recognised as equivalent if instruments subject to MiFID II obligations are to be traded.



Conduct and culture

Improving conduct and reforming culture within FSI has been a priority for regulators across the globe as well as within Asia Pacific. Reform programs have been rolled out in response to numerous well-known cases of wrongdoing within industry that have surfaced over the past decade. In Australia, as evidence of the political concern around this issue, the government has decided to establish a Royal Commission to inquire into misconduct within FSI.

Many firms and regulators have formed the view that 'culture drives conduct'. Culture has been incorporated into supervisory frameworks, behavioural psychologists have been recruited, reviews of risk culture launched. The HKMA, for instance, released a circular in March 2017 on bank culture reform requiring enhancements around governance, incentives, and assessment and feedback mechanisms²⁷. Several firms are well into culture transformation programs that include articulating firm values, testing 'tone from the top', 'mood in the middle' and 'echo from the bottom', and setting up new whistle-blower channels.

The intense supervision and scrutiny of firm conduct and culture will continue in 2018. Strengthening individual accountability, complying with industry codes, enhancing professionalism, and building a customer-attuned business will be prominent areas of regulatory interest.

04

Strengthening individual accountability

The global view

Enhancing and embedding individual accountability will be an important part of the Asia Pacific regulatory agenda in 2018. Encouraging individuals within firms to take greater responsibility for their actions, especially those who hold senior roles, is a global regulatory trend aimed at mitigating the risk of misconduct within financial services firms. Perhaps the best known example is the UK's Senior Managers and Certification Regime, some key elements of which are summarised in Figure 6²⁸.

Regulators are concentrating on good governance and other preventative mechanisms to supplement reactive enforcement tools (e.g. fines). The FSB, for example, has a work stream on reducing misconduct risks in the financial sector, which includes plans to develop toolkits covering responsibility mapping, improving the quality and availability of information on employees' conduct history, and incorporating conduct into decisions on a person's remuneration and performance²⁹. This material is likely to influence the direction of domestic regulation in the next few years.

Regional developments

Notable developments in Asia Pacific include Australia's proposed Banking Executive Accountability Regime (BEAR)³⁰ and, in Hong Kong, the SFC's Manager-in-Charge (MIC) regime³¹ and the HKMA's Circular on Management Accountability in Authorised Institutions³². Some core aspects of these measures are summarised in Figure 6.

While approaches in Australia and Hong Kong have significant differences (e.g. the former is proposed new legislation, the latter regulatory guidance; the former

lays down new remuneration rules and new enforcement powers, the latter does not), common features include: identifying the types of roles that should be responsible for conduct within a firm (e.g. the board, C-suite, heads of business units); specifying appropriate reporting lines and particular responsibilities; and requiring comprehensive responsibility and reporting maps to be prepared and submitted to the regulator. Thomas Atkinson, SFC Executive Director, has observed that such measures will "help enforcement identify responsible individuals when things go wrong" and "you can assume that we will make use of this additional information to hold responsible individuals accountable"³³.

There are other examples from the region that show the heightened regulatory focus on individual responsibility and accountability for conduct. Bank Negara Malaysia (BNM) for instance, is proposing new procedures that will require, screening of employee records and criminal convictions prior to employment, mandatory information in references and sharing of same, and a code of ethics that articulates minimum standards of conduct, as well as written policies and procedures governing internal disciplinary processes³⁴.

Embedding individual accountability into governance frameworks

Firms with strong governance and good conduct risk management will already be doing much of what is being articulated by regulators (e.g. unambiguous, well-defined and well-understood roles, responsibilities and reporting lines). The regulatory interest in strengthening individual accountability can also be the impetus for accelerating implementation or review of best practice arrangements within firms, and help

Firms with strong governance and good conduct risk management will already be doing much of what is being articulated by regulators (e.g. unambiguous, well-defined and well-understood roles, responsibilities and reporting lines).

to embed these across the enterprise. For example, by requiring individual responsibilities to be articulated, approved and disclosed, named individuals may take those responsibilities more seriously (and may be less likely to deny authority and accountability). Similarly, requiring the preparation of granular maps of roles, responsibilities and reporting lines, as well as having these disclosed to the regulator, could facilitate greater internal awareness and follow through.

Of course, cascading any changes into existing policies, procedures, processes, employment contracts and mindsets is no easy task, particularly with tight implementation timelines. Large or multinational firms can have complex management structures and leadership may be remote from teams, making it difficult, in practice, for individuals to carry out their responsibilities. Delicate conversations and conflicts may need to be worked through if people feel they will have a heightened level of personal exposure to regulatory or public

scrutiny, if their remuneration is cut, or if new frameworks disrupt existing roles and authority.

It is an opportune time for firms to conduct a current state assessment to ensure that new and developing regulatory expectations on individual accountability can be met. Organisation and enterprise maps should be reviewed and refreshed to eliminate instances of overlapping or unclear allocation of responsibilities that could undermine accountability or muddy understanding of responsibility (e.g. two people of different levels of seniority being jointly responsible for a function). Boards and senior executives should be engaged and educated on any new responsibilities or emerging trends, while employment contracts and remuneration policies may need to be reworked. Reporting and escalation processes should also be tested for effectiveness, as should the understanding and embeddedness of internal governance across the enterprise.

Figure 6: Evolving accountability regimes***United Kingdom****Senior Managers & Certification Regime (SM&CR)**

Commence 7 March 2016 for banks, building societies, credit unions and PRA-designated investment firms, with plans to extend regime end 2018/early 2019.

Regulatory pre-approval for individuals taking on any 'senior management function' (SMF).

SMFs include: CEO, CFO, CRO, head of internal audit, head of key business area, chair, committee chairs, senior independent directors, executive director, chair of the nomination committee, compliance oversight, money laundering reporting.

New conduct rules for all individuals within firms, and additional specific conduct rules for SMFs (e.g. ensuring business complies with regulation, appropriate delegation, effective oversight, disclosure of information to supervisors).

Certain responsibilities must be allocated to SMFs (e.g. firm's performance of its SM&CR obligations).

Firms must •map responsibility for key business areas and activities to an SMF, •prepare a statement of responsibility for each SMF, and •prepare, gain board approval of, keep up to date, and share management responsibility maps with regulators.

Hong Kong SAR**Managers-in-Charge Regime (MIC)**

Announced December 2016, for implementation by SFC licensed corporations (LCs) by October 2017.

LC senior management includes directors, shadow, non-executive directors, responsible officers (ROs), and a new category of 'managers-in-charge of core functions' (MICs)

MICs are individuals who have overall management oversight (e.g. CEO), or who manage one of the following core functions: •a key business line (e.g. head of equity, head of corporate finance), •operational control and review (e.g. COO, head of internal audit), •risk management (e.g. CRO), •finance and accounting (e.g. CFO), •information technology (e.g. head of IT), •compliance (e.g. head of legal), or •AML/CTF (e.g. AML Reporting Officer).

Must have at least one designated MIC for each core function, and MICs of overall management oversight (OMO) and key business line must also be ROs.

MICs should have sufficient authority (e.g. over conduct and resource allocation), report to the board or OMO MIC, and formally acknowledge their appointment.

MICs can be located outside Hong Kong and do not necessarily need to be an employee.

Regulator to be notified, in prescribed form, of MIC information (e.g. name, residence, reporting line) and given an updated organisational chart (e.g. corporate hierarchy, business lines, MICs).

* This figure only provides a high level summary of some of the key elements of the regulation. Readers should further consult with professionals to understand the detail of the full regulation, and its application and implications for them or their organisation.

Hong Kong SAR

HKMA Circular on Management Accountability

Circular and FAQs released 16 October 2017, for implementation between 16 March and 16 April 2018.

Applies to registered institutions (RIs, e.g. licenced banks) in relation to conduct and supervision of regulated activities (RAs, e.g. advising on securities, asset management, dealing in OTC derivatives).

Management of an RI encompasses chief executives (CEs), alternate chief executives (ACEs), directors approved under section 71 of the Banking Ordinance (directors), managers notified under section 72B of the Banking Ordinance (s72 managers), executive officers approved under section 71C of the Banking Ordinance (EOs), and any other people who are involved in the management of a RA.

Must have at least one CE, ACE, director or section 72B manager as the principally responsible individual (PRI) for overall management of the business (e.g. CE) and for managing retail, private, corporate or international banking, treasury and any other material business accounts (e.g. CFO), risk management (e.g. CRO), AML, computer systems (e.g. CISO, CIO), internal audits or inspections (e.g. head of audit), compliance with laws, regulations or guidelines (e.g. general counsel, CCO).

A PRI does not have to be an employee of the RI, but must have sufficient authority and is accountable for their business or function.

Regulators to be notified, in prescribed form, of PRI information (e.g. name, passport number, residence, title, function responsible for) and an organisational chart (e.g. the RAs and individual businesses or functions that PRIs are responsible for lines of responsibility and accountability).

Australia

Banking Executive Accountability Regime (BEAR)

Draft legislation released September 2017, with planned commencement date of 1 July 2018.

Places obligations on authorised deposit-taking institutions (ADIs, which include banks, credit unions, foreign subsidiary banks and branches of foreign banks), ADI subsidiaries and 'accountable persons'.

Accountable persons include: individuals with responsibility for oversight (e.g. board member), or the management of business activities (e.g. CEO), operations (e.g. COO), internal audit function (e.g. head of internal audit), risk management /risks controls (e.g. CRO), financial resources (e.g. CFO), information management, including IT systems (e.g. CIO), compliance function (e.g. CCO), AML function, or human resources (e.g. CHRO).

Executives of a non-ADI parent can be accountable persons, as can people located outside Australia.

ADIs and accountable persons must act honestly, with due skill, care and diligence, be open and constructive with the regulator, and take reasonable steps to prevent matters that would adversely affect prudential standing or reputation.

A portion of an accountable person's variable remuneration to be deferred for at least four years and can be clawed back if BEAR is breached. Amount depends on size of ADI, and the person's role and total annual remuneration (e.g. 60% for CEOs of large ADI).

Regulator to be notified of appointment of accountable persons, given maps of roles and responsibilities, and be notified of BEAR breaches.

Regulator can direct an ADI to reallocate responsibilities of accountable persons, disqualify accountable persons, and require adjustments to remuneration policies.

05

An increasing emphasis on industry codes and professionalism

Regulators are not just concentrating on individuals or individual firms. The perception that weaknesses in conduct and culture permeate across FSI means that attention is also on industry-wide tools for change.

Industry codes

Compliance with voluntary codes of conduct is increasingly important in the eyes of regulators. A prime example is the FX Global Code, the result of public/private sector collaboration and finalised in May 2017³⁵. The code applies to all FX market participants (not just sell-side), usurps national FX codes (e.g. the Blue Book in Singapore and the ACI model code in Australia) and contains 55 principles of good practice in the FX market covering ethics, information sharing, execution, e-trading and platforms, prime brokerage, governance, risk management and compliance. While not imposing any legal or regulatory obligations on market participants, adherence to the code has been made a requirement for membership of foreign exchange committees, central banks have announced that they will commit to compliance and will expect counterparties to do so, and industry will be surveyed on its adherence³⁶.

In Asia Pacific, the Bank of Korea (BOK), HKMA, Reserve Bank of Australia (RBA), RBI and MAS released formal statements expressing support for the FX Global Code and encouraging industry to observe its principles. The Bank of Japan (BOJ) has said it expects a wide range of market participants to comply, and the Tokyo FXC (comprised of the BOJ, private financial institutions, and other entities) will run a public register detailing the firms that have committed to the code and that have sought

commitments from counterparties³⁷. The HKMA meanwhile has provided guidance on the steps that authorised institutions should take to follow the code, including maintaining adequate systems of control to support compliance and demonstrating such status by issuing a statement of commitment³⁸. MAS has also been vocal on the importance of compliance, with Deputy Managing Director Jacqueline Loh saying that the regulator expects “strong buy-in from market participants”, that adherence will be a condition for membership to MAS’ Foreign Exchange Committees, and that firms should publicly show that their conduct in the FX market is in line with the code³⁹.

In the circumstances described above, where regulators express a very clear view on the importance of compliance with a code, and also support mechanisms to exclude or ‘name and shame’ those that do not comply, it is questionable whether firms truly have a choice about whether or not to adhere. Australia is considering taking the position a step further, proposing that the Australian Securities and Investments Commission (ASIC) approve content and governance arrangements for certain industry codes, requiring entities that engage in activities covered by an approved code to subscribe to that code (e.g. making this a condition on their financial services licence), and make approved codes binding on and enforceable against subscribers via contractual arrangements with a monitoring body⁴⁰.

Industry professionalism and purpose

Industry professionalism and purpose is another topic gaining significant traction in the region. Regulators are laying emphasis on ethics, integrity and competence,

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and on cultivating a common purpose to steer industry that is anchored in driving economic activity and meeting needs in the real economy. For example, the Vice Chairman of the China Insurance Regulatory Commission (CIRC) delivered a lengthy speech during 2017 saying that the insurance industry needed greater self-discipline, enhanced qualifications and professionalism, and to have a fixed focus on supporting the real economy as an economic "shock absorber" and a "social stabilizer".

BNM Governor Muhammad bin Ibrahim has similarly identified "competence, character and calling" as a key element in developing a high calibre and trustworthy banking industry, and has said that all industry pursuits should be grounded in serving society and the public interest: "finance exists for society, not society for finance"⁴¹.

A principles-based approach to compliance

Against this backdrop, the regulatory compliance function within firms may need some recasting. Promoting and policing internal conformance with rules will still be necessary, but adopting a more principles-based approach to compliance - one that incorporates an understanding of ethics and fairness, the spirit and policies that underpin regulation, and the social function of financial services - may put firms in a better position to both instil compliance within organisational norms and meet regulatory requirements.

The human resource function may likewise consider incorporating these elements into recruitment, professional development, remuneration, and reward frameworks (e.g. hiring people skilled in ethics and rolling out training on purpose). Firms will also benefit from active involvement in the development of codes of conduct and a shared industry ethos, as these increasingly shape regulatory expectations and become bases for supervisory intervention.

06

Building a customer-attuned business

Suitability and good customer outcomes

Several Asia Pacific regulators have voiced the view that prioritising customer outcomes ahead of short-term shareholder returns, and putting customer needs at the centre of business models and business decisions, is at the heart of improving culture and conduct within financial services firms (see examples in Figure 7). Transparency, disclosure, fairness, managing conflicts of interests, investment suitability and acting in the best interests of clients are key regulatory themes. Supervisors will be expecting firms to show that an understanding of customer needs and striving for good customer outcomes are central to decision-making throughout the enterprise.

A good example of this regulatory focus is the Financial Service Agency of Japan's (JFSA) Principles for Customer-Oriented Business Conduct (the Principles), which were finalised in March 2017 and provide best practice guidance for Financial Business Operators. The seven Principles are:

1. **Develop and disclose a clear policy for the implementation of customer-oriented business conduct, publish activity status reports and regularly review the policy.**
2. **Pursue the best interests of the customers, operate with a high level of expertise, professional ethics, honesty and fairness, and strive to incorporate these values into the corporate culture.**
3. **Monitor and manage conflicts of interest with the customer.**

4. **Provide customers with detailed and comprehensible information on commissions and fees.**
5. **Provide customers with important information in an easy to understand manner (e.g. on conflicts, unbundling products).**
6. **Gather information on the financial position, experience, needs, and goals of the customer, and provide suitable products and services.**
7. **Design remuneration, performance and incentive frameworks, as well as training programs and governance structures, to facilitate employee compliance with the Principles.**

While the Principles are voluntary, a 'comply or explain' approach is incorporated and the JFSA publishes a list of adherents. This will likely mean that the majority of firms operating in Japan will be working to incorporate the Principles into their business (and is another example of the increasing reliance on codes and 'naming and shaming').

The HKMA has similarly developed, in conjunction with industry, the Treat Customers Fairly Charter to promoting a customer-centric culture in the private wealth management industry. The charter has significant synergies with the JSFA's Principles, such as: design products and services to meet the needs of customers; clearly explain key features, risks and terms (including fees, commissions and charges); and ensure marketing materials and customer information is accurate, understandable and not misleading⁴³.

Educating customers

Supporting and improving financial literacy is a core mandate of most financial services regulators. While traditionally regulators have driven consumer education initiatives, some in the region are showing interest in industry investing in financial education to help their customers make better decisions. Hong Kong's aforementioned Treat Customers Fairly Charter, for example, encourages firms to promote financial

Programs to foster a customer-centric mindset should ensure messaging is carefully crafted, so that people have a clear and consistent understanding of the meaning of terms such as 'customer best interests', 'customer needs', 'good customer outcomes'.

education and literacy. It will no longer be acceptable to simply disclose and forget. Firms will be increasingly expected to incorporate an educative element into their sales and advice, as well as test customer understanding (at least for retail, inexperienced or vulnerable customers).

Understanding customer identity and transactions

Asia Pacific regulators will not just be watching suitability and the delivery of good customer outcomes. Ensuring firms are not serving the wrong types of customers is a continuing regulatory priority. Across the region, failings in AML/CTF programs, as well as weaknesses in sanctions compliance, have been the source of much regulatory concern. Robust procedures for understanding customer identity and associations, ongoing monitoring and analysis of transactions, and timely identification, and escalation and action on suspicious matters will continue to be top of mind for regulators.

Developing a customer-attuned business

The regulatory pressures to understand customer identity and needs, ensure suitable sales and advice, drive good customer outcomes and act in their best interests, as well as continually monitor and analyse transactions, means a deep and ongoing understanding of the customer is essential. Customers are also increasingly demanding personalised service and the Commissioner of the JFSA, Nobuchika Mori, has predicted more customer driven business models as a result of innovation in financial services⁴⁴.

In a world where it is critical to understand your customer, quality data collection and analysis is essential. The digitisation of business, together with the ubiquity of the internet and connected devices, means collation of data from many sources is possible (e.g. from social media, internal systems, public repositories). Advanced data analytics, process automation tools, pattern recognition algorithms, artificial intelligence and machine learning are helping humans organise and make sense of the data tidal wave. Other technological developments, such as fingerprint, face and voice recognition technology, support remote yet robust identity authentication. These are some of the tools that can help firms have a rolling and holistic understanding of the customer (e.g. identity, life situation, history, needs, and goals), which in turn help to determine if it is appropriate to provide services to a customer, understand customer best interests, and develop forward looking suitability assessments and strategies.

Most firms are alive to the benefits of investing in technology, although this can be expensive. Certainly in the AML/CTF sphere, compliance costs are reaching unsustainable levels. Helping to progress supportive regulatory policies and initiatives can benefit firms in this regard. The HKMA, for example, announced plans to facilitate remote on boarding of customers and is considering simplifying procedures for low-

It is essential that messaging does not run the risk of being interpreted as 'do anything the customer wants' or 'do anything to obtain customer business'.

risk banking services, while BNM plans to introduce an e-KYC platform in 2018.

Enlisting technology to crunch customer data is not the only response for building a customer-attuned enterprise that is committed to good customer outcomes. Some firms may need a mindset change, involving transformations of strategy, values, policies, controls and procedures, as well as a roll out of enterprise wide communications and training.

Programs to foster a customer-centric mindset should ensure messaging is carefully crafted, so that people have a clear and consistent understanding of the meaning of terms such as 'customer best interests', 'customer needs', 'good customer outcomes' (and that these align with any applicable legislative definitions). Providing practical examples and scenarios is helpful.

It is essential that messaging does not run the risk of being interpreted as 'do anything the customer wants' or 'do anything to obtain customer business'.

It will also be important to identify conflicts and structures that risk undermining suitability and good customer outcomes, for example offering clients products and services from related parties. In addition, thought must be given to how to embed a customer-centric mindset into non-client facing sides of the business (e.g. transactions, commercial trading, contracting, information technology), as well as how to best design in and evidence consideration of customer needs and outcomes for standardised products or automated solutions. Regular dialogue between customer care, product design, marketing, regulation, financial crime, and risk and compliance teams is essential.

Figure 7:
Asia Pacific regulators voice their support for customer centricity

“Managers should set an example by seriously considering what their institutions should do to enhance the capabilities to fulfil duties from the perspective of a customer-first approach and by taking actions. Only then will financial institutions become more valuable organizations...”

Nobuchika Mori
JFSA Commissioner

“Get your house in order, or the regulators, government, media and others will do it for you in ways that may be more onerous...If I were to summarise, it’s not that complicated. It’s about putting the customer first.”

Peter Kell
ASIC Acting Chairman

“It is thus crucial to instill confidence that [financial advisory] firms and their representatives put customers at the centre of everything they do...‘putting customers at the centre’ needs to go beyond having systems and processes in place and mere compliance with regulations. Boards and senior management must inculcate a culture in their firms where fair dealing is embedded in all aspects of their business and deeply ingrained in the psyche of their representatives.”

Merlyn Ee
MAS Executive Director

“As professional bankers, we should think beyond profits and understand how to meet the evolving needs of the economy. Like the medical profession, we cannot begin to prescribe a solution without first diagnosing the needs of the customer.”

Muhammad bin Ibrahim
BNM Governor

“We want to see Boards and senior management of regulated firms leading organisational culture and placing customer interests at the centre of their business strategies.”

**Financial Markets Authority
of New Zealand**

“Banks must become more “customer-centric” by offering highly personalised services to meet what the customers actually want rather than pushing out products or services that the firms think the customers should have.”

Norman Chan
Chief Executive of the HKMA



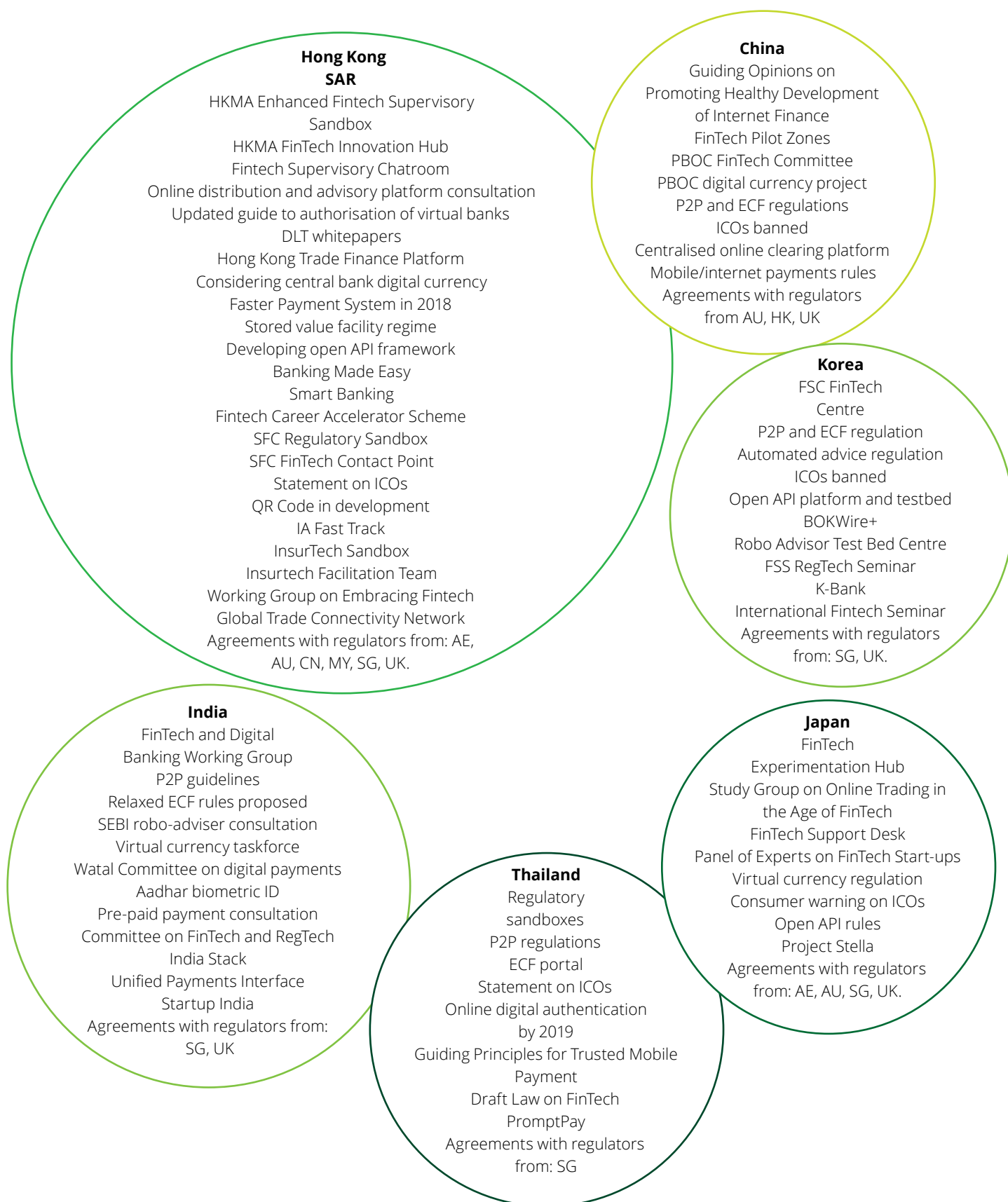
Data and digital disruption

Like most other sectors of the economy, financial services is becoming a data driven and digital industry, and Asia Pacific is at the forefront of the digital revolution⁴⁵. Reflecting this, regulators in the region have innovation and its implications at the top of their agendas. Most take a pro-innovation position and have been amending frameworks and policy settings to support its growth.

Figure 8 provides a snapshot of some Asia Pacific regulatory responses to digital disruption and innovation in financial services, and demonstrates the intensity of activity in this area. Regulatory sandboxes, guidance on new technologies, innovation hubs, and advisory committees are some of the common tools used by regulators to balance the competing interests of innovation, consumer protection and financial stability.

Innovation and digital disruption will continue to be front of mind for Asia Pacific regulators in 2018, with interest turning to firms' data management, the role of TechFins, and building a cyber resilient ecosystem.

Figure 8:
Asia Pacific regulatory responses to digital disruption and innovation



Malaysia

aFINity
 P2P and ECF regulations
 Framework for digital investment management
 Statement on ICOs
 Real time retail payments platform in 2018
 Plans for a centralised digital identity
 Plans for open APIs
 SCM Digital Markets Strategy
 BNM Regulatory Sandbox
 Financial Technology Enabler Group
 SCxSC Digital Finance Conference
 Bond+Sukuk Information Exchange
 Agreements with regulators from: AE, AU, HK, SG.

Singapore

Regulatory Sandbox
 FinTech Office
 FinTech Innovation Group
 P2P and ECF regulation
 Consultation on digital advisory services
 Project Ubin
 Digital token guidance
 Cloud computing guidelines
 National Payments Council
 National KYC utility
 FAST
 API playbook
 MAS data analytics group
 Smart Financial Centre
 Industry Transformation Map
 Singapore QR Code
 FinTech Festival
 FinTech Hackcelerator
 Global Trade Connectivity Network
 Virtual currencies within payments regulation
 \$27m grant for AI and data analytics
 PayNow
 Agreements with regulators from: AE, AU, CH, DK, FR, HK, IN, JP, MY, PH, PL, KO, TH, UK, US.

Australia

“World First” sandbox
 ASIC Innovation Hub
 Digital Finance Advisory Committee
 ECF legislation
 P2P guidance
 Relaxed licence regime for alternative markets
 Guidance on automated advice
 DLT information sheet
 Considering DLT for clearing and settlement
 Guidance on ICOs
 New Payments Platform
 Consulting on open APIs
 RegTech roundtable
 ASIC RegTech Liaison Group
 ASIC Data Strategy
 Agreements with regulators from: AE, CA, CH, CN, HK, ID, JP, KE, MY, NZ, SG, UK.

Indonesia

Regulatory sandbox
 FinTech Office
 Fintech Advisory Forum
 P2P regulations
 IT based lending regulations
 Digital banking services consultation
 Agreements with regulators from: AU.

New Zealand

P2P and ECF regulatory regime
 Robo-advice exemption
 Guidance on cryptocurrencies and ICOs
 RegTech for supervision
 Innovation Strategy Group
 Paper on DLT
 Agreements with regulators from: AU.

07 /

Knowing your data

While understanding your customer will be front of mind in 2018, knowing your data will be equally as important in meeting regulatory expectations. The explosion of data brought about by the digital revolution has meant increasing opportunities for firms, but also increasing regulatory expectations around data use and management. Regulators continue to be disappointed in FSI risk data capabilities. They also want FSI to be far more open and transparent with its data. At the same time, regulators are putting pressure on firms to have robust data protection and privacy programs in place. The convergence of these forces mean strong data management will be a priority in 2018 for both firms and regulators.

Better risk data capabilities

Regulators across Asia Pacific have been underwhelmed by firms risk data capabilities. This has raised questions about whether risks are understood and are being properly managed. In Australia, APRA has been clear on the need for improvements in ADIs risk data and is proposing an increase in the amount and granularity of data collected from larger institutions. The RBI has expressed similar sentiments⁴⁶ and has stepped up scrutiny of data governance, as well as on the source and quality of data points.

The BCBS' Principles for effective risk data aggregation and risk reporting (BCBS 239), released in 2013 for implementation by G-SIBs, has provided the benchmark against which regulators around the world are measuring adequacy of risk data programs within FSI more generally. The core principles of BCBS 239 are: strong governance arrangements; data architecture and IT infrastructure that fully supports capabilities and practices; accurate, complete, timely and adaptable aggregation; and accurate, comprehensiveness clear and

useful reporting.

The most recent progress report on BCBS 239, released in March 2017 and based on assessments carried out by G-SIB supervisors, concluded that adoption of the principles was "unsatisfactory"⁴⁷. Of note, there was a lower level of compliance than reported in bank self-assessments carried out two years earlier, for no principle was full compliance reached by all assessed banks, only one bank fully complied with all the principles, and four banks estimated that they would not fully comply until after 2018. In light of these results, the BCBS called on supervisors to closely follow up on compliance weaknesses "with continued and intensified efforts". Given this recommendation, and the more general dissatisfaction among local regulators about the quality of firms' risk data programs, pressure to improve capabilities is likely to increase.

More access to customer data

There is growing support for giving customers more control over the data that firms hold about them, as well as giving third parties access to customer data and accounts (with customer consent). Both trends recognise the unique source of value that data has in today's digital economy. There is also a widely held view that innovation and competition in financial services will be accelerated by improved customer control and third-party access, which in turn will support better consumer outcomes (e.g. more options for customers, easier access, more tailored solutions, and lower prices). For example, by giving a FinTech start-up access to the rich customer data accumulated by incumbent banks, the start-up will have the blocks from which to build new, and potentially, better products and services. Facilitating third-party access is also seen as an important step in better integrating financial services and

e-commerce, and for moving to platform-based financial services.

The EU has led the way with the revised Payment Services Directive (PSD2)⁴⁸ and General Data Protection Regulation (GDPR)⁴⁹, which will come into effect in the first half of 2018. Under PSD2, customers can consent to having an authorised third-party provider access their transactional payments data through open application program interfaces (API). These third-party providers can then use the customer data (e.g. to provide financial advice, develop comparison website) or the bank's payment infrastructure to initiate a payment on the customer's behalf. The GDPR's emphasis is on data subjects' rights, such as access, portability and deletion.

Some Asia Pacific firms may need to comply with certain PSD2 provisions and GDPR because they have operations in the EU or, with respect to the GDPR, because they hold EU citizen personal data. Moreover, governments and regulators across Asia Pacific are showing increasing support for customer control and data sharing initiatives akin to these pieces of EU regulation (see Figure 9).

Keeping data safe and protecting privacy

As much as regulators are supportive of giving customers more control and encouraging third party access, they are also vigilant about firms keeping data safe and protecting an individual's privacy. Regulators in the region have been acting in this area for some time⁵⁰. India, which has been somewhat slower to develop a comprehensive regime, is likely to have a Data Protection Act passed by early 2018 and in 2017 the Supreme Court delivered an historic judgement making privacy a fundamental right for India's citizens. The Chinese government also identified a right to privacy in the General Provisions of the Civil Law released by the National People's Conference in March 2017, and the nation's new Cybersecurity Law and related

standards also place renewed emphasis on data protection.

Getting an intimate understanding of data

Regulatory pressures to improve risk data capabilities, to open up access to customer data, and to ensure data security and privacy mean that firms are going to see an increasing number of requests for data (and for it to be cut in a variety of different ways), as well as more information on their data management frameworks and governance. To respond in a confident, timely and adequate fashion, firms will need an intimate understanding of their data: what they have, how it is categorised and how it is processed (collected, stored, accessed, moved, copied, released).

The importance of overhauling legacy systems, ageing infrastructure, siloed and manual processes that inhibit accurate and timely collation and analysis of data is well known. The need to invest in advanced data capture, analytics tools and automation technologies is also recognised. Proper metadata planning and management will be essential. Data management programs should not be rolled out in silos, but coordinated to take account of each other's requirements. Overlaying a strategy and risk lens to decisions on what data is important, and what can and cannot be released, will further support clarity and confidence amid competing requirements.

Firms should also think about the opportunities ahead and not just the challenges. Good risk data will generate information from which management can develop data driven strategic insights. Third-party access can lead to fruitful partnerships, and industry wide transparency can lead to better product pricing and risk assessment. New revenue streams could be opened up for firms that set up trusted and secure data sharing platforms. Finally, being transparent and providing insight and control to customers can help build trust.

Figure 9: Asia Pacific regulatory support for customer control and data sharing

Hong Kong

The HKMA to develop a framework for open APIs, which will allow recognised third-party service providers to connect to and conduct data exchange with bank systems.

Japan

Diet enacted legislation that will require financial institutions dealing with 'Electronic Payment Intermediate Service Providers' to develop systems that support open APIs.

Singapore

MAS, in conjunction with the Association of Banks in Singapore, developed API standards for the FSI.

Australia

Government proposing an open banking regime that would require banks to share product and customer data with customers and third parties (with customer consent). A new consumer right to access and use data, as well as a new structure and framework to facilitate data sharing, is also being considered.

India

Household Finance Committee recommended a framework that would confer on data subjects a set of rights in relation to their personal data and impose requirements and liabilities on data controllers (e.g. financial services firms) in respect of meeting those rights.

08

Responding to the influence of TechFins

Interest is moving to the influence and impact of technology and e-commerce giants that have diversified into financial services: the so called 'TechFins' (a term reportedly coined by Alibaba founder Jack Ma⁵²). When to bring TechFins within the regulatory remit, understanding and managing prudential and consumer risks, as well as preventing abuse of market power will be on the minds of regulators⁵³.

The rise of the TechFin

Several large technology and e-commerce companies operating in Asia Pacific have diversified their business to include financial services. Alibaba, Baidu, Tencent, Amazon and Samsung are some examples. These TechFins enter the financial services ecosystem in a much more advantageous position to FinTech start-ups. They have a pre-existing, and usually very substantial, base of customers. Positive experiences with the TechFin in the non-financial world means pre-existing customers are far more willing to also consume financial services from them. TechFins have accumulated rich and expansive customer data sets from a variety of sources while carrying out their primary business and these datasets are far superior to that held by FinTech (start-ups, as well as that held by many incumbents).

China is a leading example of this development. Alibaba's Yu'e Bao accrued US\$211 billion in assets and 370 million account holders in just four years, making it the largest money-market fund in the world⁵⁴. The \$5.5 trillion Chinese mobile payments sector is also dominated by products from Alibaba (54%), followed closely by Tencent (37%)⁵⁵.

Regulatory responses to TechFins

Given the size and influence of TechFins, regulators are unlikely to extend them the same helping hand that has been given to start-up FinTechs. Nonetheless, TechFins will be welcomed for their potential to

infuse competition into industry, help serve underserved communities, and provide new technologies, products and services that could improve industry productivity and lead to better customer engagement and outcomes.

Speaking about emerging platform-based business models where customers are provided with a combination of financial and non-financial services, JFSA Commissioner Mori has argued for a regulatory framework that is function (not entity) based⁵⁶. He has also predicted a shifting regulatory focus to disclosure, prevention of unfair transactions, and customer product suitability. HKMA's Norman TL Chan has also observed "more tech companies venturing into finance by riding on the highly successful and popular e-commerce, payment or social media platforms that they have developed" and predicts "a high degree of convergence in the way in which banks and tech firms conduct their businesses and compete". In this environment, he believes regulators should facilitate "Smart Banking", wherein "platforms are provided to offer full interconnectivity among retail and corporate customers" and "more personalised financial services and transactions to be undertaken with great mobility, speed, ease and safety"⁵⁷.

Both Commissioner Mori's and CE Chan's comments are indicative of the support for TechFins (as well as FinTechs) entering the financial service ecosystem, but also that they should be subject to regulation. If regulators adopt, as Commissioner Mori suggests, an activity not entity based approach, then there will be more clarity on when to impose licensing, conduct and consumer protection obligations (e.g. when credit is provided) when investment advice is given).

The point at which TechFins should be subject to prudential regulation will not

be as clear cut and assessments of their systemic impact may be harder to gauge. As a TechFin's financial service offering is usually just one part of its overall enterprise (and possibly provided by a separate legal entity), regulators may not have sufficient visibility over information about their true influence and potential systemic risks. Financial services firms are also increasingly dependent on TechFins to provide the

With their rich data sets, strong brand recognition, customer trust and greater pull on talent, TechFins pose a much more real threat to established financial services firms than FinTech start-ups.

platforms to access and engage with customers (e.g. Tencent's WeBank platform). Abuse of market power by TechFins is another issue that regulators will be more and more interested in, given the significant scale and market share wielded by a relatively small number of corporations.

Chinese regulators are recognising the increasingly important role played by internet-based financial service providers in the Chinese financial system. For example, in an effort to enhance oversight of the country's large online payment market, the PBOC created a centralised online clearing platform and reached agreement with 45 non-bank financial firms (including Alibaba

Group Holding Ltd. and Tencent Holdings) to connect and route transactions through the new platform. The PBOC is also proposing to include technology companies in macro-prudential assessments (hitherto reserved for large banks). In Australia, proposed new legislation will enable APRA to make rules relating to the lending activities of non-ADI lenders (where material risks of instability in the financial system have been identified) and to improve APRA's ability to collect data from non-ADI lenders⁵⁸.

Implications for firms

With their rich data sets, strong brand recognition, customer trust and greater pull on talent, TechFins pose a much more real threat to established financial services firms than FinTech start-ups. Regulators appear supporters of TechFins entry into the financial services sector and are encouraging a merging of technology and finance. In this context, it will be tougher for firms to find a competitive advantage. A focus on customer care, tailored experiences, building tech skills, as well as developing partnerships for access to new data sets will be important.

There will also be impacts for TechFins. Regulators want to ensure a level playing field and have been moving to bring innovative players within their remit, including prudential supervision. Adjusting to the highly regulated world of financial services could be challenging for enterprises that have grown exponentially before having to build regulatory requirements into their businesses. Regulatory compliance costs may go up, and speed and agility impeded.

09 /

Constructing a cyber resilient system

Financial services innovation and digitisation are certainly being encouraged by Asia Pacific regulators and being advanced by FSI. With this development comes increased cyber risk. Regulators prioritising innovation are also, and necessarily, prioritising cyber security. The focus is on both resilience within individual firms and within the financial system as a whole.

From firm resilience to system resilience

Regulatory frameworks and supervisory approaches for addressing cyber risk are evolving across the region⁵⁹. The general trend in Asia Pacific is toward building cyber resilience within firms, where the emphasis is not just on preventing cyber attacks, but being able to respond, recover and adapt. Importance is being placed on enterprise-wide cyber risk programs that are continually tested and updated to allow for agility and swift recovery, and that are overseen by the executive and board, and underpinned by strong governance.

Regulators are increasingly thinking beyond cyber risk management within individual firms, with some voicing concerns about a cyber-crisis in the system. IOSCO has called cyber risk “a growing and significant threat to the integrity, efficiency and soundness of financial markets worldwide”⁶⁰. The Reserve Bank of New Zealand’s (RBNZ) Head of Prudential Supervision has described cyber attacks as posing a “significant threat” to the global financial system and Korea’s Deputy Prime Minister has also noted cyber security as having a key role in maintaining financial system stability⁶¹. According to MAS’ Ravi Menon “it is not inconceivable that the next financial crisis is triggered by a cyber attack”, while former ASIC Chairman Greg Medcraft said cybercrime could be the next black swan event⁶³.

The financial system is characterised by a high degree of global interconnectivity,

with a steady stream of data flowing to and from enterprises, across borders, and around the clock. At the same time, a relatively small number of firms manage a significant number of transactions, and most participants rely on a handful of core market infrastructures (notably CCPs and the SWIFT interbank system). There is also little diversity in the software, hardware and mechanisms for internet access used by firms and their business partners. This global interdependence, constant activity and widespread reliance on the same software, systems and providers means that firms face common exposures to cyber attack and that attacks can also rapidly scale and spread. The resilience of the system is only as good as the weakest link.

Cyber attacks are also not confined within political or geographic borders. They tend to quickly evolve and transform, and are hard to predict. Identifying perpetrators is extremely difficult, because of the complexity and anonymity inherent in cyberspace, and with limits on cross-border cooperation and enforcement.

Given the above, firm level monitoring and management of cyber risk is unlikely, in itself, to provide the satisfactory level of cyber resilience (for both firms and the system). Nor will it facilitate a full understanding of the scale of threats and risks, which is essential for understanding and mitigating those risks.

Regulatory responses

There is a growing interest in developing holistic and coordinated action on cybersecurity, as well as harmonised approaches. Financial services regulators will likely turn their attention to:

- Industry-wide simulation exercises and scenario planning.
- Incorporating cyber attacks into stress-testing exercises.

- Managing outsourcing and counterparty risk, or applying regulatory requirements directly to important third-party providers.
- Requirements for reporting data on cyber attacks and risks.
- Centres for industry and regulators to systematically collect and share threat and attack data, with a view to continuous and proactive responses, as well as the foundation for enhancing risk analytics.
- Building cyber savvy workforces, both within industry and within regulators.
- Identification of industry critical infrastructures.
- Frameworks for cross border co-operation.
- Harmonised cyber risk management standards, including standardised classification, terminology and data collection.

The widening of the regulatory lens to capture system-wide resilience will not translate into less focus on firms. An important element of systemic resilience is consistently strong and active cyber risk management on the part of all players within the ecosystem.

Regulators in Hong Kong and Singapore are at the forefront of building regulatory architecture to facilitate industry-wide resilience. The HKMA's Cyber Security Fortification Initiative (CFI)⁶⁴, released in the first half of 2016, is a good example. The key elements of the CFI are: a self-assessment by firms with a view to identifying and remedying gaps; industry simulation exercises; a professional development program; and a platform for sharing intelligence, which the HKMA has described as "one-stop shop for threat intelligence, alerts and solutions" for industry, regulators and any other participants.

Similar measures have been taken in Singapore. MAS has established a centre to monitor cyber threats to firms in the region, provide analysis and recommend courses of action to mitigate threats⁶⁵. The

government runs cyber-attack simulations and scenario planning sessions involving participants from the financial services, energy and telecoms sector. The TechSkills Accelerator project has been introduced to build and maintain a workforce with strong information communication technology and cyber security skills. A Cybersecurity Bill has also been released that, if passed, will set up a framework for regulation of critical information infrastructure (such as operators of essential services relating to banking and finance) and includes a reporting regime, national cyber security stress tests and the secure sharing of information⁶⁶.

The OJK's Wimboh Santoso has said "it is not possible for a country to carry out preventive efforts against cyberattacks single-handedly, instead, there should be global initiatives to fight them"⁶⁷. MAS Managing Director Ravi Menon has identified cyber risk management as "likely to emerge as the new frontier for global regulatory harmonisation and supervisory co-operation"⁶⁸. Some steps have been taken toward global coordination. In June 2016, IOSCO and the Committee on Payments and Market Infrastructures (CPMI) released the first internationally agreed guidance on cyber security for the financial industry, which focused on cyber resilience for FMIs⁶⁹. Later that year, the G7 released its Fundamental Elements of Cybersecurity for The Financial Sector, which provides a set of high-level non-binding elements to "serve as the building blocks upon which an entity can design and implement its cybersecurity strategy and operating framework"⁷⁰. More recently, the G7 identified five "desirable outcomes" that show good cybersecurity practices, as well as a view of what effective practice for assessing cybersecurity looks like⁷¹.

Implications for firms

The widening of the regulatory lens to capture system-wide resilience will not translate into less focus on firms. An important element of systemic resilience is consistently strong and active cyber risk management on the part of all players within the ecosystem. Firms should expect regulators to continue their scrutiny of internal cybersecurity practices, but there will likely be more requests for data and information on cyber threats, as well as for participation in industry-wide simulation exercises and standards development.



Emerging structural risks

Preparing for longer-term challenges is part of good forward thinking risk management, and regulators in the region are striving to be more predictive and pre-emptive in their approach. Firms too need to think now about longer-term developments if they wish to both meet regulatory expectations and build sustainable enterprises.

Regulatory attention is starting to turn toward the impacts of two long-run developments facing society: climate change and ageing populations. At first these two matters would not appear to be traditional concerns of financial services regulation, but they are increasingly being incorporated into regulatory policy and action. There are both significant risks and significant opportunities.

10

Assessing the impact of changing climates and ageing populations

The focus on ageing populations intensifies

By 2027, Asia is likely to see 160 million people added to the ranks of its over-65s, almost five times the estimated 33 million to be added to the Eurozone and North America. Indeed by 2042, it is predicted that over-65s in Asia will exceed the combined populations of the Eurozone and North America. The impacts of an ageing population has been an issue in Japan for some time, but the demographics of Australia, China, Korea, New Zealand, Singapore and Thailand are all following the same trend⁷².

Numerous economic and policy issues arise from ageing populations, including increased pressures on health care systems and providing an income for people who have exited the workforce. Of interest to financial services regulators (and firms), is that with shifts in demography come shifts in the types of products and services people need. Many governments have mandated or encouraged investment based retirement products, which in turn drives increased demand for such products, as well as for financial advice, wealth and asset management, both to individual and institutional investors.

Ageing populations create new risks and also new opportunities, and regulators will be thinking about both. Australia's ASIC is a good example. ASIC has commented that "retirement is a rich environment for poor consumer outcomes" suggesting enhanced scrutiny of the provision of financial services to seniors. Indeed demographic change is one of the key challenges that the regulator will focus on during the next four years⁷³. An internal working group has been formed to address issues affecting older Australians,

contributions are being made to IOSCO work on senior investor vulnerability, and a surveillance on reverse mortgages selling practices to those in or approaching retirement is planned. The 2016-2018 work plan of the Securities and Exchange Commission of Thailand (SECT) lists ageing society as likely to have a significant impact on capital markets policy and the regulator is focusing on the greater need for savings to prepare for retirement⁷⁴. Japan's JFSA⁷⁵ and Korea's central bank⁷⁶ have also flagged an increased interest in ageing populations.

Demographics could significantly impact the makeup, riskiness and ageing of portfolios (e.g. longevity risk for providers of defined benefit pension plans, ability of borrowers to service loan once they retire). Therefore, scenario analysis is needed as part of risk management and could be incorporated into supervisory oversight.

Regulators are also showing support for the new opportunities that can arise from older populations. For example ASIC and APRA are working to facilitate the development of new income stream products with a longevity component. John Leung, CEO of the HKIA, has identified Hong Kong's rapid move to an ageing society as creating "ample business opportunities for the insurance industry" and "vast demand for retirement protection financial products and healthcare services" such as annuity and individual indemnity hospital insurance products⁷⁷.

It should, of course, be noted that a significant number of Asia Pacific countries are not demographically older. India stands out, but Indonesia and Malaysia are similarly youthful countries, with median ages of 27.3, 28.5 and 28.6 respectively (compared with Japan's 47.1, Korea's 41.8 and China and

Australia's 37.6)⁷⁸. Nonetheless, people in these youthful countries are living longer and so their governments and regulators still need to think about the potential implications of ageing. For example, one of the key findings of the RBI sponsored Report on Household Finance in India was the "near total absence" of pension wealth, as well as a tendency to borrow and take out mortgages later in life (meaning an increased likelihood of reaching retirement age with positive debt balance). Committee recommendations included an awareness campaign on the importance of pensions, relaxation of annuity fund investment guidelines and increased transparency on expenses, commissions, annual fees and surrender charges with regards annuity market⁷⁹.

So what does all this mean for financial services firms? A growing market for retirement products, health related insurance, as well as wealth and asset management services, but also much more intense regulatory examination of whether those products and services are being appropriately sold and managed. Scenario analysis and modelling tools to understand how risks may change as customers get older will also be needed. Firms should keep in mind the complexity of demographic change and consider a variety of possible future scenarios, including more prolonged working lives.

The growing interest in climate change

In June 2017 the FSB-initiated, industry-led TCFD released its final recommendations on disclosure of climate-related financial risks in mainstream financial statements⁸⁰. The recommendations aim to facilitate greater information and awareness about how climate change impacts business and financial returns.

The TCFD considered the impact of both physical and transition risks associated with changing climates. Transition risks generally arise from policy changes (e.g. emission restrictions), technological change (e.g. new clean energy sources), or

pressure from community and consumers. Firms that invest or lend to industries exposed to transition risk, such as the fossil fuel industry, may face a risk that these investments will drop in value. Physical risk can also be relevant to financial services firms. For example, an increasing number of extreme weather events and natural disasters could see hikes in the cost of property maintenance and insurance, as well as loss in property value. This in turn could put strain on borrowers and impede their ability to service loans. The TCFD encourages scenario testing, measuring financial position impacts, setting strategies to mitigate adverse consequences, but also

...by 2042, it is predicted that over-65s in Asia will exceed the combined populations of the Eurozone and North America...with shifts in demography come shifts in the types of products and services people need.

looking for the commercial opportunities.

While the TCFD recommendations are voluntary, they will likely set the standard against which regulators will judge a firm's climate risk disclosure, at least the larger firms. Many financial institutions have signed up in support of the TCFD's recommendations. Moreover, the recommendations can be seen as part of a wider trend within the financial services ecosystem toward thinking about how climate change might impact business models, risk profiles, investment performance and the financial system as a whole.

Asia Pacific financial services regulators are becoming increasingly interested in both the risks and opportunities associated with climate change. On the 'upside' (the opportunities), regulators are providing

incentives for firms to pursue green financing, facilitating the development of green bonds, green assets and green products. On the 'downside' (the risks), regulators want to ensure firms are adequately disclosing their exposure to climate risk across their portfolios and also incorporating it into risk management frameworks.

Regulatory concerns include whether firms are adequately pricing and risk-weighting assets that could be exposed to climate related risks (e.g. shares in carbon-intensive companies, real estate vulnerable to rising sea levels, investments in agriculture affected by reduced annual crop yields). Other issues on the regulatory radar could be whether climate change is being incorporated into scenario and stress testing, what is being done to ensure long-term liabilities to policy holders and pensioners can be met, and whether disclosure properly supports informed decision making by investors.

China has been particularly active, tying into the nation's green agenda, and some examples of key Asia Pacific regulatory responses to climate change are noted in Figure 10.

Firms wishing to take the lead on managing climate risks can start by unpacking potential exposures across the business (e.g. vulnerable assets), and also identifying opportunities during this process (e.g. new avenues for investment). Incorporating the assessment and management of climate risk into the overall risk management frameworks, and developing appropriate metrics and targets will also be critical. Advanced climate risk analytics and modelling tools are available to help with scenario testing and impact assessments. Disclosure in accordance with TCFD recommendations will also be important.

Figure 10: Asia Pacific regulatory responses to climate change

Australia

- Firms expected to integrate climate risk into internal risk management processes, including modelling potential impacts under different scenarios and time horizons.
- APRA formed an internal Climate Change Financial Risk Working Group.
- Regulated entities to be surveyed on their climate risk practices.
- Climate change risk may be incorporated into system-wide stress testing.
- Inter-agency initiative on whether companies are taking steps to protect themselves and their customers from risks caused by climate change.

China

- PBOC one of eight central banks to commit to establishing the Network of Central Banks and Supervisors for Greening the Financial System
- Guidelines to incentivise green products.
- Mandatory environmental disclosures.
- Environmental stress testing.
- Pilot green finance zones.

India

- Renewable energy sector designated as a priority sector for bank lending.

Indonesia

- Roadmap for sustainable finance.
- Regulation for green bond issuance.
- Rules on sustainable finance for financial services companies, issuers, and public companies.

Singapore

- MAS one of eight central banks to commit to establishing the Network of Central Banks and Supervisors for Greening the Financial System.
 - Green bond grant scheme.
 - MAS to help expand the range of ESG-related products and broaden green and sustainable finance talent pool.
 - MAS to include climate-related scenarios in future stress testing exercises.
 - MAS to encourage industry adoption of TCFD recommendations.
-

Figure 11: Upcoming leadership changes in Asia Pacific



Conclusion

Asia Pacific financial services firms will continue to operate in a demanding regulatory environment in 2018. While there will likely be a slowdown in the pace of regulation making, particularly global standard setting, firms should not vacillate in pushing forward with the implementation of already agreed international reforms. They may also need to consider compliance with some significant pieces of foreign regulation, such as MiFID II.

Improving industry culture and conduct will continue to be a regulatory priority in the region, with individual accountability, industry codes, as well as deep customer understanding, being particular focal points. Financial services innovation and digital disruption will also remain top of the Asia Pacific regulatory agenda. Firms will be facing pressures around data management and data access, from big TechFin

competitors, and to assist with building a cyber resilient ecosystem.

While not yet front of mind for regulators, in 2018 firms should start preparing for increased supervisory interest in management of risks associated with climate change and ageing populations.

Meeting the crowd of regulatory requirements and expectations will be challenging for Asia Pacific firms in 2018, although this is certainly not a new state of affairs. In designing approaches and frameworks for managing regulatory risk, firms should consider some of the measures noted in Figure 12.

We hope this 2018 Outlook provides a strong foundation from which to confidently steer forward regulatory work plans for the year ahead.

Figure 12: Facing the future: five pathways to managing regulatory risk

- 1 / Advanced data management and analytics to understand customers and risks, manage security and privacy, and to confidently respond to data requests from regulators, customers and third parties.
- 2 / Detailed organisational maps and matrices that include particulars of individual responsibilities, lines of accountability, critical infrastructures, internal business divisions, external business relationships, and an end-to-end view of controls framework identifying where controls sit across the three lines of defence.
- 3 / Effective and timely management information to provide data-driven insights and support confident and agile leadership decisions on the many issues for which they are expected to provide oversight and insight.
- 4 / Sophisticated and adaptive tools for modelling and scenario analysis that can test a variety of potential risks, under varying conditions, and that support forward looking and pre-emptive decision making.
- 5 / A diverse workforce with diverse skills (e.g. in IT, digital, ethics, customer care) and with knowledge of international as well as local regulatory landscapes.

Glossary

AE	United Arab Emirates
AI	Artificial intelligence
AML/CTF	Anti-money laundering/counter terrorism financing
API	Application programming interface
APRA	Australian Prudential Regulation Authority
ASIC	Australian Securities and Investments Commission
AU	Australia
BEAR	Banking Executive Accountability Regime (AU)
BCBS	Basel Committee on Banking Supervision
BCR	Basic capital requirement
BIS	Bank for International Settlements
BNM	Bank Negara Malaysia
BI	Bank Indonesia
BOJ	Bank of Japan
BOK	Bank of Korea
BOT	Bank of Thailand
CBRC	China Banking Regulatory Commission
CCP	Central counter-party
CET1	Common equity tier I (capital ratios)
CH	Switzerland
CIRC	China Insurance Regulatory Commission
CN	People's Republic of China
ComFrame	Common Framework for the Supervision of Internationally Active Insurance Groups
CPMI	Committee on Payments and Market Infrastructures
CRD IV	Capital Requirements Directive IV (EU)
CSRC	China Securities Regulatory Commission
CVA	Credit valuation adjustment
DK	Denmark
DLT	Distributed ledger technology
D-SIB	Domestic systemically important bank
EBA	European Banking Authority
ECF	Equity crowdfunding
EU	European Union
FinTech	Financial technology
FMI	Financial market infrastructure

Glossary

FR	France
FRTB	Fundamental review of the trading book
FSB	Financial Stability Board
FSI	Financial services industry
FX	Foreign exchange
GDPR	General Data Protection Regulation (EU)
G-SIB	Global systemically important bank
G-SIFI	Global systemically important financial institution
G-SII	Global systemically important insurer
G7	Group of 7 (Canada, France, Germany, Italy, Japan, the United Kingdom and the United States)
G20	Group of 20 (international forum for governments and central bank governors)
HK	Hong Kong Special Administrative Region
HKIA	Hong Kong Insurance Authority
HKMA	Hong Kong Monetary Authority
HLA	Higher loss absorbency
IAIG	Internationally active insurance group
IAIS	International Association of Insurance Supervisors
IASB	International Accounting Standards Board
ICO	Initial coin offering
ICS	Insurance Capital Standard
ID	Indonesia
IFRS	International Financial Reporting Standard
IM	Initial margin
IMA	Internal model approach
IMF	International Monetary Fund
IN	India
InsurTech	Insurance technology
IOSCO	International Organisation of Securities Commissions
IRB	Internal ratings-based
IRDAI	Insurance Regulatory and Development Authority of India
JFSA	Japan Financial Services Agency
JP	Japan
KE	Kenya
KO	Republic of Korea (South Korea)

KYC	Know your client/customer
LCR	Liquidity coverage ratio
MAS	Monetary Authority of Singapore
MIC	Manager-in-charge (HK)
MiFID II	Markets in Financial Instruments Directive II (EU)
MY	Malaysia
NMRF	Non-modellable risk factors
NSFR	Net stable funding ratio
NZ	New Zealand
OJK	Otoritas Jasa Keuangan (Financial Services Authority of Indonesia)
OTC	Over-the-counter (derivatives)
P2P	Peer-to-peer (lending)
PBOC	Peoples Bank of China
PH	Philippines
PO	Poland
PSD	Payment Services Directive (EU)
RBI	Reserve Bank of India
RBNZ	Reserve Bank of New Zealand
RegTech	Regulatory technology
Regulatory Sandbox	Framework for testing new technologies in a controlled environment
RWA	Risk weighted assets
SA	Standardised approach
SA-CCR	Standardised approach for measuring counterparty credit risk exposure
SEBI	Securities and Exchange Board of India
SECT	Securities and Exchange Commission of Thailand
SCM	Securities Commission Malaysia
SFC	Hong Kong Securities and Futures Commission
SG	Singapore
STC	Simple, transparent and comparable
TCFD	Task Force on Climate-related Financial Disclosures
TechFin	E-commerce or technology company that diversifies into financial services
TH	Thailand
TLAC	Total loss-absorbing capacity
TR	Trade repository
UK	United Kingdom
US	United States
VaR	Value at risk
VM	Variation margin

End notes

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