banking insight

IDEAS FOR LEADERS
JUNE 2015

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SAFEGUARDING PRIVATE RETIREMENT SCHEMES

CAN WE BE MORE INCLUSIVE?

TOWARDS ASEAN FINANCIAL INTEGRATION: EVOLUTION, NOT REVOLUTION

TRUSTING THE ZETTABYTES

ON A MISSION TO BANK THE UNBANKED

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FUELLING RISK

PREPARING FOR CYBERGEDDON

CHAMPIONING FINANCIAL INCLUSION

WITH EQUITABLE GROWTH accorded priority in the development discourse, it is perhaps the right time to advocate financial inclusion as a strategy complementary to other inclusion strategies more intensively. After all, sustainable growth only has meaning if its rewards can be shared by all.

Currently, the Global Partnership for Financial Inclusion (GPFI) estimated, based on the World Bank Global Financial Inclusion Index (Global Findex) Database, that 2.5 billion adults globally or approximately half the total adult population lacked access to financial services delivered by regulated financial institutions.

Banking the unbanked represents a massive opportunity for development through financial inclusion. Allowing broad access to financial services has been shown to benefit poor people and other disadvantaged groups by enabling them to consume more, manage health concerns, make investments in durable goods, make home improvements or benefit from education. The GPFI also noted that macroeconomic evidence shows that economies with deeper financial intermediation tend to grow faster and are able to reduce income inequality.

This issue of *Banking Insight* contains insights on this subject from Alfred Hannig, Executive Director of the global Alliance for Financial Inclusion (AFI). Hannig provided his perspective on the necessity of advocating financial inclusion, the tools and technologies being leveraged, the outcomes of successful financial inclusion initiatives, and the risks and challenges moving ahead. He noted that financial inclusion is a circular process: the long-term goal of financial inclusion, Hannig said, was to see concrete policy changes in the countries where AFI is active in reducing poverty and supporting inclusive growth – which starts with sustainable financial inclusion.

Unsurprisingly, Hannig commented extensively on technology, a key driver for financial inclusion. Recent technology and applications like mobile phones and electronic purses have successfully expanded the delivery of basic financial services, bypassing traditional branch and banking models, and improving access to finance for remote and hitherto under-served populations.

But technology can be a double-edged sword. As technology and the internet become increasingly ubiquitous channels for delivering banking services, banks and their customers and stakeholders in turn become increasingly vulnerable to cyber-attacks. Hence, cybersecurity must be augmented to better manage risks. This issue's focus on cybersecurity examines the measures being undertaken by regulators and banks to shore up defences against cybercriminals, stressing the need to be more vigilant in the Asia-Pacific region to prepare for the perils of 'cybergeddon'.

Other than cyber risks, arguably the foremost fundamental risk is reputational risk, underpinned by ethical risks. Dr. Raymond Madden, Chief Executive Officer, Asian Institute of Finance (AIF) says that bank stakeholders the world over are asking what banks can do to strengthen the ethical culture within their organisations. Indeed, prudent ethical behaviour is obligatory, not least because banks serve as a major financial intermediary for the general public. Dr. Madden makes the point that banks must embed a strong ethical culture, with the drive for high ethical standards starting at and being driven by the top echelon of each bank. The pay-off of a strong ethical culture is the minimisation of risks to the banking organisation.

With the imminent materialisation of the ASEAN Economic Community (AEC), this issue also feels it important to revisit the state of ASEAN regional financial integration. The integration process has incorporated some critical milestones, such as the establishment of the ASEAN Banking Integration Framework (ABIF), due to be implemented in 2020, which should boost cross-border banking activity. Read on to find out the progress achieved to date, the challenges that must be overcome, and the opportunities which are still unfolding.

However, true regional harmonisation and integration cannot be achieved without diminishing the economic disparities between ASEAN nations and their populations. Coming full circle, this is where financial inclusion can contribute. Even as banks play their primary role as major financial intermediaries for the general population, they can provide access to finance to bridge economic gaps and stimulate economic activity in support of ASEAN's pursuit of its vision of becoming an influential global economic bloc.

We hope you enjoy this issue. We welcome all feedback at *publish@aicb.org.my*. ✱

Hope you have a fruitful read.

THE EDITOR

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Ideas for Leaders

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MASSIVE DROP IN NUMBER OF UNBANKED

FROM 2011 TO 2014, 700 million people became account holders at banks, other financial institutions, or mobile money service providers, and the number of 'unbanked' individuals dropped 20% to two billion adults, according to the latest edition of the Global Findex, the world's most comprehensive gauge of progress on financial inclusion.

Financial inclusion is measured by the Global Findex as having an account that allows adults to store money and make and receive electronic payments. "Access to financial services can serve as a bridge out of poverty. We have set a hugely ambitious goal – universal financial access by 2020 – and now we have evidence that we're making major progress," said World Bank Group President Jim Yong Kim.

The 2014 Findex also found that:

- More than half of adults in the poorest 40% of households in developing countries were still without accounts in 2014.
- The gender gap in account ownership is not significantly narrowing: In 2011, 47% of women and 54% of men had an account; in 2014, 58% of women had an account, compared to 65% of men. Regionally, the gender gap is largest in South Asia, where 37% of women have an account compared to 55% of men.

In 2011 the World Bank – with funding from the Bill & Melinda Gates Foundation and in partnership with Gallup, Inc. – launched the Global Findex in over 140 countries to study how adults save, borrow, make payments, and manage risk. ✱

FAVOURABLE PROSPECTS FOR MALAYSIA'S DIVERSIFIED ECONOMY

AFTER A YEAR OF VERY STRONG GROWTH OF 6%, lower energy export prices in 2015 will likely contribute to Malaysia's growth moderating to a still impressive rate of close to 5%, said IMF economists in March 2015.

In their annual report on the health of the Malaysian economy, the report's authors say growth is expected to moderate to about 4.75% this year while headline inflation will likely increase slightly to about 3.25% in 2015 as a result of an end to fuel subsidies, the introduction of a Goods and Services Tax (GST), and exchange rate depreciation.

Inflationary pressures are expected to remain subdued, helped by lower oil and gas prices. Activity will be led by consumption and growth in private investment in the non-oil sector, which is likely to benefit from lower energy costs and higher prices of non-commodity exports.

Private consumption growth is likely to moderate, reflecting the net effects of lower commodity prices, the impact of the new GST, and slower credit growth, as financial conditions tighten, but remain accommodative. The report's authors added that the current macroeconomic policy mix was appropriate. ✱

BAFT LAUNCHES INTERNATIONAL SUSPICIOUS ACTIVITY GUIDELINES

BAFT, AN INTERNATIONAL FINANCIAL SERVICES ASSOCIATION, has announced its 'Guidance for Identifying Potentially Suspicious Activity in Letters of Credit and Documentary Collections'. The guidance, developed by BAFT's Best Practices Anti-Money Laundering Know Your Customer working group, is designed to assist the international banking industry when combatting money laundering and financial crime.

The BAFT working group reviewed the red flags and risk indicators identified by various industry bodies in different regions globally including the Federal Financial Institutions Examination Council , Financial Action Task Force, the Wolfsberg Group and the Financial Conduct Authority to provide clarity for international banks to consider when implementing trade compliance policies.

> **One of the challenges banks face with implementing global compliance policies is trying to interpret guidance from multiple industry bodies.**

BAFT combined the key points from the above groups into 16 red flags to raise banks' awareness of what to look for to assess suspicious activity in trade transactions.

"One of the challenges banks face with implementing global compliance policies is trying to interpret guidance from multiple industry bodies," said Tod Burwell, BAFT President and CEO. "This document aims to simplify guidance from a variety of regulatory and standard setting authorities in a way that facilitates more effective policies and procedures." ✱

CAPITAL MARKETS IN 2020

PwC'S REPORT 'CAPITAL MARKETS 2020: Will It Change for Good?' predicts a new equilibrium for global capital markets, the landscape, composition and dynamics of which will look very different to that of today come 2020.

PwC highlights that the new equilibrium will emerge in terms of innovation, technology, industry structures, business models, financial structures, products, and remuneration.

Its global survey of 250 capital market executives and industry leaders found that executives are highly concerned by the threat posed by shadow banking players such as

crowd funders and peer-to-peer lenders. 70% believe they pose a moderate to severe threat to traditional banks with 16% indicating they believe this shadow banking world may be set to expand beyond its current 25% market share of financial assets. Just 20% believe they present innovative partnership opportunities.

Despite shifts in global gross domestic profit and economic power, liquidity pools will continue to aggregate in established global financial hubs. Whilst the majority (76%) expect a financial centre rivalling London and New York to emerge, PwC is confident both cities will continue to lead the global financial ecosystem through to 2020. ✱

Unlocking the world's greatest EMERGING ECONOMY

THE ESTABLISHMENT OF THE ASEAN ECONOMIC COMMUNITY (AEC) PRESENTS UNPARALLELED OPPORTUNITIES FOR GROWTH FOR BUSINESSES. IN THIS UPCOMING INTEGRATED MARKET VALUED AT OVER USD2.4 TRILLION AS OF THE TIME OF WRITING, WHERE DO OPENINGS LIE, AND WHAT MUST COMPANIES AND GOVERNMENTS DO TO REALISE THE OPPORTUNITIES?

The 10-member Association of Southeast Asian Nations (ASEAN) is home to one-tenth of the world's population. And if it were a single country it would be the seventh largest economy in the world. By 2030, the region's citizenship will grow by one-third, from 620 million today to 900 million, with GDP quadrupling from USD2.4 trillion to USD10 trillion by then.

Malaysian Prime Minister, Dato' Sri Mohd Najib Tun Abdul Razak, describes ASEAN as: "Without doubt, the world's greatest emerging economy." He said: "Everyone from an equity analyst in Singapore, a rice farmer in Thailand, a halal food business owner here in Kuala Lumpur, SMEs and business leaders throughout our region, should be aware of the shared growth and prosperity that the ASEAN community aims to enable, and have access to this potential."

Little wonder then that with ASEAN integration looming in the shape of the ASEAN Economic Community to be launched in December 2015, many banks and financial institutions see the upcoming single market as an opportunity for growth and progress. For example, Maybank, Malaysia's largest bank is fast expanding across the ASEAN bloc of emerging economies.

Recently, Maybank Group President and Chief Executive Officer Datuk Abdul Farid Alias described ASEAN as a huge marketplace and home to a very large supply of rising middle-class consumers with discretionary spending. "The region is the world's seventh largest economy and has been experiencing strong economic growth rates. To integrate into this regional powerhouse, it takes disruptive technology, effective branding and strategic advertising. The rising empowerment of women and the demographic implications of millennials are also crucial to capitalise on ASEAN," he said.

Foreign direct investment is also rising as investors diversify away from lagging developed economies in search of a piece of the lucrative ASEAN pie. Feisal Zahir, Maybank Head of Global Banking explained that intra-ASEAN foreign direct investment (FDIs) has been steadily increasing over the past five years, from about 10% of total FDIs into ASEAN in 2009 to an estimated 22% in 2014. "FDIs into ASEAN also increased from USD91 billion in 2011 to an estimated USD123 billion in 2014, which further indicates a potential for continuous growth."

"Maybank is well positioned to capture the increase in business in the region and those linking to Asia. We have a deep understanding of the business landscape in ASEAN, as well as, the products to provide seamless solutions for corporate trading, funding and investment needs," he said.

Meanwhile, Maybank Kim Eng Group Chief Executive Officer John Chong said ASEAN's economic integration could bring about an increase in corporate exercises, which bodes well for the banking and financial industry and the development and maturity of capital and financial markets in the region. "We expect to see more merger & acquisition activities as businesses in the region consolidate. Fund raising exercises will also rise, driven by businesses' regional expansion and new infrastructure demand," he said, adding that Maybank Kim Eng was proud to be able to provide investors with unrivalled access to this region. Maybank Kim Eng, the investment banking arm of Maybank maintained its position as ASEAN's largest equities franchise with the highest trade value in 2014, for the second successive year.

'Be ASEAN'

While the concept of integration carries immense potentials, much has to be done to overcome economic and social disparities among the ASEAN members in order to align them and smoothen harmonisation in the run-up to the launch of the AEC just a few months away. Central to integrating these diverse economies is the concept of 'one ASEAN'. Datuk Abdul Farid stressed that in order to achieve this, member nations and local businesses must engage with one another, foster greater collaboration, and accept that the long-term vision of an integrated and united ASEAN has already arrived.

Currently, there is a long way to go to achieve ASEANisation. "As individual countries, we trade and invest more with countries outside ASEAN than within," remarked the CEO, explaining that trade between member states presently accounts for only one-quarter of regional commerce. He encouraged companies, governments and citizens to seek new partnerships with peers from other member nations, and to "be ASEAN".

Without "being ASEAN", the idea of the AEC will not come to full fruition. Ambitiously, the AEC initiative encourages free flow of goods and services, and freer movement of capital and skilled labour, and these can only be achieved if all stakeholders work together cohesively.

Other integrative measures proposed by business leaders include the implementation of a single time zone; educating the region's young population about the benefits of ASEAN; developing new infrastructure projects; and for the bloc to have its own presence at global summits like the World Economic Forum in Davos, Switzerland.

The Human Factor

Perhaps one of the factors that makes the AEC such a compelling initiative is ASEAN's youthful demographic and rising middle-class, both of which are catalysts for economic and social development. Presently, more than 60% of the region's population – more than 370 million citizens – are aged between 18 and 34, an age group otherwise referred to as Millennials. And there are around 81 million consumer-class households across the region, with this number set to double within 15 years.

Being able to relate to both of these demographics is critical for companies doing business in ASEAN: on one hand, businesses must embrace disruptive technologies like social media and mobile tools, in order to meet the needs of the region's increasingly tech-savvy populous; on the other, companies must modify their internal structures in order to meet the high expectations of Millennials in areas like career progression, meritocracy, ethics and continuous feedback.

Businesses Must Take Action

The ability of ASEAN to shift the AEC from drawing board to reality is critical for the future prosperity of the region. Yet while it is the responsibility of member governments to promote the concept of ASEAN, the onus of driving its potential rests with businesses, irrespective of size or sector. As one of the growth engines and key pillars of the Malaysian economy, Maybank is committed to doing its utmost and engaging with its stakeholders to facilitate the realisation of the AEC blueprint, and hence, catalysing ASEAN growth. ✱

About Maybank

Maybank is among Asia's leading banking groups and Southeast Asia's fourth largest bank by assets. It has been ranked among the World's Top 20 Strongest Banks by Bloomberg Markets for two consecutive years - 2013 and 2014. The Maybank Group has an international network of 2,400 offices in 20 countries namely Malaysia, Singapore, Indonesia, Philippines, Brunei Darussalam, Vietnam, Cambodia, Thailand, Papua New Guinea, Hong Kong SAR & People's Republic of China, Bahrain, Uzbekistan, Myanmar, Laos, Pakistan, India, Saudi Arabia, Great Britain and the United States of America. The Group offers an extensive range of products and services, which includes consumer and corporate banking, investment banking, Islamic banking, stock broking, insurance and takaful and asset management. It has over 47,000 employees serving more than 22 million customers worldwide.

Thank you.

Malayan Banking Berhad (3813-K)

Humanising Financial Services.

SECURITISATION *makes a comeback*

JESSICA FURSETH

THE RETURN OF SECURITISATION: DOES THE VILLAIN FROM THE GLOBAL FINANCIAL CRISIS DESERVE ANOTHER CHANCE?

The big villain of the 2008 financial crisis was not a masked creature in a hood, but an until-then unremarkable financial product known as securitisation. Not everybody understood how it worked, but soon securitisation was labelled as 'toxic sludge', responsible for creating an instability in the financial markets which spiralled into a global recession. After a public lynching of this scale, the news that securitisation is making a comeback is somewhat ironic.

With memories fresh from the downturn, it is no wonder that critics are fearful that welcoming securitisation back in from the cold means that painful lessons have been forgotten. But financial commentators claim there is nothing inherently unsafe about these so-called securitised financial products. In fact, the transformation of mortgages, credit card debt and other recurring cash flows into new marketable securities can be a very useful tool for getting credit flowing and boosting growth.

The desire to encourage economic growth is also the reason why the Bank of England (BoE) and the European Central Bank (ECB) have thrown their weight behind the budding resurgence of securitisation. Andy Haldane, Chief Economist at the BoE, last year described securitisation as "a financing vehicle for all seasons" that should no longer be thought of as a "bogeyman". ECB President Mario Draghi followed up by saying the restrictions have been "discriminating asset-backed securities against other very similar instruments, such as covered bonds".

TOXIC SLUDGE

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Welcome to EU Reform

While the previous six years saw the securitisation market almost double to £6.6 trillion in the US, and quadruple to £1.6 trillion in Europe, outstanding securitisation contracts have sharply contracted since the crisis. This was partially due to their unsavoury reputation, but also because regulators in the EU and US cracked down so hard on the industry, they nearly killed it. Because of this, the securitisation market will need a boost if it is to recover.

In a joint discussion paper entitled 'The

Case For A Better Functioning Securities Market In The European Union', the BoE and ECB highlighted the advantages of bringing back the financial instruments: "Securitisation can support greater funding diversification, free up capital to allow banks to extend new credit to the real economy, and provide non-bank investors, such as insurance companies and pension funds, with access to a broader pool of assets."

In order for this to happen, said the BoE and ECB, the securitisation market needs a thorough revamp. First of all, this means creating products that are simple and transparent to investors. Secondly, banks need to be incentivised to monitor and be prudent about the loans they package into securities, and thirdly, investors need to have access to enough historical data to understand how the loans that make up the basis of their securitisation will perform across a wide variety of circumstances.

Many of these concerns have already been addressed, at least partially, by the regulations initiated after the financial crisis. This illustrates that while securitisation may be returning, no one is pretending that it can go back to the way things were in the past - lessons have indeed been learned. Out of the so-called alphabet soup of acronyms from the pre-crisis securitisation boom, only two are so far making a comeback. Most popular is ABSs, or asset-backed securities, which is generic securitisation including credit card debts. Second is CLOs, or collateralised loan obligations, which includes loans to poor-credit firms such as those acquired by private equity. The two more problematic products have so far been left on the shelf: these being MBSs, the mortgage-backed securities which were the culprit in the subprime crisis, and CDOs, the collateralised debt obligations disliked by regulators because they were made up of bundles of other securities.

Selections from the Alphabet Soup

ABSs and CLOs have been enjoying a steady revival since 2013, and the temptation to encourage them to grow further in order to boost economic growth is strong, especially in Europe. This may not necessarily be a problem, as in its simplest form, securitisation is not complicated. For example, a bank collecting monthly payments on a credit card or car loan can access cheap financing by selling the claim to these payments on to investors. By selling it on in bundles, a bank or business can use its existing debts to access credit, which can then be used to boost growth. It was only when certain US banks grew complacent about credit checks that this process became problematic, as customers continued buying the debt bundles without realising the underlying mortgages were subprime, and often worthless.

The prospect of using securitisation to boost the European economic recovery was a key aspect when European Commission member Jonathan Hill presented the green paper on the EU Capital Markets Union in February. "We are seeking to encourage the development of an EU market for high-quality securitisation, which is transparent, simple and standardised," said Hill, pointing out how a return to just half the level of SME securitisation seen in 2007 would result in an extra €20 billion in funding. EU regulation post-crisis requires banks to retain at least 5% of the loan risk when selling securitised products, as well as set aside more capital against the instruments. Hill has warned against speculation that the fundamental rules will be changed, but his comments have spurred hope that some lightening of the regulatory burden may be on the cards.

The European Commission wants to reduce the region's reliance on bank funding, and securitisations may be a way to create a more diversified financial market where funding and risk is distributed more evenly across the system. Hill pointed out that in pre-crisis Europe, only 2% of securities were defaulting. However, Hill assured any return of securitisation will take a different shape than what we saw before: "We will not be going back to the bad old days of subprime mortgages. Our door will remain firmly closed to the highly complex, opaque and risky securitisation instruments which were part of the crisis."

Keeping Some Skin in the Game

If securitisation is no longer the villain in the story, US subprime mortgage lending still carries much of the blame for sparking the recession. The Dodd-Frank Wall Street reform from 2010 meant that securitisation issuers have to retail 5% of the risk, adhering to the so-called 'skin in the game' rule as mandated by the G20 summit the year before. The requirement is intended to provide an incentive to monitor and control the quality of securitised assets, and align the interests of the issuer with those of investors. The finalisation of the Volcker rule in December 2013, which touches on certain types of securitised products, was a relief for the finance industry because it removed a lot of uncertainty around regulation. This has paved the way for a period of re-emergence:

"The structured finance market is beginning to rebound as the path forward becomes clearer," said Lisa Filomia-Aktas, Head of the Financial Services Office On-call Advisory Services group at EY (formerly Ernst & Young). "The US securitisation market is re-emerging as legislative progress is made and investor

COMPLICATED

Securitisation transactions are very complicated and have multiple participants. A specific law for securitisation is needed.

appetite returns. However, the reaction by banks to the various new requirements is still uncertain. Banks will need to retain interests under risk retention [rules] but will also need to deduct amounts from capital under Volcker and meet liquid coverage ratio requirements." But, added Filomia-Aktas, the US securitisation market is poised to be "a strong contributor" to economic recovery, in spite of these challenges.

While there are many similarities in the approach to reducing the risk in the securitisation markets in the US and EU, the differences reflect the roles these two regions played in the actions leading up to the crisis. In the US, regulation seeks to protect the investor by focusing on moderating the issuer, whereas the EU regulator takes a more indirect approach, looking to protect EU investors from exposure from securitised products issued in any jurisdiction.

According to Peter Green, Partner at international law firm Morrison Foerster, "The European approach reflects the fact that during the financial crisis, European securitisation assets performed well, and that losses suffered were due to exposure to securitised assets from other jurisdictions, such as the US, over which European authorities can have no direct control." The European approach is not without its problems, added Green: "It is difficult for European investors to ascertain whether or not the originator or sponsor is complying with the risk retention requirement."

Fresh Approaches in Asia

Asian securitisation markets have also seen a tentative resurgence in the past few years. In China, securitisation was stopped entirely in 2009 in response to the crisis, but was restarted three years ago as a tool for diversifying financing for infrastructure, agriculture and small businesses. Last year saw Chinese securitisation issuance reach its highest level since its start in 2005; however, there are calls for a stronger legal framework:

"Securitisation transactions are very complicated and have multiple participants. A specific law for securitisation is needed," Ba Shusong, Chief Economist for the China Banking Association and Deputy Director of the Financial Research Institute at the Development Research Centre of the State Council, wrote in a PwC report. "Securitisation is a business across many industries; the cooperation between

regulators and coordination by one single department may be a way out."

Ongoing government support, the accumulation of experience, and growing demand from investors mean the Chinese securitisation market is set to continue growing, according to Vera Chaplin, Managing Director of Structured Finance at Standard & Poor's Ratings Services: "We believe Chinese regulators will adopt a cautious approach to developing the market. We expect regulators to focus on aligning the products with the government's economic and financial market reform initiatives, instead of simply providing new financial instruments."

Chinese regulators have adopted the same 'skin in the game' rule as in the US and EU, Chaplin wrote in 'FinanceAsia': "The administrative initiatives introduced by regulators in China are generally consistent with those in the global market, and have been introduced in parallel with other markets. This suggests that Chinese regulators are planning to develop a local market that operates in line with global operating standards."

However, regulation may not be the only way to remedy securitisation's tarnished reputation. An alternative way to achieve this could be through *Shariah*-compliant structures, noted Dato Dr. Nik Ramlah Mahmood, Deputy Chief Executive, Securities Commission Malaysia. Because Islamic finance rules would prevent outright speculation, securitisation would be prevented from sliding back towards the patterns which led to the financial crisis. "There is a golden window of opportunity for Islamic securitisation to lead the way," Dato Dr. Nik Ramlah said during her keynote speech to the Islamic Financial Services Board in Brunei last year.

She further mentioned that, "By its very nature, Islamic securitisation offers all the benefits of securitisation without some, if not all the weaknesses that led to the subprime crisis." While it is still very early days for the development of Islamic securitisation, Dato Dr. Nik Ramlah highlighted its potential to act as "the catalyst for the revival of the securitisation market". By automatically excluding the more complex structures, such as CDOs, Islamic products would serve as a "natural risk mitigant" for investors.

A Careful, Selective Outlook

On the whole, the return of securitisation appears to be accompanied by a healthy dose of caution - no one wants to risk a repeat of the events leading up to the global financial crisis. But there is also a broad consensus in the financial industry that securitisation is not nearly as bad as it has been made out to be, and it would be foolish to dispose of what is essentially an efficient financing tool. Bringing back the more harmless securitisation vehicles, like ABSs and CLOs, may well be the solution, while at the same time excluding the products more directly linked to the troubled history of this asset class.

Neither is a repeat of overregulation desirable. The responses from US and EU regulators were swift and harsh after the financial crisis hit, resulting in the near-death of the securitisation industry, in an effort to save the overall economy. "This response was perhaps understandable. It is undeniable: what happened with the US subprime market was a disaster. But the problem is that Europe was tarred with the same brush," noted Richard Hopkin, Managing Director of the Securitisation Division of the Association for Financial Markets in Europe. Hopkin pointed to the apt metaphor used by Yves Mersch, Member of the ECB Executive Board, who argued the crackdown of ABSs in Europe had been exaggerated: "This regulation is like calibrating the price of flood insurance on the experience of New Orleans for a city like Madrid."

The question, argued Hopkin in the 'Financial Times', is perhaps not whether securitisation is safe again, but whether the regulatory actions that stifled the industry were too broad. "Securitisation is safe, absolutely, and in Europe they have always been safe. If you look at the historical performance of prime residential mortgage-backed securities in Europe, the default for that asset class over the last seven years has been only 10 basis points." A negative effect of the crackdown on securitisation was a crunch on credit available to small and medium-sized enterprises, which make up 99.7% of all businesses in the EU. A cautious, managed return to securitisation could contribute to lessen Europe's dependence on banks for financing, argued Hopkin, and in turn this could improve the availability of credit and spur economic growth. ✱

■ Jessica Furseth is a freelance journalist based in London.

fuelling risk

WILL THE **DEFLATING OIL SECTOR** BOOM CAUSE A NEW BUST FOR BANKS?

Who are the winners and losers as the oil price keeps falling? On a global scale, the overall effect will make us winners, at least according to Christine Lagarde, Managing Director of the International Monetary Fund (IMF). Lagarde made headlines in December 2014 when she noted that falling oil prices would be a positive factor for the global economy:

"Assuming we have a 30% decline [in oil prices], it is likely to be an additional 0.8% [in economic growth] for most advanced economies," said Lagarde. Speaking at a 'Wall Street Journal' conference, Lagarde listed the US, Europe, Japan and China as economies particularly likely to see an upside, which is the case for most countries who are net importers of oil. A price of USD40 per barrel would mean a likely USD1.3 trillion shifting from producers to consumers through direct savings at the petrol pump, according to estimates from the 'Economist', as households are left with more cash to spend on other goods and services.

But while the global economy may improve overall, there are plenty of countries where the declining oil price will be a negative. Russia, Iran, Venezuela and Nigeria were among exporters highlighted by Lagarde as countries whose economies could become vulnerable if the downward trend continues. Not to mention that the price of crude has declined further since Lagarde made her comments; at the time of writing, prices are down more than 50% since the fall started last June. After five years of price stability, this downward trend has come mainly on the back of

Parallel

There is a stark parallel with the US property market collapse that heralded the start of the 2008 global financial crisis - and upended banks along the way.

improved supply; shale oil production has gone up, and OPEC (Organisation of the Petroleum Exporting Countries) is resisting a cutback on production to shore up prices.

While cheaper oil products has led to more cash for consumers to spend elsewhere, energy companies are feeling the squeeze on their finances. Banks are benefiting from the former, but the latter is causing headaches, as the until-recently stable energy sector had been a

solid source of work for banks after the financial crisis. In addition to lending to capital-intensive energy companies, banks have also been underwriting bonds and advising on mergers. Now, however, the steep decline in the price of crude has changed the financial equations for energy companies, and the stress has started to spread beyond the energy sector to affect the financiers as well.

Oil financing leaves banks vulnerable

In the US, Citi earned USD492 million in revenues from the oil and gas sector last year, representing 11.8% of its total investment banking revenue, according to Dealogic. For Barclays, the energy sector represented 10.7%, followed by JPMorgan at 6.6%, with numerous other banks also similarly exposed. A loan underwritten when oil was priced at USD80 a barrel might have seemed conservative at the time, but as the price edges down towards USD40, that same loan starts to become a risky asset.

Barclays and Wells Fargo are now feeling the heat on their USD850 million funding of the merger of US oil groups Sabine and Forest, completed last summer. Even back then, the falling oil price caused problems with loan syndication, as investors were hesitant to buy it due to the volatile pricing conditions. Barclays and Wells Fargo have been left with losses as high as 40%, according to estimates from the 'Financial Times'.

FINANCIAL EQUATIONS

IN ADDITION TO LENDING to capital-intensive energy companies, banks have also been underwriting bonds and advising on mergers. Now, however, the steep decline in the price of crude has changed the financial equations for energy companies, and the stress has started to spread beyond the energy sector to affect the financiers as well.

Sabine-Forest is only one of a number of oil and gas financing deals from the past few years now causing concern. Energy bonds make up nearly 16% of the USD1.3 trillion junk bond market, according to Barclays, a number more than three times higher than it was ten years ago. But investor appetite has not kept up with this increase, and analysts believe banks may still be sitting on up to half of the outstanding financing from the past few years.

"There is a stark parallel with the US property market collapse that heralded the start of the 2008 global financial crisis - and upended banks along the way," financial editor Patrick Jenkins wrote in the 'Financial Times'. "Those lenders with oil exposure stuck on their books may well be stuck with big losses." Research from AllianceBernstein shows that Wells Fargo and JPMorgan have the highest exposure, having participated in non-investment grade loans of USD37 billion and USD31.7 billion respectively, over the past two years.

There is also a more direct parallel to what is happening to the banks as oil prices decline. When weak oil prices caused Texas to fall into recession in 1986, hundreds of banks had to shut down their operations in the state. "If you are a small bank in Texas or North Dakota, the risk goes well beyond drilling for oil or gas. You funded the mobile homes that workers live in, the doctor's office and other facilities that live off the energy industry," Dick Bove, banking analyst at Rafferty Capital Markets, told 'CNN Money'. "There is no question about the fact that energy is going to be a big issue for banks, particularly the ones closely associated with production areas."

A price blip, or the new normal?

While banks with significant exposure to the energy sector are certainly likely to feel some pain as the oil price stays stubbornly low, executives at major banks have been confident that they are sufficiently diversified to absorb the hit. Jamie Dimon, Chief Executive Officer, JPMorgan Chase, acknowledged to analysts in January that the bank would suffer "slight negatives" due to its exposure to Texas oil towns. But as the lower oil price is also expected to boost consumer spending, JPMorgan Chase should

ISSUE

THERE IS NO QUESTION about the fact that energy is going to be a big issue for banks, particularly the ones closely associated with production areas.

be sufficiently diversified for this to balance out at least some of the hardship, concluded Dimon; hence, the oil price slide is "not going to be a big deal" for JPMorgan.

There is, however, one major uncertainty which may throw a spanner in the works for banks hoping to ride out the weakness: no one knows how far oil prices will fall. Before the oil price started falling in June 2014, it had remained consistently above the USD100 mark since the recession; this was the level which Saudi oil minister Ali Al-Naimi considered an optimum level for balancing the market between producers and consumers.

One factor in the decline in prices is that crude oil production from non-OPEC countries, especially the US, has risen significantly in recent years and created a surplus in the market. Supply exceeded demand by 700,000 barrels per day last November, according to Citi, in part because the US was producing 9 million barrels per day in 2014, almost double its 2008 production. Technological advancements, paired with easy access to bank funding, has made shale oil projects increasingly economically viable in recent years, creating a boom in exploration. Banks were keen to lend to explorers because the oil price was so stable, creating a situation of oversupply that now threatens the financial viability of many of these projects. OPEC, which pumps one-third of the world's oil, has historically stepped in to regulate output in the event of price instability, but so far it has declined to do so.

Iranian oil minister Bijan Zanganeh did however indicate to 'Reuters' that an intervention may be on the cards for OPEC's June meeting, as the weak pricing is starting to become a problem for the less-producing countries: "It seems [OPEC's strategy of not cutting output] does not work well, because prices are coming down," said Zanganeh. "We have not witnessed stable situations on the market." However Saudi Arabia, which as the largest oil producer is the de-facto leader of OPEC, has so far resisted suggestions to cut production to shore up prices.

Nearing the pricing bottom?

Especially shale oil producers, whose operations are primarily financed with debts, may struggle to refinance their loans should the weakness continue. On that note, there is one potential upside in all this for banks: "At times of high commodity price volatility, mergers and acquisitions activity can pick up. This might be a good time for those with available cash to acquire distressed junior players," said Hassan Bashir, Assistant Manager in the Energy & Resources audit practice at Deloitte. This has already started to happen: Ophir completed its acquisition of Salamander Energy in March, after Repsol acquired Talisman in December.

Another financial effect of oil prices staying weak, noted Bashir, is that companies could return to hedge accounting, something that has not been necessary with prices above USD100 per barrel: "Especially large [oil producers] have continued to pay for price hedging instruments as 'insurance' against a price fall. Lower prices may mean more producing companies, including smaller ones, could resort to 'locking down' their output with hedging instruments."

But the big question is whether the current weakness in the oil price is a temporary situation, or part of a long-term structural adjustment. Bashir pointed to analyst forecasts that indicated we may see a recovery back up to USD80 per barrel by the end of 2017. In April, Barclays analysts said in a research note they are hopeful we are nearing rock bottom: "We expect the support to oil from temporary factors to fade away in [the second quarter], and that a massive US crude oil stock build will find its way back to the global market in the form of products in the months ahead." Middle East geopolitics remain an uncertainty factor, added Barclays, but instability would create a risk premium which could in turn support a price recovery.

Mixed blessings for Asia

Looking at the region as a whole, the fall in crude is generally positive also for Asian countries. Oil accounts for up to 18% of total imports in Asia, excluding Japan, or about 3.4% of total GDP, according to Bank of America Merrill Lynch. Similarly to Malaysia, Indonesia has been able to scrap its petrol subsidy due to the price drop, freeing up cash for a range of economic and administrative policies. This has the potential of raising Indonesia's GDP to 5.5% this year, up from 5.1% last year, according to Fitch Ratings.

But while the overall effect of the weak oil price is a negative for Malaysia, there are some benefits: the country has been able to cut its fuel subsidies, freeing up funds to counteract some of the negatives. The decades-old subsidy on petrol and diesel was abandoned in December, introducing a more flexible fuel pricing system.

Coupled with the recovery in global demand for goods and services, falling oil prices should boost GDP growth in emerging Asian countries to 4.7% this year, up from an estimated 4.3% last year, according to consultancy Capital Economics. The overall effect is likely to be a "confidence multiplier" which will trigger to higher-than-expected growth. According to Glenn Maguire, economist at Australia & New Zealand Banking Group, quoted in 'Bloomberg View': "We think this will be the defining, constructive dynamic that underpins Asian growth in 2015 and most probably 2016."

But as a major oil-exporting country, the price weakness is a negative factor for Malaysia, and the same is the case for fellow oil-exporting ASEAN-members Myanmar and Brunei. In January, the decline in crude prices meant Malaysia had to cut its annual growth forecast, now at 4.5% - 5.5% this year, down from a previous estimate of up to 6%. In addition, the fiscal deficit is expected to grow to 3.2% of GDP. But Malaysian Prime Minister Dato' Sri Mohd Najib Tun Abdul Razak was quick to downplay concerns that the country is at any risk of economic crisis: "The government has been vigilantly monitoring the situation. We are not in crisis," said Najib in a nationally televised address. "We are taking pre-emptive measures following the changes in the external global economic landscape which is beyond our control. This is to ensure that our economy continues to attain a respectable and reasonable growth."

The revised Malaysian budget assumes crude oil will trade at approximately USD55 per barrel, a number just below the current USD60 level. Analysts at Bank of America Merrill Lynch have suggested Malaysia may see its oil-related revenue fall to 3.1% of GDP in 2015, a significant drop from last year's 5.9%. But while the overall effect of the weak oil price is a negative for Malaysia, there are some benefits: the country has been able to cut its fuel subsidies, freeing up funds to counteract some of the negatives. The decades-old subsidy on petrol and diesel was abandoned in December, introducing a more flexible fuel pricing system. This has been hailed as a "positive step" by Moody's Investors Service, due to the link between the subsidy and the country's fiscal deficit.

While resilient exports will support growth, Bank Negara Malaysia stated in its annual outlook that economic expansion is likely to be supported by a number of domestic factors, including sustained expansion of services, manufacturing and construction. While a number of central Asian banks have cut interest rates to boost growth in the past year, Bank Negara Malaysia has kept interest rates stable in the past six months. Speaking at an ASEAN Finance Ministers and Central Bank Governors meeting in March, Bank Negara Malaysia Governor Tan Sri Dr. Zeti Akhtar Aziz said: "Right now, our interest rates are accommodative, and very supportive of the economy. We will review conditions but right now our economy is on a steady growth path and the interest rates support that growth trajectory." ✱

■ Reporting by the *Banking Insight* Editorial Team.

Transform

ASEAN Economic Community (AEC), the union aiming to "transform ASEAN into a region with free movement of goods, services, investment, skilled labour, and freer flow of capital". Though the region's convergence will be long-term, much effort has been done to pave the way towards the end-goal.

TOWARDS ASEAN FINANCIAL INTEGRATION: Evolution, *not* Revolution

MUCH WORK REMAINS to be done to promote ASEAN integration, in order to realise the ASEAN Economic Community's vision of a single market which will catalyse financial development and higher regional economic growth.

For ASEAN citizens, the end of 2015 marks the long-awaited deadline for financial integration of the ASEAN countries through the ASEAN Economic Community (AEC), the union aiming to "transform ASEAN into a region with free movement of goods, services, investment, skilled labour, and freer flow of capital". Though the region's convergence will be long-term, much effort has been done to pave the way towards the end-goal by the ten member countries making up the Association of Southeast Asian Nations (ASEAN).

According to Cedric Chehab, Head of Asia at BMI Research, the AEC is "more of an evolution rather than a revolution". But economic growth will continue regardless of whether ASEAN meets its self-imposed deadline. ASEAN's collective GDP is expected to see a compound annual growth rate of over 10% in the years to come, growing from USD2.4 trillion in 2013 to over USD6.2 trillion in 2023. "It is quite difficult to find other regions with as strong growth prospects as ASEAN."

Commitment Affirmed

As of March 2015, the ASEAN Finance Ministers remained optimistic of making the year-end deadline, issuing a joint statement with their Central Bank Governors: "We remain committed to achieving the goals of the AEC in 2015. We affirmed our commitment to develop plans for post-2015 ASEAN financial integration that will be built upon our agreed broad framework."

Greater financial integration will help facilitate convergence and strengthen growth as well as accelerate financial deepening throughout the region. A critical milestone towards greater financial and economic integration is the ASEAN Banking Integration Framework (ABIF), which was established by the Central Bank Governors of Malaysia and Indonesia last December. The goal of ABIF is to achieve a more integrated banking market, while promoting financial development and higher regional economic growth.

The financial integration effort on capital markets is overseen by the ASEAN Capital Markets Forum (ACMF), chaired by Datuk Ranjit Ajit Singh, who is also Chairman of

DEVELOPMENT

The goal of ABIF is to achieve a more integrated banking market, while promoting financial development and higher regional economic growth.

Securities Commission Malaysia. The outline for building a regional market infrastructure is set out in the ACMF Implementation Plan, which contains three elements: the outline for a so-called ASEAN exchange alliance and governance framework; goals for promotion of ASEAN as an asset class; and the intent for further strengthening of the regional bond market. The ACMF has already developed several new guiding frameworks aimed at streamlining financial services and capital transactions, which will eventually be used by all the ASEAN markets.

Unlike the European Union (EU), the AEC will not be pursuing a single currency. The region remains too diverse, at least for now. However, during the March ASEAN Finance Ministers' and Central Bank Governors' meeting in Kuala Lumpur, Bank Negara Malaysia Governor Tan Sri Dr.

Zeti Akhtar Aziz highlighted how the region can still work together without a single currency: "We are going for financial integration to achieve the same objectives of greater collective growth." Her comments echoed those of former Indonesian Finance Minister Dr. Mohamad Chatib Basri: "A single currency is probably the issue we really have to think carefully over. You can still have the integration and your own currencies."

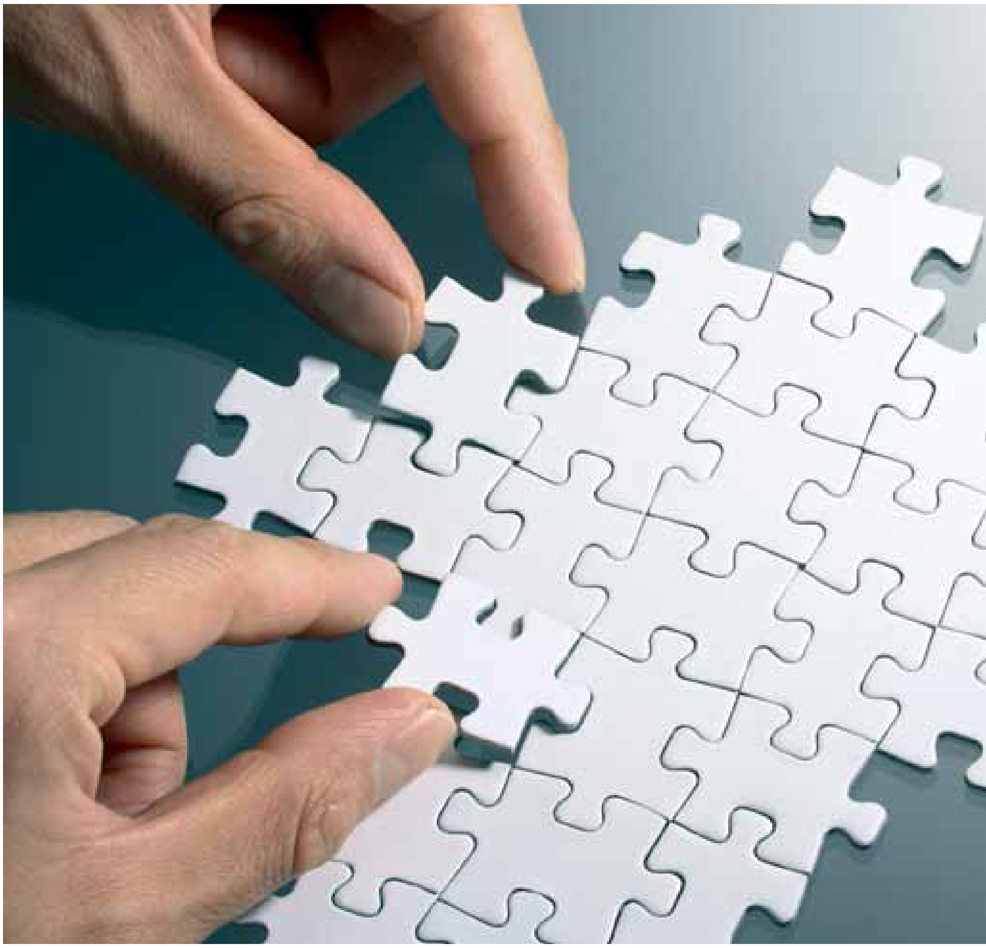
Obstacles to Integration

In November 2014, ASEAN reported having made 'good progress' towards integration, reaching 88% completion of three of the AEC pillars: the economic, political-security, and socio-cultural communities. But major regional differences remain, some of which will require constitutions to be rewritten before they can be resolved. Other obstacles are rooted in economic differences; GDP per capita in Brunei was over USD35,000 last year, compared to Indonesia, Malaysia, Philippines and Thailand where it ranged from USD2,700 to USD10,400, according to ASEAN data.

Then there are obstacles of a more cultural nature. For example, the working language in ASEAN is English, but low proficiency in the language across the region makes it difficult for the average citizen to follow the agenda. According to Ji Xianbai, Associate Fellow at European Union Centre in Singapore, in 'The Diplomat', "Narrower national interests [often] trump a broader regional vision, while short-term thinking outweighs long-term benefits," A key goal of the AEC is the free flow of goods and services, which requires the removal of restrictions in industries such as transport, healthcare, tourism and aviation. But, to name one example, Indonesia has refrained from ratifying the ASEAN Multilateral Agreement for Full Liberalisation of Air Freight Services, in order to protect local operators from regional competitors.

"It seems the entrenched 'ASEAN Way' of non-interference in domestic affairs in politics risks being translated and relegated to non-recognition of mutual interest in economics," Ji wrote. "In the absence of strong regional institutions and sanction mechanisms for non-compliance and non-cooperation, only peer pressure incentivises ASEAN member states to respect community commitments."

When discussing the progress towards the AEC, it is worth noting that the work only started in 1997, on the 30th anniversary of the establishment of the ASEAN community. In comparison, it took almost half a century to create the European Union (EU), a community which has continued to expand its remit continually since its establishment in 1993. The EU is also a case of evolution, not revolution, and its success is the result of financial investment in its inner workings. For example, the European Commission employed 34,000 people as of 2012, compared to 300 people at the ASEAN Secretariat. The EU translates all its documents into every



INEQUALITY

One of the AEC goals - the reduction of tariffs on physical goods trade amongst ASEAN countries - has made good progress. Still, the inequality between the countries means transitional agreements may still be required to protect some of the economically weaker countries.

member language, whereas an ASEAN Secretariat survey from 2013 found that three out of four ASEAN citizens lack even a basic understanding of the work of the English-dominated ASEAN.

"Raising ASEAN awareness [among its citizens] with the more effective use of communication channels would be conducive to the establishment of the AEC," said Ji. "Greater public understanding of the AEC would encourage more people to take advantage of what after all would be a vibrant single market encompassing a GDP of USD2.4 trillion and 620 million people."

Regional Differences and Strengths

As ASEAN ranks as the seventh largest global economy as a whole, increased collaboration will represent significant advantages for the region. Businesses across ASEAN, not to mention internationally, are certainly catching on to this fact: "The level of awareness about how companies can benefit from ASEAN and AEC's existence is starting to take off," said Vinod Kalloe, Head of International Tax Policy at KPMG Meijburg & Co, in a report on the business impact of the AEC. "Up to now, ASEAN governments have been focusing on reaching the AEC 2015 targets and talking to stakeholders about sensitivities and perhaps protecting certain domestic interests. However, more attention should be given to informing the public on what benefits and opportunities AEC could bring for cross-border trade and investment."

Economic integration is at the forefront as Malaysia is the Chair of ASEAN in 2015, along with regional community-building. Malaysia will also have the important task of formulating the 'post 2015' roadmap for the AEC over the next decade. Today, however, even a superficial look at the ten ASEAN member countries conveys a mixed impression, as the region continues to demonstrate vastly different levels of preparedness.

While Singapore remains the regional hub for foreign direct investment to the region, other ASEAN countries are primed to establish themselves as hubs for a variety of other descriptions. Malaysia's tax incentives and other concessions mean the country attracts foreign companies looking to do business, while Thailand has become a centre for automobile and industrial research and development activities. Indonesia is progressing in sensitive production sectors, while the Philippines should benefit from AEC integration due to the country's high proficiency in English, which enables business process outsourcing. Vietnam is on track to be compliant with the ASEAN free trade obligations by the year-end deadline, while Laos has increased investment interest from foreign countries and expanded its economic presence particularly in the manufacturing, transport, agribusiness and construction sectors.

One of the AEC goals - the reduction of tariffs on physical goods trade amongst ASEAN countries - has made good progress. Still, the inequality between the countries means transitional agreements may still be required to protect some of the economically weaker countries. Foreign investors are watching especially Myanmar with interest, as the country is the world's only newly opened market. The steady easing of restrictions will improve the flow of credit to the private sector in Myanmar, but the transition period remains a sensitive time:

"Myanmar, Cambodia and Laos should be supported in reaching their targets and to a certain extent, perhaps protect vulnerable domestic sectors with transitional arrangements, as has been done in the European experience many times before," noted Kalloe. He concluded that the widely differing levels of economic development mean "the best opportunities for all of the ASEAN countries exist where they each manage to specialise in certain industry and service sectors rather than compete for all of them."

Banks' Response to Regional Development

As ongoing reduction in cross-border tariffs and regulations has resulted in a sharp rise in regional trade, financial groups have been busy putting frameworks and initiatives in place to promote development of the ASEAN region. Having said that, cross-border activity is likely to get its biggest boost following the implementation of the ABIF in 2020. Under the ABIF, any ASEAN bank will be considered a local bank across all ten member nations, a move which should strengthen ASEAN banks against international competitors.

The ACMF initiative also contributed to the increase in cross-border transactions, when it announced last year that the ASEAN CIS Framework had initiated cross-border offerings of Collective Investment Schemes (CIS). The ASEAN CIS framework allows fund managers in

Malaysia, Singapore and Thailand to offer CIS services to investors in any of the three countries, under a streamlined authorisation process.

Authorisation for the first five funds to qualify as CIS under the ASEAN framework for cross-border offerings was issued in March. In the same month, the ACMF also established a Streamlined Review Framework for the ASEAN Common Prospectus, aimed at raising the region's attractiveness as a fundraising centre. The Framework, which should be implemented by the third quarter of this year, will mean a quicker, more streamlined route to market for any issuer of equities or plain debt securities. Furthermore, the ACMF has endorsed the ASEAN Capital Markets Development Programme, which aims at extending mutual assistance to all markets within the region in order to facilitate cross-border market development.

"Currently, the level of integration in ASEAN's banking sector is actually relatively limited," said Thiam Hee Ng, Senior Economist at the Office of Regional Economic Integration at the Asian Development Bank in 'East Asia Forum'. The share of ASEAN's banking assets held by regional banks is generally smaller than global banks, noted Ng: Indonesia has the highest share of banking assets held by other ASEAN banks at 15%, followed by Malaysia at 9%. "The prospects of stronger competition from other ASEAN banks could push banks to merge as they look to strengthen their domestic position and better compete against regional rivals," Ng wrote. This has already started to happen, as Malaysian financial institutions CIMB Bank, RHB Bank and Malaysian Building Society Berhad (MBSB) made headlines by entering into merger talks last year, although these were abandoned in January.

"The opportunity to be a part of a mega Islamic bank was an exciting one for us," President and Chief Executive Officer of MBSB, Dato' Ahmad Zaini Othman commented as the merger talks ended. This statement echoed the hope that the establishment of bigger financial players can help the region become a banking powerhouse, where players have the resources to expand to other countries. While cross-border investment, trade and labour have improved as restrictions have eased, blocks do still exist:

"It is still relatively more expensive to trade with each other than to trade with some of the partners outside ASEAN, [such as those in North America and Europe]. This on its own proves that borders still exist [in this region] and we have not done enough

to remove their effects," said Mia Mikic, Economic Affairs Officer with the Trade and Investment Division at UNESCAP. In addition to tariff barriers, other reasons for the high costs of trade within ASEAN are due to the poor transport and digital infrastructures, Mikic said during a Federation of ASEAN Economic Associations meeting in Bangkok in March.

Still, there are advantages to maintaining at least some lines between the financial players in the ASEAN countries, noted Ng: "Closer integration can give rise to new risks. As the region's banking system becomes more tightly knit, there is potential for contagion and spillover effects. Hence, the authorities should work together to strengthen regulatory and supervisory cooperation frameworks to deal with potential spillovers."

This sentiment was echoed by Takehiko Nakao, President of the Asian Development Bank. At the March ASEAN meeting in Kuala Lumpur, he highlighted the 'risks' of ASEAN financial integration due to greater cross-border capital flows which could make countries more vulnerable to financial crisis through contagion. "Closer coordination of monetary policies among ASEAN members" may become necessary, said Nakao, while "ASEAN may also wish to make arrangements for cross-border resolution of distressed banks."

Still, added Nakao, the different levels of development of ASEAN countries' financial sectors and markets remains a key obstacle for completing the financial integration. Therefore, efforts by financial institutions to expand into other member countries should be supported by coordinated policy actions.

Because the risks are minor compared to the incentive to facilitate greater ASEAN financial integration: "Opening of the ASEAN internal market, for other ASEAN countries, will likely be followed by gradual opening of markets for non-ASEAN trade and investment as the whole region is keen to be part of the global market and production base," argued KPMG Meijburg & Co's Kalloe. "The full elimination of both tariff and non-tariff barriers is still the main target, and the expectation is that all ASEAN countries will achieve these goals within a few years providing the basis for the AEC single market." ✱

■ Reporting by the *Banking Insight* Editorial Team.

ABOUT THE ABIF

THE GOAL OF THE ASEAN BANKING INTEGRATION FRAMEWORK (ABIF) IS TO ACHIEVE A MORE INTEGRATED BANKING MARKET BY 2020, AS WELL AS TO PROMOTE FINANCIAL DEVELOPMENT AND REGIONAL ECONOMIC GROWTH.

The precursor to the ABIF was signed in December 2014 by Bank Negara Malaysia, Bank Indonesia, and the Indonesian Financial Services Authority. "For Indonesia and Malaysia, greater financial integration has the potential to significantly facilitate greater bilateral trade and cross-border investments between our respective countries, and thus contributes to growth that will be mutually reinforcing," said Bank Negara Governor Tan Sri Dr. Zeti Akhtar Aziz at the time of the signing.

In addition to setting out the definition of what constitutes a qualified ASEAN bank, the ABIF also enables ASEAN countries to create agreements where they can establish banking operations in each other's jurisdictions. "The new ABIF creates a mechanism for greater regional access for well-capitalised and well-managed ASEAN banks, which will improve their long-term competitiveness and support their expansion across the ASEAN region," Rajiv Biswas, Asia-Pacific Chief Economist at analytics firm IHS, told 'Deutsche Welle'. "This is an important positive step for the long-term growth of ASEAN banking institutions, and is expected to improve their competitiveness against foreign banks from other countries."

In terms of risk management, the implementation of ABIF will require regulatory supervision across ASEAN if it is to prevent single-country financial instability from spilling across to the rest of the region. But the ABIF is an important step for reaching the financial integration goals of the AEC, as improved access to corporate credit, commercial lending and trade finance will boost regional economic development.

SAFEGUARDING PRIVATE RETIREMENT SCHEMES

DATO' STEVE ONG

THE PRIVATE RETIREMENT SCHEME (PRS) INDUSTRY IS STRUCTURED WITH A COMPREHENSIVE AND ROBUST STATUTORY AND REGULATORY FRAMEWORK TO PROTECT MEMBERS' INTERESTS IN THE PRS SCHEME. THE PRS FUNDS MUST BE PROFESSIONALLY MANAGED ACCORDING TO APPROVED INVESTMENT MANDATES AND OBJECTIVES. LAST BUT NOT LEAST, INDIVIDUAL MEMBERS TOO NEED TO PLAY A PROACTIVE ROLE IN MAKING INFORMED DECISIONS TO SELECT AND MANAGE THEIR PRS FUNDS TOWARD MEETING THEIR RETIREMENT OBJECTIVE.

As the PRS or Private Retirement Scheme industry seeks to be the third social security pillar to provide for additional retirement funds, it needs to engender public confidence that the scheme is well- regulated, supervised and developed over time. Hence, a multi-tier risk governance structure has been implemented to ensure adequate and proper protection of PRS members' interest with proper segregation of roles and responsibilities of all key parties involved.

Firstly, all key parties involved must be licensed under the Capital Markets Security Act (CMSA), under the regulatory purview of the Securities Commission Malaysia (SC). The SC grants the approval for PRS Providers, distributors, trustees, and the Private Pension Administrator (PPA) to operate in the PRS industry. Only licensed parties are approved to participate in the PRS.

Secondly, a single PPA, unique only to Malaysia, is established as the central administrator to provide lifetime efficient account administration, ongoing members' servicing, information and education to PRS members. The PPA is an independent organisation which serves and protects PRS members' interests.

Thirdly, there are only eight licensed PRS Providers approved by the SC, based on a set of stringent guidelines, to operate as the Providers for the PRS Scheme. These Providers were selected based on their investment management capability, experience and track record in managing public funds. Providers' key duties and responsibilities include the marketing,

administration and investment management of PRS funds. Furthermore, Providers are also required to establish their risk management and compliance structure to ensure they meet all regulatory standards and guidelines.

Fourthly, the guidelines require that an independent Scheme Trustee be appointed to oversee the management and operations of the Scheme in accordance to the trust deed and disclosure documents. In addition, the trustees also act as ‘custodian’ of monies invested in PRS Funds, which provides proper segregation of custodianship and the Providers’ management of the PRS Funds.

Last but not least, the SC is responsible for the supervision of all parties involved to enforce regulations and compliance to PRS Guidelines, which sets the proper requirements and conduct to safeguard the interest of members of PRS Schemes.

The above regulatory framework forms the foundation to provide public confidence and safeguarding of PRS funds. However, there are other safeguarding aspects which together with the regulatory framework seek to make PRS as safe as possible for long-term retirement savings and investments. These include the investment management aspects of PRS funds and how risk is managed whilst pursuing return opportunities. These risk management or safeguarding strategies include collective investment, portfolio diversification, professional fund management, and fund performance monitoring.

Portfolio Diversification

Portfolio diversification is another strategy for risk management. PRS funds are invested in a portfolio

Collective Investment Scheme (CIS)

The PRS uses the Collective Investment Scheme (CIS) structure that pools together investments for PRS into a portfolio of assets to achieve the mandate and objectives of the fund. The CIS structure makes it possible and affordable for the public to save and invest their retirement savings by sharing in the underlying assets through unit ownership in the PRS fund.

The CIS structure makes it possible and affordable for the public to save and invest their retirement savings.

Each PRS fund is regulated by its respective mandate and objectives documented in the fund's Disclosure Document and Product Highlight Sheet which dictate how a fund should be managed and what underlying assets it can invest in. The Disclosure Document and Product Highlight Sheet of a PRS fund must secure the approval of the SC before PRS funds are offered to the public.

In addition, PRS Funds are safeguarded with restrictions on the types of investments and concentration limits (e.g. investment in a single asset must not exceed 10% of the fund's Net Asset Value) which minimise the inherent risks of PRS funds. Furthermore, PRS funds are closely monitored by independent trustees to ensure that investment managers fully comply with the mandated requirements and investment restrictions of the fund.

Professional Fund Management

PRS funds are managed by licensed and professional fund managers. Their job is to generate potential returns while managing the fund's risks based on the mandate and objectives of the fund. Fund managers have to be licensed by the SC to ensure that they have the qualifications and experience to manage PRS funds.

The fund manager has the responsibility, investment knowledge and market insights to manage the fund performance through the underlying assets' performance vis-a-vis market outlooks and sentiments. As PRS funds are primarily invested for the long-term, portfolio managers can take a longer market view in managing market volatilities and opportunities.

Employing full-time professional fund managers to manage the performance of the PRS funds makes it easy for the public to save and invest for their retirement, without requiring them to do their own research.

of diversified underlying assets as prescribed by the mandate and objectives. Diversification helps to minimise risk and is imperative to smooth out unsystematic risk events in a portfolio so the positive performances will neutralise the negative.

Each PRS fund has its own asset allocation of underlying assets (be it stocks, bonds or money market instruments) to generate the potential returns of the fund. For example, the asset allocation of a fund can be 70% invested in equities and 30% in fixed income and money market instruments. There is no simple formula to find the perfect asset allocation for every individual. But getting it right can mean finding the right risk balance and return. Whilst the fund is being managed to generate its potential returns, the asset allocation diversifies the portfolio risks by 'not putting all your eggs into one basket'. PRS funds are therefore invested to potentially optimise returns while managing the fund's portfolio risks.

There is no simple formula to find the perfect asset allocation for every individual. But getting it right can mean finding the right risk balance and return.

Monitoring Fund Performance

Investment performance is subject to market volatility and opportunities. While fund managers endeavour to optimise PRS funds' performance, it is important that PRS members should also take responsibility in monitoring the performance of their funds.

PPA has made it easy for members to access PRS fund performances which are uploaded and reported daily by independent fund researcher, Morningstar. PPA encourages members to monitor their PRS fund performances at least on an annual basis, and to regularly review their fund managers. Consistent reviews can ensure that retirement objectives are on track and enable corrective measures, if necessary.

The Informed PRS Contributor

At the same time, the informed PRS contributor plays a pivotal role in managing their PRS funds – and their risks - towards achieving their retirement objectives. To start with, an individual PRS contributor plays an important role in the selection of PRS funds to invest in. This is the starting point of committing money into the chosen PRS fund. Hence, the selection decision should be carefully thought out and made via an informed process as contributors are putting their monies on investment risks associated with the chosen fund. Since PRS funds are long-term investments, contributors should pay attention to the adage 'caveat emptor' or 'let the buyer beware', lest they make an inappropriate decision which may lead to dire consequences.

PRS contributors take the first step in managing their investment risks by making an informed decision with regards to investing their contributions into an appropriate fund that will achieve the desired retirement objective. One should adhere to the old saying of 'begin with the end in mind', to establish the purpose for investment, which can then be translated into investment objectives. Without clarity on accomplishing

CONSEQUENCES

SINCE PRS FUNDS are long-term investments, contributors should pay attention to the adage 'caveat emptor' or 'let the buyer beware', lest they make an inappropriate decision which may lead to dire consequences.

the desired end in mind, investing decisions will often be influenced by perceptions and assumptions which may result in unsuitable investments. This starting point of investing with a purpose is critical as it will drive subsequent decisions on risk-taking, desired returns, investment tenure, and ultimately the choice of funds and underlying assets to achieve the investment objectives. It is therefore imperative that PRS contributors spend time doing their 'retirement homework' or due diligence in order to establish a proper and suitable plan for their retirement before making their decisions on investing their funds. PRS contributors can access PPA's website *www.ppa.my* to obtain PRS information and advice on how to get started with PRS, or alternatively to seek out a registered PRS Consultant for advice.

The selection decision involved with choosing PRS funds is fraught with emotional bias as the desire to achieve high returns, together with the complexities of making an informed decision to place contributions into an appropriate PRS fund, may result in the unsuitable choice of a PRS fund. The emotional bias involved in making investment decisions is often influenced by a 'greed and fear' attitude, where market volatilities have a direct influence on the individual's perception of risks and returns opportunities. It has been well-researched and documented in ten fields of behavioural finance, that emotional responses often play a significant part in the investment decision process.

To mitigate the influence of emotional responses to market movements, PRS contributors should consider the following when deciding on their investment:

- As in all long-term decision making, the starting point to commit to long-term savings and investments should be taken based on a plan to accomplish the desired retirement funding outcome.
- PRS offers a choice of Providers and funds which serves to diversify investment risks, by not 'putting all your eggs in one basket'.
- Regular monthly contributions mitigate market volatilities through 'dollar cost averaging' your investments and reducing market entry and timing risks.
- PRS are ideally suited for long-term investing, to generate growth and/or income requirements.
- Rebalance the PRS funds when necessary, taking into account changes in life-stage situations and fund performance expectations.

Crafting and implementing a proper retirement plan also provides a roadmap for ongoing monitoring and review of contributors' PRS funds' performance.

MONITORING

A KEY MISTAKE that investors often make is that they 'invest and forget and regret' at the end of their investment period. Ongoing annual monitoring and review is part of ensuring that the retirement plan is on track and that any performance deviation is flagged and attended to.

As the journey towards retirement is long, contributors should pay attention to monitoring the performance of their funds to ensure they achieve the desired risks and returns expected. At the very least, contributors should review their PRS funds on an annual basis to ensure that their performance is on track and up to expectations. A key mistake that investors often make is that they 'invest and forget and regret' at the end of their investment period. Ongoing annual monitoring and review is part of ensuring that the retirement plan is on track and that any performance deviation is flagged and attended to. PRS offers contributors the choice and flexibility to switch their fund if they underperform expectations and/or even transfer their funds to another Provider.

Aside from fund performance issues, conducting an annual review will also highlight any changes to the contributor's personal situations which may necessitate changing the investment objectives or risk profile of the funds. This will ensure that the contributor's retirement and investment objectives are aligned and not mismatched. To assist PRS contributors in monitoring their PRS funds, PPA provides 24/7 access to their PRS accounts with up-to-date reporting on funds' performance, consolidated reporting of all PRS funds, and an annual consolidated account statement. Part of PPA's responsibilities is to provide all the necessary infrastructure, information and education to make self-monitoring of PRS funds as easy and convenient as possible for PRS members. This is in line with the PPA motto of: "We are here for you." ✱

■ Dato' Steve Ong is CEO of the Private Pension Administrator (PPA), the central administrator for the Private Retirement Scheme (PRS). The PPA is tasked by the Securities Commission Malaysia to promote the growth of the PRS industry, create general awareness and educate the public on retirement saving. The PPA also works to protect the interests of PRS contributors.

THE NEXT 'BLACK SWAN' EVENT FOR THE FINANCIAL SERVICES INDUSTRY IS PREDICTED TO COME FROM CYBERSPACE, FOLLOWING A SUCCESSION OF ATTACKS ON FINANCIAL PLAYERS. IS THE INDUSTRY RAMPING UP AGAINST CYBERCRIME? AND WHAT ARE REGULATORS DOING GLOBALLY TO IMPROVE CYBER-GOVERNANCE?

Preparing *for* Cyberggeddon

PREETHA NADARAJAH

Cybercrime is estimated by the Washington think tank, the Center for Strategic and International Studies, to cost the global economy a tremendous USD445 billion a year. Referring to any crime that involves a computer and a network, cybercrime can be borderless, remote and faceless.

The miscreants range from cyber terrorists, 'hacktivists', state-sponsored or organised crime groups who attempt breaches for financial gains, intelligence espionage, in support of an ideology, or simply for fun. Alarmingly, state-sponsored cybercrime is on the rise and should be of particular concern to the financial services industry as one means of crippling any country in this increasingly connected and globalised world is to damage either the financial services industry or communications infrastructure, or both.

Increased Smartphone Banking

"In developed Asian markets, Internet banking is now near universal and smartphone banking has grown more than threefold since 2011. In emerging Asian markets, the trend is similarly dynamic, with about a quarter of consumers using digital banking services but a fivefold growth in smartphone banking," stated McKinsey's Digital Banking in Asia research report.

The flipside of convenient banking on-the-go is the security threat that it poses. There has been acceleration in the growth of infections related to mobile devices, with an increase of 25% in 2014, compared with 20% in 2013. Alcatel-Lucent estimates that 0.68% of mobile devices globally, i.e. 16 million devices, are infected with malware.

HOW CYBERCRIME AFFECTS BANKS

The increasing use of technology in the financial services industry has not only revolutionised the services provided and the operations of the financial services industry, but has also resulted in an increased cybersecurity 'attack surface'. 'Network World' defined this as the entire expanding internal and external IT infrastructure, which should be viewed as a holistic attack surface. The predominant technology drivers have been the increased use of smartphones leveraging increasingly

faster underlying telecoms infrastructure, and the increased pooling of shared IT resources in centralised datacentres, to name a few. These have also resulted in more stakeholders - who are part of the overall supply chain - delivering the final product and services.

With more devices being connected to the Internet compared to human beings by 2020 with the Internet of Things (IOT), i.e. 50 billion devices versus 8 billion people, the attack surface will only ever increase with time.

Malaysia is among the top ten countries most hit by e-banking malware and six Asian countries make up more than a third of the world's impacted incidents of e-banking malware. The unfortunate reality is that smart device subscribers are typically unaware of security threats on these devices and have unrealistic expectations that telecom service providers will protect the mobile devices. The 2014 Zeus banking malware attack in Malaysia that resulted in losses of RM60,000 to Ukrainian scammers, has however increased consumer awareness of this specific threat.

"Maintaining security for threats such as online banking malware is a shared responsibility. It does not rest on the bank or telco alone, but on the consumers also. It is the user's responsibility to keep the devices they use to access bank services (such as online banking sites) safe from malware infection. This requires a good security solution and online banking practices for users, especially since schemes that involve online banking malware often take advantage of vulnerabilities within the system, or in the customers themselves through social engineering," stressed JM Hipolito, TrendLabs Technical Marketing Project Lead, the research arm of Trend Micro, a global leader in IT security.

Dependence on Other Stakeholders - Telecoms Technology

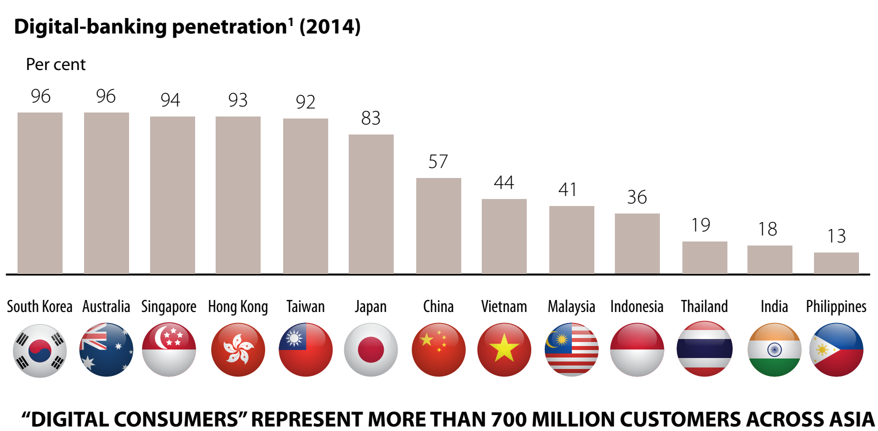
Numerous other security vulnerabilities are introduced within the end-to-end infrastructure outside of the control of the financial institution. For example, with the introduction of the Long Term Evolution (LTE) telecoms technology which provides faster Internet connectivity for mobile phones, data is transmitted as clear text, i.e. without encryption, as part of the mobile backhaul network.

Although there are telecoms standards providing guidelines to secure (encrypt) these interfaces, these standards are not always adopted and prioritised to be addressed by the telecoms service provider, especially in developing markets where clear regulations are not in place and also given other higher business priorities. Heavy Reading forecasts that the proportion of the world's LTE sites that will be secured will grow from 15% at the end of 2013 to 53% by the end of 2017, implying that about half of the LTE sites will remain unsecured.

The Zeus banking malware surfaced in 2007, but hit the limelight in Malaysia in 2014. There may be a similar lag for the LTE security vulnerabilities in developing countries before they receive a rude awakening. Till then, mobile banking on LTE networks remains a ticking time-bomb for the consumers who will increasingly and obliviously continue to use their smart devices for mobile banking.

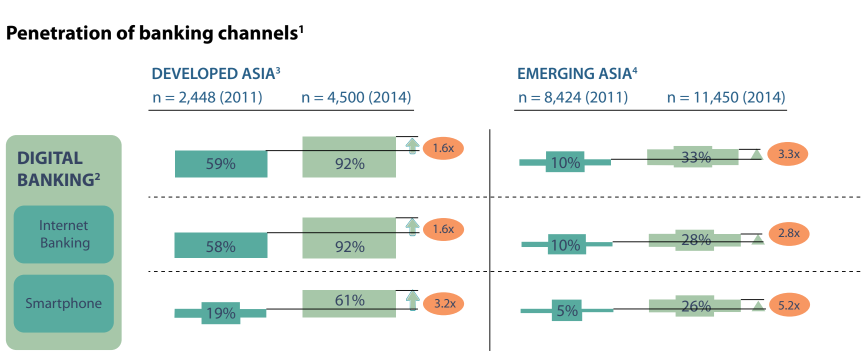
The challenge in this space is that the security compliance or regulations with regards to the underlying

FIGURE 1: Digital consumers represent a sizeable population in most markets.
Source: McKinsey Asia Personal Financial Services Survey, 2014.



¹ *"Digital Banking" penetration is defined as the number of users of internet or smartphone banking divided by total banking consumers in each country, only urban consumers are included*

FIGURE 2: There has been a significant increase in the use of digital-banking channels from 2011 to 2014.
Source: McKinsey Asia Personal Financial Services Survey 2014.



1. *Penetration based on whether respondent uses the following channels or not.*
2. *Digital - banking penetration refers to respondents who say yes to either using internet banking via pc or smartphone.*
3. *Australia, Hong Kong, Japan, Singapore, South Korea and Taiwan.*
4. *China, India, Indonesia, Malaysia, Philippines, Thailand and Vietnam*

infrastructure or devices used to provide the end-to-end digital-banking service is not owned solely by the financial services industry, but has reliance on various stakeholders in the telecommunications industry – from the Internet Service Provider (ISP), to the smart devices or component manufacturer (Samsung, Apple, Gemalto, etc.), and the mobile application providers, to name a few.

To fight cybercrime, in addition to regulations concerning an individual firm's resilience to cyber threats, there also needs to be top-down direction from the government mandating cross-industry inter-working of various regulatory bodies and regulations to improve overall strength and preparedness for national security.

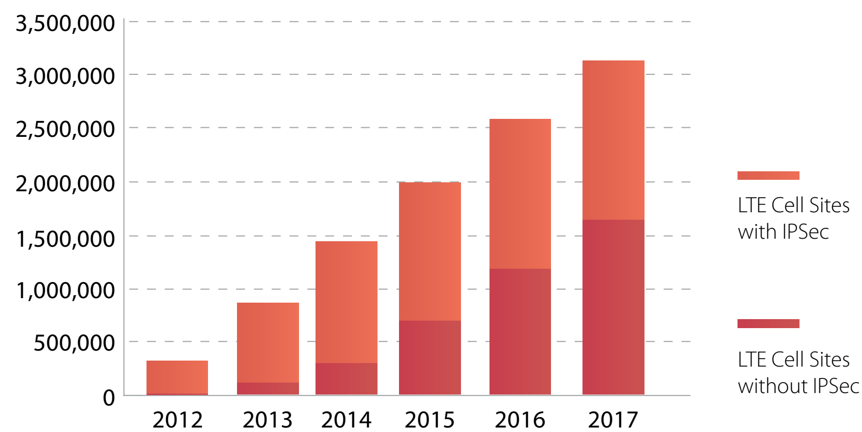
The IT Department's Nightmare

Combining technology adoption with increased mobility, Bring Your Own Device (BYOD) policies are adding another dimension of end points outside the perimeter that needs to be monitored, including the devices used by staff in the financial services industry. Traditionally, the perimeters of mobile devices go to the level of physical USB (Universal Serial Bus) ports of laptops, as well as limit access to select Internet websites from within the intranet via firewall rules.

However, heavily regulated industries such as banking struggle with the challenge of BYOD security given the unlimited range of devices utilised within the intranet for business functions. BYOD gadgets are a perfect target for malware or zero-day attacks, e.g. via widely used free over-the-top (OTT) applications such as WhatsApp or Viber used for internal corporate communications, and unregulated access to sites such as Dropbox etc., which would otherwise be disallowed by end points being monitored within the perimeter.

As the saying goes, a chain is only as strong as its weakest link. The stark reality is that internal IT compliances and regulations tend to be outpaced by technology adoption by some years. If the internal monitoring shows that the risk of leakages or security or data breaches could escalate as a result of such gaps, then the IT department would need to go beyond the mindset of 'checkbox compliance' based on the existing regulatory compliances required, to actually review and put in place the necessary policies to support these risk mitigation steps.

FIGURE 3: Forecast for IPSec Adoption in LTE Backhaul.
Source: Heavy Reading's Ethernet Backhaul Tracker, June 2013.



RESPONSIBILITY

Maintaining security for threats such as online banking malware is a shared responsibility. It does not rest on the bank or telco alone, but on the consumers also.

The Unknowns of Cloud

A March 2015 report from Cloud Security Alliance (CSA) on how the cloud is being used in the financial sector indicates that the industry is still in the formative stages of the cloud strategy, with 39%-47% of firms planning to use a mix of in-house IT and private and public clouds, and 18% planning to use private clouds. Common security concerns are unanimously cited as a primary concern about migrating to a cloud strategy. The four primary concerns are: data confidentiality, loss of control of data, data breach, and legal and compliance issues.

Clearly, it is still early days for the cloud for the financial services industry, and as such the impact of cloud on cybercrime is still yet to be seen. However, this is highly likely to be non-trivial as concentrating huge amounts of data in a centralised location - whether a corporate datacentre or the datacentre of a cloud provider - gives miscreants a bigger target, and the bigger the target, the greater the interest it attracts. Just as smart device banking has concluded that there needs to be significant inter-working and cooperation with the telecoms industry players to manage cyber risks, the increased use of cloud technology in the financial sector will have to include IT industry players to up the safety factor.

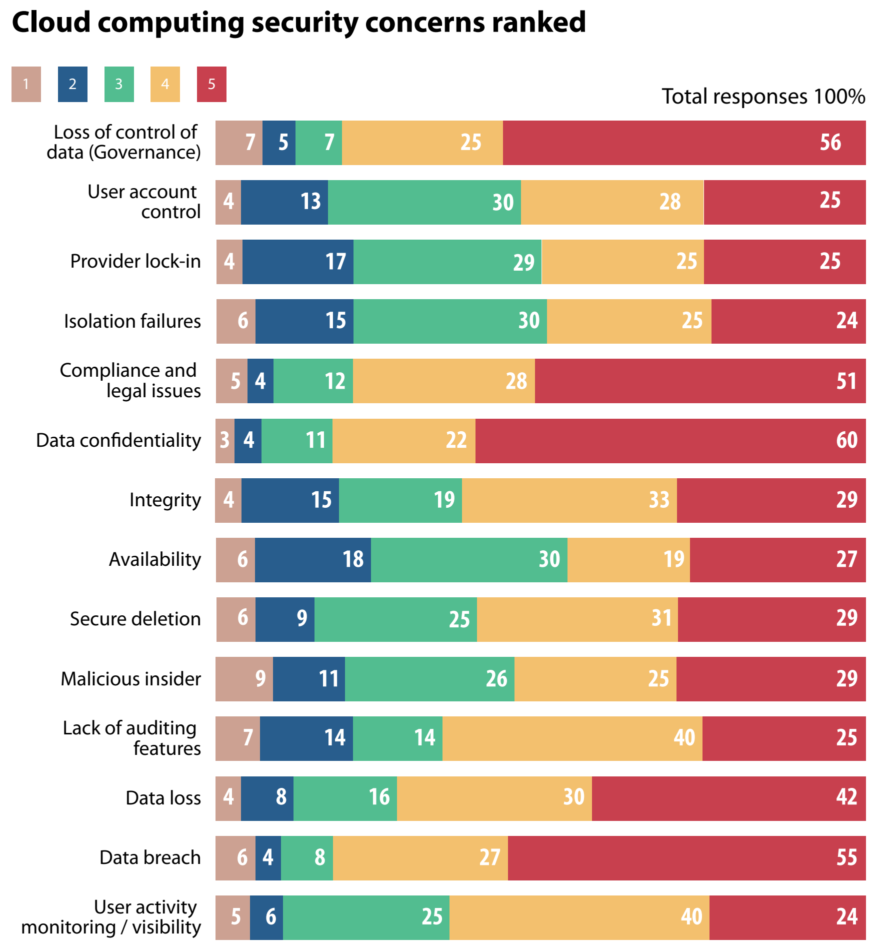
Cyber Insurance - A Silver Lining

Companies turn to insurance to manage risks and cyber risk is no different. The cyber insurance market is about 15 years old with coverage confined to specific areas, e.g. data breaches. The US cyber insurance market was worth USD1 billion in 2013 in gross written premiums and was forecasted at USD2 billion in 2014, according to the insurance broking arm of Marsh & McLennan Companies. In 2014, the European cyber insurance market was estimated at USD150 million, but is growing by 50-100% annually; the anticipated EU data protection rules would force companies to disclose data breaches to customers, resulting in the accelerated growth.

The premiums for protection of €10-50 million by German insurer Allianz are about €50,000-90,000 per annum. Companies requiring coverage up to €300 million would need to go through co-insurance policies involving multiple underwriters.

Cyber insurance is a niche and tiny market, although exponential growth could be expected once insurers figure out how to overcome their lack of experience and knowledge in cybercrime and once statistically significant actuarial data becomes available in order to model the losses. Currently, insurers have limited ability to conduct thorough security audits and any such evaluations are limited to questionnaires about existing procedures. This lack of expertise also means failure to identify high-risk clients or over-

FIGURE 4: Cloud computing security concerns ranked: 5: Greatest Concern; 1: Least Concern.
Source: CSA survey of 102 participants globally from the financial services industry



CYBERCRIME

It is still early days for the cloud for the financial services industry, and as such the impact of cloud on cybercrime is still yet to be seen.

priced offerings. Exotic types of attacks that may cause damage are harder to model and so are typically not covered by insurers.

What Are Regulators Doing Globally?

Globally, the US and the UK have been frontrunners in the cybercrime war in the recent years. In the US, the President's 2013 Executive Order on improving cybersecurity led to the National Institute of Standards and Technology (NIST) Cybersecurity Framework in February 2014, which charged local critical infrastructure companies with improving their cybersecurity positions. A roadmap was also issued to discuss the next steps and identified key areas of cybersecurity development, alignment and collaboration.

The framework was embraced by local critical infrastructure companies, as well as the U.S. federal agencies and departments, the state governments and associations for the various industries that they regulate. "Even though the framework targets US critical infrastructure providers, it offers an effective model for risk-based security for organisations across industries and across the globe," stated PwC's Global State of Information Security Survey 2015.

Foreseeing that the next big black swan event will come from cyberspace following a succession of attacks on financial players, Greg Medcraft, Chairman of the International Organisation of Securities Commissions (IOSCO), cautioned that there needed to be a more concerted effort to tackle cyber threats around the world as current approaches varied widely. As such, regulators were planning to introduce a global 'toolbox' in 2015 that could be used to assess firms' readiness for and resilience to cyberattacks.

Further, the Committee on Payments and Market Infrastructures (CPMI), part of the Bank for International Settlements (BIS), analyses cybersecurity issues and their implications for financial market infrastructures (FMI). The BIS November 2014 report on cyber resilience in FMIs also lays the foundation for the work necessary to strengthen financial stability by enhancing cyber resilience in the FMI industry as a whole.

Globally, the US and the UK have been frontrunners in the cybercrime war in the recent years. In Asia, Japan, Singapore, Hong Kong and Taiwan are leading the pack in terms of various regulations, organisations and master plans being put in place to improve preparedness for what seems to be the inevitable cybergeddon. In contrast, Indonesia and China have been woefully behind the curve despite the fact that China has one of the world's largest team of hackers by numbers, and that Indonesia is ranked the most vulnerable country globally to cybercrime in the 2013 Sophos Security Threat Report. In Malaysia, in order to keep legislation against cybercrime current, Malaysia is going to enact a new law and amend the 'ICT Act 2006' to curb cybercrime and also formulate a new evidence act before the end of 2015.

The two major challenges confronting regulators are: protecting the privacy of individuals with implementation of personal data privacy regulations, and the more encompassing challenge of ensuring data security, i.e. mandating that organisations protect the integrity of systems and data they contain.

Personal Data Privacy Regulations – Ranging from Basic Privacy Protection to Data Breach Disclosure

In general, a personal data protection act is aimed at regulating the processing of the individual's personal data involved in commercial transactions by the data user, to

provide protection to the individual's personal data and thereby protect the interest of the individual concerned. The specific implementations of such regulations vary from country to country.

In the US, the security breach state laws that have been in place since 2002 vary in terms of when and how notice must be given, and most states allow for delays to investigate the intrusion. The European Union Data Protection Regulation is on track to be finalised in 2015. The regulation is expected to add new requirements for breach notification to individuals and increase fines for compromised businesses. This is forecasted to trigger a larger-than-expected growth in business spending in the security industry including cyber insurance.

Hong Kong had put in place in 2013 what is today considered to be one of the most rigorous regulations for direct marketing worldwide. Singapore's act that came into effect in 2014, includes a 'Do Not Call' registry which allows individuals to opt out of receiving marketing phone calls, mobile text messages or faxes. Taiwan's Personal Information Protection Act (PIPA) that came into effect in 2012 has dramatically increased the civil liability, criminal liability and administration penalty for breaches. Civil liability compensations range from approximately USD15 per incident, per person to the amount of actual damages incurred; criminal liability ranges from USD6,300 to USD3.1 million or two to five years imprisonment.

The Malaysian Personal Data Protection Act (PDPA) was enforced in November 2013. However, data breach notification is not included in Malaysia's PDPA.

Fighting Cybercrime: A Team Sport

Recognising that fighting cybercrime is very much a team sport, the US and the UK have run simulated war-game programmes called 'Quantum Dawn' and 'Waking Shark' respectively. These are aimed at beefing up the financial sector's action plans for cyberattack by focusing on cross-industry and cross-sector actions, rather than focusing on the robustness of an individual firm's resilience plans.

Similarly, Japan's National Information Security Centre (NISC) released a Cyber Security Strategy in 2013 detailing the role of the government, infrastructure providers, companies, individuals and other operators in combating cybercrime.

Taking it to yet another level of preparedness, in January 2015, the US and the UK agreed to a series of simulated cyberattacks to test each other's resilience. The first exercise will be simulated attacks on the City of London and Wall Street amidst growing fears about the vulnerability of the financial sector. Subsequent exercises will test the resilience of critical national infrastructure on both sides of the Atlantic, since most of it is owned by the private sector, with many networks connected to the Internet.

Opportunity for Talent Creation

Although more and more people are tech-savvy, it is ironic that a talent crisis is looming in the security space given that there are fewer specialists. Most organisations may have some systems to monitor their networks to determine how they are being infiltrated, but not necessarily the cost-effective and capable manpower required to make sense of it all and provide clear direction on the way forward.

The regulatory bodies may need to collaborate with the industry players and also bodies such as the SANS Institute, the largest source for information security training and certification in the world, to ensure that local academic institutions appropriately structure their programmes in order to produce professionals with advanced hands-on skills that the industry needs, and not just theoretical security or security basics.

Prepare for War

Ultimately, it is very clear that cyber-security must be ramped up in order to manage the risks better. "In APAC, there was a mere 5% increase of threat detections in 2014 compared to 2013 versus a 41% and 11% increase for North America and Europe respectively as shared in PwC's Global State of Information Security Survey 2015. However, economic crime follows megatrends. The increasing shift in economic power, which correlates with the movement of wealth from the West to the South and the East, may see a reversal of this threat detection trend sometime in the future," cautioned Alex Tan, Forensics Lead for PwC Malaysia. The writing on the wall is clear. The financial industry cannot afford to disregard this threat – there is a very real need to prepare for cybergeddon. ✱

■ Preetha Nadarajah is a freelance writer based in Kuala Lumpur.

CYBER WAR GAMES IN THE UK

In the UK, the Bank of England (BoE) tested the financial sector's contingency plans for cyberattack by running war-gaming exercises called Operations *Waking Shark I* and *Market Wide Exercise* (MWE) in 2011 and *Waking Shark II* in 2013.

The objectives of *Waking Shark I* was not to focus on the robustness of an individual firm's resilience plans, but rather on how the participants would communicate with each other in order to coordinate their responses to a widespread and systematic cyberattack on the financial sector. The objectives of the exercise were to:

- Identify key industry coordination issues in the event of a major attack.
- Establish recommendations to address any perceived issues or gaps.
- Establish rules of conduct for cross-firm and regulator communication during a cyberattack.

Participants of this exercise included over 100 representatives from 33 participating organisations, representing a broad range of financial firms, infrastructure providers and the financial authorities and an expert panel comprising representatives from the Centre for the Protection of National Infrastructure (CPNI), the Serious Organised Crime Agency (SOCA), the Cyber Security Operations Centre (CSOC), the Payments Council and telecoms operators BT and O2 UK.

Operation *Waking Shark II,* with more than double the number of participants, further reinforced the lessons learned from previous cyber exercises and was a test of how the earlier feedback had been adopted. It also reflected the continued evolution of the nature, intensity and sophistication of cyber threats over the past two years. The scenario for *Waking Shark II* was based on a concerted cyberattack against the UK financial sector by a hostile nation state with the aim of causing significant disruption within the wholesale market and supporting infrastructure.

Specifically, the following technical and business impacts were included in this scenario:

- Distributed Denial of Service (DDoS) attacks, causing the firms' global websites and certain other internet-facing systems to be unresponsive or intermittently available.

- Advanced Persistent Threat (APT) and PC wipe attacks that penetrated the firms' networks for disruptive and destructive purposes.
- Issues with end-of-day market data pricing files for some equities markets, causing challenges with overnight risk and margin calculations.
- Issues with Central Counterparty Clearing processes for fixed income, with resulting events causing significant liquidity and funding issues.
- Issues associated with processes used to instruct payments through agent banks and manage balances in accounts at agent banks.

Findings from more than 200 industry participants in this exercise reflected that future exercises should be more focused and rigorous, address issues related to cyberattacks impacting retail operations which result in significantly greater media pressure, and allow individual firms to have access to the specific scenario in order to be better prepared as a firm, before convening to respond as a sector. Further inputs received were to broaden the scope of the cyberwar games to include cross-border issues and possibly participants outside the UK (leading to the trans-Atlantic simulated cyberwarfare agreed between UK and US in January 2015), increasing the stress on the sector in the cyber scenario, perhaps including more focus on the APT thread, more asymmetry in impact on different firms and greater systemic impact (extended outages, increased pressure on liquidity and funding and more market dislocation). Both Operations *Waking Shark I and II* were led by Credit Suisse.

Access

Bank Negara aims to ensure that every economic activity, geographical region and segment of society has access to financial services that include financing, financial redress and financial information.

Can we be more INCLUSIVE?

MAJELLA GOMES

YES, WE WILL HAVE TO BE. FOLLOWING ITS SELECTION AS THE PERMANENT HEADQUARTERS FOR THE GLOBAL ALLIANCE FOR FINANCIAL INCLUSION (AFI), MALAYSIA WILL HAVE TO PLACE ITSELF AT THE FOREFRONT WHERE DRIVING FINANCIAL INCLUSION IS CONCERNED.

Financial inclusion is generally considered to be the process of ensuring access to appropriate financial products and services required by vulnerable, low-income groups in society, at an affordable cost and in a fair, transparent manner, by mainstream institutional players. Therefore, making the choice of being financially inclusive can have many repercussions, especially when it implies a need to strike a balance between allowing the financially more robust to forge ahead while ensuring the less able do not fall behind.

At the forefront

With the setting up of the headquarters of the global Alliance for Financial Inclusion (AFI) in Kuala Lumpur in 2014, Malaysia will have to be exemplary in driving the agenda.

The need for financial inclusion perhaps first entered the orbit of public consciousness with the closure of more bank branches to manage banking sustainability and hence, the decrease in physical access to banking services. The term 'financial inclusion' was coined in the early 1990s but started being used in a broader sense by the turn of the millennium – mainly in reference to those people whose access to mainstream financial services was being limited by bank branch closures etc. In the UK, financial inclusion was developed by the Treasury through the Credit Union Task Force and its policy action teams. The thrust of the financial inclusion strategy then was to increase access to financial services for people in deprived neighbourhoods.

In Malaysia, the approach is slightly different, with Bank Negara aiming to ensure that every economic activity, geographical region and segment of society has access to financial services that include financing, financial redress and financial information. Initiatives cover the setting up of institutional arrangements, strengthening existing service providers, developing a microfinance institutional framework, establishing special funds and financing schemes, and improving general outreach and awareness of the issues connected with - financial inclusion. Based on World Bank statistics, about 80% of the Malaysian population currently has access to a bank account.

Although Bank Negara targets its financial inclusion efforts primarily at SMEs, it does have programmes for large corporations as well, such as providing credit enhancements to support their ability to tap the bond market. Bank Negara has put in place various avenues for consumers to seek financial redress, in its efforts to safeguard consumer interests, and makes an effort to improve consumer literacy levels through comprehensive education programmes so that they may understand better the risks and obligations involved in financial transactions. These efforts, according to AFI, were part of the reason why the organisation chose Malaysia as its permanent home. Additionally, Malaysia also has the required facilities, infrastructure and legal support.

Championing Financial Inclusion

Bank Negara, explained AFI spokesperson Peter Foster via e-mail, has been a long-standing and active member of AFI. "Governor Zeti Akhtar Aziz has been consistently promoting the benefits of financial inclusion, both within Malaysia and globally for many years," he said. "Being located in a country that is so clearly supportive of and active in financial inclusion policy development is a good fit for our organisation. Plus, our location in the Sasana Kijang building incorporates a well-established international training and conference facility that focuses on supporting financial inclusion." Malaysia's commitment saw Bank Negara hosting the AFI Global Policy Forum in 2013, and the launch of the Sasana Accord.

Together with the seminal Maya Declaration, which recognises the role of financial inclusion in improving global financial stability, the Sasana Accord is a landmark commitment by all AFI members to use quantifiable, measurable targets for their financial inclusion goals. But on its own, however, AFI does not implement policy. "What we do is bring together leaders and policymakers to look for common areas of interest and activities," Foster explained. "AFI's working groups give focus for policy discussion. We provide opportunities to share experiences and ideas about ways to innovate and advance the cause of financial inclusion as well as to build knowledge and capacity."

AFI provides the platform on which support services are identified, discussed and designed. Shared experiences and knowledge exchange allow members to compare challenges, lessons learnt and programmes, which in turn provide support for national policy implementation. "Our engagement with international standard-setting bodies gives AFI members a strong voice in the development of global standards," he added. "Financial inclusion policies and platforms can have a significant impact on lives, although it is not a term that ordinary people hear very much about. For instance, if you mention it in Kenya, you may not get much of a response, but say 'M-Pesa' and everyone will have an opinion!"

Technology Enabling Financial Inclusion

Although most people do have some sort of access to banking facilities, there are more than two billion – almost a third of the global population – who are unbanked. But there is no one-size-fits-all when it comes to financial inclusion. Each country and region has its own particular challenges so the access that has to be provided

needs to be just as diverse. "As a global group, developing and emerging countries like Malaysia are actually in the forefront of financial inclusion," Foster divulged. "And it's becoming part of the mainstream discussion quite rapidly on a global level. In fact, every region in the world recognises the importance of financial inclusion, and that recognition is growing."

While the concept might seem obscure and difficult to comprehend, financial inclusion is not a 'thing'; rather, it is an amalgamation of many elements that come together to make formal financial services available to people, in places and ways that never existed before, and it is promoted today by international organisations like the G20 and G24, and private sector organisations like Visa, MasterCard and BBVA (Banco Bilbao Vizcaya Argentaria), a multinational Spanish banking group.

Technology, in particular, has gone quite a way to facilitating financial inclusion. Digital financial services (DFS) have greatly expanded the delivery of basic financial services in recent times. New technology like mobile phones, electronic purses and new channels such as retail agents have been pressed into service, in efforts to reduce the cost of access for remote and hitherto under-served populations.

DFS implementation has seen encouraging success in Kenya, the Philippines, Pakistan, Tanzania and Peru, underscoring its tremendous potential. Realising this, regulators around the world have stepped up their efforts to create enabling environments for DFS – something that the AFI Mobile Financial Services Working Group (MFSWG) is actively supporting, Foster confirmed. But they still need to tread warily because, like with anything that is pioneering, many questions remain unanswered, such as the regulating and safeguarding of new digital payment instruments like e-money, and how to supervise such services effectively.

Risks and costs

As with anything concerning money, there are the inevitable risks and costs. How do you balance experimentation and innovation – both necessary elements for pioneering financial services – with the existing legal framework where these services are to be implemented? Who supervises cross-border remittances? Foster said three areas were imperative to the application of DFS programmes: access, usage and quality. "There are definite risks in each of these areas if they are not properly addressed," he explained. "Pricing access too high may reduce usage and access, and low quality will reduce price but may also discourage usage – and wide usage without quality will impact usage."

RISKS

There are definite risks in each of these areas if they are not properly addressed," he explained. "Pricing access too high may reduce usage and access, and low quality will reduce price but may also discourage usage – and wide usage without quality will impact usage.

In addition, easy access opens risks that can impact quality and usage, he pointed out. "Any one of these areas can impact risk but it is part of the policymakers' job to make sure that risks are mitigated by keeping a balanced approach to each of these priorities," he stressed. "Also, financial literacy and education can go a long way to ensuring that risks can be quickly identified by end-users as well as providers."

The major challenges confronting financial inclusion are also the ones which enable it: technology and environment. Dynamic environments, especially, are always a challenge. "Developments in the field of digital finance are happening extremely quickly," he said. "Policymakers have to be open and adaptable."

This is one area that regulators will need to constantly stay abreast of, to ensure that the channels which send and deliver funds are safe and secure for everyone who uses them. Many aspects of financial inclusion policy have changed and evolved over the years, but priorities are now shifting, and there is more interest in this field across the globe. "Financial inclusion policy is a bit like an education or health policy," remarked Foster. "It isn't a project with a definite beginning or end; it's ongoing. In this case, it's an ongoing commitment by governments, global organisations and the private sector to open up the formal financial sector and provide equal opportunities for everyone, everywhere."

On what financial inclusion costs, he acknowledged the real cost lies in exclusion, or having nearly half of the world's population working outside the formal financial sector. "I think it is safe to say that the power and benefit of financial inclusion policy can play a key role in the global efforts to reduce poverty and increase economic stability," he concluded. "Having a policy of financial inclusion opens up opportunities for individuals and small businesses. Creating these opportunities to the world's unbanked will not only improve their lives, it will help strengthen the global economic system. We are all paying the price for the exclusion that currently exists." ✱

■ Majella Gomes is a senior freelance journalist based in Kuala Lumpur.

MAJELLA GOMES

ON A MISSION TO bank the unbanked

THE ULTIMATE GOAL OF AFI, SAYS ALFRED HANNIG, EXECUTIVE DIRECTOR OF THE GLOBAL ALLIANCE FOR FINANCIAL INCLUSION (AFI), IS TO REDUCE POVERTY WORLDWIDE, AND PROMOTE INCLUSIVE GROWTH – WHICH CAN ONLY HAPPEN WITH SUSTAINABLE FINANCIAL INCLUSION.

Alfred Hannig is a man on a mission, and his entire working life seems to have been geared towards it. Currently the Executive Director of the global Alliance for Financial Inclusion (AFI), he spent a considerable amount of time before he took up this position working in the areas of management, policy advisory, training and research. His assignments have taken him around the world to four continents, with stints in Indonesia, Uganda, Bolivia and Germany. But even before he set up AFI in 2008/2009, his achievements in the field of financial inclusion were enough to attract the attention of the Gates Foundation. He suggested ways of providing financial services for sectors with little or no access to financial services, and the Gates Foundation decided to grant him USD40 million in funding.

Before establishing AFI, he spent three years developing its unique concept of peer-to-peer knowledge networking. He started small, with just a handful of enthusiastic members, but has since turned this global alliance into a hub of policymaking and regulatory institutions from nearly 100 developing or emerging countries. The ultimate goal of AFI, said Hannig is to reduce poverty worldwide, and promote inclusive growth – which can only happen with sustainable financial inclusion. Challenges abound, but financial inclusion is moving from fringe to mainstream, and stakeholders – like conventional banking institutions and regulators – are beginning to sit up and take notice. In the following e-mail interview, Hannig gave his perspectives of what it takes to be financially inclusive.

Q In your opinion, what have been the successes of financial inclusion so far?

We've seen a number of remarkable successes in recent years. First, we have observed that technology has really started to fulfil its promise of having the power to be the game changer for financial inclusion. Tanzania is a great example, having made an impressive leap forward. In 2009, only 16% of its adult population were included in the formal financial system. By 2014, it was around 60%. The biggest part of this growth can be attributed to the mobile phone, which has fundamentally changed the way that large parts of the population use financial services, in only a few years.

There have been similar developments in Kenya, Bangladesh, Paraguay and the Ivory Coast as well. These changes have been made possible largely due to a change in mindset among financial regulators of these countries. Technology can only realise its potential for financial inclusion if government policy allows it to be implemented effectively. Financial regulators have increasingly made financial inclusion a part of their official mandate and have enacted regulation to unlock the potential of technology for the unbanked. AFI, as a network of financial inclusion policymakers, has enabled financial regulators to learn from the successes of their peers.

Technology can only realise its potential for financial inclusion if government policy allows it to be implemented effectively. Financial regulators have increasingly made financial inclusion a part of their official mandate and have enacted regulation to unlock the potential of technology for the unbanked.

Q What have been some of AFI's most serious challenges?

There are still so many out there. Some include the unintended consequences that global standard-setting bodies like the Financial Action Task Force (FATF) can have on national financial inclusion policies. These standards weren't developed with financial inclusion in mind, originally, so a number of challenges can arise when developing and emerging countries implement them within their national jurisdictions.

For examples, 'Know Your Customer' (KYC) requirements may restrict access to financial services to the very poor, who may not be able to provide the proof of identity that KYC requires, in order to open a bank account. The proportionate risk-based application of KYC rules is a big bottleneck and impediment to financial inclusion. Also, the 'de-risking' strategies of international banks regarding compliance with Anti-Money Laundering/Counter Financing of Terrorism (AML/CFT) standards, appear to have impacted the availability of certain financial services and channels like remittances and correspondent banking. Some of the progress made by financial inclusion can be unintentionally undone.

The positive thing is that our members understand their responsibility with regards to financial inclusion, and they're being proactive about it. Despite the current and growing challenges, there has been considerable progress amongst global standard-setting bodies, to address the need for proportionality in the implementation of standards.

Q Regardless of the challenges and the dynamic environments, what are the prospects for the respective regions?

In the past, we have seen different approaches to financial inclusion innovations in the various geographic regions of the world. Sub-Saharan Africa was one of the early champions; non-bank entities like telcos were allowed to provide financial services by themselves. Latin America and South Asia traditionally have opted for innovating in a more conservative way – they still require banks to be the main players. But more recently we have seen convergence of these approaches, and we expect this trend to continue. In Latin America, an increasing number of countries are now allowing non-banks like telcos to provide financial services; Paraguay, Peru and Colombia are examples where this has happened.

In Kenya, Safaricom – the leading provider of mobile financial services on the African continent – has realised that partnerships with commercial banks can be very successful. Safaricom and the Commercial Bank of Africa collaborated to launch M-Shwari, a new product that offers an interest-bearing savings account as well as the possibility of accessing short-term credit without interacting with a loan officer or bank branch, by using a credit-scoring algorithm. In just a few years of existence, it has reached the ten million customer mark. This has made the Commercial Bank of Africa a leading financial inclusion player – without an extensive branch network!

Q In your opinion, which areas have been more receptive to the concepts of financial inclusion, and where have you found more resistance to it?

The whole conversation among financial inclusion stakeholders has shifted in recent years, and financial inclusion has now become part of mainstream policymaking. It's no longer regarded as something 'nice to have' – it's become a must-have. The right policies, smart policies – these are key to unlocking the potential of financial inclusion. The positive thing is that our members understand their responsibility with regards to financial inclusion, and they're being proactive about it. Despite the current and growing challenges, there has been considerable progress amongst global standard-setting bodies, to address the need for proportionality in the implementation of standards.

Q How far can new technologies assist?

We have only just started to see the impact that technology will have on financial inclusion. The main advantage here is that technology can help to bring down the high cost of transacting that is associated with traditional brick-and-mortar branch service delivery.

Q Are there currently new technologies in use, or being developed specifically for financial inclusion?

Everyone has realised that alternative delivery channels like the mobile phone are cheaper and can reach deeper into previously unserved populations. We are now at the beginning of a second level of innovation with a more sophisticated use of technology. One example is Big Data Analytics. Even people in developing countries now leave an unprecedented digital footprint of information about themselves! This opens up the possibility of predictive analytics to help financial institutions reach previously excluded client segments by analysing their digital footprint and determining their credit worthiness.

One example is the already-mentioned M-Shwari in Kenya; China also has an equally impressive story to tell. The world's largest e-commerce company, Alibaba, has built its own credit scoring model based on online activity, to understand client behaviour and characteristics, and offer responsive financial services. This is overturning traditional banking models and leveraging on the company's computing services to keep response time to customers fast and operational costs low. Alibaba's microfinance loans (AliFinance) have provided loans averaging from USD3,500 to more than 400,000 clients, with an accumulated loan portfolio exceeding USD12.9 billion.

Q Conclusion: More financial inclusion successes ahead?

As the word on financial inclusion spreads, so do its markets. Developing countries and emerging economies are not the only ones who need financial inclusion. Despite long histories of conventional banking and financial services, research shows that as many as 30 million people in the US may be in the unbanked category, and in Europe, there are still many marginalised communities with either very limited or no access to financial services. In contrast, financial inclusion has worked in places like Tanzania, where the proportion of those who had been excluded from financial access fell from 70% of the population to 50%; and in Nigeria, where it decreased from 47% to 39% in just three years.

There is a growing global perspective of financial inclusion as necessary to improving quality of life by helping people develop healthily and sustainably, in ways that will benefit themselves, their families and communities. The long-term goal of financial inclusion, Hannig said, was to see concrete policy changes in the countries where AFI is active to reduce poverty and support inclusive growth. ✱

■ Majella Gomes is a senior freelance journalist based in Kuala Lumpur.

A STRONG ETHICAL CULTURE *in banking*

BANKS NEED TO CONTINUOUSLY STRENGTHEN THEIR ETHICAL CULTURE TO MANAGE TALENT RISK, THE RISK OF BANK FAILURE AND CONSEQUENTLY, THEIR ADVERSE FINANCIAL, ECONOMIC, AND SOCIAL IMPACTS ON THE GENERAL PUBLIC.

DR. RAYMOND MADDEN

Collapse

From the perspective of the general public, a bank collapse regardless of its cause(s) – unethical conduct, underestimation of credit risks, and so on – could result in severe financial, economic and social consequences.

The case for a strong ethical culture in banking is an intuitive one. The arguments, by now, are well-rehearsed. The main benefit to a bank of a strong ethical culture is the minimisation of risks to the organisation. If a bank engages in or permits unethical behaviour such as mis-selling of financial products, the charging of unjustified fees and outright fraud, it runs the risk of not only losing the business of dissatisfied customers, but also the imposition of increasingly substantial financial penalties, the withdrawal of its license to operate by regulators, and even criminal prosecution of key staff.

In addition, banks which do not adhere to high ethical standards may lose the ability to attract or retain the right talent. This trend is starting to happen in developed markets. Ask a class of MBA students in London if they want to join investment banking; very few hands go up these days. It can be both uncomfortable and demotivating for employees to work with an organisation with a dubious reputation. To exacerbate matters, history has repeatedly shown that a major scandal can destroy an entire organisation, resulting in thousands of employees losing their jobs. The collapse of Arthur Andersen and Barings Bank are cases in point. It is thus not surprising that in a September 2013 global survey of financial services executives conducted by the Economist Intelligence Unit (EIU), 96% of respondents expressed their preference to work for a firm with a decent reputation for ethical conduct.

SCANDAL

History has repeatedly shown that a major scandal can destroy an entire organisation, resulting in thousands of employees losing their jobs.

Finally, from the perspective of the general public, a bank collapse regardless of its cause(s) – unethical conduct, underestimation of credit risks, and so on – could result in severe financial, economic and social consequences. This is primarily due to the dominance of banking institutions in the financial services industry (FSI) (particularly in most Asian economies), as well as the global acceleration of the growth of the FSI relative to the broader economy and the increasing interconnectivity of the FSI across sectors and borders since the 1980s. The financial crises of the 1990s and 2000s dramatically illustrate this.

In contrast, a bank that is anchored in a strong ethical culture and thus consistently conducts its business with a high degree of professionalism, integrity, fairness, and objectivity has the potential to shine among its peers. Standing tall on the strong foundations of its reputation, the bank is then able to inspire trust among its stakeholders, including its customers, employees, shareholders and the general public. Such trust can even weather bad times when markets are unduly affected.

No time for complacency for Asian banks

Placing this continuous emphasis on ethics runs the risk that any seasoned banker will sound like a broken record. Yet, the news is replete with one major banking scandal after another. While it is the misconduct of banks and other financial institutions in developed markets such as the US and the UK that grab global headlines, Asian banks cannot be complacent. As Tan Sri Dr. Zeti Akhtar Aziz, Governor of Bank Negara Malaysia, mentioned in her speech at the launch of the Financial Services Professional Board (FSPB) in September 2014, banks and other financial institutions in the region should take this opportunity of relative calmness in the region to raise the bar of their professional and ethical standards in order to avoid major scandals and to secure their long-term sustainability.

So what can banks do to strengthen the ethical culture within their organisations? This question is being asked with increasing frequency by bank stakeholders the world over, not least because banks serve as a major financial intermediary for the general public. This core function of banking, that ranges from safeguarding savings and enabling payments to facilitating efficient allocation of capital to support economic growth, is both a heavy social responsibility and a privilege.

Unfortunately, there are neither quick answers nor simple solutions. Ethics are rooted in culture, which in turn is intrinsically shaped by human behaviour. As observed by Christine Lagarde, Managing Director of the International Monetary Fund (IMF) and Hector Sants, ex-Chief Executive of the former UK Financial Services Authority (FSA), grappling with issues surrounding changing human behaviour and ultimately culture, until recently, has been outside the comfort zone of stakeholders within the FSI ecosystem.

Thinking of an ethical culture as a package

In a January 2015 speech, Thomas Baxter, General Counsel of the Federal Reserve Bank of New York, likened ethical culture to that of a package. The culture that banks have is a derivative of what is put into the package and what is left out. The three main components for inclusion in the package are: first, having the right incentives for bankers, including compensation and career progression, second, having the right character at the top, and finally, having the right shared and well-understood values throughout the organisation. The three main things for exclusion from the package are: first, the treatment of customers as mere profit opportunities as opposed to people who are to be served, second, the notion of a bank as a pure money-making machine, and third, the adoption of 'short-termism' in incentive pay structures and the

ETHICAL STANDARDS

Banks and other financial institutions in the region should take this opportunity of relative calmness in the region to raise the bar of their professional and ethical standards in order to avoid major scandals and to secure their long-term sustainability.

measurement of success.

Clearly, the drive for high ethical standards must start at and be driven at the top of each bank. The Boards and top management of banks must act in a manner that reflects the shared ethical values of their respective organisations, and ultimately that of a bank's public function as a financial intermediary. Given that the conduct of people in any organisation will be strongly influenced by incentives, the Boards and top management of banks must also ensure that the remuneration and incentive (R&I) policies of their organisations are aligned with ethical considerations. As Baxter put it, "If the only consideration with respect to compensation and promotion is how much money the individual made for the firm, then that communicates a message that is inconsistent with a strong ethical culture." This perhaps goes some way to explain why in the September 2013 EIU survey, over 53% respondents thought that it would be difficult to progress in their careers at their firm without being "flexible" on ethical standards, and only 37% believed that their firm's financial bottom line would improve as a result of higher ethical standards amongst employees.

INCONSISTENT

If the only consideration with respect to compensation and promotion is how much money the individual made for the firm, then that communicates a message that is inconsistent with a strong ethical culture.

Engaging industry

In this regard, two projects being undertaken by AIF may be of interest to readers of *Banking Insight*. First, the FSPB, of which AIF serves as secretariat, is currently developing a code of ethics that applies across the financial services industry (Code). The Code is being developed by a Working Group that comprises leaders from across the FSI (defined as banking, capital markets, insurance and Islamic finance) and individual subject matter experts, both domestic and international. It is hoped that institutions and individuals from across all sectors of the financial services industry will come together and support the initiative. Such collaboration would go a long way to create a sense of common purpose to raise the bar of professionalism, including ethics, across the entire industry.

Second, AIF recently commissioned an initial research on the consideration of professionalism (defined as competence and ethics) in the R&I policies of institutions in the FSI in Malaysia. One hundred and fifty participants from the FSI were invited to participate in the survey that was conducted as part of the research. The key highlight of the survey is that while the respondents do integrate professionalism into R&I policies – and they consider it important to do so – they find it more feasible to integrate competence into R&I policies than ethics. The main challenge in integrating ethics in R&I policies is in the identification of a robust set of metrics to measure the performance of this critical dimension among employees. We hope to engage FSI players in the coming months to strengthen our work in this area.

Conclusion

To sum up, it is vital that banks continuously strengthen the ethical culture within their organisations. Though such efforts may not succeed in stopping all bad behaviour, it may reduce the volume of such behaviour. This in turn would contribute towards minimising the risk of bank failure, and consequently, their adverse financial, economic and social impacts on the general public. Given the important and privileged role that banks and bankers play in society, this must surely be of paramount consideration in all their daily business decisions and actions. ✱

■ Dr. Raymond Madden is Chief Executive Officer of Asian Institute of Finance, Kuala Lumpur; a human capital development Institute dedicated to the financial services industry in Asia, set up under the auspices of Bank Negara Malaysia and the Securities Commission Malaysia. Raymond has extensive international experience in human capital development and talent management, having first coined the term the 'talent game' in 2009 to describe how organisations can best manage the careers of critical personnel.

He brings to the region experience from several senior roles in human capital development within the European financial services industry, including tenures as Global Head of Learning at ABN AMRO Bank and Lloyds Banking Group.

Lean Banking
NEEDING LESS TO DO MORE FOR THE CUSTOMER

AGAINST A BACKDROP OF COSTLY REGULATION, A RAPIDLY CHANGING AND COMPETITIVE LANDSCAPE, COMBINED WITH FINANCIAL MARKET PRESSURES, THERE IS GREATER FOCUS WITHIN THE BANKING SECTOR ON THE ABILITY TO DELIVER PROFITABLE AND SUSTAINABLE RESULTS. LEAN BANKING IS ABOUT HOW TO KEEP DOING MORE FOR THE CUSTOMER, AND REQUIRING LESS TO DO IT. **PREETHA NADARAJAH** EXPLORES LEAN BANKING.

Cost-cutting measures, such as voluntary separation schemes, are now the norm in the financial services industry as tough times call for tough measures. Although cost-cutting measures provide short-term value possibly within a department or a function, breakthrough performance gains that enable successful institutions to change how the organisation can compete, are usually not in sight.

Going lean in contrast, requires a team-based approach with strict focus on customer value optimisation that builds efficiencies, improves quality and customer experience through baby steps, and has the added advantage of instilling a continuous improvement mindset and process.

How can Banks Go Lean?

To go lean, banks need to start by understanding what factors drive customer value. Customer insights could be obtained by drilling into customer complaints or performing their own customer or general consumer surveys. Social media could be used to leverage crowd wisdom via crowdsourcing. Customer immersion, a process where senior executives experience their business from the customer's point of view, could also provide invaluable insights.

"The most important aspect to consider is what our customers think of the process or the outcome of the process and what their expectations are. This is uncovered through active engagement of our customers and consumers at large. These insights help pave the way in designing the future state," explained Mary James, Group Chief Information Officer & Head, Group Infrastructure, Alliance Bank Malaysia Berhad.

"We also benchmark ourselves to discover the best performance being achieved amongst others in the industry and to be bold and look beyond i.e. at best practices in different industries. Armed with this information, we can then identify the gaps in our processes in order to achieve the much sought after competitive advantage to stay relevant," continued Mary. An example of benchmarking methodology is TRADE as described in **Figure 1**, where best practices could be achieved with learnings from IKEA, Samsung, Amazon, Lego, AirAsia amongst many others. TRADE focuses on the exchange (or trade) of information and best practices to improve the performance of processes, goods and services.

Going lean

To go lean, banks need to start by understanding what factors drive customer value. Customer insights could be obtained by drilling into customer complaints or performing their own customer or general consumer surveys.

Subsequently, the operating model to realise the goals to be established needs to be defined, i.e. what are the changes required in the bank's end-to-end processes. "A process walk-through needs to be conducted to go through the multiple steps within a process in the whole value chain to identify the value of each step as well as the redundancies, silos, bottlenecks and waste in the key value chain. This helps to build profound knowledge of the current state of the processes within the key value chain facilitating the improvements to go lean while maintaining the value of the process chain," said Rohan Krishnalingam, Group Chief Operations Officer, RHB Banking Group.

In parallel, identify the metrics to define the expected bottom line impact. Cost metrics are most commonly used but on-time delivery process speed, quality, safety and morale can also be measured.

TRADE BENCHMARKING METHODOLOGY

Focuses on the exchange (on 'trade') of information and best practices with best-in-class organisations to improve the performance of business processes, products and services.

TERMS OF REFERENCE
Develop Project Plan, Aim, Scope, Benchmarking Innovation

RESEARCH
Engage Sponsor, Stakeholders & QSE Staffs. Conduct Interviews & Self Assessment of Current State of Innovation

ACT
Develop Partner Selection Criteria, Conduct Desktop Research and Company Visits Partners

DEPLOY
Make Recommendations & Implement Best Practices & Framework

EVALUATE
Benchmarking Process, Share Experiences and Project Outcomes

Figure 1: TRADE Benchmarking Methodology.

ASIAN SUCCESS STORIES

There are some notable Asian success stories that have either practiced lean banking for years, or those which have been recent adopters.

OCBC Bank, Singapore's second largest local bank with a market capitalisation of SGD13 billion, embarked on its lean banking journey in 2003. Since the launch of the New Horizons strategy in 2003, OCBC has executed over 115 cross-functional process improvement projects to deliver operational efficiencies and enhanced customer experience, with estimated cumulative margin improvements of SGD330 million, averaging SGD28 million per year. During this period, OCBC's revenues quadrupled from SGD2.1 billion to SGD8.3 billion.

"One of our strategies then (2003) was to offer customers differentiated service especially in an industry where products were largely homogeneous. We wanted to provide customers with seamless services across all touch points and make it easier for them to do business with us. Today, our Quality initiatives are no longer confined to within the bank only but also to other entities within the OCBC Group of companies including Great Eastern Life Assurance, PacLease, Bank of Singapore and Bank NISP OCBC. Such collaborative initiatives have helped us to build greater synergy and partnership for the benefit of our customers," said Alvin Lim, Head of Quality & Service Excellence, OCBC Bank (Malaysia) Berhad.

"Although the early initiatives were centred on key processes in the Singapore Head Office, with the excitement of initial successes, the journey was then quickly extended to Malaysia and in subsequent years also to other countries where OCBC has a presence including Indonesia, China and Hong Kong," continued Alvin.

Alliance Bank's vision since 2011 has been to be the 'Best Customer Service Bank' in Malaysia. "In order to achieve this, the Alliance Process Excellence (APEX) was initiated in 2012 to deliver impactful and efficient customer service using lean principles to remove non-value added waste and drive process optimisation. According to Mary James, Group Chief Information Officer & Head, Group Infrastructure, Alliance Bank Malaysia Berhad, Alliance's notable achievements have been:

- Best-in-class SME credit processing turnaround time (until Letter of Offer issuance) which improved by approximately 50-90% depending on products
- Streamlined retails credit process flow from 7 to 2 steps for process efficiency and productivity
- Increased retail credit productivity through straight-through processing for Credit Card Balance Transfer/Fast Cash."

Once the new operating model has been defined, the next step is to divide the overall processes into logical cells to ensure that change can be conducted systematically and in well-managed stages. This cell-based transformation process can be used to create customised change management best practices that can be rolled out in other cells to facilitate greater efficiency and a smoother transition.

As with any change management process, institute a structured communication and governance framework. Set specific milestones to keep the lean programmes on track and ensure that they deliver the expected bottom line impact. Track outcome metrics of projects on an ongoing basis after implementation to ensure that changes are properly embedded and targets are being achieved, to avoid performance slippages.

"Control needs to be in place for sustainability and performance has to be tracked periodically and reviewed by the relevant parties, especially the process owner and business units that benefit from lean operations," according to Rohan.

The final stage of going lean is to establish an enduring system of continuous improvement so that the benefits of the lean banking initiative continue to accrue and grow over time.

Ingredients for a Successful Lean Journey

A successful lean journey has the following key ingredients:

Continued commitment of senior leadership

"When we first started our journey, our Group CEO together with our senior management drove the group-wide initiatives. This ensures that there is support where and when required to overcome obstacles, of which there will be many. Without the support and guidance of senior management, many of the initiatives could be derailed or even abandoned, resulting in key objectives not being achieved," said OCBC's Alvin.

Quality enablement for the initiative drivers and required stakeholders

"Training is a key building block particularly in developing a common Quality language with which employees across the organisation can communicate. When most employees recognise and start using terms, for example, 'Remove Waste' or 'Pursue Zero Defect', it will be easier to achieve concerted effort towards an improvement initiative which contributes towards a lean organisation. Over the years, we have trained and developed more than 700 Quality Leaders who can lead mid-sized initiatives," explained Alvin.

Quality mindset and culture embedded into the corporate DNA

Leaders need to consistently walk the talk and maintain emphasis on quality. "The success of our Quality Journey can be largely attributed to the leadership support from Senior Management including our CEO who also personally participates in some larger cross-entity initiatives," said Alvin.

Encourage employee ownership of quality, without necessarily tying this to financial incentives. Perhaps recognise innovation by displaying employees' ideas on posters in a busy hallway, as a reminder that quality is a collective responsibility. Try organising friendly 'quality competitions' to spark ideas. "As part of the Quality culture which we have developed over the years, we now also have an Annual CEO Quality Award to recognise Leaders, Individuals and Teams for their outstanding contributions which have benefitted our Customers, Employees or Shareholders," said Alvin.

The evidence of a true quality culture is when employees are free to apply skills and judgement, with some guidance, to situations that fall outside the rules in highly ambiguous but critical areas.

Dedicated and experienced human resources

By doing this, leaders send a message that going lean is a priority. Full-time members focused on lean should be fully trained and able to share their knowledge while working in the trenches with the broader team. These specialists could become the teacher and coach during the ramp-up period and thereafter.

As part of the Quality culture which we have developed over the years, we now also have an Annual CEO Quality Award to recognise Leaders, Individuals and Teams for their outstanding contributions which have benefitted our Customers, Employees or Shareholders.

Alvin Lim, Head of Quality & Service Excellence, OCBC Bank (Malaysia) Berhad

Big vision, small beginnings, and celebration of early success

"It is important to start with one or two strategic projects and strive for early success. This would pave the way for more initiatives; clichéd as it may be, we have found that success does breed success. Making changes for improvements is often very challenging and for that reason, we make it a point to celebrate interim milestone achievements as well as the overall initiative completion," advised Alvin.

Continuous and targeted communication

Ensure effective communication, i.e. consistent, open and honest, targeted at the specific recipient at the right time and delivered through a variety of media. These are the regular internal communications from the CXOs (e.g. chief executives and others in C-level positions) reinforcing why lean management is a top priority or the intense communication amongst the different transformation cells to indicate what to expect and what is needed for change. Do not neglect external communications to the customer advertising the service levels improvements which they can expect.

Lessons Learnt

At various stages of going lean, organisations can expect different challenges and lessons learnt. "In the early years when the Quality approach was introduced, it did not have the widespread support that it does today. As we made aggressive efforts to break down silos, we needed to address change management and obtain buy-in from various stakeholders. Upon successful completion of some early initiatives, many more became believers and converts after they realised that the approach worked and contributed to helping them achieve their objectives and targets. Today, the challenge is very different as we do have more initiatives being proposed and hence requiring prioritisation," advised Alvin Lim.

Employees at every level may worry that by 'industrialising' operations, lean will diminish the value of their contributions or indicate that they are poor performers or managers. In scaling lean practices across the enterprise, ensuring that the right people are in the right places to drive and support lean initiatives is much harder when management capabilities and mindsets may be the resistance. Leaders must therefore be particularly visible and vocal in articulating the need for change and advocating for lean as the right answer. The purpose of the lean journey must be conveyed in a way that emphasises the benefits not only for the bank but also for the individual, pointing out that the waste lean targets prevents employees from using their skills fully.

Lean banking is not just an extrinsic goal, but an intrinsic quality that must be continually strengthened so that the bank stays open to change and improvement long after the transformation process has ended. ✱

■ Preetha Nadarajah is a freelance writer based in Kuala Lumpur.

DARK POOLS AND HIGH-FREQUENCY TRADES

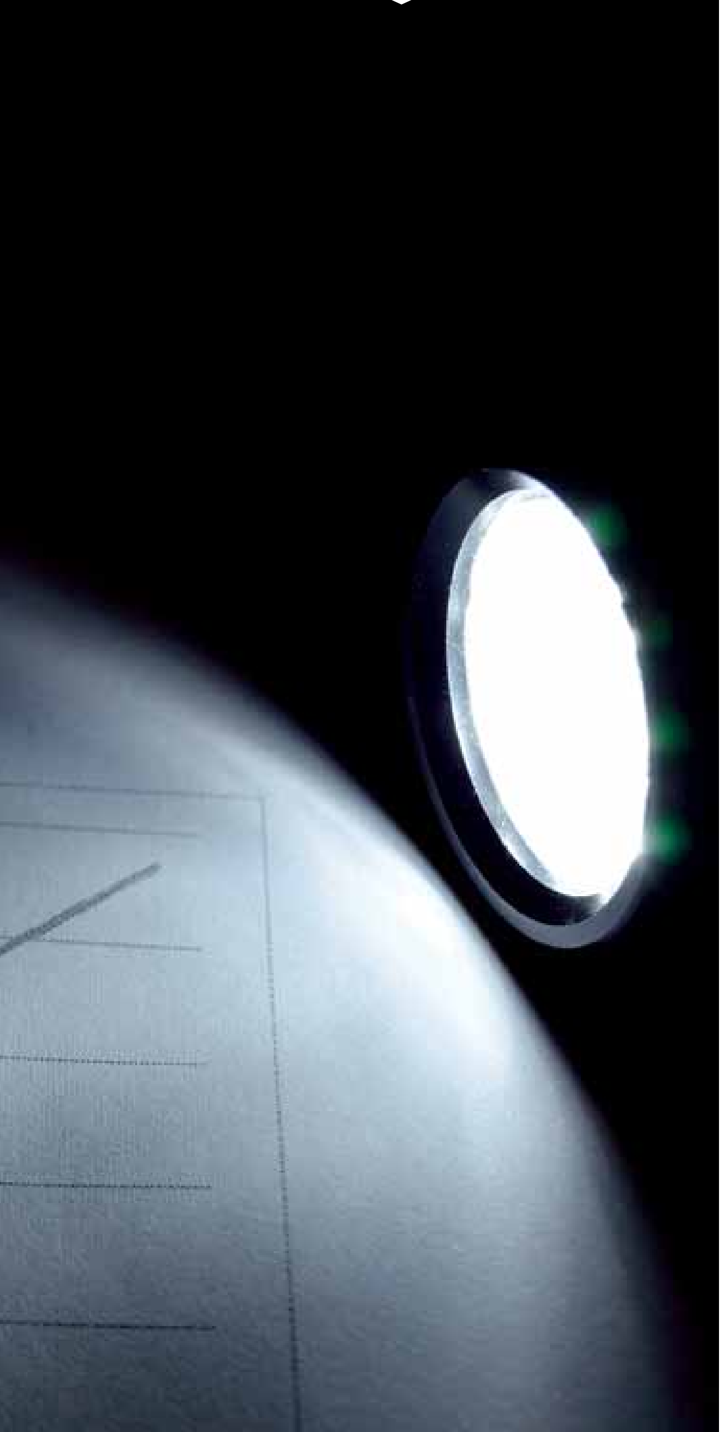
shining a light on dark pools

JESSICA FURSETH

DARK POOLS AND HIGH-SPEED TRADING ARE NEGATIVELY PERCEIVED AS BEING CONTRARY TO TRANSPARENCY, ACCOUNTABILITY AND PROTECTION OF THE PUBLIC INTEREST, AND PERHAPS EVEN CONTRIBUTE TO MARKET DETERIORATION. NEVERTHELESS, THE RELENTLESS SEARCH FOR LIQUIDITY MEANS THAT DARK POOLS REMAIN A VIABLE TRADING PLATFORM ESPECIALLY FOR LARGE TRADES.

Secret

The numbers are mind-boggling. Dark pools, or private stock markets where investors can swap large asset blocks in secret, now account for up to 40% of all stock market volume in the US.



It is rare for a topic as technical as dark pools to capture the public's attention, but this is what happened last year after Michael Lewis published 'Flash Boys'. Granted, the success of a book investigating the inner workings of Wall Street benefited from the fact that people's interest in obscure sections of the finance industry had already been sparked by the global financial crisis. The general public had gained a unique appreciation of the reality that the performance and regulation of complex financial products had an effect beyond just the banking industry.

So it is no wonder that Lewis, a well-respected Wall Street reporter, found a big audience for his book. 'Flash Boys' is an expose on the rise of high-frequency trading in the US equity market, and what is described as the "rigged" underbelly of Wall Street. As the reading public was hungry for an explanation and a scapegoat following recent years' hardship, 'Flash Boys' became a success.

The numbers are mind-boggling. Dark pools, or private stock markets where investors can swap large asset blocks in secret, now account for up to 40% of all stock market volume in the US, according to Professor Charles Whitehead at Cornell Law School. Furthermore, most experts agree that high-speed trading algorithms are now conducting more than half of all US trading, as increasing numbers of high-frequency traders move in and out of securities in a fraction of a second - practically in a flash.

Most experts agree that high-speed trading algorithms are now conducting more than half of all US trading, as increasing numbers of **HIGH-FREQUENCY TRADERS MOVE IN AND OUT** of securities in a fraction of a second - practically in a flash.

A month after the publication of 'Flash Boys', Mary Jo White, Chair of the US Securities and Exchange Commission (SEC), faced direct questions about the book from the US House of Representatives. White rejected Lewis' claims: "The markets are not rigged. The US markets are the strongest and most reliable in the world." However, the aftermath of Lewis' book triggered

HIGH-FREQUENCY TRADERS WENT HOME EVERY NIGHT WITH NO POSITION IN THE STOCK MARKET. THEY

announcements from a number of US authorities, including the SEC, the FBI, and the US Attorney General, that they would be looking into potential abuses by high-speed traders. Several of these probes have since resulted in banks being fined for failing to reveal important details about their dark pools to investors.

Fraud, deception and dishonesty: The crackdown begins

Part of the problem with dark pools, Lewis wrote in 'Flash Boys', is lack of transparency: "Private stock exchanges, run by the big brokers, were not required to reveal to the public what happened inside them. They reported any trade they executed, but they did so with sufficient delay that it was impossible to know exactly what was happening in the broader market at the moment the trade occurred." Another problem is lack of accountability: "High-frequency traders went home every night with no position in the stock market. They traded in the market the way card counters in a casino played blackjack: They played only."

But the main problem with high-frequency trading, argued Lewis, is that the system is fundamentally unfair: "For a fee, the exchange will 'flash' information about buy and sell orders for just a few fractions of a second before the information is made publicly available." This practice allows selected firms to identify when an investor is looking to buy stock, enabling them to rush in to buy it first, and then sell it back at a higher price. Concluded Lewis: "The US stock market was now a class system, rooted in speed, of haves and have-nots. The haves paid for nanoseconds; the have-nots had no idea that a nanosecond had value."

Since the probing of private stock markets started last year, a number of financial institutions have faced scrutiny into how they conducted their dark pools trading. UBS agreed to pay USD14.4 million to settle allegations from the SEC that it did not treat dark pool clients fairly: "The UBS dark pool was not a level playing field for all customers and did not operate as advertised," the SEC found. The regulator added that UBS failed to properly disclose to all clients how the dark pool system worked, leading to a situation where some knew the rules and others did not. UBS has amended its practices following the SEC's report.

After looking into Barclays' dark pool, New York Attorney General Eric Schneiderman accused the bank of "a flagrant pattern of fraud, deception and dishonesty with Barclays clients and the investing public". The bank responded by fighting these claims on factual and legal grounds. The case continues;

TRADED IN THE MARKET THE WAY CARD COUNTERS IN A CASINO PLAYED BLACKJACK: THEY PLAYED ONLY.

however, Schneiderman claimed that Barclays lied about how it favoured high-frequency traders in its dark pool, leaving institutional investors exposed to high frequency trading "predators".

Regulatory calls for transparency and fairness

In the aftermath of Lewis' book, numerous players with a vested interest in the continued operation of the high-frequency trading industry have defended its merits. One of them is Ari Rubenstein, Co-founder and CEO of automated market maker Global Trading Systems:

"The automation of the financial markets has been an overwhelmingly positive development. Not, as Mr. Lewis claims, for a few computer whizzes, but for everyone who invests. The new, digital marketplace has lowered broker fees, improved price efficiency, and facilitated the spread and transparency of information." Writing in 'CNBC', Rubenstein also echoed the common acknowledgement that things are not perfect: "I'm grateful to [Lewis] for giving Wall Street something rare: an opportunity for those of us in the financial services industry to work together for the greater good. … Now, the industry can talk about something that really matters to the financial markets: stability."

Last year, Mary Jo White announced that the SEC is considering new rules targeting both dark pools and high-speed trading. Earlier this year, reports claimed these new SEC rules may force dark pools to comply with some of the same requirements as the public exchanges. The two areas thought to be of particular concern for the SEC are the disclosure of the types of orders available on the platforms, and the source of pricing data.

The US Financial Industry Regulatory Authority (Finra) has already taken a big step in the direction of promoting openness. Finra decided last year to make dark pool data available to the public, doing so in an effort to "increase market transparency and thereby enhance investor confidence". Steven Joachim, Executive Vice-President of Transparency Services at Finra, said: "Finra's commitment to transparency is bringing light to what was previously a dark area of the equity markets. Making this information available to both the investing public and market participants provides an unprecedented view into the activity of these highly significant trading venues."

The initial figures from Finra, released the week of 12 May 2014, showed that the biggest dark pool was held by Credit Suisse, whose CrossFinder was worth USD373.6 million. The second biggest pool was Barclays' LX, worth USD305.5 million, followed by UBS's ATS, worth USD278.2 million. Initial reports saw Bank of America's pool announced as the biggest, but the bank has since corrected this, saying it had provided erroneously high numbers to Finra.

Beyond data disclosure, Finra's proposal for increased openness includes issuing new guidance for trading firms, requiring them to supervise the development and use of trading algorithms in order to prevent adverse impacts. Considering the high-speed nature of their work, trading firms will need to synchronise their clocks with the National Institute of Standards and Technology, and fixed-income traders will have to disclose confirmation of pricing in same-day principal trades of retail size.

The upside to dark pools

Until now, lack of transparency in dark pools has actually been a deliberate factor, and part of the

The US stock market was now a **CLASS SYSTEM, ROOTED IN SPEED, OF HAVES AND HAVE-NOTS.** The haves paid for nanoseconds; the have-nots had no idea that a nanosecond had value.

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appeal: because trades take place away from public exchanges, trading interests are not displayed to the market until after completion. This ability to minimise market impact is one of the reasons investors are attracted to dark pools: "By restricting access to undesired market participants such as high-frequency trading firms, and by not revealing quotes, dark pools enable institutional investors to minimise their information leakage and realise more efficient executions," Rhodri Preece, Director of Capital Markets Policy at the CFA Institute, a global non-profit organisation of investment professionals, wrote in the 'Financial Times'. This enables better prices and reduced transmission costs, reducing the bid-offer spread as well as reducing exchange fees.

US equity trading in dark pools has seen a rise of almost 50% over the past three years, according to research from the CFA Institute. Part of this increase is due to technology speeding up trading, but investors are also seeking out alternative pockets of liquidity. In recent years, European bond traders have increasingly become drawn to dark pools because they offer liquidity, something that has become increasingly difficult to find on the open bond market. While traditional bond trading takes place over the phone between dealer banks and investors, regulation has caused many of the middlemen to step back. Dark pools, however, enable buyers and sellers to deal with each other directly, allowing for anonymous trades.

While Preece concluded that dark trading is not harmful to market quality at current levels, he warned that too much trading taking place away from public exchanges could lead to market deterioration: "If the majority of order flow is filled away from pre-trade transparent markets, investors could withdraw quotes because of the reduced likelihood of those orders being filled. It would be prudent for authorities to monitor these developments closely."

Regulating Dark Pools

While the CFA Institute reported that European dark trading volumes have more than doubled over the past two years, trading systems provider Fidessa also found that the average size of trades in European dark pools has grown. The average trade size has grown to €11,403 in December 2014, representing a doubling since 2012. The implication is that market participants are already starting to move towards accommodating the EU's new rules on dark pools. The new EU rules, which will take effect in 2017, aim to curb equity trading in dark pools, by capping dark pool trading at 4% of the EU market for any given stock, and at 8% of the total amount traded of that stock in the EU.

Swaps trades are being encouraged to move back towards the regulated platforms, but the fact that EU rules are leaving big-order trading largely exempt is a nod to the reason dark pools were initially created. Originally, these were intended as a space for big trades to be carried out without the market realising, so other dealers would not immediately start moving the price. "The market has woken up to the fact that relentlessly slicing and dicing is not always best," Rebecca Healey, Market Structure Analyst at Tabb Group, told 'Bloomberg'. Healey noted that the average dark pool trade size has also risen because investors are taking greater interest in what happens to their orders, while the likelihood of finding a match for a large trade increases as more so-called block orders become available.

Beyond the US and EU, other international regulators are moving to regulate private stock market trading as well. The Hong Kong regulator has proposed restricting access to dark pools to institutional investors only, while Australia and Canada are opting for a system where a dark pool must offer a better price than the standard exchange in order for a trade to take place there. Beyond worries about how data will be collected and compared between multiple platforms, critics are concerned that regulation will prevent traders from getting the best price, especially in the EU. "In Europe, the restrictions are pretty significant. There is nothing else like that in major western markets," said Justin Schack, Managing Director of institutional agency brokerage Rosenblatt Securities. Schack told the 'Financial Times' that the SEC, on the other hand, "appears to be prioritising transparency", leaving traders with discretion to choose how to route orders according to their own economic interests.

An unexpected turn ahead?

So far, dark pools trading remains very limited in Asian markets, in part because both the Hong Kong and Singapore exchanges manage their own clearinghouses. Consensus estimates put dark pools trading in Asia at 1% of total market share, with the biggest markets being Japan, where dark pools represent 10%, and Hong Kong, where they represent 2%.

Private stock trading is clearly going to grow. Our membership is growing year-on-year and our trading and liquidity are growing as well.

Lee Porter

Managing Director of institutional trading network provider Liquidnet

Lee Porter, Managing Director of institutional trading network provider Liquidnet, predicts that Asian dark pools could see their trading volume double over the next few years, as institutional investors look for better liquidity than what is currently offered by official exchanges: "[Private stock trading] is clearly going to grow. Our membership is growing year-on-year and our trading and liquidity are growing as well," Porter told 'Asia Asset Management'. "If you talk to any buy-side traders, they will tell you the biggest challenge in trying to fulfil their portfolio manager's request is seeking liquidity."

While European stock exchanges stand to regain much of their lost business once the EU rules on private exchanges kick into operation in 2017, the US remains a relatively more permissive regulatory environment. This is possibly why Nasdaq CEO Robert Greifeld has taken a different approach to handling the competition: since January, the Nasdaq has been in discussion with a number of major banks about running their dark pools for them, pending regulatory approval. Greifeld argued this move is not a change of direction for the exchange, but simply a development made in response to customer needs.

This unexpected move by Nasdaq has been met with interest across the markets, as the job of running a dark pool has never been more difficult: regulation is looming, public pressure has increased, and trust is scarce following investigations and fines. The public exchanges may be an unorthodox choice for running banks' private markets, but it is not a bad idea. After all, who else has the necessary expertise and experience to run a fair market? Plus, this move could also shake off the air of dishonesty that has haunted private dark pools over the past 18 months. ✱

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DATA, ANALYTICS AND TECHNOLOGY ARE BECOMING EVEN MORE CENTRAL TO THE OPERATING MODEL OF FINANCIAL SERVICES ORGANISATIONS. WHAT ARE THE IMPORTANT IMPLICATIONS OF DATA AND ANALYTICS FOR BANKS?

Trusting the Zettabytes

IT market research firm International Data Corporation (IDC) predicts that the digital universe will be 44 times bigger in 2020 than it was in 2009, totalling a staggering 35 zettabytes (ZBs). This is equivalent to the capacity held in one billion 1TB external hard disks. Hence, the term big data.

COMPLEX ISSUE

Massive volumes of a variety of structured and unstructured data generated and transmitted at a high rate (velocity) make the veracity of the data a complex issue to handle.

Big data can be characterised by the 4Vs: volume, variety, velocity and veracity i.e. massive volumes of a variety of structured and unstructured data generated and transmitted at a high rate (velocity) make the veracity of the data a complex issue to handle – i.e. how can organisations differentiate the signals from the noise, and derive massive value from the insights that could be obtained from the data.

Data analytics is typically categorised as descriptive, predictive and prescriptive. Descriptive analytics answers the questions of what and why it happened. Predictive analytics answers the question of what will happen, given historical and external data combined with rules and algorithms. Prescriptive analytics uses structured and unstructured data to suggest implications based on the various decision options possible.

Getting ahead with data analytics

IDC forecasts that by 2015, more than 85% of the largest 250 Asia-Pacific banks will use big data analytics for customer marketing activities. The top 25 Asian banks that are leaders in big data analytics as ranked by IDC are depicted in **Figure 1**.

There are various areas in which data analytics could be harnessed in the financial services industry - making real-time personalised offers, improving fraud management, credit risk, and customer micro-segmentation, and leveraging analytics to strengthen security, amongst many others.

Personalised offers

Making personalised offers requires leveraging information that the financial institution already has about consumer spending (structured data) and incorporating that with information (unstructured data) that is available in the public domain in order to truly target the consumer. The structured data could be the individual's spending patterns, credit rating, income and debt levels; the unstructured data could range from online searches made by the consumer (e.g. properties for sale) to comments made on online blogs for specific topics (e.g. comparison of property mortgages).

In March 2014, Westpac Australia disclosed that it achieved a AUD22 million increase in revenues, which was double its set target, by using big data techniques to provide targeted offers to customers when they interact with the bank at the branch, via the call centre or online.

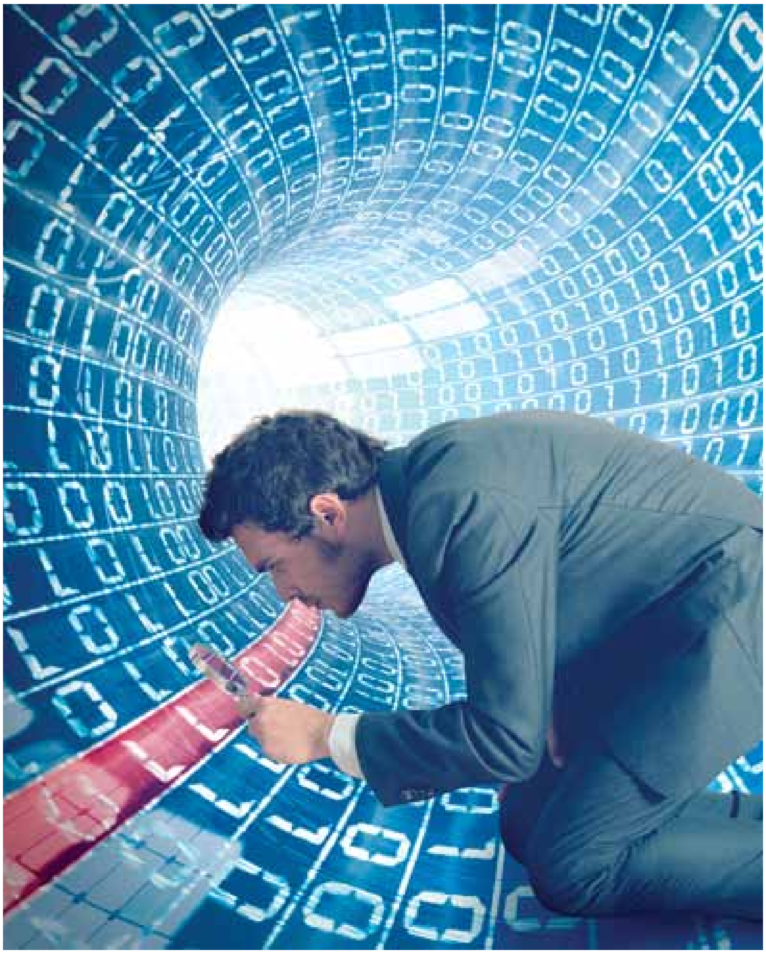
"Next best offers" (NBOs) have taken off in Westpac branches since the campaign launched in mid-2013 – 37% of 812,000 customers whose branch staff engaged in conversations, and 60% of those engaged by call centre staff signed up to an additional banking product. The up sells via online banking campaigns alone accounted for AUD7.8 million in incremental revenue, achieved via delivering targeted communications to 80% of online banking customers.

Making personalised offers requires leveraging information that the financial institution already has about consumer spending (structured data) and incorporating that with information (unstructured data) that is available in the public domain in order to truly target the consumer.

FIGURE 1: TOP 25 LEADERS IN BIG DATA IN ASIA-PACIFIC

Alliance Bank	China Guanfa Bank	Maybank
AmBank	CIMB Bank	National Australia Bank
ANZ Bank	CITIC Bank	OCBC Bank
Bank of China	Commonwealth Bank of Australia	Standard Chartered Bank
Bank of Communica-tions	CTBC Bank	UBank
Bank Internasional Indonesia	DBS Bank	United Overseas Bank
Bank Mandiri	HDFC Bank	Westpac
Bank Negara Indonesia	HSBC	
Cathay United Bank	Industrial and Commercial Bank of China	

Source: IDC Financial Insights Asia-Pacific Financial Insights Innovation Awards 2015 research



Customer micro-segmentation

Is traditional market segmentation based on demographics or geography a thing of the past now that micro-segmentation is achievable with big data solutions? Micro-segmentation aims to categorise customers into very small segments based on an initial distinction into lifecycle stages, and then to further segment each lifecycle stage into segmentation layers achieved using a cluster analysis on attributes that share a common context. This then allows for highly-personalised predictive analysis.

According to a McKinsey banking report on customer centricity, "Micro-segmentation helped Royal Bank of Canada (RBC) detect a previously neglected customer segment – senior citizens spending the winter in Florida." McKinsey explained that the bank developed "a 'VIP Banking' account for this segment that includes a senior rebate for eligible clients above 60, travel discounts, easy access to Canadian funds, a consolidated account review online, ability to leverage a Canadian credit history for mortgages in the US and a toll-free number for cross-border banking questions. As a result, over the last five years sales per customer have more than doubled, the attrition rate has dropped by nearly 50%, and net income has grown by 75%."

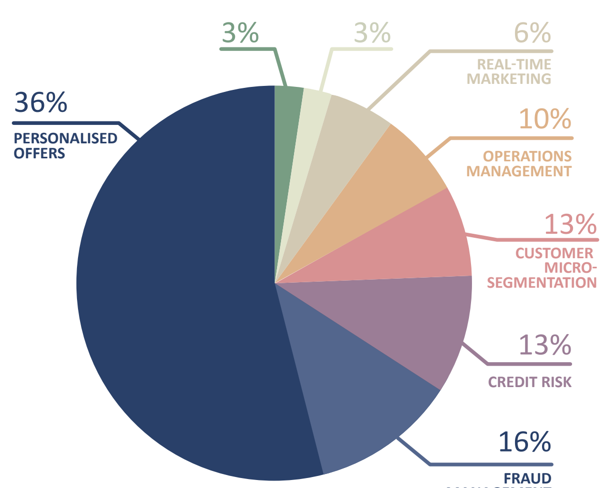
Systematically managing such opportunities based on micro-segmentation will create a sustainable development plan.

BIG DATA USAGE IN ASIA-PACIFIC BANKING

At the March 2015 IDC Financial Insights Asia-Pacific Financial Insights Innovation Awards 2015, Cathay United Bank of Taiwan walked away with the 'Asia's Leader in Smart Banking' award for their implementation of Big Data Infrastructure. According to IDC, "a revamped data warehouse has substantially enhanced customer data visibility within the bank across all lines-of-business and enabled real-time data queries to match client needs with the right product. In short, not only does Cathay United Bank now have a '360-degree customer view' of their customers, but in-built analytics provide actionable insights for quick decision-making."

Over 50% of the use cases used by these APAC leaders with big data are for targeting personalised offers and improved fraud management as depicted in **Figure 2**.

FIGURE 2: USE OF BIG DATA & ANALYTICS FROM THE TOP 25 LEADERS IN ASIA-PACIFIC BANKING



Source: IDC Financial Insights Asia-Pacific Financial Insights Innovation Awards 2015 research

Big Data Analytics for Security

Traditional security incident and event management (SIEM) tools are limited in their ability to handle the quantity of data and frequency analysis of events. According to Stephen Gailey, former Group Head of Security Services for Barclays, "Barclays generates 44 billion security events per month – a figure set to reach 65 billion by the end of the year. The SIEM solution had ceased to be able to cope at about 500 million events per day."

Using SIEM tools with big data solutions enables results from queries within a minute, with meaningful security information from beyond the usual sources of firewalls and security devices, but spanning also website traffic, business processes and other day-to-day transactions. With such big data solutions in place, actionable intelligence in real-time is within the realm of achievement and is no longer based on a historical fact-finding mission after the fact.

Given the big data technology capability to sift through massive amounts of data in search of security anomalies, the real-time actionable analytics also provide improved support for NetFlow monitoring for botnets and Advanced Persistent Threat (APT) detection.

Similarly, given the big data technology capability to sift through massive amounts of data in search of security anomalies, the real-time actionable analytics also provide improved support for NetFlow monitoring for botnets and Advanced Persistent Threat (APT) detection.

Implications of data and analytics

As with all technologies promising sweeping changes to businesses, change management to transition individuals, teams and organisations to support the transformation required is going to be vital in order to realise the true value of the data economy. These include changes to the way decisions are made, increased investments in talent, and improved data security given the increased value attached to the '360-degree customer view' now made possible with data analytics.

STRONGER DISCIPLINE

In order to achieve stronger discipline in decision-making, the culture of analytics needs to be ingrained across the various silos that make up a financial institution.

Gut to Analytics Transformation

In the past, the voice of experience and 'gut feel' from management and influencers, combined with descriptive analytics, was used by executive boards to make decisions. With the advent of advanced predictive and prescriptive data analysis capabilities, decision-making is changing: there is a greater emphasis on data and analytics rather than basing decisions on 'gut feel', ranging from decisions of optimal branch footprint to what to tweak on a non-performing product.

In order to achieve stronger discipline in decision-making, the culture of analytics needs to be ingrained across the various silos that make up a financial institution. Transparency to decision-making could also be increased by widely distributing data and tools to analyse the data. Such a culture cannot be achieved without a top-down commitment to make decisions based on what the analytics say is right for the business regardless of the fiefdom.

Talent Investments

Talent investments into people would be required to include IT personnel who understand distributed systems such as Hadoop and MapReduce, data scientists and business analysts adept at data mining, statistics, predictive and prescriptive analytics, and data-savvy line-of-business workers proficient in tools such as Excel, Tableau and similar business intelligence applications and data visualisation to communicate insights.

Data scientists typically have a strong mathematical and statistical modelling background. Roles called Chief Data or Digital Officer (CDO) and Chief Analytics Officer, to oversee the governance, analysis and monetisation of data will become the norm in companies on this transformational journey. Gartner Inc. has predicted that as much as 25% of all organisations will have a CDO in their executive staff by 2015.

Given the relative freshness of the data analytics technologies, it is likely that the talent with such skills will be the millennial generation which will bring about people management challenges for middle management. How will the various generations – the ones that are business savvy and the ones that are data analytics technology savvy –need to be managed? How can their skills be integrated? As such, middle and senior managers would also need to be educated on how to manage the millennial generation.

Data Privacy and Security

There is an increasing loss of data sovereignty with big data. With the off-shoring of datacentres as part of private or public cloud infrastructure, there are even more stakeholders that are compiling, storing and analysing personal data for any number of reasons. Over time, regulatory changes will likely be required in order to further protect the data privacy of individuals, and data privacy handling could well become a competitive issue for financial institutions. To be able to enforce such regulatory requirements, data security will become key especially when, with one fell swoop, it may be possible to obtain key personal data with customer-centric or 360 degree views, captured in a single data store.

Impact to CIOs

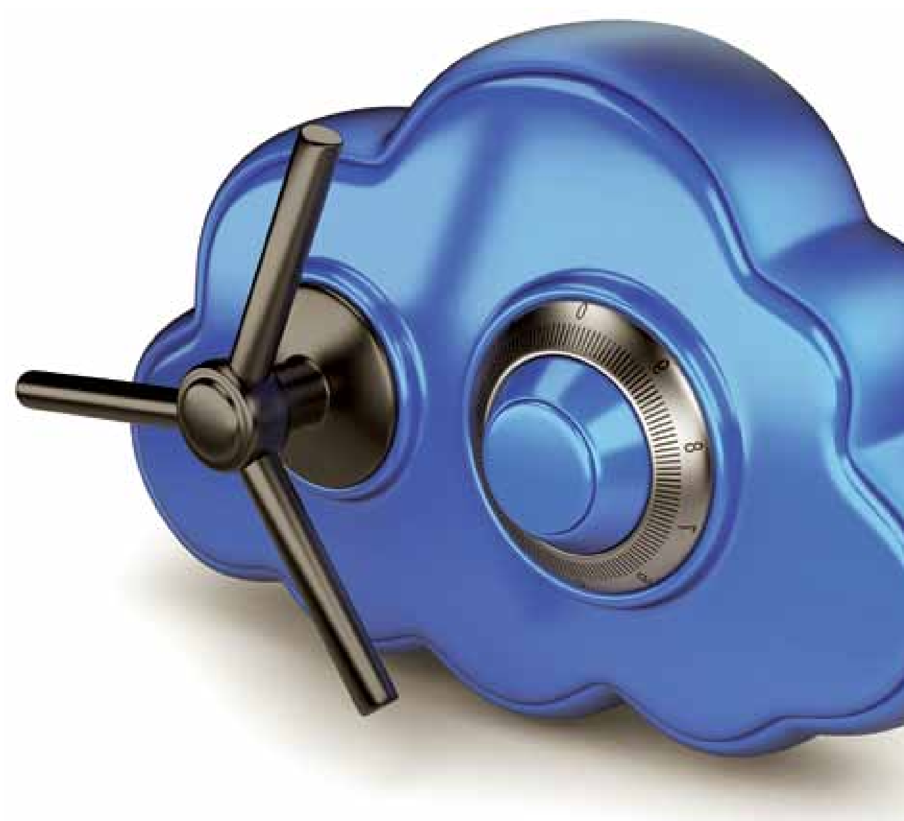
What does the digital era of data analytics, outsourcing, software-as-a-service, and widely available consumer technology mean for Chief Information Officers (CIOs)? What characteristics or management style does the new CIO need to embrace?

According to Andy Rowsell-Jones, Research Vice-President, Gartner Inc: “Based on Gartner’s 2015 CIO survey results, CIOs must ‘flip’ leadership practices from control first to vision first, to deliver on the digital promise – spanning information and technology leadership, value leadership as well as people leadership.”

“CIOs will need to implement a programme of agile risk management to help respond rapidly to unexpected

CHALLENGES

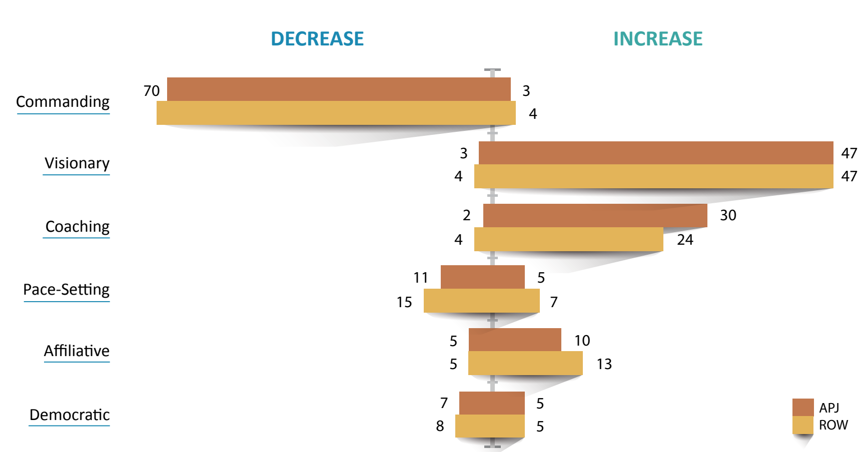
Given the relative freshness of the data analytics technologies, it is likely that the talent with such skills will be the millennial generation which will bring about people management challenges for middle management. How will the various generations – the ones that are business savvy and the ones that are data analytics technology savvy –need to be managed? How can their skills be integrated? As such, middle and senior managers would also need to be educated on how to manage the millennial generation.



LEADERSHIP

CIOs must 'flip' leadership practices from control first to vision first, to deliver on the digital promise – spanning information and technology leadership, value leadership as well as people leadership.

FIGURE 3: LEADERSHIP STYLE CONSIDERATIONS, ASIA-PACIFIC INCLUDING JAPAN (APJ) VERSUS REST OF THE WORLD (ROW)



Source: Gartner (January 2015)

risks arising from the digital journey. They will also need to prioritise new investments with determined clarity on their purpose; to strike a balance between renovating the core and creating powerful digital leadership such as investing in mobile, cloud or business intelligence/analytics. CIOs will also need to be more deliberate and commit to adding to their repertoire of skills and competency as a visionary leader through measurement and practice," elaborated Rowsell-Jones.

Based on Asia-Pacific and Japan (APJ) CIOs surveyed by Gartner, 75% said that they needed to change their leadership style in the next three years, most commonly by amplifying their vision (47%) while reducing their command and control (70%) styles as illustrated in **Figure 3**.

In order to do so, CIOs may need to consider appointing a Chief Operating Officer (COO) of IT or alternatively delegating the operational aspects of the CIO role to lieutenants in order to begin the process of changing leadership orientation. Changing leadership orientation is no mean feat and this would need to involve a leadership mentor or coach, seeking feedback from peers and subordinates, spending more time with leaders outside IT, and spending more time with customers.

These actions will provide invaluable insights that can be used to make prioritisation decisions or foster innovative ideas. With these exposures, it would set the stage for CIOs to support the development of new revenue streams, innovate through disruptive technologies, and build better customer experiences.

With such a track record, the CIO could begin to influence business strategy and not merely follow the strategic leads set by his peers. Right now, the journey with big data has barely just begun. Banks have barely skimmed the surface, and the best is yet to come. ✱

■ Reporting by the *Banking Insight* Editorial Team.