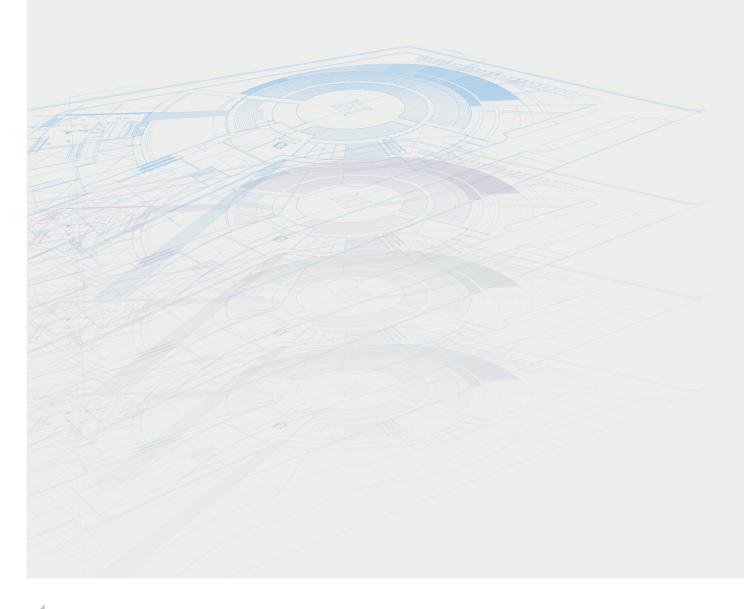
CHAPTER 4

EVOLVING THE REGULATORY APPROACH



CHAPTER SUMMARY





Promote businesses that are *accountable* to the environment and the broader stakeholders of the economy



Inculcate greater industry *accountability* to mitigate misconduct through self-regulation



Encourage third parties to hold market participants *accountable* for their actions, in particular in ESG practices



Enable shared *accountability* in the capital market with principles-based regulations and greater regulatory transparency





Prioritise efforts in protecting investors against vulnerabilities



Prioritise fit-for-purpose regulatory architecture for enhanced regulatory outcomes



Prioritise supervisory efficiency with technology as well as effectiveness in coverage and conduct



Enhance enforcement approach to *prioritise* swift, effective and targeted outcomes





Encourage the *embrace* of RegTech for effective compliance, risk management and regulatory reporting



Navigate emerging data, AI and other technology risks as the capital market *embraces* digitisation



Embrace greater use of data and technology in the SC for better regulatory efficiency and effectiveness

4.1 EMBEDDING SHARED ACCOUNTABILITY WITHIN THE CAPITAL MARKET

The integrity of the capital market is the shared responsibility and accountability of the SC and all participants of the capital market ecosystem. This includes, among others, intermediaries, institutions, RMOs, corporates, auditors, SROs and investors. As the capital market continues to mature and adapt to the emerging trends outlined in Chapters 2 and 3, these participants will need to assess and reflect on how they interact with the market as well as cater to stakeholders' expectations and needs. To facilitate such developments, the SC will refine its regulatory framework to further promote agility, growth and innovation. At the same time, market participants need to be vigilant and prepared to embrace new standards of responsibility and accountability to maintain market integrity. The SC's move towards a regulatory approach that is more principles-based and outcomes-focused will enable market participants to realign their compliance framework according to the nature of their businesses and risk parameters. This section outlines the SC's regulatory framework and design to promote market growth and integrity in a rapidly evolving environment that embraces sustainability, competition and innovation.

THE STATE OF PLAY

The SC's regulatory approach serves to protect investors by shaping market behaviour while at the same time promoting development and innovation. In the last decade, the SC has embraced the regulatory philosophy of 'no more regulations than necessary'. This is reflected in the liberalisation of regulations that had become outdated due to the maturity of the capital market and its participants or had out-lived their purpose.

Amid growth and innovation, all market participants need to play their part as gatekeepers in their respective business segment. Institutions, including Bursa Malaysia and RMOs, are accountable to maintain fair and orderly markets as well as ensure efficient dissemination of relevant disclosures and information. Licensed intermediaries are accountable for the fair treatment of investors and to manage risks to market integrity, including those associated with anti-money laundering (AML) / combatting the financing of terrorism (CFT). Licensed capital market individuals also play a role – for example, PAs are gatekeepers of the IPO due diligence to facilitate greater efficiency in the approval process. Frontline regulators such as Bursa Malaysia and SROs such as the FIMM are accountable to regulate the conduct of their members in order to protect investors.

Corporates are accountable to their shareholders and wider stakeholders for the viability, integrity and sustainability of their business. The MCCG acts as a compass to guide companies and boards in navigating the rapid evolution of markets and business structures. The SC has also put in place guidelines to provide clarity on its expectation of the directors' discharge of fiduciary duties. Investors or shareholders with voting rights can play a bigger role in shaping responsible corporate behaviour by engaging boards and senior management of investee companies, as well as exercising their voting rights to promote board accountability and transparency. External auditors also play an important role in promoting the reliability and integrity of a company's financial statements to enable shareholders and investors to rely on the financial reports when making investment decisions.

The SC's core functions of rule-making, authorisation, supervision and enforcement provide a robust framework which promotes market integrity and investor protection. To manage both conduct and systemic risks, the SC adopts a risk-focused supervisory approach over intermediaries and institutions, with emphasis on governance, compliance and senior management culture. In this regard, the SC's enforcement parameter applies an outcomes-focused approach and utilises a broad set of tools, ranging from administrative to civil and criminal actions.

Diagram 13

MARKET PARTICIPANTS HAVE SHARED ACCOUNTABILITY IN PRESERVING MARKET INTEGRITY



Exchange and RMOs Ensure fair and orderly marketplaces as well as efficient dissemination of relevant information



Licensed intermediaries and individuals

Ensure good conduct, with investor-oriented outcomes integrated into business decisions and risk management



SROs

Regulate the conduct of their members to protect investors



Corporates and board of directors Ensure continued business viability, risk management, ethical conduct and sustainable value creation



Auditors

Ensure high audit quality to promote integrity and reliability of financial statements



Investors and shareholders

Exercise responsible ownership to shape corporate accountability

Source: SC.

STAYING AHEAD OF THE CURVE

Emerging developments across climate change, societal inequalities, competition and innovation have given rise to new challenges as companies race to meet the evolution of investors' needs and expectations. For example, the rise in sustainability movement has resulted in greater expectations of corporate accountability to the environment and society. Similarly, the growth in innovation and technology has changed investors' expectations of service levels and access.

To meet the public and investors' expectations on sustainability issues, corporates will need to assess and align their culture and business operations with responsible business practices. This includes, among others, the consideration of stakeholders' views on sustainability as well as a stronger focus on action, outcomes and CG. The leadership of the board is profoundly important to ensure corporates are able to deliver long-term value responsibly.

Capital market institutions and intermediaries too are expected to play a key role in Malaysia's transition towards a low-carbon economy. They can support the achievement of sustainability goals through the intermediation of risk and capital by taking into account ESG factors. This includes incorporating ESG considerations into their corporate, investment and business decisions. Along with the growth in SRI, there will be increasing demand for ESG disclosures and for intermediaries to be able to manage ESGrelated risks which could undermine investor interests.

In response to changes in investing behaviours, the intermediation landscape will see more innovation, disruption and competition. As the SC introduces more flexibilities in the regulatory regime to enable innovation and competition, market participants are expected to exercise greater self-regulation in their conduct of business. Increasingly in other jurisdictions, individual firms are taking on a more proactive role in self-policing, self-reporting and self-rectifying breaches.

Large global institutional investors are already leading the way as strong advocates for change, particularly in driving good CG, through direct engagements with investees or by exercising their voting rights. In this regard, the IIC can and should play a bigger role in adopting greater transparency in their engagements and voting patterns.

Moving forward, as the capital market develops further, the SC's regulatory approach will continue to adapt to allow businesses to meet the changing market needs and innovate - all while safeguarding investors' interests. In this respect, the SC sees the opportunity to take principles-based regulations further, in line with its objective to be less prescriptive and more outcomes-focused. This will entail making further changes in the SC's rule-making, supervision and enforcement approach as well as the need for greater regulatory transparency.

STRATEGIC CONSIDERATIONS

4.1.1 PROMOTING RESPONSIBLE BUSINESSES

Diagram 14

KEY THRUSTS TO PROMOTE RESPONSIBLE BUSINESSES



Drive long-term value creation for stakeholders and respond to expectations on sustainability



Develop ability of corporates to respond to sustainability issues in an integrated and strategic manner



Adopt a wholeof-society approach

Work with key stakeholders to drive businesses to be more accountable and responsible

Source: SC

To prosper over time, corporates are increasingly expected to deliver financial performance and demonstrate that they do so responsibly, benefitting a broader set of stakeholders, including employees, customers and the communities that are impacted by their activities. This shift has centred on considerations of governance, people, planet and prosperity – all of which are recognised as critical pillars for transition to a resilient and sustainable future¹. This is particularly relevant, in light of the targets set by many markets to move towards net-zero emissions.

Board leadership will continue to be critical to promote responsible business practices, drive long-term value creation for stakeholders and respond to stakeholder expectations on sustainability commitments. Having an effective board hinges on factors such as independence, diversity and skills-mix – areas that the SC will continue to focus on. Capacity for ESG leadership among boards and senior management must also be strengthened to ensure corporates are able to respond to sustainability issues in an integrated and strategic manner. This includes reliable and timely sustainability disclosures. As the significance of sustainable reporting increases, auditors are expected to play a key role in the verification of these sustainable reports to provide credibility to their clients' sustainability efforts. In this respect, auditors may need to strengthen their knowledge and capabilities in the area of sustainability to keep up with the needs of the market.

In April 2021, the MCCG was updated to introduce best practices and further guidance on, among others, board policies and practices on the selection, nomination and appointment of directors, as well as further guidance for areas identified by the SC's CG Monitor report that see relatively low levels of adoption. The updated MCCG also focuses on the role of board and senior management in addressing sustainability risks and opportunities of the company, which will set the stage for ESG leadership in corporate Malaysia.

Financial intermediaries too play a part in promoting responsible businesses through their role in mobilising capital. As SRI becomes mainstream, investors will increasingly expect asset managers or fund managers to consider the ESG risks within their portfolio and to actively manage such risks. As outlined in Chapter 3, regulatory considerations and supervisory focus will prioritise transparency through disclosures and investor education, in particular to ensure governance over ESG integration in investments and management of material climate-related risks such as greenwashing risks.

Promoting responsible business will in fact require a whole-of-society approach. As such, the SC will continue to work closely with key stakeholders, including the members of the CG Council, with a targeted focus on driving greater, more visible and impactful stewardship by institutional investors.

4.1.2 INCULCATING GREATER SELF-REGULATION

While a vigorous enforcement program is essential to fulfil the SC's mission in maintaining investor confidence in the capital market, the SC recognises that this alone is not enough to prevent misconduct in the capital market. Despite numerous pre-emptive actions taken by the SC over the years, enforcement remains a 'post occurrence' action after a violation has occurred or was detected by authorities.

To achieve more optimal compliance with rules and earlier detection of regulatory breaches, there is a need to encourage regulated entities to self-report and self-rectify. Self-reporting and self-rectification is critical in mitigating the impact of a misconduct as well as containing and minimising losses to investors.

Measuring Stakeholder Capitalism: Towards Common Metrics and Consistent Reporting of Sustainable Value Creation, World Economic Forum, September 2020.

Unlike mandatory self-reporting where regulated entities are obligated to report under prescribed legislation and regulations, voluntary self-reporting will rely on the robustness of the processes which regulated entities have put in place to detect potential conduct risks. The co-operation and voluntary self-reporting framework undertaken by most securities regulators entails a credit or penalty reduction scheme that typically considers four key factors – self-policing before the discovery of misconduct, self-reporting of misconduct when it is discovered, measures undertaken to self-rectify breach and co-operation provided to the regulators. The voluntary self-reporting framework for the Malaysian capital market has been operationalised, with a *Guidance Note on Co-operation and Self Reporting* issued in June 2021.

Diagram 15 FACTORS TAKEN INTO ACCOUNT IN A VOLUNTARY SELF-REPORTING FRAMEWORK



- Established effective compliance procedures
- Provided a strong message regarding compliance



- ► Conducted a thorough review of the nature, extent, origins and consequences of the misconduct
- Disclosed misconduct promptly, completely and effectively to affected persons and regulatory agencies



Remediation undertaken

Modified and improved internal controls and procedures to prevent recurrence of the misconduct



Co-operation provided

 Provided all information relevant to the underlying breaches voluntarily

Source: SC.

4.1.3 ENCOURAGING GREATER INVESTOR ACTIVISM AND ADVOCACY

Investor activism and advocacy are powerful tools that can shape the accountability landscape in the capital market. Backed by greater access to information, investors today, and more so in the future, will be equipped with greater awareness and knowledge to hold businesses and capital market participants accountable towards the environment and the society.

In developed markets, environmental and social issues have become more prominent in shareholder meetings, especially as the world grappled with the systemic implications of the pandemic. Investor activism has in recent years catalysed global energy companies to align their business strategies to the goals of the *Paris Agreement*^{2,3}, and global banks to do more to cut fossil fuel financing and combat climate change⁴.

² Record year for environmental, social investor petition, Financial Times, June 2020.

³ Shareholders push SEC for tougher climate regime for US oil, Financial Times, February 2021.

Barclays offers vote on climate progress as activist heat rises, Reuters, May 2021.

Agendas related to human capital issues, including equal opportunity, workplace health and safety as well as diversity, are also gaining momentum in shareholder meetings.

The landscape of shareholder activism has gradually matured in the last decade, contributed in large part by the launch of the MCII as well as the establishment of the IIC in 2014 and 2015 respectively. Institutional investors and the Minority Shareholders Watch Group (MSWG) have also stepped up on stewardship across a wide range of issues, from CG to compensation to workplace health and safety. Moving forward, the IIC will be expected to enhance the MCII to strengthen the stewardship of institutional investors, particularly in relation to sustainability.

Malaysia has also seen a change in how individual retail investors participate in shareholder meetings and exercise their rights. With the movement control orders, Malaysia has seen a shift into virtual and hybrid general meetings. A survey conducted by the SC revealed that virtual and hybrid general meetings resonated with investors across different age groups and the level of engagement during these meetings remained positive. Moving forward, the SC will continue to encourage the adoption of digital tools to promote meaningful engagements between the board, senior management and shareholders at general meetings. Stakeholder communications could also be strengthened through digital platforms and tools, setting up better collaborations to promote effective shareholder participation and by engaging youth on CG topics and issues.

The growth of investor activism and advocacy, in particular among retail investors, is underpinned by the promotion of transparency through disclosures and investor education. The SC continues to promote accurate and effective disclosures by market participants to enable investors to make informed decisions.

Similarly, investor education will remain a key priority for the SC. Over the next few years, the SC will continue to execute initiatives under the *Malaysia National Strategy for Financial Literacy*, together with BNM and the other members of the FEN, to elevate financial literacy among Malaysians and promote responsible financial behaviour⁵.

4.1.4 MOVING FURTHER TOWARDS PRINCIPLES-BASED REGULATIONS

In 2015, the SC, in its regulatory philosophy, outlined the policy to adopt a principles-based approach for regulations – one which emphasises broad-based standards over prescriptive and detailed rules, with greater focus on outcomes rather than dictating processes. This approach acknowledges that there may be more than one way to achieve a regulatory outcome, and by clearly articulating the desired outcomes, firms are given greater flexibility to achieve their own business goals without compromising those regulatory outcomes⁶.

Since then, elements of principles-based regulations were introduced in the *Guidelines on Sales Practices* of *Unlisted Capital Market Products* and *Guidelines on Recognized Markets*. In more recent guidelines, such as *Guidelines on Advertising for Capital Market Products and Related Services*, the SC has adopted principles-based regulations to a larger extent. These early initiatives and the challenges that surfaced during the implementation of this approach have provided valuable learning experiences for the SC and capital market participants to fine-tune the adoption of principles-based regulations.

6 Regulatory Philosophy, SC, 2015.

Malaysia National Strategy for Financial Literacy 2019-2023, FEN, 2019.

Diagram 16

KEY CONSIDERATIONS IN ADOPTING A BALANCED APPROACH BETWEEN PRINCIPLES AND RULES-BASED REGULATIONS



- Principles-based regulations are more suited when driving conduct or culture, or when focusing on outcomes. In contrast, rules-based regulations are more applicable on prudential aspects.
- Rules-based regulations are more suited for areas relating to retail investor safeguards and requiring standardisation for comparability e.g. disclosures and reporting obligations.



Principles-based regulations are more suited for innovative and nascent areas, where landscape changes rapidly and risks are relatively unknown.



- ► Higher level of maturity and sophistication of market participants helps in moving towards principles-based regulations.
- ▶ Presence of industry groups can promote collaboration on the implementation of principles-based regulations.



Principles-based regulations require enhancement of the SC's supervisory and enforcement approach and capabilities.

Source: SC.

Over the next five years, the SC is committed to adopt principles-based regulations more extensively where appropriate. This entails the reviewing of regulations in a holistic manner, making provisions for principles-based regulations and replacing prescriptive rules where possible. In shaping regulations, the SC will take into consideration the following key factors:

- Objectives that the regulations intend to achieve;
- Nature of the market that will be benefit from principles-based regulations;
- Sophistication of the market participants and market structure, and
- The SC's regulatory readiness to supervise and enforce principles-based regulations.

As part of the journey forward, the SC will refine how principles-based regulations will be adopted as well as work with market participants to facilitate and provide greater support for compliance. Recognising that market participants vary in maturity and differ in their ability to interpret principles, some will require more guidance as regulations become more principles-based. The SC will focus on enabling regulated entities on multiple fronts – some of which are currently in practice, but are expected to be enhanced to be more efficient in the transition towards principles-based regulations.

Diagram 17

APPROACHING PRINCIPLES-BASED REGULATIONS WITH REGULATED ENTITIES



Source: SC.

Principles-based regulations will require regulated entities to adopt a strategic approach to regulations – this calls for greater senior management involvement to continuously improve their practices and greater capacity for internal compliance teams to make judgement calls when interpreting the principles. To enable this, engagements involving the senior management team will be key to help regulated entities understand the SC's expectations and develop a shared understanding on the type and level of conduct required by the principles.

Recognising that 'one size does not fit all', the SC will apply a facilitative and differentiated approach for smaller or less matured firms over this transition to build their expertise and guide them towards greater adoption of principles-based regulations. To provide greater support, relevant guidance will be provided to help regulated entities better interpret and adopt the principles. Industry groups can also play a more significant role by providing standards, statements of good practices and other publications to guide market participants in adopting these principles.

In line with greater adoption of principles, the focus on culture and conduct of regulated entities will be enhanced. It is important that firms take ownership of their culture – this entails identifying and shaping the drivers of good culture, which will in turn shape the behaviour and conduct of their employees and representatives. In this aspect, regulators globally have taken the following steps in tandem with their shift towards principles-based regulations:

- Embark on the development of guiding principles of good culture, drivers of ethical conduct and outcome of culture reform that firms should achieve:
- Take the approach to guide firms to self-discover the good culture suited to them and take remediation actions to improve their governance; and
- Set expectations for the board and senior management to drive good CG culture.

This will also entail a shift from the current supervisory approach, from one that focuses on compliance culture and governance to one driven by principles, where market intermediaries are responsible to internalise culture and put in place processes, based on their size and business models, to adhere with these principles.

This will also require greater development of shared understanding with the regulated entities in respect of the principles under such regulatory approach. At the same time, the SC will also re-evaluate how it engages market participants, how regulatory objectives are communicated, how consistency is ensured across the regulatory value chain as well as how its supervisory capability and capacity will be developed.

4.1.5 ENHANCING THE TRANSPARENCY OF THE SC'S REGULATORY APPROACH

As the SC's regulatory approach shifts towards greater adoption of principles-based regulations and self-regulation, there is a need for greater transparency on the SC's expectations on intermediaries and members of the public at large across its supervision, authorisation and enforcement actions.

The SC is committed to enhance the transparency of the regulatory approach and conduct regular communications on regulatory expectations. Having greater disclosures on regulatory principles, approach, objectives, priorities and key dimensions of the decision-making frameworks will give regulated entities greater clarity on regulatory expectations. This will also provide firms with greater guidance and understanding on regulatory changes and actions.

Diagram 18 GREATER TRANSPARENCY ACROSS THE REGULATORY VALUE CHAIN





Shaping market behaviour and enabling the public to understand the enforcement approach and priorities of the SC

Source: SC.

4.2 PRIORITISING EFFICIENCY AND OUTCOMES

priorities and progress

The capital market is constantly evolving, and thus, the delivery of services, development of products and innovation of businesses will also change over time. These changes, while enabling value-added propositions, also introduce new challenges and vulnerabilities for investors, especially against the backdrop of changing population demographics. To uphold the mandate of investor protection, the SC's regulatory approach will also need to continuously adapt. Moving forward, the SC will place emphasis on the identification and assessment of vulnerable investors. Simultaneously, the SC will also refine its regulatory approach to better supervise, identify and address capital market transgressions, to ensure more effective deterrence against market misconduct. This section discusses the SC's priorities over the next five years to enhance its regulatory approach, including the efficiency and effectiveness of its supervisory and enforcement functions, to maintain a fair and orderly market and promote investor confidence.

THE STATE OF PLAY

The objective of preserving the integrity of the capital market and protecting investors is central to the SC's regulatory approach. The SC's regulatory philosophy, outlined in 2015, recognises that the market needs to continuously change to cater to investor demands and technological advancements. Thus, the SC's regulatory approach will need to embrace and thrive through these changes⁷. This entails, among others, facilitating participation by investors of different levels of skills, investment knowledge and net worth in the market as well as enabling diverse business models to offer capital market services to Malaysian investors – all without compromising investor protection. When embracing such development changes, effective and efficient supervision and enforcement become critical to promoting good conduct and deterring market abuse.

Recognising investor diversity, the current regulatory approach distinguishes retail and sophisticated investors through a differentiated protection framework. Investors are segmented based on their net worth, professional background, experience and accreditation status. The design of disclosure requirements, suitability assessments and product approvals are also differentiated for the different investor segments.

In the SC's assessment, the current segmentation criteria can be made more robust to cater to high-net worth investors, both individuals and entities, who may be vulnerable due to a lack of investment knowledge or experience. The current framework also does not consider the vulnerability of investors at different life stages, although such vulnerabilities may adversely affect their judgement when making investment decisions.

The diversity of Malaysian investors has catalysed diversification in the intermediation landscape. As a result, the presence of non-traditional, technology-based companies offering capital market services and products in Malaysia has grown while traditional financial institutions have also scaled up and broadened their range of investment offerings.

While most entities carrying out regulated activities in the capital market are supervised by the SC, there are also entities that are deemed registered within the definition of the CMSA that are also permitted to carry out regulated activities – these include financial institutions such as commercial banks, Islamic banks and insurance companies that are under the oversight of BNM. While there is a Memorandum of Understanding between the SC and BNM to co-ordinate the oversight of banks carrying out capital market activities, the regulatory architecture adopted currently is predominantly one that is entity based, whereby banks and insurance companies that carry out capital market activities are primarily supervised by BNM.

The SC's supervision mandate covers the micro prudential soundness of licensed entities, macro prudential aspect of the markets as well as the risk identification of firms, issuers, products, transactions and markets. This entails assessing the strength of the governance, oversight and risk functions of licensed intermediaries and institutions, as well as whether necessary controls are in place to manage risks. In the last decade, the SC's supervisory capabilities have been expanded across new intermediation models and enhanced through the greater use of data and technology, particularly in market surveillance. Other aspects of supervision are still largely dependent on traditional tools and practices, including thematic reviews, data samples, supervisory inspections and engagements. To be more future-ready, especially in identifying risks and early intervention, there is a need to tap into a wider range of data sources, strengthen the use of advanced and predictive analytics as well as develop new capabilities.

⁷ Regulatory Philosophy, SC, 2015.

The SC's enforcement function complements its supervisory strength, enabling it to balance market integrity with proportionality as well as ensure effective and credible deterrence. Past experiences as well as skills gained in pursuing insider dealing, market manipulation and money laundering investigations as well as prosecutions have also been beneficial in directing the SC's enforcement approach, including the management of resources and selection of appropriate enforcement strategies. These will continue to be applied in the spirit of prioritising efficiency and efficacy in areas such as fraud, unlicensed activities, breach of fiduciary duties and protection of investors against vulnerabilities.

STAYING AHEAD OF THE CURVE

A constant feature of the future capital market will be its dynamism – the speed and frequency of change – which will present both growth opportunities and challenges for market participants and regulators. The proliferation of digital adoption in the capital market will give rise to more sophisticated forms of investment fraud and market misconduct. Growing complexities in investment products also expose investors, particularly those who are vulnerable and more susceptible, to exploitation, poor sales practices and misleading financial advice. Senior investors, in particular those with low financial literacy or those suffering from diminishing cognitive capacity, could be more vulnerable to financial abuse. There is also growing recognition globally that personal circumstances, be it the physical, mental or emotional state of a person, can affect judgement and decision-making capacity in financial transactions, making such person vulnerable to harm at the hands of irresponsible or purported financial service providers^{8,9}.

The intermediation landscape is expected to be more modular and fragmented as new entrants equipped with digitally enabled business models continue to compete with traditional businesses. As intermediaries adapt their business models to remain relevant and competitive, the lines are blurring between entities undertaking banking and capital market activities. In turn, this growing trend poses new risk and challenges to investor protection, resulting in the need to rethink the effectiveness of the existing regulatory approach. The concept of entities versus activities-based regulatory architecture for the capital market will therefore require greater refinement in order to minimise regulatory arbitrage. It will also provide a level playing field for all intermediaries. A more efficient matrix form of supervision will also be required to balance the increasing focus on capital market activities with sufficient entity-level accountabilities.

The expansion of the supervisory scope demands greater efficiency as more businesses evolve in their business models and more entities expand into capital market activities. To become more efficient, regulators are taking a more proactive approach – one that focuses on preventive measures, rather than spending significant effort to address the repercussions of misconduct. As such, there is growing emphasis on governance to shape the culture and conduct of market participants. In this regard, more proactive engagements with market participants will be important to respond to key risks and changes in the market in a more agile manner. There is also a growing focus among global regulators to leverage supervisory technologies (SupTech) to improve the regulator-regulatee interaction and sharpen their focus on key risk areas.

⁸ Senior Investor Vulnerability, IOSCO, March 2018.

⁹ Financial Lives 2020 Survey: The Impact of Coronavirus, Financial Conduct Authority, 2020.

Diagram 19

PRIORITISING EFFICIENCY AND OUTCOMES IN THE FACE OF NEW CHALLENGES

Changing demography and market landscape brings new challenges, in particular to investors



Greater imperative for regulatory efficiency and outcomes

Focus on emerging investor vulnerability, including what they are and how to collectively approach these with the industry

Fit-for-purpose regulatory architecture for effectiveness of micro and macro prudential supervision and conduct Supervisory efficiency to achieve greater effectiveness and proactiveness, amid new developments and greater use of technology Swift, effective and targeted enforcement to achieve deterrent impact where it matters and with efficient use of resources

Source: SC.

Similarly, in the area of enforcement, regulators are investing in technology and resources to enable more effective intelligence capacity as well as earlier detection of harm, misconduct and breaches before they escalate into adverse consequences. Some regulators are also making strategic changes in how they approach investigations to shorten investigation timeframes, resulting in more effective enforcement outcomes. These include efforts to improve process efficiencies and establish cross-sector collaboration as well as utilise tools such as enforcement undertakings and wells notices. In line with this, the SC's enforcement approach will be swift, effective and targeted. This will require a shift towards a more focused and outcomes-orientated approach in order to incentivise the right behaviours on the part of market participants.

To become more efficient, regulators are undertaking a more proactive approach – one that focuses on preventive measures, rather than spending significant effort to address the repercussions of misconduct. As such, there is growing emphasis on governance to shape the culture and conduct of market participants.

STRATEGIC CONSIDERATIONS

4.2.1 ENHANCING FOCUS ON PROTECTING INVESTORS AGAINST VULNERABILITIES

As the capital market moves forward with new technologies and increases in complexity, regulators globally have started focusing on the impact of such changes to investors – especially when it can exacerbate vulnerability to fraud and harm. The underlying reason for the state of vulnerability can be multifaceted. For example, the financial circumstance of investors, along with several other factors such as experience, age, education, literacy and socio-economic background, may determine their level of vulnerability. Geographical location, changing personal circumstances such as bereavement and illness can also be determining factors in increasing investors' susceptibility to fraud and malfeasance by unlicensed persons.

Diagram 20
CHANGING DEMOGRAPHY AND MARKET LANDSCAPE EXACERBATES INVESTOR VULNERABILITIES (ILLUSTRATIVE)



Source: SC.

Senior investors in particular face greater risk of becoming victims of fraud, being misled or taken advantage of. As investors age, they may face new challenges such as cognitive impairment due to health and age reasons as well as mental health issues arising from greater social isolation¹⁰. For some senior investors, these challenges are compounded by a background of limited education and financial literacy – all of which can affect their judgement and decision-making capacity when it comes to investments. This is already apparent in Malaysia – senior citizens are often targets of various syndicates, ranging from phone scams and sweepstakes to more complex scams which involve impersonation of figures of authority. Most scams or fraud activities target the life savings of these senior citizens, regardless of net worth, and take advantage of their vulnerabilities.

There are also segments of investors who are vulnerable due to the lack of decision-making capability. This could include both individuals and entities that lack the knowledge or understanding of financial products and investment experience. Losses experienced by entities that lack knowledge often impact the savings of the individuals they represent. The growth in digitisation within the capital market has also exposed vulnerabilities among investors who lack the knowledge to protect themselves in the digital age.

Today, intermediaries and institutions are expected to treat all investors fairly, have clear and effective disclosures, and where necessary, conduct suitability assessments. Investor programmes, events and alerts have been put in place to raise awareness about fraud and scams. There are also multiple programmes to raise the bar on investment literacy. Moving forward, there is greater imperative to enhance the regulatory approach to cater to investors who are more susceptible to vulnerabilities, especially senior investors. This becomes more important as Malaysia's population ages and more Malaysians are expected to make decisions on their retirement savings – how they invest or drawdown their savings during retirement.

Securities regulators globally have mainly focused on senior investors. In a related IOSCO survey, most jurisdictions still do not have explicit legislation or regulatory requirements focused on senior investors as many indicated that senior investors are protected under general rules for investors.¹¹ Some jurisdictions have started making changes, with notable considerations outlined in Diagram 21. Most jurisdictions are focusing on investor education to empower vulnerable investors to protect themselves as well as making available dedicated resources or launching research projects to better understand issues faced by senior investors. Some have guidelines identifying best practices when interacting with senior investors – the requirements of which vary across different jurisdictions. Some require additional steps to be undertaken when onboarding senior investors, while others require a more comprehensive approach in the sales and post-sales practices. In designing the regulatory approach for the SC, there is a need to consider issues and challenges faced by vulnerable investors in Malaysia as well as the capabilities of market participants to identify and cater to vulnerable investors.

Within the SC's supervisory and enforcement functions, focus will be directed towards early detection and action against misconduct relating to vulnerable investors. Actions to deter misconduct using the variety of statutory tools designed to protect investors will be considered at the onset. Industry collaboration, which is a pillar of the SC's regulatory outreach, will continue to be prioritised along with developing best practices to shape behaviour among market participants. These efforts will be underpinned by stronger advocacy in investor education programmes to boost awareness and understanding on risks and issues relating to vulnerable investors. This includes adopting greater use of social media platforms to alert vulnerable investors on possible scams or unlicensed activities and enhancing investor outreach programmes to be more targeted towards senior and rural investors.

Social Isolation In Older Malaysians: Prevalence and Risk Factors, Rahimah Ibrahim, Yadollah Abolfathi Momtaz, Tengku Aizan Hamid, 2013.

Senior Investor Vulnerability, IOSCO, March 2018.

Diagram 21

MEASURES UNDERTAKEN BY GLOBAL SECURITIES REGULATORS FOR VULNERABLE INVESTORS, IN PARTICULAR SENIOR INVESTORS



- Events and programmes designed to educate and raise awareness of vulnerable investors on how to protect themselves.
- Public outreach activities, enabling the public to ask questions or submit complaints.



- ► Guidelines or guidance on treatment of vulnerable investors e.g. sales practices, appropriateness of recommendations, training for workforce and marketing communications.
- In some jurisdictions, legislative changes are made to combat maltreatment of senior and other vulnerable investors.



- ▶ Thematic review on risks for specific vulnerable investors.
- Risk-based supervisory framework to include vulnerable investor protection as a dimension e.g. identifying institutions to focus more on given their target customer segment, past records and complaints.



- Vulnerable investor protection as an enforcement priority.
- High-deterrence enforcement to deter poor behaviour and misconduct involving vulnerable consumers e.g. stiffer actions.

Source: Internal Analysis, SC, Based on publicly available information from Financial Conduct Authority, IOSCO, Monetary Authority of Singapore as well as US Securities and Exchange Commission.

4.2.2 REVIEWING THE REGULATORY ARCHITECTURE FOR THE CAPITAL MARKET

For a regulatory architecture to be effective, it must be fit-for-purpose. An effective regulatory regime is essential to enable the country to reap the benefits of regulation in driving the development of the capital market and improve confidence. The mandate of the regulator should also be set out succinctly with clear objectives, operational autonomy, effective powers and sufficient resources. Globally, different jurisdictions have adopted different architecture for oversight in various areas, among them, micro prudential supervision, macro prudential policies and supervision of conduct of business.

Firstly, a well-designed regulatory architecture can minimise the risk of regulatory arbitrage as consistent standards will apply regardless of an entity's classification, be it a bank, insurance company, securities broker, asset manager or other organisation. Secondly, as businesses evolve, new business structures or features in their products and services may straddle both banking and securities regulation. Thus, an entity may be regulated as a financial institution but the new product or services could be regulated under securities laws.

In the case of banking and securities regulation, there are currently three archetypes of entities within the capital market:

Archetype 1 Standalone entities that perform capital market activities and are regulated by the SC, such as boutique corporate finance firms and RMOs.

Archetype 2 Entities performing capital market activities as subsidiaries of a larger banking group. These entities are regulated jointly by the SC as well as BNM, and in some ways may face higher compliance cost.

Archetype 3 Entities, such as commercial banks, whose primary regulator is not the SC but conduct capital market activities such as fund distribution. Regulatory arbitrage is a concern as regulatory and supervisory requirements imposed on such entities may differ from those under the direct oversight of the SC.

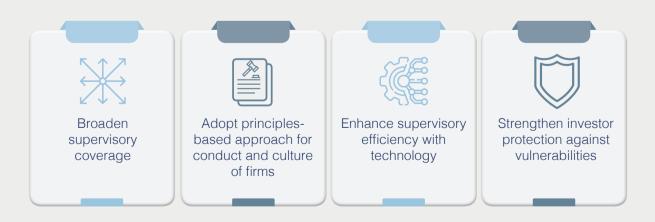
As the SC moves towards refining the regulatory architecture for the capital market, the SC and BNM will conduct a joint study to enhance the regulatory structure for the financial market, which will promote effectiveness of micro prudential supervision, macro prudential policies and supervision of conduct of business. The joint study will explore the feasibility of rationalising regulations on advisory services for banking, insurance and capital market products which will include the consolidation of licensing regime between FPs and FAs.

Irrespective of the archetype adopted in the future, continuous collaboration between the SC and BNM will be essential to ensure a holistic approach in managing systemic and financial stability in the financial market.

4.2.3 ENHANCING SUPERVISORY EFFICIENCY AND EFFICACY

Besides the abovementioned review of regulatory architecture to enhance supervisory effectiveness across the various business models and entities in the market, there is also a need for the SC to strengthen its supervisory function across intermediaries, institutions, markets and auditors and become more efficient as the capital market develops in scale, scope and sophistication.

Diagram 22SUPERVISORY FOCUS TOWARDS GREATER EFFICIENCY AND OUTCOMES



Source: SC.

Changes in how financial services are conducted will bring about new scopes in the supervision of market conduct to ensure the fair treatment of investors, with emphasis on investor vulnerabilities. For example, there will be a need to focus on the conduct of advisors as the landscape for investment advice evolves into differentiated models. Similarly in the development of SRI, there will be a need to focus on greenwashing risks, while in the growth of alternative marketplaces, there will be a need to expand the scope of market surveillance. In addition, there is a need to strengthen the SC's supervisory coverage across the intermediaries within the capital market, including FPs, investment advisors, corporate advisors and rating or pricing agencies.

In this regard, an approach which adopts proactive measures can better serve investors and market participants, while optimising the use of the SC's resources. Section 4.1.4 elaborates on the SC's plans to enhance its supervisory focus on the culture and conduct of capital market participants as regulations become more principles-based. This is premised on the belief that the culture of an entity shapes how it is governed and behaves, and that poor culture and values are often the root cause of an entity's failure to meet regulatory standards. Greater supervisory focus on culture and conduct would allow for more proactive management of culture, behaviour and conduct risk within the capital market. In line with this, the SC will outline expectations of governance standards for capital market participants and do more to communicate the findings of thematic or supervisory reviews to provide greater clarity of the SC's expectations.

In tandem, the SC will continue to pursue regular and proactive 'regulator-regulatee' engagements. Today, these engagements are conducted through various forums and platforms, covering areas related to innovation and topics that inform the SC's development and regulatory policies. Moving forward, engagements with market participants will also serve to strengthen alignment on standards and expectations of principles-based regulations as well as to ensure that communication channels remain open, as market participants evolve with greater self-regulation.

The AOB, which supervises auditors in Malaysia, will also enhance its supervisory effectiveness as expectations on auditors as well as audit quality increase and as auditors themselves increasingly adopt new technology when undertaking their work. For larger audit firms, the introduction of the Annual Transparency Reporting for identified audit firms in 2021 will promote greater transparency and accountability for audit quality. For smaller audit firms, the AOB intends to conduct greater engagements to raise the bar on audit quality.

There is also a need to expand the use of data and technology to enhance supervisory efficiency. This will enable more coverage, in particular over the conduct of the growing number of intermediaries and institutions, to safeguard investors without the need to scale up human resources extensively. Today, the SC adopts advanced analytics in the surveillance of markets and in the monitoring of CG adoption and disclosures. Insights derived from the use of analytics have not only brought about greater internal efficiencies but also enabled evidence-based regulatory measures and more efficient policymaking. Similarly, the AOB has initiated efforts on using data and analytics to better assess the risk profile of audit firms and PLCs to augment its supervisory focus. Globally, regulators have started using advanced data gathering and analytics to improve the monitoring of key risk indicators, enhance supervision of market conduct as well as provide better visibility of intermediary behaviours and practices. This entails greater efforts by regulators to automate data collection and develop analytics capabilities. The SC's priorities on this front will be further discussed in section 4.3.3.

4.2.4 ENABLING SWIFT, EFFECTIVE AND TARGETED ENFORCEMENT

Effective regulations that hold entities and individuals accountable as well as deter misconduct promotes investor confidence, and is a key factor in the development of efficient markets. A successful enforcement strategy can change behaviour, reduce transgressions as well as create an environment where fair and efficient markets can thrive. In order to optimise the deterrent effect of sanctions imposed, enforcement action needs to be swift and its outcomes certain. Timely enforcement interventions will also prevent misconduct from escalating and crystalising into detrimental effects on investors. As such, the SC's enforcement strategy will prioritise the utilisation of its resources in market segments that are susceptible to abuse and towards misconduct that impairs the operations of a fair and orderly market. To achieve the aforementioned enforcement outcomes, the SC will adopt a holistic approach across its enforcement value chain

Diagram 23SWIFT, EFFECTIVE AND TARGETED ENFORCEMENT APPROACH



Source: SC.

A. DEFINING A TARGETED ENFORCEMENT STRATEGY

Over the last decade, the SC focused on the vigorous enforcement of securities laws and active deterrence of capital market transgressions – this has seen significant enforcement focus on insider trading. Recognising the need for greater balance in enforcement focus across its mandate, the SC has in recent years started expanding its enforcement focus to include securities fraud, corporate misconduct, disclosure breaches as well as market manipulation. In tandem, the AOB has also stepped up enforcement actions and imposed sanctions on auditors to deter non-compliance with auditing standards and procedures, to mitigate the risk of future audit failures. These enforcement actions are in line with the SC's priorities on CG, market conduct and investor protection – particularly against fraud and scams arising from an increasingly digital landscape. To be more effective in enforcement outcomes that shape market behaviour, the SC and AOB will continue to refine and deploy a more targeted enforcement strategy.

A targeted enforcement strategy is one that is defined by enforcement priorities, capacity and risk appetite. Greater alignment of enforcement priorities to the insights derived across the regulatory value chain, ranging from regulations to authorisation to supervision, enables a more cohesive effort to shape industry behaviour while enabling greater synergies across the SC. With defined priorities, enforcement resources can be allocated more effectively, and where relevant, the use of cross-functional taskforces can be leveraged for greater regulatory efficiency. For example, a cross-functional taskforce was set up to enable the SC to respond to the increasing numbers of scams and unlicensed activities in the market in a more agile manner.

The SC's enforcement strategy will also be guided by the intended enforcement outcomes, which outlines key considerations to determine the course of regulatory actions taken – be it administrative sanctions, civil actions or criminal charges. These considerations include litigation risks as well as the level of desired deterrence to the offenders and other industry players. Moving forward, the SC will continue to expand the use of administrative sanctions and penalties to strengthen deterrence against market misconduct and breaches in securities law. The SC will also continue to pursue restitution as an effective enforcement tool that not only hold offenders accountable for financial losses suffered by victims, but also generate a deterrent effect. In recent years, the SC has stepped up efforts on disgorgement of illegal profits to compensate investors who have suffered losses as a result of transgressions.

The SC today adopts a set of criteria when triaging for the opening of a formal investigation. This shapes the use of enforcement resources as well as the type of enforcement actions to be undertaken, and typically considers, among others, the seriousness of the misconduct, public interest as well as the availability and quality of evidence to prove misconduct. Once a formal investigation is opened, the SC conducts the necessary investigations within a time charter defined by the complexity of the case.

To achieve swifter outcomes, there are opportunities for the SC to enhance parts of its enforcement value chain. For example, a more efficient triage process can lead to greater efficiency in enforcement actions. This can benefit from process improvement initiatives or a greater use of analytics. The efficiency of investigations can also be further enhanced through various other means, including the expansion of enforcement tools and through greater use of technology. For transgressions originating outside Malaysia, the SC will continue to leverage IOSCO Multilateral Memorandum of Understanding for cross-border investigation.

Efforts to expand the suite of enforcement tools will be pursued to expedite the investigation process and case resolution. For example, some jurisdictions offer prospective defendants the chance to explain themselves and offer information, where relevant, to dispute the facts put forth by the regulator. The use of such tools could potentially reduce time spent validating facts, thus expediting the investigation of a case. In another example, enforceable undertakings by companies or individuals provide the regulator with flexibility to negotiate the terms of an undertaking with the culpable party. Such tools can provide regulators with the balance needed to achieve the appropriate remedial outcomes of investor protection while still managing the timeliness of regulatory action. In this regard, the SC will explore more alternatives in enforcement solutions, relevant to the local context, which can enable greater expediency in the investigation or case resolution process.

Technological advancements will be a key enabler towards more efficient enforcement actions. In developed markets, advanced analytics play a critical role in detecting anomalies that may warrant additional inquiry – be it trading patterns, disclosure patterns in financial statements or behavioural patterns of intermediaries in their submissions to regulators. In some cases, advanced analytics are used to generate leads for swift enforcement actions. In this respect, both the SC and AOB will pursue the greater use of analytics to

enhance their ability in detecting anomalies. In addition, the greater use of digital tools will also enhance regulators' efficiency. In this respect, the SC will continue to increase adoption of technology to enhance analytical and traceability capabilities, build an in-house digital forensics lab to manage digital evidence and develop digital asset investigation capabilities.

B. ENABLING EFFICIENCY THROUGH GREATER SELF-REMEDIATION, TRANSPARENCY AND MEASUREMENTS

The pursuit of self-remediation and co-operation by individuals and entities involved in the SC's investigation and related enforcement actions can also contribute to greater efficiency and expediency of the enforcement process. The SC's introduction of self-reporting mechanisms, outlined in section 4.1.2, is intended to not only enable self-reporting, but also self-rectification in exchange for leniency or credit.

Communications with the general public and the industry will be pertinent as the SC progresses towards a swift, effective and targeted enforcement approach. Greater transparency of the enforcement approach and strategy will enable the public to better understand the SC's enforcement priorities as well as the objectives and rationale behind the SC's enforcement actions. This will promote confidence in the enforcement process. In this respect, the SC will pursue more dedicated reporting of its annual enforcement priorities and outcomes as the next step towards greater transparency. Along with this, the SC will also refine key enforcement efficiency measures to enable continuous improvement in achieving swift, effective and targeted enforcement actions.

4.3 EMBRACING THE DIGITAL AGE

The current digital revolution is being driven by a wave of changing consumer behaviour, heightened competition and demand for greater efficiency in an environment of tightening profit margins. While the digital revolution has enabled new experiences and opportunities for market participants, increasing technology adoption also brings with it emerging risks, including among others, cyber risk, risk of data breach, and Al-bias. Against this backdrop, regulators have begun to refine regulations around technology-enabled activities while transforming their own internal technology capabilities to achieve better regulatory efficiency and effectiveness. This section outlines the key regulatory considerations that the SC will take into account as both market participants and the SC continue to embrace the digital age.

THE STATE OF PLAY

The Malaysian capital market has seen significant growth in digital adoption over the last decade. Online trading has become sizeable, growing to 46.7% of the total equity and derivatives trading volume as at 2020, compared to only 21.9% in 2012. This was driven in part by greater industry digitision efforts and the entrance of digital-only brokers which have more than doubled the number of accounts opened in 2020 alone. Other aspects of the capital market have also seen greater digitisation. The proliferation of DIMs has catalysed growth in the asset management industry, resulting in ~200,000 new accounts opened since its inception in 2018. The growth of alternative investment has been largely driven by greater access to digital platforms, with ~450,000 accounts being registered at the three DAXs since 2019. Meanwhile, ECF and P2P financing platforms have collectively been used by ~31,000 investors since 2017¹².

¹² Internal analysis, SC, 2020.

Market participants have begun to take advantage of new technologies to enhance their capabilities in distribution channels, sales support and back office operations such as reconciliation and fraud detection. This is further enabled by cloud-based and as-a-service offerings ranging from software to platform to infrastructure, which have shortened the time needed to deploy new digital capabilities. The proliferation of data usage and the ability to mine large amounts of data may offer valuable insights and new opportunities. However, basic data hygiene issues remain a challenge and will have to be addressed to mitigate the risk of inaccuracies and erroneous reporting.

In 2017, cyber perpetrators threatened a potential large-scale distributed denial of service (DDoS)¹³ attack on numerous stock broking firms in Malaysia. Although this incident did not materialise in any trading disruption or financial losses, it highlighted the potential systemic impact of a cyber incident to the Malaysian capital market. Following the DDoS event, the reported number of cyber security incidents and threats continued to increase as regulated entities pivoted towards digital adoption. In 2020 alone, cyber security incidents increased by over three fold compared to 2019¹⁴. Most of these incidents were related to phishing and intrusions¹⁵, which could potentially lead to serious material and reputational loss to businesses.

Cyber resilience has therefore become imperative for all capital market participants and a significant priority for the SC. In 2018, the Cyber Risk Working Group was set up, consisting of representatives from the SC and market participants, to discuss cyber issues and strengthen industry resilience against cyber risk. Relevant market participants are also assessed annually on their general preparedness for cyber attacks through an industry-wide cyber security simulation exercise. This annual simulation exercise (Capital Market Cyber Simulation) was designed to simulate cyber incident scenarios as close to the real situation as possible. Although market participants have demonstrated improvements in their ability to detect, respond to and recover from cyber attacks, cyber threats have evolved as well. For example, cyber attackers have started to exploit loopholes in the supply chain as potential entry points into organisations that have solid cyber controls in place and weaponise Al for cyber attacks. Hence, it is important for the industry to continue elevating its cyber resilience and cyber readiness.

Along with digitisation efforts by the broader market, the SC has continued to pursue its own digitisation journey to automate interactions with market participants, augment policymaking as well as enhance its supervisory and enforcement efficiency. Regulatory submissions and reporting to the SC has been digitised and streamlined over the past decade through the LOLA Online Submission System and Common Reporting Platform (ComRep). Efforts to incorporate advanced analytics in the SC's regulatory functions have also begun, as outlined in section 4.3.3. These are being deployed to evaluate the adoption of CG practices by PLCs as well as to enable real-time analytics and relationship analysis in market surveillance. In addition, a pilot project on DLT was carried out to further the SC's understanding of this new technology. Efforts to build digital forensic capabilities are also underway to enhance the management of digital-based evidence for the investigation and prosecution of cyber-crimes. With the SC consuming more data than ever before, data analytics is being embedded even deeper into internal processes to deliver more effective, evidence-based policies and decision-making.

A DDOS hit occurs when the bandwith of a targeted system is flooded with traffic – typically from hijacked or infected machines – to overwhelm the system's capacity and render its services inaccessible.

¹⁴ Internal analysis, SC, 2020.

¹⁵ Cyber intrusions refers to the act of gaining unauthorised access to a computer system.

STAYING AHEAD OF THE CURVE

Evolving expectations on digital fundraising and investments have put pressure on capital market participants to improve their customer experience to remain relevant. With more consumers demanding tailored and personalised digital experience, a deeper understanding of individual clients and the ability to offer bespoke products to meet investor needs is required. For market participants to be able to achieve this at scale, they need to incorporate advanced technologies and data analytics effectively into their businesses and operations.

New solutions have also emerged to enable a more efficient and effective approach towards managing risks, client onboarding as well as regulatory reporting, compliance and monitoring. These new solutions, collectively referred to as RegTech, are gaining momentum globally. Since 2017, global investments into RegTech have grown by ~7.0 times to \$10.6 billion in 2020¹⁶. Various surveys have also shown growing interest from regional and global financial institutions to adopt RegTech moving forward^{17,18}. Most RegTech efforts by financial intermediaries can be seen in areas such as KYC, transaction monitoring, AML screening, fraud prevention, compliance risk analysis and regulatory reporting. Regulators across jurisdictions have also begun to play a bigger role in building greater awareness and promoting the growth of RegTech within their markets.

As data analytics gain traction among market participants, governance issues relating to the collection and usage of data have come to the forefront. Global regulators have begun setting standards on data protection and privacy to clarify and establish the rights of consumers over their personal data as well as the role of businesses in safeguarding the data of their consumers. The European General Data Protection Regulation (GDPR), for example, is a step in this direction. It provides consumers with greater control over their personal data, allowing them to extract it from an entity for their own use or to share it with another entity, or alternatively, request for erasure of their data.

Beyond the existing applications of technology in the capital market ('known knowns'), there is also a need to consider existing technologies that have potentially new applications ('known unknowns'), and technologies that have yet to be invented ('unknown unknowns'). As a result, globally, securities regulators routinely review regulations and policies with respect to technology risk management. Over the years, regulatory policies and guidance have evolved from covering traditional areas of technology risk management, such as technology governance, technology risk oversight and operational resilience, to newer developments on data privacy and security, responsible AI as well as cloud computing. In this respect, the SC will continue to take a multi-pronged approach to manage emerging technology risks by improving awareness of new technologies, understanding their applications and the potential risks to the capital market as well as designing appropriate regulatory policies.

Globally, securities regulators are advancing the use of data to inform regulatory policymaking and actions. In addition to the automation of regulatory reporting and processes as well as data collection for intelligence purposes, regulators are transforming their organisations, developing new capabilities, recruiting new talent and enhancing the way intelligence is used to take swifter regulatory actions. These efforts will pave the way for regulators to gain deeper insights into markets and investors as well as be more agile when responding to emerging risks and potential harm to investors, while being more efficient in the use of resources.

Pulse of Fintech H2'20, KPMG, February 2021.

¹⁷ Transforming Risk Management and Compliance: Harnessing the Power of RegTech, Hong Kong Monetary Authority, 2020.

Fintech, RegTech and The Role of Compliance, Thomson Reuters, 2021.

STRATEGIC CONSIDERATIONS

4.3.1 CATALYSING REGTECH

Enabled by the rapid advancement of technology, RegTech have emerged in recent years as solutions for market participants to automate and enhance the effectiveness of their compliance to regulatory requirements, risk management monitoring and regulatory reporting. Examples of RegTech adoptions across various jurisdictions can be found in many literatures, some of which are outlined in the Box Article: Objectives of RegTech. RegTech solutions which enable real time detection could allow issues to be addressed before they manifest into larger concerns, and early detection of emerging risks can mitigate reputational loss and regulatory sanctions. Automated RegTech solutions which remove manual intervention can reduce costs of operations and regulatory compliance while solutions that identify and mitigate fraud risks, including innovative KYC solutions, can deliver better outcomes for consumers.

Across most of these examples, RegTech solutions demonstrate benefits that can enhance the capital market's overall efficiency in mitigating material risks and maintaining market integrity. As the SC looks to promote greater self-regulation and discipline within the capital market, RegTech can play a role in enabling market participants to self-monitor compliance requirements and detect lapses in a timely manner. This includes moving beyond the traditional sampling approach to leveraging technology to audit complete sets of data and at more regular intervals.

Recognising the potential of RegTech, the SC aims to see greater use of data, analytics and technology by market participants to improve efficiency, maintain market integrity and protect investors. This means encouraging greater RegTech adoption among participants and facilitating growth in RegTech innovation. In doing so, the SC will adopt a three-pronged approach as outlined in Diagram 24.

Diagram 24 THE APPROACH FOR THE DEVELOPMENT OF REGTECH IN MALAYSIA



Expand RegTech Knowledge

- Collaborate with ecosystem partners to conduct outreach programmes
- Facilitate industry-wide dialogues on RegTech innovation



Catalyse RegTech Innovation

- Enable a collaborative platform with other regulators, market participants as well as ecosystem players, including accelerators and RegTech innovators
- Where necessary, provide regulatory guidance or clarification to facilitate the entry of RegTech solutions



Encourage RegTech Adoption

- Develop understanding of market needs for RegTech and the barriers or challenges to the adoption of RegTech
- Collaborate with market participants to implement pilots, particularly in emerging RegTech areas

Source: SC.

The SC has already begun engagements with market participants and technical experts to identify areas where RegTech has the greatest impact and understand the barriers or challenges of RegTech adoption. This will be a continuous process, where inputs from these engagements will be used to identify RegTech priorities and inform the development of RegTech in Malaysia. Collaborative efforts with the broader industry are key to expanding RegTech knowledge among market participants. This includes joint efforts to facilitate greater information sharing within the capital market about potential RegTech solutions, innovations and best practices. Greater knowledge will be fundamental to spur RegTech growth, innovation and adoption.

To facilitate greater RegTech innovation, collaborative platforms will be put in place to facilitate industry-wide discussions to synthesise innovative ideas on RegTech. Events such as hackathons or TechSprints will also be considered to catalyse RegTech development in areas that could potentially unlock significant value for the capital market. Where relevant, regulatory guidance can be provided to help RegTech solution providers navigate through regulatory requirements in the Malaysian capital market.

Box Article 2

OBJECTIVES OF REGTECH

RegTech solutions in various jurisdictions are broadly used to enable the three key objectives, outlined below:

Enhance compliance with regulatory requirements



RegTech solutions are often used to automate workflows to improve regulatory compliance, especially in areas that are resource-intensive and procedural in nature.

For example, RegTech solutions are deployed to automate the real-time monitoring of investors' margin and collateral exposure as well as identify suspicious transactions based on defined triggers. For investor onboarding, RegTech solutions such as biometric authentication and digital workflow solutions are often used to augment investor due diligence and KYC processes. In some cases, analytics are adopted to enhance investors' suitability and risk profile assessments.

Enhance risk management



RegTech solutions are often used to comb through large volumes of data to generate insights and monitor risks, such as compliance or conduct risk.

For example, analytics that evaluate the impact of market movements and liquidity needs can help intermediaries make more informed decisions when managing portfolio risks. In the case of managing conduct risks, intermediaries have also started to deploy voice analytics to identify potential misconduct by analysing conversations between employees and customers.

Automate and streamline regulatory reporting



RegTech solutions are often used by intermediaries to integrate reporting requirements into existing business processes, streamline data collection and automate the reporting process.

This serves to enhance the accuracy and timeliness of reporting, reduce duplication of efforts in reporting and enable intermediaries to redirect the cost of manual activities to higher-value areas that require human judgement. In some jurisdictions, machine executable regulations – regulations coded in such a way that machines can interpret the regulatory requirements and act upon it without human intervention – are also being explored to fully automate the reporting process from interpreting and adapting to changes in regulatory requirements to preparing and submitting the required data to regulators.

4.3.2 NAVIGATING EMERGING TECHNOLOGY RISKS

While there has been an overall improvement in the industry's level of cyber security awareness and preparedness, there are still areas that can be further strengthened. Market participants need to remain vigilant, particularly in the face of increasingly sophisticated cyber threats. While the ability to detect, respond and recover from a cyber-breach will still remain a core competency in the cyber resilience framework, focus will be expanded to strengthen industry's capabilities to proactively detect cyber threats and organise their cyber defence.

Market participants would need to strengthen their ability to detect and fend off incoming attacks within their own perimeters. To that end, ongoing efforts are centred around strengthening intelligence capabilities against potential cyber threats and breaches. Market participants should also consider more extensive self-assessment methods beyond penetration tests, such as red team or blue team exercises to identify vulnerabilities and areas to be strengthened, to complement annual cyber simulation exercises.

As the cyber capabilities of the industry mature, more proactive methods for cyber defence, such as using AI models to predict and respond to unknown cyber threats can also be explored. Moving forward, the SC will continue to work closely with the industry to develop an approach to enhance cyber defence in the industry.

The human risk factor should also not be underestimated. Regular cyber security awareness and training programmes should become the norm for all employees to reduce the risk of phishing, identity theft and other social engineering threats. Market participants should also ensure that cyber security factors become increasingly embedded in the overall design of their top-to-bottom technology stack. This would help raise the level of cyber hygiene within their environment and reduce the risk of malicious intrusions into the system. For market participants considering deployment of cloud-based or as-a-service capabilities, they should be mindful that the continued responsibilities of managing cyber risks still remains with them. To further strengthen the industry's cyber posture and provide further regulatory guidance, the SC will be looking to develop a framework to regulate technology risks more holistically.

The increasing use of cloud-based services also poses several risks to intermediaries and the industry. Greater reliance on virtual platforms by intermediaries makes them potentially more vulnerable to operational disruptions – any disruption to cloud services may grind operations to a halt and potentially cause financial loss for intermediaries and investors. A single cyber incident at a cloud service provider could also potentially affect multiple intermediaries that subscribe to the same cloud service provider. Provisions in the *Licensing Handbook* currently cover some elements related to the risk of outsourcing to such providers. However, there are other sources of risk that intermediaries need to be aware of, including potential vulnerabilities due to integration with legacy systems and the risk of compromised credentials. Intermediaries utilising such services should put in place a suitable risk management framework and take measures to mitigate related risks, including having internal policies for cloud outsourcing and cloud security as well as trainings for employees.

The practice of market participants collecting and utilising increasing amounts of data, in particular the data of their clients, has become an area of growing concern. The privacy of clients is of paramount importance. In addition to ensuring that only authorised parties are allowed access to appropriate levels of client data, clients' data privacy and usage rights, as enshrined in the *Personal Data Protection Act 2010* (PDPA) and all other relevant regulations, should also be respected and upheld. This is particularly important as market participants, in addition to utilising these data internally, begin to also collect and share data from and with third parties as they aim to enrich their own offerings. Furthermore, data which is no longer relevant should be appropriately retired, disposed of or archived to prevent unnecessary mishap.

Closely related to the topic of data privacy and confidentiality is the movement for data portability and self-sovereignty as consumers are demanding increasing control over their own data. For the capital market, this could include data such as transaction history and investment records. The implementation of the GDPR created a wave of technology enhancements in Europe to ensure compliance. In anticipation of emerging regulations and standards in this area, market participants should begin internal analysis and preparations in order to be able to comply with such regulations and standards as they arise. This would include being able to extract client data in a timely manner upon request and providing it in a portable and machine-readable format.

The increasing usage of technology and analytical insights among market participants could also give rise to interesting ethical considerations and quandaries which may not have existed previously. For example, while gamification cues and features could be useful in encouraging regular savings behaviour in users, the same excessive use of such cues and features could also drive users towards reckless investment behaviour, resulting in unintended consequences. If not supported by the right risk assessment framework and parameters, the same digital distribution platforms which can help market participants easily reach and onboard a wider client base as well as enable greater financial inclusion, might result in a deluge of overleveraged issuers.

On the other hand, as more data is used to assess credit risk profiles, biases in data and analytical models could result in certain issuer segments being unfairly excluded. This is potentially exacerbated by the use of AI or machine learning methods, which remain largely 'black box' solutions. In this respect, the SC may consider issuing relevant guidance with a view towards setting principles and regulatory expectations on the increased utilisation of data analytics and AI in the market. This may include more structured governance over the usage of data analytics and AI, ethical considerations, handling of biases, protection of investor rights over their data as well as requirements for ongoing risk management and monitoring.

While the SC is supportive of the use and further adoption of advanced technologies by market participants, it must be stressed that this needs to be accompanied by appropriate risk assessment and monitoring frameworks to test and refine the outcomes of such uses of technologies. In recent years, the SC has collaborated with market participants to enable the execution of certain pilots and proof of concepts of innovative ideas and products, and will continue to do so in the future. Industry standards may also be defined, should the need arise, to serve as a reference and minimum baseline for certain practices. The SC will also continue to encourage dialogue and information sharing between regulators and market participants in order to stay abreast of emerging risks.

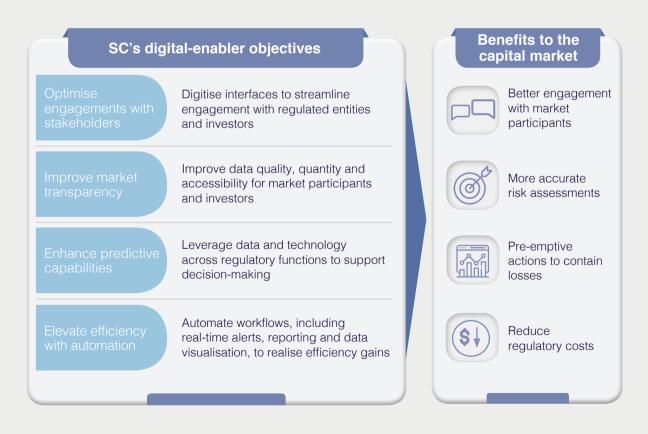
4.3.3 INTEGRATING DATA AND TECHNOLOGY ACROSS THE REGULATORY **VALUE CHAIN**

The digital transformation is not only changing how businesses operate, but how regulators perform their regulatory functions. Greater use of data and technology will continue to reshape how regulators interact with their regulated entities as well as how regulators go about understanding and regulating new techniques adopted within their respective markets. The growth in data has also changed how regulators collect, store and use data to perform their regulatory functions. Increasingly, regulators are adopting advanced analytics to sharpen their regulatory focus and efficiency.

This section discusses the role of SupTech in enhancing the SC's regulatory efficiency and effectiveness. This has become increasingly pertinent, as the nation moves forward with its digital agenda. To regulate an increasingly digital capital market, the SC will need to expand its use of data and technology. This will also complement the adoption of RegTech within the industry. The use of RegTech and SupTech will enable both market participants and the SC to collect and harness more data to generate insights that will benefit the broader industry. The promotion of better risk management through RegTech will also complement the SC's SupTech efforts in predictive supervision.

Data and technology will be key enablers to support the SC's vision of becoming more principles-based and outcomes-focused. In line with this, the SC will be crafting its technology and analytics roadmap to enable the desired outcomes as outlined in Diagram 25.

Diagram 25 THE SC'S DIGITAL-ENABLER OBJECTIVES WILL BENEFIT CAPITAL MARKET **PARTICIPANTS**



Source: SC.

The SC will build on ongoing efforts to pursue greater digitisation to optimise engagements with stakeholders. Functionalities of existing platforms such as the ComRep, the Electronic Licensing Application (ELA) and the LOLA Online Submission System, will be expanded to cover a wider range of regulatory submissions and enhanced with more dynamic capabilities. Moving forward, the SC will also prioritise the digitisation of stakeholder touchpoints that are manual or require multiple hardcopy submissions.

To improve market transparency, greater sharing of market information will be pertinent. This would entail enhancements to the type of information shared to the public and the technologies underpinning how such information is shared. For example, APIs have been used by some regulators to enable the direct integration of data with applications used by investors and intermediaries. In some jurisdictions, technologies such as chatbots and machine-readable regulations are being developed to help investors and intermediaries navigate through regulatory documents and processes more efficiently. These technologies will be explored by the SC to help deliver greater transparency outcomes and better engagements with the industry.

As the SC's supervisory scope widens and the number and types of intermediaries increases, traditional sampling methods will also become less effective. In this regard, technology can be used to analyse data more effectively to better identify high risk areas within the capital market. Technologies to analyse larger volumes and wider sources of data, including those from non-traditional sources, may be used to generate insights into areas such as misconduct analysis, market and corporate surveillance as well as systemic risk monitoring. These technologies may also be used to enhance existing or new methods of supervision and provide oversight over regulatory areas which were not previously possible using traditional methods. In addition, models may also be developed to identify areas with higher risks of misconduct in the market, enabling pre-emptive actions to be taken to reduce risks in those areas and contain potential losses.

The SC will also continue to automate regulatory workflows to realise greater operational efficiencies. Regulatory activities that are more procedural in nature and require repetitive manual labour, such as creating reports and generating alerts for further investigation, may be automated through algorithms and robotic process automation²⁰. This will not only eliminate the risk of human error and enable faster outputs, but also free up supervisory resources to focus on higher-value supervisory activities in areas which require qualitative judgement and engagements with intermediaries.

The digital transformation is not only changing how businesses operate, but how regulators perform their regulatory functions. Greater use of data and technology will continue to reshape how regulators interact with their regulated entities, and how regulators go about understanding and regulating new techniques adopted within their respective markets.

Robotic process automation enables machines to record tasks performed by humans on their computers, to be replicated and executed without human intervention.

GOVERNANCE IN A GLANCE: THE USE OF AI TO MONITOR CG

Since 2018, the SC has leveraged an internal system – Governance in a Glance (GiG) – which uses AI to monitor the adoption of the MCCG and evaluate the quality of CG disclosures by PLCs.

The AI uses natural language processing and machine learning technique to extract data on the adoption of the MCCG best practices as well as CG disclosures and evaluate these disclosures against predetermined parameters. The evaluation results are then summarised on an interactive dashboard.

KEY OBJECTIVES OF GIG



Enable efficient monitoring of the MCCG adoption and the evaluation of CG disclosures



Automate the extraction of data from the annual CG disclosures across all PLCs, which was previously a manual and resource intensive exercise



Gather insights on CG practices, including areas which may require regulatory intervention



Enable the SC to take evidencebased regulatory measures to improve CG culture and practices

4.1 EMBEDDING SHARED ACCOUNTABILITY WITHIN THE CAPITAL MARKET

4.1.1 PROMOTING RESPONSIBLE BUSINESSES

- a. Strengthen board leadership through effective board composition.
- b. Develop capacity for ESG leadership in corporates.
- c. Evaluate approach for investor protection in relation to the management of disclosures and data as well as ESG governance and risk management.

4.1.2 INCULCATING GREATER SELF-REGULATION

a. Formulate strategies, including guidance, to incentivise greater voluntary self-reporting or co-operation.

4.1.3 ENCOURAGING GREATER INVESTOR ACTIVISM AND ADVOCACY

- a. Accelerate shareholder activism and stewardship, focusing on greater use of digital tools and platforms.
- b. Implement initiatives in relation to the *Malaysian National Strategy for Financial Literacy*, together with BNM and other members of FEN.

4.1.4 MOVING FURTHER TOWARDS PRINCIPLES-BASED REGULATIONS

- a. Review regulations and make provisions for principles-based regulations.
- b. Enable regulated entities through the implementation of strategies to engage, educate and guide market participants.
- c. Calibrate supervision and enforcement approaches in tandem with principles-based regulations.

4.1.5 ENHANCING THE TRANSPARENCY OF THE SC'S REGULATORY APPROACH

a. Enhance communication of regulatory principles, priorities and dimensions of decision-making.

4.2 PRIORITISING EFFICIENCY AND OUTCOMES

4.2.1 ENHANCING FOCUS ON PROTECTING INVESTORS AGAINST VULNERABILITIES

- a. Elevate supervisory and enforcement focus on misconduct relating to vulnerable investors, particularly senior investors.
- b. Collaborate with industry to identify investor vulnerabilities and best practices to protect vulnerable investors.
- c. Strengthen investor outreach programmes for vulnerable investors.

4.2.2 REVIEWING THE REGULATORY ARCHITECTURE FOR THE CAPITAL MARKET

- a. Conduct joint study with BNM to enhance the regulatory structure for the financial market.
- b. Review licensing and registration framework in tandem with the review of regulatory architecture.

4.2.3 ENHANCING SUPERVISORY EFFICIENCY AND EFFICACY

- a. Expand supervisory coverage across the industry as well as strengthen capabilities on emerging risks arising from SRI and innovation.
- b. Issue governance standards for capital market participants and enhance supervisory focus on culture and conduct.
- c. Expand the SC and AOB's SupTech capabilities to enhance supervisory efficiency.

4.2.4 ENABLING SWIFT, EFFECTIVE AND TARGETED ENFORCEMENT

- a. Institutionalise annual identification of the SC and AOB's enforcement priorities, in alignment with the broader priorities of the SC.
- b. Allocate resources more effectively, in alignment with the SC's enforcement strategy.
- c. Enhance the efficiency of enforcement triage and investigation, including through the exploration of new enforcement tools and use of advanced analytics.
- d. Enhance digital enforcement capabilities, including in digital forensics.
- e. Enhance communications on enforcement priorities, strategies and outcomes.

4.3 EMBRACING THE DIGITAL AGE

4.3.1 CATALYSING REGTECH

- a. Deepen understanding about RegTech within the industry through outreach programmes and industry-wide dialogues.
- b. Catalyse RegTech innovation through collaboration with other regulators, market participants and ecosystem players.
- c. Encourage the industry to adopt RegTech through education, engagements and jointimplementation of pilot projects.

4.3.2 NAVIGATING EMERGING TECHNOLOGY RISKS

- a. Strengthen intelligence capabilities of the SC and the industry to enhance preparedness against potential breaches and imminent threats.
- b. Develop an approach to strengthen cyber defence capabilities in the industry.
- c. Develop a framework to regulate technology risks more holistically.
- d. Develop guidance, setting out principles and standards, on the utilisation of data analytics and Al.

4.3.3 INTEGRATING DATA AND TECHNOLOGY ACROSS THE REGULATORY VALUE CHAIN

- a. Strengthen analytics and predictive capabilities to augment policymaking and risk surveillance.
- b. Enhance automation of process workflows to elevate efficiency across regulatory activities.
- c. Improve interface with regulated entities and market participants.