

DISRUPTION

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**RETHINKING
FINANCE:
NAVIGATING
DISRUPTION,
RESILIENCE
AND PURPOSE**

AT HLB, AI DOES NOT HAVE A SEAT AT THE TABLE.

AI dominates conversations in meeting rooms around the world. And will for years to come. The unknowns are significant. Even those building it are grappling with its economic consequences, human cost, and potential for misuse, and for good.

The financial sector sits at the heart of these concerns. At Hong Leong Bank, we see a different horizon. One we define for ourselves.

For us, this technology isn't about who or what it can replace. Those are the wrong questions. The question we ask is, what can it empower? As part of our 3-5 Year Transformative Plan, we're using AI not to disrupt, but to drive responsible change and growth, shifting our teams toward higher-value work, upskilling our people into strategic client partners, and making banking more responsive, inclusive, and tailored to real lives.

AI can create unnecessary complexity at a time when customers need clarity. That's why our decisions around technology are guided by being thoughtful and responsible to our people, our customers, their families, and the communities we serve. We're not just building a tech-forward bank, we're building one where technology safeguards financial longevity and unlocks human potential. To learn more about HLB, visit www.hlb.com.my.



Forum Insights

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Cover Rationale

The cover design uses a vintage timepiece as a central metaphor for rethinking finance through the lens of time, change and strategic direction. Its detailed, classical form suggests experience and institutional knowledge, while the glitch effect introduces a sense of disruption, reflecting how technology, geopolitical shifts and evolving financial systems continue to reshape the global landscape.

The bold typographic treatment and vibrant colour distortion create strong visual energy, reinforcing the urgency of navigating change with resilience and purpose. By combining heritage-inspired imagery with a contemporary digital aesthetic, the design positions FIDE FORUM as a credible thought-leadership platform that encourages reflection, adaptability and forward-looking dialogue within the financial sector.



About FIDE FORUM

Established in 2010, FIDE FORUM is Malaysia's only membership-based organisation dedicated specifically to directors of financial institutions.

Formed through the shared vision of alumni of the Financial Institutions Directors' Education (FIDE) Programme, together with Perbadanan Insurans Deposit Malaysia (PIDM) and Bank Negara Malaysia (BNM), FIDE FORUM was founded on a clear conviction: that meaningful board leadership does not end when formal training does.

Sixteen years on, that conviction carries even greater significance.

The financial sector has been reshaped by forces that are broader, faster, and far less predictable than before. Technology has transformed business models. Cyber risk has become a boardroom priority. Geopolitical tensions increasingly influence financial decision-making, while expectations around governance, resilience, and accountability continue to intensify.

In this environment, the role of directors has become markedly more demanding.

FIDE FORUM exists as a platform for board leaders to remain engaged with the forces shaping the sector, exchange perspectives, strengthen board effectiveness, and access timely dialogue with regulators, policymakers, and industry stakeholders.

Through its programmes, strategic conversations, and thought leadership initiatives, FIDE FORUM continues to support stronger governance and more resilient financial institutions in Malaysia.

Vision

To be an exclusive network of Financial Institution directors to enhance board excellence, and promote sustainable business growth and financial stability.

Mission

To provide seamless board services that enhance Financial Institution directors' awareness, board talent management, and board effectiveness by leveraging thought leadership and members' insights.

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Foreword



Datuk Kamaruddin Taib,
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This edition of Forum Insights carries the theme of Disruption.

Disruption in business and industry is no longer an isolated event – it has become the defining condition of the modern operating environment. Driven by technological change, geopolitical uncertainty, shifting regulations, and evolving societal expectations, disruption is reshaping industries, institutions, and governance models at unprecedented speed. In this environment, resilience, adaptability, and the ability to anticipate change are becoming critical determinants of long-term relevance and success.

Disruption has fundamentally reshaped the financial industry – changing how institutions operate, compete, govern, and deliver value. Digital transformation, fintech innovation, artificial intelligence (AI), cyber threats, geopolitical uncertainty, and shifting customer expectations have accelerated the move away from traditional banking models towards more connected, data-driven, and platform-based ecosystems. Financial institutions are now expected to be faster, more resilient, more transparent,



Disruption is no longer an isolated event; it has become the defining condition of the modern operating environment.

and continuously adaptive. At the same time, disruption has elevated the importance of technology governance, operational resilience, cybersecurity, and trust as core strategic priorities. Increasingly, competitive advantage in finance is no longer determined solely by scale or capital strength, but by the ability to anticipate change, leverage technology effectively, and respond with agility in an increasingly complex and uncertain environment.

Customer experience is no longer defined simply by services being available at the touch of a button. The smartphone is no longer merely a symbol of convenience; it has become an indispensable enabler – a 24/7 gateway to financial access, a container of personal and transactional data, and an essential platform through which individuals engage with institutions, services, and the digital economy.

Developments in AI have progressed rapidly from experimentation to real-world problem solving. While AI has not fully replaced human decision-

making, it continues to assert itself as a major disruptive force – reshaping workforce structures, redefining financial intermediation, influencing investment priorities, and transforming how institutions deliver customer experience and value. Increasingly, AI is not merely supporting operations, but assuming a more active role across analysis, automation, risk management, and customer engagement within the financial sector.

The theme of Disruption is re-emphasised in the context of an operating environment that must constantly navigate conflict, resistance, and uncertainty. Industries today are increasingly shaped by geopolitical tensions, climate-related risks, rapid technological change, and evolving societal expectations – all of which are redefining how institutions operate, govern, and build resilience for the future.

Our annual publication brings together thought leadership perspectives from individuals whose views and insights reflect on the disruptive forces reshaping the meaning of finance – and what these changes mean for institutions, leadership, governance, and the broader financial system.

Each of the 16 articles examines four broad areas of disruption – ranging from policy implications and technological innovation, including evolving payment methods, to the wider impacts on digital capital, public interest, institutional resilience, and societal choices.

This edition begins with a broader reflection on the role of finance in society. Yet before considering how finance must respond to disruption, innovation and uncertainty, it is worth reflecting on a more fundamental question: what is finance ultimately for?

The edition opens with a reflection by Bank Negara Malaysia Governor Dato' Sri Abdul Rasheed Ghaffour on the role of finance in shaping a flourishing society. At a time when finance is being reshaped by artificial intelligence, geopolitical fragmentation, climate pressures and technological disruption, it is easy to become preoccupied with what is changing. More difficult, and perhaps more important, is to ask what should remain constant. The Governor invites us to consider the enduring purpose that underpins finance itself: how it creates opportunity, strengthens resilience and contributes to long-term prosperity.

The articles that follow explore this challenge from different perspectives. At the policy level, we sought perspectives from Andrew Sheng on how the financial world may be transformed in the context of these shifts and uncertainties. Rohit Talwar presents a forward-looking perspective on how rules may be rewritten and behaviours reshaped in response to global disruptions, ranging from technological transformation to evolving societal expectations and demands. Regulators remain central to this narrative, playing a critical role in guiding transitions, enabling innovation, safeguarding stability and ensuring that the evolution of finance continues to serve the broader public interest.

The subsequent chapters offer a glimpse into the next frontier of financial services, focusing on how far fintech companies have evolved and the growing influence



Strong institutions will not be defined solely by how quickly they move, but by how effectively they navigate uncertainty, sustain trust and maintain their relevance.

of innovations ranging from asset tokenisation to new payment models. The discussion examines how digital assets, alternative payment systems, and emerging financial technologies are increasingly challenging traditional assumptions about financial intermediation, market structure, and the future delivery of financial services.

AI capabilities have moved rapidly from experimentation into practical application. While data has long been recognised as a strategic asset, its value has become even more critical in an AI-driven operating environment. Building on this momentum, the subsequent chapters examine AI applications within the context of legal and public policy concerns, while also exploring their implications for areas such as alternative payment models and innovation in Islamic banking.

The articles in this edition also examine adaptation and resilience in an era of disruption. The role of governance, inclusion, and the broader purpose of finance remain critical at a time when institutions are being challenged to respond and adapt to rapid change. Shahril Anuar brings to life how technology can be deployed to address disruption in sustainability, while Dafinah and Raza offer perspectives on the evolving

context and potential of Islamic finance amid these transformations. Above all, Joseph Cherian brings these developments together through his reflections on the emergence and significance of digital capital in the age of AI.

This edition of Forum Insights brings together articles covering a wide range of topics and issues related to disruption, and how these developments are influencing and reshaping the economy, industry, governance, and the broader public interest. Underpinning these discussions is a common theme: strong institutions will not be defined solely by how quickly they move, but by how effectively they navigate uncertainty, sustain trust, and maintain their relevance in an increasingly disruptive environment.

It is our intent that this publication encourages useful reflection and constructive discussion among directors, senior leaders, policymakers, and stakeholders across the financial community.

Institutions are increasingly challenged to rethink how they operate, how decisions are made, and what capabilities leadership teams and boards will require in the years ahead. Technology, while a powerful enabler, is no longer sufficient on its own as a solution. Disruption has become a permanent feature of the operating environment – reshaping how institutions embed resilience into their core business models, managing risk, responding to market volatility, and creating and preserving wealth. As these transformations accelerate, the importance of governance becomes even more pronounced. Strong governance will increasingly determine how effectively institutions navigate uncertainty, maintain trust, and sustain long-term relevance in an era of continuous disruption. ■

Abstract

Periods of profound change often prompt us to revisit first principles. As finance navigates an era increasingly shaped by uncertainty, technological disruption, geopolitical fragmentation, climate pressures and demographic change, questions of innovation, competitiveness and growth have become increasingly important. Equally important, however, is a more fundamental question: what is finance ultimately for?

Dato' Sri Abdul Rasheed Ghaffour considers the role of finance in shaping a flourishing society. Drawing on Malaysia's development journey and the challenges that lie ahead, he explores how financial systems can remain connected to the real economy, expand opportunity, strengthen resilience and support long-term prosperity.

At its heart, this is a reflection on purpose. It serves as a reminder that while the tools, technologies and institutions of finance may evolve, their value is ultimately measured by their ability to improve lives and create a better future for generations to come.



By Dato' Sri Abdul Rasheed Ghaffour,
Governor, Bank Negara Malaysia



BANK NEGARA MALAYSIA
CENTRAL BANK OF MALAYSIA

As I write this from my desk at Jalan Dato' Onn, my window overlooks Dataran Merdeka, where the Jalur Gemilang was raised at midnight on 31 August 1957. Beyond it, I can see the historic Sultan Abdul Samad building, where the central bank's offices used to be, set against KL's increasingly modern skyline. This view is a powerful reminder of the responsibility we have at Bank Negara Malaysia – and the wider financial system – to steward capital for lasting prosperity even as the world around us transforms rapidly and we confront unexpected events.

As the other authors in this publication highlight, we live in an era of dizzying change on many fronts. Amid this, the central question for those leading financial institutions is how might finance remain relevant to the evolving needs of our nation?

What Is Finance for, Actually?

Finance is the connective tissue of economic life. It channels savings into investment and converts uncertainty into opportunities in the form of priceable risk. In a globally connected market economy, finance enables individuals, businesses and governments to act today based on reasonable confidence about tomorrow. It allows the young family to own a home before a lifetime of savings, the entrepreneur to begin before revenue kicks in, and the pension fund to deploy the savings of millions toward long-term investments that neither individual saver nor the government could finance alone.



The purpose of finance is to serve the real economy, and through it, the people who depend on it to build flourishing lives for themselves and the generations to come. Everything else – the instruments, the institutions, the infrastructure, even the regulation – is in service of that. When we lose sight of this, we lose the plot.

However, left on their own, financial systems have a tendency to drift toward short-term returns over long-term value, toward the concentration of benefit among those already well-served, and toward purposes which serve the financial industry itself rather than the people it was built for.

The 2008 global financial crisis is the most instructive modern example of such drift. In the years leading up to it, financial instruments of great sophistication were constructed, layer upon layer, until almost no one could trace the connection between the financial product and the underlying real-world economic asset or activity it was supposed to represent. The system had become self-referential, and when it broke, the cost was borne not by those who built it but by ordinary people far removed from Wall Street and the City of London.

Malaysia has not been immune to this tendency to drift. The capital market excesses of the 1990s, and the painful adjustments that followed, are a reminder that financial exuberance without adequate guardrails, purpose, or value to society, can amplify vulnerability.

Islamic finance offers a useful steer away from this tendency. *Shariah* instruments were developed to meet real economic and societal needs, from *salam* contracts that allowed farmers to receive payment before harvest, to the *sukuk* structures that today finance an increasing portion of large infrastructure projects. But the contribution of Islamic finance is not only in its instruments but also in its purpose-driven framework to achieve *Maqasid al-Shariah*. This asks not only whether a transaction is technically permissible (*halal*), but whether its outcomes genuinely promote human welfare and a flourishing society.

“The capital market excesses of the 1990s, and the painful adjustments that followed, are a reminder that financial exuberance without adequate guardrails, purpose, or value to society, can amplify vulnerability.”

The Challenges for Our Generation

It is a fact of life that every generation must face its own challenges. When the Tunku stretched out his arm and cried "*Merdeka!*" in the early hours of our independence day, the leaders of that era faced the immense task of building a nation. Yet from that foundational challenge emerged the conditions that enabled Malaysia to develop and diversify with a consistency that few comparable economies have matched.

Today, we face our own test. Unlike the Tunku's, ours is not a single constitutive moment but several forces arriving at once, pulling in different directions, demanding responses that sometimes sit in tension with each other.

A fracturing global order is redrawing the trade and investment flows that Malaysia has depended on for decades as a small, open economy. Technological breakthroughs are creating real efficiency gains while simultaneously disrupting industries, reshaping labour markets and introducing vulnerabilities we are still learning to govern. There is genuine opportunity for new capital and technology to flow in, but we must be intentional about managing the dependencies and risks that come with it.

As our nation approaches 70, our population too is ageing, yet many of us are not able to retire with what EPF considers to be "adequate" savings¹. Although we are on the cusp of becoming a high-income nation², wages that have not kept pace with the cost of living³ and constrained public finances are pressures that will not resolve themselves.

Cutting across all the above is the challenge facing our natural world. Climate change is not a distant risk; ask the farmers in Kinabatangan who now wake up a few hours earlier to avoid the midday heat⁴, or the business owners in Kuala Terengganu who worry about their inventories getting damaged by increasingly severe floods. Beyond adaptation, there is the imperative to transition to a lower-carbon economy: not simply to do our part as good global citizens (Malaysia's share of global emissions is 0.7%⁵), but because modern industry needs more energy capacity anyway, and there is no better time to reconsider our energy security than during the present West Asia conflict.⁶

And beyond energy transition, Malaysia is one of the world's most biodiverse countries. Of course, this gives us the privilege to participate in the conservation of paradise. But on a purely pragmatic level, many of our economic activities also depend on nature and its associated ecosystem services⁷. The rainforests that regulate our water and local temperatures, the reefs that sustain our fisheries, the wetlands that buffer our coasts from rising sea levels, all represent a form of natural capital to our economy, yet barely registers on any financial balance sheet.

These are not reasons for alarm. Malaysia faces these structural shifts from a position of genuine strength. Rather, these observations require us to ask if our financial system, as currently oriented, is calibrated for this moment.

From Defensive to Adaptive Resilience

Bank Negara Malaysia has often spoken of the financial system's role as a "shock absorber", buffering the small and open nation against the inevitable turbulence of a volatile global economy. This framing served us well in the decades following the Asian Financial Crisis, as we built stronger capital buffers, held onto more liquid assets, and strengthened risk governance amid an increasingly developed and diversified financial system. Our resilience through the 2008 global financial crisis, through covid lockdowns, and through successive bouts of market volatility, is a genuine achievement that should not be taken for granted.

But the defensive resilience that absorbs shocks may no longer be sufficient for the more complex set of challenges that we now face. In these times, we will also need adaptive resilience which catalyses the economy to make the most of opportunities. In other words, we need a financial system that not only survives disruption but navigates it purposefully to support a productive economy.

It is this framing of adaptive resilience that will inform our approach in developing the upcoming medium-term roadmap for the financial



system, which will succeed the present Financial Sector Blueprint 2022-2026. Without going into the substance of what our strategy will entail, I will share here how we are thinking about the period ahead.

First, the north star is simple even if the work is not. Finance must serve the real economy, facilitating the aspirations of individuals and businesses, large and small, across the country. This includes securing the foundations which too many Malaysians still lack, from basic protection to retirement readiness. It also means orienting capital toward the frontier, such as new high-growth sectors, moving up the value chain, attracting long-term investment and improving regional integration – building wealth for us and our neighbours, creating new opportunities for SMEs and defining what Malaysia becomes. We will put our minds to consider how financing might promote more complex economic activities, shifting from value extraction to value creation.

Second, what is changing is how we will pursue these goals. The traditional model of “industrial policy” where the government or regulator identifies specific, linear plans is not suited to the fast-changing and multi-faceted nature of today’s world. Rather, the model moving forward is “industrial co-creation”, where we convene financial service providers, technologists, users, and relevant regulators to align on solution areas, co-design solutions and demarcate clear lanes for cooperation and competition.

Third, our strategies will lean on Islamic finance as a unique advantage for Malaysia. We have spent the last six decades building an Islamic finance system with increasing depth and rigour in banking, capital markets, *takaful*, asset management as well as the regulatory and scholarly ecosystem to hold it all together. There is opportunity for Islamic finance to be not only an industry of compliance but as a force for meaningful change to foster just and sustainable prosperity. In practice, this means value-based intermediation which deploys all three arrows of Islamic finance’s capital architecture – credit, equity, and Malaysia’s sizeable pool of philanthropic capital in *zakat*, *wakaf* and *sadaqah* – to serve real economic and social outcomes. This will include working to mainstream social finance, building upon the i-TEKAD experiment, which started small during the pandemic, to drive commercially viable social impact at scale.

Conclusion

Looking out my window, the view tells me two stories at once. The recently refurbished Sultan Abdul Samad building stands just as it did when the Tunku made history at Dataran Merdeka all those years ago, reminding us of what endures. Merdeka 118 rises behind it, bearing the silhouette of the Tunku with his outstretched arm in the sky, reaching into the future yet ahead for all of us.

Navigating both stories of continuity and change is no simple feat. At its best, finance provides the confidence and means to do so – to act today with reasonable faith in tomorrow, to extend that faith to those who have been excluded from it, and to direct it toward what we most need to build. This is what a financial system in service of a flourishing society looks like to me. ■

References

- 1 Employees Provident Fund (2024, December 12). EPF releases Belanjawanku 2024/2025 and Retirement Income Adequacy Framework. KWSP. <https://www.kwsp.gov.my/en/w/epf-releases-belanjawanku-2024/2025-and-retirement-income-adequacy-framework>
- 2 World Bank (2025, February 5). World Bank report highlights opportunities for Malaysia to strengthen economic mobility on path to high-income status. World Bank. <https://www.worldbank.org/en/news/press-release/2025/02/05/world-bank-report-highlights-opportunities-for-malaysia-to-strengthen-economic-mobility-on-path-to-high-income-status>
- 3 Bank Negara Malaysia (2026, March 31). Sustaining the Engine: The Evolving Drivers behind Malaysia’s Private Consumption Growth. Economic and Monetary Review 2025. BNM. <https://www.bnm.gov.my/publications/emr2025/box2>
- 4 Forever Sabah (2025). Climate change: The Sabah scenario—Mountaintop & Valley Immersion (MTVI) coursebook. https://cdn.prod.website-files.com/5eba63d1a62b9b0a6ad4c42d/677f510d38af90265e0b11c6_Climate%20MTVI%20coursebook_FINAL%20.pdf
- 5 International Energy Agency (2026). Malaysia: Emissions. IEA. https://www.iea.org/countries/malaysia/emissions?__cf_chl_f_tk=q1phHiUhQ0iiGg7C8MFjt6vyXdLdUI3e9VUKicTJVY0-1783299536-1.0.1.1-qDK6vmvvh67BKfcyg47WdWC38ljfAJU.5fP:Aldth4kk
- 6 Wirjawan, Gita (2026, April 3). Southeast Asia’s agency amid the new oil crisis. Carnegie Endowment for International Peace. <https://carnegieendowment.org/posts/2026/04/southeast-asias-agency-amid-the-new-oil-crisis>
- 7 World Bank & Bank Negara Malaysia (2022). An Exploration of Nature-Related Financial Risks in Malaysia. World Bank. <https://www.bnm.gov.my/documents/20124/3770663/wb-bnm-2022-report.pdf>
- 8 Bank Negara Malaysia (2025). Governor Rasheed on ASEAN’s growth at the AVPN Global Conference 2025. BNM. <https://www.bnm.gov.my/-/g-spch-avpn25>



The Changing Global Financial Landscape Since 1980¹



By Tan Sri Andrew Sheng,

Distinguished Fellow, Institute for Capital Market Research, Malaysia; Chairman, George Town Institute of Open and Advanced Studies, Wawasan Open University, Penang.

GIOAS GEORGE TOWN INSTITUTE OF
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The rise of digital banking, electronic trading platforms, and financial deregulation facilitated faster capital flows and expanded access to financial services worldwide.

Introduction

Since 1980, the global financial landscape has undergone profound transformation, driven by technological innovation, regulatory changes, geopolitical rivalry, climate change, demographics and the increasing interconnectedness of markets. Global population grew from 4.5 billion in 1980 to 8.1 billion in 2024, with a trend of urbanisation and faster birth rate in developing economies, whereas the advanced countries began to age. Under the US-led unipolar global order that promoted free trade and capital market liberalisation with the Bretton Woods architecture (UN, World Bank, IMF and WTO), global trade, investment and finance expanded rapidly with global digital connectivity. The rise of digital banking, electronic trading platforms, and financial deregulation facilitated faster capital flows and expanded access to financial services worldwide.

This article examines how recent fragmentation of the global order due to geopolitics, technology, war and climate change, and their coming together, are forcing a re-think in financial policy, including the roles of central banking, commercial and investment banking/asset management, and financial regulation.

Re-think in Financial Architecture Post-2008

Major events such as the 1987 stock market crash, the Asian financial crisis of 1997, and the 2008 global financial crisis forced a re-think in the global financial architecture, particularly in risk management and regulatory reforms, such as stricter capital and liquidity requirements (Basel III) and greater transparency. With the rise of larger emerging market economies (such as China, India, Brazil and others, notably grouped under BRICS+), non-Western financial systems have grown in influence, with increasing pressure for new discourse on global financial and power architecture.

Furthermore, the advent of fintech, cryptocurrencies, private equity and sustainable finance reflected the impact of major changes from financial innovation, shifting wealth towards less regulated institutions, market concentration, changes in speed, scale and scope of financial payments, and stores of value. The global financial system today is more complex and dynamic, presenting new opportunities, risks and challenges for investors, institutions, regulators and policymakers alike.

As financial markets became more complex and concentrated, with the larger banks, brokers and intermediaries dominating global assets under management, they also became more networked, entangled and opaque. Regulations became more complex in order to control risks, but at the same time, the rise of technology and geopolitical events, as well as rising natural disasters, made financial markets more volatile and subject to sudden shifts. Indeed, both American and European regulators are talking about “modernising” financial regulation to allow banks more room to compete against shadow banks.

Changes in Global Balance Sheet Since 1980

Geopolitically, the Chinese reforms started in 1978, when China was a poor agricultural and rural economy. Her transformation to the world's largest trading partner, manufacturing powerhouse and second largest economy, has added to geopolitical rivalry and transformation of the global balance sheet.

In 1980, global GDP was around US\$11 trillion, and the global financial sector balance sheet was nearer 100-150% of GDP, being more bank-dominated. Today, global GDP is US\$117 trillion (nearly 10 times larger), but China today accounts for 19.6% of world GDP and has the largest banking system.



Table 1: Global Financial Balance Sheet as % of GDP

Component	~1980 % of GDP	2024-2026 % of GDP
Bank assets	50-60%	100-120%
Stock market cap	20-25%	110-120%
Bonds (govt + corp)	40-50%	150-180%
Total financial assets	~110-135%	~350-420%

Source: McKinsey Global Institute, 2025²

In terms of financial assets, the greatest change has been in the bond markets, due largely to large government debts, rising to 150-180% of GDP, whereas stock market capitalisation rose rapidly from 20-25% of GDP in 1980 (smaller than banking assets) to 110-120% of GDP, slightly larger than banking assets, due largely to the rise in the US stock market from high tech valuations.

Because of urbanisation and growing urban wealth, global real estate value has surged dramatically since 1980, fuelled by low interest rates,

financialisation and willingness of banks and governments to encourage residential house-ownership. Post-2000, commercial real estate share grew via institutional investment, especially through Real Estate Investment Trusts (REIT), which became a part of pension and retail holdings.

From roughly US\$60-80 trillion in 1980 (in nominal terms) or 200-250% of then-global GDP, real estate value by 2025 was estimated at US\$393 trillion or 350-380% of GDP.

In crude terms, financial market asset size was between 110-135% of GDP in 1980, with the banking system accounting for just under half of total assets. Financial markets in 1980 were dominated by the advanced markets, but after the 2008 global financial crisis, their growth slowed, interest rates were cut and stock markets and real estate valuations grew, as did public debt. Between 1980 to 2025, financialisation roughly quadrupled, as central bank balance sheets shrank relative to private sector growth, but expanded again after 2008, when advanced central banks (Fed, ECB and Bank of Japan) undertook aggressive quantitative easing (QE).⁴

Table 2: Global Real Estate Value as % of GDP

Asset	~1980 Nominal	~1980 % of GDP	2025 Nominal	2025 % of GDP
Real estate	~US\$60-80 tn	200-250%	~US\$393 tn	350-380%

Source: Stacked Homes, 2025³

How Technology and Geopolitics Are Changing Financial and Real Sector Balance Sheets

The drive for globalisation through speed, scale and scope from technology has since been disrupted by geopolitics, which are also shaped in turn by demographics, climate change and other political dynamics. Technology tends to concentrate markets, with the largest players becoming hubs that benefit from network economies of scale.⁵

Geopolitical Disruption

Since 2016, when the US started imposing sanctions on Chinese tech companies, followed by use of tariffs, the increasing weaponisation of the US dollar against economies such as Russia⁶ has forced surplus economies to re-think the need for de-dollarisation⁷ or the hedging of their asset portfolios. Every holder of US dollars needs to hedge their risks of a weakening dollar due to the inexorable rise in US government debt to US\$39 trillion, with unfunded liabilities (social security pensions) of another US\$125 trillion.⁸ Annual Treasury debt interest payments now exceed US\$1 trillion, and the US is asking for another US\$200 billion in extra funding for the Iranian conflict. The long-term fiscal deficit is estimated at 7.2% of GDP⁹ which is clearly unsustainable.

Surplus economies have been clearly shaken by President Trump's tariffs (over-ruled by the Supreme Court) and military action on Venezuela and Iran

(without either Congress approval or UN support), suggesting that rule of law may be replaced by rule of might. US pressure on allies includes induced allied investments in the US, such as the US\$550 billion funds from Japan and US\$350 billion from South Korea under threat of tariff sanctions.

The combination of geopolitical risks on fiat money, backed only by government promises to pay in the future, has caused a mindset shift back to the historical role of gold as a perennial store of value. The sharp rise of gold to over US\$5,000 per ounce in 2026 reflected a close correlation between the compound growth rate of US Treasury debt of 8.8% since 1971 (when the US delinked the dollar from gold) and the compound growth rate in gold price. In 2026, the value of gold at current market price in central bank official reserves exceeded their holdings of US Treasuries.¹⁰

Digital assets, including stablecoins and tokenised real-world assets, are integrating into mainstream finance, boosting decentralised finance's (DeFi) total value to US\$300 billion by 2026 while streamlining cross-border payments.

Technology Impacts

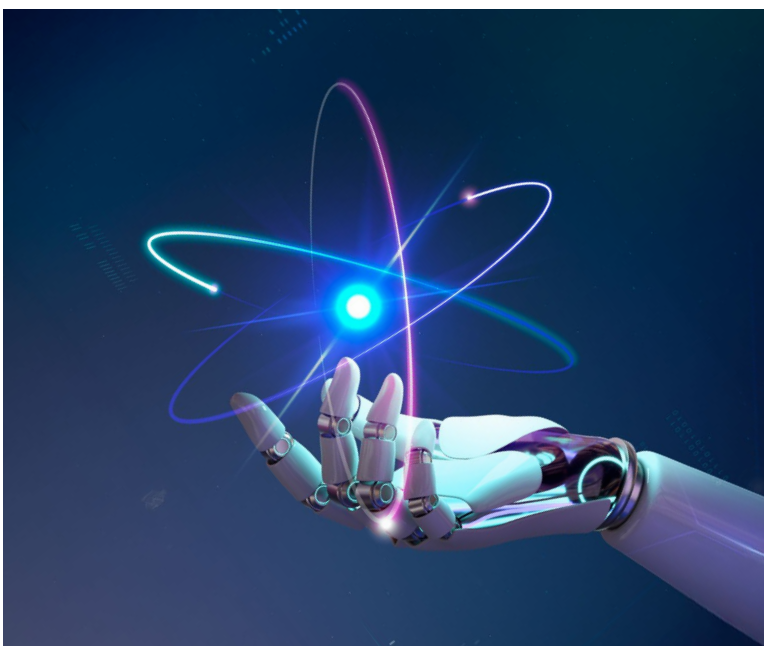
The arrival of the internet rapidly increased telecommunications and network connectivity, driving down transaction costs and enabling new forms of trading and data platforms, including the arrival of cyber currencies. AI and blockchain are driving efficiency in banking, with agentic AI enabling proactive services like personalised wealth management and fraud detection.¹¹ Digital assets, including stablecoins and tokenised real-world assets, are integrating into mainstream finance, boosting decentralised finance's (DeFi) total value to US\$300 billion by 2026 while streamlining cross-border payments. Embedded finance allows non-banks to offer seamless lending and investing, though it raises cybersecurity and regulatory challenges.¹²

Demographic Impacts

As urbanisation, income levels and education increase, ageing populations in developed economies demand tailored retirement products, while younger demographics in emerging markets accelerate fintech adoption for accessible banking. GenAI enhances investor access across age groups, but demographic shifts like urbanisation strain traditional systems, pushing inclusive digital solutions. These changes interact with technology to widen financial inclusion, yet increase the risk of inequality without equitable access.

Complex Entanglement of Mega-Trends

Technology amplifies demographic trends, such as millennials and Gen Z favouring robo-advisors over legacy banks, fostering a more resilient yet fragmented global system. By 2026, banks investing in AI infrastructure and regulatory adaptation will lead, while laggards face disruption. The fragmentation of markets by region and products (sometimes outside the regulatory oversight of central banks) can create moral hazard in the sense that shadow banks and non-bank financial intermediaries take risks that are ultimately bailed out by the state.¹³



Concluding Thoughts

Finance is evolving so fast because of changes in geopolitics and technology that it is difficult to precisely predict how the system is evolving. On the one hand, technology is providing a wider spread of financial users (governments, investors, borrowers, intermediaries and consumers) at speed, scale and scope that are changing faster than governments and regulators can comprehend.¹⁴ At the same time, the fragmentation of markets due to geopolitical rivalry erodes economies of scale benefits for the users of finance.

The complex interaction between climate change, technology, demographics and geopolitics makes the prediction of how the financial landscape will evolve in the coming decades much more difficult than ever. Central banks and financial regulators do not regulate the system comprehensively. They are often asked to take charge when financial crises break out.

Even as fiscal deficits rise due to government spending outrunning government income, the debt bubble may burst in ways that no one fully understands. Financial institutions and regulators plus central banks will have to navigate the complex path of financial evolution with humility, knowing that finance moves in cycles of boom and bust. The good news is that the entangled complex systems are somehow more resilient than people think. The bad news is that accidents and collapses may unpredictably inflict huge losses on parts of the system. It is no longer clear that central banks are large enough and have sufficient credibility if the economy or financial system goes through another crisis. We should have the humility to appreciate that crises will come, and we should be prepared for it in the coming years. ■

Bibliography

- Bipartisan Policy Tracker. Deficit Tracker. n.d. Accessed 25 March 2026. <https://bipartisanpolicy.org/report/deficit-tracker/>.
- Edwards, Bruce, host. Kenneth Rogoff on Dollar Dominance. n.d. Accessed 25 March 2026. <https://www.imf.org/en/news/podcasts/all-podcasts/2025/10/27/ken-rogo-off-on-dollar-dominance>.
- Farrokhnia, R. A. 'Disrupting the Finance World: How Fintech Is Changing the Game for Businesses'. Columbia Business School | Executive Education, 23 January 2026. <https://execed.business.columbia.edu/article/disrupting-the-finance-world-how-fintech-is-changing-the-game-for-businesses>.
- Ferguson, Niall, Martin Kornejew, Paul Schmelzing, and Moritz Schularick. 'The Safety Net: Central Bank Balance Sheets and Financial Crises, 1587-2020'. CEPR Discussion Papers, CEPR Discussion Papers, January 2023, 17858. <https://ideas.repec.org/p/cpr/ceprdp/17858.html>.
- Ferguson, Niall, Andreas Schaab, and Moritz Schularick. 'Central Bank Balance Sheets: Expansion and Reduction since 1900'. CESifo Working Paper Series, CESifo Working Paper Series, 2015, 5379. https://ideas.repec.org/p/ces/ceswps/_5379.html.
- Ford, Alex. 'Six Forces Modernizing Banking In 2026: Inside The Digital Shifts Transforming Global Finance'. Forbes. Accessed 26 March 2026. <https://www.forbes.com/councils/forbestechcouncil/2026/02/04/six-forces-modernizing-banking-in-2026-inside-the-digital-shifts-transforming-global-finance/>.
- Hanke, Steve H., and David M. Walker. 'The Treasury Just Declared the U.S. Insolvent. The Media Missed It'. Fortune. Accessed 25 March 2026. <https://fortune.com/2026/03/23/us-government-insolvent-fiscal-crisis-fix/>.
- Mischke, Jan, Rebecca J. Anderson, Olivia White, et al. Out of Balance: What's next for Growth, Wealth, and Debt? McKinsey Global Institute, 2025. <https://www.mckinsey.com/mgi/our-research/out-of-balance-whats-next-for-growth-wealth-and-debt>.
- Ong, Ryan J. 'The World's Real Estate Is Now Worth US\$393 Trillion In 2025. Here's Where Singapore Fits In'. Property Blog Singapore - Stacked Homes, 30 September 2025. <https://stackedhomes.com/worlds-real-estate-393-trillion/#sh.nufbn7>.
- Perry, Christopher. How Innovation, Technology and Regulatory Changes Are Shaping the Future of Investing. 7 January 2025. <https://www.weforum.org/stories/2025/01/innovation-technology-investing-capital-markets/>.
- Rivera, Carlos. 'Digital Transformation in Global Finance: How Technology Is Shaping the Financial Landscape'. Academy of Accounting and Financial Studies Journal 29, no. 1S (2024): 1–3.
- Sen, Julius. 'The Weaponisation of the Dollar: Policy Options for Small Countries'. LSE Research Online Documents on Economics, 1 August 2019. https://www.academia.edu/89258160/The_weaponisation_of_the_dollar_policy_options_for_small_countries.
- World Gold Council. 'Gold Reserves by Country'. 3 March 2026. <https://www.gold.org/goldhub/data/gold-reserves-by-country>.

References

- 1 This article is a summary of a presentation by the author to FIDE on the changing financial landscape. The author is grateful to Ali Azmi of the George Town Institute of Open and Advanced Studies, Wawasan Open University for assistance in the preparation of this paper. All errors and opinions are those of the author alone.
- 2 Jan Mischke et al., Out of Balance: What's next for Growth, Wealth, and Debt? (McKinsey Global Institute, 2025), <https://www.mckinsey.com/mgi/our-research/out-of-balance-whats-next-for-growth-wealth-and-debt>.
- 3 Ryan J. Ong, 'The World's Real Estate Is Now Worth US\$393 Trillion In 2025. Here's Where Singapore Fits In', Property Blog Singapore - Stacked Homes, 30 September 2025, <https://stackedhomes.com/worlds-real-estate-393-trillion/>.
- 4 Niall Ferguson et al., 'Central Bank Balance Sheets: Expansion and Reduction since 1900', CESifo Working Paper Series, CESifo Working Paper Series, 2015, 5379, https://ideas.repec.org/p/ces/ceswps/_5379.html.
- 5 Carlos Rivera, 'Digital Transformation in Global Finance: How Technology Is Shaping the Financial Landscape', Academy of Accounting and Financial Studies Journal 29, no. 1S (2024):1–3.
- 6 Julius Sen, 'The Weaponisation of the Dollar: Policy Options for Small Countries', LSE Research Online Documents on Economics, 1 August 2019, https://www.academia.edu/89258160/The_weaponisation_of_the_dollar_policy_options_for_small_countries.
- 7 Bruce Edwards, host, Kenneth Rogoff on Dollar Dominance, n.d., accessed 25 March 2026, <https://www.imf.org/en/news/podcasts/all-podcasts/2025/10/27/ken-rogo-off-on-dollar-dominance>.
- 8 Steve H. Hanke and David M. Walker, 'The Treasury Just Declared the U.S. Insolvent. The Media Missed It', Fortune, accessed 25 March 2026, <https://fortune.com/2026/03/23/us-government-insolvent-fiscal-crisis-fix/>.
- 9 Bipartisan Policy Tracker, Deficit Tracker (n.d.), accessed 25 March 2026, <https://bipartisanpolicy.org/report/deficit-tracker/>.
- 10 World Gold Council, 'Gold Reserves by Country', 3 March 2026, <https://www.gold.org/goldhub/data/gold-reserves-by-country>.
- 11 Christopher Perry, How Innovation, Technology and Regulatory Changes Are Shaping the Future of Investing, 7 January 2025, <https://www.weforum.org/stories/2025/01/innovation-technology-investing-capital-markets/>.
- 12 Alex Ford, 'Six Forces Modernizing Banking In 2026: Inside The Digital Shifts Transforming Global Finance', Forbes, accessed 26 March 2026, <https://www.forbes.com/councils/forbestechcouncil/2026/02/04/six-forces-modernizing-banking-in-2026-inside-the-digital-shifts-transforming-global-finance/>.
- 13 Niall Ferguson et al., 'The Safety Net: Central Bank Balance Sheets and Financial Crises, 1587-2020', CEPR Discussion Papers, CEPR Discussion Papers, January 2023, 17858. <https://ideas.repec.org/p/cpr/ceprdp/17858.html>.
- 14 R. A. Farrokhnia, 'Disrupting the Finance World: How Fintech Is Changing the Game for Businesses', Columbia Business School | Executive Education, 23 January 2026, <https://execed.business.columbia.edu/article/disrupting-the-finance-world-how-fintech-is-changing-the-game-for-businesses>.

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A World Rewritten: Rethinking Finance at the Crossroads of Geopolitics, Technology, Climate, and Energy



By Rohit Talwar,
Global Futurist and Chief Executive Officer,
Fast Future

Fast Future

Introduction: A Farewell to Stability, Predictability, and Certainty

Financial institutions increasingly recognise that the once-reliable assumption of seamless global financial integration and capital access can no longer be taken for granted. We live in an era where the pursuit of efficiency gains coexists with profound structural uncertainty. Today, assessment of true financial strength means looking beyond scale, brand, or reaction speed. The best indicators of likely future success are increasingly the effective use of foresight, comfort and courage in uncertainty, agility, governance clarity, and institutional trust. Innovation and stability must advance together - or both are placed at risk.

The world's financial architecture is being rewritten by a series of interacting developments that are not necessarily coherent or coordinated. As historically trusted risk models, assumptions, and beliefs are overturned, the critical question for financial institutions (FIs) and their boards is stark – do we understand what it will take to survive, thrive, and lead in a world of uncertainty?

Since 1945, a set of institutions, mechanisms, and frameworks had evolved to govern global finance through the reliable paradigm of macroeconomic predictability, and escalating multinational integration. Essential to the effective functioning of this growing governance coherence and supporting infrastructure was the clear separation between geopolitical statecraft and balance sheet management. Boards could safely assume deepening globalisation, increasing freedom of capital flows, energy price stability, technology-enabled efficiency, continuing product innovation, and manageable geopolitical shocks.

The paradigm has collapsed under the weight and simultaneous interlocking convergence of five macro forces that are rewiring and reshaping the international monetary system:

1. tensions and fault lines within global markets.
2. intense geostrategic rivalries, co-dependencies, multi-polarisation.
3. supply chain shocks.
4. technological disruption and the challenges of digital sovereignty; and
5. the deep interconnection of environmental stresses, climate pressures, and energy security,

Collectively, these forces are driving a deep global and structural shift away from an “efficiency and returns maximising” model of commercial and economic globalisation. In its place, a new model is taking shape - one shaped by the priorities of volatility navigation, security, redundancy, sovereignty, and the national and global policy priorities of the economically dominant states and groupings.

Treating today's structural friction as temporary turbulence before a return to normal would be a catastrophic strategic mistake for governments, FIs, and commercial organisations. Volatility has evolved - from an episodic

risk factor checked via point-in-time stress-testing, into a permanent structural feature of the new operating system. Acknowledging this means accelerating the transformation of corporate governance from a reactive compliance exercise into a proactive, multidisciplinary approach capable of oversight across second- and third-order systemic transmissions. This article is designed to help boards make sense of this fragmented landscape, align technological and environmental foresight with geopolitical reality, and safeguard institutional resilience in a multi-polar world.

The Global Risk and Fragility Landscape

An assessment of critical factors shaping tensions in the global financial landscape needs to be grounded in the broader context of major forces driving risk across the world. A start point here is the World Economic Forum's (WEF) Global Risks Report 2026. A key element of this is the Global Risks Perception Survey (GRPS), which "captures insights from over 1,300 experts worldwide. It explores risks in the current or immediate term (in 2026), the short-to-medium term (to 2028) and in the long term (to 2036)."

The report highlights the evolution of the top 10 risks across those timeframes (figure 1) and clearly emphasises the short-term risk of geoeconomic confrontation, which few would disagree with. In contrast, the broader aspects of global financial volatility are not considered top 10 risks for either timeframe. Perhaps the biggest point of contention in the assessment is that potential existential risks presented by the rapid evolution of artificial intelligence (AI) do not appear at all in the near term assessment and are only ranked fifth for the ten-year horizon.



Figure 1 – The World Economic Forum – Leading Short Term and Long-Term Risks (Created by Fast Future using WEF data)

Some might argue that much higher prominence should also be given to advances in genetics that could lead to bio-terrorism and biohazards risks. More broadly, this WEF report finds that 57% of global experts anticipate a "turbulent" or "stormy" 10-year outlook with only 1% expecting a "calm" environment. At the national level, the OECD States of Fragility Report identifies 61 countries and territories on the brink of structural collapse with "extreme" or "high" institutional fragility.

Global risks are at their highest level in more than 20 years, according to the latest (May 2026) data from the World Geopolitical Risk (GPR) Index, published by the US Federal Reserve. This ranks overall global Geopolitical Risk at 161.46 – its highest since March 2003. The Index "Threats" subcategory assesses "imminent military buildups, nuclear proliferation warnings, and war threats before physical violence breaks out", and stands at 214.09 – a 35-year peak. Finally, the "Acts" subcategory "tracks the explicit media and signature of active kinetic warfare, escalations, and cross-border military strikes currently playing out globally." This stands at 170.86 – its highest level since January 2002. These risks are backed up by The Uppsala Conflict Data Program (UCDP) 2026 assessment, which shows that the world is at its most violent state since World War II, with 65 active state-based conflicts across 35 countries. Collectively, these factors suggest a deeply unstable environment.

Global Financial Risks in Context

Before looking at the risk impact of the broader geopolitical and macroeconomic forces, we have to look at the robustness and sustainability of what we have today. The IMF World Economic Outlook and Fiscal Monitor projects global public debt will reach 95.3% of GDP in 2026, rising to 100% by 2029 driven by accelerated spending on defence and social initiatives. The IMF says severe fiscal strain means 2026 advanced economy debt will average 108.2% of GDP compared to 77.2% for emerging markets, driven by elevated interest burdens and geopolitical security shocks.

Given this backdrop of global indebtedness, a major question relates to the manageability of complex financial instruments (figure 2). The core question is whether the financial markets themselves have the capacity to withstand the kinds of shocks that brought about the Great Financial Crisis of 2007-09. The IMF estimates global GDP for 2026 at ~US\$126 trillion. Against that, a June 2025 Bank for International Settlements (BIS) report puts the total notional value of the mix of global OTC derivatives contracts and exchange traded derivatives at around US\$1.11 Quadrillion – with a gross market value of US\$22 Trillion. The combined gross value of sovereign, corporate, and household debt add a further US\$270 trillion. The next major element in this risk basket is the US\$257 trillion "Shadow Banking" system of Non-Bank Financial Intermediation which controls 51% of total global financial assets. Other high risk asset categories add a further ~US\$100 trillion.

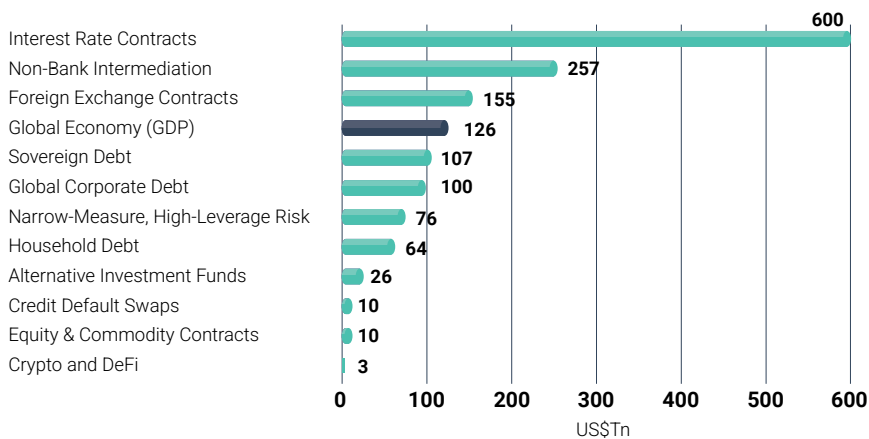


Figure 2. Global financial exposures compared to the size of the real economy.

The exposure of FIs and their clients to different forms of crime and corruption is a further critical factor that will increasingly need to be factored into risk assessments. The Global Organized Crime Index estimates that over 70% of the global population live in countries with high levels of organised crime or which are experiencing severe state vulnerability to illicit trafficking networks. At the same time, Transparency International's Corruption Perceptions Index shows a stagnant global average score of 43 / 100. This means over two-thirds of nations score below 50, suggesting persistent systemic public sector corruption.

The Basel AML Index shows weighted global risk average for money laundering and terrorist financing stands at 5.2/10 – highlighting vulnerabilities in international asset recovery and crypto-asset monitoring. Alongside this, the shadow economy is particularly hard to quantify, but EY Global Insights estimates it at 11.8% of total global GDP. This could prove to be a major understatement given the World Bank estimate that 58% of the global workforce is in informal employment without legal safety nets. The key question here for boards is how well our risk models incorporate these risks and their interconnectedness with the other drivers covered in this broader risk analysis.



Figure 3. Technology companies dominate global market capitalisation in the AI era (Source: Boardroom)

In parallel, a question also arises over whether we need to revisit the valuation of companies for the AI era or are we on the verge of a market meltdown with the risk of massive global contagion? The last five years in particular have seen the rise of a cluster of U.S. technology companies propelled to stellar valuations (Figure 3) by the promise of the returns they could see from their investments in artificial intelligence (AI) tools and infrastructure.

The 10 largest US technology companies now represent around 40% of the valuation - but only 12% of revenues and 25% of the profits - of the entire S&P 500. This is in turn reflected in their weighting in index tracker funds, pension funds, sovereign wealth funds, and individual share portfolios. To put this in perspective (figure 4), Investors in the top ten technology firms pay US\$10-15 per dollar of revenue compared to US\$1-3 for non-technology firms.



Figure 4. Are the leading AI focused technology firms becoming a new asset class?

The June 12th, 2026 IPO of SpaceX, with a market capitalisation of US\$1.77 trillion, instantly made it the sixth most valuable company in the world, with a valuation-to-revenue multiple 94 times trailing sales. The question for the global financial system is whether we should treat the top 20-50 US technology firms as a distinct super category to be valued on a completely different basis and if not, then how do we prepare for the kind of chaos that could ensue from a collapse in their value?

Fragmentation of Global Regulatory Space

On paper at least, the world continues on a slow but steady path towards convergence of global regulatory standards under Basel III, the Financial Action Task Force (FATF), and International Financial Reporting Standards (IFRS). However, geopolitical pressure could increasingly derail that journey. Today, global trade and capital are becoming intensely conditional, regulated, and messy. For the foreseeable future, FIs must navigate parallel, and frequently incompatible, regimes:

- The U.S. Architecture: Driven by extraterritorial secondary sanctions, strict dollar-clearing compliance mandates, and national security investment screenings.
- The Chinese Framework: Governed by rigid data localisation laws, state-directed data security audits, and the expansion of the Cross-Border Interbank Payment System (CIPS).
- The European Union Regimes: Dictated by the Corporate Sustainability Due Diligence Directive (CSDDD), carbon border adjustment mechanisms (CBAM), and mandatory, granular cross-border ESG disclosure requirements.
- The Global South Initiatives: Shaped by emerging regional economic and settlement frameworks championed through ASEAN, the African Union, and the Organization of Islamic Cooperation (OIC), prioritising currency diversification, and local-currency settlement rails.

Risk and success for FIs and their clients both sit squarely in the strategic ability to navigate across the seams between these overlapping jurisdictions, standards, currencies, and enabling technologies.

The Macro-Geopolitical Architecture: The G2

Central to the global financial rewrite is the escalating strategic competition between the United States and China. The global capital allocation map is being redrawn along geopolitical lines rather than purely for economic optimisation. The two superpowers are pursuing diverging, yet paradoxically interdependent, financial, and industrial strategies - placing immense structural friction on cross-border institutions, turning payments, sanctions, investment screening, and digital infrastructure into instruments of statecraft.

United States vs. China: Structural Bifurcation

The power of the two currencies lies at the heart of competition. Today, the U.S. continues to leverage its financial dominance through the dollar-clearing system. Figures from the IMF show that while the U.S. is only involved in 11-12% of all global trade (imports and exports), 54% of all global export invoicing is conducted in US Dollar. In contrast, while China accounts for 12-13% of all global trade, less than 4% is conducted in Chinese Renminbi (Yuan). In the oil markets, 80-85% of all physical global oil trade is conducted using the 'Petrodollar', with less than 4% in the 'Petroyuan.' Hence a critical priority here for China is to reduce dollar dependency by encouraging greater native currency commerce with its trading partners while also encouraging the nations within the BRICS++, Shanghai Cooperation Organization, ASEAN, and wider Belt and Road Initiative to follow suit.

A USA First Agenda

For the U.S., the next few years of macroeconomic policy are likely to see the continued use of economic sanctions, tariffs, aid programmes, outbound investment restrictions, and the threat of military action to enforce economic and political alignment and protect its technological dominance. Concurrently, the near-term U.S. domestic regulatory posture is likely to focus on attracting foreign investment through its use of "sell here, make here" pressure on foreign firms to manufacture in the U.S. if they want to serve the US market. The policy of broadening deregulation is expected to remain a central feature of domestic economic strategy - easing capital requirements, reducing compliance constraints, and adopting a 'develop first, regulate later' stance on emergent technologies like AI. This creates an aggressive, high-velocity financial theater where U.S. capital seeks global yield with fewer domestic boundaries, while facing intense restrictions on where and how it can interface with foreign adversaries.

China's Fifteenth Five Year Plan

China's latest five-year plan (figure 5) sets out the next stage of a long-term strategy centred on building self-sufficiency in critical technology fields such as AI and biotechnology, strengthening data sovereignty, and establishing an alternative financial architecture with key partners. Facing U.S. semiconductor export curbs and tariff escalation, Beijing has prioritised 'internal circulation,' and the aggressive expansion of non-dollar settlement systems. While several nations are being forced to sell off their gold reserves to prop their economies, China is actively building its holdings of gold, adding to them for 19 months in a row. In parallel, it is cultivating digital assets, establishing cross-border tokenised networks, and growing a yuan-denominated crude oil trading framework to insulate its economy from Western sanction channels.

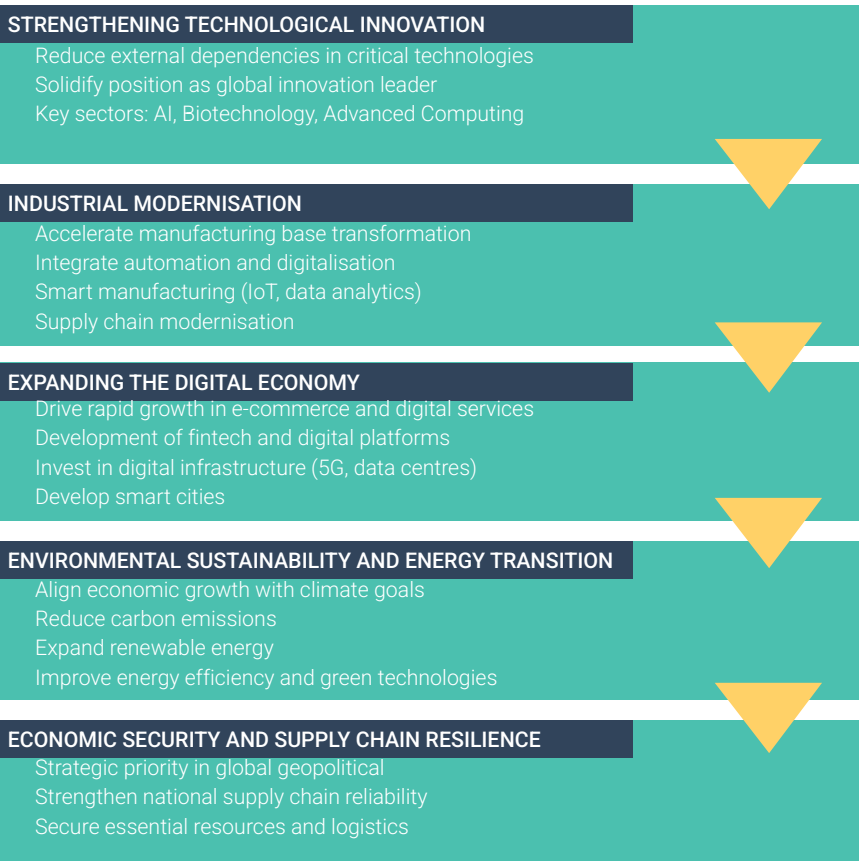


Figure 5. Priorities of China's 15th Five Year Plan (2026-2030) (Source: cathytax.com)¹⁷

This defensive posture is backed up with a highly calculated, selective opening of its domestic markets to key U.S. players. This strategy appears to be designed to deepen the entanglement of Wall Street and Silicon Valley interests with China's economic stability, creating a powerful domestic lobby in Washington advocating against absolute decoupling or attempts at destabilisation. Conversely, China's capacity to destabilise the U.S. economy is expanding – with five potential 'rug pulls':

Accelerated dumping of U.S. government debt - Since 2021, China has reduced its holding of U.S. government debt from US\$1.1 trillion to \$652.3 billion. This has partly been a hedge against possible future Chinese asset seizure by U.S. authorities. The sell-off has also funded Belt and Road Initiative projects, currency buybacks, and purchases of gold. China has also been buying higher-yielding U.S. "Agency Debt" issued by the likes of Freddie Mac and Fannie Mae, and accumulating U.S. debt held through offshore custodians.

Broader asset sell-offs – Estimates suggest the Chinese government, state backed enterprises, and citizens could hold an additional US\$1-1.2 trillion of U.S. Agency Debt, corporate equities and bonds, real estate, and offshore custodian accounts.

Accelerated de-dollarisation – Almost 94% of China's US\$6.5 trillion in global trade is now with non-U.S. counterparties. Speeding up the shift to executing in multiple alternate currencies would simultaneously spread risk to a basket of currencies whilst increasingly driving U.S. economic volatility.

Choking off U.S. military and IT supplies – Thousands of Chinese firms are direct or indirect suppliers of critical semiconductors, assemblies, rare earth metals, and battery technologies for the US military. The value of such supplies is estimated in the tens of billions; however, the true systemic value of the underlying structural dependency runs into the trillions. Similarly, the US IT industry is estimated to purchase over US\$200 billion of components and finished items that effectively originate from China – much of it central to the trillions of dollars of U.S. data centre infrastructure currently being built out across the country.

Unleashing the next 'DeepSeek moment' - The launch of Chinese LLM DeepSeek in January 2025 wiped almost 17% (US\$590-600 billion) off the share price of the world's most valuable company - chipmaker NVIDIA. This represented the largest single-day loss of market capitalisation in Wall Street history. Other U.S. semiconductor firms saw a further trillion-dollar decline in their collective valuation. DeepSeek's smart software architecture and algorithmic design require a fraction of the training costs and computing power compared to the leading U.S. frontier models. The assumption is that China's AI model developers will continue to pioneer such low power alternatives and their release could trigger a major U.S. stock market meltdown.



Wall Street in Beijing: The Key May 2026 Financial Agreements

The growing imbalance in the power relationship between the two countries was a prime driver of President Trump and President Xi's May 2026 Beijing bilateral summit. Accompanied by a delegation of some of America's most powerful billionaire CEOs - the visit yielded critical handshake deals and regulatory breakthroughs. This corporate diplomacy highlighted how market access for the "technology Industrial complex" and "financial industrial complex" is being explicitly re-politicised at the highest levels.

For the U.S., critical drivers included retaining China as a manufacturing centre for players like Tesla and Apple, ensuring access to critical inputs such as rare earth metals, increasing market access for US financial players (see below), and ensuring China didn't exercise any of its potential rug pulls. Wall Street institutions are keen to tap into the potential of China's expanding middle class and massive, structurally underserved wealth and retirement markets at a time when sustaining profitability and growth from debt-laden Western consumer markets becomes ever harder.

For Beijing, granting controlled market access serves a triple purpose: injecting robust liquidity, risk modelling, and institutional depth into domestic capital markets. This also builds a powerful, trillion-dollar financial bridge and hedge against any potential future aggression from Washington's China hawks.

The summit produced a framework for deeper economic cooperation, including two new bilateral institutions: the US-China Board of Trade and the US-China Board of Investment. However, the outcomes were characterised more by long-term intent than immediate concessions, as structural market access barriers remained substantially intact. From China's perspective, key to allowing the other deals to progress was a commitment from President Trump to row back on the idea of Taiwanese independence and to block a US\$14 Billion defence supply contract for Taiwan. Although not confirmed officially, the suggestion is that China also asked for the war with Iran to be ended quickly and for its critical oil shipments to restart. The most notable deals agreed or advanced were:

- BlackRock secured expedited political openings and regulatory nods to expand into retail wealth and pension markets.
- Goldman Sachs & Citigroup advanced long-term joint ventures and expanded securities licences.
- Mastercard pushed for a substantially higher equity stake in its local joint venture with NetsUnion.
- Visa made an unprecedented request for a 100% Wholly Foreign-Owned Enterprise (WFOE) bankcard clearing licence.

Second-Order Implications for Regional Banking Ecosystems

Deeper entry into China's domestic market of asset rich, technologically dominant U.S. financial institutions has the potential to change regional financial markets in fundamental ways. Accelerated institutionalisation of Chinese capital should drive higher corporate governance standards and transparency. Second, the geography of capital allocation will shift as U.S. asset managers scale their footprints in Beijing, meaning regional hubs in ASEAN must work much harder to attract institutional flows - requiring more sophisticated and transparent financial instruments. Finally, it establishes a clear precedent for 'managed friction' and conditional interdependence – proving that, even in an era of intense competition, financial networks can establish deep, systemic interdependencies.

Beyond the G2: Emerging Macro Pillars of the Multi-Polar Order

The reshaping of global finance extends beyond the US-China rivalry that dominates mainstream financial headlines. Three key macro actors - the European Union, Saudi Arabia and the Gulf States, and India - are pursuing sovereign financial strategies of significant consequence.

The European Union: Financial Sovereignty Through Integration, Regulation, and Strategic Capital Mobilisation

The European Union (EU) is confronted by three major risks. Firstly, continuing energy shocks and supply chain volatility from ongoing global conflicts risk reigniting inflation and triggering a disorderly sell-off in overvalued financial markets. Secondly, rising borrowing costs to combat inflation have dramatically increased the burden of servicing high government debt, directly threatening the balance sheets of the commercial banks holding those bonds. Finally, the rapid growth of unregulated non-bank FIs with low liquidity buffers poses a constant risk of a systemic margin-call crisis that could disrupt traditional European banking networks.

To fulfil the desired ambition of becoming a strong and increasingly less US-dependent pole in the global financial architecture, the EU's future financial strategy centres on 'open strategic autonomy' and deployment of its regulatory architecture as a geopolitical doctrine. Acknowledging structural dependence as a deep material risk, the EU is attempting to transform its continental financial framework into a genuine asset. The newly launched Savings and Investments Union (SIU) strategy aims to complete a process of Capital Markets Union (CMU), reduce systemic over-reliance on bank lending, and mobilise vast household savings into green innovations, clean technology, digital infrastructure, AI, and industrial renewal.

Bilateral long-term agreements with India and China also feature heavily in EU strategy – although tensions over massive trade imbalances with the latter are proving a major stumbling block. Concurrently, the bloc is pursuing a ReArm Europe Plan with up to €800 billion of additional defence spending by 2030. Globally, Brussels aims to expand the Euro's international role by fostering deeper, more liquid capital markets and exploring a joint European safe asset - a public debt pool to rival US Treasuries. This is paired with a payment strategy, positioning a wholesale and retail digital euro for the digital age. These are backed by the 'regulatory imperialism' of the measures discussed earlier.

Saudi Arabia and the Gulf States: The Fourth Economic Pole of Capital, Energy, and Strategic Investment

As the central economic engine of the Gulf Cooperation Council (GCC), many commentators are heralding the potential for Saudi Arabia to become the leader of a fourth pole in the global economic order. The key here is deploying sovereign capital with the explicit intent of geopolitical diversification and building domestic infrastructure and industry

ecosystems. When the most recent Gulf conflict started in February 2026, the GCC countries were all in the process of restructuring their economies beyond hydrocarbon exports and recycling petrodollars into Western assets. The GCC nations hold approximately \$5 trillion in assets with projections of this climbing to \$7 trillion by 2030 (capturing 40% of the world's global sovereign wealth assets). The goal is to evolve gradually from building standard global portfolios towards investing in domestic industrial growth, advanced technology, tourism, logistics, minerals, and AI.

However, the GCC now faces multiple challenges as it seeks to course correct in the face of regional conflict and shipping disruptions around vital maritime chokepoints. These have severely curbed commercial activity across the GCC – including oil exports, port activity, aviation, tourism, and hosting business events. The United Nations Development Programme's estimates suggest GCC commercial losses to date of US\$120-194 billion and US\$103-168 billion for infrastructure damage - causing the World Bank to slash the Gulf's aggregate 2026 economic growth forecast from 4.4% to 1.3%. Despite elevated oil prices, the loss of export volume has triggered fiscal deficits, forcing sovereign wealth funds to rely on heavy debt issuance to sustain massive domestic diversification projects such as Saudi Arabia's Vision 2030 programme. Prolonged regional instability threatens a "lost decade" of economic growth by eroding foreign direct investment and private sector confidence, which are critical to permanently transitioning the region away from oil dependency.

Saudi Arabia's oil exports have proved the most resilient because of its ability to use Red Sea ports and its growing internal rail network to ship oil and other products. This network will eventually connect with the multi-national GCC Rail network project - a US\$250 billion, 2,117-kilometer initiative designed to run down the coast of the Arabian

Gulf. Saudi Arabia's massive US\$1.2-1.3 Trillion Vision 2030 mega-projects and infrastructure programme has been scaled back and refocused, with a greater emphasis on public-private partnership financing for critical infrastructure projects. Delivering the key infrastructure components could help in establishing Saudi Arabia as the economic centre of a region in transition.

Despite the current volatility, Saudi Arabia continues to lead an accelerated GCC-wide push to attract global institutional capital at scale. The crisis has also seen reports of a "behind the scenes" hardening of relations between some GCC states and the U.S., and acceleration of the slow unwinding of the traditional petrodollar system. This includes the Gulf's already aggressively growing outward strategic focus on Asia, Africa, and the broader Global South. Furthermore, GCC nations are issuing landmark debt capital instruments for foreign entities and demonstrating an increased willingness to explore non-dollar energy settlement and alternative Shariah-compliant trade finance frameworks.

India: Digital Public Infrastructure, Domestic Capital Deepening, and Rupee Internationalisation

India's financial strategy represents a long-term game of scale, sovereign technology ownership, and multi-alignment statecraft. Ranked by the IMF as the world's fastest growing economy with projections of a 2026 GDP growth of 6.5%, India is facing strong headwinds from the Gulf conflict, tariffs, and US sanctions. Extreme reliance on foreign crude oil leaves its economy highly vulnerable to global geopolitical conflicts. The Gulf conflict in particular has driven up import bills, reduced foreign reserves, and forced the central bank to keep interest rates elevated. Rising global protectionism and aggressive U.S. tariff policies have also triggered billions of dollars in foreign capital flight, threatening India's high-value export pipelines. Finally, India's admired digital payment infrastructure has become

its top domestic risk, as extreme data concentration leaves the banking system exposed to catastrophic cyber-attacks.

Strategically, India is operating on the premise that a vast democracy can negotiate highly favourable terms with every global power simultaneously without yielding strategic autonomy. The strategy is to balance deep Western financial market integration with self-directed regional and global positioning. Domestically, India's hybrid model - combining market expansion with strong sovereign direction - is centred on its Viksit Bharat 2047 ambition. This involves major sector overhauls, such as permitting 100% FDI in insurance and pensions, deepening corporate bond and infrastructure finance markets, and aggressively scaling its unified digital technology infrastructure.

India's digital public finance infrastructure is becoming a core pillar of economic transition. In 2025, its Unified Payments Interface processed 228.5 billion transactions worth over \$3.5 trillion. The parallel Digital Rupee CBDC pilot has been recognised by the IMF and the Bank for International Settlements as one of the world's most advanced. This infrastructure has become an important soft power tool with adoption by over 25 countries.

Globally, New Delhi is utilising Production-Linked Incentive schemes in a move to capture multi-billion-dollar semiconductor, electric vehicle, and green power supply chains, and to position India as the primary China-alternative manufacturing base. To support this ambition, and challenge dollar dominance in regional trade, the Reserve Bank of India has authorised offshore rupee accounts and local-currency settlement rails. While India doesn't see itself becoming a fifth pole to rival China anytime soon, it is positioning to become a vital node in inter and intra-regional trade.

ASEAN Regional Dynamics: The Paradox, Islamic Finance, and the 'Middle Corridor'

As the tectonic plates of the global economy shift, the ASEAN region - and Malaysia specifically - finds itself sitting in a uniquely paradoxical, yet highly lucrative, geostrategic position. The reconfiguration of global industrial and financial networks has transformed the region into a vital buffer zone, exposing it simultaneously to immense cross-border risks and historic growth opportunities.

Malaysia and ASEAN as the 'Middle Corridor'

Malaysia sits directly in the centre of the rewiring of global supply chains, serving as a prime beneficiary of 'China-plus-one' diversification strategies. The nation has attracted unprecedented corporate capital in advanced manufacturing, particularly in the semiconductor, electronics, and assembly testing ecosystems of Penang. Yet, here lies a deep strategic paradox: Malaysia is simultaneously deeply embedded in Chinese upstream supply chains as a processing hub, and highly reliant on Western institutional capital and consumer markets for its final exports. 'China-plus-one' does not mean 'China-free.' Many ASEAN manufacturing exporters remain fundamentally tied to Chinese raw materials, machinery, intermediate components, and final demand.

This creates an acute hidden correlation risk for regional banks. A sharp deterioration in US-China relations, or the imposition of sweeping secondary tariffs, could instantly strand local investments that today look highly creditworthy.



The strategic opportunity for Malaysia is to solidify its status as a trusted, neutral 'Middle Corridor' economy - an unaligned, highly resilient clearinghouse for global trade. The risk, however, is being violently squeezed by competing blocs if global protectionism hardens into permanent economic barriers.

Many banks today are holding significant long-term U.S. dollar-denominated exposures, commodity trade finance books, and energy-linked portfolios. However, the quiet and gradual unwinding of the dollar based global trading system also represents a slow-burning, structural macroeconomic risk that must be integrated into long-term scenario planning.

Geographic Chokepoints and Financial Contagion

For decades, bank directors treated regional geographic realities - such as Malaysia's proximity to the South China Sea and the Strait of Malacca - as diplomatic and defence matters entirely divorced from balance sheet management. That separation may no longer be tenable. As strategic competition intensifies, the probability of regional maritime disruption, aggressive sanctions screening, cyber grey-zone operations targeting port infrastructure, and sudden insurance premium spikes on shipping routes have escalated materially.

Maritime and territorial chokepoints can no longer be treated as merely logistics issues but must be seen as direct financial contagion channels. These chokepoints can instantly trigger localised corporate liquidity crises, working-capital starvation, and sudden capital-flow reversals, and must be modelled as such within credit and liquidity stress frameworks.

The Rise of Alternative Capital and Islamic Finance

In response to global fragmentation, investors and sovereign entities are aggressively seeking diversification away from increasingly politicised Western financial networks. As such, the global financial system is experiencing a powerful, structural surge of interest in alternative, values-based financial models. This has driven a profound growth trajectory for Islamic finance, anchored in ethical alignment, asset-backed transaction structures, and robust risk-sharing frameworks.

While ESG-linked Western institutional capital is increasingly constrained by intense domestic political backlashes, shifting sanctions regimes, and complex compliance screenings, GCC sovereign wealth funds are increasingly redirecting capital flows toward Shariah-compliant ecosystems. Malaysia, possessing a world-class Islamic finance infrastructure, a highly sophisticated regulatory framework, and an unaligned diplomatic posture, is exceptionally positioned to serve as a preferred global routing point for this capital reallocation. Realising this potential requires regional FIs to move with immense strategic intent, upgrading cross-border Islamic trade finance capabilities at speed to turn regional integration into a genuine shock absorber.

Supply Chain Volatility

In this volatile global landscape, where geopolitics is having a direct impact on goods distribution, effective functioning of the international financial infrastructure requires global supply chains to run smoothly. The COVID-19 pandemic was supposed to have demonstrated vital flaws in the prevailing logic of "Just-in-Time" (JIT) global supply chains built to hyper-optimize the efficiency and predictability of international logistics. In theory, they were replaced with a new model built to address structural volatility, prioritize resilience, localise optionality, and offer dynamic algorithmic adaptability. The latest Gulf conflict demonstrated that this transformation still has some way to go before it is fully embedded. Supply chain rigidities and vulnerabilities are manifesting as everything from product shortages and construction delays through to inflation and mass cancellation of flight routes that are no longer viable.

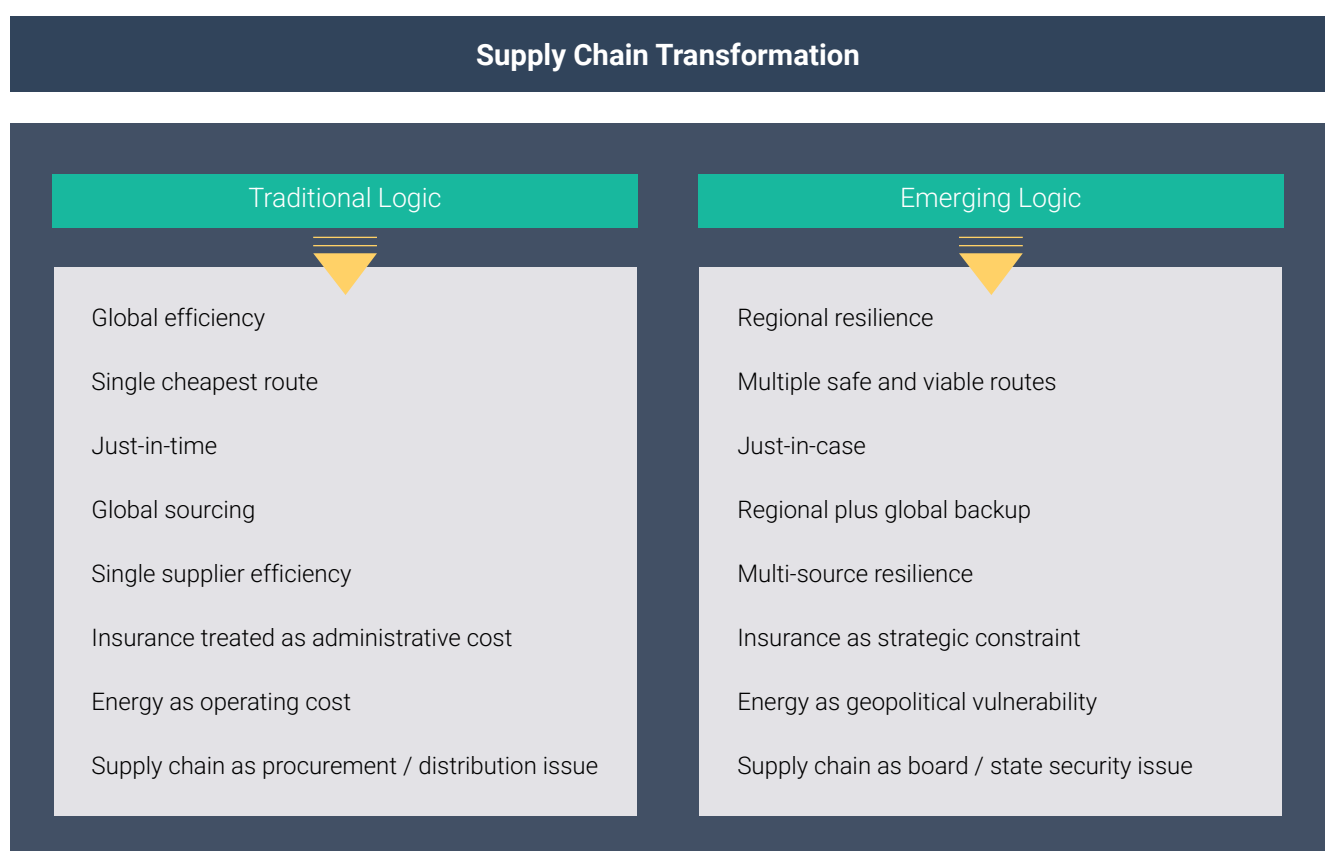


Figure 6. From efficiency to resilience: the evolution of global supply chains.

The adoption of emerging supply chain logic (Figure 6) may seem an obvious set of considerations to factor in. However, truly embracing a model that has capacity redundancy, resource duplication, just in case stockpiles, and multiple supply chain partners means a 180-degree shift in thinking from the boardroom to the loading bay. The upgraded supply chain risk evaluation model for FIs will need to incorporate an assessment of firms' capacity to embrace this mindset shift and sustain the new model in the face of near-term cost pressures.

Environment, Sustainability, and Energy

The seeming polycrisis of global disruptions outlined above, has led many nations to pull back from addressing critical aspects of sustainability from environmental protection to ensuring long term energy security. This is best evidenced by the UN Sustainable Development Goals (SDGs) progress report. The report found that only 18% of assessable SDG targets are currently on track to meet the 2030 threshold - with the remainder stalled or actively retrogressing.

A key concern for FIs should be the decline in environmental protection as measured by Stockholm Resilience Centre assessment of nine planetary boundaries (figure 7). This framework “highlights the rising security risks from human pressure on nine critical global processes that regulate the stability and resilience of the Earth.” The latest assessment finds that seven boundaries have now been crossed, arguing that “Human activities have pushed Earth beyond its Safe Operating Space.” And that “The planet’s natural resilience is weakening.” For FIs this is likely to show through in their clients’ supply chain risks, tighter regulation, increasing environmental protection regulation, higher remediation costs, and potential risks to the licence to operate for those with the most negative environmental footprints.

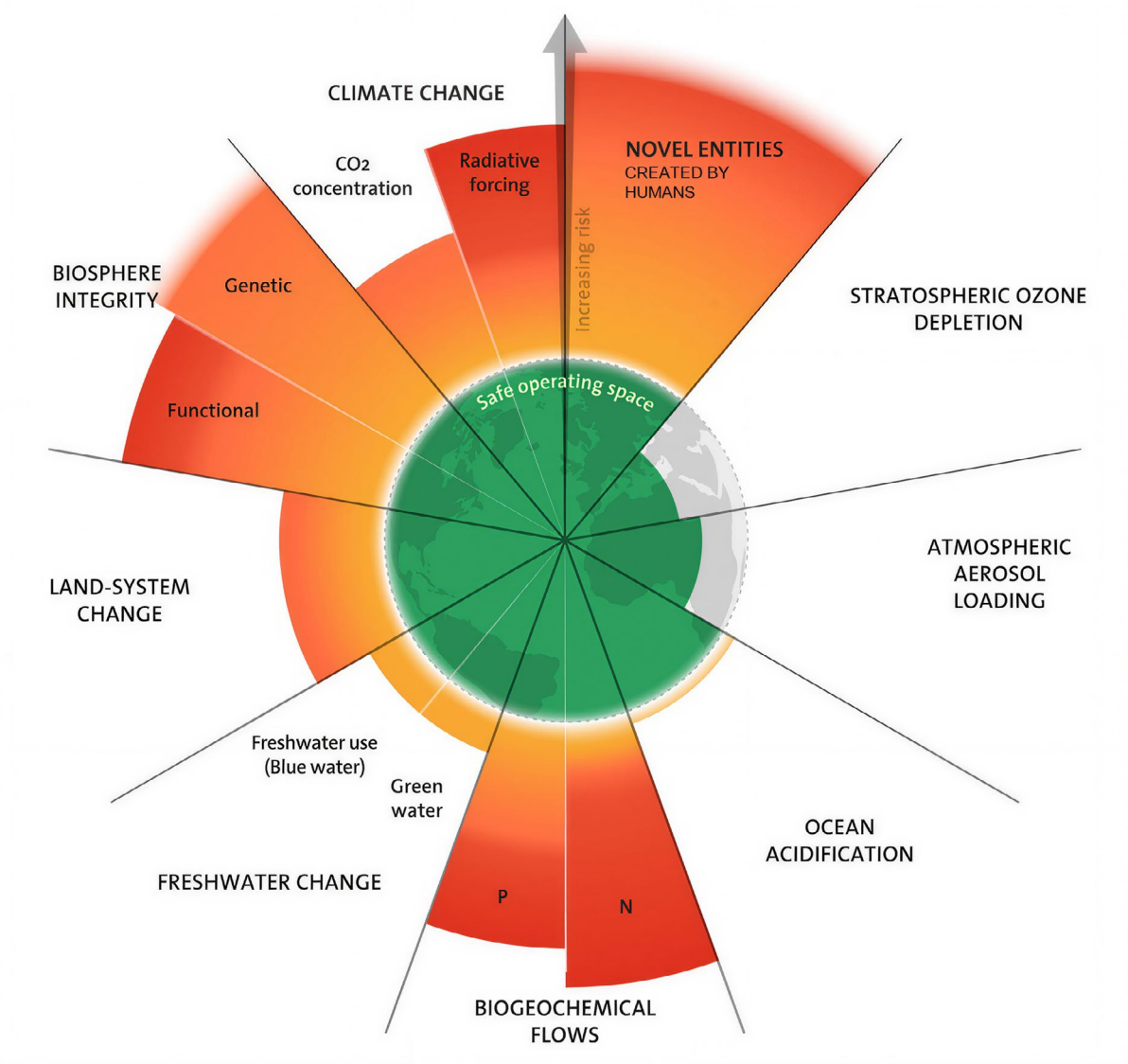


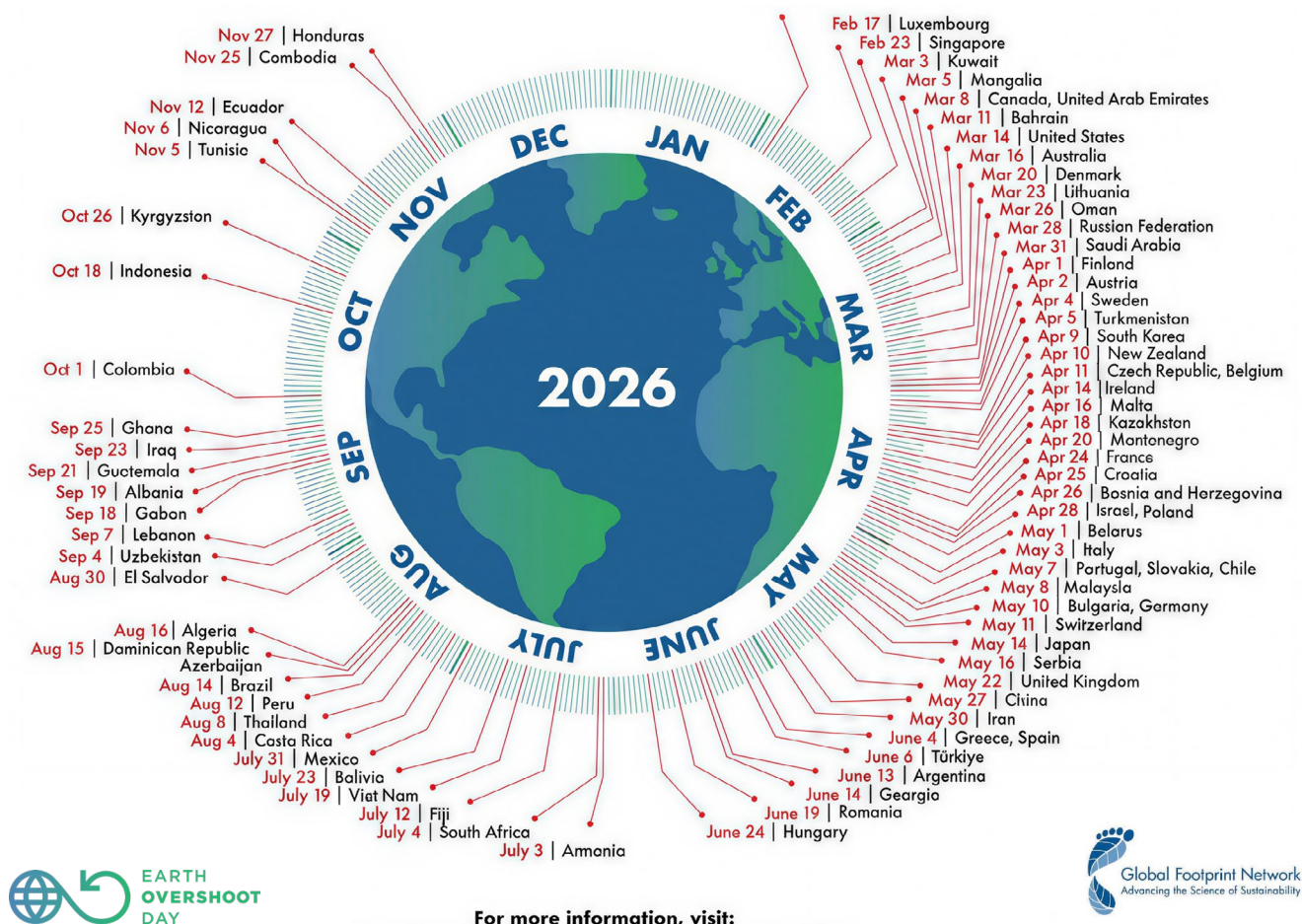
Figure 7. Planetary boundaries and the limits of sustainable growth.

Alongside, environmental degradation, in a world characterised by input resource shortages and inflation, consumption of natural resources is becoming both a sustainability and economic challenge. To assess how far planetary carrying capacity is being tested, each year The Global Footprint Network calculates Global Earth Overshoot Day (figure 8). This is the date when “humanity has exhausted nature’s budget for the year.” The Network reports that “For the rest of the year, we are maintaining our ecological deficit by drawing down local resource stocks and accumulating carbon dioxide in the atmosphere.” The assessment is based on an allowance of 1.48 Global hectares (Gha) per person. The latest evaluation finds that Earth Overshoot Day is accelerating – falling on July 24th in 2026.

Qatar (3.2M) – February 4th	EU (451.8M) – April 29th	India (1.48B) – August 1st
Singapore (6.1M) – February 23rd	Malaysia (34.4M) – May 8th	Indonesia (287.9M) – October 18th
US (347.3M) – March 14th	China (1.41B) – May 16th	Honduras (11.2M) - November 27th

Country Overshoot Days 2026

When Earth Overshoot Day would be if everyone on Earth lived like...



For more information, visit:

<https://overshootday.org/newsroom/country-overshoot-days>

Source: Country Overshoot Days 2026 are calculated using the National Footprint and Biocapacity Accounts' 2025 Edition (Lo et al. 2025), produced by York University for FoDaFo and Global Footprint Network, available at data.footprintnetwork.org



Figure 8. Earth Overshoot Day and Key National Indicators of Ecological Overshoot.

To put the results in context, if everyone on Earth consumed at the same rate as Qatar's population of 3.2 million, 12 planets would be required to meet the resulting resource demand. Global consumption at the rate of Malaysia's 34.4 million citizens would require three planets to service the demand.

AI and the Energy-Climate Nexus

The accelerating transformation of modern finance is occurring simultaneously across two highly capital-intensive, interlocking frontiers: increasing deployment of AI and the complex execution of the global energy transition. These are highly interdependent forces that introduce deep systemic vulnerabilities to the balance sheets of FIs and their clients.

The key risks surrounding future energy systems are well known, ranging from the resilience of distribution infrastructure, geopolitical and supply chain volatility, and cybersecurity threats to market stability, stranded assets resulting from poorly managed transitions, and extreme weather and climate pressures.

The International Energy Agency (IEA) projections suggest that by 2030, there is unlikely to be a major global energy shortage. Indeed, the expectation is of a major surplus in oil markets. The challenge will be around where electricity is produced and grid capacity to deliver it. The major barriers are acute bottlenecks in infrastructure grid capacity, and localised security. Given the growing reliance on power-hungry technology infrastructures, risk assessments will need to factor in both the reliability and price of energy – both of which threaten compression of clients' margin and their debt servicing capacity.

Energy Transition: Financial Fragility and Stranded Assets

While the global narrative surrounding the energy transition is dominated by climate finance opportunities and green investment bonds, the practical reality for a hydrocarbon-linked economy like Malaysia is fraught with

fiscal and credit instability. The rapid, regulatory-driven phase-out of fossil fuel financing by major European and Western institutional investors is colliding directly with the reality that Southeast Asian energy demand continues to grow at an aggressive rate. This creates a highly dangerous investment gap characterised by three primary boardroom risks:

- **Stranded Asset Accumulation:** Accelerated disinvestment risks stranding massive hydrocarbon and heavy industrial assets prematurely, eroding the asset values underpinning corporate loan books.
- **Sovereign Fiscal Squeezes:** In nations where state-owned energy enterprises serve as vital pillars of national development, prolonged pressure on fossil-fuel revenues is placing acute constraints on sovereign dividend flows, leading to a direct tightening of national fiscal manoeuvrability.
- **Energy Intensity as a Core Underwriting Metric:** Energy intensity is no longer a macroeconomic footnote or an abstract ESG marketing metric. It has transformed into a core borrower-risk metric that directly dictates margin stability, cost pass-through capacity, refinancing viability, and long-term default probability across heavy manufacturing, logistics, aviation, data centres, and civil construction.

Artificial Intelligence: From Automation to Systemic Contagion

Artificial Intelligence is evolving beyond task and process automation to drive back-office efficiency. Whilst the majority of FIs have yet to see the kinds of results that the AI evangelists have been promising, they are beginning to put in place the foundations to enable sustained performance improvements in the coming years. A critical risk here is overpromising on results and

over committing on technology spend before the essential human, organisational, and governance factors have been addressed properly.

Progress is being made across financial services, with machine-learning models and autonomous agentic AI gradually becoming embedded within core processes such as algorithmic credit scoring, automated fraud detection, continuous compliance monitoring, portfolio optimisation, and personalised customer engagement. Over time, financial institutions will increasingly be relying on machine-assisted judgement to enhance operational speed and underwriting precision. However, this systemic reliance introduces unprecedented governance implications and structural risks:

- **Organisational AI Readiness:** Research from MIT found that 95% of corporate generative AI projects were failing to deliver a return on investment. The learning from the other 5% was that the critical enablers of success were clear business goals, tackling likely organisational issues at the outset, ensuring data robustness before starting projects, and considering issues of scaling and governance from the outset. Underpinning all of these were the importance of AI awareness and understanding at all levels of the organisation. Supporting staff on the journey from AI literacy to fluency and ultimate mastery was seen as key to ensuring safe and effective use of AI.
- **Computing Costs:** Organisations are beginning to understand the true cost of running AI models and how quickly that cost scales with widespread user adoption and regularity of use. Most end user organisations are too early in their adoption of AI to have accurate metrics. However, for comparison, Epoch AI found

that the purchase of computing power makes up 54% to 62% of total budget for AI native companies. As FIs become increasingly technologically dependent, and start to look like software houses, then the costs of “compute” are likely to move closer to those of native AI companies.

- Model Irrelevance under Structural Shocks:** Traditional credit models are built entirely on historical cyclical data. In an era of persistent complexity and unprecedented geopolitical shocks, historical data quickly loses its predictive validity. Hence the challenge is to ensure risk models are evolving continuously to capture non-linear disruptions.
- The Amplified Cyber Attack Surface:** The widespread adoption of cloud infrastructure, third-party API dependencies, and digital financial interfaces vastly expands the systemic attack surface for increasingly sophisticated cyber campaigns conducted by states, non-state actors, competitors, and individuals. State-sponsored cyber operations targeting financial market infrastructure are now a recognised tool of geopolitical competition. Digital resilience is no longer a routine IT operational metric; it is a frontline variable of national and firm-level financial security.
- Algorithmic Herding and Machine-Speed Crises:** A critical, unmodelled risk is the phenomenon of algorithmic herding. What happens when AI-driven risk engines across multiple independent FIs process the exact same geopolitical shock signal or maritime disruption simultaneously? Operating at machine speed, these systems can execute instantaneous, highly correlated asset liquidations and credit pullbacks. This amplifies localised volatility into systemic, economy-wide liquidity crises within minutes - far faster than central bank or regulatory interventions can realistically respond.



Digital Sovereignty as a Strategic Imperative

A critical concern for FIs and their clients is the true level of sovereignty of their technology infrastructure. In practice, the vast majority of AI tools, cloud services, and data centres are run by US-domiciled companies. The majority of the biggest providers are signatories to the US Genesis AI initiative that effectively binds them strategically to the U.S. government – and effectively ensures their long-term financial survival and success. They are also covered by the U.S. Cloud Act – which means the U.S. government can seize foreign entity data from servers run by companies that fall under U.S. jurisdiction. These concerns are driving a noticeable rise in organisations moving away from third party cloud data centres to having all of their data and IT services running on equipment owned and stored on their own premises.

The recent Gulf conflict highlighted the challenges of relying on third party cloud services. A number of data centres in the Gulf were struck by Iranian drones because they were suspected of supporting U.S. military intelligence and AI operations in the region. Major Middle Eastern enterprises that ran their operations on those local servers were instantly paralysed. Outages froze the networks of organisations such as Abu Dhabi Commercial Bank, Emirates NBD, and First Abu Dhabi Bank. This emphasises the importance of knowing exactly who else’s data is sitting in the data centres an organisation is using and assessing the risk accordingly.

Financial institutions need to assess both their own and client risk around outsourced technology – focusing on five key sovereignty tests:

- Who owns the physical infrastructure?

- Who owns the organisation's data and who can access it?
- Which AI models and tools will the data centre provider allow the organisation to use and does the customer have true ownership of them?
- Who controls, filters, and moderates what the organisation can see and generate using the models?
- What is the organisation's right to exit from the agreement?

Future Evolution of AI

The machine learning applications described above and tools such as GenAI Large Language Models (DeepSeek, Qwen, ChatGPT, Claude) are all examples of Narrow AI – increasingly powerful tools that excel at a single specific task such as fraud analysis. This is really just the starting point for AI, and the real goal for the major AI developers is to create artificial general intelligence (AGI) that is as capable as individuals across the full range of human cognitive abilities, with the capacity to set its own goals and enhance itself. The next evolutionary stage would be the creation of artificial superintelligence (ASI) that far exceeds human abilities across every domain.

There is already significant and growing concern over the pursuit of AGI and ASI before society is adequately prepared for them, with an increasing number of warnings that AGI could pose an existential threat. Some experts say we could see it within the next few years. The biggest risk here is FIs failing to spend time now to understand what AGI could enable, how they might take advantage of it, how it could go out of control, and how it could be used against them.

The AI Boom as an Energy Shock in Disguise

We are currently seeing an almost exponential global rise in AI infrastructure investment - characterised by the hyper-scaling of advanced data centres, specialised AI processing chips, and massive server cooling demands. This infrastructure demand is rapidly emerging as a massively underestimated driver of global energy demand, grid stress, and resource depletion. In regional technology hubs like Malaysia, the AI economy has significantly strengthened the foreign direct investment narrative. However, it simultaneously places profound structural pressure on domestic national grids, natural gas utilisation, industrial land allocation, water tables, and green power availability. For FIs, data centres must be viewed as more than purely a high-growth financing sector. The risk modelling needs to treat them as a systemic resource-demand that can profoundly reshape sovereign fiscal pressures and squeeze the creditworthiness of other energy-intensive borrowers across the domestic economy.

Financial Soundness Redefined: Moving Beyond Default-Oriented Risk

In this highly volatile, fragmented operating environment, traditional risk management paradigms are proving to be ineffective. Historically, bank credit risk frameworks were overwhelmingly default-oriented, relying heavily on lagging, point-in-time indicators such as headline defaults, past-due cycles, and historical debt-service coverage ratios. In a rewritten world, the next financial stability test will manifest not through immediate, visible credit defaults, but through systemic, progressive, margin compression and acute liquidity exhaustion.

Macroeconomic shocks - such as sudden freight cost spikes, input-cost pass-through delays, localised currency mismatches, and supplier concentration failures – could see corporate borrowers remain technically solvent on paper while steadily becoming dangerously illiquid. In such circumstances, firms will risk seeing their working capital trapped in bloated, expensive inventories and disrupted supply chains, and facing severe covenant pressures well before a credit event is triggered. Hence, credit monitoring systems will need to be recalibrated extensively to detect early-stage liquidity deterioration. A critical board priority here is to ensure the integration of advanced, forward-looking early warning metrics directly into risk reporting dashboards:

- **Freight Cost and Supply Chain Spikes:** Tracking abrupt deviations in international shipping and regional logistics costs to identify margin degradation well ahead of any credit event.
- **Input-Cost Pass-Through Delays:** Measuring the precise time lag required for a commercial borrower to pass escalating input and operating costs on to end consumers.
- **Supplier and Tier-2 Concentration Metrics:** Quantifying the vulnerability of exporters to single-source component suppliers or localised geographic clusters.
- **Hedging Gaps and FX Mismatches:** Continuous tracking of currency derivatives and unhedged FX exposures amidst volatile, non-linear currency swings.

The Delicate Fiscal Trade-Off

Concurrently, bank boards are becoming more forensic in their assessment of national fiscal policy transitions. As regional governments execute necessary fiscal consolidation paths - such as shifting from blanket subsidies to highly targeted fuel, food, and transport transfers - the sovereign balance sheet is strengthened, protecting national credit ratings and long-term credibility. However, this transition shifts the direct financial exposure down to households and Small and Medium Enterprises (SMEs), which face sudden, unbuffered exposure to real resource costs. Upgraded risk models now need to simulate this policy trade-off explicitly, treating domestic subsidy rationalisation not merely as a macroeconomic policy debate, but as a direct household and SME credit-stress transmission channel.

The Boardroom Blueprint: Governance Competence as a Competitive Advantage

The ultimate defence against structural volatility does not reside in a bank's capital adequacy ratio alone, but in the intellectual capacity, agility, and foresight of its boardroom and executive team. Systematic and continuous advancement of governance competence is now essential in a fast-changing world and will increasingly become a distinct and powerful competitive advantage. Financial institutions that proactively invest in building sophisticated oversight capabilities, strategic foresight, and deep technology literacy at the board and leadership level will be far better positioned to

protect capital, safeguard institutional trust, and capture market share while less agile competitors stall.

Bridging the Boardroom Capability Gap

A major, unaddressed risk facing modern FIs is the potential internal governance gap between the hyper-complexity of the emerging macro-environment and the legacy preparedness of the independent directors entrusted to oversee it. Boards assembled during an era of relative stability can find they lack the specialised competencies required to govern in a fractured world. Independent bank directors must bridge this gap through continuous education, building new capabilities, and institutional upskilling across four core pillars:

- **Technology and Data Fluency:** Directors do not need to write code or be data scientists, but they must possess the fluency required to critically evaluate algorithmic risk governance, and understand AI and its implications. Hence it will be important to understand how AI systems actually work and, for example, how machine-learning data bias impacts credit underwriting. This level of understanding is going to be essential for directors to be able challenge executive teams on staff capability, data governance standards, and model validation.
- **Geopolitical Literacy:** Strategic agility demands a comprehensive and regularly updated understanding of macro-political shifts, sanctions regimes, regulatory divergence, and the financial transmission channels through which global statecraft impacts the local loan book.
- **Strategic Scenario Thinking:** Oversight must reject static, point-in-time financial predictions, and forecasting. A key role for the board now is to engage with the

executive leadership in regular, multi-variable scenario planning exercises that stress-test an organisation's strategy against non-linear, concurrent disruptions - such as a simultaneous South China Sea maritime blockage, cyber infrastructure failure, and regional sovereign debt restructuring.

- **Crisis Governance and Operational Resilience:** Navigating a financial architecture that is being rewritten in real time requires disciplined frameworks to oversee critical points of risk and vulnerability. These range from operational interdependencies, cloud data concentration risks, third-party critical infrastructure vendors, and cyber resilience, recognising that digital robustness is a core pillar of modern operational and financial soundness.

The New Frontier: Constructing a Geopolitical Balance Sheet

To achieve genuine strategic foresight, boards need executive management to construct and continuously maintain an institutional "Geopolitical Balance Sheet." This framework moves beyond traditional asset-liability matching to explicitly map, quantify, and track the institution's systematic exposure to external geopolitical and resource variables. The boardroom must demand granular answers to several fundamental questions:

- **Chokepoint and Supply Chain Exposure:** Which commercial borrowers or critical industry sectors are entirely reliant on single-nation supply chains, high-risk geographic chokepoints, or weaponised critical minerals?
- **Technological and Cloud Concentration:** Are the institution and its customers' core operations, customer interfaces, and data management systems overly concentrated on a single

global cloud provider, vulnerable digital infrastructure, or shared automated market triggers?

- **Sanctions and Currency Vulnerability:** What is the institutional exposure to rapidly shifting sanctions regimes, and do internal compliance engines possess the capability to navigate parallel, incompatible, and constantly evolving regulatory standards in real time?
- **Energy and Transition Risk Mapping:** How exposed is the corporate loan portfolio to sudden spikes in power pricing, energy intensity metrics, carbon taxes, or Western institutional capital disinvestment?

Resilience as a Growth Market and Competitive Product

Finally, the highest-performing FIs will recognise that a rewritten world does not merely present defensive challenges - it offers an unprecedented growth market. In an era of persistent complexity, an FIs corporate and retail clients are desperately searching for guidance and stability. The best FIs will transform resilience from an internal governance standard into a highly profitable, customer-facing, competitive product.

The opportunity is emerging for institutions to design and scale advanced advisory and financing propositions specifically engineered to help clients navigate structural volatility. This includes structuring sophisticated supply-chain finance programmes to facilitate manufacturing reshoring and localisation; developing novel insurance solutions for high risk assets and shipments, deploying innovative transition-finance instruments to fund localised corporate energy overhauls and efficiency upgrades; designing robust multi-currency hedging and liquidity planning solutions to counter petrodollar erosion and currency mismatches; and offering bespoke resilience audits and strategic scenario planning as premium corporate advisory services.

In a fragmented global order, the institutions that thrive will be those that embrace transformation not as a temporary, cyclical initiative, but as an enduring organisational capability. This capability needs to be firmly anchored in trust, strengthened by operational resilience, and guided by strategic boardroom leadership.

Conclusion: Finance as a Force for Stability in an Uncertain World



The financial system stands at a genuine crossroads. The forces outlined in the discussion above are reshaping the global landscape in fundamental and unpredictable ways. They are not temporary anomalies before a return to a predictable equilibrium. They represent the next stage of evolution of a constantly changing operating system for global finance - treating them as passing turbulence could be the most fundamental strategic mistake a board can make today.

The FIs that navigate this transition successfully are unlikely to be those that rely solely on the legacy scale of their balance sheets or the speed of their systems. In an environment characterised by complexity, rapid change, and an uncertain and unpredictable future, the winners will be the institutions whose leadership can hold several complex truths simultaneously, recognising that:

- Uncontrolled innovation destabilises while structured digital adoption empowers
- Great-power competition introduces profound credit correlation risks while creating historic 'Middle Corridor' opportunities; and
- Energy transition demands rigorous credit underwriting while presenting an unprecedented advisory growth market.

For independent bank directors across the region, and globally, the question is no longer whether these converging forces will reshape institutional operations. They are already doing so in real time. The true test of boardroom leadership is whether directors are prepared to proactively lead through this complexity with a learning orientation, clarity, discipline, and strategic purpose.

Finance, at its core, remains society's primary engine for turning uncertainty into sustainable investment, trust into credit, and stability into long-term value creation. By driving sound governance alongside strategically focused digital transformation, and embedding geopolitical literacy into capital allocation, modern directors of FIs can ensure that innovation and stability advance together, anchoring their institutions as active authors of resilience for a world in constant rewrite. ■

References

- ¹ <https://www.weforum.org/publications/global-risks-report-2026/>
- ² <https://ecdpm.org/work/eus-new-approach-fragility-strategic-awakening>
- ³ <https://en.macromicro.me/charts/55589/global-geopolitical-risk-index>
- ⁴ <https://ucdp.uu.se/>
- ⁵ <https://www.imf.org/en/publications/weo/issues/2026/04/14/world-economic-outlook-april-2026>
- ⁶ https://www.imf.org/external/datamapper/profile/WEO_WORLD
- ⁷ https://www.bis.org/publ/otc_hy2512.htm
- ⁸ <https://www.fsb.org/2025/12/fsb-reports-continued-growth-in-nonbank-financial-intermediation-in-2024-to-256-8-trillion>
- ⁹ <https://ocindex.net/>
- ¹⁰ <https://www.transparency.org/en/cpi/2025>
- ¹¹ <https://baselgovernance.org/resources/basel-aml-index/>
- ¹² https://www.ey.com/en_gl/insights/tax/why-the-shadow-economy-persists-and-how-governments-are-responding
- ¹³ <https://documents1.worldbank.org/curated/en/099101625182064076/pdf/BOSIB-a88bfa56-d82c-4546-9d33-1b9b34b865db.pdf>
- ¹⁴ <https://data.imf.org/en?sk=e6a5f467-c14b-4aa8-9f6d-5a09ec4e62a4>
- ¹⁵ <https://www.cfr.org/articles/petrodollars-myths-and-reality>
- ¹⁶ <https://thetricontinental.org/newsletterissue/a-primer-on-the-petrodollar/#:~:text=The%20petroyuan%20is%20estimated%20to,yuan%20is%20not%20fully%20convertible>
- ¹⁷ <https://cathytax.com/accounting/china-15th-five-year-plan-what-global-businesses-need-to-know/>
- ¹⁸ <https://www.gaiadynamics.ai/blog/top-20-products-imported-from-china-to-the-usa>
- ¹⁹ <https://argaamplus.s3.amazonaws.com/3ffe681b-beab-49ba-9c30-bfe8ca8bd0bb.pdf>
- ²⁰ <https://www.deloitte.com/global/en/industries/investment-management/perspectives/gulf-cooperation-council-sovereign-wealth-funds.html>
- ²¹ <https://www.undp.org/arab-states/press-releases/escalation-middle-east-reverses-more-year-economic-growth-arab-states-region-according-new-un-development-programme#:~:text=This%20represents%20a%20staggering%20loss,GDP%20growth%20achieved%20in%202025>
- ²² <https://www.worldbank.org/en/news/press-release/2026/06/11/global-economic-prospects-june-2026-press-release>
- ²³ <https://gulfif.org/rebalancing-ambition-saudi-arabias-megaproject-pivot/#:~:text=Saudi%20Arabia%20is%20quietly%20scaling,a%20more%20volatile%20regional%20environment>
- ²⁴ <https://unstats.un.org/sdgs/report/2025/>
- ²⁵ <https://www.stockholmresilience.org/research/planetary-boundaries.html>
- ²⁶ <https://www.footprintnetwork.org/our-work/earth-overshoot-day/>
- ²⁷ <https://www.iea.org/news/slowing-demand-growth-and-surging-supply-put-global-oil-markets-on-course-for-major-surplus-this-decade>
- ²⁸ https://mlq.ai/media/quarterly_decks/v0.1_State_of_AI_in_Business_2025_Report.pdf
- ²⁹ <https://epoch.ai/data-insights/company-spending-breakdown>

Governance Beyond Scale: Labuan IBFC's Role in Responsible Cross-Border Finance



By Affendi Rashdi,
Director General,
Labuan Financial Services Authority



Introduction

International financial centres (IFCs) have evolved beyond their traditional role as platforms for cross-border banking, capital flows and investment structuring. As illustrated in the evolution of IFCs, the focus has shifted over time from expansion and global integration towards emphasis on providing equivalent complementarities to major markets via enhanced financial resilience, digitalisation, cybersecurity, sustainable finance and stronger governance. In today's environment, the relevance of an IFC is no longer defined by scale alone, but rather by trust, adaptability and regulatory credibility.

For Labuan International Business and Financial Centre (Labuan IBFC), this evolution is especially meaningful. Thirty-five years after its inception, the Centre has emerged as a thriving specialist IFC and supports international financial institutions with diverse business models, group structures and cross-border activities aimed at intermediating Asia businesses. Its value proposition therefore lies not in replicating larger financial centres, but in applying suitable governance and regulatory pitching in a way that is credible, proportionate and responsive to market development as well as innovations.

Evolution of IFCs - A Journey of Growth, Innovation & Global Impact



This approach reflects the nature of Labuan IBFC as a predominantly host market for international financial institutions. Many Labuan financial institutions (LFIs) operate as part of wider financial groups, while others maintain leaner structures suited to niche international business. In this context, effective governance cannot be reduced to a single template. It must be sufficiently robust to uphold accountability, yet sufficiently practical to reflect the size, complexity and operating model of each institution.

Labuan FSA's regulatory approach is therefore anchored on a clear principle: the governance outcome must remain strong, even where governance structures differ. This means preserving Board oversight, management accountability, independent control functions and effective escalation channels; while allowing LFIs to adopt arrangements that are proportionate to their business and risk profile as intended by their respective Group.

Navigating Complexity Through Strong Governance

Established in 1990 to advance Malaysia's participation in international finance, Labuan IBFC has grown in step with the transformation of global finance. Today, as a predominantly host market IFC, Labuan IBFC provides a conducive platform for international financial groups with varied business models, cross-border mandates and different levels of integration within their wider group networks, while leveraging Labuan's role as an intermediary for international business.



As part of Malaysia, Labuan is also expected to manage beyond traditional financial risks, and integrate where relevant with the nation's economic stance and regulatory policies that promote market stability and resilience as well as conformity to international requirements. This gives Labuan IBFC a distinctive operating context: it must remain aligned with international standards and supervisory expectations, while applying regulation in a way that is practical, proportionate and suited to the nature of international business conducted from the Centre.

As a fundamental corporate responsibility within Labuan IBFC, the Board and senior management of a LFI play a critical role in fostering a culture of accountability and ensuring that governance arrangements remain fit for purpose. This includes establishing clear lines of responsibility, maintaining effective internal controls and implementing reporting mechanisms that support sound decision-making and risk management.

Building on these foundational elements, LFIs are expected to enhance their governance practices as their business operations and risk profile evolve, taking into consideration the nature, scale and complexity of their activities. This includes ensuring governance arrangements effectively address pecuniary risks arising from cross-border operations, including differing legal and regulatory requirements

between client jurisdictions; cyber threats; data protection obligations; as well as reliance on group functions and third-party dependencies.

One Objective, Different Governance Paths

Given the international and diverse nature of Labuan IBFC, governance arrangements across LFIs cannot be viewed through the same lens as financial institutions operating in larger domestic economies. Many LFIs are structured as branches or subsidiaries of larger international financial groups, with business mandates that are often closely linked to their parent or home-market strategies. Their governance arrangements therefore reflect not only local regulatory expectations, but also the degree of integration with their respective group-wide governance framework particularly relating to risk management, compliance, internal audit and reporting policies.

This creates a distinctive operating environment. Compared with larger financial institutions in onshore economies, many LFIs operate with leaner manpower and flatter organisational structures. The separation between the Board, senior management and control functions may be less pronounced, particularly where officers are required to dual- or triple-hat across business, operational, compliance or administrative roles. While such arrangements may be commercially practical for smaller

international operations, they also require careful safeguards to ensure accountability, independence of judgement and effective challenge are not diluted or compromised.

At the same time, many LFIs benefit from more direct governance oversight from their parent or home-market group, including established policies, specialised expertise and escalation channels. Labuan's approach is therefore not to impose a rigid or uniform governance model, but to ensure that these varying structures still deliver the intended governance outcomes. The objective remains clear: effective Board oversight, sound internal controls, proper segregation of responsibilities where practicable, and timely escalation of material risks within both the Labuan entity and its wider group network.

To address this structural challenge and preserve effective governance, rather than applying a one-size-fits-all governance model, Labuan FSA implements targeted safeguards that reinforce independence and oversight:

- **First**, the "Four-Eye" policy ensures that significant decisions are not made by one person alone. By requiring review and approval by at least two independent individuals, it strengthens accountability, improves judgement and reduces the risk of unchecked decision-making.
- **Second**, dotted-line reporting provides an additional channel of oversight for key control functions. For instance, the Head of Compliance may report directly to the Principal Officer while also maintaining a secondary reporting line to the Board or its Audit and Risk Committee. This helps preserve independence and ensures that material issues can be raised without undue management interference.
- **Lastly**, the importance of independence in dual-hatting arrangements, where officers hold multiple roles due to leaner structures. Even where responsibilities overlap, individuals must maintain clear boundaries, manage conflicts of interest and exercise objective judgement in each capacity.

1 FOUR-EYES POLICY

Dual review for key decisions and critical actions



- ✓ Two authorised individuals must review and approve key decisions.
- ✓ Promotes accuracy, accountability and quality decision-making.

2 DOTTED LINE REPORTING

Independent oversight of key decisions and actions



- ✓ Independent function reports directly (dotted line) to the Board / Audit Committee.
- ✓ Strengthens governance, transparency and accountability.

3 INDEPENDENCE IN DUAL-HATTING ARRANGEMENT

Preserve independence while leveraging group expertise



- ✓ Individual holds multiple roles must exercise objective judgement and avoid conflict of interest.
- ✓ Clear separation of responsibilities preserves objectivity and independence.



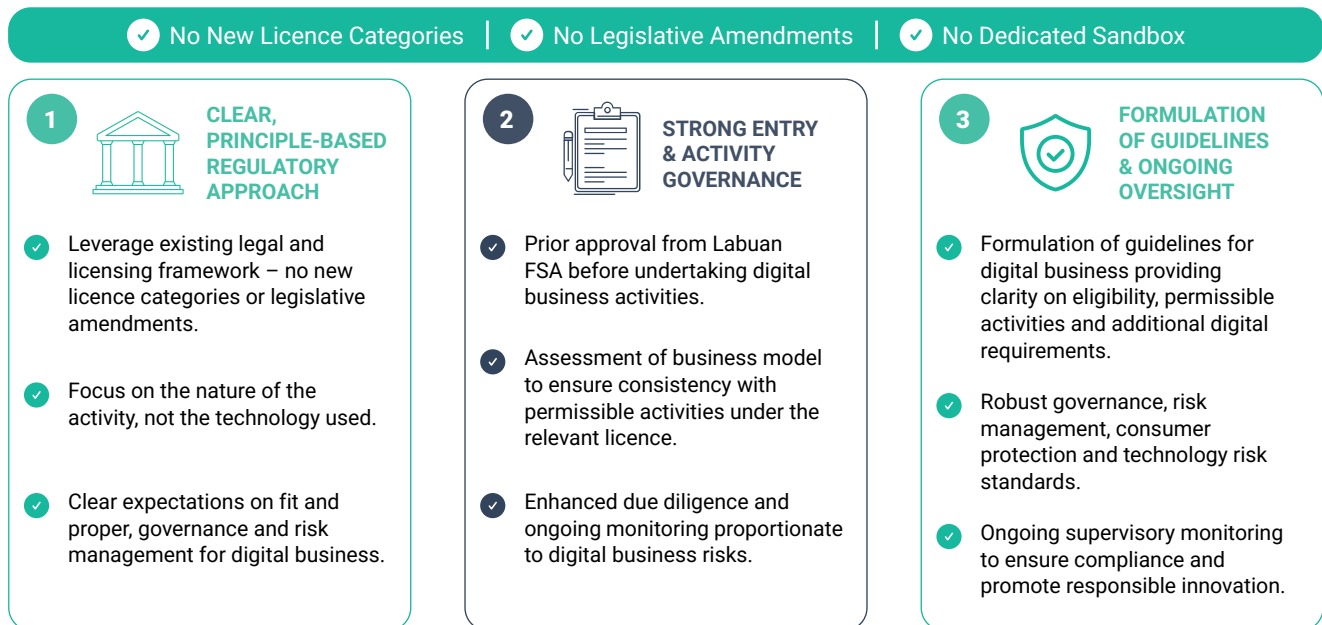
These safeguards enhance oversight, ensuring effective governance arrangements in Labuan IBFC.

Innovation as the New Competitive Frontier

The competitiveness of future IFCs will depend not only on their ability to harness technological advances, but also on their capability to innovate through new business models. Equally important, this pursuit must be supported by appropriate governance, oversight and risk management. Achieving this balance is essential to safeguard market confidence, sustainable growth, and ensure that innovation contributes meaningfully to the broader financial ecosystem.

This agility is reflected in Labuan IBFC's efforts towards facilitating digital financial business. Rather than relying on conventional regulatory sandboxes, as adopted by many jurisdictions, Labuan IBFC adopts a more flexible and market-oriented approach through a regulatory "toolbox" means that allows innovation while imposing specific business conditions to be adhered to by innovative applicants. Under this approach, innovative financial solution applications are facilitated through existing business framework and existing licence structures, supported by requisite safeguards and oversights imposed to suit the business modality proposed by applicants. This enables new digital business solutions to develop within an adequately regulated environment.

The diagram below highlights the key elements of this approach.



The Right Equilibrium: Innovation & Regulatory Resilience

Technology is transforming every aspect of financial industry, creating opportunities that were unimaginable just a decade ago. Digitalisation, artificial intelligence (AI) and automation are reshaping financial intermediation, enabling more efficient, seamless cross-border transactions and supporting greater financial inclusion in an increasingly interconnected economy.

However, sustainable growth requires a careful balance between innovation and risk management. The rise of digital assets, tokenisation and AI illustrate compelling examples. The ability to digitise ownership rights, facilitate fractional investment and improve transaction efficiency has the potential to transform capital markets and investment structures. Similarly, AI is enhancing risk management, compliance monitoring, customer engagement and operational efficiency across the financial sector.

In Labuan IBFC, the regulatory and supervisory framework has progressively been strengthened to address emerging technology and cybersecurity risks. LFIs are expected to adopt innovation responsibly and proactively manage the risks, particularly those associated with digital transformation.



- At the foundational level, enhanced business continuity requirements strengthen institutional resilience, focusing on operational readiness, remote working capabilities and continuity of critical functions during disruption.
- Building on this baseline, heightened expectations for digital governance and technology risk management were introduced, including stronger oversight of IT infrastructure, cybersecurity controls, data protection, governance and business conduct to support safe and secure digital operations.
- With the emergence of certain digital assets in Labuan IBFC, specific and detailed regulatory frameworks were developed as follows:
 - Admissibility framework for digital currencies tradeable by Labuan digital financial service providers; and
 - Regulations on digital security and non-security tokens.
- Enhanced due diligence process is also required for digital assets and transactions via AML/CFT regulations. This is to address any heightened money laundering or terrorism/proliferation financing risks exposure relating to anonymity, rapid fund movement, layering and cross-border dealings.

Innovation cannot exist in isolation; it must be anchored in strong governance, prudent risk management and appropriate regulatory safeguards to ensure that it does not compromise financial stability, market integrity and stakeholder confidence.

In combination, these provide a set of sophisticated regulatory safeguards to ensure sufficient transparency, investor protection, and market integrity in the digital asset space hosted by Labuan IBFC.

Moving forward, in anticipation of growing demand for more complex digital financial products, Labuan FSA is considering developing further regulatory policies on other aspects of digital finance which relate to use of stablecoins and digital asset custodianship. These continuous initiatives underscore Labuan FSA's proactive commitment to strengthening the Centre's ecosystem, so that business-conducive infrastructure and prudential safeguards evolve in tandem.

Conclusion

Looking ahead, cross-border finance will continue to be shaped by digitalisation, AI, tokenisation, sustainable finance and deeper regulatory cooperation. These developments will create new opportunities for IFCs but also require stronger oversight of risks relating to cybersecurity, financial crime, data flows and market integrity. Ultimately, trust will remain the foundation of cross-border finance, with investors and businesses placing greater confidence in jurisdictions that uphold strong governance, regulatory credibility and institutional resilience.

IFCs that can effectively combine these attributes will be best positioned to remain relevant and competitive in the years ahead. For Labuan IBFC, this trust is built not on scale, but on credible regulation, proportionate governance and the agility to support innovation responsibly. In the years to come, this is where Labuan IBFC's strength lies — as an agile, well-regulated and internationally connected centre, ready to serve the next phase of cross-border finance and international business. ■



Labuan International Business and Financial Centre (Labuan IBFC)

- An international business and financial centre set up by Malaysia in 1990
- Marketed by Labuan IBFC Inc., the official promotional and marketing agency for Labuan IBFC
- Regulated by Labuan Financial Services Authority, a statutory body under the Ministry of Finance, Malaysia
- Well-balanced legal and regulatory framework
- Adheres to Malaysia's AMLCFT requirements and international standards

Key Segments



Tax Structure

- Income from Labuan trading activities (as defined) taxed at 3% of net audited profits
- Non-trading income (e.g. from investment holding activities) is not taxed
- Clear and prescribed substance requirements based on business activities
- Fiscal regime is perpetual, not time bound

Other Benefits

- Exemption from withholding tax on dividends, interest, royalties, service fees and lease payments to non-residents
- Exemption on stamp duty
- Access to most of Malaysia's 70+ double taxation agreements*
- 100% foreign ownership is allowed

*Labuan entities enjoy the benefits of most of Malaysia's tax treaties, but certain treaties have specifically excluded Labuan entities from treaty benefits

Tokenisation of Financial Assets: Going Beyond Digitalisation

Together, these assets account for over US\$300 billion in globally held capital, and well over US\$100 billion in daily trading volume globally.



By Liew Ooi Hann,
Founder and Chief Executive Officer,
Halogen Capital



A Strategic Guide for Malaysian Financial Leaders

For many in the financial industry, the term 'tokenisation' still carries the echoes of the early cryptocurrency era. However, to view tokenisation through the narrow lens of speculative digital assets is to miss the most significant architectural shift in finance since the advent of the internet (a.k.a. digitalisation).

At its core, tokenisation is the process of converting rights to an asset into a digital token on a blockchain. While its roots lie in the birth of Bitcoin (the first decentralised, native internet currency) in 2009, the technology has matured into a sophisticated vehicle carrying mainstream financial assets with real institutional participation, particularly from 2023 onwards, and growing until today.

We see this today in the scaling of USD stablecoins, tokenised US treasury bonds, gold and other commodity-backed tokens, and, more recently, the tokenisation of money market funds, stocks, and private credit. Together, these assets account for over US\$300 billion in globally held capital, and well over US\$100 billion in daily trading volume globally.¹ While this sounds large, it is held up against the backdrop of a larger US\$3 trillion market cap asset class (as of 2026) in crypto assets (including cryptocurrencies, utility tokens, stablecoins, and tokenised financial assets).

These are not mere experiments; they are the earliest examples of a new financial plumbing that is already handling tens of billions of dollars in daily volume, and I firmly believe that Malaysia can and should lead in tokenisation in a couple of key areas beyond the core focus of enabling global access to Malaysian investments. These key areas are (1) serving as a gateway for on-chain token-native investors into regional assets; and (2) leading in the availability, standards-setting and trading of Shariah compliant tokenised financial assets globally.

Digitalisation Gets You Only Halfway There

There is a common misconception at the board level that tokenisation is simply 'Digitalisation 2.0'. Senior management and directors on the board are often told that the benefits of tokenisation are the following: 24/7 trading, fractionalisation, and increased transparency.

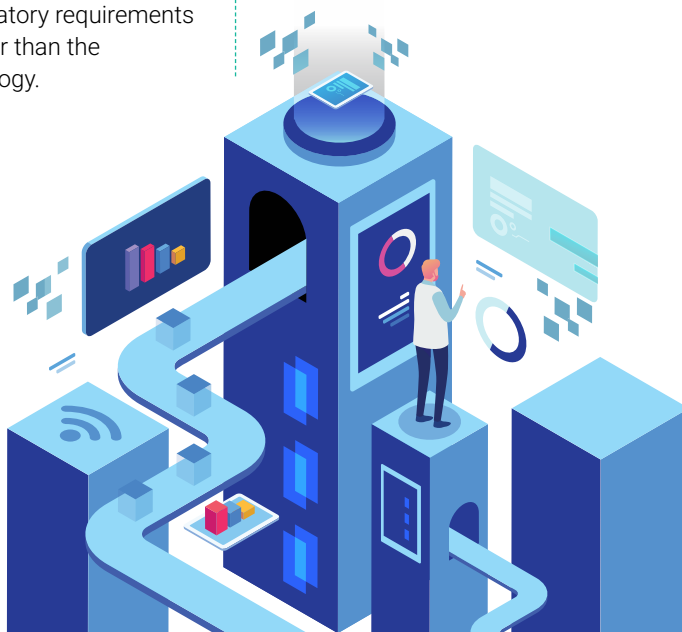
While these benefits are real and achievable with a push towards tokenisation, the uncomfortable truth is that the various digitalisation journeys that institutions are already on can achieve these benefits even without tokenisation.

For example, over the last two decades, traditional electronic markets have successfully implemented fractional share trading and extended off-hours settlement. In Malaysia, digital brokers such as M+Global, Moomoo, and Webull already offer off-hours trading, fractional share investing and trade volume transparency. Further transaction transparency, too, is often a function of regulatory requirements for reporting, rather than the underlying technology.



If a board views tokenisation merely as a way to trade 24/7 or split an asset into smaller pieces, they are likely to see it as a heavy capital expenditure exercise with only marginal utility, or in other words, just spending money on a technology improvement that has marginal tangible commercial benefits beyond digitalisation. This framing misses the point entirely.

To unlock the real value of this shift towards tokenised financial assets, we must look at the three pillars that digitalisation alone cannot replicate: atomic settlement, immutability of records, and most crucially, unprecedented market access to a tokenised world that exists beyond the fiat world.



In the traditional world, "digital" trading still relies on a complex web of intermediaries, clearing houses, and several days of settlement lag (T+2 or at best T+1).

The Three Benefits of Tokenisation Beyond Digitalisation

Atomic Settlement (Delivery vs. Payment (DvP))

In the traditional world, "digital" trading still relies on a complex web of intermediaries, clearing houses, and several days of settlement lag (T+2 or at best T+1). This creates counterparty risk, specifically settlement risk, and traps massive amounts of capital in the "plumbing" of the system. Every day of settlement delay is capital that cannot be deployed elsewhere.

Tokenisation introduces Atomic Settlement: the simultaneous exchange of the asset and the payment. Individual investors, consumers, and small businesses already have a feel of this benefit by using payment systems such as DuitNow, which on the backend actually rely on batch settlement among licensed institutions and the central bank, unlocking full atomic settlement across the value chain, all the way up to licensed banks, the central bank, and its benefits for the financial industry at large. If the payment isn't there, the asset doesn't move. This eliminates settlement risk and frees up collateral liquidity that was previously stagnant.

Immutability and Bearer Capability

Traditional digital records are entries in a private database that can be altered or deleted by the database owner. This creates dependency on the integrity of centralised record-keepers and introduces reconciliation costs across counterparties.

Tokenised assets are different; they are immutable, which means, once a transaction is recorded on the ledger, it cannot be erased, or at least, will have full transparency of reversals and resets, particularly on a public blockchain. Furthermore, tokenisation returns us to the concept of a "bearer asset" in a digital format. The token is the asset, allowing for direct ownership and transferability without the constant need for a central registry to validate every micro-movement, while maintaining full transparency for regulators and auditors alike to ensure full AML/CFT and transaction compliance.

The Secret of Market Access

This is the "boardroom secret." If you treat tokenisation as a technology upgrade, it is a cost centre. If you treat it as a market access exercise, it is a revenue and demand driver.

As of 2026, the cryptographic-asset (i.e. tokenised) ecosystem consists of over 600 million investors globally,² interacting with a US\$3 trillion market cap ecosystem.³ By tokenising a Malaysian financial asset, be it a unit trust fund, a bond/sukuk, or a stock in the KLCI Index, you are not just "making it digital"; you are making it visible and accessible to this global pool of liquidity with instant transaction and settlement. Without tokenisation, these assets remain trapped within local legacy rails, invisible to a large burgeoning liquidity source in the world without gatekeepers.

The Regulatory Landscape: A Malaysian Perspective

Confidence in this transition is bolstered by a decisive regulatory pivot in 2025. The Securities Commission's (SC) Consultation Paper No. 1/2025 on the Proposed Regulatory Framework for Offering and Dealing in Tokenised Capital Market Products⁴ marked a major shift, moving tokenisation from a "sandbox" experiment to a formalised pillar of the capital markets. By proposing a framework that specifically addresses how traditional securities, such as bonds and unit trusts, can be issued as tokens, the SC is effectively merging the 'crypto' world with institutional finance.

The current baseline implementation is the 'digital twin' model, where securities are issued and traded as usual, but have a 'digital twin' token represented on-chain. The on-chain twin can be held and traded with all the benefits of a cryptotoken, as long as the final source of truth, the offchain twin, remains updated.

Complementing this, Bank Negara Malaysia's (BNM) October 2025 Discussion Paper on Asset Tokenisation⁵ introduced a three-year Co-creation Roadmap (2025-2027). Central to this is the Digital Asset

Innovation Hub (DAIH), launched in June 2025, which has already begun testing real-world applications for tokenised deposits and MYR-denominated stablecoins. These initiatives are not merely about digitising assets; they are about maintaining the "singleness of money", ensuring that tokenised ringgit remains interchangeable at par with physical currency while unlocking wholesale efficiency. It's a good thing, because you cannot have a thriving tokenised asset ecosystem without tokenised money as the settlement instrument.

For boards, the takeaway is clear: the regulators are no longer just monitoring the space; they are building the "rails." They are focusing on systemic benefits like Atomic Settlement (or DvP) to reduce counterparty risk and programmable Shariah-compliant transactions to reinforce Malaysia's leadership in Islamic finance. This integrated effort between the SC and BNM ensures that as the ecosystem scales, it does so with a focus on institutional-grade resilience and legal certainty.

Together, these initiatives signal a decisive regulatory shift, bringing traditional securities, tokenised deposits and MYR-denominated stablecoins closer to institutional finance.



The Stablecoin Question

A critical question remains regarding USD Stablecoins (like USDT or USDC). These tokens currently serve as the primary medium of exchange in the global tokenised economy, with over US\$250 billion in market capitalisation between the two largest alone. For Malaysia to truly compete, our assets must have a bridge to this liquidity, or be open to this investor flow (i.e. foreign direct investments). However, there has been significant regulatory resistance to USD stablecoins, and boards must understand why.

The primary concern for BNM is monetary sovereignty. The widespread adoption of foreign-denominated stablecoins could lead to "digital dollarisation", where the domestic digital economy begins to operate in USD rather than Ringgit. This would erode the central bank's ability to manage domestic interest rates and control capital flows. The simple answer here would be to ensure (1) that current FEP rules are not circumvented regardless of whether it's fiat or token; and (2) leverage the additional transparency of blockchain transactions to monitor and ensure compliance.

The other risk is that global stablecoins present significant macro-financial risks; if a major USD stablecoin, mostly held by lightly regulated companies (at least until they are all regulated by the recent Guiding and Establishing National Innovation for U.S. Stablecoins Act (GENIUS Act)), were to de-peg or fail like any corporate insolvency, having significant exposure to it, say, through trading pairs and using it as a settlement token, could destabilise financial flows and strain Malaysia's monetary and liquidity position.

Still, the innovation push by both regulators, along with Halogen Capital's involvement in tokenisation efforts with the major commercial banks in 2026 has been well received, and bodes well for Malaysia's future leadership in this space, at least in the region. While the start might seem limited, with concepts like digital twins and whitelisted participants (rather than native, bearer asset handling and trading) being the primary first step, taking a staggered, step-by-step approach is probably the right one, given how systemic the banking and investment industry is to the wider Malaysian economy.

The Shariah Advantage: Malaysia's Strategic Edge

Malaysia's most distinctive opportunity lies in Shariah-compliant tokenisation. This is not a niche play but a strategic positioning that leverages over 40 years of institutional infrastructure against a global demand gap that tokenisation is uniquely positioned to solve.

Consider the problem: a Malaysian-domiciled Shariah fund is practically inaccessible to a Bahraini or Indonesian retail investor without expensive onboarding on to various institutions including the local broker/advisor, the unit trust dealer or the fund manager. A tokenised unit on shared infrastructure removes that friction entirely: The investor gets access; the fund manager gets distribution; Malaysia gets capital inflows.

Malaysia's competitive position here is clearly formidable. The SC was the first capital markets regulator globally to issue a formal Shariah ruling on digital assets in 2020.⁶ This regulatory clarity combined with Shariah governance institution-building bodies like the SC Shariah Advisory Council, creates advantages that Singapore and Hong Kong cannot easily replicate.

Three Innovative Flows: The Programmable Future

Beyond the three pillars of benefits of tokenisation today, when all financial assets are tokenised, we move from "static finance" to "programmable finance." Consider these innovative flows:

1 Intra-day Collateral Management:

Using tokenised deposits or money market tokens as collateral that can be moved in seconds to satisfy a margin call, rather than waiting hours or days for an interbank transfer, even with foreign counterparty banks.

2 Programmable Outcomes:

Structured products where the payout is automatically executed via a smart contract the moment a market condition is met, removing the need for manual calculation and distribution.

3 Yield Composability:

A Malaysian corporate bond token could be used as collateral in a global lending protocol, allowing the holder to earn interest in two different ecosystems simultaneously.

Four Risks Boards Must Manage

No transformation of this scale is without risk. Boards must move past the "crypto-scare" and focus on institutional-grade risk management. Key areas of focus should include:

1 Smart Contract Risk:

Ensuring that the code governing the asset is audited and secure.

2 Cybersecurity and Custody:

Moving from "account-based" security to "key-based" security requires a fundamental shift in how assets are guarded.

3 Interoperability:

The risk of being stuck on a blockchain that does not communicate with others eliminates the liquidity benefit from market access. Boards should advocate for open standards that ensure their tokenised assets can move across different systems.

4 Regulatory Compliance:

Ensuring that the "bearer" nature of tokens does not bypass Anti-Money Laundering (AML), Know Your Customer (KYC) and Foreign Exchange Policy (FEP) requirements, leveraging on the inherent transparent nature of blockchain transactions to do so.



Conclusion: A Strategic Imperative



The debate over tokenisation is not a debate about technology; it is a debate about the future of market relevance.

Digitalisation was about making the old system faster and more efficient. Tokenisation is about building a new system that is more liquid, more resilient, and infinitely more connected with global investor pools.

I see a possible future where Malaysia leads in tokenisation of financial assets, particularly in two areas:

- Serving as a gateway for crypto-asset liquidity and capital to flow into the region
- Establishing leadership in Shariah-compliant tokenised assets - this being a natural extension of Malaysia's current leadership in sukuk issuance and trading, as well as Shariah standards worldwide.

For the Malaysian boardroom, the message is clear: do not invest in tokenisation just to save on your back-office costs or simply for efficiency gains. Invest in tokenisation to gain access to the global, programmable future of finance. The transition from "digital" to "tokenised" is the difference between being a local participant and a global leader. ■

References

- 1 Total stablecoin market capitalisation alone reached US\$300 billion as of April 2026. Source: DefiLlama, "Stablecoin Market Cap Chart"
- 2 Demandsage, Global Crypto Adoption Stats (April 2026), <https://defillama.com/stablecoins>
- 3 CoinGecko, Global Cryptocurrency Market Cap (April 2026), <https://www.coingecko.com/>
- 4 Securities Commission Malaysia (6 May 2025): Proposed Regulatory Framework For Offering And Dealing In Tokenised Capital Market Products (No.1/ 2025), <https://www.sc.com.my/api/documentms/download.ashx?id=5a9a10e2-5872-4b48-9ea3-5b9635cc5179>
- 5 Bank Negara Malaysia, Asset Tokenisation in the Malaysian Financial Sector, https://www.bnm.gov.my/documents/20124/938039/Discussion_Paper_on_Asset_Tokenisation.pdf
- 6 Securities Commission Malaysia, Resolutions of the Shariah Advisory Council of the SC, <https://www.sc.com.my/development/icm/shariah/resolutions-of-the-shariah-advisory-council-of-the-sc>

From UX to Infrastructure

Historically, large banks and financial services giants have concentrated their immense power on maintaining the status quo and enlarging their already significant market share.

Whatever technology they adopted was at best aimed at efficiency and further cost rationalisation to widen margins, and the gap between them and any incumbent. Core banking remained archaic, and in some major international and Malaysian financial services groups, that technology is in its same base form since the 1990s, if not earlier.

As technology became more available and democratised at the start of the 2000s, they went into "siege" mentality and denied that they required more technology as they already had three channels - so who would require more? They denied that their processes, their technology stack, was an issue that required greater attention, and sat back as profits surged until a number of them nearly broke the global financial system in 2008.

The financial technology sector, as a necessity, had to suffer a cycle of creative destruction. All their entreaties to the entrenched financial services companies were not entertained, and in frustration they started to build around the available technology. They found that much of finance was being implemented and had been built on architecture that was available at that time rather than what was now available to deploy.

However, as we navigate near the midpoint of 2026, the narrative has fundamentally shifted away from the combative "disruptor vs. incumbent" trope that defined the previous decade. The "First Wave" of fintech (2010–2024) was an era of unbundling — isolating specific banking services like payments, FX, or lending and optimising them through superior user experience, unbundling services and lower fees as a result of simplicity and technology, not just technology alone.

The Next Frontier in Fintech: Insights and Lessons from the First Wave



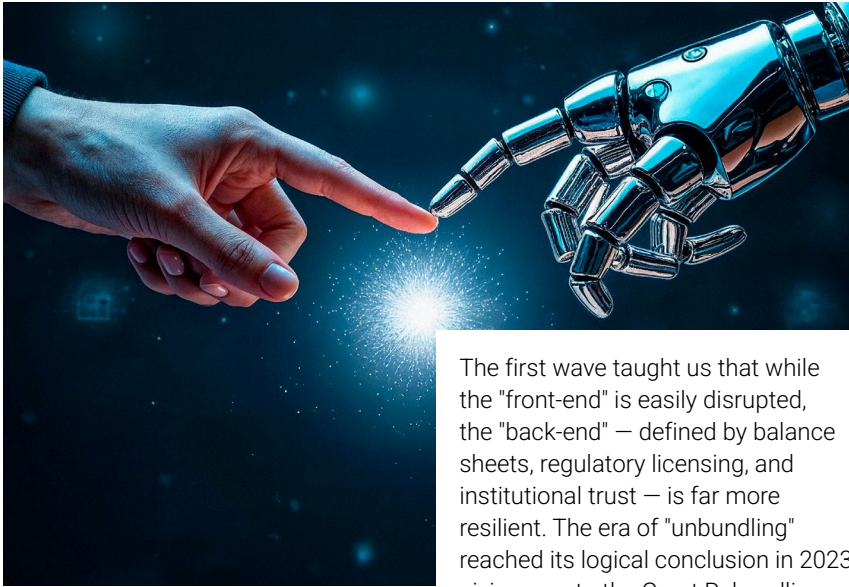
By **Anil Gill**,
President,
Fintech Association of Malaysia (FAOM)



What is the next frontier?

"Next Frontier" is an era of sovereign infrastructure and autonomous agents. We are no longer merely digitising paper-based processes; we are rewriting the underlying architecture of global value exchange. By analysing the maturation of Real-World Asset (RWA) tokenisation, the legislative clarity of the 2025 GENIUS Act, and the rise of Agentic AI and the impending arrival of Quantum Computing this article explores how fintech has transitioned from a niche "disruptor" to the very operating system of global finance.

They found that much of finance was being implemented and had been built on architecture that was available at that time rather than what was now available to deploy.



A Retrospective: Some Hard Lessons from the First Wave (2010–2024)

To appreciate the current situation, we must acknowledge the "Efficiency Paradox" of the first wave. Between 2010 and 2022, billions in capital flowed into technology-inspired neobanks, niche payment providers and SaaS startups with the promise of making traditional banks obsolete or at least taking significant market share and "eating their lunch" in the parlance of the times. However, as Pham & Nguyen (2025) noted, fintech adoption by incumbents often led to increased operational margins and executive compensation rather than the predicted "disruption" of legacy players. In fact, when we look at AI use case pilots at the large FIs, what seems to be their focus? Again, it is efficiency, which means fewer people and more margin. But has this helped the consumer? Is the customer experience better than before?

The first wave taught us that while the "front-end" is easily disrupted, the "back-end" — defined by balance sheets, regulatory licensing, and institutional trust — is far more resilient. The era of "unbundling" reached its logical conclusion in 2023, giving way to the Great Rebundling. Neobanks realised that customer acquisition costs (CAC) for single-product users were unsustainable, leading them to aggressively seek banking licences or "rent" them via Banking-as-a-Service (BaaS) to offer the full suite of high-yield savings and credit products.

The first wave taught us that while the "front-end" is easily disrupted, the "back-end" — defined by balance sheets, regulatory licensing, and institutional trust — is far more resilient.

Financial inclusion, another feature of the first wave and for many digital banking licences a requirement from central banks, saw mixed results. While digital credit expanded access in emerging markets, it also created "digital debt traps" in regions with insufficient consumer protection. As we see in the Airlangga et al. (2025) review, the success of the next frontier depends on moving from "access to credit" to "access to sustainable wealth-building tools." In Malaysia the regulator has seen this and set up the Consumer Credit Oversight Board ("CCOB") and begun licensing procedures for BNPL and other off balance sheet lenders thereafter.

The AI Renaissance: Moving to "Agentic Finance"

If 2023–2024 was defined by the novelty of Generative AI (LLM and their logical extensions - chatbots), 2026 is defined by Agentic AI. The "Next Frontier" has moved beyond models that merely inform users to models that act on their behalf within defined guardrails.

We read today that Anthropic has delayed the release of "Mythos" because internal testing revealed the model possessed "dangerous" and "hacker-grade" cybersecurity capabilities that surpassed the company's existing safety thresholds - and yet we still speak of guardrails as a future feature for IT systems?

The 'when' aside, what are some guardrails we can institute?

Technical and Architectural Guardrails: Agents require access to internal APIs and databases to gain the maximum advantage from them, therefore technical guardrails are required to prevent "excessive agency" and data leakage. Some required steps without the details are defined here:

- System Prompt Hardening
- Trace Analysis (Observation Logs)
- Data Masking & PII Redaction
- Tool-Use Authorisation

Operational Guardrails are needed. These focus on the "Human-in-the-Loop" (HITL) model, and ensuring that AI agents' actions remain auditable.

- Exception-Only Human Intervention
- Immutable Audit Trails
- Digital Segregation of Duties

Traditional finance was built on manual workflows. In 2026, we see the rise of the Agentic Mesh. Instead of a bank employee validating identity documents in one system and performing risk checks in another, an autonomous AI agent now ingests data, triggers AML (Anti-Money Laundering) screening, applies internal risk models, and executes the decision.

Research by Krungsri Research (2025) suggests that Agentic AI has improved KYC (Know Your Customer) productivity by nearly 20-fold. These agents operate 24/7, shifting compliance from a "periodic review" model to an "always-on" monitoring system. For the consumer, this translates to "Self-Driving Wealth Management" — where an AI agent doesn't just suggest a portfolio rebalance but negotiates rates across multiple protocols and executes trades to optimise for real-time tax-loss harvesting.

The Security Architecture of 2026

As AI becomes the primary actor in financial transactions, the industry has had to abandon "bolt-on" security. As argued in MDPI (2026), the Next Frontier requires threat-centric architectures. We are seeing security integrated into the model weights themselves, preventing "hallucinated" transactions and ensuring that agents cannot be social-engineered into bypassing wire transfer limits.

The most profound structural shift in 2026 is the migration of Real-World Assets (RWAs) onto programmable ledgers. The speculative "crypto" volatility of the early 2020s has been replaced by the institutional stability of tokenised treasuries and private credit.

This was led by the Institutional Catalyst when by late 2025, BlackRock, and Apollo, to name a few, entered the fray, and tokenised RWAs (excluding stablecoins) surpassed US\$50 billion in market capitalisation (InvestaX, 2025). The catalyst was the entry of Tier-1 asset managers. BlackRock's BUIDL fund and Apollo's tokenised private credit funds proved that blockchain rails could offer T+0 (Atomic) Settlement, eliminating the "float" and reducing counterparty risk.

The value proposition is no longer "blockchain for blockchain's sake." It is about asset productivity. A tokenised Treasury bond in 2026 is not just a digital record; it is a "composable" unit of value that can be used as collateral across multiple decentralised and centralised venues simultaneously. This "granularisation" of assets allows for the fractional ownership of previously illiquid assets, such as commercial real estate or fine art, on a scale never before seen.

The Regulatory Renaissance: The GENIUS Act of 2025

For years, the US fintech sector operated in a "grey zone" of regulation by enforcement. This ended on July 18, 2025, with the signing of the Guiding and Establishing National Innovation for US Stablecoins (GENIUS) Act.

The GENIUS Act was a watershed moment for several reasons:

1. **Institutional Exclusivity:** It limited the issuance of "payment stablecoins" to insured depository institutions and licensed non-bank entities under Federal Reserve oversight.



2. **The Yield Prohibition:** In a move to separate "money" from "investments," the Act prohibits issuers from offering yields on payment stablecoins, effectively ending the era of algorithmic or "yield-bearing" stablecoins that led to the 2022 market crashes.
3. **HQLA Status:** It clarified that dollar-pegged stablecoins could be treated as High-Quality Liquid Assets (HQLA), allowing banks to integrate them into their core liquidity management.

The macro-impact has been staggering. As IMF research (2026) demonstrates, demand for stablecoins now serves as a significant structural support for U.S. Treasury yields, as these digital dollars must be backed by "cash or cash-equivalent" reserves.

While the West consolidated around the GENIUS Act and MiCA (EU), the rest of the world has been building a parallel financial reality. The "Next Frontier" is not a single global highway but a series of interconnected, sovereign "liquidity corridors." The graduation of Project mBridge from the BIS Innovation Hub in late 2024 signalled the end of the US-centric "First Wave" of global payments. In 2026, we see the full-scale implementation of BRICS Pay — an independent alternative to SWIFT designed to facilitate intra-BRICS trade using local currencies and central bank digital currencies (CBDCs).

This fragmentation poses the greatest challenge to fintech firms: Interoperability. The winners of the next decade will be the "bridge builders" — firms that can provide compliant, real-time FX and settlement between the dollar-based "GENIUS" ecosystem and the emerging CBDC bridges of the East.

The Next Frontier: Embedded Finance 2.0

The first wave of fintech was obsessed with Gen Z and retail "neobanks." The Next Frontier has pivoted toward the Small to Medium Enterprise (SME) and Vertical SaaS.

The Death of the Balance Sheet

In 2026, lending is no longer based on a static, six-month-old balance sheet. It is algorithmic and embedded. Whether it's a construction management platform or a healthcare SaaS, the "fintech layer" is embedded directly into the business workflow.

Lenders now use real-time telemetry — inventory turnover, customer churn, and invoice velocity — to offer "Just-in-Time" credit. This shift has significantly narrowed the global SME lending gap, as software-driven data provides a more accurate risk profile than traditional credit scoring ever could.

Conclusion: The Synthesis of Legacy and Innovation

The First Wave of fintech proved that technology could make banking better; the Next Frontier is proving that technology is making banking different. We have moved from the era of "Fintech as a niche" to "Finance as a technology."

The transition from the UX-focused 2010s to the infrastructure-focused 2020s has been marked by a return to institutionalism — but with a programmable twist. The winners of the next five years will be those who master three core competencies:

1. Agentic Governance: The ability to oversee autonomous AI financial actors.
2. Tokenised Liquidity: The ability to move value across programmable ledgers with zero friction.
3. Regulatory Interoperability: Navigating the diverging frameworks of the US, EU, and the BRICS+ corridors.

The frontier is no longer a distant horizon. It is the code currently being written into the global, programmable ledger of 2026. Code being written by code and with an infinite loop leading to $rQOPS > 1m$ where $rQOPS = Q \times f!$ ■

References

- Agur, I., et al. (2025). Programmable money and the future of finance. *Journal of Financial Transformation*. (Referenced in *Frontiers*, 2026).
- Airlangga, et al. (2025). A systematic review of digital credit and regulatory loopholes. *Inverge Journal of Social Sciences*, 4(4), 143-155.
- Cisar, J., et al. (2025). Real-time settlement and the granularity of tokenized assets. *Frontiers in Blockchain*. (Referenced in *Frontiers*, 2026).
- Eurex. (2026). Repo Trading & Clearing 2025/2026: Driving Transformation Towards a More Integrated European Repo Market. https://www.eurex.com/resource/blob/4902968/026dc34af9bfb63d190c720bd855ed48/data/repo-report_2025-2026.pdf.
- Frontiers. (2026). Tokenization and the reshaping of traditional finance: Institutional adoption. *Frontiers in Blockchain*, 9(1747208).
- International Monetary Fund (IMF). (2026). Stablecoin Shocks: Demand for HQLA and the GENIUS Act Framework (WP/26/44).
- InvestaX. (2025). Real-World Asset Tokenization Market Recap 2025. <https://investax.io/blog/real-world-asset-tokenization-market-recap-2025>
- Kore.ai. (2026). AI agents in finance and banking: 12 proven use cases (2026). <https://www.kore.ai/blog/ai-agents-in-finance-banking-12-proven-use-cases-2026>
- Krause, D. (2026). Beyond the GENIUS Act: Regulatory gaps and operational challenges in stablecoin adoption. *University of Miami Law Review*, 80(337).
- Krungsri Research. (2025). Banks in the Age of Agentic AI: The 20x Productivity Leap. <https://www.krungsri.com/en/research/research-intelligence/agentic-ai-2025>
- MDPI. (2025). The role of regulatory sandboxes in FinTech innovation: A comparative case study. *Journal of Risk and Financial Management*, 4(2), 26.
- MDPI. (2026). Securing Generative AI Systems: Threat-Centric Architectures and the Impact of Divergent Governance Regimes. *Systems*, 6(1), 27.
- Pham, T., & Nguyen, H. (2025). The effects of fintech adoption on CEO compensation: Evidence from JSE-listed banks. *Journal of Risk and Financial Management*, 19(1), 56.
- World Economic Forum (WEF). (2025). The GENIUS Act is designed to regulate stablecoins in the US, but how will it work? <https://www.weforum.org/stories/2025/07/stablecoin-regulation-genius-act/>



From AI Pilots to International Scale: A Banking Perspective



By Azwan Baharuddin,
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The discussion around artificial intelligence (AI) in Asia has shifted decisively from experimentation to execution. Early initiatives focused on testing use cases and validating technology. Today, the challenge confronting business leaders across the region is far more complex. The question is no longer whether AI can deliver value, but rather how to move from isolated initiatives to enterprise-wide capabilities that deliver sustained business impact. Nowhere is this more evident than in Malaysia's banking sector, where AI pilots are proliferating across functions, yet coordinated, enterprise level capability remains elusive.¹

A recent survey of Asia Pacific (APAC) executives² paints a picture of rising disruption across the region, with three in four leaders expecting the pace of change to accelerate in 2026. In response, the majority of C-suite leaders now plan to increase investment in AI, and a notable minority is preparing to boost spending by around 20% or more, signalling a move beyond incremental experimentation.

These trends point to a change in how leadership teams view AI. What was once considered discretionary is now being elevated to a strategic priority, closely linked to competitiveness and resilience in an increasingly volatile environment.

Yet ambition continues to outpace readiness. Even as investment accelerates, confidence in organisational preparedness remains uneven.

In practice, only a small minority of banks across the region has reached this level of maturity. While many institutions are running multiple AI pilots, far fewer have been able to scale these efforts into enterprise-wide capabilities that deliver sustained, transformational value.

Only around half of C-suite leaders in APAC say they feel very prepared for the level of technological disruption they expect to face in the year ahead.³ When it comes to managing AI-related risks, the confidence gap widens further. While the vast majority of organisations intended to increase investments in AI in 2025, only a very small fraction indicated that they were fully equipped to govern its impact on operations, decision-making and trust.⁴

This disconnect between aspiration and execution has become a defining feature of Asia's AI journey. Having seen early productivity and performance gains from generative AI (gen AI), most senior leaders globally plan to continue increasing investment.⁵ The scale of potential economic impact reflects this momentum.

Across the APAC region alone, gen AI could unlock as much as US\$4.5 trillion in value by 2038.⁶ However, realising that value will depend less on the pace of investment and more on whether organisations can translate experimentation into enterprise-wide capability, supported by the right data foundations, governance models and leadership oversight.

What It Takes to Scale AI and Why It Matters

We have entered the **“Age of AI”**, a period of accelerated value shift in the global economy. Over the past decade, US\$27 trillion in enterprise value migrated among the world’s largest companies, and this migration has doubled in pace in recent years. Analysis shows that companies which failed to reinvent with new technologies, like AI, have ceded ground to those that did.

A small group of digital-first and tech-forward firms have captured a disproportionate share of this movement. These “value leaders” have grown earnings at nearly three times the pace of their peers and expanded market valuations by more than seven times, demonstrating that the ability to scale innovation now translates directly into competitive and financial advantage.⁷

For enterprises in Malaysia, the implications are difficult to ignore. AI is no longer simply another technology initiative to be piloted and optimised at need. It is becoming a foundation for business reinvention, with direct consequences for long-term competitiveness and value creation.

Organisations that treat AI as a strategic capability and scale it deliberately are positioning themselves to move ahead as value continues to migrate. Those that remain stuck in perpetual pilot mode risk falling behind in an increasingly unforgiving, rapidly evolving landscape.

As banks move beyond experimentation, leaders are confronting deeper questions: what should the AI operating model of the future look like, how much must sit at the centre of the bank, and what responsibility must move into the lines of business to unlock real value.

This article examines how this dynamic is playing out across Malaysia; who is emerging as AI “frontrunners”; why so many institutions continue to struggle to scale; and what must change, particularly within the financial services sector, to close the gap.



Over the past decade, US\$27 trillion in enterprise value migrated among the world’s largest companies, and this migration has doubled in pace in recent years.

Defining the Front-Runners: Who's Leading and Why

A study by Accenture, examining thousands of companies across industries and geographies, points to a clear divide in how organisations are progressing with AI.

At one end are companies still experimenting, where AI efforts remain limited to basic pilots and proof-of-concepts. A larger group has begun progressing, with some foundational capabilities in place, but AI initiatives remain largely siloed within functions. More advanced organisations, often described as “fast followers,” have established a solid base and achieved success with several use cases, yet struggle to scale AI consistently across the enterprise. Only a small minority has reached front-runner status.

Globally, only 15% of companies can be considered “AI reinvention-ready” with the capabilities needed to scale AI beyond isolated use cases. Within that group, just 8% qualify as front-runners, embedding AI into core strategy and operations.

Among banks in the APAC region, only 10% have what it takes to realise the transformational value AI promises.⁹ This means 90% of APAC banks remain at limited or moderate AI maturity despite running multiple pilots.

What Sets Front-Runners Apart

Research examining AI adoption in banking shows that the institutions making the most progress share a common approach. Rather than treating AI as a collection of disconnected initiatives, they invest in scaling it through a small number of industry-specific strategic bets.¹⁰

These bets are characterised by sustained, long-term commitment to applying AI across core banking processes, supported by deliberate investment in data foundations, talent practices and responsible AI governance.

The potential upside is significant. Banks that successfully scale gen AI could see productivity improve by up to 30%, alongside a 600 basis point lift in revenue growth, and a 300 basis point increase in return on equity over three years.¹¹ However, despite the opportunity, only a small share of banks in the APAC region is set up to realise this potential.

Those that are leading have moved beyond pilot activity to validate and scale AI use cases that matter most to their business. They tend to be further along the data maturity curve, with more integrated architectures and a clearer approach to deploying foundation models and, in some cases, AI agents within specific processes.

Of equal importance, these banks place greater emphasis on people and governance. As AI becomes more deeply embedded, leading banks are also addressing the human impact by rethinking roles, career paths and workforce engagement to maintain trust, motivation and long-term capability alongside automation.

They invest in enterprise-wide change management and learning, and have translated responsible AI principles into day-to-day operating practices.

Together, these choices help explain why only around one in ten banks in the region is currently equipped to turn AI ambition into enterprise-wide impact.

What differentiates leaders today is their ability to redesign the enterprise around AI, not simply deploy it. Integrating AI as an opportunity for all requires CEOs and CHROs to align business strategy, workforce priorities and technology with a clear focus on people.

Leading banks are moving away from traditional role-based structures toward intent-driven workflows, where cross-functional teams are organised around business outcomes rather than departmental boundaries. This enables the orchestration of AI agents alongside human expertise, shifting routine work to AI while freeing specialists to focus on exceptions, customer empathy, complex problem-solving and quality control.

However, such transformations demand more than new tools. They require new operating models, revised metrics and deliberate investment in change management. Globally, institutions that have established dedicated learning centres to encourage upskilling and formalise AI expertise, standards and governance are seeing measurably faster adoption.¹²

Malaysia's AI Moment

Malaysia finds itself at an important juncture in its AI journey. The country benefits from strong policy intent, a digitally engaged population and a resilient financial sector that continues to invest in growth. These factors have created a credible platform for AI adoption.

Yet, for many organisations, particularly in financial services, progress remains uneven. Malaysia is best characterised today as a fast follower, advancing steadily but still confronting the structural and strategic barriers that separate momentum from sustained, enterprise-wide impact.

There is no shortage of intent. Public investment and policy direction signal long-term commitment, with national roadmaps and dedicated funding aimed at strengthening AI capabilities and talent pipelines.

At the same time, global technology providers are expanding Malaysia's cloud and data infrastructure at scale, reinforcing the country's role as a regional digital hub.¹³



The banking sector itself remains financially healthy, supported by diversified income streams and stable profitability, providing institutions with the balance sheet capacity to invest in transformation.

Market readiness is also evident on the demand side. Consumers across Southeast Asia, including Malaysia, show growing openness to intelligent agents and the use of gen AI in financial services. However, this openness is tempered by persistent concerns around privacy and data security, reinforcing the importance of trust, transparency and governance as AI becomes more deeply embedded in customer interactions.¹⁴

Despite these favourable conditions, execution challenges persist. Many Malaysian financial institutions continue to operate with fragmented data environments that limit the ability to scale AI across the enterprise. AI initiatives are often confined to pilots or isolated use cases, with limited alignment to core business priorities.

Responsible AI frameworks also exist in principle, but in many cases remain insufficiently operationalised. Talent constraints and cultural inertia further slow adoption, reducing the return on otherwise well-intentioned investments.

Malaysia, like its neighbours, stands at an inflection point. The country has strong ambitions to be an AI leader, supported by government initiatives and a tech-savvy talent pool, but turning ambition into impact will require concerted effort to close the maturity gap in sectors like financial services.

The foundational work of upgrading data infrastructure, instilling strong AI governance and equipping the workforce cannot be skipped. These are the enablers that convert an AI proof-of-concept into a scaled, enterprise-wide success story.

For Malaysia to move from fast follower to front-runner, the challenge is not ambition, but coherence. Leading organisations globally are distinguished by their ability to align technology investment with operating model change and governance discipline.

For Malaysian banks, this requires three leadership shifts. First, building a scalable digital core by investing in unified data platforms that support real-time, enterprise-wide AI deployment. Second, embedding responsible AI into day-to-day operations through clear accountability, model oversight, and board-level governance. Third, redesigning the organisation itself by investing in workforce upskilling, cross-functional teams and ways of working that integrate AI into core processes rather than layering it on top.

In Malaysia, awareness of AI's strategic importance has been growing, and steps are being taken to improve governance and alignment. The Malaysian government, for instance, has published a National AI Roadmap and is setting up a National AI Office to coordinate AI initiatives and governance nationally¹⁵. In the private sector, an encouraging number of CEOs and boards are starting to champion AI as a core part of their future business.¹⁶

This kind of strategic vision, however, needs to be backed by concrete governance measures: clear ownership of AI at the executive level, cross-functional steering committees to drive AI projects, and company-wide policies for data governance, ethics and risk management. Malaysian firms are at the beginning of this journey.¹⁷

The opportunity for Malaysia's financial sector is clear. As AI reshapes competitive dynamics across the region, the institutions that succeed will be those that translate intent into execution and experimentation into scale. ■

References

- ¹ [The Edge: How AI is transforming financial institutions in Malaysia Fintech Malaysia: Why 95% of AI Pilots Fail in Banking and How Banks Can Get ROI](#)
- ² [Accenture CXO Pulse of Change Survey \(January 2026\)](#)
- ³ [Accenture CXO Pulse of Change Survey \(January 2026\)](#)
- ⁴ [Accenture: From compliance to confidence Accenture: Leapfrog with responsible AI Yicai Global: As APAC Businesses Plan Bigger AI Spending, Risk Readiness Lags, Accenture Finds](#)
- ⁵ [Accenture: Leapfrog with responsible AI](#)
- ⁶ [Accenture: Leapfrog with responsible AI](#)
- ⁷ [Accenture: The great value migration](#)
- ⁸ [Accenture: The front-runners' guide to scaling AI](#)
- ⁹ [Manila Bulletin: Most Asia-Pacific banks not Already—Accenture report](#)
- ¹⁰ [Accenture: The front-runners' guide to scaling AI](#)
- ¹¹ [Accenture: The age of AI: Banking's new reality](#)
- ¹² [Accenture: Top Banking Trends 2026](#)
- ¹³ [Budget 2025 to accelerate Malaysia's digitalisation, AI adoption](#)
- ¹⁴ [Accenture: Banking Consumer Study 2025](#)
- ¹⁵ [RM2.9 million in strategic grants to advance ai and industrial digitalisation](#)
- ¹⁶ <https://www.petronas.com/media/media-releases/petronas-strengthens-global-collaboration-ai-integration-ecosystem-and-high>
- ¹⁷ <https://www.cimbislamic.com/en/newsroom/2025/cimb-accelerates-investment-in-its-people-to-future-proof-its-workforce.html>

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Disruption Without Pause: When Technology Sets the Pace



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The trading floors of Southeast Asia, once defined by the cacophony of human shouts and the frantic rustle of paper, have fallen into a digital hum. In 2026, the ASEAN stockbroking landscape is no longer just "incorporating" technology; it is being fundamentally rewritten by it. From the high-rise offices of Singapore to the surging trading hubs of Kuala Lumpur and Jakarta, the integration of Artificial Intelligence (AI) and automated systems has moved from a competitive edge to a baseline requirement.

This shift represents a "Disruption Without Pause." For institutional players and retail brokerages alike, the pace of technological advancement is now setting the pace of institutional behaviour. As capital markets become more integrated across the region, the lens through which we view stockbroking must evolve.

The New Architecture of Efficiency

The most immediate impact of the AI revolution in ASEAN brokerages is the radical overhaul of operational workflows. Historically, the "back office" was a labyrinth of manual trade confirmations and complex order routing, prone to human error and latency.

Today, AI-driven bots manage the lifecycle of a trade with surgical precision. These systems do more than just execute orders; they analyse liquidity pools across multiple ASEAN exchanges in real-time, identifying the most efficient routing paths to minimise slippage. Manual trade confirmation, once a bottleneck that delayed settlements, has been replaced by automated matching engines. This doesn't just improve accuracy; it eliminates the "fat-finger" risks that have historically cost firms millions.

This doesn't just improve accuracy; it eliminates the "fat-finger" risks that have historically cost firms millions.



For the modern equity analyst, the days of spending 48 hours straight manually inputting historical data into an Excel spreadsheet are fading. AI tools now serve as co-pilots in financial modelling. These systems can ingest thousands of pages of annual reports, ESG disclosures, and macroeconomic data to build foundational models in seconds.

By automating the structural build of a model, analysts can spend their cognitive energy on the "why" rather than the "how." They move from being data entry specialists to strategic thinkers, adjusting variables and stress-testing scenarios that AI identifies as high-risk.

In a market where a single tweet or a sudden regulatory shift in a neighbouring country can trigger a sell-off, speed is the ultimate currency. Research analysts are now utilising Generative AI to draft initial summaries of earnings calls and breaking news. What used to take half a day to synthesise into a client note now takes minutes. This allows brokerages to provide "real-time research," keeping clients informed while the market is still reacting, rather than a day late.

Redefining the Human Element: Value and Balance

Perhaps the most profound disruption is not in the software, but in the people. There is a common fear that AI exists solely to replace humans. In the ASEAN stockbroking context, the reality is more nuanced: AI is replacing routine, not people.

By offloading the "grunt work" such as data scrubbing, routine reporting, and basic client inquiries, employees are liberated to perform tasks that require high-level intuition and emotional intelligence. For a broker, this means more time spent on bespoke client relationship management and navigating the complex geopolitical nuances of ASEAN investing, areas where AI still lacks the "human touch."

The finance industry is notorious for its gruelling hours. However, the efficiency gains from AI are beginning to chip away at the "culture of burnout." When AI handles the overnight data processing and the early morning news summaries, the physical and mental toll on staff is reduced. A more balanced workforce is a more creative and stable one, which is vital for the long-term health of the financial sector.

When AI reduces the burden of repetitive work, employees are freed to focus on intuition, strategy and emotional intelligence.





The Shadow Side: Navigating the Risks

Innovation never comes without a price tag or a set of new anxieties. As ASEAN institutions race to adopt these technologies, two primary risks have emerged.

There is a growing concern regarding “black box” trading. If a brokerage becomes overly reliant on AI models without maintaining a robust layer of human oversight, they risk systemic failure. If the underlying data is biased or if the AI encounters a “Black Swan” event it wasn’t trained for, the automated response could exacerbate market volatility. Institutions must ensure they don’t lose the institutional knowledge required to step in when the machines fail.

The “AI Arms Race” is expensive. For smaller brokerages in developing ASEAN markets, the cost of acquiring, implementing, and maintaining cutting-edge AI infrastructure is staggering. There is a risk of a digital divide, where only the largest, most well-capitalised firms can afford the tools necessary to compete. This investment isn’t a one-time fee; it requires continuous capital expenditure on cybersecurity, data talent, and hardware.



As institutions race to adopt AI, the real risk is not only technological failure — but losing the human oversight needed when the machines fail.

Conclusion: A Balanced Horizon

The transformation of the ASEAN stockbroking industry is a testament to the region’s resilience and ambition. We are witnessing a transition where technology does not just support the institution, it defines it. While the risks of over-reliance and high entry costs are real, the rewards of unparalleled efficiency and a more empowered workforce are too significant to ignore.

As we move forward, the most successful institutions will be those that strike a perfect harmony between algorithmic speed and human judgement. The pace of disruption will not slow down; the only question is whether you have the right partner to help you navigate it.

For investors looking to capitalise on these shifting dynamics, professional guidance remains indispensable. Whether you are navigating the complexities of AI-driven markets or seeking traditional fundamental analysis, firms need to look for the expertise and regional insight necessary to turn disruption into opportunity. In a world where technology sets the pace, ensure your investment strategy is a step ahead. ■



Beyond General Chat: How Retrieval-Augmented (RAG) AI is Redefining Shariah Compliance in Islamic Finance



By Adjunct Professor Dr. Zaharuddin Abdul Rahman,
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Artificial intelligence is no longer a future issue in financial services. It is already being used to search documents, summarise rules, support customer service, improve internal workflows, and assist with reporting and decision-making. In Islamic finance, however, the main question is not whether AI can be used. The more important question is whether it can be used in a way that respects Shariah governance, institutional authority, and accountability. That question is especially timely in Malaysia. Bank Negara Malaysia issued a discussion paper on AI in the financial sector in August 2025, and the Securities Commission's 2026–2030 Capital Market Masterplan explicitly discusses AI-based digital screening tools for Shariah compliance.

That distinction matters because Islamic finance is not just another branch of finance. It is built on legal principles, ethical boundaries, regulatory requirements, and the guidance of qualified scholars and recognised bodies.

This means that a reply may sound intelligent and still be unsuitable. A polished answer may still mix authorities, overlook jurisdictional limits, or fail to reflect the proper governance process. In Islamic finance, the issue is not only whether an answer is convincing. It is whether the answer is grounded, traceable, and legitimate within the right framework and sound context.

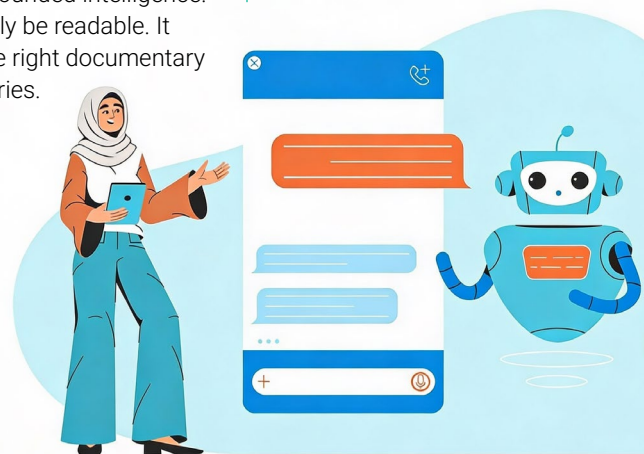
The Weakness of General-Purpose AI in a Shariah Setting

General-purpose AI tools are impressive. They can explain concepts quickly, rewrite documents well, and respond to a wide range of questions in seconds. For many ordinary tasks, that is extremely useful. But Islamic finance is not an ordinary knowledge space.

A public chatbot usually works from a very broad pool of training data. It does not naturally restrict itself to one regulator, one institution's policy framework, one approved set of Shariah standards, or one internal source hierarchy. As a result, it may blur the line between binding policy and market commentary, merge positions from different jurisdictions, or present a neat answer without showing whether the conclusion really comes from a recognised source.

That may be acceptable for casual use, but it is not enough for a field where compliance, governance, and credibility are central.

This is why Islamic finance cannot rely on fluency alone. It needs bounded intelligence. The answer must not only be readable. It must also stay within the right documentary and governance boundaries.





AI Should Support Shariah Governance, Not Replace It

This leads to a basic but very important principle: AI is not a mufti, and it should not be treated as one.

Technology can be extremely helpful in retrieving documents, comparing provisions, organising knowledge, and drafting first-pass analyses. These functions can save large amounts of time. But the authority to interpret Shariah principles, weigh competing views, approve product structures, and issue binding institutional positions still belongs to qualified human experts and established governance bodies.

That is not a limitation of good AI design. It is the correct place of AI in Islamic finance.

In fact, the healthier model is to see AI as a serious research and governance assistant. It can help institutions find the right documents faster, identify relevant issues earlier, and structure internal analysis more clearly. But the final judgement remains with human scholars, Shariah committees, legal teams, boards, and senior management where appropriate. In other words, AI may assist the process of governance, but it does not become the source of governance.

The Real Answer Is Not “More AI,” but More Structured AI

The better path for Islamic finance is not open-ended AI that speaks about everything. It is structured AI built on curated knowledge and clear source boundaries.

That means an AI system should work from selected and trusted material: regulator guidance, approved standards, internal policy documents, institutional resolutions, and carefully chosen reference texts. The goal is not to make the machine all-knowing. The goal is to make it more reliable within a defined professional scope.

This matters because Islamic finance institutions do not merely need quick answers. They need answers that reflect the documents they actually trust. If an institution wants a draft analysis based only on Bank Negara Malaysia policy documents, AAOFI Shari’ah Standards, internal Shariah decisions, and selected legal documents, then the AI should be able to operate within those limits. A general public chatbot will not naturally do that with the same discipline.

So the real progress is not simply smarter conversation. It is better source control.

Why Retrieval-Based AI Is Especially Relevant

“The output is no longer only “what the model thinks.” It becomes an answer shaped by selected references that users can review, check, and escalate when needed.”

One of the most important developments here is Retrieval-Augmented Generation, or RAG. In simple terms, RAG allows an AI system to retrieve relevant material from an external knowledge base before answering, rather than relying only on whatever patterns happen to sit inside the model. The original RAG research was introduced to improve knowledge-intensive work by grounding model outputs in retrievable sources.

For Islamic finance, that is highly relevant. A retrieval-based system can be connected to curated materials and work within defined knowledge boundaries. This creates a major advantage: traceability. The output is no longer only “what the model thinks.” It becomes an answer shaped by selected references that users can review, check, and escalate when needed.

This does not make the technology infallible. No responsible institution should assume that. But it does reduce one of the biggest weaknesses of general AI in compliance-heavy settings: the risk of unsupported, unverified, or poorly sourced output. That is why the move toward structured, retrieval-grounded AI is not just a technical improvement. It is also a governance improvement.



Democratising Knowledge Without Weakening Authority

One of the most promising benefits of this more disciplined approach is that it can help democratise access to Shariah and Islamic finance knowledge.

For many years, high-level knowledge in Islamic finance has often remained concentrated within a relatively small circle of specialists. That is understandable. The field is technical, source-heavy, and deeply tied to scholarly method. But it also means that useful knowledge can be difficult to reach for many others who still need it in practice: bankers, lawyers, compliance officers, auditors, researchers, students, business owners, and even members of the public trying to understand basic Islamic finance issues.

A structured AI environment can help open that space in a responsible way. It can make knowledge easier to retrieve, easier to organise, and easier to understand. It can help bring Islamic finance knowledge closer to everyday professional and public use. In that sense, the value of AI is not only efficiency. It is also knowledge inclusion. It helps bring important knowledge down from an exclusive

and highly fragmented space into a form that is more accessible and usable.

But this democratisation must be understood correctly. Access does not mean authority. Making knowledge more reachable does not mean that everyone becomes a scholar, or that institutions can bypass proper governance. Rather, it means more people can approach Islamic finance from a better starting point, while interpretation and endorsement still remain with qualified experts.

That balance is essential. The best AI future for Islamic finance is one that widens access to structured knowledge without weakening scholarly authority.

From Research Assistant to Governance Tool

This is also why AI in Islamic finance should not be viewed only as a question-and-answer tool. Its more important role may be as a Shariah and Islamic finance governance tool.

Institutions do not only need answers. They need systems that help them manage internal knowledge, support consistency, reduce fragmented reasoning, and strengthen institutional memory. A properly designed AI tool can help retrieve approved references, compare standards, highlight relevant clauses, organise internal materials, and prepare draft analyses or gap reports based on selected sources.

This is useful at several levels. Product teams can use it to test whether a structure raises Shariah concerns. Legal and compliance teams can use it to compare documentation against policy requirements and standards. Management can use it to prepare more informed internal discussions.

Shariah committees can use it to access organised source material more efficiently before reaching decisions.

Seen this way, AI becomes part of the institution's governance architecture. It supports consistency, improves access to institutional memory, and helps different departments work from a more disciplined knowledge base. In a field like Islamic finance, where one issue may touch jurisprudence, operations, legal drafting, product design, and regulation simultaneously, this is highly valuable.

Why This Matters for Boards and Senior Leadership

At its core, this challenge is more institutional than technological.

The key question is not simply whether AI can write a reasonable answer. The real questions are these: What should the institution allow AI to do? What sources may it rely on? Which outputs may be used only for research, and which may inform internal drafting? What must always be escalated to scholars or committees? Who remains accountable when AI-supported work enters governance, product development, or compliance review?

That is why boards and senior leadership have a major role. Their task is not only to approve AI adoption. Their task is to define the limits of reliance, set the source framework, establish oversight, and ensure that AI use remains aligned with institutional legitimacy.

In Islamic finance, precision is not a luxury. Legitimacy is not a branding issue. Both are foundational. So AI governance must be designed just as carefully as product governance, legal governance, and Shariah governance itself.

A Recent and Useful Example: ShariahLab.io



A notable recent example in this space is ShariahLab.io, a specialist platform that came into public view in early 2026, with public announcements in February 2026 and app releases and updates appearing through March and early April 2026. Its Google Play and Apple App Store descriptions present it as an enterprise-grade generative AI platform and an “AI Shariah Governance Advisor,” built for Islamic financial institutions and other regulatory-driven organisations, operating in a controlled data environment and designed to reduce the risks of public AI hallucinations and unreliable sources. Those same public descriptions say it is built upon references such as AAOIFI, Bank Negara Malaysia, IFSB, Majma’ Fiqhi, Dallah, Fatwa MUIS, and Jordan Ifta, and position it as a platform for faster decision-making, consistent governance, and institutional use.

That makes it interesting not because it is simply another chatbot, but because it reflects a more focused direction for the industry. It sits at the meeting point of regtech and Shariah governance AI. In other words, it is part of a new category of tools that are trying to do more than provide generic answers. They are trying to support compliance,

documentation, internal governance, and structured retrieval within a controlled environment. That is a meaningful development for Islamic finance, especially at a time when regulators and market frameworks are themselves paying closer attention to AI, governance, and digital screening tools.

This should not be overstated. No single platform solves every governance issue, and no AI tool should be treated as a replacement for scholarship or institutional process. But the emergence of tools like this is still good news for Islamic finance. It suggests that the industry is moving beyond generic AI convenience and toward more serious, more disciplined, and more useful applications of AI for governance-related work.

Drafting with More Precision and Less Guesswork

One of the clearest practical benefits of structured AI is drafting support.

Much of the real work in Islamic finance is not fatwa issuance. It is preparing issue notes, internal justifications, gap analyses, clause reviews, board papers, training materials, product assessments, and policy comparisons. These tasks do not require the AI to “be a scholar.” They require it to retrieve the right materials, organise them sensibly, and draft carefully from selected sources.

This is where a curated system becomes especially useful. Instead of pulling from random public material, it can be instructed to work from specific approved documents only. That may include BNM policy documents, AAOIFI Shari’ah Standards, internal Shariah committee resolutions, or particular contracts and product papers.

The result is not final authority, but it is a better starting point: more controlled, more consistent, and easier to review.

That means less guesswork, less scattered searching, and a better chance that teams across the institution are working from the same documentary ground. In practice, that can strengthen both efficiency and governance quality.

Conclusion

As AI becomes more deeply embedded in financial services, Islamic finance must ask a harder question than many other sectors: not merely what AI can do, but what it should be allowed to do within the boundaries of Shariah governance.

That is why general-purpose AI, however useful, is not enough on its own. In a field shaped by jurisprudence, recognised authority, and institutional accountability, the stronger model is one based on curated sources, retrieval-grounded outputs, disciplined oversight, and clear limits of reliance.

That is also why the rise of specialist tools such as ShariahLab.io deserves attention. Its recent public emergence as a platform positioned around controlled knowledge, governance-aware use, and compliance-oriented support is a welcome sign for the industry. Not because Islamic finance needs a machine to replace scholars, but because it does need better tools to support institutions, scholars, bankers, lawyers, and the wider public with more accessible, better organised, and more traceable knowledge.

In the end, the best future for AI in Islamic finance is not one where AI claims authority. It is one where AI helps democratise knowledge, widen inclusion, strengthen governance, and support better human judgement. For Islamic finance, that is the more useful and more legitimate path forward. ■

When Disruption Meets the Boardroom: D&O Liability in Malaysia's New Financial Landscape



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If you serve on the board of a Malaysian financial institution today, the personal stakes have never been higher. In recent years, Malaysian courts have imposed record financial penalties running into billions of ringgit in landmark financial crime prosecutions. Regulators have charged directors for false financial statements and reprimanded entire boards for serious dereliction of duties. Companies have been delisted. And the Federal Court has confirmed that directors may be held jointly and severally liable for millions in unpaid statutory contributions, even where the company is in liquidation and not even named in the proceedings.

Bank Negara Malaysia alone carried out 326 supervisory and enforcement actions in 2024, imposing RM18.9 million in penalties. These numbers clearly indicate that regulators and courts are no longer content to penalise institutions alone. They are going after the individuals who govern them.

And in this era of financial disruption — digital banking, fintech, AI, and rapidly evolving regulation — the situations that give rise to personal liability are growing, fast.

Bank Negara Malaysia alone carried out 326 supervisory and enforcement actions in 2024, imposing **RM18.9** million in penalties.



How Far Will Courts Go? Two Contrasting Answers

Two appellate decisions — one from Malaysia, one from Singapore — illustrate this issue. In *Lai Fee & Anor v Wong Yu Vee & Ors* (2023) 3 MLRA 495, the Malaysian Federal Court imposed personal liability on directors for fraudulent trading under Section 540 of the Companies Act, 2016.



A dormant company with no assets, no funds and no bank accounts was used to acquire a business for RM7 million. The directors took over the business, registered themselves, not the company, as owners, and channelled payments through another dormant entity.

The Court held this was a dishonest scheme, judged against the ordinary standards of reasonable and honest people, and made the directors personally liable for the outstanding RM2.5 million balance purchase price. The message? A corporate form is no shield for dishonesty. Even a single fraudulent transaction may suffice.

Contrast this with the Appellate Division of the Singapore High Court's decision in *Goh Jin Hian v Inter-Pacific Petroleum Pte Ltd* (2025) 1 SLR 872. Dr Goh had been ordered at first instance to pay US\$146 million for failing to detect fraud in a fuel trading company.

The Appellate Division overturned the damages award. It accepted he breached his duty of care, but held that causation was not proved, the breach did not cause the losses. Justice Kannan Ramesh observed:

"A director may be a sentinel, but he is not a forensics investigator or a sleuth, unless there are signs that would put him on inquiry."

Read together, these cases establish a framework every director might want to understand. Dishonesty attracts personal and unlimited liability. Negligence without causation does not. Directors are expected to be vigilant, not omniscient.

The difficulty, of course, is knowing where vigilance ends and exposure begins, and that difficulty increases as the risks boards must oversee grow even more novel and complex.

Statutory Debts Follow You Personally

In *Mohd Abdul Karim Abdullah & Ors v Lembaga Kumpulan Wang Simpanan Pekerja* (2025) 4 MLJ 878, the Federal Court dismissed an application for leave to appeal and thereby left undisturbed the finding that four company directors were jointly and severally liable for approximately RM3.28 million in unpaid EPF contributions, even where the company was in liquidation and not cited as a co-defendant.

Under Section 46 of the Employees Provident Fund Act, 1991, EPF can sue directors personally, including former directors who held office at the material time, for unpaid contributions. For directors of financial institutions, this carries important weight. Insolvency, liquidation, or resignation does not extinguish personal exposure.

Statutory liabilities, ie., EPF contributions, tax obligations, and similar trust-based debts may survive the company's collapse and attach directly to the individuals who sat on the board.

The Dual-Capacity Trap

Another exposure that catches directors off guard is the overlap between directorship and employment. The Court of Appeal in *Woon Kim Choy v Acexide Technology Sdn Bhd* (2025) 8 MLJ 739 clarified that a director can simultaneously be an employee, and that removal from the board does not automatically terminate the employment relationship.

Two directors who had served for approximately 23 years were removed at an EGM. The company argued they were the "directing mind and will" and could not be employees. The Court disagreed. Statutory deductions, namely EPF, SOCSO, PCB, over more than two decades were strong indicators of employment, and the total compensation awarded exceeded RM2 million.

For financial institutions, where executive directors commonly hold both board positions and employment contracts, the lesson is clear: the boundaries between shareholder, director, and employee must be defined in contracts and managed through separate legal processes. The law looks beyond titles and applies substance over form.

D&O Insurance: What It Covers — And What It Does Not

Each of the liabilities above raises a question too few directors ask until it is often too late. Will my D&O Insurance respond? The answer is not what directors may expect. Statutory liabilities may not be insurable.

There is no judicial guidance in Malaysia confirming that statutory liabilities such as EPF debts are covered under D&O policies.

Even where insurers offer endorsements, courts may refuse to uphold coverage on public policy grounds, particularly for trust-based obligations intended to protect employees. Allowing indemnity could be seen as creating “moral hazard,” undermining the very incentive for directors to comply. The prudent approach might be to treat these exposures as potentially uninsured risks.

Criminal Liability Is Excluded

D&O policies universally exclude criminal conduct. If a director faces prosecution, whether under the Capital Markets and Services Act, the MACC Act, or any other criminal statute, the policy will not respond to the ultimate liability. Defence costs may be advanced under some policies, but this is policy-specific and typically subject to clawback upon conviction.



Section 17A of the MACC Act Creates a Novel and Largely Untested Exposure

This provision, which came into effect on 1 June 2020, reverses the burden of proof: where a commercial organisation commits a corruption offence, its directors and senior management are deemed guilty unless they can prove it occurred without their consent or connivance and that they exercised due diligence (see our Article entitled “The Advent of Section 17A of the MACC Act, 2009: Key Points for Companies and Directors & Officers”).

The penalties reach up to twenty years’ imprisonment and fines of not less than ten times the gratification value or RM1 million, whichever is higher.

This is not just theoretical. In March 2021, Pristine Offshore Sdn Bhd became the first company charged under Section 17A, with its former director simultaneously charged under Section 16(b)(A) of the MACC Act, 2009 for allegedly offering bribes to secure a Petronas Carigali subcontract.

The insurance position is particularly complex. Section 289(1) of the Companies Act, 2016 provides that a company shall not indemnify or effect insurance for directors in respect of liability for acts or omissions in their capacity as officers.

However, Section 289(3) and (4) permit a company to indemnify or insure directors for costs incurred in proceedings, but only where the judgement is in the director’s favour, the director is acquitted, or the proceedings are discontinued.

In other words, coverage for Section 17A defence costs is conditional on outcome. If convicted, the director bears the full cost personally. If acquitted, coverage may be available, but subject to the specific policy wording and any applicable exclusion clauses, including the fraud exclusion commonly found in D&O policies.

Directors should note that the Government has issued Guidelines on Adequate Procedures built around the T.R.U.S.T. principles — Top-level commitment, Risk assessment, Undertake control measures, Systematic review, monitoring and enforcement, and Training and communication.

Demonstrating compliance with these principles serves a dual purpose. It is both a statutory defence for the commercial organisation under Section 17A and the kind of documented governance diligence that strengthens a director’s personal position.

The “Insured vs Insured” Exclusion Can Leave Directors Unprotected In Intra-Corporate Disputes

This clause excludes coverage for claims brought by one insured against another, when the company sues its former directors, or when one director sues another.

It is intended to prevent collusion. But it can also bar legitimate claims, including derivative actions, whistleblower suits, or proceedings by newly appointed boards against their predecessors.

In an era of board turnover, corporate restructuring, and activist shareholders, this exclusion deserves careful scrutiny and, where possible, negotiated carve-outs.

What Boards Should Do

Three steps can make a real difference.

First, know your personal liability map. The provisions that create individual exposure differ depending on whether you sit on the board of a conventional bank, a takaful operator, or a digital bank. The overlay of the Companies Act, Financial Services Act, CMSA, MACC Act, EPF Act, and PDPA creates distinct risk profiles.

Every director should understand which statutes apply to them personally.

Second, understand your D&O insurance, really understand it. Do not assume coverage exists for every type of claim. Review the criminal conduct exclusion, the insured vs insured exclusion, the coverage position on statutory liabilities, and the adequacy of Side A coverage, which protects directors when the company cannot indemnify them, particularly in insolvency.

Review Section 289 and its implications with your professional advisers. These are not merely theoretical concerns. They determine whether you fund your own defence when the time you most need it, comes.

Third, document your governance diligence. In litigation, it is not what the board discussed that matters, it is what the board can prove it discussed.

Board minutes that record only conclusions provide inadequate protection. The deliberative process, questions asked, risks identified, alternatives considered, ought to be captured, for good measure. For Section 17A purposes, documented compliance with the T.R.U.S.T. adequate procedures is both a statutory defence and practical protection.



Upshot

The cases discussed in this article, from personal liability for fraudulent trading, to personal liability for statutory debts, to the limits of causation, to the dual-capacity trap, reflect a consistent direction. Directors are being held personally accountable with increasing rigour, while the forces of disruption transforming Malaysia's financial sector compound the situations in which that accountability is tested.

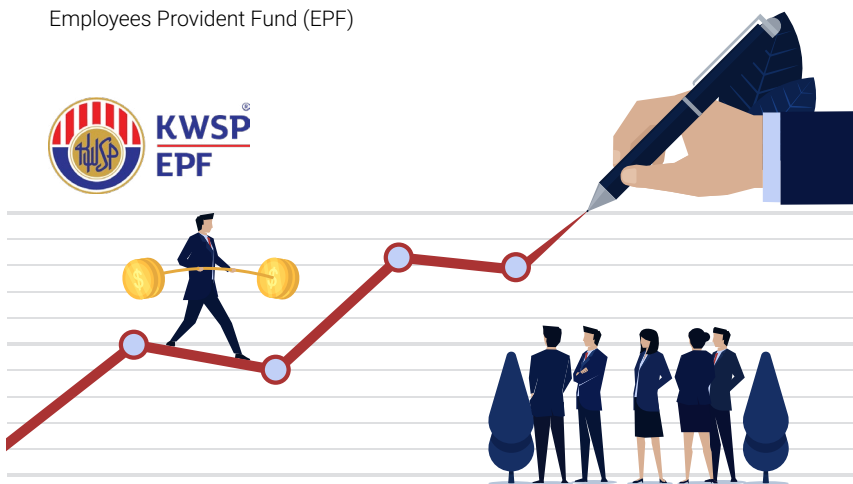
Yet not all liability is insurable, and not all insurance responds when you need it most. The directors who will navigate this landscape successfully are those who understand not just their duties, but the architecture of their protection, and its limits. ■

Disclaimer: This article is provided for general information and discussion purposes only and does not constitute legal advice. Readers should seek specific legal advice from qualified professional advisers, having regard to the particular circumstances of each case.

Inside the Stewardship Lens: What Long-Term Investors Expect from the Boardroom

By Investment Stewardship,

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The past decade has seen a significant evolution of governance expectations across Malaysia's corporate and financial sectors. The baseline for good governance has risen, and now encompasses strengthened regulatory frameworks, increasing institutional ownership, and a growing emphasis on stewardship. As markets become more complex and conditions more uncertain, it has become clear that governance cannot be assessed through frameworks and disclosures alone. The true test lies in how boards exercise judgement, particularly under pressure,

when trade-offs are unavoidable and decisions carry long-term consequences.

As one of Malaysia's largest long-term institutional investors, the Employees Provident Fund (EPF) engages extensively with boards across the financial system. It may come as a surprise to many that the EPF, whether by design or through the natural course of long-term capital deployment, has become one of the largest shareholders across many of Malaysia's major banks. This vantage point has given it a pragmatic perspective on how governance is

practised beyond disclosures.

At EPF, stewardship is not peripheral, but core to how it invests. It begins with clarity and transparency in its expectations of investee companies. This conviction gave rise to the EPF Corporate Governance Principles and Voting Guidelines ("Guidelines"), first established in 2010 and among the earliest frameworks of its kind in the region. Reviewed annually to reflect evolving market realities, the Guidelines cover key areas of governance expectations, including board independence, remuneration structures, audit integrity, capital management, and shareholder rights. More importantly, they are intended not as a static document, but as a living framework that signals how EPF assesses governance, capital allocation, and accountability over time.

EPF engages actively through a full suite of stewardship levers, including structured corporate engagements, informed proxy voting, nominee directors and where appropriate, formal shareholder letters. These channels ensure that governance is not only assessed, but continuously shaped through dialogue and accountability. In 2025 alone, EPF participated in 118 shareholder meetings and 61 engagements. Its stewardship approach operates within a broader governance ecosystem underpinned by frameworks such as the Malaysian Code on Corporate Governance (MCCG) and Bursa Listing Requirements.

As an institutional investor, EPF's commitment to stewardship is fundamentally about resilience. Engaging with investee companies on governance is not an end in itself; it is also about strengthening the portfolio against risks that no investor can fully predict or control. While market volatility is inevitable, robust governance provides the discipline and oversight needed to navigate uncertainty. At the centre of this is the board. As the apex of corporate

decision-making, it plays a critical role in steering companies towards sustainable, long-term value creation.

Our stewardship expectations, therefore, are anchored firmly in the boardroom. EPF expects the boards of its investee companies to go beyond compliance and disclosure, with the Chairman driving board effectiveness, disciplined capital allocation, and Independent Directors (“INEDs”) and Senior Independent Directors (“SINEDs”) acting as catalysts in strengthening engagement between the board and shareholders. In parallel, EPF continues to strengthen its own stewardship infrastructure, including the development of tools to assess board effectiveness and the advancement of a more proactive, beta activism approach.

Governance Beyond Mandatory Disclosure

As Malaysia’s largest institutional fund investor with over RM1.4 trillion in assets under management, EPF’s prioritisation on good corporate governance is anchored to its mandate of safeguarding and enhancing members’ long-term retirement savings. This fiduciary responsibility calls for a view of governance that extends beyond mandatory disclosure regimes. While annual reports and corporate governance statements provide a baseline of compliance, they do not always fully capture the substance of governance practices. In some cases, the quality and depth of disclosures may limit shareholders’ ability to assess proposals effectively, creating potential information gaps that can affect decision-making. Strengthening disclosure practices would therefore support more informed and consistent voting outcomes.

Good governance must go beyond compliance – it must provide shareholders with the clarity needed to make informed decisions.

For example, in 2025, EPF assessed nine Long Term Incentives Plan (LTIP) resolutions where the accompanying circulars provided limited detail. Through engagements with several investee companies, additional clarity was obtained on key aspects of the LTIPs, including performance conditions, vesting framework, allocation thresholds and alignment with long-term shareholder interests. This additional transparency enabled a more considered evaluation of the resolutions.

This exercise illustrates how selective voting and constructive engagement can strengthen governance standards and shape board practices. However, while EPF is able to engage directly with investee companies to seek clarification, this may not be as accessible to the broader shareholder base. EPF therefore encourages boards to provide comprehensive and decision-useful disclosures not merely as a compliance requirement, but to enable all shareholders to better assess how proposed resolutions support long-term value creation, leading to more informed voting outcomes.



The Chairman's Role in Board Effectiveness

Aside from meaningful disclosure, good governance rests on effective frameworks and policies, as these influence how the board functions in practice. Within this construct, the Chairman plays a pivotal role as a key determinant of board effectiveness and governance outcomes. The role is not to dictate, but to set the tone and ensure cohesion across a diverse group of individuals with different expertise, perspectives, and temperaments. The Chairman shapes boardroom dynamics by facilitating robust discussion and maintaining a balance between challenge and cohesion.

EPF's engagements also reveal that what truly distinguishes a high-performing board is the collective wisdom of diverse voices coming together to challenge, deliberate, and decide. This dynamic is shaped, more than any other factor, by the Chairman, who plays a central role in curating the conditions for robust deliberation, surfacing dissenting views, and ensuring that critical issues are interrogated with sufficient depth.

Ultimately, this role requires a careful balance of keeping the board independent in thought while unified in direction. The Chairman must prevent dominance from management, controlling shareholders, or influential board members, while simultaneously guarding against passivity and overreliance on management narratives.

Effective board leadership lies in balancing challenge with cohesion, ensuring diversity translates into better decisions.

The Chairman also shapes the architecture of board decision-making, from what gets prioritised, to how time is allocated between strategy and compliance, and whether capital allocation decisions receive sufficient scrutiny. This includes meeting the expectation of a 30% women representation threshold, not as a symbolic measure, but as a substantive driver of board effectiveness. Broader perspectives arising from diverse board composition can lead to higher-quality decisions, and it is the Chairman who is ultimately responsible for ensuring this diversity is reflected in practice.

These are all subtle but powerful levers that influence long-term value creation, including how boards increasingly integrate sustainability and climate-related considerations into core strategic decisions. The Chairman is not merely a facilitator, but the ultimate custodian of board effectiveness and the quality of its decisions.

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Capital Allocation: The Board's Ultimate Litmus Test

While governance forms the foundation of the board and the company, capital allocation is where principles translate into business decisions. Every capital decision, whether to invest organically, pursue acquisitions, manage the balance sheet, or return cash to shareholders, is both a commercial and governance decision, reflecting the board's discipline and conviction.

Against this backdrop, EPF applies a consistent set of expectations in assessing how boards allocate capital. For organic reinvestment and M&A, EPF expects a clear strategic rationale supported by disciplined frameworks applied before capital is committed, rather than narrative justifications offered after the fact. Where boards are unable to demonstrate a credible path to returns above the cost of capital, growth cannot be considered value creation. On dividends, EPF expects policies that reflect governance discipline, providing shareholders with clarity and reinforcing confidence in board decision-making.

Balance sheet management must reflect resilience. This is particularly important when assessing share buyback resolutions. EPF's internal assessments indicate that buybacks are value-accretive only under specific conditions, including where companies demonstrate strong balance sheet fundamentals, have limited alternative uses of capital, and where the programme genuinely enhances long-term shareholder value. In the absence of these conditions, buybacks risk serving short-term objectives at the expense of long-term outcomes.

Where these conditions are not met, EPF has taken a more critical stance, including voting against "stand-by" share buyback mandates. This is reflected in EPF's 2025 voting record, where it voted against 68% of buyback resolutions, consistent with its position that buybacks should only be deployed where they genuinely create long-term value.

INEDs and SINEDs: Strengthening the Link Between Boards and Shareholder

Just as capital allocation tests the board's discipline, the role of INEDs and SINEDs tests accountability. They play an important role within the governance architecture, particularly in strengthening independence and accountability at the board level.

From a stewardship perspective, EPF places importance on enabling appropriate avenues for engagement between independent directors and institutional investors. This may include more structured dialogue before and after key decisions, thoughtful follow-up on previously raised concerns, and continuous engagement rather than episodic interaction around the AGM season. The purpose of such engagement is to obtain genuine clarity on board-level perspectives that only independent directors may be positioned to provide.

This emphasis on independent oversight is matched by the close attention EPF pays to INED appointment processes. EPF continues to prioritise a thorough understanding of tenure and independence through its

engagements. This is reflected in our 2025 engagement record, where board governance matters, including INED tenure and independence, were the focus of 59% of our engagements.

Another area where independence of judgement, and therefore the role of INEDs, is particularly critical is recurrent related-party transactions (RRPTs), involving material dealings in which directors or substantial shareholders have direct or indirect interests. RRPTs are becoming increasingly prevalent across corporate groups, with 70 resolutions tabled among EPF investee companies and 43 engagements conducted on the topic in 2025.

Yet, the growing scale in RRPTs, amounting to RM 3.1 billion in transaction value in 2025, has not been matched by improvements in disclosure standards. Our internal review indicates that disclosures remain largely generic and financial statements often fall short in highlighting dependency risks. This is where INEDs play a critical role in ensuring alignment with minority shareholder interests and advocating for disclosures that are sufficiently comprehensive for fairness to be demonstrated. A board with effective INED engagement signals that robust checks and balances are in place, strengthening investor confidence.

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Engagement to Insight: A Diagnostic Approach

EPF engages closely with investee companies through multiple touchpoints, and it is through sustained dialogue that it has recognised the need for a more structured diagnostic approach. Effective stewardship requires a framework that makes engagement substantive. To this end, EPF has begun developing an internal tool to evaluate board effectiveness, enhancing the depth and rigour of EPF engagements.

Rather than relying on management narratives or periodic updates, EPF is increasingly assessing the quality of board deliberations, examining how effectively boards oversee strategy, whether leadership structures function as intended, and where gaps in skills, independence, or succession planning may be emerging. This approach enables more precise and constructive engagement in the boardroom.

The result has been a clearer identification of governance gaps and a stronger basis for stewardship, moving from observation to diagnosis, and where appropriate, to intervention. This reflects EPF's conviction that stewardship should be substantive, not merely procedural.

To this end, EPF has begun developing an internal tool to evaluate board effectiveness, enhancing the depth and rigour of EPF engagements.



Beta Activism: Shaping the Broader System

Company-level engagement, however rigorous, has its limits. Systemic governance issues, such as inconsistent disclosure standards and weak accountability norms, affect the entire portfolio and cannot be addressed through individual engagements alone. This underpins EPF's focus on beta activism, improving the broader system within which the companies operate.

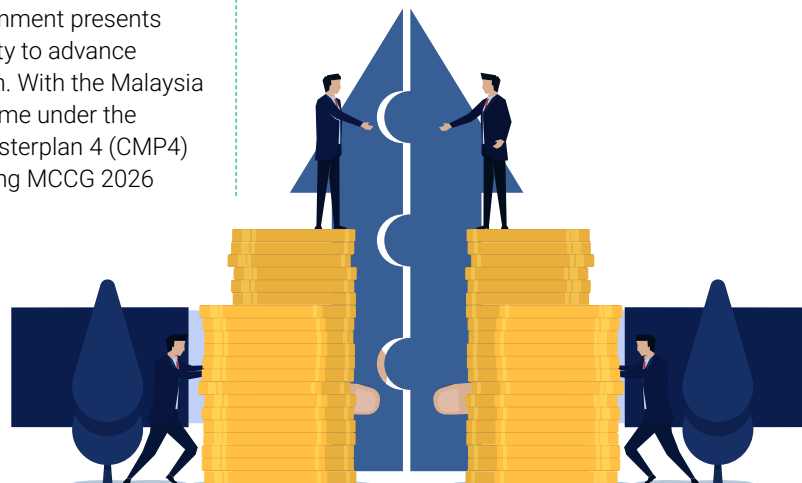
EPF maintains active dialogue with regulators, including the Securities Commission Malaysia and Bursa Malaysia, and has observed growing alignment between investor expectations and regulatory direction. EPF has contributed to key initiatives, including feedback on Bursa Malaysia's PLC Transformation Programme (PLCT) and participating in consultations for the upcoming MCG 2026 revision.

The current environment presents a timely opportunity to advance governance reform. With the Malaysia Value-Up Programme under the Capital Market Masterplan 4 (CMP4) and the forthcoming MCG 2026

EPF's role is not to observe from a distance, but to engage, influence, and where necessary, to **lead**.

revisions converging, there is a strong alignment of policy direction, regulatory momentum, and investor expectations towards enhancing long-term value creation. EPF believes this convergence should be leveraged to drive meaningful lasting reforms.

Stewardship is ultimately a shared responsibility. For investors, it requires clarity, consistency, and conviction. For boards, it demands judgement, discipline, and a genuine focus on long-term value. EPF has seen what is possible when both sides meet this standard: stronger governance structures, more disciplined capital allocation, and outcomes that endure beyond a single reporting cycle. As Malaysia's corporate governance landscape continues to evolve, our position remains clear: boards are accountable not only for performance, but for how that performance is achieved. EPF's role is not to observe from a distance, but to engage, influence, and where necessary, to lead. ■



Beyond the Rulebook: A New Governance Mindset Can Guide Malaysia's Financial Institutions



By Dato' Abdul Rauf Rashid,
Malaysia Managing Partner, EY Malaysia



A Strong Financial System, but Rising Complexity

Malaysia's financial system — anchored by banking assets of roughly RM3.61 trillion as of 2024 — has long been one of the key pillars of economic development.¹ This foundation has enabled us to endure past crises and support economic aspirations across industries and communities. Yet strength today does not guarantee resilience tomorrow, especially as global dynamics evolve faster than the frameworks built to manage them.

As Malaysia advances into a more digital, interconnected and globally exposed economy, the financial system is becoming more complex,

and that complexity brings new risks, opportunities and policy challenges.

One of the most significant shifts in recent years is the rapid compounding of risks. Disruptions no longer wait their turn; they overlap and amplify. Across Malaysia's financial institutions, economic, political, environmental and technological pressures are increasingly merging with internal structural challenges.

The NAVI framework in EY Megatrends 2026 asserts that the economic environment is now:



Nonlinear:

Small disruptions can trigger outsized impacts. For instance, a localised semiconductor plant shutdown can ripple through global supply chains, delaying production across multiple industries.

Accelerated:

The pace of change is unprecedented. AI adoption in financial services is projected to grow at a CAGR of over 20% up to 2030, reshaping risk models and customer interactions rapidly.²

Volatile:

We wake up every day over the last few months to breakfast TV news that endlessly discuss, and sometimes speculate, on whether there will be progress toward stability in the Middle East. Geopolitical developments result in commodity prices swinging sharply, affecting supply chains and fuelling price volatility.

Interconnected:

Weather conversations are no longer confined to specific regions but are increasingly global in nature. Climate-related events, once episodic, are becoming more frequent and financially material, affecting credit quality, asset valuations and operational resilience. This, coupled with trade tensions and sanctions, transmits shocks quickly across borders and sectors, increasing systemic risk.

Increasingly, disruptions are no longer predictable nor gradual in nature. For financial institutions all over the world, this demands more than the traditional models and policies. It calls for a more dynamic way of looking at the environment that embraces a forward-looking risk appetite that anticipates NAVI.

The New Risk Framework

Traditional risk appetite frameworks were built for more stable times. They served us well when risks were largely linear and historical patterns were reliable guides. But today's environment is shaped by what EY calls NAVI dynamics — non-linear, accelerated, volatile and interconnected forces. In a NAVI world, even small disruptions can magnify quickly. All the above does not suggest that institutions should shy away and be risk-conservative by only delving into areas they are comfortable with. If boards avoid risk, the institutions will be left behind.

Boards, therefore, need to encourage continuous assessment that considers global trends, national vulnerabilities and community-level impacts. This includes closer attention to emerging risks, such as climate transition exposure, climate events and the knock-on effects that move through supply chains and households. These shifts underline the need for more quantitative, fact-based risk modelling supported by real-time data.

New forms of disruption, such as AI-driven risks, must also be incorporated. Many organisations are still in the process of embedding AI-enabled risk-measurement capabilities deeply into their processes.

A strong reference point here is the EY Trust Value framework, which emphasises that AI adoption must be built on confidence, transparency and responsible controls rather than on speed alone. For financial institutions, innovation without trust can quickly become a source of operational, legal and reputational risk.

The real question is whether decisions are being made with foresight, strong scenario planning, quantifiable data

and guiding principles that reflect how quickly circumstances can change. Much of these can be enabled by AI and advance analytics. And of course, like any financial institutions, these new capabilities should be supported by appropriate guardrails to safeguard safety and reliability, among others.

It is worth noting though that we are, in fact, seeing many boards in Malaysia moving from a data-driven approach based on historical information, to a more insight-driven organisation, grounded in a rigorous quantitative fact base and enabled by real-time, predictive analytics.

Leading Governance on the Frontier of Innovation and Uncertainty

Emerging technologies, such as AI and digital assets, present governance challenges that may outpace existing regulatory frameworks. Sustainability goals are required to be considered together with growth goals. At the same time, boards face rising expectations around risk governance, financial discipline and transparency. None of these pressures exist in isolation; they stack, and are felt deeply by the people entrusted to lead.

These expectations increasingly meet at the same table, and for some institutions with developmental or policy-linked responsibilities, the pull can come from several directions at once. It is no surprise that governance becomes more complex, not less. In the face of such accelerated and interconnected changes, boards should proactively codify principles, engage regulators and maintain vigilant oversight to balance growth with risk mitigation.

Key governance imperatives for boards may include:

- Principle-based governance frameworks: Develop and codify board-approved principles that define acceptable AI use, guardrails, accountability and ethical standards, so that governance keeps pace with rapid technological advances. These frameworks must also encourage ethical innovation culture.
- Proactive regulatory engagement: Collaborate with regulators through transparent pilots, sandboxes and supervisory dialogues to co-design adaptive oversight mechanisms that balance innovation with prudential safeguards.
- Model risk and data ethics oversight: Institute rigorous board-level oversight on AI model validation, bias mitigation, data privacy and ethical use of data to safeguard trust and compliance.
- Cybersecurity resilience: Prioritise cyber risk governance with continuous monitoring, incident response readiness and integration of cyber risk into enterprise risk management frameworks.
- Talent and capability development: Technological advancements and capabilities are only as good as the human operating and leading them. Therefore, investment in continuous learning is paramount. At EY, we call this Humans@Center.

By exercising disciplined judgement in these areas, boards can lead confidently through regulatory uncertainty, safeguard institutional integrity and unlock the full potential of technological innovation. It goes without saying that boards should always remember that governance is ultimately about stewardship — and stewardship requires both clarity and conscience.



The Financial System That Matters to Malaysia and Our Future Generation

As noted earlier, Malaysia's banking assets are probably twice the national GDP. While this ratio is lower than it was prior to the Asian Financial Crisis in late the 1990s, banking financial intermediation is still a significant source of economic funding to the country.

It is also no secret that there have always been concerns around the respective roles played by different types of banks, including development financial institutions (DFIs) in Malaysia, and whether there are indeed duplications. This raises the first point of debate, that is a policy-level view of the financial system. There are always questions of whether financial system designs, efficiency and the optimal allocation of capital across institutions

need to be considered by policymakers and regulators i.e., those entrusted with system-wide stewardship.

The second perspective is to look at it from the financial institution's viewpoint. For financial institutions generally, their higher purpose should extend beyond profitability alone. Having this perspective can help rally people to work not just for financial gains but to also contribute positively to businesses, people and communities. Purpose can then serve as a decision guide, helping boards navigate trade-offs between growth and prudence, efficiency and inclusion, as well as short-term performance and long-term resilience. It reinforces a commitment to responsible financial inclusion not by lowering standards, but by shaping risk and operating frameworks that expand access while preserving soundness. Over time, this positions financial institutions not merely as providers of capital, but as stewards of confidence, opportunity and economic stability.

From micro-entrepreneurs to climate-conscious farmers, from young families seeking housing to SMEs exploring new markets, access to financing and the terms on which it is provided quietly determine confidence,

opportunity and resilience. For the man on the street, it is felt in turnaround times, in the clarity of terms, and in whether institutions feel engaged or distant. Stronger risk frameworks should enable responsible lending, not unintentionally narrowing access to only the safest segments. Such concerns reflect a deeper question of trust: can financial institutions strengthen themselves without losing touch with those they serve?

For Malaysia, the clarity of purpose for financial institutions may be one of the key factors that will help us achieve the next stage of our development. This calls for a governance mindset that views profitability and purpose not as opposing forces but as mutually reinforcing pillars. Financial resilience enables institutions to support households, businesses and transitions through periods of stress. At the same time, an institution's societal and economic relevance reinforces its ability to remain effective and trusted. When both are aligned, institutions may be better positioned to extend their impact and contribute meaningfully to the financial system, specifically, and the country, more importantly. Financial institutions' governance (as articulated above being about stewardship) shall lead the way accordingly.

A Call to Boards: Move Beyond the Rulebook

Governance is not an abstract concept. At its best, governance is an act of stewardship — anchored in integrity, foresight and empathy.

Malaysia stands at the threshold of a transformative decade. We aspire to higher growth, a more equitable society and an economy resilient in an uncertain world. To achieve this, we need financial institutions that see themselves not merely as market participants but as partners in nation-building.

Our young people expect institutions that are fair, transparent, innovative and genuinely committed to helping Malaysians progress. Many businesses benefit from financial partners that support entrepreneurship, expansion and resilience. Our communities require institutions that uphold trust and promote financial inclusion.

Achieving this vision requires governance in financial institutions to move beyond the rulebook. They should embrace a model of an insight-driven organisation, grounded in a rigorous quantitative fact base and enabled by real-time, predictive analytics that are insight-driven. Effective governance is often characterised by decisions guided by values and principles, not formulas alone. They must remain open to new ideas while preserving the timeless standards of integrity and responsibility.

As AI and advanced analytics become more embedded in decision-making, this trust must be reinforced through clear governance expectations, aligned with the EY Trust Value framework, including:

- Transparency and explainability, so that AI-informed decisions can be understood by boards, regulators and affected customers, particularly where outcomes shape access to finance, pricing or risk assessments.
- Fairness and bias control through active monitoring and testing to maintain consistent and equitable treatment across customer segments.
- Accountability and human oversight, where responsibility for outcomes remains firmly with management and boards, supported by clear ownership and escalation mechanisms for material decisions.
- Data integrity and privacy, so that AI-enabled insights are built on accurate, lawful and well-governed data, with strong protection for confidentiality and proper use.
- Security and resilience with safeguards that protect models from manipulation, cyber threats and degradation, as well as maintaining reliability under changing conditions.



Our young people expect institutions that are fair, transparent, innovative and genuinely committed to helping Malaysians progress. Many businesses benefit from financial partners that support entrepreneurship, expansion and resilience.

If boards can combine foresight with humility, discipline with empathy and ambition with accountability, Malaysia's financial institutions may be better positioned to withstand future shocks and contribute to a more inclusive and resilient nation we aspire to be. Because at the heart of good governance lies a profound human belief: every decision made today must serve the generations that come after us. ■

"The views expressed here are the writer's own."

EY Malaysia refers to Ernst & Young Consulting Sdn. Bhd.

References

- ¹ <https://www.nst.com.my/news/nation/2025/08/1265812/amir-hamzah-commercial-banking-assets-rm361-trillion-last-year?source=widget>
- ² <https://bcn.co.uk/app/uploads/2025/10/Maximising-Value-and-Adoption-of-AI-in-Financial-Services.pdf>

Navigating a Decade of Turbulence: Transforming Values-Driven Idealism into Competitive Advantage



By Datuk Shahril Azuar Jimin,
Group Chief Sustainability Officer,
Maybank



As a leading financial institution in ASEAN, Maybank imposes on itself a moral obligation to do the right thing by society, even when global headwinds may show otherwise.

The decade from 2020 to 2030 is likely to be a defining period in humanity's growing awareness of the existential threats posed by irresponsible anthropogenic activity. The rising global temperatures, destruction of nature, loss of biodiversity, social inequality, and the failing rules-based international order are no longer a probability but a dire reality.

As a leading financial institution in ASEAN, Maybank imposes on itself a moral obligation to do the right thing by society, even when global headwinds may show otherwise. The first three years of the decade began with great urgency for financial institutions to materially change, and we began by immediately upskilling our people in the relevant aspects of ESG through various training programmes.

2021 saw greenhouse gas concentrations, sea levels, ocean heat, and acidification hit record highs; this continued worsening through 2023–2024. It was also one of the¹ warmest years on record - a clear signal of the widening "ambition-reality gap" where climate physical

risks accelerated faster than policy responses.

2021 was a pivotal year for Maybank as a whole. It was the year that the Group publicly articulated our sustainability commitments. From these commitments, Maybank recognised the importance of building our sustainability governance framework and structures. Without a strong foundation in place, we wouldn't be able to establish clearer plans and ambitions in sustainability. Incremental sustainability efforts were no longer sufficient, and as a Bank with our regional footprint, we play a systemic role in ASEAN to shape a just and inclusive transition.

Sustainability governance underpins the effectiveness of our sustainability leadership. To remain better attuned to stakeholder needs, the ever-changing climate and social challenges, we strengthened the integration of sustainability into our core operations. Actions ranged from revising the Group's ESG Policy, and formalising sector-based risk acceptance criteria, to reinforcing our No Deforestation, No New Peat, and No Exploitation commitments.

It was timely that the M25+ strategy was launched in the early part of the decade, giving us the opportunity to weave sustainability into Maybank's conduct and operations through the establishment of our sustainability commitments with hard targets.

In supporting this integration, we introduced two key frameworks – the Sustainable Product Framework, a first in Malaysia for providing clear methodologies for green and social product recognition, and the Transition Finance Framework which outlines criteria for credible transition finance aligned with net-zero pathways.

Introducing sustainability proved to be an enormous task in an organisation of over 40,000 people. Maybank was already undergoing a significant structural and mindset shift with the digitalisation of the Bank's ecosystem. In addition to this, new regulatory requirements in the form of Bank Negara Malaysia's Climate Change Principled based Taxonomy (CCPT) and Climate Risk Management and Scenario Analysis (CRMSA) policy document were also announced in 2021 and 2022.

It was timely that the M25+ strategy was launched in the early part of the decade, giving us the opportunity to weave sustainability into Maybank's conduct and operations through the establishment of our sustainability commitments with hard targets. These commitments were to mobilise RM80 billion in sustainable finance, improve the lives of two million households across ASEAN, to achieve carbon neutrality by 2030 with net-zero by 2050, and to build a strong sustainability culture.

To embed sustainability, and emphasising our dedication to sustainability, these efforts also gave rise to installing central capabilities, building sustainability teams mostly at the centre with strong engagement with our overseas units and business lines. This helped us establish new

and improved processes and tools for the management and adoption of sustainability issues.

Equally, we recognised the need to build a best-in-class sustainability workforce. Getting our employees to start thinking about sustainability proved an enormous task, so we had to build traction and capacity within our people and equip them with the right base knowledge. Maybank then partnered with the United Nations Global Compact Malaysia & Brunei (UNGCMYB) to create the Maybank Sustainability Practitioner Certification (MSPC) Programme, an innovative first-of-its-kind training programme.

In 2025, MSPC was also scaled across the region, expanding from Malaysia to Singapore, Indonesia, the Philippines, and Cambodia to reflect our focus on localised, regionally relevant capacity-building.

Our biggest leap into sustainability action has been our ambition to decarbonise and reduce our scope 3 emissions for six key hard-to-abate sectors, namely Power, Palm Oil, Steel, Aluminium, Commercial Real Estate and Automotive. This was a major strategic shift to our business conduct as it involved re-assessing our large sector portfolio exposures to have true material impact. As such, we had to strategically engage with our customers and clients. We found two encouraging outcomes from this: that many of our clients were aligned with the need to decarbonise and innovate, and that this endeavour provided new opportunities for us - showing that doing good also means doing well.



In driving social impact, Maybank Foundation also played a critical role in driving the sustainability commitment to improve the lives of over two million people. The R.I.S.E. (Reach Independence & Sustainable Entrepreneurship) programme is our flagship economic empowerment programme focused primarily on Persons with Disabilities (PWDs) and other marginalised communities across ASEAN. R.I.S.E. has often been cited as a best practice example of scalable social inclusion: evidence-based social impact measurement aligning purpose-driven banking with long term community resilience.

Through Maybank Foundation, Maybank has the privilege and honour of being an ASEAN-accredited entity, proving our dedication to meeting rigorous international standards that continue to advance and promote the ASEAN identity, ensuring that our sustainability initiatives are tailored and applied across the region. There



were inevitably local challenges as many of the economies were at different degrees of development. However, we overcame this by establishing local sustainability operations and heads. Each overseas unit maintains its own committees, councils, and management structures to implement sustainability priorities, and ensure alignment with Group frameworks, whilst staying astute to local contexts.

When sustainability took a hit in 2024 and 2025, global politics caused wavering general confidence in the global sustainability agenda. Smaller companies also struggled to adapt, coping with rising energy prices due to the conflict in Eastern Europe. Natural gas, viewed by many as a transition fuel, saw its price rise over 70% in the first quarter of 2026. This was circumstantial and even a welcome re-calibration to achieve the desired outcome of transitioning away from fossil fuels. However, underlying coercion to abandon climate goals and pursue climate negative activities prevailed. Many of the global financial institutions dropped away from their earlier sustainability pledges and

participation in collaborative initiatives that were already underway. These shifts notwithstanding, Maybank remained steadfast and achieved more than we expected.

From 2021 to 2025, we achieved RM176 billion in sustainable financing, improved the lives of over two million households, reduced scope 1 and 2 emissions by 57% against our 2019 baseline, and our people consistently dedicated over one million hours to sustainability-related endeavours annually. Our broader efforts were also validated by numerous awards and acknowledgements. Maybank received multiple Global Finance Sustainable Finance Awards, including recognition as Best Bank in various categories at global, regional, and country levels. We were also ranked second in TIME Magazine's 2025 Best Companies in Asia Pacific, a significant recognition for a Malaysian institution operating in a diverse and developing region. We also achieved an AAA rating from MSCI ESG, reflecting strong performance across environmental, social, and governance dimensions.

More important than exceeding our targets and gaining recognition for it was the realisation that we are capable of more. With the success of M25+, we are entering ROAR30 – our new five-year corporate strategy to define Maybank's next phase of growth and sustainability leadership – from a position of strength.

M25+ was the period where we proved we could execute at scale and, just as importantly, where we built the guardrails that make execution repeatable. The next phase is about being clearer on what works, tightening what needs to be tightened and directing effort where it creates the most meaningful outcomes for people, businesses, and the region.



We aim to raise our sustainable finance commitment to RM300 billion.

Now, we are reaching further in terms of our sustainability commitments. From 2026 to 2030, we aim to: raise our sustainable finance target to RM300 billion; positively impact three million lives across ASEAN; and stay on course on our trajectory to be carbon neutral by 2030 and net zero by 2050.

One of the biggest shifts under ROAR30 is moving from output-based delivery to impact-driven outcomes. Over the past five years, the commitments helped us build momentum and discipline, but they also sharpened an important question: are we measuring activity, or are we measuring whether lives, resilience and decision quality are improving? Under ROAR30, we will further sharpen the outcomes we are trying to influence and evolve our metrics accordingly – so success is not just about volume, but about depth and durability.

We are cognisant that having greater social impact will require a whole-of-bank approach. As such, we are galvanising the entire Group, driving further synergy between business outcomes and sustainability to create a mutually reinforcing pursuit. This will entail decentralising and propagating sustainability capabilities according to the needs of different population groups. An example of this is through the current fragmentation of which resources within the Group are being channelled to our social causes. This reduces the full impact of what we can achieve for our social agenda. To address this, we have since January 2026 established the Group-wide Social Impact Committee (SIC) that oversees, coordinates, and synergises bank-wide social impact strategic plans and social investments to support the realisation of our M30 Social pillar to 'Impact Society Positively'.



Trends Towards 2030

Sustainability has entered a decisive phase. What once centred on emissions accounting and corporate social responsibility is now transforming into a system-wide challenge that reshapes human behaviour, economies, value chains, and governance in ASEAN. Six forces are likely to dominate the next five years: the climate transition, decarbonisation efforts for hard-to-abate sectors, climate adaptation, human rights, nature and biodiversity, and artificial intelligence.

The climate transition will not be linear or neutral. It will disrupt incumbent industries, regional economies and labour markets as energy affordability and employment concerns raise political and social tensions. In Southeast Asia, these tensions are acute. The region's energy demand continues to grow faster than the global average, and large workforces remain linked to carbon-intensive sectors.

Yet the transition also presents opportunity: studies suggest that a successful energy transition in ASEAN could unlock hundreds of billions of dollars in new revenue and millions of new jobs by mid-century. The challenge is that just-transition planning remains uneven, and without deliberate investment in reskilling, regional diversification, and social protection, the transition risks exacerbating inequality and resistance. Climate transition, therefore, is a transgressive shift that must be actively governed, not simply announced.

Early net zero efforts focused on the power sector, but this is no longer sufficient. Globally, hard-to-abate sectors such as steel, cement, chemicals, aviation, and shipping account for around 40% of emissions and remain the toughest challenge. ASEAN illustrates this next phase clearly. While renewable deployment is accelerating, around 70% of electricity generation and more than 80% of total energy supply in the region still rely on fossil fuels. More importantly, emissions growth in ASEAN is increasingly driven by industry, transport, construction materials, land use, and logistics, reflecting the region's role as a global manufacturing and trade hub. As a result, net zero in ASEAN is no longer an energy transition alone – it is an industrial, trade, and value chain transformation, requiring low-carbon materials, green logistics, circular production models, and scope 3 engagement with suppliers and customers.

While renewable deployment is accelerating, around 70% of electricity generation and more than 80% of total energy supply in the region still rely on fossil fuels.

Climate action has historically prioritised mitigation, but adaptation has become unavoidable. Extreme weather, heat stress, flooding, and sea-level rise are already imposing significant costs on economies. Adaptation needs in developing countries are estimated at USD\$310–USD\$365 billion annually by 2035, while actual public adaptation finance remains a fraction of this level. This gap is already visible in Southeast Asia. Floods alone cost the region more than USD\$2 billion each year in direct losses, excluding productivity and health impacts. Adaptation costs across ASEAN are estimated to reach up to 1%–2% of GDP annually in the most vulnerable economies.

This reality is reframing climate strategy from long-term prevention to immediate resilience – driving investment into climate-resilient infrastructure, water management, cooling solutions, and early warning systems. In fast-urbanising ASEAN cities, adaptation has become inseparable from economic continuity and fiscal stability. In some cases, reasonable judgement must be made as adaptation efforts may lead to climate maladaptation, especially in the case of social welfare.

As sustainability becomes systemic, human rights are gaining prominence. Climate impacts, energy transition, and global supply chains increasingly intersect with labour rights, migrant protection, land use, and community consent. The region is deeply embedded in global supply chains that rely on migrant and low-wage labour, and studies indicate that forced labour and exploitative conditions affect a significant share of migrant workers in certain ASEAN markets, particularly in manufacturing, agriculture, fisheries, and construction. Climate stress and transition pressures further heighten vulnerability through displacement, informal work, and weak enforcement.

As regulatory expectations on human rights due diligence tighten globally, labour practices in climate-



and nature-exposed sectors are becoming material financial and reputational risks, not optional social considerations.

Nature loss has moved from environmental concern to financial risk. Globally, more than USD\$44 trillion of economic value – over half of global GDP – is moderately or highly dependent on healthy ecosystems. This dependency is even more pronounced in ASEAN. Despite covering only about 3% of global land area, the region hosts over a quarter of the world's known biodiversity and supports the livelihoods of more than 660 million people through agriculture, fisheries, forestry, tourism, and resource-based industries. Across Asia Pacific, an estimated three-quarters of economic output is generated by sectors that rely directly on nature. For financial institutions and corporates alike, nature-related financial risk is no longer abstract; it is embedded in credit, insurance, and investment portfolios, particularly in ASEAN economies.

AI enables real-time climate monitoring, energy optimisation, disaster forecasting, nature surveillance, and supply chain traceability at a scale previously impossible.

Artificial intelligence (AI) is emerging as a force multiplier for sustainability. AI enables real-time climate monitoring, energy optimisation, disaster forecasting, nature surveillance, and supply chain traceability at a scale previously impossible. In ASEAN, AI adoption is accelerating through smart city initiatives, flood monitoring systems, air quality management, energy-efficient buildings, and logistics optimisation. Studies suggest AI could increase ASEAN's GDP by up to 10%–18% by 2030, while also supporting climate adaptation and emissions reduction. However, this must be balanced by responsible deployment. Rapid growth in data centres and digital infrastructure is increasing energy demand, reinforcing the need for energy-efficient, well-governed AI systems that support sustainability rather than undermine it.

Riding the Six Trends

The convergence of these trends is redefining the role of banks. For Maybank, these trends represent an opportunity to move beyond financing volume toward financing impact with traceability, intelligence, and scale, while unlocking new business models across ASEAN.

There is a need to strengthen the traceability of sustainable initiatives across lending, capital markets and advisory by integrating data, technology, and client engagement. Beyond tracking inputs, priority will be placed on measuring both primary impacts – such as emissions reduced, water saved, or mangroves protected – and secondary impacts, including supply chain resilience, community livelihoods, and long-term asset value preservation.

Recognising that perfect data is rare, we will have to adopt a pragmatic approach: accuracy remains important but should not be a hindrance to adoption. High entry barriers and excessive reporting complexity often slow progress. Instead, we need to reduce inconvenience for clients while remaining transparent about assumptions, limitations, and the “inconvenient truths” embedded in complex transitions.

Many sustainability challenges cannot be solved using legacy financial metrics alone. We need to be open minded about creativity in metrics, combining climate, nature, and social indicators with financial data to better guide capital allocation. Scenario analysis will play a core role, allowing portfolios and clients to stress-test physical climate risk, transition pathways and policy shocks, rather than relying on static disclosures. To be clear, scenario analysis for stress testing is different from scenario analysis for strategy.

This forward-looking lens creates opportunities for advisory services, sustainability-linked financing, and transition support, particularly for sectors where uncertainty is highest and decision-



Nature-related finance presents a growing opportunity space, especially in blue carbon and coastal ecosystem financing, where ASEAN's **mangroves** and **seagrass ecosystems** offer high carbon-sequestration potential alongside flood protection and **biodiversity** benefits.

making most constrained. Nature-related finance presents a growing opportunity space, especially in blue carbon and coastal ecosystem financing, where ASEAN's mangroves and seagrass ecosystems offer high carbon-sequestration potential alongside flood protection and biodiversity benefits. Emerging tools such as asset tokenisation, underpinned by verified data, can help fractionalise and mobilise capital into nature-based and transition assets, widening investor participation while improving liquidity and transparency. AI, geospatial analysis, and digital platforms will increasingly underpin risk assessment, monitoring, and verification – improving productivity, reducing processing costs, and enabling near-real-time insight across portfolios.

We will have to leverage behavioural economics to translate sustainability intent into action. Thoughtful nudges – such as default greener options, simplified sustainability metrics, feedback, and pricing incentives – can meaningfully influence client behaviour without introducing friction.



Hard Truths

As sustainability matures, the industry must confront difficult and sometimes uncomfortable realities. Not all sustainable outcomes align neatly with prevailing narratives, and credibility increasingly depends on our ability to engage honestly with trade-offs rather than avoiding them.

One such example is nuclear power, including the debate around its potential role in Malaysia. Nuclear energy offers reliable, low-carbon baseload power that could support decarbonisation and energy security. At the same time, it raises legitimate concerns around safety, waste management, governance capability, and public acceptance. Treating nuclear as either a panacea or a taboo does little to advance the transition; the harder truth is that credible pathways require rigorous assessment, transparency, and long-term institutional readiness.

Similarly, the rise of automation and robotics will be critical for productivity, safety and competitiveness, especially in manufacturing and logistics. Yet it also poses real social risks: job displacement, skills mismatch, and income inequality. Sustainability cannot ignore these impacts; a just transition must extend beyond energy into workforce transformation and social resilience.

Finally, sovereign sustainability increasingly intersects with geopolitics. In a more fragmented and volatile world, financing defence, critical infrastructure, and strategic resilience may be necessary to preserve stability, protect trade routes, and uphold economic sovereignty. This challenges traditional ESG boundaries but ignoring security considerations risks undermining the very social and economic systems sustainability seeks to protect.

True sustainability requires confronting these hard truths openly, pragmatically, and without illusion. We will continue to humanise financial services - by ensuring growth translates into shared progress, by supporting transitions that are realistic and inclusive, and by holding ourselves to the highest standards of integrity, accountability, and impact. We will continue to play our role in creating systemic change, working closely with clients and key stakeholders to ensure that our wider sustainability commitments, aspirations, and goals stay true to our guiding purpose of humanising financial services. ■



References

- ¹ World Meteorological Organisation (WMO) – State of Climate in 2021 (<https://wmo.int/news/media-centre/state-of-climate-2021-extreme-events-and-major-impacts>)
- United Nations Environment Programme (UNEP). (2025). Adaptation Gap Report 2025. Nairobi: UNEP. Available at: <https://www.unep.org/resources/adaptation-gap-report-2025>
 - World Economic Forum. (2026). Climate adaptation and resilience: The opportunity awaiting Southeast Asia. Available at: <https://www.weforum.org/stories/2026/02/climate-adaptation-and-resilience-southeast-asia/>
 - United Nations Economic and Social Commission for Asia and the Pacific (UN ESCAP). (n.d.). Adaptation costs and priorities for ASEAN. Asia-Pacific Risk & Resilience Portal. Available at: <https://rrp.unescap.org/adaptation-and-priorities/asean>
 - World Economic Forum. (2024). Net-Zero Industry Tracker 2024. Geneva: World Economic Forum. Available at: <https://www.weforum.org/publications/net-zero-industry-tracker-2024/>
 - International Energy Agency (IEA). (2025). World Energy Outlook 2025. Paris: IEA. Available at: <https://www.iea.org/reports/world-energy-outlook-2025>
 - Institute of Southeast Asian Studies (ISEAS) – Yusof Ishak Institute. (2025). Towards a just energy transition in Southeast Asia. Singapore: ISEAS. Available at: https://www.iseas.edu.sg/wp-content/uploads/2025/04/ISEAS_Perspective_2025_35.pdf
 - ASEAN Centre for Energy; International Renewable Energy Agency (IRENA). (2016). Climate change highlights in ASEAN. Available at: https://accept.aseanenergy.org/wp-content/uploads/2020/03/Factsheet_Climate_Change_Highlights_in_ASEAN.pdf
 - World Economic Forum & PwC. (2020). Nature risk rising: Why the crisis engulfing nature matters for business and the economy. Geneva: World Economic Forum. Available at: <https://www.weforum.org/publications/new-nature-economy-report-series/nature-risk-rising/>
 - ASEAN Secretariat. (2024). ASEAN Biodiversity Plan. Jakarta: ASEAN Secretariat. Available at: <https://asean.org/asean-biodiversity-plan/>
 - Asian Development Bank (ADB). (2025). Good for the environment, good for growth: How developing Asia can lead the green economy. Manila: ADB. Available at: <https://www.adb.org/news/features/good-environment-good-growth-how-developing-asia-can-lead-green-economy>
 - ASEAN Exchanges. (2025). Green ASEAN: Nurturing sustainable growth. Available at: <https://www.aseanexchanges.org/content/green-asean-nurturing-sustainable-growth/>
 - ASEAN Centre for Energy. (2024). Just and inclusive energy transition under the ASEAN Plan of Action for Energy Cooperation (APAEC) 2026–2030. Available at: <https://aseanenergy.org/topics/just-and-inclusive-energy-transition>
 - World Economic Forum. (2024). ASEAN leaders for just energy transition: Shared aspirations statement. Geneva: World Economic Forum. Available at: https://www3.weforum.org/docs/WEF_ASEAN_Leaders_for_Just_Energy_Transition_2024.pdf
 - International Labour Organization (ILO). (2022). Global estimates of forced labour: Forced labour and forced marriage. Geneva: ILO. Available at: <https://www.ilo.org/topics/forced-labour-modern-slavery-and-trafficking-persons/data-and-research-forced-labour>
 - Full Circle Risk & ILO. (2026). Forced labour in Southeast Asian supply chains. Available at: <https://fullcyclerisk.com/identify-forced-labor-in-southeast-asian-supply-chains-guide/>
 - ASEAN Secretariat & International Labour Organization (ILO). (2020). ASEAN Roadmap on the Elimination of the Worst Forms of Child Labour by 2025. Jakarta: ASEAN Secretariat. Available at: <https://asean.org/wp-content/uploads/2020/11/ASEAN-Roadmap-on-the-Elimination-of-the-Worst-Forms-of-Child-Labour-by-2025.pdf>
 - Mott MacDonald. (2025). Embracing responsible AI to transform infrastructure development in ASEAN. Available at: <https://www.mottmac.com/en-us/insights/embracing-responsible-ai-to-transform-infrastructure-development-in-asean/>
 - ASEAN Secretariat. (2025). ASEAN Smart Cities Network Monitoring & Evaluation Report 2025. Jakarta: ASEAN Secretariat. Available at: https://asean.org/wp-content/uploads/2025/11/2025-ASCN-ME-Report-Final_30Sep2025-for-public.pdf
 - Arup & UK Foreign, Commonwealth and Development Office (FCDO). (2025). AI for sustainable development in ASEAN. London: Arup. Available at: <https://www.arup.com/globalassets/downloads/insights/a/ai-for-sustainable-development-in-asean/ai-for-sustainable-development-in-asean.pdf>



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The Next Wave of Islamic Finance: Purpose, Pragmatism, and the Technological Frontier



By Dafinah Ahmed Hilmi,
Chief Executive Officer,
Hong Leong Islamic Bank



The contemporary operating environment demands more than incremental adaptation; it calls for a thoughtful reimagining of the role financial institutions play in society. For decades, banks have played an essential role in supporting economic growth: safeguarding trust, facilitating transactions, enabling commerce, and connecting capital with individuals and businesses to drive progress. These foundations remain critically important today. However, the challenges and opportunities of the 21st century require financial institutions to evolve beyond their traditional roles. In an increasingly interconnected world shaped by technological disruption, climate



considerations, demographic shifts, and changing customer expectations, banks are now expected not only to finance growth, but also to help shape more resilient, inclusive, and sustainable economies.

Islamic finance is uniquely positioned to respond to this moment. Grounded in principles of fairness, shared prosperity, and real economic value, it offers a framework that balances commercial strength with broader societal impact. The next wave of Islamic finance will therefore not simply be defined by scale or market share, but by its ability to combine purpose, pragmatism, and innovation in ways that remain relevant to the evolving needs of communities, businesses, and future generations.

Stakeholders across the entire spectrum, from institutional investors and sovereign wealth funds to everyday retail customers and the communities in which we operate, have increasingly come to expect their financial partners to be proactive catalysts for sustainable economic development and positive social progress. This evolution is not a disruption to be managed; it is a natural, inevitable extension of our foundational principles. It represents a modern, practical application of the timeless values inherent in Maqasid al-Shariah (the objectives of Islamic law), which prioritise the preservation and enhancement of faith, life, intellect, lineage, and wealth for the greater good of humanity. This principle, often summarised as supporting the wellbeing (maslahah) of the community, is our moral compass.

The Strategic Mandate for Change

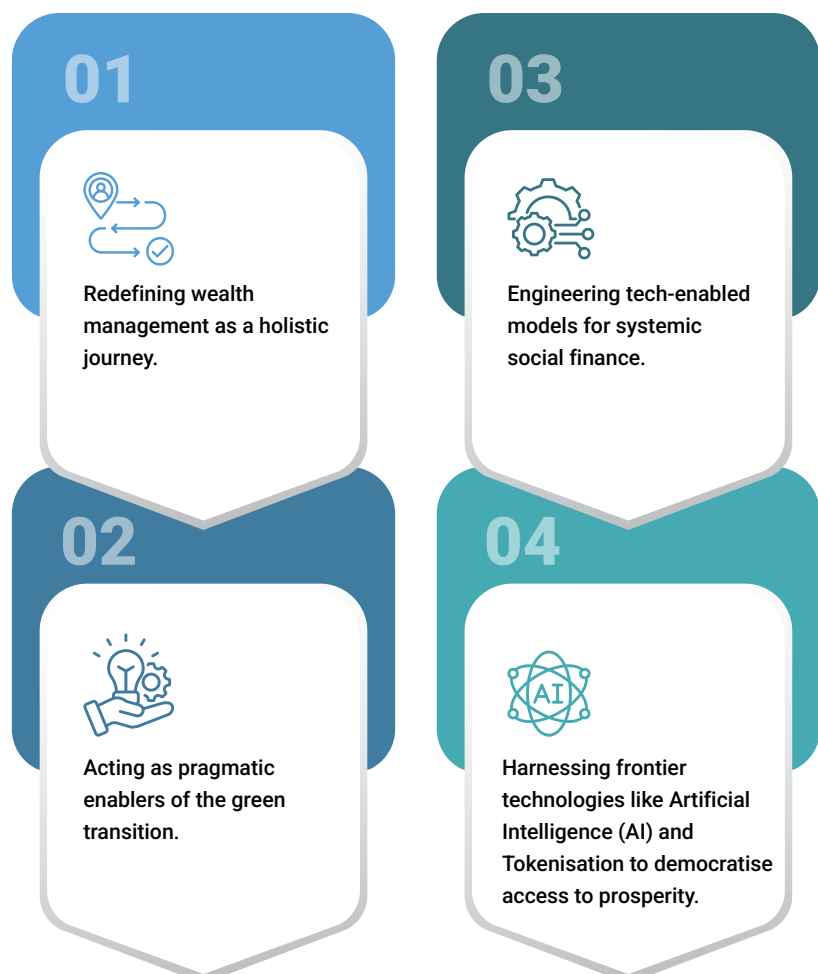
This shift in expectation is not merely a top-down directive driven by regulators or global climate summits. Consumer data reveals that this is also a ground-level reality defined by the urgent needs of the people we serve. A comprehensive survey conducted by HLB¹ on consumer financial behaviours highlighted a stark and concerning "wealth management gap" in society, revealing that a staggering 79% of Malaysians currently operate without a formal financial plan. This is a profound vulnerability, fuelled by a pervasive misconception that professional wealth management is an exclusive privilege reserved only for the ultra-affluent.

The consequences of this gap are profound. We are witnessing the rapid rise of a new generation of self-directed, yet unsupported, investors, with 83% of individuals attempting to manage their own finances, and nearly half turning to informal, unverified sources like social media platforms for critical financial guidance. This fragmentation of financial advice presents a massive risk to the economic resilience of our households. Yet, the motivation to build wealth remains deeply rooted in foundational, noble values, as demonstrated by the 78% of investors prioritising insurance and Takaful to protect their families. The desire for security is clearly present, but the bridge to achieve it is broken.

Motivation to build wealth remains deeply rooted in foundational, noble values, as demonstrated by the 78% of investors prioritising insurance and Takaful to protect their families.



We cannot view these statistics merely as a challenge or a gap in financial literacy. We must view them instead as an urgent mandate for structural industry reform. The next wave of Islamic finance must be operationalised through a purpose-driven, socially responsible strategy, supercharged by frontier technologies, into a robust and highly value-generative business model. This strategic transformation rests on four deeply interconnected pillars:





Reframing Wealth: The Holistic Journey and the AI Advantage

The traditional approach in banking has often been fragmented and transactional. A customer acquires products in silos, and the bank's active role often diminishes once the paperwork is signed, leading to a financial experience that lacks direction. To bridge this gap, the industry must transition to a holistic wealth framework: a 'cradle-to-grave' approach that views every customer interaction, from opening an account to securing business financing, as part of a long-term, comprehensive wealth-building journey. This framework must support customers across the full continuum of wealth: creation, accumulation, preservation, purification, and distribution.

This paradigm shift must be scaled through the integration of Artificial Intelligence (AI). AI is not merely a tool for operational efficiency, but is the engine for financial democratisation in our sector. By leveraging advanced data analytics, we can move from offering generic products to providing personalised, Shariah-compliant wealth advisory at scale. This forms the basis of Behavioral Shariah Banking, where AI delivers 'Ethical Personalisation'.

An AI-enabled digital platform can analyse a customer's profile to proactively recommend the precise Takaful coverage for family protection or suggest the optimal Zakat contribution. Critically, it can deliver real-time nudges aligned with Maqasid Shariah, such as triggering Hajj savings or education plans

based on income milestones, thereby prioritising purposeful financial outcomes over mere transactions. For the majority who manage their own wealth, AI acts as a sophisticated, ever-present co-pilot, translating complex market data into actionable insights and dismantling the cost barriers of traditional advisory.

Furthermore, AI profoundly enhances Shariah governance. In an industry where absolute compliance is non-negotiable, AI-driven natural language processing can be utilised to scan complex legal documents and financial reporting statistics, automatically flagging potential Shariah non-compliance (SNC) risks with unprecedented speed. This strategic deployment ensures that our commitment to technological growth never compromises our ethical foundation.



Financing the Green Economy and the Power of Tokenisation

While we empower individuals to build financial resilience, we must simultaneously build resilience into the very fabric of our macro-economy. The second strategic pillar addresses the existential threat of climate change. Our approach must be one of deliberate, pragmatic support. Recognising that key economic sectors require substantial capital to align with national sustainability targets, the industry must reject a strategy of immediate divestment from carbon-intensive industries.

Such an approach risks triggering severe economic dislocation, which runs contrary to the Maqasid objective of preserving wealth and welfare.

Instead, the focus must be on acting as a committed transition enabler. This involves mobilising significant capital to support corporate and SME clients in their adoption of greener technologies and circular economy practices. This collective effort requires substantial transition financing, evidenced by the industry's focus on channeling capital into critical areas such as Renewable Energy, Green Buildings, Clean Transport, and SRI/ESG Sukuk.

We must ensure that practical support and tools, such as carbon accounting software, ESG training, and transition financing, are made accessible to SMEs, particularly within the vital Halal ecosystem. This collaboration, often facilitated by government-backed schemes like the Greening Halal Business (GHB) initiative, ensures the transition to a low-carbon economy is inclusive, not exclusive, particularly for the SMEs that form the backbone of the economy.

However, a critical gap remains: translating national climate taxonomies and sectoral guidance into tangible, commercially viable Islamic financial products. This requires a "co-creation" mindset, bringing together regulators, banks, Shariah scholars, and technical experts to develop structures that are Shariah-compliant, taxonomy-aligned, commercially attractive, and operationally scalable.

As we look to the future of financing this massive transition, Asset Tokenisation and blockchain technology present a watershed moment for Islamic finance. Tokenisation, the conversion of rights to an asset into a digital token on a blockchain, has the potential to fundamentally alter how we raise capital and distribute risk. Consider a large-scale renewable energy

project. Tokenisation allows for the fractionalisation of asset ownership, such as a Green Sukuk, into smaller, affordable digital tokens. This achieves two remarkable things:



Democratisation: It allows retail investors to participate in high-yield, impact-driven green infrastructure projects that were previously out of reach, providing a powerful, low-entry funding mechanism.



Shariah Integrity: Tokenisation is a technological expression of core Islamic finance principles. By fractionalising tangible, real-world assets, we eliminate ambiguity (Gharar) and facilitate true risk-sharing and asset-backed financing with absolute transparency, reinforcing the very essence of ethical finance.

This is inextricably linked to our need to deepen our focus on core risk-sharing contracts, such as Musharakah and Mudarabah, especially in SME financing. These structures, by aligning the interests of financiers and entrepreneurs to share profits and losses equitably, offer a more resilient alternative to conventional fixed-debt, fostering long-term sustainability through risk participation.

Reimagining Social Finance: Tech-Enabled Inclusion

Concurrently, we must elevate financial inclusion from a peripheral Corporate Social Responsibility (CSR) initiative to a core tenet of the operational business model. This demands the elevation of Value-Based Intermediation (VBI). Islamic finance possesses unique, built-in instruments such as Zakat, Sadaqah, and Waqf that are designed to create social safety nets. Historically, however, the distribution of these funds has sometimes lacked the traceability and scalability required for systemic economic empowerment.

The industry is now revolutionising this space by merging traditional Islamic social finance with cutting-edge financial technology, proving that social finance can transition from episodic initiatives to structured, scalable financial solutions, acting as a strategic lever for inclusive growth. This involves strategic partnerships with fintech platforms to build digital ecosystems that convert corporate and public donations into traceable e-vouchers, guaranteeing that funds intended for good are utilised precisely for their intended purpose, reducing administrative leakage and enhancing transparency.

Crucially, the focus must shift to sustainable economic empowerment for the underserved segments, including the B40 community and micro-entrepreneurs. Through industry-wide initiatives like the national iTEKAD micro-entrepreneur programme, financial institutions are directly assisting vulnerable families in building viable micro-businesses, supporting them with capital and training to move toward financial independence. The data proves our collective efforts are broad and measurable, with the industry channeling billions in Social & Inclusion Financing across SMEs/MSMEs, affordable housing, schools, and roads.

The future of this space lies in blended finance: the integration of commercial capital with social funds. This approach has the potential to transform Islamic social finance from a purely redistributive mechanism into a sustainable economic engine. We envision a formalised system where Waqf funds provide foundational capital; Zakat supports vulnerable segments; and commercial financing scales viable enterprises. This continuum is aligned with national aspirations to "Raise the Floor" for all citizens. This vision can be realised through initiatives like "Public-Private-Waqf Partnerships" (PPWP) to channel waqf assets into essential community infrastructure like healthcare clinics and vocational centres, easing fiscal pressures. The future intersection of VBI and Tokenisation, creating "Smart Waqf" assets where social dividends are automatically calculated and distributed via smart contracts to verified beneficiaries in real-time, represents a disciplined, market-based approach to expanding opportunity.

This demands the elevation of Value-Based Intermediation (VBI). Islamic finance possesses unique, built-in instruments such as Zakat, Sadaqah, and Waqf that are designed to create social safety nets.





The Architecture of Impact: Talent, Governance, and Trust

Operationalising this multifaceted strategy, from redefining wealth to digitalising social finance and embracing the frontiers of AI and Tokenisation, is an imperative for the entire industry, and it necessitates continuous, aggressive investment in our digital infrastructure and, most importantly, our people.

To execute this vision, every institution must actively cultivate a culture that embraces complexity and constant innovation. This requires a deliberate, industry-wide focus on talent development. As Islamic finance expands into sustainability, digital innovation, and social impact, the demand for professionals with dual competencies, both in Shariah and modern finance, is growing rapidly. We must proactively upskill our talent to embed ESG considerations,

technological literacy, and VBI principles into the daily decision-making processes of our staff.

This focus on talent is intrinsically linked to strengthening our governance and resilience. Strong Shariah governance frameworks, risk management practices, and integrated governance are the cornerstones of stability. However, the future demands integrated governance that bridges financial performance with environmental, social, and ethical outcomes, directly addressing the concerns of the Board. Furthermore, we must collaboratively address the persistent "data gap" for the unbanked and micro-entrepreneurs who lack formal credit histories. By leveraging alternative data sources and shared data infrastructure, potentially in collaboration with social institutions, we can build more inclusive and accurate risk profiles.

Our collective strategy must be designed to prove that the foundational principles of Islamic finance are uniquely suited to meet the intricate demands of a modern, purpose-driven economy. We must dismantle the myth that a financial institution must choose between technological advancement, commercial viability, and social responsibility. They are, in fact, mutually reinforcing.



Our collective strategy must be designed to prove that the foundational principles of Islamic finance are uniquely suited to meet the intricate demands of a modern, purpose-driven economy.

In summary, the next wave of Islamic finance will be defined by:

Purpose-Driven Wealth Stewardship:

Moving beyond transactional banking to define and scale a holistic, AI-powered wealth framework, making professional financial direction accessible to all segments of the population.

Pragmatic Transition Enablement:

Mobilising massive capital resources to actively finance the transition to a green economy, providing real capital and technological tools to enable corporate and SME clients, and rejecting the risk of economic dislocation through immediate divestment.

Technological Democratisation:

Utilising Tokenisation to fractionalise high-impact assets, opening investment opportunities to the broader retail segment, while leveraging AI for enhanced personalisation and non-negotiable Shariah compliance.

Systemic Social Impact:

Operationalising Value-Based Intermediation (VBI) through strategic fintech and blended capital models (e.g., Smart Waqf) to create scalable, traceable social safety nets that move individuals from social upliftment to economic empowerment.

The next wave of Islamic finance is inclusive and fundamentally transformative, evolving from being perceived as merely an alternative, to becoming a mainstream force in global finance. ■

Reference

- ¹ HLB Wealth Perception Survey: <https://www.hlb.com.my/en/personal-banking/news-updates/hlb-wealth-perception-survey.html>

Beyond Debt: Reconsidering Equity-Based Finance in a Post-Tawarruq Landscape



By Raza Ullah,
Chief Executive Officer and Founder,
Pfida

pfida

The Persistence of the Debt Paradigm

For all the transformation witnessed across global finance over the past century, the structure of home ownership finance has remained curiously resistant to change. The mechanisms that underpin it - borrowing, fixed repayment obligations, and the transfer of risk from institution to individual - would be broadly recognisable to a lender or borrower from decades past. Even as financial markets have digitised, globalised, and expanded in complexity, the core architecture has endured.

Islamic finance, despite its distinct ethical and legal foundations, has largely evolved within these same structural boundaries. Its growth has been significant, its institutions increasingly sophisticated, and its global footprint well established. Yet much of this expansion has taken

place through adaptation rather than reinvention. Conventional financial forms have been re-engineered to achieve compliance, often preserving economic substance while altering legal structure.

This raises a question that is becoming more difficult to ignore: Has Islamic finance fully explored the implications of its own principles, or has it settled into a pattern of accommodation, working within an inherited system rather than rethinking it?

The persistence of debt-based structures within Islamic finance is often explained in pragmatic terms. Instruments such as Commodity Murabaha and Tawarruq offer predictability, scalability, and compatibility with existing regulatory frameworks. They provide institutions with stable returns and customers with familiar products. In a competitive environment, these characteristics carry significant weight.

But these advantages are not purely technical. They reflect a deeper alignment with the incentives that shape modern financial systems. Predictability is rewarded, variability is penalised, and structures that integrate smoothly into established regulatory and accounting regimes are naturally favoured over those that require adaptation. In this context, the continued dominance of debt-based models appears less as a conceptual necessity and more as an institutional outcome.

The Convergence of Crisis and Classical Logic

The global financial crisis of 2008 briefly disrupted this equilibrium. As policymakers and economists sought to understand the causes of systemic failure, attention turned not only to individual institutions but to the architecture of the system itself. Among the proposals revisited during this period was the so-called "Chicago Plan," associated with economists such as Irving Fisher and later highlighted by Nobel laureate Edward Prescott - a figure better known for real business cycle theory than institutional radicalism.

Its central idea was deceptively simple: separate money from credit. Transactional deposits would be fully backed by safe reserves, while risk-taking activities would be funded by equity rather than debt. This was a structure that overlapped in part with strands of thought associated with Austrian School debates on banking, focusing on the inherent instability of fractional reserve systems.

Although framed in technical terms, the proposal carried broader implications. It challenged the assumption that leverage should be the primary engine of financial intermediation and suggested instead

that risk should be explicitly borne by those who seek returns. In doing so, it echoed a distinction long embedded within Islamic jurisprudence: the separation between custodial funds held in trust and capital deployed in pursuit of profit.

The convergence was striking. A fully reserved payments layer, in which money held for safekeeping does not generate return, aligns closely with the prohibition of *riba*. Profit, in such a system, arises only where there is genuine exposure to risk. The boundary between custody and investment, often blurred in modern banking, becomes clear. Concepts such as *amanah* (trust) and *mudarabah* (partnership), which define the relationship between trust and capital, find a more natural institutional expression.

For Islamic finance, this could have been something far more significant - a rare convergence between modern reform and classical principle. In a world shaped increasingly by technological deflation and a hard money standard, even *Qard Hasan* could regain economic logic as a rational means of wealth preservation.

Yet this convergence did not translate into meaningful structural change within Islamic finance. The industry, like its conventional counterpart, remained embedded within a broader financial ecosystem shaped by leverage, liquidity transformation, and regulatory frameworks designed around debt. The opportunity to rethink architecture gave way to the imperative to remain competitive within existing constraints.

The reasons are not difficult to identify. Financial systems evolve in response to incentives, and those incentives tend to favour continuity over disruption. Debt-based structures offer stable and predictable returns, which are easier to price, manage, and regulate. They fit comfortably within Basel frameworks and align with the expectations of both investors and customers. By contrast, equity-based models introduce variability, require more complex governance, and often sit uneasily within existing regulatory categories. In such an environment, the path of least resistance is clear. Adaptation becomes the default strategy, and deeper structural questions are deferred.

The Evolutionary Lineage: Three Pillars of Innovation

If the industry avoided the fundamental choice in 2008, it was partly because the practical models for a scalable alternative were still being forged in the margins. To understand the emergence of a viable "No Debt" landscape, we must trace the lineage of three specific innovations that eventually coalesced into modern, technology-driven equity models.

1.

The JAK Members Bank: Solving for Ethical Funding

The first pillar of this lineage is the JAK Members Bank in Sweden. Established on the principle that interest is inherently exploitative and economically destabilising, JAK pioneered a "community funding" model. In this ecosystem, members provide interest-free savings to a common pool, which is then used to provide interest-free loans to other members.

The brilliance of the JAK model was its psychological shift: it turned "banking" into a cooperative utility. However, as an institutional model, it faced a "scalability ceiling." Because it relied on 1:1 member savings, it was slow to grow and could not easily tap into the vast pools of institutional capital required to solve a national housing crisis. It proved that a "No Debt" philosophy could survive for decades - even thriving during the Swedish banking crisis of the early 90s - but it lacked the mechanism to reach the masses.

2.

The Bank of Whittier and Lariba: Solving for Risk Architecture

The second pillar emerged in the United States through the work of Dr. Yahia Abdul-Rahman and the Lariba (no-usury) model, implemented via the Bank of Whittier. This was a watershed moment for the "Risk Case" of equity-based finance.

Unlike conventional mortgages, which are driven by interest rate movements (base rates or LIBOR), the Lariba model was grounded in the Mark-to-Market rental value of the property. The "rent" paid by the occupant was determined by what a similar house in the same neighbourhood would actually command on the open market. This created a natural "reality check" on asset prices.

The results were staggering. During the 2008 subprime collapse, while mainstream American banks were recording losses of 30% to 40% on their mortgage books, the Bank of Whittier's equity-based risk architecture recorded losses of less than 1%. It proved that when you remove the artificial "leverage" of debt and link finance to real-world utility (rental value), the system becomes "antifragile." It doesn't just survive stress; it is built to withstand it by design.

3.

The Virgin Offset Innovation: Solving for Capital Fluidity

The third pillar came, perhaps surprisingly, from the conventional innovation of the “Offset Mortgage,” famously championed by Richard Branson’s Virgin Money. The offset model allowed savers to link their savings accounts to their mortgage, paying interest only on the “net” difference.

For the evolution of Islamic finance, the importance of this was the concept of liquidity logic. It suggested that a consumer’s financial life didn’t have to be fragmented. It paved the way for a model where a homeowner could hold their “savings” directly in the equity of their home - buying more “bricks” when they have a surplus and potentially selling them back if they need liquidity. It turned the home from a static debt obligation into a fluid savings vehicle.

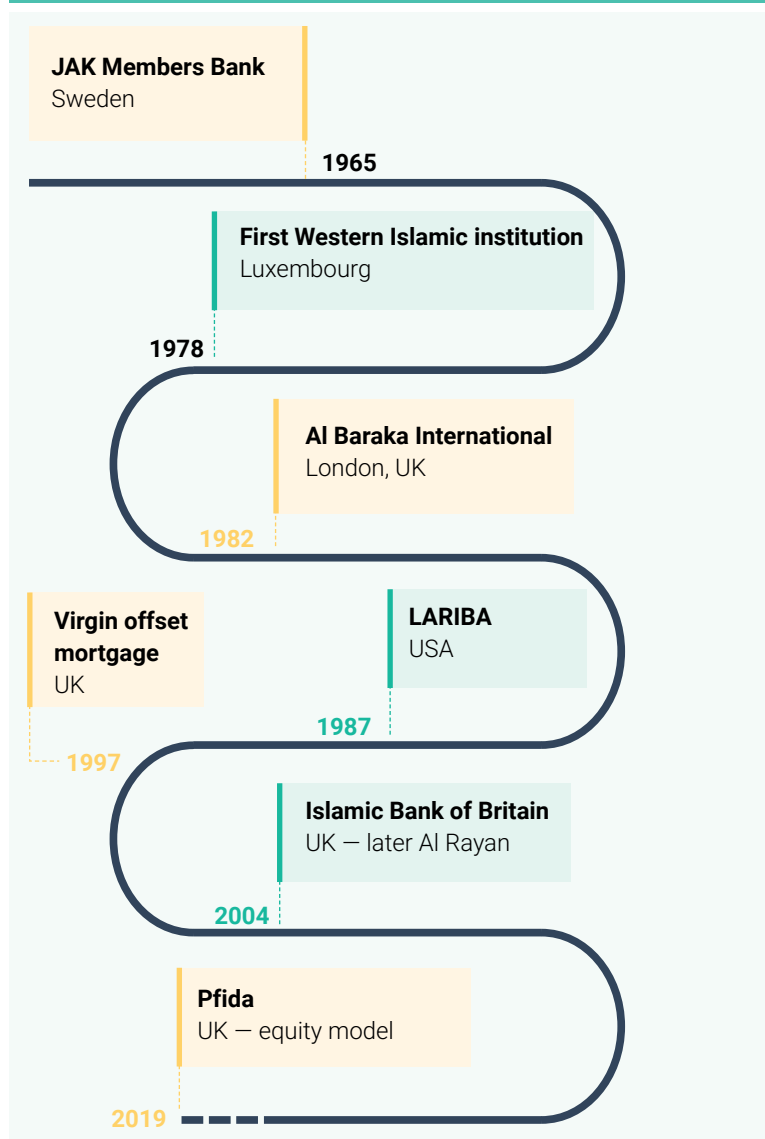
Islamic and ethical finance in the West Key milestones, 1965–2019

Figure 1: The evolution of equity-based finance in Western markets.

The Implications of Distributional Risk

The choice to defer these structural questions has profound implications that extend beyond questions of compliance or authenticity. They shape how risk is distributed within the financial system. Debt-based models, by design, fix obligations in advance. The borrower is required to meet repayment schedules regardless of how the underlying asset performs. While this provides certainty for the lender, it concentrates downside risk on the individual and limits the system’s ability to absorb shocks.

The events of 2008 illustrated how these dynamics can escalate. As asset values declined and borrowers struggled to meet obligations, losses propagated through interconnected balance sheets, amplified by leverage and liquidity mismatches. Islamic financial institutions were not immune, though in some cases their relative insulation reflected lower exposure rather than fundamentally different structures.

The broader lesson remains relevant. Systems built on fixed obligations and high leverage are inherently sensitive to disruption. They perform well in stable conditions but can become fragile under stress. This has led to a renewed interest in alternative models, particularly those based on equity and partnership.

Within Islamic finance, such models are not new. The principles of musharakah (partnership) and mudarabah provide well-established frameworks for shared ownership and risk. In theory, they offer a more direct alignment with the ethical foundations of the system, distributing both risk and reward between parties. In practice, however, their adoption has been limited.



The challenges are both practical and structural. Managing co-ownership arrangements at scale introduces operational complexity. Returns are less predictable, making them harder to standardise and price. Regulatory frameworks, designed with debt instruments in mind, do not always accommodate partnership-based structures easily. As a result, equity-based approaches have often remained peripheral, invoked more frequently in principle than in implementation.

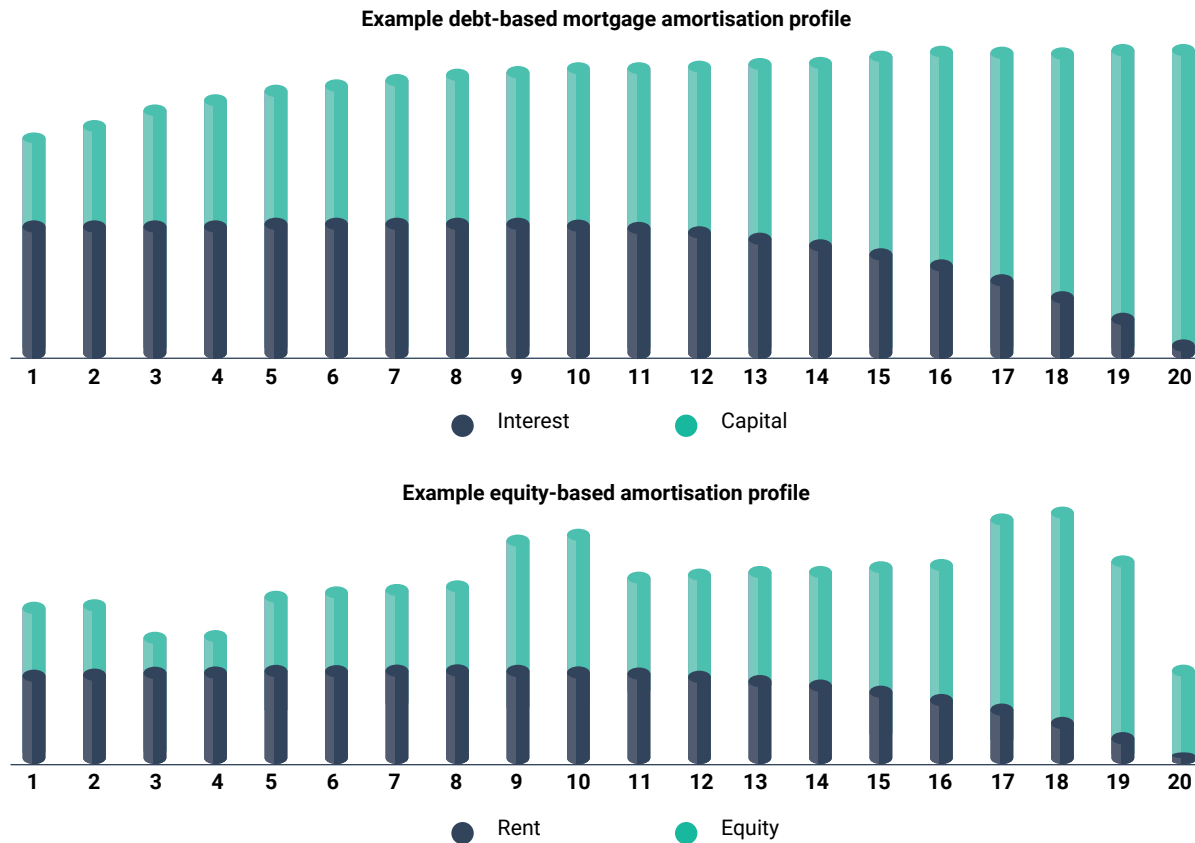


Figure 2: Illustrative comparison of debt and equity financing models.

The Technological “Unlock”: Making Partnership Scalable

What is beginning to change is the feasibility of overcoming the practical and structural constraints of partnership. Managing co-ownership arrangements at scale introduces operational complexity that a simple debt-contract avoids. Historically, the “man-hours” required to track shifting ownership percentages, calculate micro-dividends, and manage shared property costs made equity-based models too expensive to compete with the automated simplicity of Tawarruq.

This is where contemporary innovators such as Pfida have fundamentally changed the landscape. Such organisations are, at their core, technology companies that have used modern infrastructure to solve a problem that financial innovation alone could never crack: making a genuine debt-free musharakah model work at scale, in real time, for real people.

Digital infrastructure now allows for:

Real-time Equity Tracking: Automated ledgers that adjust ownership share down to the penny as payments are made.

Automated Rental Recalibration: As a user buys more “bricks,” the rent they pay on the remaining shares owned by the institution is automatically and transparently reduced.

Segmented Liquidity: The ability to allow external investors to fund these properties while ensuring the occupant retains the security of a homeowner.





Processes that once required manual intervention and bespoke arrangements can now be standardised and scaled.

1. The Micro-Equity Engine

In a traditional partnership, buying an extra 1% of a house would require a new legal contract and manual land registry updates - a process costing hundreds of pounds in solicitor fees. Technology-led platforms now use proprietary digital ledgers that track ownership percentages in real-time. This allows for "Micro-Equity" purchases. A user can choose to buy £50 or £5,000 worth of their home at the click of a button. The system automatically recalculates the new rent for the following month without any human intervention.

2. Automated Rental Calibration

Calculating fair rent across a shifting ownership structure is historically a nightmare. By utilising local property market data, modern partnership engines ensure the rent charged on the portion the user doesn't own remains fair and reflective of the real economy. This automation ensures that as the user's equity grows, their rental burden drops precisely and instantly, maintaining the "alignment of interests" that Shari'a demands.

3. The "Equity Buffer" and Risk Mitigation

One of the most profound technological unlocks is the Equity Buffer. In a debt model, inability to pay leads to default and foreclosure. In a debt-free musharakah model, the technology manages an "internal sale." If a homeowner faces a temporary financial shock, they can trade their built-up equity to cover their rent. This seamless mechanism provides a level of security that a debt-contract - by its very definition - cannot provide.

At the same time, developments in digital money are reopening questions about the structure of financial intermediation itself. Fully reserved stablecoin models, for example, make it technically feasible to create a segregated payments layer in which transactional balances are clearly separated from investment activity. In such a framework, the distinction between money held in custody and capital deployed for return becomes explicit, rather than embedded within complex balance sheet structures.

The Shari'a Case: The End of the Debt Fatwa

The increasing scrutiny of Tawarruq and similar structures suggests that the industry may be approaching a point of transition. Questions that were once confined to academic or scholarly debate are becoming more prominent within regulatory and institutional discussions. The issue is not simply whether existing structures are compliant, but whether they represent a sustainable foundation for future growth.

As we move through 2026, we are seeing a "fatigue" among global scholars and bodies like AAOIFI. There is a growing consensus that the "circularity" of Tawarruq - where an asset is bought and sold within seconds purely to generate cash - is a legal fiction that fails the "purpose of the Law" (Maqasid al-Shari'a).

The industry has long operated under a "necessity" (darurah) argument: that debt-based structures were a temporary bridge until true partnership models were viable. Innovators such as Pfida have demonstrated that with the arrival of the necessary technology, the "necessity" argument has expired. The "Debt Fatwa" is approaching its expiry date.

A post-Tawarruq landscape, if it emerges, will require more than incremental adjustments. It will demand a clearer alignment between legal form and economic substance, and a willingness to explore models that move beyond the replication of conventional debt.

This is where equity-based finance re-enters the conversation, not as an abstract ideal, but as a practical alternative that merits serious consideration. It is not without challenges. Variability in returns complicates pricing and risk management for institutions accustomed to the steady "margin" of debt. Governance structures must be robust enough to manage shared ownership arrangements. Regulatory frameworks may need to evolve to accommodate new forms of intermediation.

Yet these challenges are not insurmountable. In fact, they may be characteristic of any meaningful structural shift. The history of financial innovation suggests that new models rarely emerge fully formed; they develop through iteration, supported by changes in technology, regulation, and market expectations.

Economic Realities: The End of Rising Income

Alongside these technological and Shari'a changes, broader economic trends are also challenging the assumptions that underpin traditional financing models. One of the most significant is the gradual erosion of the "rising income" hypothesis.

Many long-term financing arrangements, particularly in housing, rely implicitly on the expectation that borrowers' incomes will increase over time, making fixed repayment obligations more manageable. In an environment characterised by wage stagnation, the "gig economy," and economic uncertainty, this assumption is less secure than it once was. For many, a 25-year fixed debt obligation is no longer a ladder to prosperity but a source of profound "precarity."

Demographic shifts further complicate the picture. Ageing populations are altering patterns of savings, investment, and home ownership. A 55-year-old looking to downsize or release equity has very different needs, compared to a 25-year-old first-time buyer. Financial products designed for a static mid-century demographic profile struggle to adapt to these changes. At the same time, periodic economic shocks - whether financial, geopolitical, or environmental - are increasing the premium placed on resilience and flexibility.

In this context, the appeal of models that distribute risk more evenly and adjust more naturally to changing circumstances becomes more apparent. Equity-based approaches, by linking returns to asset performance rather than fixed obligations, offer one possible avenue for achieving this. If a homeowner faces a period of lower income, a debt-free musharakah model can allow for a "pause" in equity buy-back without the threat of foreclosure that haunts a debt-based contract.

This flexibility is particularly vital for the modern "Gig Economy" worker. Traditional mortgages require a steady, predictable salary. But in 2026, many workers have fluctuating income. By using a partnership model, providers can allow for Variable Contributions. In a strong month, a partner can buy more equity; in a lean month, they can pay rent only. This "Elastic Finance" is the only sustainable way to support a modern, diverse workforce.





The Strategic Opportunity: Proof of Possibility



Long-term credibility may depend not only on demonstrating compliance, but on proving distinctiveness.

What remains uncertain is whether the incentives that have historically favoured debt-based models will shift sufficiently to allow for broader adoption. Financial systems tend to be path-dependent. Once a particular structure becomes dominant, it shapes the behaviour of institutions, the expectations of customers, and the design of regulation. Changing course requires not only conceptual clarity but also alignment across these dimensions.

There are, however, indications that such alignment may be gradually emerging. Technology is reducing operational barriers. Economic conditions are challenging existing assumptions. Regulatory conversations - particularly in the UK under the FCA's Consumer Duty and outcomes-based regulation - are becoming more open to structural questions. And within the industry itself, there is a growing recognition that long-term credibility may depend on demonstrating not just compliance, but distinctiveness.

In this evolving landscape, a small number of market participants have begun to experiment with fully partnership-based approaches to home ownership, illustrating that equity-based models can, under certain conditions, be implemented within contemporary regulatory

environments. The Pfida model is a primary example: it is live, the regulator is satisfied with it, and it operates in the UK. It has passed the "stress tests" of legal and regulatory scrutiny. For institutions thinking about the next generation of their home financing portfolio, it serves as a proof of possibility rather than a definitive solution.

The broader significance lies not in any single model, but in the re-emergence of a question that has surfaced repeatedly over the past century: should finance be organised primarily around debt, or around equity and shared risk? Each time the question has been raised, it has encountered institutional resistance. Each time, the prevailing system has adapted rather than transformed.

And yet the question persists.



Conclusion: Identity and the Future of Global Finance

Islamic finance, by virtue of its foundational principles, is uniquely positioned to engage with this shift. The emphasis on risk sharing, asset-backing, and ethical alignment provides a conceptual framework that is perfectly compatible with equity-based approaches. The challenge lies not in theory, but in practice - in translating these principles into structures that are scalable, resilient, and competitive.

The choice facing the industry is not binary. Debt-based models are unlikely to disappear, nor should they necessarily. They serve important functions and will continue to play a role in financial intermediation. The question is whether they will remain dominant, or whether they will be complemented, and in some areas perhaps supplanted, by alternative approaches that offer different risk-return profiles.

Ultimately, the direction of travel will be determined less by abstract debate than by the interaction of incentives, institutions, and ideas. If the conditions that favour equity-based

finance continue to strengthen - if the "Debt Fatwa" expires and the appetite for genuine partnership grows - adoption will follow. If not, the industry may continue along its current trajectory, refining existing structures without fundamentally altering them.

History offers reasons for caution. Financial systems rarely transform unless the incentives that underpin them change. But it also offers examples of ideas that, once considered impractical, become viable as circumstances evolve. The separation of money and credit, the reintroduction of partnership-based finance, and the use of technology to enable new forms of intermediation are no longer purely theoretical constructs. They are increasingly part of the landscape in which Islamic finance operates.

Whether they will move from the margins to the mainstream remains an open question. But the fact that the question is being asked with renewed urgency suggests that the conditions for change may be closer than they appear.

In the end, the issue is not simply one of compliance or innovation. It is one of identity. Islamic finance can continue to define itself in relation to conventional systems, adapting where necessary to remain competitive. Or it can draw more fully on its own principles to articulate a distinct approach to financial intermediation - one that reflects not only what is permissible, but what is preferable.

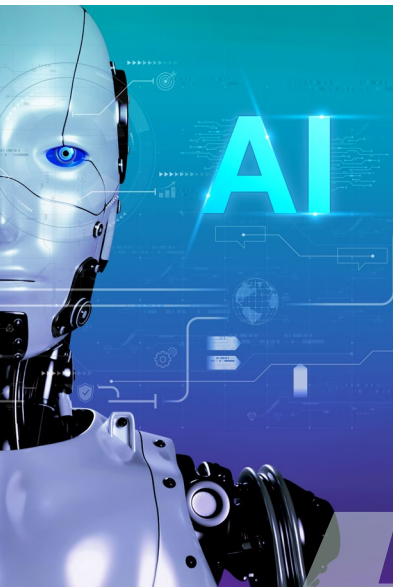
The path it chooses will shape not only its own development, but also its contribution to the broader evolution of global finance. It is time to move from "compliance without conviction" to a model that is authentically and technologically distinctive. ■



Introduction

Artificial intelligence (AI) has been widely heralded as both a game changer and a convenient remedy for those who are less equipped, less trained, yet well intentioned in their pursuit of progress in life and work. But as AI becomes increasingly embedded in financial decision-making across the industry – particularly under extant conditions of deep uncertainty and geopolitical volatility – the real question is no longer whether institutions will adopt AI. Rather, it is whether their people are sufficiently prepared to govern it, interpret its outputs, and apply it responsibly.

This shift is no longer merely technological; it is fundamentally human – shaped by behavioural instincts, issues of trust, the need for validation and verification, and the ever-present threat of cybersecurity confidence tricksters. The tools may be digital, but the judgement required to deploy them – and the consequences of their use – remain deeply institutional and societal. In this sense, the AI revolution is less about machines replacing humans, and more about whether humans can meet the demands of the machines they have created.



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Development of Digital Capital in the Era of AI



By Joseph Cherian,

President,
Dean and Distinguished Professor,
Asia School of Business.



Background

AI in its various forms – from machine learning models to generative systems – has rapidly moved from the periphery to the core of financial operations. Applying technology towards financial decision making, in itself, is not new. I was personally involved in building a robo-advisor for a large US financial institution during the dot-com era, when, in a wave of exuberance – fuelled by youthful confidence and a thin grounding in financial fundamentals – went so far as to declare the death of brick-and-mortar financial institutions. It was, in many ways, the Revenge of the (Dot-Com) Nerds on steroids. I found myself brought in as the only trained adult in the room – an academic, no less.

The national rollout of that robo-advisor failed swiftly and, in hindsight, almost predictably. The primary reason was not technological inadequacy, but human resistance. Wealth advisors within the institution viewed the tool not as an enabler, but as a threat to their roles. The result was a breakdown in adoption. So much for corporate communications – and the assumption that innovation, however well-intentioned, will be embraced without trust, alignment, and clarity of purpose.

AI and the Modern Financial Institution

Today, in its more mature form, AI is deployed with far greater confidence across the financial industry. It is used to assess creditworthiness, detect fraud, construct asset allocation strategies and investment portfolios, optimise trading, and enhance customer engagement. These systems operate at a scale and speed that far exceed human capability. Yet, while AI can process vast quantities of data and uncover patterns invisible to the human eye, it does not possess financial judgement, accountability, trust, or ethical awareness. These remain uniquely human responsibilities.

In financial services, this distinction is critical. Decisions made within this sector do not merely affect individual firms; they shape financial markets, influence risk-reward frontiers and capital allocation, compress or eliminate arbitrage opportunities, provide liquidity, and, at times, determine the stability of entire economies. On more than one occasion in its august history, the global financial system has demonstrated how complexity without comprehension – and financial innovation without resilience – can lead to systemic fragility.

The introduction of AI adds a new layer of complexity – one that is often opaque, adaptive, and difficult to fully interpret, even by its creators. As such, the rise of AI does not diminish the importance of human judgement; rather, it amplifies it.

Indeed, AI – compounded with intellect alone – is not enough. What is knowledge without soul, compassion, empathy, and a basic care for the well-being of others? The great Professor Robert K. Merton, one

of the most influential sociologists of the 20th century, coined the term “The Matthew Effect.” In the context of accumulated advantage, it is often summarised as: “the rich get disproportionately richer, and the poor get disproportionately poorer.”

In a world where AI and technology advance at breakneck speed, those who adapt quickly will shape tomorrow's opportunities; those who hesitate, risk being left behind. Digital fluency and AI literacy enable better decisions and open possibilities that were unthinkable just a decade ago. But in recalling the Matthew Effect, we must be careful not to widen the divide further – where the AI-savvy become disproportionately more capable and prosperous, while the AI-disadvantaged fall further behind, not by choice, but by lack of access.

The rise of AI does not diminish the importance of human judgement; it amplifies it.

Human capital in the age of AI must therefore be redefined. It is no longer sufficient to produce graduates who are technically proficient in coding or data science alone. What is required is a new generation of professionals who can operate at the intersection of technology, finance, and governance. These individuals must understand how data is generated, structured, and governed; how models are built, trained, and validated; and how algorithmic outputs interact with regulatory frameworks, fiduciary duties, and ethical considerations.



This shift reflects a broader evolution in the nature of expertise. Traditionally, financial expertise was forged through years of experience – through exposure to market cycles, crises, and institutional decision-making – as well as through foundational academic advances such as Modern Portfolio Theory, the Black-Scholes/Merton Model, the Intertemporal Capital Asset Pricing Model, and Behavioural Finance. While such practical and theoretical financial grounding remains indispensable, it must now be complemented by a working understanding of how AI systems function – and, importantly, where their limitations lie.

The modern financial professional must be able not only to use AI tools, but to question them: to interrogate their assumptions, assess their robustness, and determine when their outputs should be trusted – and when they should be challenged.

The implications of this are far-reaching. As AI systems become more deeply embedded in financial processes, model risk increasingly becomes synonymous with financial risk. A poorly designed or misapplied algorithm can result in biased credit decisions, flawed investment strategies, or critical gaps in compliance and risk monitoring. In more extreme scenarios, it can contribute to systemic instability – reinforcing herding behaviour and other biases, distorting price discovery, and amplifying market volatility. These risks are not hypothetical; they are already manifesting in various forms across global financial markets.

In this context, AI-driven model risk can be likened to the “mother of all fat fingers” in trading – except that its consequences are not momentary or isolated, but systemic, persistent, and far-reaching.

Digital Capital and Education

Against this backdrop, the development of digital capital must be approached with both urgency and discipline. Digital capital – or digital assets – refers to value that exists in digital form and can be created, stored, transferred, traded, and leveraged within digital systems, whether as Central Bank Digital Currencies, stablecoins, or security tokens. However, it should not be understood merely as technological infrastructure or data assets. Rather, the digital capital experience also reflects the human capabilities required to harness these tools effectively. It encompasses technical proficiency, certainly, but also institutional awareness, ethical judgement, and the ability to operate within complex regulatory and governance frameworks.

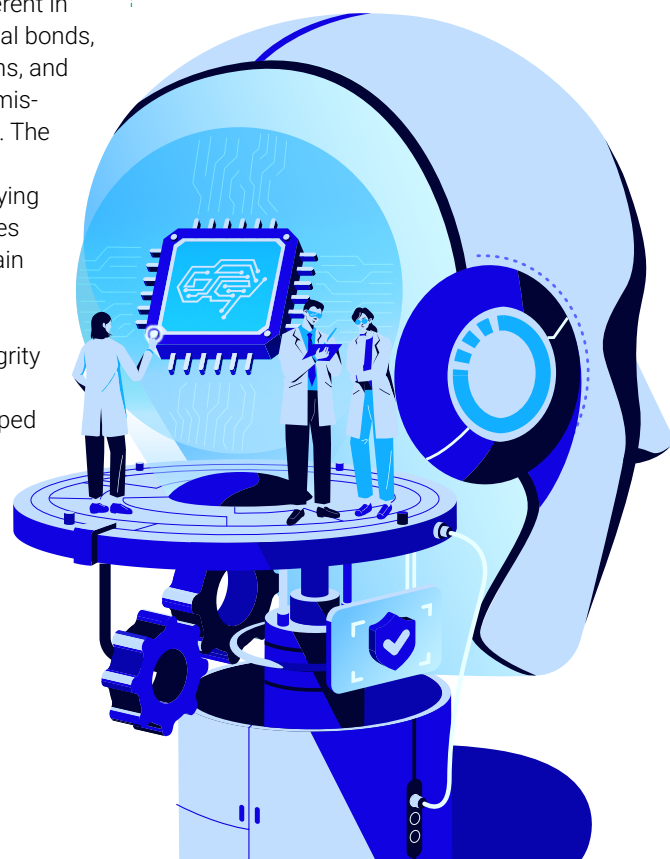
History reminds us that financial innovation, without integrity and transparency, can mislead as easily as it can empower. A subprime asset underlying a security token, yet marketed as a high-quality digital instrument, is no different in substance from the municipal bonds, collateralised debt obligations, and mortgaged-back securities mis-selling episode of the 2000s. The overarching packaging may have evolved, but the underlying risks – and the consequences of misrepresentation – remain fundamentally unchanged.

The understanding that integrity must be integrated into financial innovation has shaped a distinctive approach to developing digital capital in the financial sector at the Asia School of Business (ASB). Rather

than treating AI as a standalone technical discipline, lessons and “jam sessions” on AI are embedded throughout a broader framework that brings together finance, economics, policy, and governance. This reflects a fundamental belief: that technology must be understood in context – not in isolation – if it is to improve financial intermediation, democratise access, and support equitable economic development.

In a 2018 paper I noted, “Blockchain can be used to create fractional, tradeable digital ownership backed by securities, or security tokens, whose ownership is recorded on a secure, shared ledger. These digitally tradeable instruments, collateralized by real assets or financial securities – such as infrastructure projects, private equity funds, project bonds, or units in collective investment schemes – have the potential to democratise access, while enhancing liquidity, diversification, and risk-adjusted returns for smaller investors.”¹

The interdisciplinary approach to financial knowledge creation and execution is critical. Financial decisions are rarely purely technical; they involve trade-offs,



uncertainties, and considerations that extend well beyond quantitative analysis. They require sound financial judgement, shaped by experience and an appreciation of how markets behave in practice. By situating AI within this broader context, users are equipped not only to build models, but to understand their implications – and their limitations – within real-world institutional settings.

Equally important is the emphasis on hands-on, action-based learning and deep industry engagement. At ASB, participants are exposed to real-world challenges, working on projects that require them to apply AI tools in practical contexts for actual companies while navigating the constraints and complexities inherent in financial institutions. This experiential approach bridges the gap between theory and practice, enabling learners to develop not just technical competence, but the practical judgement required to deploy these tools responsibly and effectively – then deploy these skills in their own financial careers. The importance of such an approach cannot be overstated. One of the key shortcomings of many AI training programmes is their narrow focus on technical proficiency, often at the expense of the broader institutional context in which these skills must be applied. In finance, this gap is particularly consequential.

A model that performs well in a controlled environment – underpinned by simplifying assumptions and elegant theoretical constructs backtested on historical data – may behave very differently when deployed in a live setting, where data is noisy, conditions are constantly evolving, human behaviour can be irrational, and decisions carry real and immediate consequences.

In addition to interdisciplinary learning and practical application, the development of digital capital requires a sustained commitment to continuous education. The pace of



technological change is so rapid and dynamic that skills acquired today can become obsolete within a relatively short period. As a result, institutions must cultivate a culture of lifelong learning; one in which individuals are not only encouraged, but also enabled, to continually refresh and expand their knowledge and technological capabilities.

Akin to how digital fractional assets enhance access and reduce intermediation costs, skills development across different stages of a professional's career should have a broader emphasis on flexible, modular, and stackable learning pathways. Education is therefore not treated as a one-off intervention, but as an ongoing, inclusive journey. Multiple entry and exit points, coupled with embedded flexibility and optionality, enable participants to tailor their learning trajectories in response to evolving industry demands and individual career aspirations.

Technology must be understood in context – not in isolation – if it is to improve financial intermediation and support equitable economic development.



Ethics and Governance

Beyond technical and institutional considerations, the development of digital capital must also address the ethical dimensions of AI. Financial decisions, by their nature, involve issues of fairness, transparency, and accountability. The use of AI introduces new challenges in this regard, particularly in relation to bias, explainability, and the potential for unintended consequences.

For example, it is now well-known that an AI-driven credit scoring model may inadvertently disadvantage certain groups if it is trained on biased data. Similarly, a trading algorithm may contribute to market instability if it reacts to signals in ways that amplify existing trends. In such cases, the issue is not the technology itself, but how it is designed, deployed, and governed.

Addressing these challenges requires more than technical fixes; it demands a strong ethical foundation. Professionals must be trained to identify potential biases and ethical blind spots, understand their broader implications, and exercise sound judgement in responding to them. This extends beyond mere compliance with existing regulations. In many instances, the rules themselves may be incomplete, evolving, or open to interpretation – requiring practitioners to act with discernment and integrity.

In such cases, the issue is not the technology itself, but how it is designed, deployed, and governed.



Consider, for example, a scenario where an investment advisor is treated to a lavish Michelin-star dinner with a broker on the eve of executing a large trade. An AI system, operating purely on observable data patterns, may interpret this advisor/broker interaction as benign. However, from a regulatory and fiduciary standpoint, such an engagement could raise legitimate concerns around conflicts of interest. The integrity of best execution may be called into question if personal inducements – however subtle – are perceived to influence decision-making.

This illustrates a critical limitation of purely technical systems: they are not inherently equipped to interpret context, intent, or ethical nuance. Embedding AI within financial institutions therefore requires not only technical sophistication, but also a deeply ingrained culture of governance, accountability, and professional judgement.

In this context, governance plays a central role. Effective AI governance involves establishing clear frameworks for model development, validation, and monitoring; ensuring transparency and accountability in decision-making processes; and maintaining robust oversight mechanisms. It also requires collaboration between different stakeholders, including technologists, risk managers, regulators, and senior leadership.

The integration of AI into financial institutions also has implications for organisational culture. As technology becomes more central to operations, there is a risk that decision-making becomes overly reliant on automated systems, with human oversight reduced or marginalised. To mitigate this, institutions must cultivate a culture that values critical thinking, encourages questioning, and recognises the importance of human judgement. Building a culture that effectively integrates AI requires leadership commitment, clear communication, and alignment of incentives.

At a broader level, the development of digital capital is closely linked to the resilience of the underlying financial system. A system that relies heavily on advanced technologies is only as robust as the people who design, manage, and oversee those technologies. If these individuals lack the necessary skills, judgement, or ethical grounding, the system itself becomes vulnerable. Conversely, a well-developed pool of digital capital, supported by highly skilled employees, can enhance access, returns and resilience.

Conclusion

The future of AI in finance will be determined not only by technological advancements, but by the quality of human capital. Sophisticated models and powerful computing infrastructure are important, but they are ultimately tools. Their effectiveness depends on how they are used, and by whom.

The balance between innovation and governance will be particularly important. Innovation drives progress, enabling institutions to improve efficiency, enhance services, and create new opportunities. Governance, on the other hand, ensures that this progress is achieved in a manner that is safe, ethical, and aligned with broader societal objectives.

These two elements are often seen as being in tension, but in reality, they are complementary. The challenge, therefore, is not to choose between innovation and governance, but to integrate them. This requires a

holistic approach that encompasses technology, people, processes, and culture. It also requires a willingness to adapt, as both the technology and the regulatory landscape continue to evolve. As AI takes on more routine tasks, the value of uniquely human capabilities – such as judgement, creativity, and ethical reasoning – will become increasingly important. Professionals will need to focus less on executing processes and more on overseeing, interpreting, and improving them.

This shift has implications for business and finance education and training. Curricula must evolve to reflect the changing nature of the industry, incorporating not only technical skills, but also broader competencies such as critical thinking, communication, and ethical reasoning. It also underscores the importance of interdisciplinary learning, as the boundaries between different domains become increasingly blurred.

In conclusion, the development of digital capital in the era of AI is not simply about equipping individuals with new technical skills. It is about preparing them to operate effectively within a complex, rapidly evolving environment where technology and human judgement are deeply intertwined. Digital capital is not merely an enabler of technological transformation. It is the foundation upon which that transformation must be built. ■

Reference

- ¹ Blockchain can democratise access to the best alternatives opportunities", Asia Asset Management, September 2019, Vol 24, No. 9, Joseph Cherian and Katrina Cokeng



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Quote from the Governor



The purpose of finance is to serve the real economy, and through it, the people who depend on it to build flourishing lives for themselves and the generations to come. Everything else – the instruments, the institutions, the infrastructure, even the regulation – is in service of that. When we lose sight of this, we lose the plot.

Dato' Sri Abdul Rasheed Ghaffour,
Governor, Bank Negara Malaysia

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