

BANKINGINSIGHT

IDEAS FOR LEADERS | JUNE 2023

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Crypto's 'Whoa, Nelly!' Moment

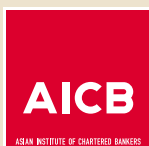
Basel is Cracking the Whip with its New Global Standard

Countdown begins to bridle an unregulated asset class.

Will Carbon Capture
Find a Captive
Audience?

**CREATIVE COACH,
HALLUCINATING HELP, OR
MISLEADING MUSE?**

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ALGOS
GANG UP**

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Editor's Note

Time for a Spruce Up

The depth and reach of several crises over the past years have forced us to do some soul-searching. As global events become trickier to forecast, the conventional approach and model variables relied upon by banking are fast becoming obsolete. To help business and society cope with these shocks and uncertainty, we must adjust to new forms of chaos.

This issue of *Banking Insight* is designed for just that.

Our cover story, *Crypto's 'Whoa Nelly!' Moment: Basel is Cracking the Whip With Its New Global Standard*, signals that there's a new sheriff in town. We give you the run-down on future governance of the 'Wild West' crypto market that's tasked to rein in systemic risk from an increasingly volatile asset class.

Other aspects of banking and finance are also experiencing synchronistic movements.

At a time when quantum computing is still a distant consideration for many leaders, Christophe Barel of the Financial Services Information Sharing and Analysis Center is a step ahead. He urges us "to be resilient in the face of tomorrow's threats" by investing in resilient technologies and security systems that will future-proof us against vulnerabilities that are yet to come.

The answers to some of these banking quandaries can be found in our exclusive interview with Chartered Banker, Mohd Rashid Mohamad, Group MD cum Group CEO of RHB Bank Berhad, who concurrently serves as an AICB Council Member and a member of the AICB Human Resource Committee. He ponders the changing landscape of banking and predicts that there will be "an intensified

At a time when quantum computing is still a distant consideration for many leaders, Christophe Barel of the Financial Services Information Sharing and Analysis Center is a step ahead. He urges us **"TO BE RESILIENT IN THE FACE OF TOMORROW'S THREATS"** by investing in resilient technologies and security systems that will future-proof us against vulnerabilities that are yet to come.

adoption of new technologies such as generative artificial intelligence technology that has gained traction, most notably ChatGPT. In this respect, there will be multiple use cases that can potentially be adopted across the banking value chain to be deployed in the near future."

As environmental, social, and governance (ESG) investing continue to evolve at lightning speed, it's clear that executives have their work cut out for them in the race to net zero. Our article, *What's The Right ESG Framework For You?*, is a primer in choosing the most suitable reporting standard for your organisation. This is coupled with Bangor Business School's Robert Souster's article on navigating the social/environmental dichotomy. In *ESG and Sustainability Reporting: Challenges for Banks*, he warns that "the bank has a duty to its client and a broader duty to the environment, and these obligations are difficult and often impossible to reconcile."

There's no doubt that banking is due for some serious spruce up.

The Institute is here to work with and for our members, every step of the way. *

The Editor



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Editor - Edward Ling

Assistant Editor - Shireen Kandiah

Editorial Assistant - Felicia Song

Writers - Angela SP Yap, Julia Chong,

Kannan Agarwal, Dr Amanda Salter,

Shein Shanin

PUBLISHER

Asian Institute of Chartered Bankers

197701004872 (35880-P)

(formerly known as

Institut Bank-Bank Malaysia)

Levels 11 & 12, Bangunan AICB

10 Jalan Dato' Onn

50480 Kuala Lumpur, Malaysia

Tel +603 2602 6833 / 1300 88 6833

Email enquiries@aicb.org.my

PUBLISHING CONSULTANT

Executive Mode Sdn Bhd (317453-P)

Tel +603 7118 3200

Fax +603 7118 3220

Email info@executivemode.com.my

PRINTER

Empress Print Sdn Bhd

No. 33, Jalan PBS 14/8

Taman Bukit Serdang, Seksyen 14

43300 Seri Kembangan

Selangor Darul Ehsan

Tel +603 8959 9233

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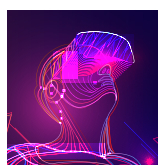
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Hack Me If You Can

Stress-testing the system takes on an added dimension as Bank Negara Malaysia (BNM), in partnership with the Financial Intelligence Consultative Group (FICG), announced its AML/CFT Hackathon 2023 from 1–28 June 2023.

The Hackathon, now in its third instalment, builds upon past efforts by the BNM and the Australian Transaction Reports and Analysis Centre following the International Financial Intelligence Unit Codeathon in 2017 and the ASEAN-Australia Codeathon in 2018. Prototypes developed from past iterations included enhancement of anti-money laundering/counter-financing of terrorism (AML/CFT) compliance and artificial-intelligence-based suspicious matter reporting. In its press release on 20 April, Marzunisham Omar, BNM Deputy Governor said: “Global challenges require global solutions. Financial crime is a global issue, and we all have a role

to play in maintaining the integrity of the financial system. We are pleased to continue our long-term partnership with FICG through this search for creative solutions to curb financial crimes, particularly scams, from talented individuals across the region.”

The Hackathon features workshops and mentoring sessions run by cybersecurity and AML/CFT experts for participants, who will work in teams to prototype innovative digital solutions in response to real-world pain points in combating financial crimes. Pitches will be evaluated in three separate tracks to reflect different categories of participants – public sector, private sector, and an open category – with the best team winning a USD5,000 prize and the chance to present their prototype to senior financial intelligence officials in the region.



ASEAN'S ETHICAL FINANCE FRONT

Building on last year's success, the Asian Institute of Chartered Bankers and the Global Ethical Finance Initiative jointly organised the Ethical Finance ASEAN 2023, which took place on 30 March 2023. Themed 'Financing Transition', the virtual summit convened regional and global experts on sustainable and responsible finance, exploring how financial institutions in the region can support Southeast Asian economies in their transition towards net zero. Discussions centred on the ASEAN Sustainable Finance Taxonomy, the importance of a social dimension to financing, nature and biodiversity, the role of Islamic finance, and the professional skills needed to deliver the transition.

Attracting close to 700 delegates from over 20 countries, this year's summit was a deep-dive into critical sustainability issues for regional players, including the ASEAN Sustainable Finance Taxonomy, a just transition and the importance of a



social dimension to financing, the role of Islamic finance, and the professional skills needed to deliver such transition. Included in the esteemed line-up of global speakers were Tatiana Didier, Senior Economist, World Bank Group, USA; Samir Suleymanov, Principal Lead, Climate

Finance, COP28, USA; Omar Shaikh, Managing Director, Global Ethical Finance Initiative, UK; Remi Fernandez, Specialist, Human Rights & Social Issues, Principles for Responsible Investment, and Sylvi Gani, Director, Financing and Investment, PT Sarana Multi Infrastruktur, Indonesia.

CEO EXPECTATIONS STACK UP



Only 20% of Malaysian CEOs believe **growth would improve during the year ahead**, an about turn from 2022's 91%, which points to an unprecedented level of pessimism.

About 50%

expect some degree of impact (moderate, large or very large impact) from **climate change** in the next 12 months—primarily in supply chains.



51%

don't think that their companies are **viable a decade** from now.

51%

say that leaders in their organisation do not often encourage **debate and dissent**.



57% say they **don't plan on mitigating the physical risks of climate change** through internal carbon pricing.

63%

of Malaysian CEOs believe that **regulatory change** will be the biggest potential source of industry disruption.



69% say that leaders in their organisation **did not often tolerate** small-scale failures.

SOURCE: PwC's 26th Annual Global CEO Survey for Malaysia, January 2023.

'THIS MESSAGE IS NOT APPROVED'

In January 2023, employees from a major investment bank fined its own bankers and clawed back salaries ranging from a few thousand dollars to over USD1 million per employee. The fines imposed on its bankers came after the lender was fined USD200 million by the US Securities and Exchange Commission (SEC) for unauthorised business-related communications using WhatsApp. The SEC and Wall Street's Financial Industry Regulatory Authority mandate that all broker-dealer records be monitored on approved digital channels. WhatsApp and other messaging apps like Signal are not approved digital channels as messages on these apps can be deleted by users.

Back in September 2022, the SEC imposed a groundbreaking USD1.8 billion fine on 16 financial firms after a probe uncovered widespread discussions of deals and trades on their personal devices and apps.

A month later, sources told *Reuters* that the SEC investigation had expanded to include investment funds and advisers. The news agency also reported that some of the banks that were fined had informed employees of future pay and bonus docks if they were found to have used unauthorised communication channels in the securing of deals and investments.

Back in September 2022, the SEC imposed a groundbreaking USD1.8 billion fine on 16 financial firms after a probe uncovered widespread discussions of deals and trades on their personal devices and apps.



LITTLE PROGRESS, LITTLE CONSENSUS

The Green Future Index 2023, *MIT Technology Review's* annual ranking of 76 countries and territories, measures the degree to which these economies are pivoting toward clean energy, industry, agriculture, and society through investment in renewables, innovation, and green policy.

Scored across five pillars – carbon emissions, energy transmission, green society, clean innovation, climate policy – the research comprised in-depth secondary research and analysis along with interviews with global climate experts. Key findings from the report:

GREEN LEADERS REVEAL MORE CONSISTENCY THAN PROGRESS.

All but three countries in the top ranks for 2023 — Green Leaders — were in the same cohort for 2022. Iceland remains top-ranked, and only one of the top 10 (South Korea, rising from 10th place to eighth) was not European. All Green Leaders retained their low-carbon attributes, but roughly half saw scores decline during the past year. This suggests that although efforts to reduce carbon in their economies are increasing and policy work is strengthening, early returns are diminishing.

JUMPING AROUND IN THE GREENING MIDDLE.

The 20 countries of the Greening Middle put sustainable policy formulation into action, and many moved forward substantially. These include emerging economies that were able to link sustainable policies to economic incentives, including South Africa (in 25th place for 2023, up from 31st) and Uruguay (26th, up from 38th in 2022). As in past years, the highest-ranked emerging economy for the Green Future Index 2023 is Costa Rica, in 24th place.



WEALTH MATTERS. Despite notable efforts to link economic and sustainable development, emerging economies continue to fare poorly in the index. Correlating rankings with GDP per capita reveals an uncomfortable truth: wealth contributes significantly to a country's ability to define its low-carbon future.

ECONOMICS ALONE DOES NOT DEFINE THE FUTURE.

Seventeen of the 35 countries that improved scores in 2023 were poorer countries. Argentina and Indonesia saw the biggest increases of all countries for 2023, moving 20 and 21 places respectively, placing them in 48th and 49th overall. Significant commitment to improving a single pillar was behind both increases: Argentina's green society score and Indonesia's carbon emissions score.

THE UNBEARABLE WEIGHT OF CARBON.

Economic overreliance on fossil fuel production or natural resource extraction contributes to lower scores. Most Climate Laggards are weighed down by carbon-intensive industries. Australia is notable for beginning to free itself from its carbon-intensive economy and new policy-focused business incentives allowed it to jump 10 places to 42nd place. Malaysia ranked 68th from 65th although it was noted that the country is "not without significant sustainability aspirations".

Rolling Up Sleeves in SVB Aftermath

As the dust starts to settle on the Silicon Valley Bank (SVB) buccaneer saga, the US Financial Stability Oversight Council (FSOC) has proposed guidelines ensuring nonbank financial institutions come firmly under greater regulatory supervision in order to avoid future similar threats to the financial system.

The Council, chaired by Treasury Secretary Janet Yellen and 15 other members including Federal Reserve Chair Jerome Powell, issued a new proposed guidance for public comment on designating nonbank financial companies for Federal Reserve supervision and enhanced prudential standards. In its statement, the FSOC elaborates that the proposal would "replace the Council's existing guidance and describes the procedural steps the Council would take in considering whether to designate a nonbank financial company". The FSOC's proposed actions comprise of a two-stage evaluation process to determine whether a nonbank financial company should be subject to Federal Reserve supervision and prudential standards. If a company is designated, it will be subject to annual reevaluations of such designation. Its objectives are to enhance the FSOC's ability to address financial stability risks and be transparent on how the designation process will be operationalised.

At the same meeting, it also announced a proposed new analytic framework to explain how such nonbank financial company designations will bolster financial stability risk monitoring and mitigation in order to, as Yellen says, "help prevent financial disruptions from starting and spreading in the first place".



‘Opportunities Amidst Challenging Times’

Reporting by the Banking Insight Editorial Team

Where customer experience is a key differentiator.

Our exclusive interview in this edition of Banking Insight taps the acumen of **MOHD RASHID MOHAMAD, CB, GROUP MANAGING DIRECTOR/GROUP CHIEF EXECUTIVE OFFICER OF RHB BANK BERHAD**, whose decades-long career is a unique meld of his experiences as an ex-regulator and subsequent practice as an international banker. He is an AICB Council Member and also serves on the Institute’s Human Resource Committee.

Q *Global banking is sailing through some choppy waters right now, stemming from a crisis of confidence in the US. Off the bat, what could this mean for banks in Asia and how should we prepare for not just this event, but any future crisis?*

Throughout my 30-year career, the markets have definitely evolved over the years and I have witnessed various financial market milestones in different capacities, including:

- + Asian financial crisis 1997/98;
- + Global financial crisis 2009;
- + European debt crisis 2011/12;
- + Covid-19 pandemic 2020/21; and
- + SVB Bank run 2023.

I have always believed that there are opportunities amidst challenging times. I have learnt a



great deal from each crisis and continue to learn and sharpen myself from past incidences. I believe that the risk of contagion from the US and Switzerland is low. The respective regulators in both countries have acted swiftly in containing the crisis, and ASEAN banks, in general, have had very little exposure as well as linkages to the latest crisis in the US and Switzerland.

Furthermore, banking systems in the ASEAN region are sound, resilient, and well-capitalised with healthy liquidity positions, underpinned by a stable and diversified funding base. The banks in ASEAN also conduct regular stress tests and are closely monitored by regulators. With that being said, we would still need to watch out for spillovers from the recent events, which could lead to market volatility, tighter credit access, and possibly slower global growth.

Looking ahead, while each crisis will have its nuances and differences, I believe that banks must always take precautionary measures by strengthening risk management practices, invest deeply in technology, and build solid relationships with stakeholders to boost confidence in banks as the core institution of the economy.

■ As one who has experienced banking through the lens of a regulatory body such as Bank Negara Malaysia (BNM) as well as industry, how has it shaped your approach and priorities in finance?

Prior to helming the Group Managing Director role at RHB, I spent 14 years at BNM as a regulator, before moving on to other roles at local and international banks. Being at different levels within RHB Banking Group has exposed me in managing different situations and crises through different lenses over the past eight years. My biggest takeaway has, and will always be, to seek opportunities through any crisis or difficulties. Being in my current role comes with its set of challenges, but I look forward to learn something new every day.



■ The expectations of next-gen banking customers are different from their predecessors on many fronts: round-the-clock service, digital-first solutions, social values and responsibility. How should banks transform to meet these evolving customer expectations?

Over the past few years, we have witnessed a rapid evolution in customer expectations, accelerated by the Covid-19 pandemic, as well as the entrance of fintech players that are disrupting traditional banking across the value chain. Customers now prioritise service excellence and a seamless digital/online experience as well as increased commitment to sustainability/environmental, social, and governance (ESG) aspects of financial institutions.

In addressing these changing expectations, we believe that banks should adopt measures to:

a. Improve customer experience. This can be done by:

- > Reducing red tape across the customer's banking journey, with 24/7 access, supported by online self-service models via live chat or chatbots, as well as a physical model via self-service terminals.
- > Offering personalised products and services based on customer personas through the use of data

analytics, such as risk profile, occupation, and age.

- > Double-down in enhancing relationship management. From this perspective, RHB has continued to embed a strong culture of service through our RHB Way Programme, constantly upskilling frontline staff as well as simplifying and automating processes. As a result, RHB has improved its Net Promoter Score, achieving the Top 3 position amongst Malaysian banks in 2022.

b. Provide customers with a seamless digital experience by:

- > Continuously improving features and functionalities of internet and mobile banking systems. RHB has improved online transactions in 2022 with 81.8% transactions conducted through digital channels.
- > Embedding better digital experience through ecosystems and partner offerings. For instance, RHB has partnered with EcoWorld, enabling prospective home buyers to obtain a 30-second approval-in-principle on their mortgage application via the RHB MyHome app. Consequently, 49% of RHB's mortgage sales were accepted via the RHB MyHome app in 2022.

- > Strengthening online banking platforms with more features and functionalities. In this respect, RHB has introduced new features, such as fixed-deposit placement and redrawing excess home-loan payment. The bank also recently reinvigorated its online and mobile digital platforms to provide a more secure and user-friendly customer experience by migrating to RHB Online Banking.
- > Offer first-in-market and distinct digital product offerings. RHB introduced currency purchase on its online banking platforms via its multi-currency account (MCA). Customers are able to convert up to 24 currencies and use the MCA debit card to transact overseas without incurring the risk of fluctuating currency exchange prices.

c. Increase ESG commitments:

RHB's Sustainability Strategy and Roadmap is anchored against its three core pillars of (i) sustainable and responsible finance, (ii) embedding good practices, and (iii) enriching and empowering communities. It is further strengthened by our sub-pillar of developing a pathway to a climate resilient future.

Under the Sustainability Strategy and Roadmap, we have identified five key performance indicators supporting our sustainability aspirations as listed below:

- + Mobilise RM20 billion in sustainable financial services by 2026;
- + Empowering over two million targeted individuals and businesses across ASEAN by 2026;
- + Achieve carbon-neutral operations by 2030;
- + Diversity, equity and inclusion in the workplace; and
- + Launch and implement the Group Climate Action Programme, which will be the catalyst towards developing the Group's net-zero pathway and our sector's

decarbonisation strategy.

As at 31 December 2022, the Group has mobilised over RM12 billion in sustainable financial services through our business activities of lending and financing, capital markets and advisory, wealth management, investments, and insurance businesses, more than 40% above our annual target.

■ Your predictions on what banking will look like a decade from now?

Based on current trends, I believe that banking will continue to rapidly evolve digitally. With customers' preference shifting more and more towards online transactions, banks will most likely move towards digital channels for broader reach and accessibility, while brick-and-mortar will continue to exist and remain relevant for certain products and services where engagement with customers need to continue and serve as a local community-based touchpoint.

There will also be an intensified adoption of new technologies such as generative artificial intelligence technology that has gained traction, most notably ChatGPT. In this respect, there will be multiple use cases that can potentially be adopted across the banking value chain to be deployed in the near future.

In addition, cross border financial systems have been gaining traction in recent years, in parallel with customer demands. Banks will be forced to adapt to changing preferences and deliver more innovative solutions to cater to the cashless agenda. Apart from that, new features, such as banks' 'Buy Now, Pay Later' services, have made it easier to integrate financial services into customers' daily lives, given the rise of various digital platforms and ecosystems. We expect this trend to continue and non-financial providers and platforms will continue to interconnect with banking systems to provide a seamless experience for customers.

Sustainability will also be a key priority for banks as climate change continues to gain global attention. Banks will need to prioritise

sustainable finance and investments as well as ensure that ESG considerations are integrated into all aspects of its business and decision-making processes.

■ What core competencies do you think should be prioritised in order for banking to remain relevant?

In order to remain relevant, I believe that it is important for banks to foster a culture of innovation, allow its employees to think outside the box, and stay ahead of the competition. As a financial institution, I believe that we must prioritise and adopt a strong customer-first culture.

At RHB, we believe that customer experience is a key differentiator which sets us apart from our competitors. In line with the group's Together We Progress 2024 corporate strategy, 'Winning in Service' by delivering service excellence is one of our key drivers in everything we do. As such, we aim to deliver a consistent experience to our customers across all touchpoints. Through continuous employee upskilling, we are committed to improving product knowledge and service quality of our frontliners.

Additionally, we believe in delivering continuous innovation, together with improved digital capabilities and process automation, in order to improve productivity and efficiency. This includes enabling straight-through processing for instant loan approvals and introducing e-Know Your Customer capabilities. We have allocated RM500 million for IT and digital modernisation initiatives and operational improvement spend by 2024.

In future-proofing our workforce, we deeply emphasise investing in upskilling and reskilling them with future-ready skills. To further provide our employees with a competitive edge, given the competition for talent that is taking place today, we have rolled out an employee upskilling programme called RHB's Future Skills Programme to further develop our people across five key areas, i.e. agility, critical thinking, design thinking, digital literacy, and data analytics. *

CRYPTO'S 'WHOA, NELLY!' MOMENT: BASEL IS CRACKING THE WHIP WITH ITS NEW GLOBAL STANDARD

By Angela SP Yap

Countdown begins to bridle an unregulated asset class.

Cryptocurrencies' 'Wild West' days are numbered. What began more than a decade ago as a project to create an independent virtual currency, cryptoassets today – like bitcoin and ethereum – have morphed into flashpoints of financial instability and a hotbed for illicit activities.

Since the stablecoin meltdown of TerraUSD in May 2022 (which we've tackled in previous commentaries of crypto hype in *Banking Insight*), the cryptocurrency ecosystem has been battling to stay afloat in this 'crypto winter'.

Bitcoin, widely regarded as the bellwether for cryptocurrency assets, has dipped below the psychological threshold of USD28,000, whilst ethereum, another popular cryptocurrency, has lost more than 60% of its market value.



Bitcoin, widely regarded as the bellwether for cryptocurrency assets, **HAS DIPPED BELOW THE PSYCHOLOGICAL THRESHOLD OF USD28,000**, whilst ethereum, another popular cryptocurrency, has lost more than 60% of its market value.

There has also been a growing number of systemic risks and bankruptcies involving cryptoassets. Think of the 2014 hack of the Japanese-based Mt Gox exchange, which saw 750,000 bitcoins ‘disappear’ into thin air. As the biggest cryptocurrency exchange at the time, the USD20 billion loss led to its bankruptcy and marked the first major collapse of the cryptoasset market.

The aforementioned collapse of high-yielding stablecoin TerraUSD and its sister-token Luna in March 2022, which wiped out nearly USD40 billion in market capitalisation, caused over USD400 billion in losses for the broader cryptocurrency market. Its developer and founder, Stanford-University-educated and ex-Google engineer Do Kwon, had been on the lam for more than a year after Interpol issued a red notice for his arrest. At the time of writing, Kwon has just been arrested in Montenegro while attempting to fly to Dubai using forged Costa Rican travel documents, and was released after paying a six-figure bail. The US is seeking his extradition to face charges of conspiracy to commit commodities fraud, securities fraud, wire fraud, conspiracy to defraud investors, and market manipulation.

CRACKDOWN ON SPIN

“This asset class is rife with fraud, scams, and abuse in certain applications. There’s a great deal of hype and spin about how cryptoassets work. In many cases, investors aren’t able to get rigorous, balanced, and complete information. If we don’t address these issues, I worry a lot of people will be hurt.” That was Gary



Gensler, Chair of the US Securities and Exchange Commission in remarks before the 2021 Aspen Security Forum.

This is about to change.

On 16 December 2022, the Group of Central Bank Governors and Heads of Supervision, the oversight body of the Basel Committee on Banking Supervision (BCBS), endorsed a finalised global prudential standard on banks' cryptoasset exposures, for implementation by 1 January 2025.

Known as *SCO60*, this new (and long-awaited) prudential measure will place unbacked cryptoassets and stablecoins – private digital assets that depend on cryptography and distributed ledger technologies or similar technologies – directly under the microscope of financial regulators.

The forthcoming standard clarifies how the Basel Framework is to be applied in respect of banks' exposures to cryptoassets. Banks can expect the consolidated new *SCO60* chapter – which cross-references other chapters of the Basel Framework – to be made available soon. **Table 1** indicates more granular (and in some instances, more relaxed) treatment of cryptoassets by banks. It is also important to note that *SCO60* does not, at this juncture, prescribe any prudential treatment of central bank digital currencies (CBDCs),

With the *SCO60* go-live slated for 2025, the clock is now ticking for **EVERY JURISDICTION TO ENHANCE THE BLUEPRINT FOR THE TREATMENT OF CRYPTOASSETS BY BANKS**. In addition to translating the standard into each national framework, there is the added challenge of cross-border harmonisation for the treatment of this asset class.

although it is on the BCBS' radar once CBDCs are formally issued *en masse* in the future.

CHAMPING AT THE BIT

"I can already see one challenge for regulators, which is to let banks reap the economies of scale inherent to digital technologies while not recreating risks of too-big-to-fail," said Benoît Cœuré, member of the Executive Board of the ECB, back in 2017 when speaking about the "known unknowns of financial regulation" at a conference on rethinking macroeconomic policy.

With the *SCO60* go-live slated for 2025, the clock is now ticking for every jurisdiction to enhance the blueprint for the treatment of cryptoassets by banks. In addition to translating the standard into each national framework, there is the added challenge of cross-border harmonisation for the treatment of this asset class.

Although the spillover effects of past crises like Mt Gox and TerraUSD have been contained within the crypto market with little impact on systematically important banks, the lightning collapse of Silicon Valley Bank (SVB) is proof that there are enough linkages between conventional finance and crypto markets to make contagion a real worry for core financial services.

Prudential requirements	Group 1 cryptoassets <ul style="list-style-type: none">Meet in full a set of classification conditions.Subject to capital requirements based on the risk weights of underlying exposures as set out in the existing Basel Framework (Note: Algorithm-based stablecoins or those stablecoins that use protocols to maintain their value are not eligible for Group 1.)		Group 2 cryptoassets <ul style="list-style-type: none">Fail to meet any of the classification conditions. As a result, they pose additional and higher risks compared with Group 1 cryptoassets and consequently are subject to a newly prescribed conservative capital treatment.Covers tokenised traditional assets and stablecoins that fail the classification conditions, and all unbacked cryptoassets.A set of hedging recognition criteria is used to identify Group 2 cryptoassets.		Out of scope Central bank digital currencies
	Group 1a Tokenised traditional assets	Group 1b Cryptoassets with stabilisation mechanisms (i.e. stablecoins)	Group 2a Cryptoassets where a limited degree of hedging is permitted to be recognised	Group 2b Cryptoassets where hedging is not recognised	
Infrastructure risk add-on	Capital treatment generally based on existing Basel Framework with add on for any observed infrastructure weaknesses.		Adapted market risk rules with netting and 100% capital charge.	1,250% risk weight	
Redemption risk test and a supervision/ regulation requirement	This test and requirement must be met for stablecoins to be eligible for inclusion in Group 1. They seek to ensure that only stablecoins issued by supervised and regulated entities that have robust redemption rights and governance are eligible for inclusion				
Group 2 exposure limit			<ul style="list-style-type: none">A bank's total exposure to Group 2 cryptoassets must not exceed 2% of the bank's Tier 1 capital and should generally be lower than 1%.Banks breaching the 1% limit will apply the more conservative Group 2b capital treatment to the amount by which the limit is exceeded.Breaching the 2% limit will result in the whole of Group 2 exposures being subject to the Group 2b capital treatment.		
Other elements	Other elements of the standard include descriptions of how the operational risk, liquidity, leverage ratio and large exposures requirements should be applied to banks' cryptoasset exposures. The supervisory review process and a specific set of disclosure requirements are also prescribed.				

Table 1: Overview of the prudential treatment of a bank's cryptoasset exposures

Source: Adapted from the BCBS' *Prudential Treatment of Cryptoasset Exposures – December 2022* and *Consultative Document: Prudential treatment of Cryptoasset Exposures Issued for Comment by 10 September 2021*.

Part of the problem was the lack of portfolio diversification. SVB's core depositors of technology start-ups and cryptocurrency firms took big hits to their balance sheets in the ongoing 'crypto winter', burning through cash reserves at unprecedented rates. As word of the deposit drain – coupled with the bank's own funding mismatches and interest-rate bets that went awry – got out, a run on the bank was inevitable.

In the interconnected world of finance, there can be no safe harbour without a harmonised global standard. For investors who've had their fingers singed in the fire, the toughened regulatory stance on crypto can't come soon enough.

In addition to the overall monitoring of the standard, the BCBS Committee has agreed on a set of issues that will be subject to specific monitoring and review:

- + **Statistical tests and redemption risk test:** The Committee will further study whether there are statistical tests that can reliably identify low-risk stablecoins and, if such a test is identified, will consider it as an additional requirement for inclusion in Group 1b. The Committee will also further study the appropriate composition of reserve assets for the purpose

Part of the problem was the lack of portfolio diversification. SVB's core depositors of technology start-ups and **CRYPTOCURRENCY FIRMS TOOK BIG HITS TO THEIR BALANCE SHEETS IN THE ONGOING 'CRYPTO WINTER'**, burning through cash reserves at unprecedented rates. As word of the deposit drain – coupled with the bank's own funding mismatches and interest-rate bets that went awry – got out, a run on the bank was inevitable.

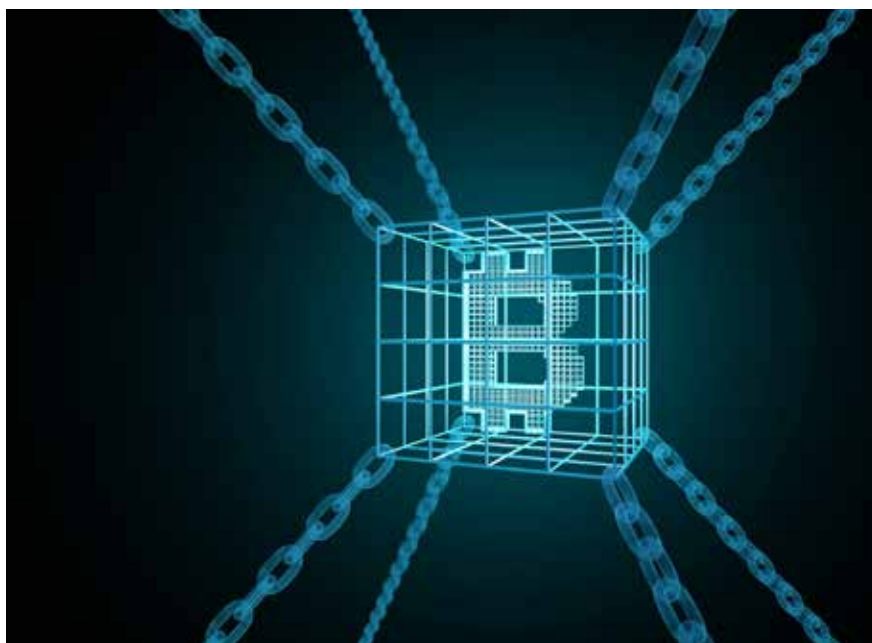
of the redemption risk test.

- + **Permissionless blockchains:** The Committee will continue to reflect on whether the risks posed by cryptoassets that use permissionless blockchains can be sufficiently mitigated to allow for their inclusion in Group 1 and, if so, what adjustments to the classification conditions would be needed.
- + **Group 1b cryptoassets received as collateral:** Under the final standard, Group 1b cryptoassets that a bank receives as collateral are not permitted to be recognised as eligible

collateral for the purposes of calculating regulatory capital requirements. The Committee intends to continue to monitor this treatment and assess whether any Group 1b cryptoassets have the required characteristics to receive recognition as collateral for capital requirements purposes.

- + **Group 2a criteria and degree of hedge recognition:** The 'hedging recognition criteria' in the final standard are in line with the proposals set out in the second consultation proposal. Cryptoassets that meet these criteria will be allocated to Group 2a and will be eligible to receive a limited amount of recognition. The criteria include various thresholds, relating to the market capitalisation, trading volume and price observations for cryptoassets to meet to be included in Group 2a. The Committee intends to monitor closely the specification of these thresholds and the degree of hedge recognition that the Group 2a classification permits.
- + **Calibration of the Group 2 exposure limit:** The Group 2 exposure limit is based on thresholds set at 1% and 2% of banks' Tier 1 capital. These thresholds aim to safeguard the banking sector against the potentially significant risks posed by Group 2 cryptoassets. As the cryptoasset market develops, the Committee will reassess the appropriateness of these thresholds. *

■ *Angela SP Yap is a multi-award-winning social entrepreneur, author, and financial columnist. She is Director and Founder of Akasaa, a boutique content development and consulting firm. An ex-strategist with Deloitte and former corporate banker, she has also worked in international development with the UNDP and as an elected governor for Amnesty International Malaysia. Angela holds a BSc (Hons) Economics.*



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WHEN **ALGOS** GANG UP

By Angela SP Yap

ARE BOT-DRIVEN PRICING MECHANISMS THE NEXT NEW CARTEL?

Collusion. It's almost as old as business itself. To cop a line from that old Cole Porter tune, "Birds do it, bees do it. Even educated fleas do it."

In the digital age, that 'educated flea' looks very much like a computer. Quick, efficient, and devoid of values, the widespread use of self-learning machines has introduced a deluge of new-age antitrust dilemmas in business.

CODE TO COLLUDE

Think of David Topkins, founder of an online poster store, whose self-coded algorithm was designed to fix the prices for certain posters in collusion with other suppliers on Amazon Marketplace. The US government slapped Topkins with a USD20,000 fine – which he promptly settled – but the case garnered headlines because it involved a disproportionate amount of force against a nondescript online retailer for an inconsequential sum of money.

In a public statement, the US prosecutor, Assistant Attorney General Bill Baer, said, "We will not tolerate anticompetitive conduct, whether it occurs in a smoke-filled room or over the internet using complex pricing algorithms." Word on the street though was that the real motivation behind the case was to gain access to Topkins' code.

Such algorithms are deeply embedded in today's commerce. There's rush-hour surge pricing when hailing a Grabcar and automated price-bidding on platforms like eBay and Amazon.

In 2011, a price war ensued when two competing online booksellers used Amazon's algorithmic pricing tool to automatically change their retail price based on the other store's price. The retail

```
mysql_error with query
Message: Application Ser
ORA-00921: unexpected en
ORA-00921: unexpected en
ORA-00936: missing expre
PHP application warnings
sitebuildercontent
sitebuilderfiles
sitebuilderpictures
Snitz! forums db path er
SQL syntax error
```



price for an out-of-print biology textbook, *The Making of a Fly*, was pushed up to USD23.7 million before the algorithm was disabled.

The code was simple. Keen to undercut its competitor, the first online seller, profnath, set its price for the book at 0.9983 times the price of its closest competitor, bordeebok. At a pre-set time each day, Amazon's algorithm would automatically reprice the book on profnath's website, slightly undercutting bordeebok's price. However, bordeebok had set its algorithm at 1.27 times of profnath's retail price, resulting in an out-of-control machine-driven price war with no human at the wheel.

BOTS CALL THE SHOTS

Such bot-driven price fixing is just the tip of the iceberg.

Devoid of ethical and legal parameters, the collusive potential of algorithms can be disastrous. Not many of us can fork out USD23.7 million for a textbook.

More sophisticated algorithms can automate pricing predictions, incorporate behavioural decisions in computations, automate real-time analysis in response to geopolitical events. These learning machines can, and are, deployed to perform complex game-theory-like computations in order to arrive at the optimal solution for the firm. In financial markets, when even a nanosecond advantage can result in huge profits, algorithms are a big leg-up.

In a recent interview, Patrick Chang, PhD candidate at the Oxford-Man Institute of Quantitative Finance, summarises his research findings from *Algorithmic Collusion in Electronic Markets: The Impact of Tick Size*, co-authored with Álvaro Cartea and José Penalva: "In our setting we consider when these algorithms are market-makers, they basically provide liquidity to the market, and there are two main outcomes that can appear.

"First is that they learn to be competitive, which is expected according to economic theory; but one of the unintended consequences is they learn to raise prices, they act together and they achieve algorithmic collusion, which is of course detrimental to the market in terms

of liquidity takers because they have to pay a higher price to acquire a share or equity.

“This is still an emerging field; there is a lot we still need to understand. One of the main things we’re looking at is to really understand the mechanisms as to what drives their behaviour...and from there, once we understand that, build some possible regulation or design the market in a better way so that these sorts of outcomes are less likely to occur or can be avoided entirely.

“A research agenda going forward is to really help detect when there is collusion in the market and one of the ideas we have is to use inverse reinforcement learning to understand the strategy these algorithms are learning and go back to test to see if these are collusive strategies or not.”

At this point, it is necessary to point out that although bot-pricing collusion generally results in a loss of welfare for society, there are instances when pricing algorithms are a benefit. More fluid and responsive price adjustments can make the goods markets more efficient and as long as the underlying code isn’t a black box, algorithms can, in fact, increase price transparency.

A RELIABLE CARTEL?

For Drs Hans-Theo Normann and Martin Sternberg, Research Affiliates at the Max Planck Institute for Research on Collective Goods in Bonn, the concern is not whether algorithms collude but whether they’re more efficient at it than us.

Do Machines Collude Better than Humans?, published in the December 2021 issue of the *Journal of European Competition Law & Practice*, examined under laboratory conditions whether algorithms are capable of tacit collusion by comparing the outcome of prices under these three Scenarios:

> 1: A benchmark outcome involving only human players.

Each player’s behaviour represents the behaviour of a firm and participants take home, in cash, the profits of their respective firm at the end of the experiment.

At this point, it is necessary to point out that although bot-pricing collusion generally results in a loss of welfare for society, **THERE ARE INSTANCES WHEN PRICING ALGORITHMS ARE A BENEFIT.** More fluid and responsive price adjustments can make the goods markets more efficient and as long as the underlying code isn’t a black box, algorithms can, in fact, increase price transparency.

> 2: Involves algorithm-only players with each algorithm representing the behaviour of a firm.

Algorithms were powered by Q-Learning, a feedback-based reinforcement learning technique in which the machine learns over time to find the best course of action through continuous interaction with other agents. Normann and Sternberg stress that the algorithms were not instructed to collude, merely to maximise the profit of their own firm, taking away any trace of collusive intent.

> 3: The outcome when both human and machine players interact.

Under the first scenario, there was some level of collusion found in duopolies (two-firm interactions) and occasionally when three firms interact. No collusive outcome was detected in experiments involving four firms and more, indicating that tacit collusion by humans become less likely as the number of competitors increase.

Where tacit collusion was detected, some groups managed to sustain the joint profit maximum whilst others fully compete. No player took home more than half of the full collusive gains, indicating that purely human interactions achieve only a moderate degree of supracompetitive pricing (prices above what can be sustained in a competitive market).



Under Scenario 2, the algorithms achieved supracompetitive pricing in a 'super human' way, far exceeding the levels of collusion seen under Scenario 1.

In the third scenario – a hybrid collusion involving a number of human players and one machine – supracompetitive prices at a 'super-human' level only occur in simulations with three firms or less. When four firms (three humans + one algorithm) or more interact, there was no significant difference in the outcome and the competitive play between three humans was enough to nullify the algorithm's play. This indicates that in hybrid markets, many algorithms are needed in order to facilitate collusion and firms that employ the algorithm earn significantly less than their rivals.

The authors sum it up thus: "If firms are willing to accept set-up costs (for algorithmic pricing machines), our data do indicate the anticompetitive potential algorithms have, even when interacting with humans."

So, are algorithms the ideal cartel members?

It depends. Norman and Sternberg elaborate that in order for any stable collusion to emerge, firms must have the ability to communicate and coordinate moves in order to reach price equilibria. They posit that whilst it is theoretically possible, further research is needed on whether pricing algorithms like Q-learning models would ultimately evolve to develop a language-like communication with each other in order to achieve significant anticompetitive behaviour.

This is crucial because "express communication is typically the smoking gun in cartel cases". If algorithms can effectively collude without developing a language of their own, it would be near impossible for authorities to detect or prove anticompetitive behaviour.

The authors state: "[In all Scenarios,] there are no exchanges of communication of information, posing a challenge for competition authorities. It would probably be beyond the reach of the competition laws of most jurisdictions to penalise such behaviour, even though it does result in welfare losses."

A third suggestion is to **REGULATE THE DATA INPUT TO PRICING ALGORITHMS IN A MANNER THAT WOULD ENHANCE COMPETITION.**

Although more plausible, this cannot work in a vacuum. It needs to be coupled with other market enforcement measures, such as demand-steering and separating decision-makers from algorithms.

A FOREST DIVIDED

Such concerns about the impact of algorithms on market dynamics are far from new. In 2017, the Organisation for Economic Co-operation and Development's (OECD) Competition Committee held a roundtable on 'Algorithms and Collusion' as part of its wider work stream on competition in the digital economy.

It is one of the earliest global forums to address the questions of whether traditional antitrust concepts of agreement and tacit collusion used by enforcement agencies are sufficient to include algorithmic collusion, and if it is possible for antitrust liability to be imposed on the algorithms' creators and users.

The proceedings from the OECD roundtable identified two sources of market failure from algorithmic collusion:

- + A lack of transparency due to complex software and trade secrecy. This can lead to information asymmetry which hinders consumers and regulators from making fully informed decisions.
- + A barrier to entry for potential competitors. By its very nature, algorithms will drive rapid economies of scale for firms that have it. For the 'have-nots', it is another barrier to entry that could lead to an overall loss of welfare for society.

Several solutions have been thrown into the ring, which run the gamut from ludicrous to plausible.

One is to outlaw explicit algorithmic collusion and tackle tacit collusion using existing competition laws and procedures. This works under the premise that existing laws adequately define collusion to include the possible dimensions of algorithmic collusion, which they do not. Current antitrust laws require communication as the "smoking gun" for prosecution; this needs to be redefined as algorithmic collusion does not seem to require any language-like communication and technically cannot be prosecuted.

Another is to subject new algorithms to regulatory tests and audits in order to prohibit those that support collusive strategies. Aside from being restrictive, the biggest hurdle here is whether enforcement agencies are equipped with the right talent and sufficient manpower for the job. Case in point is the US Congress' painful and off-the-mark interrogation of TikTok CEO John Shou, an indication of the chasm that separates market-makers from lawmakers.

A third suggestion is to regulate the data input to pricing algorithms in a manner that would enhance competition. Although more plausible, this cannot work in a vacuum. It needs to be coupled with other market enforcement measures, such as demand-steering and separating decision-makers from algorithms.

SOLVING THE RIGHT PROBLEM

Management guru Tom Peters comes to mind. "Trust, not technology," he says, "is the issue of the decade."

Technology is, and has always been, agnostic.

Don't look to the machine. Look to the one who wields it. *

■ *Angela SP Yap is a multi-award-winning social entrepreneur, author, and financial columnist. She is Director and Founder of Akasaa, a boutique content development and consulting firm. An ex-strategist with Deloitte and former corporate banker, she has also worked in international development with the UNDP and as an elected governor for Amnesty International Malaysia. Angela holds a BSc (Hons) Economics.*

Will Carbon Capture Find a Captive Audience?

By Kannan Agarwal

Solutions at the forefront of green finance in the region.

As economies in the Asia-Pacific region seek to decarbonise and transition to net zero by 2050, many predict that the demand for cross-border export of CO₂ is set to increase and the region is naturally positioned to reap the benefits of the decarbonisation economy. Recent deals indicate that the region is already positioning itself to reap the benefits of this nascent economy.

In November 2022, the national petroleum company Petronas green-lighted Malaysia's first carbon capture, utilisation and storage (CCUS) project in the Kasawari gas field, 200km off the coast of Bintulu. Once completed by 2025, it will be the world's largest offshore CCUS project, capturing over 3.3 million tonnes of compressed carbon dioxide (CO₂) via a 135km pipeline where it will be injected into a depleted reservoir.

In March 2023, another Malaysian state energy company, Petroleum Sarawak, was granted its first CCUS licence to unlock and commercialise the state's stranded sour gas reserves, which covers CO₂ as well as sulphur.

The International Energy Agency defines CCUS as "a suite of technologies that can play a diverse role in meeting global energy and climate goals. It involves the capture of CO₂ from large point sources, such as power

generation or industrial facilities that use either fossil fuels or biomass as fuel. The CO₂ can also be captured directly from the atmosphere. If not being used on-site, the captured CO₂ is compressed and transported by pipeline, ship, rail or truck to be used in a range of applications, or injected into deep geological formations (including depleted oil and gas reservoirs or saline aquifers), which can trap the CO₂ for permanent storage."

Whilst commercial projects are on the move, the regulatory landscape in Asia Pacific is travelling at a more languid pace. With the exception of Australia, other CCUS storage countries in the region have yet to establish a specific policy or regulation of CCUS technology.





FIRM HANDS

The crucial role of regulatory guidance should not be underestimated, as shown in a study by the Sustainable Finance Lab, a Netherlands-based transdisciplinary research centre established to transform financial markets and enhance sustainable development. Its recent report, *How Much of a Help is a Green Central Banker?: Quantifying the Impact of Green Monetary and Supervisory Policies on the Energy Transition*, sheds light on the critical role of central banks in achieving net-zero goals. In this novel research project aimed at quantifying the impact of green monetary policy and supervisory efforts, the centre found that green central bank intervention could amount to as much as 5%–12% of the needed climate action, primarily through reductions in the cost of capital for green and/or renewable subsectors.

Table 1 quantifies the possible reductions in the cost of capital induced by different supervisory and monetary instruments that are currently at the disposal of central bankers.

The perspectives are aligned on many fronts towards which we see many global supervisory bodies steer and prioritise climate-friendly policies and investments. The organisation's main conclusions from the report, all of which, it notes, should be in concert with government's regulatory and fiscal efforts state:

- + Green central bank intervention reduces emissions and speeds up the transition as it channels investments towards targeted sectors.
- + Central bank green intervention can substantially accelerate the transition with a climate contribution that amount to 5%–12% of the needed emission reductions under an ambitious climate action scenario.
- + The quantitative impacts of green central bank intervention depend on the sectoral coverage of such intervention. Our analysis shows that the maximum impact of the intervention is achieved when it targets both green final sub-sectors and renewable power sectors at the same time.
- + Across sectors, the quantitative

Central bank instrument	Lower bound effect (basis points)	Upper bound effect (basis points)
Capital Requirements (1% increase in risk-weighted assets)	2.5	20
Collateral Frameworks	7	76
Asset Purchase Programmes	0	20
Refinancing Operations	20	>20

Table 1: Possible reductions in the cost of capital induced by different supervisory and monetary instruments.

Source: Sustainable Finance Lab, *How Much of a Help is a Green Central Banker?*

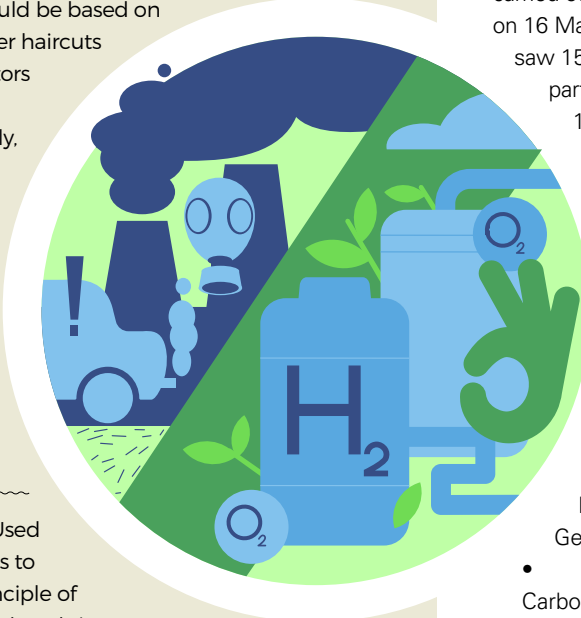
- ◆ The Sustainable Finance Lab advocates four supervisory instruments with quantifiable potential impact to the financial system, summarised below:

> CAPITAL REQUIREMENTS: Used to steer funds towards financing green parts of the economy or to drive it away from brown ones. Higher capital requirements increase lenders' cost of capital, and the pass-through is expected to be near 100%, thus higher costs of capital for the bank translate into higher costs of capital for investors. Accordingly, increasing capital requirements for brown assets would make green assets relatively more competitive.

COLLATERAL FRAMEWORK POLICY: Collateral frameworks could be used to favour the financing conditions of green assets. A central bank can define eligibility and haircut criteria for its collateral framework that include a sustainability dimension. The latter could be based on climate-related risks, resulting in higher haircuts for brown sectors. This way, green sectors would enjoy lower refinancing costs relative to brown sectors. Consequently, from the perspective of a bank, green assets will have a higher value, which they will pass through as a lower cost for firms. Another premium associated with collateral operations is referred to as the haircut premium where assets with higher haircuts provide less liquidity services and are consequently valued less by financial institutions.

ASSET PURCHASE PROGRAMMES: Used as non-conventional monetary policies to stimulate the economy. The main principle of these programmes is to buy corporate bonds in a way that does not distort the market, also known as the market neutrality principle. However, recent evidence shows that market neutrality is not desirable from a sustainability perspective. This could be achieved by relating the relative share of a firm's securities inversely to its carbon intensity. In the proposed tilting approach, central banks put more weight on low-carbon companies and less weight on high-carbon companies in their portfolio, which results in a relatively lower cost of capital for cleaner green sectors.

REFINANCING OPERATIONS: Central banks have increasingly been deploying more targeted and longer-term refinancing operations for banks with the objective of incentivising banks to extend their lending to targeted sectors in the real economy. The more banks lend to these targeted sectors, the more access they have to cheap central bank money, lower interest rates, or higher borrowing limits. Using these instruments to achieve climate targets can be done by giving banks favourable interest rates for loans given to finance green projects.



impacts differ according to their dependencies on different production factors.

- + An intervention that targets renewable sectors only induces spillover effects that could hinder the transition for most final sectors. Thus, the coordination between central bank green intervention and other fiscal climate policies is essential for a timely and cost-effective transition.

ALTERNATIVES

In Malaysia, Bursa Malaysia's newly launched Bursa Carbon Exchange (BCX) carried out its first carbon credit auction on 16 March 2023. The electronic auction saw 15 buyers from various industries participate in purchasing a total of 150,000 Verra-registered carbon credits.

According to Bursa Malaysia, the auction facilitated the price-discovery of carbon credits from two new products offered by the BCX:

- Global Technology-Based Carbon Contract (GTC) featuring carbon credits from China's Linshu Biogas Recovery and Power Generation Project; and
- Global Nature-Based Plus Carbon Contract (GNC+) featuring carbon credits from Cambodia's Southern Cardamom Project.

The bourse states: "To ensure proper governance during price discovery, Bursa Malaysia did not participate in the bidding process but purchased carbon credits only at the auction clearing price. The carbon credits from both projects were supplied by Vitol Asia Pte Ltd.

"By establishing a market-based price for carbon credits, the auction provides a clear signal to potential project proponents and developers on the economic viability of carbon credits. This will incentivise local project owners to develop carbon credit projects that can make a real impact in the fight against climate change."

It should be noted that Verra, which issues, certifies, and operates the registrar

of Verra-registered carbon credits and is also the world's biggest certifier of carbon credits for the voluntary offset market, has been battling global criticism.

In a January 2023 joint exposé by *The Guardian*, *Die Zeit* and SourceMaterial, a nine-month investigation into Verra's rainforest schemes together with recent scientific studies into the USD2 billion voluntary offset market unveiled that more than 90% of its carbon offsets "are likely to be 'phantom credits' and do not represent genuine carbon reductions".

The exposé, titled *More Than 90% of Rainforest Carbon Offsets by Biggest Certifier are Worthless, Analysis Shows*, cites corporates such as British low-cost airline EasyJet and fast-food chain Leon as some of the big brands who have moved away from their carbon offsetting programmes in favour of more direct net-zero impact such as "funding for the development of new zero-carbon emission aircraft technology".

The article quotes veteran carbon-credit researcher Barbara Hayes, the director of the Berkeley Carbon Trading Project: "The implications of this analysis are huge. Companies are using credits to make claims of reducing emissions when most of these credits don't represent emissions reductions at all...but these problems are not just limited to this credit type. These problems exist with nearly every kind of credit. One strategy to improve the market is to show what the problems are and really force the registries to tighten up their rules so that the market could be trusted.

"I started studying carbon offsets 20 years ago, studying problems with protocols and programmes. Here I am, 20 years later having the same conversation."

DIFFERENT STROKES

Financial stability is the No.1 priority today and reining in the impact of physical and transition risks arising from climate change is increasingly on the agenda of policymakers.

A 2021 study by Banque de France economists Camille Macaire and Alain Naef found that 62.1% of the European Central Bank's Corporate Sector Purchase Programme (CSPP) of corporate bond purchases were biased in favour of



the manufacturing and electricity and gas production firms. Others like Erasmus University's Dirk Schoenmaker advocate that the European Central Bank (ECB) should drop the market-neutrality approach in favour of targeted green lending for its asset purchasing programmes such as the CSPP.

Such evidence-based studies have spurred the ECB to look within and reposition its policy in favour of active green policies.

COUNTERPOINT

In a 10 January 2023 speech at the International Symposium on Central Bank Independence in Stockholm, Isabel Schnabel, Member of the Executive Board of the ECB said: "We are now tilting our corporate bond portfolio towards issuers with better climate scores, with a view to removing the existing bias towards emission-intensive firms.

"Although our current actions in relation to climate change are ambitious, they are still falling short of the Paris objectives as they are not sufficient to ensure a decarbonisation trajectory that is consistent with carbon neutrality of our operations by 2050."

The three priority areas for greening the ECB, she said, are its stock of corporate bond holdings, public sector bond holdings, and lending operations.

In the US, although many financial service firms have committed to net-

zero pledges by taking to account the environmental, social, and governance impact on their operations and investments, many more are not in favour of more granular regulation.

For instance, the Big Six financial firms – JP Morgan Chase, Citigroup, Wells Fargo, Bank of America, Morgan Stanley and Goldman Sachs – have not only signed on to net-zero pledges with overhauls to their portfolios and operations to factor in climate risk. Nonetheless, there is resistance by the industry, as represented by the American Bankers Association (ABA), to more prescriptive regulation such as climate stress testing and increased capital adequacy requirements as proposed by the Basel Committee on Banking Supervision (BCBS).

Although the ABA "conceptually agrees" with the BCBS' recommendations to include climate-related risks (see *The Heat is On* on page 30), it has stated that some of the proposals – such as mandating the inclusion of climate risk in financial risk calculations – are "premature and counterproductive" as it skews the overall risk assessment of a bank.

It is one of the many obstacles in store as the world transitions to a low-carbon economy. *

■ Kannan Agarwal is a content analyst and writer at Akasaa, a boutique content development and consulting firm.

ESG AND SUSTAINABILITY REPORTING: CHALLENGES FOR BANKS

By Bob Souster

How to navigate the social / environmental dichotomy.

With increasing public concern about the adverse effects of climate change, there has been a shift in the demands of stakeholders of banking organisations, including customers, shareholders, regulators and the communities in which they operate. While customers once focused on safety and security of deposits and receiving a reasonable return on their deposits, many now consider whether they are dealing with providers that act in an environmentally positive manner.

For many shareholders and potential investors, capital allocation decisions are influenced by the sustainability policies of companies in which they invest. Governments and regulators are turning their attention away from purely financial performance metrics and towards a broader range of indicators which help them to assess companies in respect of their environmental, social and governance (ESG) performance. These changes are permanent, creating new demands, and these will continue to evolve in the future. They will have to be taken into consideration

when deciding what information to provide to stakeholders, how the information should be provided and the support necessary to ensure that the information is credible and reliable.

ESG

Though often dressed up in different words and phrases, banks have been familiar with the need to implement sound ESG policies for some time. Even before the Paris Agreement was signed in 2016, many banks proclaimed their commitment to corporate social responsibility (CSR) and some financial institutions were even founded on the basis that they

would operate ethically, with a strong social and environmental dimension to their mission and objectives. Examples include Banca Etica (Italy) and Triodos Bank (Netherlands). In 2021, a United Nations initiative prompted the formulation of the Principles for Responsible Banking, initially signed by 129 founders and now supported by over 300 organisations. There is no doubt that ESG is the way to go.

Banks have a powerful role to play in promoting global sustainability and many commentators agree that they should accept a moral obligation to play their part. A bank can be a force for good in many ways, through lending, investing and advising clients that are committed to noble social and environmental goals. But this can create new problems and challenges, some of which must be managed extremely carefully. Even with the very best intentions, a bank may find itself supporting a client that purports to be a sustainable company, only later to discover that it is anything but sustainable.

The stark reality is that the bank cannot be technical experts in every

Governments and regulators are **TURNING THEIR ATTENTION AWAY FROM PURELY FINANCIAL PERFORMANCE METRICS AND TOWARDS A BROADER RANGE OF INDICATORS** which help them to assess companies in respect of their environmental, social and governance (ESG) performance.

field in which its clients are involved. External technical support from experts is an imperative in many fields of banking operations.

TOO MUCH INFORMATION, NOT TOO LITTLE

Consider a bank that has been approached to finance a (fictitious) airline which claims on its website, 'We are Malaysia's cleanest airline and we care deeply about the future of our planet and the people who inhabit it. The carbon emissions on our flights from Kuala Lumpur to Johor Bahru are 38% less than typical operators on the same route'. This apparently compelling reason to invest on environmental grounds could be challenged on several grounds:

- Does the company use the same aircraft all the time or has it chosen the most advantageous example, and is it likely to change the aircraft it uses in the future?
- How has the company calculated the 38% figure and can it be verified by a reputable, independent expert?
- Are the airlines operating the route typical of the industry? For example, do current operators fly aircraft with exceedingly high emissions, thereby rendering the figure less meaningful?
- Should the bank be encouraging passengers to fly at all; is it more sustainable for travellers to drive or take a bus or a train?
- What are the social costs of lending to this company, as more flights will result in more noise, more traffic to and from the airport and adverse effects on agricultural businesses situated near the relevant airports?
- Does the airline use 'dirtier' planes on other routes and is it offering favourable information simply to exaggerate its environmental credentials?

In such cases, it is up to the bank to assess whether the claims and credentials of the client are sound or

Put simply, the beneficial **ENVIRONMENTAL ACTIONS OF A BANK CAN HAVE AN ADVERSE SOCIAL IMPACT AND VICE VERSA**. The simplest example of this is reflected in the duties of a bank to clients that have a negative environmental footprint.

an example of crass 'greenwashing'. Its officers can conduct endless research to establish facts that support or disprove the information provided. But even when such due diligence has been carried out, it is possible that other experts might be consulted with different conclusions, based on different assumptions.

THE SOCIAL / ENVIRONMENTAL DICHOTOMY

Put simply, the beneficial environmental actions of a bank can have an adverse social impact and vice versa. The simplest example of this is reflected in the duties of a bank to clients that have a negative environmental footprint. These include traditional industries that cannot survive in the short-term without creating pollution or depleting the earth's resources. Yet, the same industries often employ hundreds, sometimes thousands of workers, creating income and wealth for the communities in which they operate. The bank has a duty to its client and a broader duty to the environment and these obligations are difficult and often impossible to reconcile.

The problem is compounded by the fact that experts often disagree with one another, as demonstrated by ongoing controversies in the Malaysian palm oil industry.

WHAT AND HOW TO REPORT TO STAKEHOLDERS

In managing their interfaces with stakeholders, it is up to banks to decide how they report on ESG issues, as

this can have important ramifications on how they are perceived, not least reputational risk.

There is no shortage of approaches and models available. Some organisations have adopted an integrated reporting framework, based on six criteria (or 'capitals'). An alternative is adopting a broader-based model such as the Global Reporting Initiative comprising universal standards (applicable to all) and sector-specific standards.

In 2023, the International Ethics Standards Board for Accountants launched a series of roundtables to gather intelligence on how best to approach these issues. It emphasised the importance of developing fit-for-purpose, globally applicable ethics standards (including independence) to support transparent, relevant and trustworthy sustainability reporting. Additional, ongoing work is being carried out by the International Sustainability Standards Board in this respect.

For banks going about their everyday work, these issues present difficult challenges. It is reasonable to conclude that the boards of banks want their organisations to be good corporate citizens, aligning themselves with the desires of the majority of their stakeholders, presenting information on their performance as an authentic representation of their best efforts to support their clients and society as a whole. *

■ *Robert (Bob) Souster is a Partner in Spruce Lodge Training, a consultancy firm based in Northampton, England. He lectures on economics, corporate and business law, management, corporate governance and ethics. He is the Module Director for 'Professional Ethics and Regulation', a core module of the Chartered Banker MBA programme at Bangor University, Wales.*

The Crisis-filled Clouds Do Have A Silver Lining

By Chartered Banker, UK

The financial sector is not immune to the effects of climate-change-induced physical devastation; nor can it absorb the costs of transitioning to a greener economy, posits Dr Edward Thomas Jones, Lecturer in Economics.

The G20 forum and the Financial Stability Board (FSB) have both pointed out that climate change is a threat to the stability of the global economy. Studies have shown the link between natural and man-made environmental risks, which include climate change, and economic and financial risks. As former United States Vice President Al Gore might say, there is an “inconvenient truth” that climate change is a systemic threat to financial stability.

HELL AND HIGH WATER

More recently, bank losses have materialised due to physical risks and transition risks arising from impacts on the environment. Physical risks include the effect of environmental risks on infrastructure, agriculture, businesses, and individuals. In the early 21st century, the frequency and intensity of hurricanes

increased significantly, causing much greater damage to coastal economies, particularly in the Caribbean, the US and Southeast Asia.

One of the costliest natural disasters in American history was Hurricane Katrina, which hit the Gulf Coast states of Alabama, Louisiana, and Mississippi, including the city of New Orleans in 2005, causing economic damage costing at least USD186 billion. The effect of the hurricane led to high loan losses for banks that had exposure to the impacted areas, leading US regulators to review the adequacy of bank risk models regarding credit risk and hurricanes.

Hurricanes haven't been the only recent natural event to cause considerable financial loss. California's continuous battle with drought, along with unusually high temperatures and dry vegetation, has contributed to devastating fire seasons. For example, Wang et al (2021)

estimate that wildfire damages in 2018 totalled USD148.5 billion, which was approximately 1.5% of California's annual gross domestic product.

With increasingly severe storms, floods, and fires, many forecasters envision a crisis that pivots from the physical to the economic. The growing fear is that widespread damage to property serving as collateral for loans and to assets underpinning other investments could cause devastating financial blowback to banks. If sea levels

The effect of the HURRICANE LED TO HIGH LOAN LOSSES FOR BANKS THAT HAD EXPOSURE TO THE IMPACTED AREAS, leading US regulators to review the adequacy of bank risk models regarding credit risk and hurricanes.



rise by six feet by circa 2100, American homes valued at USD900 billion would be underwater according to DeConto & Pollard (2016).

Transition risks arise from adjustments towards a greener economy. Unanticipated changes in climate policies, regulations, technologies, and market sentiment could provoke a repricing of the value of bank assets. After the 2015 Paris Agreement, there was an increased awareness of climate policy risk with banks increasing the cost of credit to fossil-fuel-based firms. There are already examples of central banks being active in recognising the impact of climate change. In 2021, the central bank of Sweden (the Riksbank) cleansed its reserves of assets tied to pollution and started mapping the carbon footprint of its corporate bond-purchase programme. The People's Bank of China has provided direct investment in sustainable projects,

encouraging the sale of green bonds. The Bank of Japan is looking to spur private-sector efforts by providing funds for bank lending to climate-friendly businesses. Policymakers at the Bank of England have signalled they will take account of the government's environmental goals when buying assets in financial markets. However, the same trend hasn't been seen in the US. In January 2023, Chair of the US Federal Reserve Jay Powell said the Fed would not become a "climate policymaker" as he mounted a vigorous defence of the US central bank's independence from political influence.

SHARING THE RESPONSIBILITY?

Most regulators are established by primary legislation and have specific legal objectives, and it is almost unheard of for that legislation to mention climate change. But some regulators have now adopted sustainability as a secondary

objective. Governments continue to be the driving force, but there are increasing cases where they have asked their regulators to consider climate change when performing their primary duties.

Climate change represents a material business and financial risk to the financial system, its users and the real economy. That means that regulators must take the issue into account, even without any extension to their responsibilities. Regulators don't usually have explicit responsibility for allocating capital towards socially useful ends. Governments do, and they use a variety of tools to achieve their aims: legislation, taxes, subsidies, etc. However, regulators can indeed facilitate the reorientation of financial flows necessary for addressing environmental risks if, for example, their governments asked them to enforce climate-related financial risk disclosures. But, in doing so, the regulator may find itself walking a tightrope, having to balance exaggerated expectations against limited capabilities and political economy constraints.

The FSB's key climate change roadmap (see the *2021 FSB Annual Report*), called for regulators to collect better climate-related data from the financial sector, to perform analysis of financial institutions' vulnerabilities to climate change, and to monitor those risks. Other financial regulators, notably within the EU, have proposed greater measures to tackle environmental risks. These include creating 'green supporting factors' to give preferential regulatory treatment for the financing of environmentally friendly projects or 'brown penalising' ones that have the opposite effect.

There is a growing awareness that climate-change targets cannot be achieved without input from players in the financial system. By facilitating the financing of low-carbon activities, a green transformation of the system could not only contribute to the fight against climate challenges, this could also protect it from climate-related financial risks. *

■ *This article previously appeared in the Chartered Banker magazine, UK, Spring 2023 edition.*

THE **HEAT** IS ON

By Julia Chong

*Be ready for more prescriptive
climate regulation in finance.*



In line with the United Nations' call in this Decade of Action – a global push from 2021 to 2030 to accelerate sustainable solutions to humanity's biggest challenges, from poverty and equity to food security and continuing environmental degradation – financial regulators are upping the ante on what's needed to tackle climate change.

Climate-related risks are now considered to be material risks that can impact the financial, reputational, and strategic operations of banks. Concrete moves are underway for more in-depth assessment and disclosure through – amongst other steps – increased Pillar 2 capital requirements, more granular climate stress test scenarios at major jurisdictions and other increased measures as emerging research point to potential material losses in the financial system if climate change is left unaddressed.

Figure 1 expands on the physical and transition climate risks and how these can affect banks' viability, whether directly or through counterparties, and potential financial contagion.

INCREASING GRANULARITY

Regulators in major jurisdictions continue to toughen their stance in favour of mandatory and standardised climate disclosure frameworks, common taxonomies to delineate green/brown activities and, increasingly, climate stress tests.

The major principles and practice for climate-related risk management are expressed through three Basel Committee on Banking Supervision (BCBS) documents: *Principles for the Effective Management and Supervision of Climate-related Financial Risks* issued in June 2022; *Climate-related Financial Risks – Measurement Methodologies* and *Climate-related Risk Drivers and Their Transmission Channels*, both issued in April 2021.

The 18 high-level *Principles* (12 for banks, six for prudential authorities) were devised “to strengthen the regulation, supervision and practices of banks worldwide with the purpose

Regulators in major jurisdictions continue to **TOUGHEN THEIR STANCE IN FAVOUR OF MANDATORY AND STANDARDISED CLIMATE DISCLOSURE FRAMEWORKS**, common taxonomies to delineate green/brown activities and, increasingly, climate stress tests.

of enhancing financial stability”, the aim being to put to rest any remaining ideological opposition within the industry to the impact climate change can have on the global financial system if left unaddressed. **Figure 2** is a summary of the *Principles* and provides a birds-eye view of the global priorities that currently govern all financial institutions, yet it must be approached as an evolving standard as climate regulation is peppered with emergent risks. In the long run, a culture of adaptability and agility will serve banks best.

This has prompted prudential authorities to introduce new and/or more granular requirements for banks conducting scenario analyses and stress tests, such as changes to the scenario designs and increasing the time frames for forecast. Most jurisdictions are slated to conduct their 30-year climate stress tests within the next 12 months, exercises that will undoubtedly assist

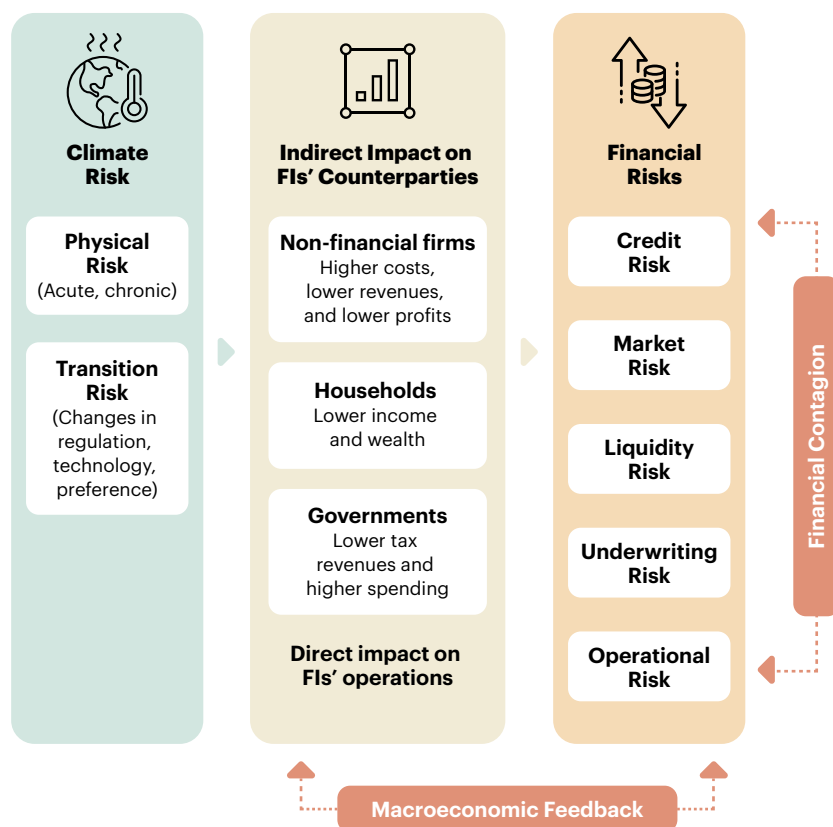


Figure 1: Climate Risk: Definitions, Measurement, Current Practices and Regulatory Oversight, June 2022. NGFS (2020d), BCBS (2021a) and HKIMR staff compilation.

regulators and financial institutions to fill in many data and process gaps in the transition to net zero.

REGIONAL MOVES

Asia-Pacific regulators have issued guidance notes and policies that are aligned to the BCBS, albeit with differing degrees of coverage and implementation.

In Malaysia, the Bank Negara Malaysia (BNM) directive is clear. Its latest Policy Document on *Climate Risk Management and Scenario Analysis*, issued on 30 November 2022, set future expectations that financial institutions should tackle the looming threat that climate change poses to financial stability by:

- + urgently taking early actions to implement changes towards building climate resilience;
- + strategically accounting for how actions today affect future outcomes under a range of scenarios and time horizons over the long term;
- + comprehensively strengthening the risk management frameworks to address these financial risks from climate change. In particular, financial institutions are to manage these risks by recognising the distinctive two elements of climate-related risks: far-reaching in breadth and magnitude, foreseeable but highly complex due to uncertainty, nonlinearity, irreversibility and dependency on short-term actions; and
- + holistically managing the systemic impact of climate-related risks. Financial institutions stand to gain from greater collective coordination and harmonisation, notably through industry-wide platforms, including those facilitated by the Joint Committee on Climate Change and VBI Community of Practitioners.

The policy uniquely presents a Malaysian-specific context for banks and how climate-related risks should be an integral part of every financial institutions' governance, risk management, ICAAP, scenario analysis, stress testing and



The policy uniquely presents a Malaysian-specific context for banks and **HOW CLIMATE-RELATED RISKS SHOULD BE AN INTEGRAL PART OF EVERY FINANCIAL INSTITUTIONS' GOVERNANCE**, risk management, ICAAP, scenario analysis, stress testing and disclosure practices.

disclosure practices.

Parallel to this is the AICB's Certificate in Climate Risk (CICR), a new programme developed by the Chartered Body Alliance comprising the Chartered Banker Institute, UK; the Chartered Insurance Institute, and the Chartered Institute for Securities & Investment.

Comprising a vast range of developments in climate change and its impacts, the CICR programme focuses on the evolving policy and regulatory landscape relating to climate risks and how finance is tackling the sustainability challenge head-on by:

- measuring, monitoring, and reporting climate risks;
- modelling climate risks, including the use of scenario analysis;
- highlighting regulatory approaches and responses at global, national, and regional levels;
- defining, developing, and embedding climate risk appetite, governance, and culture; and
- supporting the transition to a sustainable, low-carbon world.

In December 2021, the Hong Kong Monetary Authority (HKMA) introduced a new module, *GS-1: Climate Risk Management* requiring authorised institutions (AIs) in the city-state to begin incorporating "sound practices supporting the transition to carbon neutrality". Although

classified as a non-statutory guidance note, *GS-1* forms part of the Supervisory Policy Manual issued by the regulator to “set out the HKMA’s approach to, and expectations in, reviewing Als’ climate-related risk management”.

Concurrently, the prudential authority reported on the outcomes of its pilot sector-wide climate risk stress test (CRST) exercise, which sought to assess the climate-resilience of the city-state’s banking sector and facilitate capacity building in the climate risk management practices of participating banks. Comprising 20 major retail banks and seven branches of international banking groups, the pilot CRST accounted for 80% of the sector’s total lending and stress-test resilience under three scenarios:

- > **Scenario 1 (Physical risk):** Focused on the projected climate situation of Hong Kong in the mid-21st century, with assumptions around potential increases in temperature and rises in sea level. This scenario is developed based on the climate projections of the Hong Kong Observatory under a scenario of high greenhouse gas concentration.

Concurrently, the prudential authority reported on the outcomes of its pilot sector-wide climate risk stress test (CRST) exercise, which sought to assess the climate-resilience of the city-state’s banking sector and **FACILITATE CAPACITY BUILDING IN THE CLIMATE RISK MANAGEMENT PRACTICES** of participating banks.

- > **Scenario 2 (Transition risk – disorderly pathway):** Using trajectories of global carbon dioxide (CO₂) emissions and carbon price projected by the Network of Central Banks and Supervisors for Greening the Financial System (NGFS), it assumes abrupt changes in the climate policies of authorities.
- > **Scenario 3 (Transition risk – orderly pathway):** Early and progressive actions to achieve the climate goals of the Paris Agreement using the same CO₂ and carbon price projections by NGFS.

Results of the CRST showed:

- > Extreme climate scenarios assumed in the exercise would lead to a material reduction in the participating banks’ profitability due to an upsurge in expected credit losses from their exposures directly affected by climate change, such as residential mortgages and lending to high-emitting industries.
- > Climate change could also weaken the banks’ capital positions. The capital adequacy ratio of the domestic systemically important Als would drop by three percentage points on average over the five-year horizon under the disorderly transition scenario. Some parts of the banks’ operations would be affected by the more intense climate hazards under the physical risk scenario.
- > However, the overall assessment indicated that the banking sector remained resilient to climate-related shocks given the strong capital buffers built up by the banks over the years.

In a January 2023 article with *Risk.net*, counsel Wei Na Sim at legal firm Meyer Brown said that the HKMA plans to adopt a more prescriptive approach in CRSTs scheduled in 2023 and 2024, with more granular scenario specifications and possible Pillar 2 capital measures.

TURNING THE DIAL

A concentration of activity is already underway as the climate risk reporting regime broadens in both granularity and reach. There are immediate priorities to be addressed at banks of all sizes, beginning with the boardroom and right down to front-line staff.

For finance to contribute in bringing down global temperatures, it needs to first ‘turn up the heat’ in its own house through effective climate compliance. *

■ *Julia Chong is a content analyst and writer at Akasaa, a boutique content development and consulting firm.*



Figure 2

Area	Principle		Reference Principles
APPLICABLE TO BANKS			
Corporate Governance	1	Banks should develop and implement a sound process for understanding and assessing the potential impacts of climate-related risk drivers on their businesses and on the environments in which they operate. Banks should consider material climate-related financial risks that could materialise over various time horizons and incorporate these risks into their overall business strategies and risk management frameworks.	Basel Core Principles (BCP) 14, Supervisory Review Process (SRP) 30, Corporate Governance Principles for Banks
	2	The board and senior management should clearly assign climate-related responsibilities to members and/or committees and exercise effective oversight of climate-related financial risks. Further, the board and senior management should identify responsibilities for climate-related risk management throughout the organisational structure.	BCP 14, SRP 30, Corporate Governance Principles for Banks
	3	Banks should adopt appropriate policies, procedures and controls that are implemented across the entire organisation to ensure effective management of climate-related financial risks.	BCP 14, SRP 30, Corporate Governance Principles for Banks
Internal control framework	4	Banks should incorporate climate-related financial risks into their internal control frameworks across the three lines of defence to ensure sound, comprehensive and effective identification, measurement and mitigation of material climate-related financial risks.	BCP 26, SRP 20, SRP 30, Corporate Governance Principles for Banks
Capital and liquidity adequacy	5	Banks should identify and quantify climate-related financial risks and incorporate those assessed as material over relevant time horizons into their internal capital and liquidity adequacy assessment processes, including their stress testing programmes where appropriate.	BCP 15, BCP 24, SRP 20, SRP 30
Risk management process	6	Banks should identify, monitor and manage all climate-related financial risks that could materially impair their financial condition, including their capital resources and liquidity positions. Banks should ensure that their risk appetite and risk management frameworks consider all material climate-related financial risks to which they are exposed and establish a reliable approach to identifying, measuring, monitoring and managing those risks.	BCP 15, SRP 30
Management monitoring and reporting	7	Risk data aggregation capabilities and internal risk reporting practices should account for climate-related financial risks. Banks should seek to ensure that their internal reporting systems are capable of monitoring material climate-related financial risks and producing timely information to ensure effective board and senior management decision-making.	BCP 15, SRP 30, Principles for Effective Risk Data Aggregation and Risk Reporting
Comprehensive management of credit risk	8	Banks should understand the impact of climate-related risk drivers on their credit risk profiles and ensure that credit risk management systems and processes consider material climate-related financial risks.	BCP 17, BCP 19, SRP 20, Principles for the Management of Credit Risk
Comprehensive management of market, liquidity, operational and other risks	9	Banks should understand the impact of climate-related risk drivers on their market risk positions and ensure that market risk management systems and processes consider material climate-related financial risks.	BCP 22
	10	Banks should understand the impact of climate-related risk drivers on their liquidity risk profiles and ensure that liquidity risk management systems and processes consider material climate-related financial risks.	BCP 24, Principles for Sound Liquidity Risk Management and Supervision

Area	Principle		Reference Principles
Comprehensive management of market, liquidity, operational and other risks	11	Banks should understand the impact of climate-related risk drivers on their operational risk and ensure that risk management systems and processes consider material climate-related risks. Banks should also understand the impact of climate-related risk drivers on other risks and put in place adequate measures to account for these risks where material. This includes climate-related risk drivers that might lead to increasing strategic, reputational, and regulatory compliance risk, as well as liability costs associated with climate-sensitive investments and businesses.	BCP 25, SRP 20, SRP 30, Principles for the Sound Management of Operational Risk, Principles for Operational Resilience
Scenario analysis	12	Where appropriate, banks should make use of scenario analysis to assess the resilience of their business models and strategies to a range of plausible climate-related pathways and determine the impact of climate-related risk drivers on their overall risk profile. These analyses should consider physical and transition risks as drivers of credit, market, operational and liquidity risks over a range of relevant time horizons.	BCP 15, Stress Testing Principles
APPLICABLE TO PRUDENTIAL SUPERVISORS			
Prudential regulatory and supervisory requirements for banks	13	Supervisors should determine that banks' incorporation of material climate-related financial risks into their business strategies, corporate governance and internal control frameworks is sound and comprehensive.	BCP 9, BCP 14, BCP 26, SRP 20
	14	Supervisors should determine that banks can adequately identify, monitor and manage all material climate-related financial risks as part of their assessments of banks' risk appetite and risk management frameworks.	BCP 15, SRP 20, SRP 30
	15	Supervisors should determine the extent to which banks regularly identify and assess the impact of climate-related risk drivers on their risk profile and ensure that material climate-related financial risks are adequately considered in their management of credit, market, liquidity, operational and other types of risk. Supervisors should determine that, where appropriate, banks apply climate scenario analysis.	BCP 17–25, Principles for Sound Liquidity Risk Management and Supervision, Principles for the Sound Management of Operational Risk, Principles for Operational Resilience
Responsibilities, powers and functions of supervisors	16	In conducting supervisory assessments of banks' management of climate-related financial risks, supervisors should utilise an appropriate range of techniques and tools and adopt adequate follow-up measures in case of material misalignment with supervisory expectations.	BCP 8, BCP 9, SRP 10, SRP 20
	17	Supervisors should ensure that they have adequate resources and capacity to effectively assess banks' management of climate-related financial risks.	BCP 9
	18	Supervisors should consider using climate-related risk scenario analysis to identify relevant risk factors, size portfolio exposures, identify data gaps and inform the adequacy of risk management approaches. Supervisors may also consider the use of climate-related stress testing to evaluate a firm's financial position under severe but plausible scenarios. Where appropriate, supervisors should consider disclosing the findings of these exercises.	Stress Testing Principles

FORGING BUSINESS RESILIENCE IN A POST-QUANTUM WORLD

By Christophe Barel

In a not-too-distant future, the maturing of quantum computing technology could prove devastating to institutions unprepared for its impact on cybersecurity and business risk.

For many business leaders, quantum computing is a far-in-the-future consideration, as the technology is still in its early development stages. Significantly more powerful than classical computers, quantum computers use qubits instead of bits, which makes them capable of performing difficult calculations, navigating complex algorithms, and breaking current encryption methods.

With such capabilities, quantum computing presents many opportunities for optimising operations, performing complex risk analysis, and other boons to business. However, the same technology could arm cybercriminals with the most potent tool yet in their ever-evolving arsenal. Financial institutions must prepare their information security systems to move to post-quantum cryptography (PQC) today to be resilient in the face of tomorrow's threats.



WHY NOW?

When quantum computing will actually be a reality is a matter of great debate, with estimates ranging from five to 30 years to break current encryption. Building a commercially viable quantum computer has proven challenging due to the need for extreme conditions to maintain stability; qubits need to be kept at absolute zero temperatures. Current working quantum computers are limited in the problems they can solve. However, the world's most powerful countries and tech companies are pouring investments into quantum technologies and small breakthroughs could significantly speed up the timeline, especially for systems that could render today's encryption methods obsolete.

Current cryptographic algorithms used to protect financial transactions, such as public key encryption and digital signatures, rely on the difficulty of specific mathematical problems. The problem is that quantum computers can solve these problems exponentially faster than classical computers. In 2019, Google claimed "quantum supremacy" – a milestone marking a quantum computer's superiority over classical computers by performing calculations previously deemed impossible – by demonstrating that its quantum computer could solve a problem that would take a classical computer 10,000 years in just 200 seconds. Four years on, these capabilities have advanced substantially. Just as we are currently seeing artificial intelligence breakthroughs compounding extremely quickly, with new developments occurring almost daily, we should anticipate the same with quantum technologies once a certain tipping point is reached.

Threat actors are certainly acting as if this is the case, already stockpiling encrypted data for 'harvest now, decrypt later' attacks. Using this attack strategy, threat actors exfiltrate large quantities of encrypted data and store it until they can break the cryptography using quantum computers. Such quantum-powered attacks could significantly compromise the privacy and security of the global financial system and that of its customers.

COUNTERING THE THREAT – WHERE DO WE STAND?

In anticipation of a post-quantum world, significant efforts are underway to develop more resilient tools, technologies, and algorithms to protect the data and consumers

of financial institutions. These include post-quantum encryption algorithms, which use advanced mathematical problems that are considered difficult for quantum computers to solve; quantum-safe blockchain technology, which is more resistant to cyberattacks than centralised systems; and quantum key distribution, a method of communication using quantum mechanics principles to ensure immunity from tampering. Many financial institutions are investing in hiring or developing quantum experts and collaborating with quantum computing startups on pilot projects.

In the US, the National Institute of Standards and Technology has been leading an effort to identify and standardise post-quantum cryptographic algorithms. We expect that this standardisation will help the adoption of PQC across the industry.

A ROADMAP FOR POST-QUANTUM PREPARATION

The full impact of quantum computing on cyber and business risk in the financial services sector is currently unknown, but organisations must prioritise preparations today as the drivers to advance quantum technologies accelerate. According to McKinsey, global funding for quantum computing startups increased by 13.5% last year to USD1.1 billion, with China planning to invest USD15.3 billion and the European Union USD7.2 billion in the industry.

It is important for organisations to understand their ability to react to changes in the PQC landscape and be ready for them. This entails developing security protocols that secure data against both quantum and classical computers and can interoperate with existing practices. To this end, the Financial Services Information Sharing and Analysis Center's (FS-ISAC) Post-Quantum Cryptography Working Group has developed a road map for post-quantum preparation.

+ Inventory existing encryption assets: Building a clear inventory of cryptographic assets and their uses helps an organisation proactively



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identify risks and challenges brought by advances in PQC, enabling the company to be crypto-agile.

- + Assess risk:** Identify the assets, threats, vulnerabilities, and potential impacts of a security incident or data breach. The risk assessment outcome should include a comprehensive list of all the risks, controls implemented to mitigate identified risks, and mitigation action plans.
- + Create a risk assessment framework:** A starting point for organisations to understand and assess the threats that quantum computing may pose to its information security and a tool to help key stakeholders communicate risks effectively and aid in aligning security goals with operational goals and objectives.
- + Apply a risk model:** In the absence of absolute insight on risks posed by cryptographically relevant quantum computers (CRQC), the recommended immediate best practice is to create several risk scenarios for specific assets, with some of these scenarios being “more likely” than others. Once all likely risk scenarios are identified and prioritised, take proactive measures to protect against those risks with the most impact first.
- + Assess vendors:** Plan for vendor PQC requirements and update current risk



assessment procedures and legal/contract requirements to include PQC provisions. Furthermore, organisations should work to raise vendor knowledge of PQC.

FINANCIAL INSTITUTIONS CANNOT AFFORD TO WAIT

While there is no immediate call for alarm, the accelerating pace of quantum research and development means that it would be prudent to begin enacting quantum-resistant measures as soon as possible. Currently, quantum development is being driven by governments, academic institutions, and Big Tech, but, like with many major technological waves, it will not remain in their hands for long. As such, FS-ISAC's Post-Quantum Cryptography Working Group has developed a set of publicly available white papers for financial institutions to begin their post-quantum journey.

Organisations must prepare now — particularly in the financial services industry, where the stakes are so high. Financial institutions must keep pace with advancing technologies and strengthen their quantum resilience posture accordingly. A comprehensive approach incorporating intelligence and knowledge sharing, incident response exercises, and a mindset shift in prioritising quantum risk, among others, is needed to achieve resilience in anticipation of such emerging threats. Financial institutions must begin building quantum resilience today, in order to safely navigate

A comprehensive approach incorporating intelligence and knowledge sharing, incident response exercises, and a **MINDSET SHIFT IN PRIORITISING QUANTUM RISK**, among others, is needed to achieve resilience in anticipation of such emerging threats.

the post-quantum threat landscape of tomorrow. *

■ *Christophe Barel is the Managing Director for Asia Pacific at FS-ISAC, the member-driven, not-for-profit organisation that advances cybersecurity and resilience in the global financial system, protecting financial institutions and the people they serve. Founded in 1999, the organisation's real-time information sharing network amplifies the intelligence, knowledge, and practices of its members for the financial sector's collective security and defence. Member financial firms represent more than USD100 trillion in assets in more than 70 countries.*

Prior to joining FS-ISAC, Christophe was Managing Director at data and intelligence provider Acuris Group where he has set up their Risk & Compliance business for Asia Pacific, focusing on areas such as AML/KYC screening, cybersecurity and enhanced due diligence. Christophe has been based in Asia for about a decade, starting off in Hong Kong before moving to Singapore in 2015. Previously, he worked for a variety of consulting and tech companies.

CHANGES TO EU CLIMATE POLICIES ACCELERATE NEED FOR ADAPTATION OF **MALAYSIA'S SUSTAINABILITY FOCUS**

By Raja Amir Shah Raja Azwa

Opportunity for Malaysia to relook at sustainability framework and reinforce progress made in integrating sustainable business practices.

The climate change policy agenda got another significant boost in December with the European Parliament's passing of legislation that would apply tariffs on imported products based on how much carbon dioxide is used in their production.

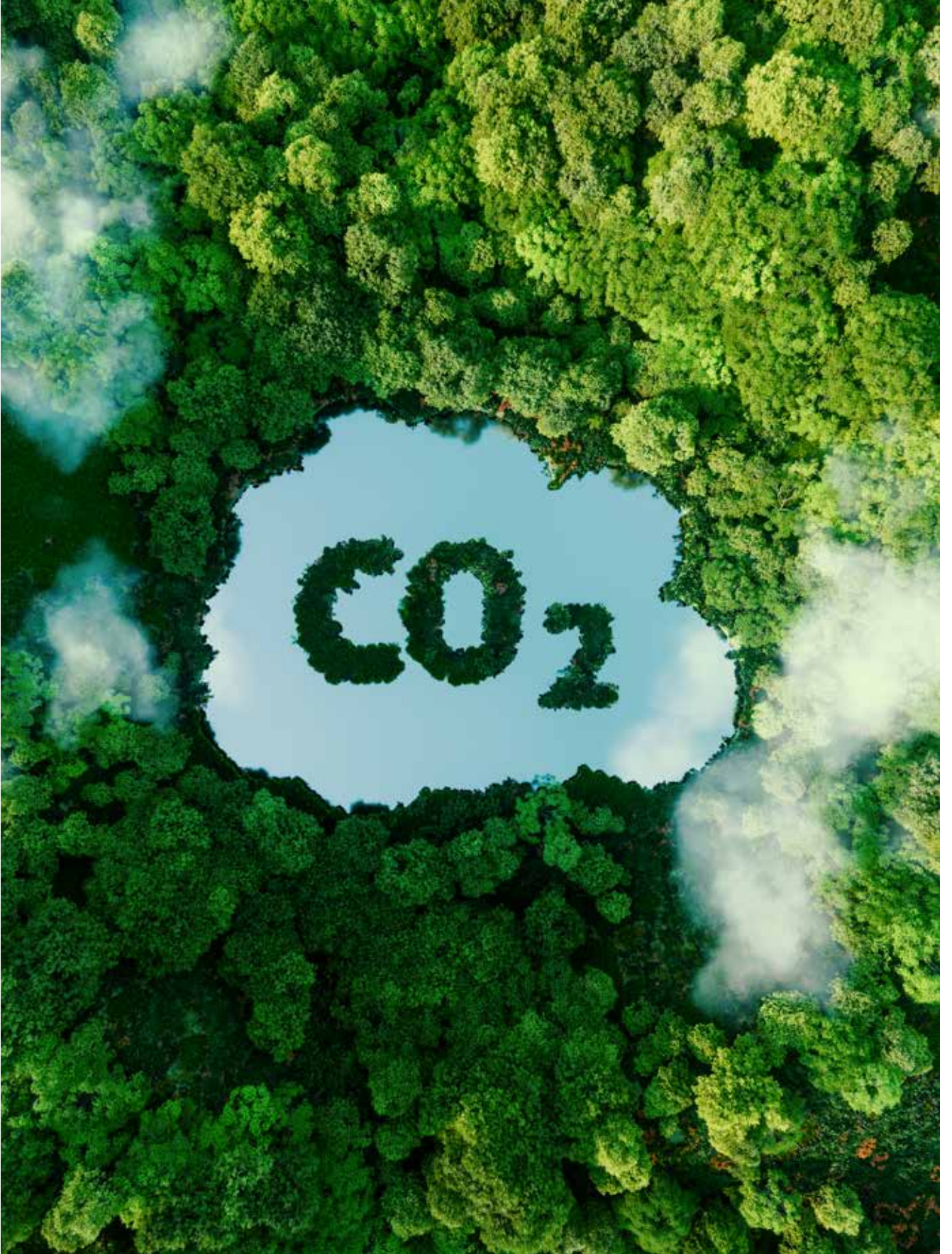
Specifically, European companies that import products which are highly carbon-intensive in their production will have to buy carbon credits to cover the value of the carbon dioxide emissions that they embody. These products include iron, steel, cement, fertilisers, aluminium and electricity.

The production of industrial goods in this list currently collectively account for around 13% of global emissions, while energy, which includes electricity, accounts for around 73% of global emissions.

Concurrently, early December saw the European Union (EU) pass similar laws relating to commodity suppliers in palm oil, cattle, soy, coffee, cocoa, timber and rubber having to prove their products are not derived from land subject to deforestation.

There is no denying that these policies are likely to be challenging for large exporters of these products to Europe, including Malaysia, which could see demand for their exports fall. But the reality is that this is the direction of travel for policy. While this will be challenging in the short run, there are also clear long-run opportunities. These policy changes help to better align the price signals to encourage a faster energy transition, which should help to mobilise investments that are needed to make it happen.

The main objective is to limit the use of fossil fuels and the impact of deforestation to thus lower carbon dioxide emissions. The necessary reaction is to be clear-eyed about these policy changes and for countries to adapt and work out what are the opportunities. It also offers the potential to markets like Malaysia to demonstrate the strides they're making in areas like deforestation and other sustainable practices which can be a differentiator to other countries.



IMPACT OF POLICIES ON KEY CARBON-INTENSIVE SECTORS IN MALAYSIA AND THE NEED TO RE-EVALUATE PRACTICES

A year on, after the overturn of commodity markets due to Russia's invasion of Ukraine, food price inflation remains high around the world despite having reduced from historic peaks in 2022. The price of food is especially sensitive to the war as both countries are significant global commodity-exporting nations. HSBC Global Research predicts that the super-squeeze in commodity markets is set to keep global commodity prices at levels that are well-above their historical averages, which is a positive for large commodity-exporting nations.

As a key exporter of commodities, elevated global commodity prices have resulted in some benefits for Malaysia, such as strong commodity exports which have helped to bolster the economy. This has also played a part in Malaysia outperforming its peers in terms of trade performance. According to the Malaysian External Trade Development Corporation, in 2022, Malaysia's exports rose by 25% to RM1.552 trillion with the EU being one of the major trading partners for exports, including commodities.

At the same time, commodity-driven deforestation can have a major impact on the environment, local communities and climate change. Food and land-use systems account for around a third of all greenhouse gas emissions and it is land-use change, such as clearing forests to make way for farms, that drives these emissions. Consequently, environmental and climate-change developments are emerging as structural factors influencing global commodity markets.

The ongoing due diligence in the EU presents Malaysia with an opportunity to formulate more deliberate and detailed definitions of criteria for sustainable development of the commodities sector. This will be critical to support the country's net-zero commitment by 2050 and, importantly help to maintain export competitiveness while meeting the world's stringent demands. The



Manufacturing, which is also a key driver of the Malaysian economy, **COMPRISES MANY SECTORS THAT DEPEND ON CARBON-INTENSIVE PROCESSES AND POSE SERIOUS ENVIRONMENTAL RISKS.** Some of the largest emitting sectors within the manufacturing industry in the country impacted by the latest round of EU climate tariffs include iron and steel amongst others.

National Agricommodity Policy 2021–2030, which was launched last year to facilitate the development of Malaysia's agriculture commodity industry in a more sustainable, competitive and market-oriented manner, is a major step in the right direction.

With *halal* principles and production supporting the development of sustainable agriculture, encouraging more *halal* food production can also be an effective way to advance sustainable farming and agriculture. But more needs to be done.

Manufacturing, which is also a key driver of the Malaysian economy, comprises many sectors that depend on carbon-intensive processes and pose serious environmental risks. Some of the largest emitting sectors within the manufacturing industry in the country impacted by the latest round of EU climate tariffs include iron and steel amongst others.

The global iron and steel industry is emission intensive, responsible for about 7% of the total global greenhouse gas emissions. Undoubtedly, steel is crucial to the energy transition, particularly as it is a critical component in our everyday life with it being used in cars, offices and even homes. It also serves as critical material for technologies such as electric vehicles and advanced manufacturing processes.



Industry transformation is therefore essential in Malaysia.

Currently, complexity and cost factors prevent the industry from decarbonising more quickly. Nevertheless, a starting point for companies is to identify and develop facility-specific roadmaps for a net-zero emissions future. Instead of investing in coal-based equipment, low-carbon technologies that can replace or be applied to existing assets can be deployed – this includes energy efficiency improvements, carbon capture and storage, and biomass or green hydrogen.

Support for investment and innovation would further enable steel's decarbonisation particularly with green steel becoming increasingly appealing

The role of banks is to actively engage with borrowers within the industry and support their efforts. **THIS INCLUDES DEVELOPING FINANCING AND INVESTMENT SOLUTIONS TO ENABLE EVEN THE MOST HEAVY-EMITTING SECTORS TO PROGRESSIVELY DECARBONISE**, while also maintaining a stable economy and the resilience of sectors that are fundamental to a nation's growth.

to businesses across a value chain. As an example, to enable the development of green steel, there are plans to build Europe's first large-scale green steel plant in Sweden. Its products will be used in the same way as traditional steel, to construct everything from cars and cargo ships to buildings and bridges. Interestingly, the new plant will use hydrogen technology, designed to cut emissions by as much as 95%.

THE ROLE OF BANKS IN THE DECARBONISATION PROCESS

A significant amount of capital is required as part of the decarbonisation process across industries and the financial sector will be key to enabling this. The role of banks is to actively engage with borrowers within the industry and support their efforts. This includes developing financing and investment solutions to enable even the most heavy-emitting sectors to progressively decarbonise, while also maintaining a stable economy and the resilience of sectors that are fundamental to a nation's growth. Islamic finance itself has its roots in not causing harm and promoting a values-based economy. As such, it can play a fundamental part in ensuring that more financial resources are mobilised in a sustainable manner.

At HSBC, we're prioritising financing and investment to support our

customers' transition to net zero. We have pledged to reach this across our portfolio by 2050 or sooner, in line with the goals of the Paris Agreement. To do this, our customers need to switch to more sustainable ways of doing business. We have committed up to USD1 trillion of financing and investment by 2030 to help them get there.

HSBC Amanah's climate-related strategies are part of a broader commitment to sustainability that is aligned with HSBC Group's ambition to become a net-zero bank. The Islamic franchise's sustainability focus is also aligned with the principles specified as part of Bank Negara Malaysia's Value-based Intermediation initiative – focused on shifting away from a solely profit-focused mindset to a new and holistic direction that looks at the impact of banking to both people and the planet whilst also ensuring that profit returns for shareholders remain a priority.

No one said the energy transition was going to be easy, but although there will be costs, there will also be substantial opportunities, particularly for those countries able to move fastest to embrace them. With Malaysia's ambition to become a carbon-neutral nation by 2050, rigorous global climate policies such as the ones that have been announced by the EU, open massive potential for the country to relook at and adapt its sustainability framework across key industries and reinforce the great progress made by the country in integrating sustainable business practices. This will be crucial to elevate Malaysia's competitiveness in the global arena and will also fuel the country's long-term sustainable growth. *

■ *Raja Amir Shah Raja Azwa is the CEO of HSBC Amanah; the Best International Islamic Bank in 2023 according to Euromoney. He has over 16 years of experience in finance, in particular Islamic banking and the development of the Malaysian Sukuk market. He is responsible for executing the Bank's strategy for Islamic banking in Malaysia, driving sustainable leadership and value-based intermediation efforts.*



VIRTUAL REALITY: REAL SALVATION IN THE MENTAL HEALTH SPACE

By Shein Shanin

Metaverse platforms could change the game in a post-Covid world.

The year is 2020. Like many in the world, Michelle is feeling isolated and depressed. Living alone in her small New York apartment, Michelle learns that her mother in Texas has just passed away from Covid-19. Unable to go out and seek help, her colleagues at the bank, who see her via video calls, notice a change in her usual bubbly demeanour but aren't able to provide physical or mental support. Her work begins to deteriorate and eventually, she worries that she might lose her job.

Enter virtual reality (VR), a simulated experience that uses 3D head-mounted devices (HMDs) and pose-tracking technology to immerse users in a digitally constructed world.

In the VR world, Michelle discovers *Death Q&A*, a digital space for individuals to open up about grief, loss, and mortality under the veil of anonymity. Creating an avatar, she attends the weekly hour-long sessions on the platform together with dozens of other people – each represented by

an avatar to protect their identity – who come together to candidly express their deepest, darkest feelings shared with no one else...except other avatars in the metaverse. Free from the fear of judgment, Michelle has finally found her tribe.

But what exactly is the metaverse? Simply put, it is an immersive virtual world that is accessed using VR or augmented reality HMDs. The metaverse is where physical and digital lives overlap and has been called an “embodied internet” by Mark Zuckerberg, CEO of Meta (formerly Facebook).

Like many other metaverse platforms, *Death Q&A* is littered with avatars, providing a form of escapism and anonymity that is increasingly becoming a way for many like Michelle to regain control of their mental health. However, it needs to be pointed out that these types of virtual platforms are not a replacement for therapy but an accessible alternative for people in times of need.

MENTAL GOES BOOM

A study by the World Health Organization (WHO) found that 30% to 80% of people with mental health challenges never seek treatment. This is due to numerous complex reasons, including stigma, a lack of awareness, limited access to treatment or resources, financial constraints, or a sense of bereftness in seeking much-needed support.

However, when offered treatment by their employers, the uptake by staff speaks for itself. According to a July 2022 survey titled *Banker Burnout: A Temperature Check* of over 200 financial service professionals jointly produced by UpSlide and Censuswide:

- > 72% of investment bankers are considering leaving the industry to avoid workplace burnout;
- > Only 2% of investment banking employees believe they have a good work-life balance; and
- > 32% of investment bankers would like greater support for mental health, including regular check-ins and offers of medical consultations.



The report also found that 43% of banks now have measures to foster and champion employee well-being with high take-up rates. For example, when NatWest Bank launched its free online therapy courses for employees in September 2020, around 5,500 staff signed up within the first six months.

In March 2022, a scientific brief by the WHO entitled *Mental Health and Covid-19: Early Evidence of the Pandemic's Impact*, reported a 25% increase in anxiety and depression during the first year of the pandemic, prompting 90% of surveyed countries to include mental health and psychosocial support in their Covid-19 response plans, spurring the need for digital health solutions.

This technological boom in the digital mental health space has accelerated the growth of its user base, particularly in the VR metaverse realm.

The metaverse can become a space to run real-life simulations, providing a safe environment for the management of mental health disorders such as anxiety, stress, eating disorders, attention deficit disorders, post-traumatic stress disorder and many more conditions. Removing the barrier and stress of an in-person session is especially helpful for an individual who is already suffering from mental trauma.

Technologies such as this are changing the way we think about solutions for mental health. As seen with *Death Q&A*, the metaverse can provide a sense of community and bring about transformation, promising the delivery of personalised mental health care whilst reducing its stigma.

The metaverse can become a space to run real-life simulations, providing a safe environment for the **MANAGEMENT OF MENTAL HEALTH DISORDERS SUCH AS ANXIETY, STRESS, EATING DISORDERS, ATTENTION DEFICIT DISORDERS, POST-TRAUMATIC STRESS DISORDER AND MANY MORE CONDITIONS.**

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FROM LAMENTATION TO SONG

In their multi-award-winning 1996 song *Virtual Insanity*, English funk-acid band Jamiroquai predicted a dystopian future where barely-functioning humans cling on to technology to our detriment:

*Future's made of virtual insanity
Now always seem to be
governed by this love we have
For useless twisting,
our new technology
Oh, now there is no sound,
for we all live underground*

But is it really all that bleak given inventions like the metaverse?

The digital mental healthcare market has seen rapid growth in investments over the past few years spurred on by the convergence of new technologies like blockchain, artificial intelligence (AI), augmented reality, and VR. According to Market Research Future's research report *Digital Mental Health Market*, the global market size was valued at USD19.5 billion in 2022 and is projected to be worth USD71.1 billion by 2030.

Aside from atypical tech companies like Meta and Microsoft investing in their future versions of the metaverse, Accenture has also emerged as a contender. As at February 2023, the consulting firm has approximately 245 metaverse-related pilots and proof-of-concept solutions built at Accenture Labs, as well as more than 600 patents filed within Accenture's Metaverse Continuum Group.

In 2022, it invested in BehaVR, a leading innovator in VR, digital wellness, and therapeutics experiences – by raising an initial USD13 million in Series B funding. The latter has since merged with OxfordVR, a spin-off from Oxford University's research on VR use in automated psychological treatments.

REAL PAIN

Although VR has been hailed as the future of mental health management, the fact remains that it is a relatively new technology and its sky-high start-

up costs remain a barrier to entry for most companies.

Another downside is a lack of standardisation among VR platforms, specifically in HMD models, making it difficult for developers to create consistent content. Oculus Quest, HTC Vive, and Samsung Gear VR are among the more popular platforms out there, with each offering its own set of features and capabilities. Corporates, developers, and psychologists will need to select the platform that best meets their needs, but with rapid advancement in the field, it's likely the

technologies – software and hardware – will need to be updated quickly and often.

As with all nascent industries, almost all of these VR therapies are largely unregulated and suffer from low-quality evidence based on a limited number of controlled trials. More research is still needed to determine its long-term efficacy for treating various behavioural and cognitive diseases and research will take time to bear fruit.

As the market for VR continues to evolve, it does seem inevitable that it will be a part of all of our lives in

the not-so-distant future, blurring the distinction between physical and virtual realities as more investments are directed towards this sector.

It's still some ways off but corporates need to be part of that change and embrace the fluidity of the future. It is time for them to stake a claim in the ever-expanding metaverse. *

■ *Shein Shanin is Associate Content Producer at Akasaa, a boutique content development and consulting firm.*

SINO RACE

China has developed its own unique market given its large demand and the rapid rise of the internet. With internet users in China hitting 1.05 billion in June 2022 according to data released by the China Internet Network Information Center, there is space for online mental health services to grow.

However, the country suffers from a supply-demand imbalance for mental health care, where access to therapy is extremely limited. A 2019 paper, *Analysis of China's Mental Health Resources*, published in the 2019 edition of the *Chinese Journal of Health Policy* highlighted that with a massive population of 1.4 billion people, the market was severely underserved with only 1,000 rehabilitation psychiatrists, 1,500 mental health social workers, and 3,000 psychotherapists. In 2020, mental health

accounted for less than 2% of total healthcare spending.

Policy support to promote the national development of the mental health industry has been significant. A major turning point occurred in 2002 when China's first National Mental Health Plan was introduced. Then in 2013, the first Mental Health Law came into effect after 27 years of debate. This was followed by the landmark Healthy China 2030 Blueprint in 2016 and a new guideline in 2019 that cites mental health as one of the country's major health concerns.

Given the country's increasing awareness of mental health, and its hunger for rapid adoption, expansion and evolution of new technology, AI and VR has been seen as a way to revolutionise psychotherapy, open new frontiers, and provide individualised support.

With that said, the VR market in China is poised for immense growth over the next few years. A report by IDC, *Worldwide Augmented and Virtual Reality Spending Guide*, states that the VR market in China is expected to reach a compound annual growth rate of 43.8% in the

five years leading up to 2026. The market research firm also predicts that IT-related expenditure in China's AR/VR market will increase from USD2.13 billion in 2021 to USD13.08 billion in 2026.

Although the country has yet to produce its own mental health applications in VR, it has been working with global healthcare providers to develop this burgeoning industry.

For example, the US- and China-based company, Cognitive Leap, is using VR to break the stigma of mental illness in China. Cognitive Leap focuses on "brain health" instead of "mental illness", a term that works better in Chinese characters and is better received in the region. It uses a clinical-grade VR attention deficit hyperactivity disorder (ADHD) assessment tool developed specifically to early detect, monitor, and treat children with ADHD.

Then there is also 'Yes I Can', Asia's first VR therapy solution, jointly launched by AXA Hong Kong, Chinese University of Hong Kong, and OxfordVR in 2019 as a new mental health platform to tackle severe anxious social avoidance.



SIGNPOSTING SOURCES OF SUPPORT

By Chartered Banker, UK



Amid the fallout of the rising cost of living, what can banks do to support the emotional health of their employees?

The pandemic and an uncertain economic outlook on the general population are well known. But impacts of the ongoing effects of the less attention is paid to the staff working on the front line of retail banking. If banks are to effectively help their customers in these challenging times, they need to support the emotional well-being of their staff and help them build emotional resilience.

“Retail banking staff have first-hand experience with a public that are facing the kind of pressure we haven’t seen in a generation, including slipping living standards and falling wages,” says Rachel Suff, Senior Policy Adviser Employment Relations, The Chartered Institute of Personnel and Development (CIPD); a charity setting professional workplace standards and championing better working lives.

Staff are increasingly vulnerable to customers taking their frustrations out on them and can potentially face harassment or violence, notes Suff. This can have a huge impact on emotional well-being. “You need to make sure that you have got signposting to sources of support your organisation can offer. So, when people start to have problems with their health or are feeling stressed they can talk about their health issues.”

Suff encourages banks to create an “open, inclusive and supportive climate around mental health”, which also requires ensuring staff have good working conditions and are not overloaded. Even encouraging employees to find the time to switch off from work can make a big

difference, she says.

“It’s about being proactive and promoting good training and awareness around well-being, offering lots of social networking opportunities because peer support is so important. Make sure that your leaders take the lead, that they send out positive messages about mental health and lifestyle, and embed health and well-being into your organisation’s DNA.”

When it comes to supporting mental well-being, there is no one-size-fits-all approach. Every workplace has its different requirements, and that’s just as true for the people who work within them. Banks should think carefully about the frameworks they put in place to support their workforce, believes Suff.

“Organisations need to make sure that their health and well-being frameworks are not just a massive menu of initiatives

“In an economic downturn the first things to go are the things that businesses think are nice to do; the pink and fluffy stuff. Well-being, unfortunately, often falls under that banner. But it’s not. It’s absolutely central. In fact, it’s a legal requirement under the Health and Safety Executive to **PERFORM A STRESS RISK ASSESSMENT ON YOUR PEOPLE.”**

Duncan Rzyško

Chief of Creativity, Happiness & Innovation, The Stress Management Society.

but are based on the outcomes of the evidence you have collected, surveys and focus groups and occupational health data. You should keep monitoring the impact of what you’re putting in place to ensure it’s really making a difference.”

CREATE A ‘PEOPLE STRATEGY’

Banks are increasingly aware of the need to support their staff’s emotional well-being but they also need to have a long-term strategy in place, says Duncan Rzyško, Chief of Creativity, Happiness & Innovation, The Stress Management Society.

“Putting in place an employee assistance programme is the bare minimum you should be doing and it’s only for short-term mental health support. You need a robust well-being strategy, not an initiative that you just do once. It’s got to be as important as your marketing or your sales or anything else,” he emphasises.

“It’s part of your people strategy. It’s about looking after people and looking after talent, attracting the best and keeping the best. Every business needs to ensure that their workplace is healthy. And you can do it. You do it with data, with clear strategy – with guidelines, pathways and support.

“In an economic downturn the first things to go are the things that businesses think are nice to do; the pink and fluffy stuff. Well-being, unfortunately, often falls under that banner. But it’s not. It’s absolutely central. In fact, it’s a legal requirement under the Health and Safety Executive to perform a stress risk assessment on your people.”

SUPPORTING REMOTE WORKERS

The pandemic drove a major shift in working practices, with the rise of remote and hybrid working. A recent report from Culture Shift entitled *Maintaining Workplace Culture in a Rapidly Changing Environment*, revealed that 54% of employees in the financial services sector said that working from home has a positive impact on their work-life balance. Omair Makhdumi, Head of Marketing, Bank Workers Charity, thinks that remote working is good for employee well-being, but it has its challenges.

“For a number of people, working from home gives them the flexibility to take their kids to and from school; to do the laundry; to manage their home and make their work-life balance a lot better. But it also becomes harder for managers to notice any signs of distress and provide support if staff members aren’t physically in front of them. But, on the other hand, a large number of people have benefited hugely from an improved work-life balance.”

Where appropriate, banks should facilitate remote working practices that align to the needs of their organisation with the needs of their workforce. Adapting to this new world of work requires understanding the role of managers, says Ryzsko.

“I think a manager’s role has changed

“For a number of people, working from home gives them the flexibility to take their kids to and from school; to do the laundry; to manage their home and make their work-life balance a lot better. **BUT IT ALSO BECOMES HARDER FOR MANAGERS TO NOTICE ANY SIGNS OF DISTRESS** and provide support if staff members aren’t physically in front of them. But, on the other hand, a large number of people have benefited hugely from an improved work-life balance.”

significantly. Managers need to upgrade their skills. It’s not so much about asking what people are doing as asking them how they are doing. They need support, and a space for a debrief, even if it’s a place to vent or get a bit of perspective. Where managers are checking in with people, and taking interest in them as individuals, they’ve had a better outcome; people have stayed, they’ve been more loyal.”

AIDING RECOVERY

A wide range of support is available for banks that want to ensure their staff are happy and effective in their working lives. Organisations can sign up to the The Mental Health At Work Commitment, a widely used framework designed to promote employee well-being. Its signatories include Barclays, Lloyds Banking Group, and Santander UK.

Help is also available from the Advisory, Conciliation and Arbitration Service, an independent public body that provides free and impartial advice and workshops to help employers promote good mental health in the workplace. Banks can also provide support for marginalised groups such as women, BAME (Black, Asian and Minority Ethnic) people, those with disabilities and LGBTQ+ people, says Makhdumi.

“We work very closely with banks in the UK and complement the support that they have available. We’re supporting lots of people around cost-of-living increases, people who are maybe falling into arrears or debt through no fault of their own, or have fallen upon hard times. We mustn’t forget that people are still acquiring disabilities and life-changing illnesses. Then there are issues such as bereavement or relationship problems, as well as the cost-of-living crisis.

“It makes it harder for people to cope with all the other things. So, if an individual is perhaps experiencing a bout of depression or anxiety, or falling into debt, it’s harder for that person to recover. We’re able to provide grants that help with cost-of-living increases, but also to support individuals who might have disabilities.” *

■ This article previously appeared in the *Chartered Banker* magazine, UK, Spring 2023 edition.





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What's The Right ESG Framework For You?

By Julia Chong

Deciding on the best sustainability reporting standard for your organisation.

As environmental, social, and governance (ESG) standards take centre stage, there is healthy competition when it comes to sustainability reporting initiatives. Corporations that are eager to redefine their value by incorporating ESG metrics have a range of competing systems to choose from.

Navigating the landscape of sustainability reporting can seem daunting and is not for the fainthearted. At last count, in April this year, the Grantham Research Institute on Climate Change and the Environment listed 3,144 policies and laws related to climate change alone, excluding other sustainability-related regulations.

The Task Force on Climate-related Financial Disclosures' (TCFD) notes encouraging progress in its 2022 *Status Report* as all regions significantly

increased their levels of disclosure over the previous three years. The average level across the 11 recommended disclosures was 60% for European companies (+23 percentage points since fiscal year 2019); 36% for Asia Pacific (+11 percentage points); and 29% for North America (+12 percentage points).

Although on the uptrend, there is still a long way to go for organisations to achieve their respective sustainability commitments.

In line with the global transition to a low-carbon economy, on 26 September 2022, Bursa Malaysia announced enhanced sustainability reporting requirements for Main Market- and ACE Market-listed issuers, in accordance with international best practices. Julian Hashim, Chief Regulatory Officer of Bursa Malaysia, stated: "Come 2025, all Main Market-listed issuers will be





reporting TCFD-aligned disclosures where they will be internalising climate change considerations in their business strategies as well as in responding to the needs of their key stakeholders.

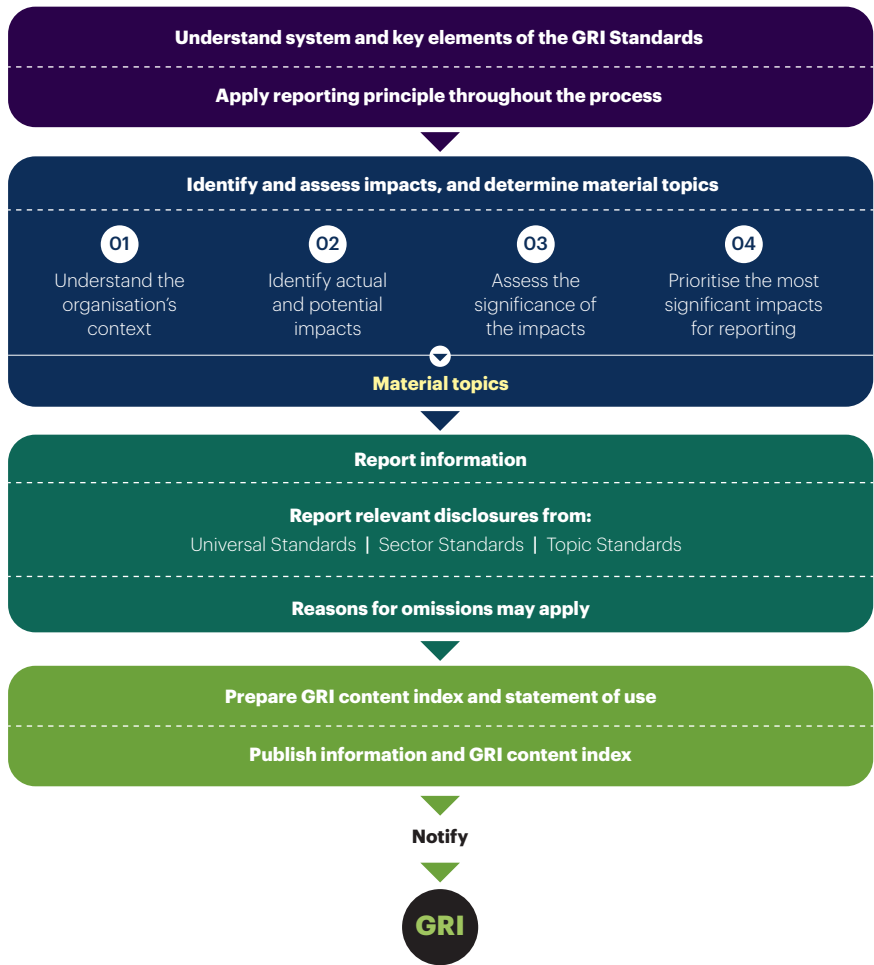
“Separately, Bursa Malaysia’s overall enhanced Sustainability Reporting Framework puts listed issuers in a good position to adopt international reporting frameworks and standards, such as those issued by the Global Reporting Initiative and the International Sustainability Standards Boards. Overall, these enhancements put our requirements on par with benchmarked international markets.”

The timeline requires disclosure of common sustainability matters on or after the financial year ending (FYE) 31 December 2023 and culminates with TCFD-aligned disclosures for FYE 31 December 2025.

The following is a short guide to help you understand the most widely adopted sustainability reporting standards and to decide which one would be the best option for your organisation.

GREEN REPORTING INITIATIVE (GRI)

The first and most commonly used standard, the GRI was developed in 1997 by a non-governmental organisation. The standard is broader than many other frameworks and is often adopted by large multinational companies for their ESG report and utilised by third parties in deriving sustainability indices and ESG awards. The methodology includes an independent, multi-stakeholder process which advocates transparency in assessing all aspects of E, S, and G in a corporation.



The GRI consists of three series of standards:

- + **GRI Universal Standards:** As the name suggests, these are benchmarks that apply to all companies / organisations and are comprised of:
 - **GRI 1:** Fundamental requirements to ensure companies report with accuracy, balance, and verifiability.
 - **GRI 2:** Disclosures relating to an organisation’s profile and scale, including its structure and reporting practices; activities and workers; governance; strategy; policies; practices; and stakeholder engagement.
 - **GRI 3:** Material topics which an organisation can use to determine the topics most relevant to its impacts.
- + **GRI Sector Standards:** These list topics that are most likely to be material for organisations in a specific sector and indicate relevant disclosures that must be applied when reporting on these topics. If an applicable Sector Standard is available, the organisation must use it when reporting GRI Standards.
- + **GRI Topic Standards:** Involves topic-specific disclosures, such

Figure 1: Reporting using the GRI Standards
Source: Global Reporting Initiative, *A Short Introduction to the GRI Standards*.



as occupational safety and health, waste management, etc, and how an organisation manages their associated impacts.

Due to its comprehensive assessment across major industries, most companies adopt the GRI and report according to its standards on all material topics and related impacts. However, the standard can also be used by smaller organisations that cannot fulfil some requirements but still wish to adopt a benchmark to begin their sustainability assessment journeys. In such cases, a company can use selected topics and report with reference to the GRI Standards.

SUSTAINABILITY ACCOUNTING STANDARDS BOARD (SASB)

Devised by the Value Reporting Foundation, it has since consolidated with the International Financial Reporting Standards (IFRS) Foundation in order to simplify the global baseline of sustainability disclosure for investors. The SASB Standards were first made public in 2018 through a set of 77 Industry Standards, identifying financially material sustainability topics and the relevant metrics for a company in a specific industry. Their focus is on the financial performance of a company and the

Their focus is on the financial performance of a company and the potential impact arising from critical ESG issues. The SASB Standards are far-reaching in **ASSESSING SUSTAINABILITY DIMENSIONS SUCH AS DIVERSITY, GENERAL ISSUE CATEGORIES** like whistle-blower policies, disclosure topics such as reporting and risk profile, and linking these to accounting metrics. The Industry Standards must be read and applied together with the SASB Standards Application Guidance.

potential impact arising from critical ESG issues. The SASB Standards are far-reaching in assessing sustainability dimensions such as diversity, general issue categories like whistleblower policies, disclosure topics such as reporting and risk profile, and linking these to accounting metrics. The Industry Standards must be read and applied together with the SASB Standards Application Guidance.

The SASB Standards are also a feed-in component to the International Sustainability Standards Board's (ISSB) upcoming standards in June 2023, namely IFRS S1 and S2 (outlined below), which cover sustainability related risks and opportunities and tie-in with the SASB Standards. These comprise of:

- + General Requirements (S1): Baseline disclosure on a company's sustainability related risks and opportunities. The framework, described as the 'core baseline' of the ISSB's sustainability reporting framework, utilises the SASB Standards for aspects beyond climate.
- + Climate-related Disclosure (S2): Building on the TCFD's existing disclosure framework, it nonetheless utilises SASB's industry-specific climate metrics to determine what companies must do to match investor needs for disclosure.

TCFD

Set up in 2015 by the Basel-based Financial Stability Board, the TCFD issued a set of recommendations in June 2017 for organisations in order to develop more effective climate-related financial disclosures. These are intended to assist financial markets in making more accurate assessments and pricing of climate-related risks and opportunities. Although adoption is voluntary, many

Developed by the Greenhouse Gas Protocol, Scopes 1 and 2 are mostly within the company's sphere of control and, at times, solutions exist to help bring levels close to net zero. More difficult is curbing Scope 3 emissions, which form more than 70% of a company's carbon footprint and are the furthest from its sphere of control.

SCOPE 01 EMISSIONS

Direct GHG emissions caused by the company and covers aspects that it can and does control, such as operating machinery, power levels and heating.

SCOPE 02 EMISSIONS

Indirect GHG emissions created when the company buys the energy or electricity it needs from a third party.

SCOPE 03 EMISSIONS

All emissions that the company is indirectly responsible for across the value chain, from purchase of raw material from suppliers to end user.

jurisdictions are increasingly making its 11 disclosure recommendations mandatory as part of the regulatory framework for climate risk disclosures from 2023 onwards.

The TCFD recommendations zooms in on four pillars of a company:

- > **Governance:** Disclose the company's governance around climate-related risks and opportunities.
 - Describe the board's oversight of climate-related risks and opportunities.
 - Describe management's role in assessing and managing climate-related risks and opportunities.
- > **Strategy:** Disclose the actual and potential impacts of climate-related risks and opportunities on the company's businesses, strategy, and financial planning where such information is material.
 - Describe the climate-related risks and opportunities the company has identified over the short, medium, and long term.
 - Describe the impact of climate-related risks and opportunities on the company's businesses, strategy, and financial planning.
 - Describe the resilience of the company's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.
- > **Risk management:** Disclose how the company identifies, assesses, and manages climate-related risks.
 - Describe the company's processes for identifying and assessing climate-related risks.
 - Describe the company's processes for managing climate-related risks.
 - Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the company's overall risk management.

> **Metrics and targets:** Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.

- Disclose the metrics used by the company to assess climate-related risks and opportunities in line with its strategy and risk management process.
- Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions and the related risks.
- Describe the targets used by the company to manage climate-related risks and opportunities and performance against targets.

A recent initiative that builds on the TCFD model is the United Nations-backed Taskforce on Nature-related Financial Disclosures (TNFD) that was launched in June 2021. The TNFD provides a framework for corporate disclosures on risks from biodiversity loss and ecosystem degradation and is aligned to the TCFD as it is organised across the same four pillars of governance, strategy, risk management, and metrics and targets. The TNFD framework is scheduled to be published and ready for market adoption by September 2023.

CARBON DISCLOSURE PROJECT (CDP)

Started in 2000, its core platform is the CDP Online Response System (ORS) which is used by organisations and cities to report sustainability information. A city or company's sustainability information is requested by stakeholders but submission is voluntary. Data submitted on the ORS platform is benchmarked on four key areas: climate change, forests, water security, supply chain.

Based on the organisation's submission, a CDP score from (D- to A) is assigned, giving stakeholders a snapshot of its environmental disclosure standards and performance. The report card incentivises companies to take action. It is important to note that an 'A' grade

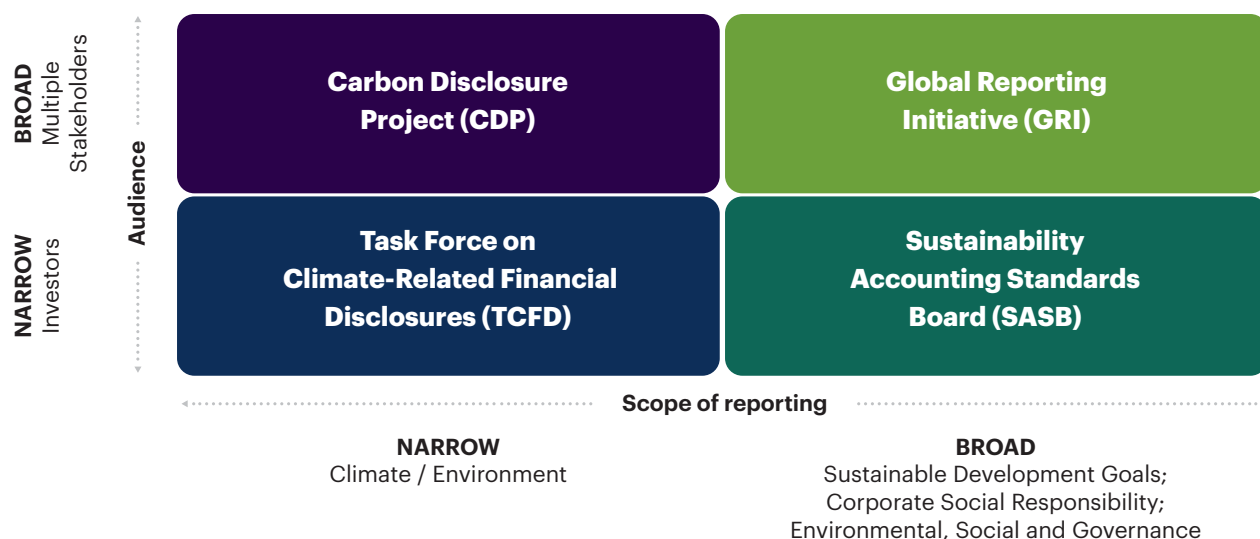


Figure 2: Choosing the right sustainability reporting standard.

Source: Augmented from *Harvard Business Review*, 14 January 2022, *Designing Your Company's Sustainability Report*.

merely means that the company is among the most transparent of its peers when it comes to climate disclosure. CDP's scoring methodology is aligned with the TCFD and other major environmental standards, allowing for comparability across the market, however it is not as comprehensive as other methods in measuring the level of sustainability of a city or organisation.

DIFFERENT STROKES FOR DIFFERENT FOLKS

With so many different frameworks and metrics to consider, the task of deciding which framework or metric to use when reporting corporate sustainability performance can seem daunting.

In *Harvard Business Review's* January 2022 article, *Designing Your Company's Sustainability Report*, authors Tim Rogmans and Karim El-Jisr elaborate on a matrix (**Figure 2**) developed by Dubai's Sustainable City which "sorted through these differences by placing topic on one axis and audience on the other...then analysed all the major global sustainability reporting standards and placed each one in the relevant quadrant on the matrix."

"Using this matrix, executives can see that if they want to report on the specific risks that climate change present to its financial results, they can choose to use...

TCFD (a broad framework). Companies looking to report on a wide range of issues can use SASB.

"On the top half of the chart, the CDP focuses on the impact of a company on the greenhouse gas emissions. CDP allows companies to report their impact on climate, water and forests, with reporting on climate typically based on the Greenhouse Gas Protocol. Finally, companies looking to report on a broad set of environmental and social topics can

Managers who use this matrix need to decide whether to **FOCUS REPORTING ONLY ON ENVIRONMENTAL ASPECTS OR TO INCLUDE A BROADER SET OF NON-FINANCIAL TOPICS** in the report. A second consideration is whether companies are reporting their impact on the environment or the impact of the environment (in particular, climate change) on the company. The former question is of interest to a broad set of stakeholders, whereas the latter is of relevance primarily to the company's management and investors.

use GRI, the world's most widely used sustainability reporting standard.

"Managers who use this matrix need to decide whether to focus reporting only on environmental aspects or to include a broader set of non-financial topics in the report. A second consideration is whether companies are reporting their impact on the environment or the impact of the environment (in particular, climate change) on the company. The former question is of interest to a broad set of stakeholders, whereas the latter is of relevance primarily to the company's management and investors. Although both are based on a solid understanding of climate change and its causes, they are essentially separate questions and use different reporting standards. The sustainability reporting standards matrix provides guidance on which standards are appropriate in each of the four scenarios that arise."

It's important to emphasise that no standard is superior to another. Instead, companies should assess their needs and ensure that whichever sustainability reporting standard it adopts, it must be fit-for-purpose and lead to regulatory compliance. *

■ *Julia Chong is a content analyst and writer at Akasaa, a boutique content development and consulting firm.*

Taking The First Step with Nature: The Next Risk Frontier

By Divyaasiny R Rajagantham and Wan Noorfatin binti Wan Mohd Zani

Imminent threats of the nature crisis demand swift and decisive action.

The past decade has witnessed an unprecedented decline in nature. Nature loss is also inextricably interlinked with climate change, and achieving global goals for addressing one cannot be in isolation from the other. With half of the world's total gross domestic product, approximately USD44 trillion, being moderately or highly dependent on nature, nature loss has far-reaching consequences not just for the ecology, but also for the economy.

While the climate debate has synthesised around the Paris Agreement's ambitions to keep global warming below 1.5°C, there has been no equivalent target to spur nature action until now. Last year, representatives from 196 countries, including Malaysia, convened in Montreal, Canada, for a global summit that ended with a landmark biodiversity agreement, known as the

Global Biodiversity Framework (GBF), to halt and reverse biodiversity loss by 2030. The significance of this landmark deal lies in the fact that countries can now refer to the GBF's overarching goals and targets as their 'North Star' to guide biodiversity agendas at both national and sectoral levels.

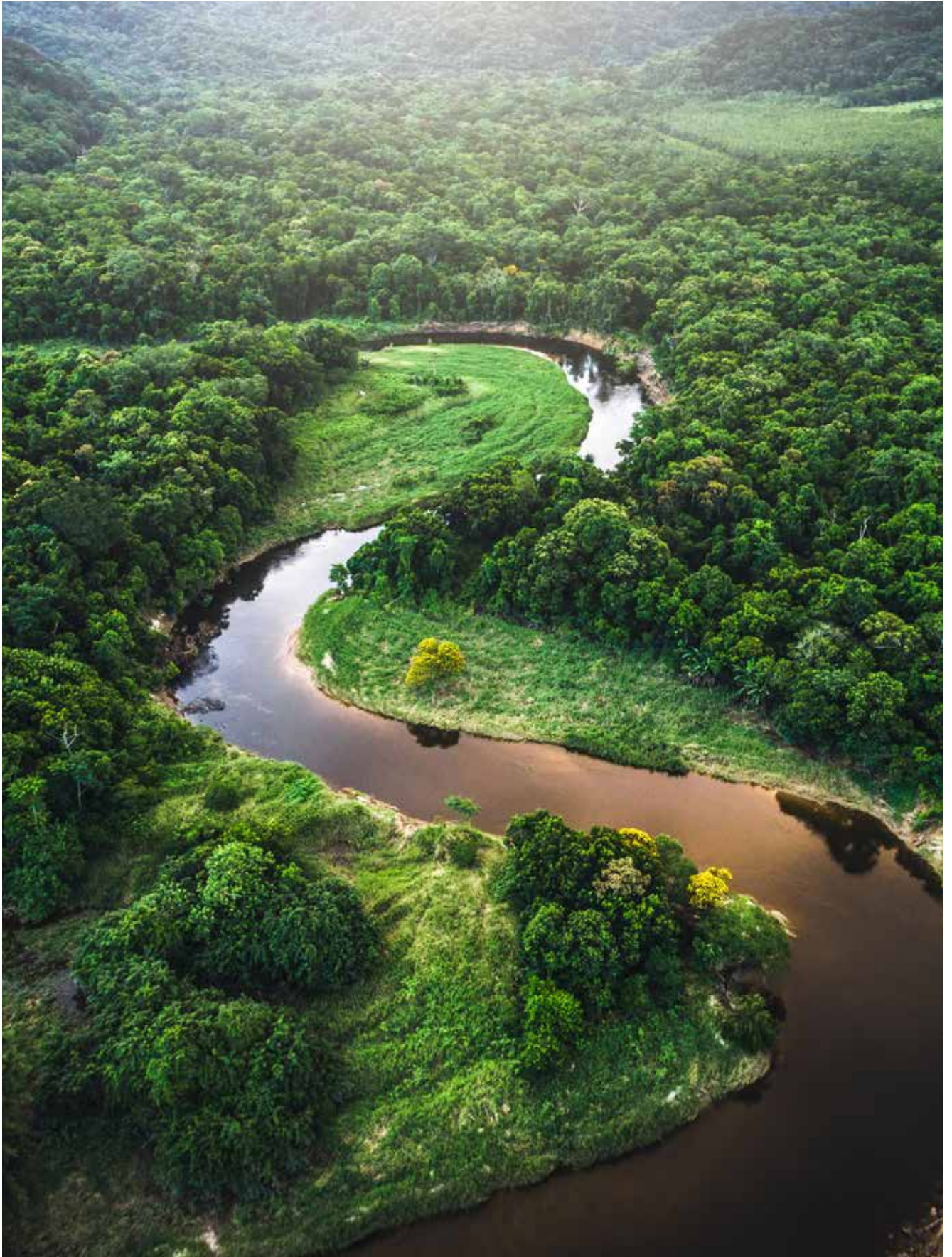
The World Economic Forum has flagged biodiversity loss as a critical threat over the next decade, making it clear that addressing nature loss is an urgent priority. According to the Global Forest Watch annual forest analysis, our planet lost 3.75 million hectares of tropical primary forest in 2021, equivalent to the size of one football pitch, every six seconds. Given Malaysia's status as one of the world's megadiverse tropical countries, the country's rapid economic development has heavily relied on its abundant natural resources. As a result, we inherently face high economic exposure to nature-

related risks, which makes us vulnerable to changes in biodiversity and its related ecosystem services.

UNDERSTANDING NATURE-RELATED RISKS: IMPACTS, DEPENDENCIES, AND FINANCIAL IMPLICATIONS

Fundamental to managing nature-related risks is understanding how the financial sector is exposed to them. According to the Network for Greening the Financial System, nature-related risks arise from the impact-dependency relationship between an organisation with nature, which may affect the economic performance of the organisation and subsequently pose financial risks to the financial institutions that are financing, investing, or underwriting them.

Similar to climate-related risks, nature-related risks consist of physical and transition risks. Physical risks are



a direct result of an organisation's dependence on biodiversity and ecosystem services, which are typically categorised as provisioning (e.g. timber, food production), regulating (e.g. water regulation, carbon sequestration), and cultural (e.g. ecotourism). The degradation of these services can give rise to physical risks and disrupt the business continuity of their financing counterparts, which can lead to operational disruptions and weaker profitability, thus impacting debt repayments. An example of nature-related physical risk is the unplanned land conversion for agriculture in the Amazon rainforest. A study has shown that the removal of native vegetation in the region to make way for soy and beef sectors can potentially engender erratic rainfall patterns and increase droughts that could result in a sharp decline in crop yields, eventually affecting financial institutions that are heavily invested in the agricultural sector in Brazil.

On the contrary, nature-related transition risks emerge due to the misalignment between an organisation's activities and the changing landscape in which it operates. Organisations with strong negative impacts on nature will be most vulnerable to these risks (e.g. agriculture, forestry, fishery, mining, energy, transport, and infrastructure). Abrupt transitions, in the form of technological breakthroughs, regulatory changes, and shifts in consumer preferences can all give rise to market, reputational and regulatory risks, which can, in turn, increase the probability of defaults on loans and write downs of investments in affected companies. The most recent endorsement of the European Union Deforestation Law, which will prohibit the import of deforestation-linked products, will most likely be a source of regulatory driven transition risk for financial institutions that have exposure to deforestation and conversion.

Nature-related risks do not only affect individual financial institutions, but can also pose significant macroeconomic and financial implications to the system as a whole. Recognising this, central banks and financial supervisors in several countries such as the Netherlands,

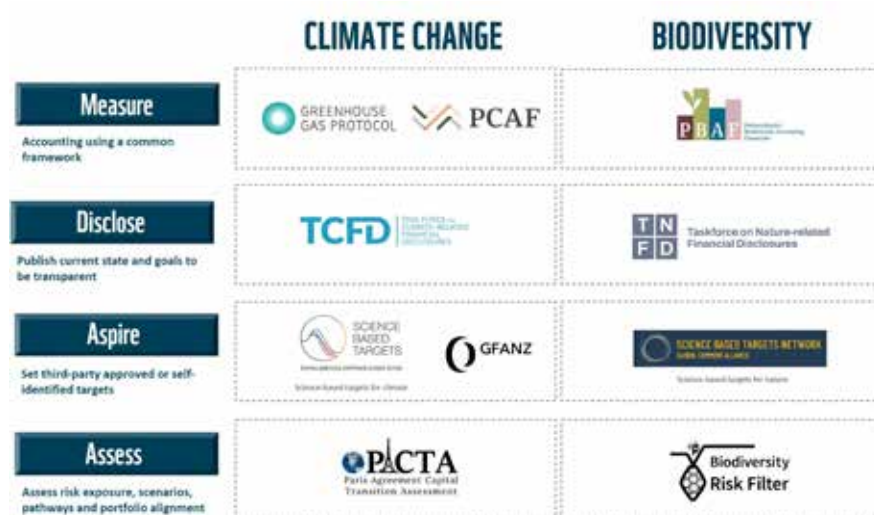


Figure 1: Non-exhaustive overview of existing and emerging tools and standards to facilitate climate and biodiversity action by financial institutions.

Source: Adapted from the Science-based Targets Initiative and TNFD with modifications.

France, Brazil, Mexico, South Africa – and even Malaysia – have conducted exploratory studies to understand the exposure of the financial sector to biodiversity-related risks. Key findings from a joint report by Bank Negara Malaysia and World Bank revealed that the country's financial system is exposed to a broad range of nature-related physical and transition risks – 54% of the commercial loans portfolio analysed were exposed to sectors that highly depend on ecosystem services and about 87% were exposed to industries that strongly impact nature.

NAVIGATING NATURE-RELATED RISK LEVERAGING EMERGING STANDARDS AND TOOLS

At the ground level, rapid and scaled-up corporate action is critical to halt and reverse nature loss, and Target 15 of the GBF exemplifies this. The target calls for financial institutions and large companies to regularly monitor, assess, and transparently disclose nature-related risks, dependencies, and impacts along their operations, value chains, and portfolios, to reduce negative impacts on biodiversity and increase positive impacts. Implementation of this target will raise the accountability of the private sector in addressing their impact on nature and encourage them to be

more transparent and adopt sustainable production practices.

However, it is to be noted that assessing nature risks is no easy feat. In contrast to climate change, biodiversity is a more complex and multidimensional paradigm to understand - it cannot be simplified within a single metric for comparison, unlike carbon reduction, which can be measured in tonnes of CO₂. To further add to the complexity, nature-related risks are also highly spatial-specific and require asset-level location data for the assessment. Unsurprisingly, investors are still grappling to understand what this means in implementation and many simply do not know where to start.

Fortunately, in recent years, there has been an emerging body of frameworks, standards, tools, and methodologies for the private sector to account for, assess, disclose, and manage their nature-related risks (see **Figure 1**). Many of these initiatives tend to mirror their climate counterparts and are gaining stronger momentum. These include the Taskforce on Nature-related Financial Disclosures framework (to guide nature-related disclosures), Science Based Targets Network (SBTN) (to guide target setting for nature), and Partnership for Biodiversity Accounting Financials (to guide the measurement of biodiversity impact/dependencies).

BRF TOOL - A PRACTICAL, FIRST-START TOOL TO ASSESS BIODIVERSITY-RELATED RISKS

While these frameworks offer valuable guidance and a good starting point for organisations to understand, assess and respond to biodiversity-related risks, they may still seem technical and complex, potentially deterring their adoption. To help address this, the World Wide Fund for Nature (WWF) recently launched the Biodiversity Risk Filter (BRF) tool, which breaks down the complexity of biodiversity and provides practical, decision-useful information in a visually comprehensible manner. Known to be the first of its kind, the BRF is an open-sourced, spatially explicit biodiversity assessment framework that builds on existing data and tools.

The BRF tool covers a range of risk indicators, some of which are pertinent to the Malaysian context, including landslides, key biodiversity areas, availability of flora and fauna, and water conditions. It employs a four-level risk hierarchy model to group these indicators into thematically relevant risk categories and risk types, informed by 56 risk metrics that comprise raw data and global biodiversity datasets.

The current version of the BRF tool allows organisations, including financial institutions, to conduct location-specific and industry-specific assessments of biodiversity-related physical and reputational risks across an organisation's

operations and supply chains. The tool is composed of four key modules:

- > **INFORM MODULE**, which provides an overview of industry specific dependencies on ecosystem services and impacts on biodiversity;
- > **EXPLORE MODULE**, which presents a collection of spatially explicit maps of biodiversity importance and integrity;
- > **ASSESS MODULE**, which allows users to input location-specific company and/or supply chain data to run a tailored biodiversity-related physical and reputational risk assessment; and
- > **RESPOND MODULE** (currently under development), which will support users in identifying suitable actions to respond to the identified risks and provide guidance on where to obtain more specific information on biodiversity values, using complementary tools such as the Integrated Biodiversity Assessment Tool.

By gathering asset-level location data from clients and inputting them into the BRF tool, financial institutions will be able to build an accurate picture of their biodiversity risk exposure. Insights from the tool can help investors prioritise their actions and systematically plan their mitigation measures at a portfolio level.

This is important for deciding resource allocation on in-depth investigations and when engaging with companies they invest in on their impacts, dependencies, and respective mitigation strategies.

A CALL TO ACTION

It took decades for the private sector to grapple with the complex challenges posed by climate change, finally culminating in a coordinated global response to address its risks. Although nature-related risks have received less attention and remain less understood, they cannot afford to follow the same timeline in addressing them. The imminent threats of the nature crisis demand swift and decisive action. To effectively manage the risks associated with nature loss and build resilience across their value chains, the financial sector must begin to act now, leveraging the emerging standards and frameworks being developed for nature. *

■ *Divyaasiny R Rajagantham is a Senior Analyst and Wan Noorfatini binti Wan Mohd Zani is a Manager in the Sustainable Finance team at WWF Malaysia. Together, they provide valuable support for various sustainable finance initiatives, collaborating with regulatory authorities and financial institutions to integrate environmental, social and governance policies and practices in the financial sector.*

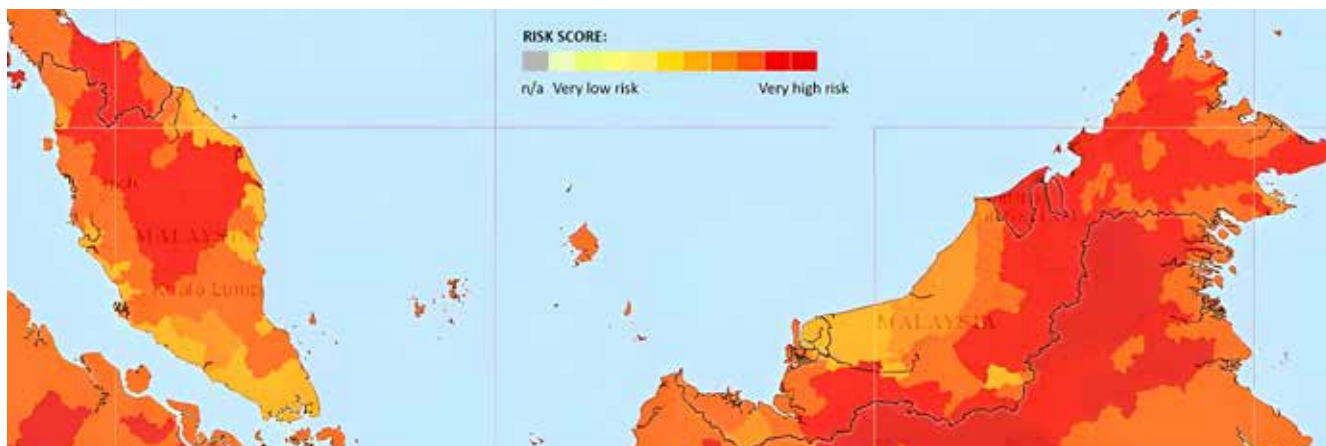


Figure 2: A high-level snapshot from the Explore Module reveals the reputational risk layer for Malaysia, indicating that companies in the different regions of the country may face biodiversity-related reputational risks, with exposure levels varying from medium to very high.

Source: WWF BRF.

USING DATA TOWARD A HEALTHY WORKPLACE

By Dr Mohd Nasir bin Mohd Ismail

DISCOVER HOW DATA-DRIVEN APPROACHES CAN
REVOLUTIONISE WORKPLACE HEALTH, DRIVE
MEANINGFUL INTERVENTIONS, AND FOSTER A
THRIVING AND SUSTAINABLE BANKING INDUSTRY.



During the early months of 2021, a group of 13 data analysts employed at Goldman Sachs conducted a survey to evaluate their job experience. The results were startling, with many of them reporting working up to 100 hours per week and sleeping at 3 a.m. in the morning. As a consequence of this work environment, their physical and mental health deteriorated significantly. These findings drew widespread media attention and were regarded as an *exposé* of the challenging and, in what some termed as, “inhumane working conditions” at Wall Street companies. Despite this, some respondents to the *exposé* argued that these junior bankers were highly compensated and therefore should persist through the gruelling workload and maintain the status quo. On the other hand, Goldman Sachs found the data concerning and went on to implement changes including limiting work hours and increasing automation to reduce workloads.

Bank Negara Malaysia data show that around 165,000 people work in the financial services sector in Malaysia. As Malaysia strives to develop its sustainable banking sectors, it is crucial to acknowledge that fostering a healthy workplace is a critical step towards this objective. Without a healthy workplace, Malaysian companies could experience high employee turnover and a loss of talent, which could have significant repercussions for the country’s financial sector. Therefore, it is vital to start addressing toxic and unhealthy workplace issues and create a healthy work environment for all employees in this sector.

WHAT IS AN UNHEALTHY WORKPLACE?

A toxic or unhealthy workplace is a workplace that harms the physical and mental health of workers. It is imperative to recognise that workplaces can impact individuals differently. However, any workplace that negatively affects the physical or mental health of its employees could be regarded as toxic or unhealthy. Therefore, the individual worker’s experience should be used as the criterion for assessing workplace toxicity and

unhealthiness. Nonetheless, aggregating data from all workers in each workplace can provide a more precise picture of that workplace.

A toxic or unhealthy workplace can have detrimental effects on the company, such as high employee turnover, loss of talented workers, decreased productivity and profitability, and hindering innovation. This toxic or unhealthy workplace can also impact the workers inside and outside of their employments, including affecting their relationships at home and, studies have demonstrated that women working in high-stress work environments reported countless reproductive issues, including miscarriages. Hence, it is imperative that the banking and financial sector in Malaysia actively work towards eliminating toxic or unhealthy workplace.

TOWARDS A HEALTHY WORKPLACE

The pathway towards a healthy workplace should be laid down by data. Data will allow companies to assess, intervene, and evaluate their state of workplace health. Using data to create a healthy workplace allows us to have a systematic and well-informed approach. Data also allows us to evaluate the changes incorporated so that their efficacy and impact could be understood. There are a few pathways to using this data, including training human resource (HR) personnel on data, assessing the current workplace using survey tools, creating interventions based on recommendations by workers and empirical evidence and shift the paradigm towards a healthy workplace.

TRAIN HR PERSONNEL ON DATA

The use of data can shed light on the impact of work on employees. Therefore, today's HR personnel should be trained in data collection and analysis. Such training can be considered a means of upskilling and accumulating micro-credentials that will greatly benefit companies. Many workers in developed nations consider training and upskilling to be essential for talent growth, so providing data training will enable Malaysian workers to stay ahead of the curve. These data gathering and analysis skills will be highly utilised by HR personnel

This toxic or **UNHEALTHY WORKPLACE CAN ALSO IMPACT THE WORKERS INSIDE AND OUTSIDE OF THEIR EMPLOYMENTS**, including affecting their relationships at home and, studies have demonstrated that women working in high-stress work environments reported countless reproductive issues, including miscarriages.

as companies becoming more digitalised.

It is crucial to recognise that data training for HR personnel should cover quantitative, qualitative, and mixed-methods data, as data can be collected in various forms in the workplace. It is ideal for the trainers to have extensive academic and real-world experience, so the data training is aimed at continuous improvement rather than just for the purpose of publication. HR personnel equipped with data gathering and analysis skills can play a crucial role in collecting and analysing data at both micro and macro levels within the workplace. In addition, they can use this data to implement effective interventions and evaluate their impact on the organisation. Hence, providing data training for HR personnel is setting the foundation towards a healthy workplace.

ASSESS THE WORKPLACE

It is imperative that organisations actively work in assessing their workplace. A survey tool should be developed with the objective of giving the organisation an aggregated data of the workers' experience in the workplace. This survey should assess various characteristics of healthy and unhealthy workplaces and demands the involvement of a social and behavioural scientist who is familiar with those characteristics.



The survey should be conducted in both our national language and English and translated versions should also be provided for foreign workers who do not speak either language so that we are inclusive to all employees. The data gathered through this survey should be kept confidential to respect the privacy of individuals and so that no backlash is experienced by the workers.

By gathering aggregated data through such survey, organisations can evaluate their workplace and identify necessary interventions. Without this kind of survey tool, organisations are left to operate based on anecdotal evidence or limited exit interview data. So, such surveys could provide a more comprehensive data of the state of the workplace.

INTERVENTIONS BASED ON SOCIAL AND BEHAVIOURAL SCIENCE THEORIES

Once the workplace has been assessed through the survey, it's important to identify necessary interventions based on the data. Items which performed poorly should be given attention so that interventions can be implemented. It is also recommended to ask employees for their suggestions and allow them to rate the interventions they would like to see in their organisations.

Focus groups and interviews can be used to collect suggestions and a mini survey can be used to rate them based on factors such as feasibility and impact. By allowing workers to evaluate interventions, organisations can make the most impactful changes. This participatory approach to interventions can help organisations make the necessary changes based on the lived experience of workers.

Interventions need not be expensive and challenging as organisations could even start at interventions deemed as low hanging fruits. Regardless, it is advisable to seek input from social and behavioural scientists in shaping these highly rated interventions. These scientists will help to ground the interventions based on empirical evidence and fine-tune these interventions to achieve maximum impact.

CHANGING PARADIGM TOWARDS A HEALTHY WORKPLACE

A healthy workplace is not just something good to have but something that could influence productivity and profitability of every organisation. In Malaysia, the ultimate objective of building a sustainable banking sector should guide us in prioritising workplace assessment and intervention efforts aimed at creating a

healthy work environment. This might call us to change our paradigm by paying a lot of attention to the state of our workplace.

Resistance from those who prefer the status quo may arise and often these individuals become a major barrier to the changes need to take place in our workplace. One method to battle this resistance is by using data, narratives, and scientific literature. Empirical evidence through data and other studies is the only robust method we could utilise to strive towards a healthy workplace. Furthermore, forward-thinking HR leaders who understand the importance of a healthy workplace must spearhead this paradigm shift, which can inspire others to follow suit. Ultimately, this change can benefit workers and the banking sectors in Malaysia.

In conclusion, data plays a crucial role in achieving a healthy workplace in Malaysia. Working without data can be ineffective, as data empowers us to understand the current state of workplace health and make the necessary changes needed in our workplace. Hence, it is time for the banking and financial sector in Malaysia to work towards a healthy workplace by using data. *

■ *Dr Mohd Nasir bin Mohd Ismail obtained his PhD. in social and behavioural science from Johns Hopkins University. He also has a master's in energy and mineral engineering and a bachelor's in Physics from Penn State University. He has vast experience in conducting research in assessing and improving workplace environment in multiple countries. Currently, he serves as the Chief Scientific Officer at m5 Solutions Sdn Bhd. He is passionate about fostering healthy, productive, and profitable work environments for individuals and organisations worldwide through the power of data. He firmly believes that the key to unleashing the full potential of any workforce lies in creating and maintaining a genuinely healthy work environment for the employees. This healthy work environment is imperative to increasing productivity and profitability for all global organisations.*



CREATIVE COACH, HALLUCINATING HELP, OR MISLEADING MUSE?

By Dr Amanda Salter

GENERATIVE AI HAS A LOT TO OFFER, BUT IT CAN'T YET TELL THE DIFFERENCE BETWEEN FACT, FICTION, AND FANTASY.

In recent headlines:

"Microsoft to invest USD10 billion in OpenAI, the creator of ChatGPT."

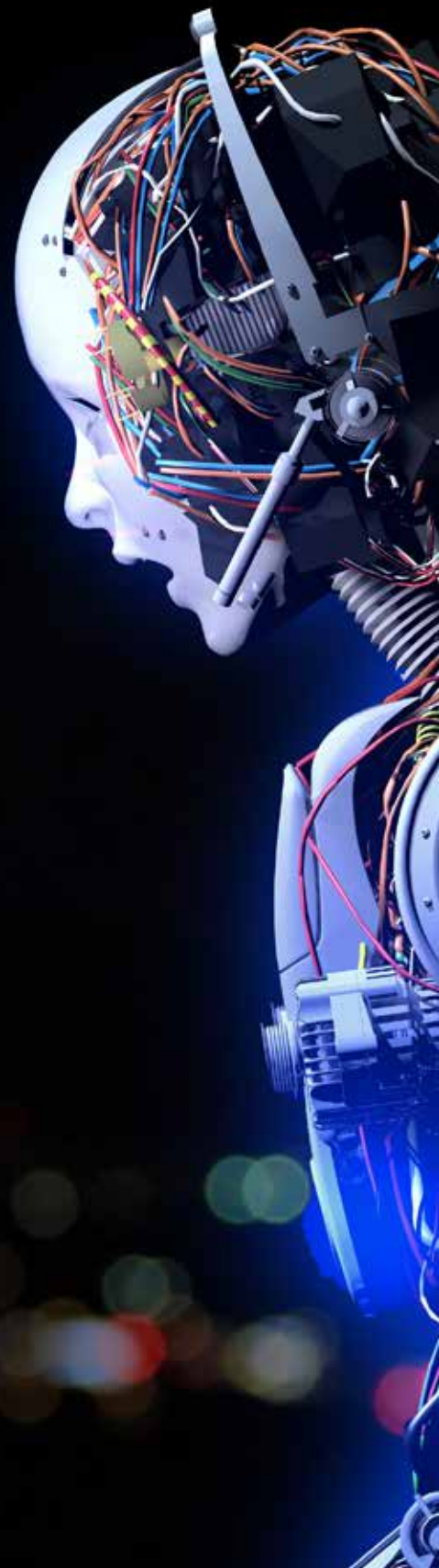
"Google invests USD300 million in artificial intelligence start-up Anthropic."

"Salesforce Ventures launches USD250 million generative AI fund."

The more cautious amongst us might be tempted to roll our eyes and dismiss generative artificial intelligence (GAI) as yet another flash in the technology pan, like the metaverse and non-fungible tokens. But as Forrester Research predicts in their recent

trends report titled *Generative AI Prompts Productivity, Imagination, and Innovation in the Enterprise*, ignoring GAI would be a costly mistake.

For the uninitiated, GAI is next-level AI that automatically creates content such as artwork, music, text, videos, programming code, and simulations in response to conversational input (also known as 'prompts') from the user. Its output mimics original content and can appear highly realistic and plausible. Popular GAI tools to date include ChatGPT (a language generator) and Midjourney (an image generator).





MIMICRY

GAI is a leap forward from traditional AI, like simple chatbots or voice assistants which respond to one request with one pre-prepared answer. In contrast, GAI tools retain information as a conversation progresses and refine their answers further according to new information. This enables users to participate in the creation process by asking for changes iteratively.

The ability of language generators to mimic human-created content is both surprising and slightly unnerving. It can take a job description and a CV and write a relevant application cover letter. ChatGPT has passed university law exams and even an MBA course at Wharton School of Business, achieving grades ranging from a 'B' to 'C+'. There is also significant success with image generators – an artwork generated using Midjourney won first place at a digital art contest in Colorado last August.

Nevertheless, the GAI race has resulted in some embarrassing casualties. Meta's GAI, Galactica, survived in the wild for three days before being taken offline, reportedly due to generating dangerous and incorrect information for its target users in the scientific research community. Alphabet's market value nosedived by USD100 billion when its GAI, Bard, provided a factually incorrect answer to a question asked in a widely publicised company demo. JP Morgan Chase, Goldman Sachs, Bank of America, and Citigroup have banned the use of ChatGPT due to factual inaccuracies and associated risks.

CURB A CHEEKY BARD?

In January 2023, ChatGPT went on record as the fastest-growing consumer application in history, with 100 million monthly active users. Regulators are striving to keep up and there are several debates and discussions happening. In the European Union, the AI Act has been trundling through the system since April 2021, but the rise of ChatGPT is forcing Parliament's hand. Lawmakers are currently debating whether unsupervised generative language tools should be defined as 'high risk' in the Act, with

TIPS TO PRUDENTLY EMBED GAI IN BANKS:



Take it slow – don't just jump in feet first.

Sit down with an expert and make sure you understand how it works and how it's different from traditional AI.

Make sure regulators are on board and there are proper guardrails.

Manage it like any other enterprise application. Maintain workflows and governance around AI-generated content. Ensure accuracy and integrity like any other enterprise software.

more restrictive legislation as a result. Stricter regulations mean that developers and users of GAI tools must take more responsibility to manage risks and be transparent about usage.

Amusingly, ChatGPT-authored output recently featured in European Parliament to stress the importance of regulating AI. At a plenary session this February, Member of Parliament Damian Boeselager read out a Shakespeare-

WHICH ASIA-PACIFIC BANKS ARE USING GAI?



Westpac is using Amazon's Lex and ChatGPT to draft letters to customers and write policies. AI-generated content is carefully reviewed by human staff due to GAI's tendency to hallucinate.



Commonwealth Bank of Australia (CBA) is actively assessing the risk and the reliability of its outputs in light of GAI's inbuilt biases. CBA envisage its potential applications in customer service, specifically for call centre and branch frontline staff.



ANZ Bank is investigating and discussing opportunities and risks, and "remaining prudent" in deciding on potential applications within the bank.

style poem that ChatGPT had generated on this topic, including the mellifluous couplet, "We cannot stand idle and let it be / But must regulate it, lest it harm thee". Tongue in cheek perhaps, but an apt demonstration of the very capabilities we are seeking to control.

At the upcoming Point Zero Forum 2023 – a policy-technology dialogue comprising over 1,000 central bankers, regulators, and industry leaders in Zurich – GAI in banking features as one of three main agenda points up for discussion. The forum, jointly organised by Switzerland's State Secretariat for International Finance and the Monetary Authority of Singapore-funded Elevandi, will discuss the potential uses for GAI in financial services and set out a roadmap towards navigating and adopting this technology.

USE CASES

If banks can find a way to safely make use of GAI, many avenues for creative and time-saving applications open up.

Language generators such as ChatGPT can produce common content in seconds, ideal for labour-intensive, low-risk, repeatable content creation tasks, such as call centre scripts, corporate policies, knowledge base articles, standard operating procedures, or summaries of longer documents. If given extra information – such as customer profiles, tone of voice, and decisioning criteria – language generators can also produce on-brand personalised customer messaging and offers, including marketing campaigns, email templates, and letter copy.

One challenge faced by Asia-Pacific banks is the plethora of regional languages and dialects, which can incur content translation time and cost. Language generators can produce translations of a text in multiple languages at one go, using prompts such as 'translate the following text into Thai, Vietnamese, Bahasa Indonesia and Mandarin'.

Tailored images for marketing campaigns, websites, or brochures can be created almost instantly by image generators such as Midjourney.

Uploading separate images of a man and a car will return several combined images that each show a man with a car. These can be further refined by adding keywords such as 'in the style of da Vinci, at night, in a city'.

Language generators can be a springboard for creative ideas. A prompt such as 'give me 10 innovative ways for a bank to reach rural underbanked customers' can yield a starter set of ideas for consideration and further brainstorming.

Where feasible, banks can also incorporate language generators into internal systems to provide improved conversational content for customer support staff and chatbots for banking customers.

Teams from operations, IT, risk modelling, and business continuity can benefit from realistic stress-test scenarios that can be quickly generated at scale. An internal business resilience programme could use prompts such as 'I am a retail bank based in Singapore with physical branches as well as online banking. Simulate a scenario to test my business resilience'.

Similarly, customer contact simulations can be generated to help train front-facing staff, from financial advisors to cashiers. Prompts can include the financial, socioeconomic, and even the emotional state of the customer, to which a language generator can role play to produce multiple realistic scenarios of customer contact.

PANDORA UNBOXED?

So how does the 'magic' work? GAI tools are trained on vast quantities of data, both text and images. This enables them to construct a probable matching answer. The tool does not truly understand what it receives, or even what it returns to the user. It simply selects the answer that has the highest probability of being correct.

Language generators have been described as being "autocomplete on steroids". This can lead to incorrect answers delivered with extreme confidence. When ChatGPT was asked, "If one woman takes nine months



to make a baby, how long will it take nine women to make one baby?”, it confidently stated that “nine women will take one month to make a baby, if they work together”, illustrating the point that these tools do not truly understand the actual meaning of the words they are taking in or giving out.

Language generators tend to ‘hallucinate’, an emotive word, but one that suitably conveys the extreme realism and specificity of their incorrect responses. There are many recorded cases where ChatGPT has not only presented incorrect answers, but has fabricated an entire alternative history for something by replacing facts with fiction; manufacturing plausible-sounding names, events, numbers, and dates; attributing non-existent references; and continuing to justify its untruths despite being challenged.

GAI tools are typically trained on material from the internet, thus they absorb the behavioural biases of society. There are many recorded examples where language generators have returned racist, sexist, immoral, or illegal answers, and image generators have also returned highly sexualised images of the subjects requested. A generator’s knowledge of the world is restricted to the particular time frame of information it has been trained on. For instance, ChatGPT’s

knowledge cutoff is September 2021 and it has no awareness of recent events.

Therefore, all AI-generated texts must be fact-checked carefully by an alert and knowledgeable human because the authoritative tone of the output can lull readers into a false sense of security. Image generation can also be hit-and-miss. Mistakes made by image generators can be much easier to detect, however, good quality AI-generated images and videos can be extremely convincing, leading to the issue of ‘deepfakes’, where a person in one image or video can be replaced by another and used for misinformation.

Philosophical and legal questions have also been raised. Who is the author

GAI tools are **TYPICALLY TRAINED ON MATERIAL FROM THE INTERNET, THUS THEY ABSORB THE BEHAVIOURAL BIASES OF SOCIETY.** There are many recorded examples where language generators have returned racist, sexist, immoral, or illegal answers, and image generators have also returned highly sexualised images of the subjects requested.

of AI-generated content? Who should be held responsible if the content is wrong? Who owns the copyright for an AI-generated artwork? Who is to be sued if said artwork infringes the copyright of another? Tools are already emerging to detect AI-generated text and debates are ongoing about whether schoolchildren should be allowed to use language generators in a learning context.

GAI also brings up data security issues. For example, consider a programmer who uploads some code and requests for it to be debugged, or an executive who uploads a lengthy merger and acquisition document and asks for it to be summarised. These documents, together with the responses generated, would then reside on any one of the GAI servers and could be included in its response to other users’ prompts.

Any data, photos, or text uploaded as input to these tools can cause a security risk. Nevertheless, there are already reports that China’s Tencent is working on a tool called HunyuanAide, in a race against Alibaba and Baidu to create a domestic version of ChatGPT, which is currently banned in China.

We have thus far only skimmed the surface of the things GAI can do and mistakes will surely be made as we explore this new territory. Forward-thinking banks may stand to benefit greatly from harnessing the capabilities of GAI, but whether they can do so safely remains to be seen. The question for banks is not ‘if’, but ‘when’ their employees and customers start to use this technology...are they ready? *

■ *Dr Amanda Salter is Associate Director at Akasaa, a boutique content development and consulting firm. She has delivered award-winning customer experience strategies for the Fortune 500 and been an Agile practitioner for over a decade. Previously with Accenture’s London office, Dr Salter holds a PhD in Human Centred Web Design; BSc (Hons) Computing Science, First Class; and is a certified member of the UK Market Research Society and Association for Qualitative Research.*

IN FS WE (MIS)TRUST?

By Chartered Banker, UK

According to 2023's Edelman Trust Barometer, the financial services sector remains the second least trusted sector – after social media. Why and what can be done?



Following outset of the Covid-19 pandemic, the financial services (FS) sector – according to the annual Edelman Trust Barometer – saw a sharp drop in trust towards the end of 2021. This downturn continued into 2022, with three countries – including the US – experiencing double-digit declines. In 2023, the collapse of Credit Suisse and Silicon Valley Bank has only underlined the widespread feelings of mistrust in the banking system globally, especially on both sides of the Atlantic.

Here, with the help of three experts, we explore the possible reasons that have contributed to this shift, and what can potentially be done to enhance – or even restore – the reputation of the sector.

Eric Leenders, Managing Director, Personal Finance, UK Finance, says: “Everyone in banking is responsible – to varying degrees – for building trust in the FS sector. But the challenge is the reverse – because if everybody is responsible for developing it, then everyone is responsible for destroying it.

“There’s this great word, Ubuntu [a Nguni Bantu term used in Southeast Africa], and it basically translates to ‘I am what I am because of who we are’. If we stop and think about this saying in context of who builds trust, then we’ll come to see that we’re all accountable for both building and eroding it. It’s symbiotic and we can’t separate it out.

“Your view can be tainted by one person. This could be the cashier that inadvertently shortchanged you and therefore colours your view of the whole industry. Or it could be the banker who was involved in a Ponzi scheme and got caught with his hand in the till. They’ll ultimately equate to the same feeling. On the flip side, you might have encountered a bank manager who helped you with an overdraft at the point of crisis. It’s a very delicate ecosystem.”

Professor Luigi Zingales, University of Chicago Booth School of Business and co-host of the podcast *Capitalisn’t*, believes that trust is a complex matter. “When you think about trust, there is a country or institutional average that is very much related to the way people see society as a whole. People are much more trusting in Sweden than they are, for example,

in Brazil. If you ask a Brazilian how much he trusts individuals, he’ll say not very much, and when asked how much he trusts banks, he’ll say the same. And in Sweden it’s high for both. Now, I’m not so sure that this is necessarily because Swedish banks are better than Brazilian ones. They might be, but it’s also related to the general health of the society in the country in question.” Switzerland has long been hailed as a banking safe haven, but even Credit Suisse could not maintain confidence in the reality of its failings. This begs the question: Is the trust in Sweden and the mistrust in Brazil unfounded?

He goes on to point out that trust is also related to specific current events. “After crypto scandals, trust in crypto goes down. Trust, famously, is easy to destroy and difficult to build. There’s a saying that it is like a bird on a tree – chasing it away is effortless, but it’s very hard to attract it there in the first place.”

EXPERIENCE AND PERCEPTION

Zingales believes that trust derives from a combination of direct experience and perception, which, in turn, is driven by media and information. “If I have had a negative experience myself, this will colour my own perception a great deal. And if this happens to someone that I know personally, then that too could have a big impact. And how you perceive what is reported in the press, and reported on social media, will be determined by how you personally feel about the press and social media. In short, no one factor shapes whether you have trust in FS or not.

“In the short term, banks can create and launch campaigns, and these might

gain traction and have an impact,” Zingales continues. “But, if there’s no real substance behind them, then the impact is temporary and what you might actually end up with is a backlash. Instead, changing the attitude vis-à-vis the customer is what makes a huge difference. All institutions would like to portray an image of trustworthiness. But the real question is around their actions, or if in fact what they’re doing is just for show.”

FAST FEEDBACK LOOPS

Zingales is of the opinion that the difference is between institutions where there is a fast feedback loop, and those where there isn’t. “Where there is instant feedback, reality and perception are aligned. But this is lacking in the finance industry. There is a huge delay and gap right now. Imagine, for example, the time between when you first take out life insurance and when you collect it.

“The financial crisis was when people realised that there is a big disconnect between reality and perception. That disconnect is generally built through deception or ignorance, but when there’s a crash everyone suffers tremendously. So, it’s about – from a regulatory point of view – ensuring that trust and substance aren’t too far removed “It’s tricky,” Zingales continues, “because from banks’ points of view (POV), you want to have a situation where [the] FS [sector] is as trustworthy as possible. But from a social POV, that’s not actually what is required. What you want is for perception and reality to be close. Because if a bank has a poor reputation and no one trusts it, then you’re less likely to have a crisis because no one is going to use and invest in that bank. The real risk is the difference between the regulatory point of view and the social perspective. This is what you need to target and sometimes this means making sure people realise that some institutions are less trustworthy. This isn’t a pleasant job. No one wants to do it, but someone has to.” This is even more important in light of the circumstances surrounding the fall of Silicon Valley Bank and Credit Suisse, whose perceived trust externally has been destroyed by real failures within.

EVERYONE IN BANKING IS

RESPONSIBLE – to varying degrees – for building trust in the FS sector. But the challenge is the reverse – because if everybody is responsible for developing it, then everyone is responsible for destroying it.

Eric Leenders

Managing Director, Personal Finance, UK Finance



A TOP-DOWN APPROACH

Neil Williams, Chief Economist, Official Monetary and Financial Institutions Forum (OMFIF), looks at this subject matter in a slightly different way, taking a top-down, as opposed to, bottom-up approach.

"We've had four major global crises over the past 14 years," he says. "They're becoming much more frequent and this is excluding the background concern of climate change. So, given that we're experiencing far more turbulence and volatility in the world, what are the chances that we can return to some sort of normality?"

He explains what this means in the context of banks. "If we think back to a time when interest rates were significantly above inflation – when we used to receive what was known as a positive real return on our cash – this for me is some way, at least two years, off. The same goes for a time when growth was guaranteed, when central banking and commercial banking were 'boring' – as Lord King, the former Bank of England Governor, said they should be. Finally, what also remains on the distant horizon is a time when it was governments that looked after tax and spending policy, leaving central banks to look after monetary policy."

Inflation, Williams says, is the main macro concern that affects central banks. "And for me, the bulk of the inflation that we're seeing is the wrong sort. It's driven by cost factors, such as energy prices. And this hits us in the pocket rather more than good old-fashioned demand-led inflation.

"What does that mean? It means that central banks, showing some machismo, have been going hard on rate rises, especially in Europe in the Northern Hemisphere winter, and this has obviously had a bearing on all lenders and borrowers. And for me, that will become increasingly destructive this year. That trade-off between raising rates and getting inflation down will become increasingly destructive to activity, GDP and employment as well as the risk tolerance of banks and the ability to loosen their lending criteria. All of these things will come back to bite us."

Why does that matter to economists like Williams?

"It matters because a strong banking sector is a necessary but not a sufficient condition for thriving growth and strong economies. Policymakers, if they are worth their salt, are highly sensitised to making sure that banking sectors in aggregate remain healthy because they know that economies will topple if they're not. Politicians, in turn, know that their tenure will be shortened if banks fail.

"If central banks continue to be part responsible for managing government debt, which they have been by buying the assets through quantitative easing, then the distinction between independent central banks and governments themselves starts to get blurred. But this shouldn't be the case – in the old days of 'normal', the two were very much distinct."

If, therefore, trust was higher when

these roles were separate, could it be argued that, when the roles are muddled, trust is further eroded?

ALIGNING PURPOSE AND VALUES

We've established the myriad places where the problems lie when it comes to trust, but what can be done to enhance the reputation of the sector? Leenders believes that purpose is key here. "There has to be an alignment of purpose and values," he says. "What are retail banks there to do? To help with day-to-day expenditure – and this means looking after finances, enabling people to make payments and receive money, and offer support when it comes to the likes of loans.

"Here's where it gets interesting though – the world doesn't stand still, and today this means being equipped and equipping others for a digital environment. What's great – and what will have strengthened trust – is the fact that many mobile applications and online banking applications have in fact added channels that increasing numbers of consumers find incredibly useful. Customers, as I've said, want help looking after their money and support when it comes to buying the things that they need to get through life – and good mobile apps are taking them closer to that."

How do banks convey their purpose? Leenders says that it should be intuitive.

"You shouldn't have to write it down," he says. "I remember when I did my marketing exams. I came up with a strapline that I was really proud of, but the director that I was presenting it to just scowled and said, 'As soon as you're explaining, you're losing'. And I think that this applies here. If you have to say why you are who you are, you're not really carrying yourself in the right way. People should already know. They should see a bank's logo or see their name and know straightaway that their money is safe, that they're going to be offered different ways to make payments, buy a car or a house and ways to save." *

■ *This article previously appeared in the Chartered Banker magazine, UK, Spring 2023 edition.*



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