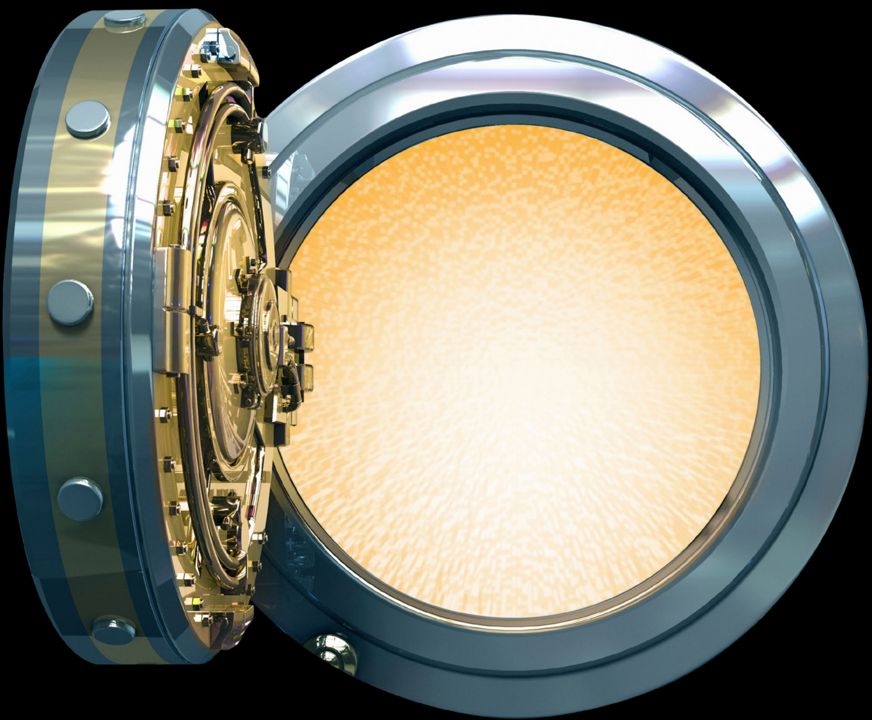

IFRS 9 in Asia

Creating a future-ready, optimized bank

Financial Advisory

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Somkrit Krishnamra
Partner, Southeast Asia Financial Services Leader
Risk Advisory
+66 2034 0134
somkrishnamra@deloitte.com

Chi-Nang Kong
Partner, Asia Head
Portfolio Lead Advisory Services
+65 6800 2270
cnkong@deloitte.com

Thomas Clifford
Partner, Financial Risk Management
Risk Advisory
+45 30 93 40 31
thclifford@deloitte.dk

Andrew Orr
Partner, Global Transaction Leader
Portfolio Lead Advisory Services
+44 20 7007 0759
anorr@deloitte.co.uk

About this report
Unless specified otherwise, all the data in this report is based on Deloitte practitioners' insights into the respective markets together with public and industry sources.

Introduction

More than a decade on from the financial crisis, banks across the globe are seeing their business models come under immense pressure. Macroeconomic conditions are tough: low interest rates and heightened international trade tensions, Brexit and Middle East instability, global pandemic risks, and ever volatile markets. Banks also face growing competition from technology-based rivals, established with a blank canvas, inherent adaptability and an ability to quickly capture traditional bank customers or replace traditional services with innovative propositions.

In these times of heightened stress, banks face an array of more stringent regulations around everything from solvency to conduct. Such regulations, while essential to economic stability, significantly hamper banks' ability to achieve sustainable growth and profitability. This is especially problematic when shareholders expect boards to find ways of competing more effectively, whilst reducing costs and transforming business models. It is a huge challenge that many banks are struggling to meet.

Among the most pressing and potentially impactful of these bank regulations is International Financial Reporting Standard 9 (IFRS 9). The accounting standard, which is closely intertwined with the capital management rules of Basel III, represents a significant challenge for the industry. It forces banks to reevaluate the sustainability of borrower cashflows under a variety of ever-changing future macro conditions. This reassessment can pose serious questions around the viability of banks' existing client base, strategies and propositions.

Crafted in the wake of the financial crisis of 2008[1], IFRS 9 has now gone live across much of Asia and is soon to be applied in several other countries. The rules mandate a regular and consistent examination of credit risk, crucially shifting impairment methodology from incurred loss (backward looking) to expected loss (forward looking). Banks must now spot signs of danger in their portfolios at a much earlier stage, then report this risk and the judgements used, and build impairment provisions as appropriate.

In Asia, the application of the new rules quickly resulted in a drop to many banks' Common Equity Tier 1 (CET1) capital ratios, according to Moody's[2]. However, the average 10 basis point (bps) dip was more modest than Europe's 47 bps fall[3] after the introduction there in 2018, a contrast we examine in this report. However, the "day one" figures only represent the beginning of a long journey, which will see the standards bed in, while supervisors focus on best-in-class compliance and the harmonization of implementation.

In spite of Asian banks on average experiencing a milder initial CET1 hit than their counterparts in Europe, the range is notable. There is not a bank in any country that should take for granted the stability of its long-term capital position, not least because the ongoing impact of IFRS 9 remains to be seen, as do that of the Basel III rules. We expect the implementation work on IFRS 9 to be an evolving process. There will clearly be phases of impact playing out over a number of years. A constant focus on improvement will be required for Asian banks, as elsewhere, requiring deep operational and strategic changes.

Transformations are expected to be more dramatic at banks in countries such as India, Thailand and Indonesia, where the new accounting standard's predecessor, IAS 39, was never adopted[4]. In such nations, there have been concerns about the potential impact IFRS 9 might have on institutions' ability or willingness to lend to small businesses. Further, small business associations in Thailand, for example, have warned that the change could force banks to increase the price of credit and restrict loans, given the capital impacts. In India, there has been apprehension that state-run lenders could need significantly higher impairment to cover their large books of loans that may fall into a higher risk bucket under the rules[5].

Even for banks with a background of IAS 39 adoption, such as those in South Korea, Singapore, Malaysia, and China, there is a great deal of work to do, as this report makes clear. **This has been the experience across Europe, where the adoption of IFRS 9 has been far from smooth sailing given the inherent complexities. So far, European banks' implementation - and that of the Asian banks that are also live - have focused on "day one" compliance, meaning a tactical solution to meeting the regulation's start date. Instead of this 'switch on' approach, banks need to take a deeper strategic view of the longer term impacts to their business models and capital sufficiency.** As the effects of IFRS 9 start to bed in, European institutions are gradually beginning to address the requirements more holistically. Regulators and central banks have already highlighted a need for better monitoring of how banks apply capital measures, and how they make stage transitions to denote and provision for underperforming or non-performing loans.

The alarming result of differing interpretations of the rules has already been witnessed in Europe, with some banks suffering a particularly severe introduction following increased regulatory scrutiny. One recent Asset Quality Review (AQR) of a major European bank, instructed by the European Central Bank under IFRS 9 standards, led to a €2 billion point-in-time hit to tier one capital from additional loan impairments[6]. While the AQR is a prudential rather than an accounting exercise it provides a marker for how banks and the regulatory authorities may clash in the future until relative consistency of interpretation is agreed.

However, IFRS 9 should not be considered simply as a threat. It also represents an enormous opportunity for financial institutions to create highly efficient business models and enhance their risk measurement capabilities, embedding the new regulatory reality such that they can compete more effectively over the long term. The smartest banks are harnessing the rules to become far more proactive and sharp in how they approach capital and balance sheet management, while consistently growing profit.

In this paper, we look at the changes brought about by IFRS 9 on the Asian financial sector and examine the preparedness of banks, while considering lessons learned from adoption in Europe. We also propose how to approach these regulatory frameworks with strategic foresight in order to turn the business threats into opportunities.

The Asian banks that act most swiftly and strategically, embracing the new world brought about by IFRS 9, will emerge as clear winners in the financial markets of the future.

IFRS 9 in Asia: The state of play

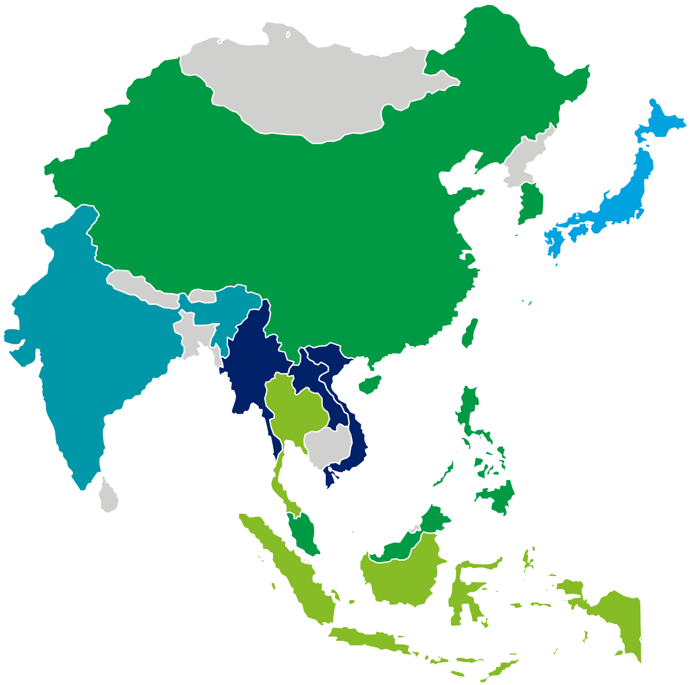
Asia presents a mixed picture of IFRS 9 implementation[7], raising concerns about the future transformation requirements in some markets.

Overall, South Korea[8], China (including Hong Kong)[9], Taiwan[10], Singapore[11], Malaysia[12] and the Philippines[13] have officially implemented IFRS 9 (or its close equivalent). Indonesia and Thailand are set to adopt the standard in 2020 and at the time of this report, Indonesia should already have gone live. In Japan, foreign banks may use IFRS 9 for consistency, if they apply the standard globally, though the standard is being discussed for domestic firms, which generally use JGAAP[14].

Some nations have seen delays. Thailand's[15] slated adoption date for most institutions is now 2020, after being pushed back several times following concerns about institutions' ability to lend to small businesses[16]. India[18] has yet to set an implementation date, primarily due to concerns about impairment at state-owned lenders[19]. Elsewhere in the region, banks in countries including Vietnam[20], Laos[21], and Myanmar[22] do not yet have to follow the standard but some are planning greater adoption of the latest rules.

There has been "good progress" regarding preparations for IFRS 9 implementation in adopter nations in Asia Pacific, Moody's notes in a study, Asia Pacific: Good progress on IFRS 9 implementation, but shortcomings remain. Its verdict acknowledges steps such as meaningful disclosures on credit stages and expected losses, with Hong Kong's banks providing particularly granular information and scenario sensitivity modelling. In part this is because banks in Hong Kong went live with IFRS 9 in 2018, a year ahead of Mainland China and some other nations.

However, the ratings agency warns that a number of banks across Asia Pacific have weak disclosures on the inputs and criteria used for stage 2 and 3 classifications, and highlights the risks from



Standards introduced – South Korea, China, Taiwan, Singapore, Malaysia and the Phillippines

Implementation in 2020 – Indonesia, Thailand

Standards in discussion - optional for banks with foreign head office - Japan

No implementation date set – India

Do not have to follow the standard yet – Vietnam, Laos and Myanmar

Source: Deloitte research

the "significant impact" on potential credit losses of loans being moved between stages[23].

Despite some of these reported weaknesses in processes, banks in the largest Asian economies appear to have initially taken less of a hit to their capital positions than their European counterparts. By October 2018, ten months into compliance, it was clear CET1 ratios at IFRS 9-compliant Asia Pacific banks had only declined by 10 bps on average, in part thanks to improved problem loan coverage, Moody's notes[24]. This is significantly less than in Europe, where the European Banking Authority calculated an initial 47 bps dip. It is also less than in the UK, where a Deloitte study showed four of the six systemically important banks seeing a fall in CET1 ratios of up to 34 bps, without temporary transitional relief measures included in the calculations[25].

Malaysian banks experienced the biggest range in CET1 dips, Moody's notes in its paper[26]. The variation is from nothing at one bank, to 70 bps at another that cited problematic Indonesian exposures as the driving factor. Some banks in China, Hong Kong and Sri Lanka experienced CET1 falls around the 40 bps mark. This was in contrast to Korean banks, with less than a 15 bps hit. Notably, Taiwanese banks saw an increase of up to 40 bps, and Filipino banks up to 61 bps, benefiting from preparatory IFRS 9 revaluation and measurement steps significantly increasing capital buffers[26].

In terms of credit impairment, by 2019, the ratings agency described a "mild increase" across the region[27.] In Malaysia, which uses a close equivalent to IFRS 9, there was a 36% increase in day one loan impairment allowances, according to Hong Leong Investment Bank[28].

Many Asian banks benefit from a relatively capital rich position. This is the result, in part, of their countries escaping the economic crisis that blighted western nations. But there is another reason: China, Korea, Malaysia, Singapore, Sri Lanka and Taiwan all have rules allowing the build up of general provisions above IFRS 9 requirements, crucially considering that IFRS 9 typically mandates impairment on a case-by-case basis[30]. That said, and despite these buffers, an economic slowdown continues to be a high threat to the region, with the general downward direction of interest rates across the globe.

A clear distinction in the depth of change needed will be witnessed between the countries with a background in related older standards, principally IAS 39, and those without this basis. For banks that implemented IAS 39 or close equivalents, such as those in China, Japan, South Korea, Malaysia and Singapore, the foundational principles should be substantially in place, especially around scope, operational delivery and recognition of financial assets.

There are, however, material differences between the new rules and their predecessors, particularly around loan staging and the fresh foundation in forward looking, expected loss methodology. Using "tactical" solutions to meet these complex expectations at go-live has come at a cost to embedding proper process enhancement and driving more fundamental business model optimization. This short-term approach is the unfortunate result of the core model implementation challenges around data quality, modelling forward-looking macro scenarios, segmenting loan portfolios and setting calculation parameters.

Such a mixed picture on implementation among the larger economies can be witnessed in Singapore, where the equivalent FRS109 standard is in place. **The financial services firm Maybank Kim Eng notes "healthy capital positions" at banks, but warns that credit costs will rise. It and several analysts highlight the 'known unknown' impact of IFRS 9 and worsening macroeconomic conditions[31]**.

Even these advanced markets that began with IAS 39 face some stiff challenges ahead. One of the greatest threats is profitability at Asia Pacific banks which could become more volatile when the credit cycle turns. This is because of greater sensitivity to loan stage migration, and changes in the macroeconomic assumptions in models, Moody's notes[33]. In essence, perceived downturns will hit the outlook on more problematic loans.

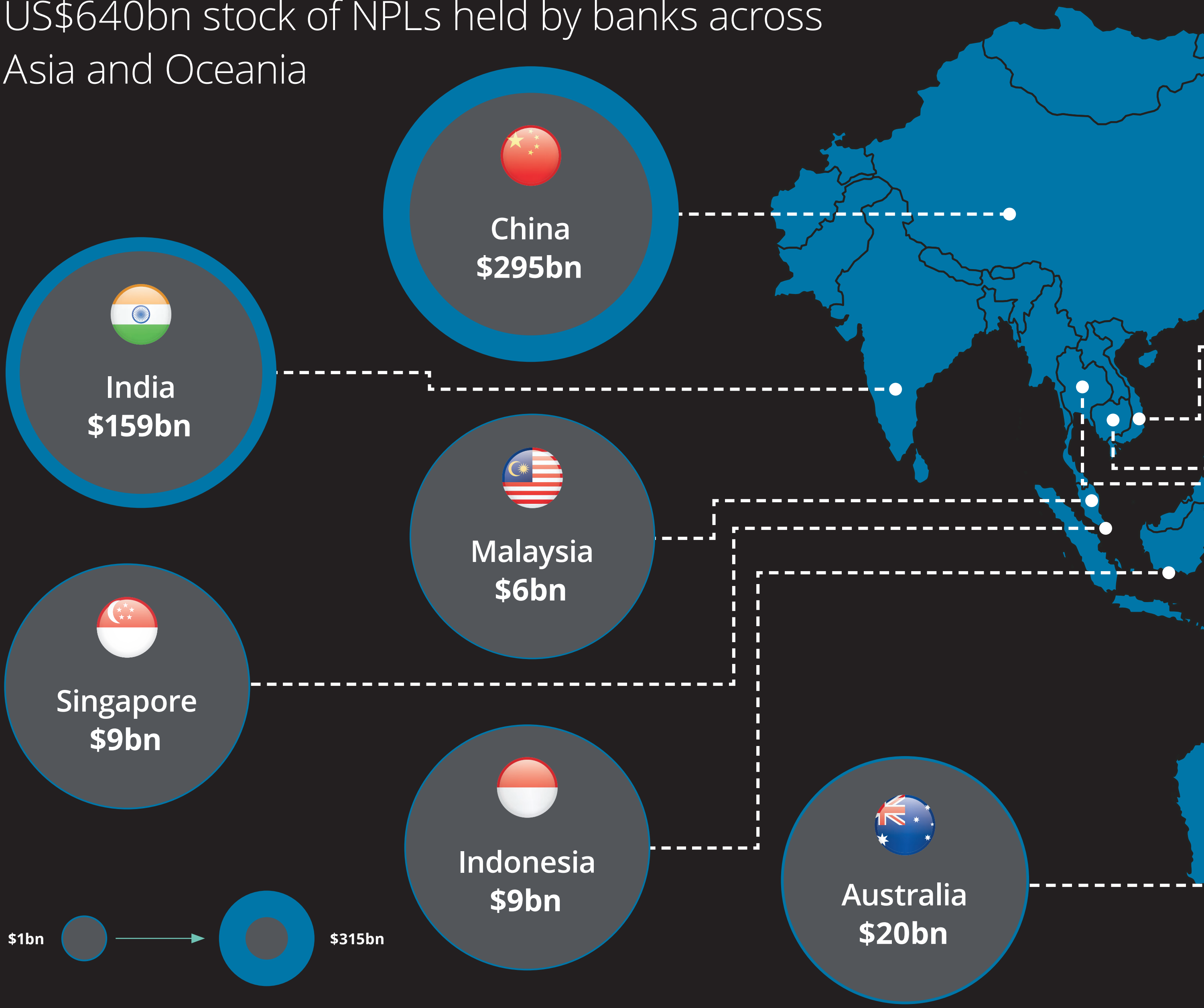
This is already being seen in China, where previous high levels of growth have somewhat slowed, and recent events showed the potential of IFRS 9 to hit banks where it hurts. In August 2019, Bank of Jinzhou (Liaoning Province) revealed losses of approximately $640 million for 2018, compared to a $1.29 billion profit posted for the previous year[34]. Management cited "implementation of the International Financial Reporting Standard 9 (IFRS 9)" as the primary cause leading to the losses, according to several reports. While in the first six months since IFRS 9 had gone live, the bank's rising impairments were offset by trading profits, the second six months saw a major reversal.

A number of Chinese regions are experiencing a particularly tough economy, especially now with the impact of the coronavirus. Banks will continue to be dependent upon local economic conditions, and observers note that any downturn could quickly push more loans than expected into the non-performing 'Stage 3' bucket - given that Mainland China has joined Hong Kong in IFRS 9 adherence and impairment for expected losses is now mandatory. One example is Shengjing Bank, the largest lender in the province of Liaoning, which in 2018 would have had to report five times more Stage 3 assets than it did, had it been subject to IFRS 9 rules. Its "nonperforming" loans were worth a total of $4.9 billion, according to UBS estimates[35]. Meanwhile, Bank of East Asia saw its first half profits fall by 75% in 2019, Bloomberg reports, after the introduction of IFRS 9, as impairment losses jumped by a multiple of 18 in one year. Stage 3 loans increased fourfold in scale[36].

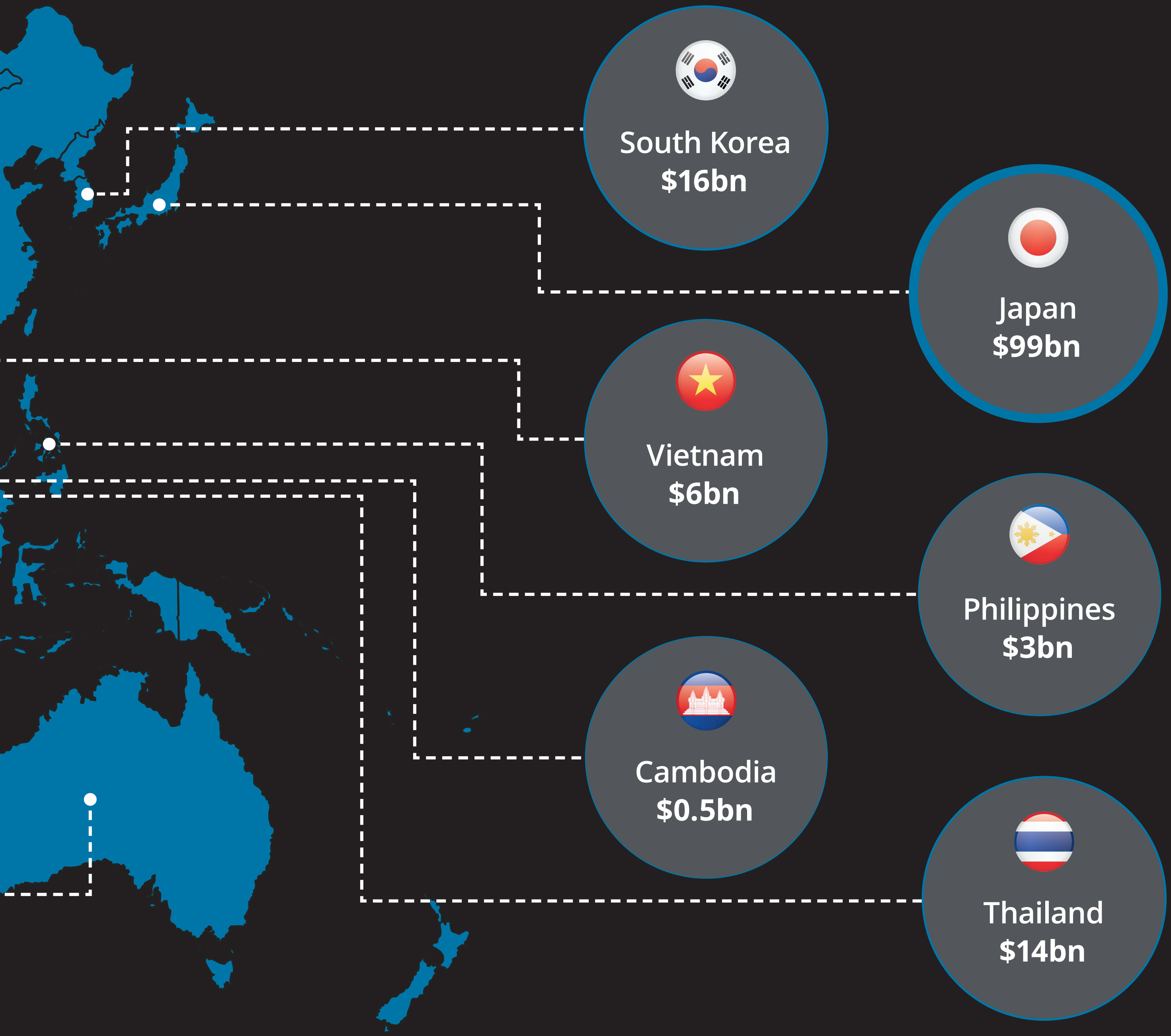
Of course, regional and global economic threats are also a problem for the next adopters of IFRS 9. These markets, such as India, Thailand, and Indonesia, will have the issue further compounded by the fact they have prior homegrown accounting standards that are well-intentioned but significantly different from global rules. Their lack of background in IAS 39 adoption leaves an even deeper operational change to be effected. Although impairment regimes prescribed by their central banks were conservative, the fact that many of the processes that underpin IFRS 9 were not required under existing legislation means more hidden bad loans could suddenly emerge, and there could be significant revisions to official capital positions.

The adverse capital consequences of the IFRS 9 reforms without a more strategic and considered approach could reduce banks' capability to lend affordably to core sectors: banks may seek higher lending rates to riskier small businesses or consumers, and may require better covenants or increased collateral on longer-term loans[37].

US$640bn stock of NPLs held by banks across Asia and Oceania



Source: Central banks and regulators, Bloomberg, CEIC. Latest data as of December 2018.


South Korea
$16bn
Japan
$99bn
Vietnam
$6bn
Philippines
$3bn
Cambodia
$0.5bn
Thailand
$14bn

The concern over loans to small- and medium-sized businesses is significant, given that they are the engine room of most Asian economies. Problems obtaining reliable data and in managing these customers efficiently could heavily drag on the credit environment. For local commercial banks in some countries, legislation continues to hamper the ability to improve their books by efficiently selling non-performing and underperforming loans.

For state-owned banks, sometimes furthest behind the adoption curve, there is a risk of balance sheet pressures building quickly. India's lack of an IFRS 9 implementation date[38] is notable, with Fitch highlighting concerns that state-run lenders there would have had to increase impairment substantially if the rules had been introduced already[39].

Weighing against these risks, however, is the relatively strong capitalization of banks across Asia [40] which so far has resulted in none of Asia's national regulators seeing a need to implement a Europe-equivalent "relief" transition phase [41].

For banks across Asia, whatever their starting point, as IFRS 9 beds in alongside Basel III measurements, there could be a substantial, materially negative financial impact on capital ratios. This will redefine what type of business activities and customers are worth sticking with. These issues can be quickly compounded by macroeconomic volatility, against which they will have to provision more highly on loans that are under stress.

Given these pressures, Asian banks must consider how to change their businesses accordingly, and they will need to make sure they are sufficiently active in managing both their capital and loan books. They must apply highly active portfolio management and operational alignment. A key element will also be talent, because IFRS 9 requires new skillsets encompassing accounting, credit risk, business, IT and data management. **Addressing these challenges will be essential in order to step ahead of competitors and build a truly future-ready business.**

Lessons learned from Europe

European banks' adoption of IFRS 9 presents clear lessons for Asian institutions.

While on day one, European banks' CET1 ratios were broadly in line with expectations, at 47 bps on a simple sample and 27 bps on a weighted sample, there are concerns about the quality and harmonization of implementation as the regulation's effect beds in over the long term. On initial implementation of IFRS 9, there was an average of 9% increase in CET1 impairment. However, there was a broad total range from a more than 20% decrease to a more than 20% increase, with more than a sixth of banks in the latter category, according to the European Banking Authority in its initial impact report[49]. The body notes that future economic trends could easily change these figures.

There is a clear concern: a focus on day one readiness and basic standards adherence has led to a blinkered view of what is required. Indeed, the European Banking Authority states that there is a need to closely examine banks' loan stage transitioning, revealing that 30 and 90 days past due on some loans was not leading to the necessary stage transfers. It also reports that even though CET1 ratios were in line with expectations, there was a boost to those ratios from transition arrangements that allow banks to include in their top tier capital a portion of the increased expected credit impairment, for up to five years[50]. **There is a need to scrutinize how the numbers change over time to ensure impairment is applied in a consistent and effective manner, with gradual withdrawal from the transitioning, the European Banking Authority says.**

For banks across Europe, staging and associated impairment levels will continue to be a challenge as IFRS 9 beds in and supervisory scrutiny on implementation increases, as the example of a major European bank provided earlier illustrates.

According to a Deloitte study, after the first year of IFRS 9[52], the six "systemically important UK banks" increased impairment levels in the first 12 months. At day one, provisioning was up by between 16.1% and 58.4%, with a wide variety of approaches being taken. By the end of that year they then decreased impairment by between 2.3% and 34.8%, primarily driven by writing off Stage 3 loans (even as total exposure increased).

In the UK, even though the regulation had a wide-ranging impact on banks initially, **it remains to be seen how total impairment levels and charges will behave during future periods of stress, particularly given banks' differing judgements on impairment, and as the transitional relief phases out.**

Correct staging will continue to be crucial for all banks. An analysis[53] by Deloitte of European institutions' stage allocation one year after adoption found that Scandinavian banks had a high proportion of loans at Stage 1 (at 92% to 95%), German banks at 81% to 96%, central European banks at 78% to 90%, and at Greek banks only 36% to 47% because of a high Stage 3 component. Expected credit loss (ECL) coverage ratios reflect staging allocation, with German banks averaging between 0.4% to 1.7% (and their Stage 3 coverage being 30% to 51%).

Banks are grappling with identifying clear and consistent definitions of Stage 2 to 3 triggers, which represent underperforming and non-performing loans respectively. Many persist with simple "30 or 90 days past due" as the core of their assessment along with measures of changes to the probability of default. However, this is unlikely to be sufficient under the latest regulatory expectations outlined by the European Central Bank. The central bank's AQR manual spells out a huge range of quantitative and qualitative stage triggers that should be factored into any staging classification assessment by banks and we would expect these, in the longer term, to become embedded in operational practices (refer to pages 11-13).

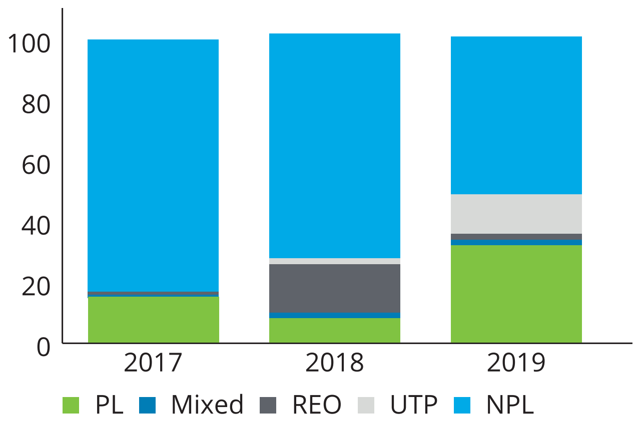
Covenant breaches, requests for extension of maturity, or payment deferrals are, of course clear foundational triggers. Banks are grappling with how to adjust loan origination, management and monitoring to meet better the new requirements. Banks must put a major focus on correctly classifying assets and putting in place a robust approach to staging and impairment.

IFRS 9 is therefore presenting further complexity for European banks, particularly in aligning the complex, multi-variant collective models, with realistic impairment calculations. Those models need to logically handle the weighting of base versus adverse risks, going versus gone concerns, and risks versus what should be deemed losses or liabilities. Notwithstanding this complexity, it is interesting to note that **IFRS 9 does not eliminate many of the weaknesses that were inherent in IAS 39, for example unrealistic collateral values and cashflow prediction, and a struggle to properly determine effective interest rates.**

Supervisory focus will clearly continue in these fundamental areas.

Capital optimization is visibly becoming a critical requirement for all banks, not only the largest. European institutions of all sizes are increasingly considering how they can adjust products, pricing, technology, data and processes to optimize business models and manage the CET1 impact. They are also closely monitoring their portfolios: three years ago, secondary portfolio markets across Europe were almost entirely comprised of non-performing loans, whereas now about half the trades conducted are for performing or underperforming loans, as banks move to optimize their financial position and reduce non-core assets.

European loan portfolio transactions by type (€bn)



Source: Debtwire, Deloitte research and analysis of market data

Deeper look at Stage 2 and 3 triggers

In June 2018, the European Central Bank updated its guidance on AQR for banks[54] (Asset Quality Review Phase 2 Manual - "The AQR Manual") to reflect the mandatory application of IFRS 9 from 1 January of that year.

Reflecting that IFRS 9 is, of course, a principles based standard, chapter four of the AQR Manual, provides guidance as to how the European Central Bank considers IFRS 9 rules should be applied to assess changes in credit risk.

Stage 2 (Significant Increase in Credit Risk – [SICR]) triggers

1. As set out in the AQR Manual, the European Central Bank applies the following minimum triggers for Stage 2 classification under IFRS 9:
   - **A. lifetime Probability of Default (PD) of the exposure on the reporting date is 200% higher** than at origination*
   - **B. 12-month PD of the exposure on the reporting date is above 20%**
   - **C. payments on the exposure > 30 days past due** (rebuttable assumption – e.g. not if as a result of administrative error)
   - **D. exposure is on the bank's watch-list,** forborne or restructured due to financial difficulty
2. Only exposures with a 12-month PD exceeding 0.3% are to be considered for SICR assessment

The following should also be considered when assessing classification:

- cases where individual triggers for credit impairment are hit but are assessed as not warranting credit-impaired status based on the debtor's overall situation;
- the following non-exhaustive list of other qualitative factors as listed in the Standard (B5.5.17):
  - A. significant changes in internal price indicators of credit risk (the credit spread of similar financial instrument, terms and counterparty)
  - B. other changes in the rates or terms of an existing instrument (such as more stringent covenants, increased amounts of collateral or guarantees, or higher income coverage)
  - C. significant changes in external market indicators of credit risk for a particular or similar financial instrument with the same expected life (such as credit spread, credit default swap prices, length of time/ extent to which the fair value of the financial asset has been < its amortized cost, debt or equity prices)
  - D. an actual or expected significant change in the financial instrument's external credit rating

* It may be acceptable to assess this trigger by considering changes in 12-month PD rather than lifetime PD in cases where the bank uses this practical expedient for accounting purposes.

E. an actual or expected internal credit rating downgrade for the borrower
F. existing or forecast adverse changes in business, financial or economic conditions (interest rates, unemployment)
G. an actual or expected significant change in the operating results of the borrower (declining revenues or margins, increasing operating risks, working capital deficiencies, decreasing asset quality, increased balance sheet leverage, liquidity management problems or changes in the scope of business or organizational structure [such as the discontinuance of a segment of the business] that results in a significant change in the borrower's ability to meet its debt obligations)
H. significant increases in credit risk on other financial instruments of the same borrower
I. an actual or expected significant adverse change in the regulatory, economic, or technological environment of the borrower
J. significant changes in the value of the collateral supporting the obligation or quality of guarantees, which are expected to reduce the borrower's economic incentive to make scheduled contractual payments
K. a significant change in the quality of the guarantee provided by a shareholder
L. significant changes, such as reductions in financial support from a parent, or change in the quality of credit enhancement
M. expected changes in the loan documentation and terms, including an expected breach of contract
N. significant changes in the expected performance and behavior of the borrower, including changes in the payment status of borrowers in the group
O. changes in the entity's credit management approach in relation to the financial instrument (more focused monitoring)
P. past due information, including the rebuttable presumption of > 30 Days Past Due (DPD)

Stage 3 triggers for assessing whether an exposure is credit-impaired

Most banks do not define the extent of minimum triggers for credit impairment in their policies or state explicitly what such events would be. The AQR Manual states clearly the European Central Bank's interpretation, as per below.

Appendix A to IFRS 9 defines a credit impaired financial asset where the following type of events can be identified:

1. **Significant financial difficulty of the issuer or the borrower,** i.e.:
   A. deterioration in external or internal rating
   B. 5Y CDS > 1,000 bps within last 12 months
   C. equity reduced by 50% within a reporting period
   D. debtor has requested emergency funding with the bank
   E. material amount past due to public creditors or employees
   F. material decrease in the collateral value where the sale of the financed asset is required to repay the loan (e.g. CRE)
   G. material increase in the loan-to-value ratio
   H. material decrease in turnover or the loss of a major client
   I. material decrease in estimated future cash flows
   J. current debt service coverage ratio is below 1.1
2. **A breach of contract, such as a default or past due event : interpreted by the European Central Bank as being > 90 DPD** on any facility at debtor level (subject to materiality criteria), covenant breach not waived by the bank, ISDA credit event declared;
3. **Concessions for economic or contractual reasons relating to the borrower's financial difficulty that would not otherwise be granted.** The European Central Bank's expectations include strict compliance with ETS standards on forbearance – i.e. if forborne NPE then must be Stage 3;
4. It is becoming probable that the **borrower will enter bankruptcy or other financial reorganization**: Debtor has filed a bankruptcy application, any legal entity within the debtor's group of connected clients (including subsidiaries of the debtor) has filed a bankruptcy application;
5. **Disappearance of an active market for the financial asset or for refinancing** because of financial difficulties;
6. **Deep discount observed at origination**/purchase of the financial instrument

Conclusion

Regulatory expectations in Europe are much wider than those being implemented in practice. Banks need to develop and embed internal definitions to match these expectations.

Business impact of IFRS 9

In a world of more stringent accounting, and increased regulation and capital standards, banks need to focus not just on implementation but on how to best embed the requirements into business-as-usual operations to minimize risk and turn threat into opportunity.

The leading Asian banks of the future will develop **portfolio management functions** capable of delivering back book optimization, product innovation and strategic capital allocation. They will also tighten operational alignment with business model modification, loan lifecycle management, and system and data transformation.

In terms of **back book optimization,** IFRS 9 affects normalized risk adjusted return on capital by changing the risk staging of assets, and creating income statement volatility through revised methods of impairment[55]. Asian banks will therefore need to define what is core and what is not, freeing trapped capital and disposing of assets that are too risky or do not match up to the required return levels.

Product innovation is also key. Improved risk adjusted returns will come from a better design of future products, bearing in mind the higher risk weighting associated with undrawn balances and long maturity assets. Banks will also need to ensure customers provide enhanced levels of information and tighter loan documentation to better manage risks.

As banks release capital by optimizing their back books and selling less-desirable loans, they are looking to **strategically reallocate capital** towards newer and better performing products. On an ongoing basis, the smartest banks in Asia will continually reallocate newly freed capital away from Stage 2 and 3 assets.

In addition, using the machine learning techniques developed, there is a real opportunity to use these tools to improve the predictability of credit risk and collections performance to drive impairment and capital optimization.

Financial institutions are equally aiming to optimize and potentially even **restructure business models** to be better aligned to new products and markets, and, therefore, to new clients. This is essential to optimal delivery of their business strategies given that IFRS 9 changes so dramatically the profitability and even viability of many higher risk loans.

Methods of **managing loan lifecycles** will change, with particular attention required around systems and processes. IFRS 9 shifts the requirement for proactive monitoring of clients from the boundary between performing and non-performing under IAS 39 to the boundary between Stage 1 and Stage 2 under the new model. As such, the entire early warning and watch-list cycle will be required to move up the curve. Banks must determine how these processes will now be managed, and who within the organization bears primary responsibility for them.

Finally, looking to the future, strong **data and analytics** will clearly be essential to optimization in all these contexts. Monitoring and forecasting of loans throughout the lifecycle, and effective portfolio management, is only possible through strong management of information and the astute deployment of analytics.

How we can help you

We can help you to stay ahead of the curve and prioritize below where we propose to start the journey towards future proofing...

Enabling Pillars	Where we can help
Back Book Optimization - IFRS 9 will change the way assets are risk weighted and increases income statement volatility through impairments, therefore affecting normalized Risk Adjusted Return on Capital (RAROC). Certain assets may no longer meet the bank's return hurdles / risk appetite. The situation presents the opportunity to define what is core and non-core to the bank and derive a plan to free trapped capital.	• Core-Non Core definition/Asset Classification Reviews • Deleverage planning/Structured solutions • Execution of Deleverage plan
Product innovation - Certain products will attract higher Risk Weighted Assets (RWA) for example undrawn balances, certain long maturity assets, etc. Certain products will need to be adjusted including loan documentation. Analyzing the potential behaviors and strategically considering future products and info requirements will allow for improved RAROC.	• Strategic product type & pricing/markets/clients review • Structured solutions/Originate to distribute model • Internal funding/LTP realignment
Strategic Capital Reallocation - Capital released from Back Book optimization should be strategically reallocated to go-forward products. Credit risk models can be refined and enhanced to optimize impairment and release capital.	• Strategic portfolio management capabilities and processes • Tax/funding impact analysis • Machine Learning/Artificial Intelligence tools to improve credit and collections
Business model/Organization - The business may need to be restructured to align itself to new products/markets/clients. This facilitates optimal delivery of the strategy.	• Business model review based on Strategic Capital Reallocation
Loan lifecycle and Business systems and processes - Impact of IFRS 9 will mean that defining, monitoring and forecasting of asset transitions from stage 1 to 3 will be essential. In addition, the way the loans are managed and dealt with through the stages could also be deficient or suboptimal under IFRS 9.	• IFRS 9 Impact analysis on loan management lifecycle e.g. Early warning, watchlist, workout, etc. • Loan management/Workout process re-engineering
Data and analytics - Management Information (MI) will be critical to analyzing loans to support monitoring and forecasting of loans through the cycle, and facilitates effective portfolio management.	• Digitalization of MI systems • Data requirements definition and gap analysis • Systems review, selection and deployment

Deloitte case studies

Thailand

Theme: Enhancement of Small and Medium-sized Enterprise (SME) early warning mechanisms and problem loan management capabilities

IFRS 9 status: Pre-adoption readiness

Case description: This major commercial bank in Thailand sought to enhance SME problem loan management capabilities with a focus on early warning mechanisms and process improvements including automated decision making for non-performing loans. The project with Deloitte involved a detailed diagnostic and gap analysis of the bank's commercial and SME loan management lifecycle, from early warning through to non-performing loan resolution against international best practice. A prioritization matrix was applied to the gaps identified, focusing on "quick wins" and the development of longer term broader solutions including the creation of an implementation roadmap.

IFRS 9 benefits: Early warning, Stage 2 and 3 prevention mechanisms, performance improvement and portfolio management

Germany

Theme: Review of large corporate exposures to determine IFRS 9 categorization, provisioning adequacy and formulation of a deleveraging strategy

IFRS 9 status: Post-adoption review

Case description: A large German bank sought Deloitte's help in reviewing a sample of large exposures to assess the credit quality of its book, with a view to deleveraging and de-risking its balance sheet. The review covered borrowers within multiple asset classes including retail, hotel, development, aviation, energy, and infrastructure industries, alongside others. Documentation reviewed included borrower credit files (including recent credit applications and annual reviews), collateral information, financial statements, management accounts, projections and business plans, and any other relevant key commercial documents. Borrowers were then bucketed into risk categories broadly based on their vulnerability to future credit deterioration, in order to ensure provisioning levels were adequate and reflective of borrower characteristics. A deleveraging plan was subsequently formulated providing the bank with a clear strategy on the derisking of its balance sheet through the disposal of select portfolios over a given timeframe.

IFRS 9 benefits: Portfolio management, provisioning review, asset quality review, and deleveraging strategy formulation

Western Europe

Theme: Capital optimization opportunities to enable improvement in equity returns

IFRS 9 status: Post-implementation strategy

Case description: A prominent bank in Europe with domestic and international customers needed to improve its equity returns, in line with market commitments and in response to substantial changes in its capital position due to IFRS 9 and Basel III rules. Capital optimization was identified as a crucial area to focus on, alongside cost reduction and technology innovation. Deloitte brought together multi-disciplinary expertise, including strategy, banking analytics, financial advisory (M&A and restructuring), risk, regulation, and tax, to scope out opportunities for performance improvement through capital optimization. Using a proprietary “constrained optimization” tool, and working closely with the bank’s senior management, the project involves a comprehensive appraisal and prioritization of those opportunities, including: realization of efficiencies in regulatory capital requirements through changes in data, models and booking structures; restructuring or exit of legacy assets to reduce overall capital footprint and drive greater capital efficiency; capital reallocation to higher returning business lines; and improvements in internal capital controls and disciplines.

IFRS 9 benefits: Performance improvement, capital and business optimization, and portfolio management

Contacts

Financial Advisory

Global Financial Services Financial Advisory Leader

Enrique Gutierrez
Partner
+34 914381728
egutierrez@deloitte.es

Asia Pacific Financial Services Financial Advisory Leader

Kevin Chamberlain
Partner
+61 2 9322 5985
kchamberlain@deloitte.com.au

Australia

James Chown
Partner
+61 3 9671 7286
jchown@deloitte.com.au

New Zealand

David Morgan
Partner
+64 4 470 3870
davidmorgan@deloitte.co.nz

China

Edmund Yeung
Partner
+852 2852 1685
edmyeung@deloitte.com.hk

India

Bimal Modi
Partner
+91 22 6185 5080
bimalmodi@deloitte.com

Uday Bhansali
Partner
+91 22 6185 5070
udaybhansali@deloitte.com

Japan

Dai Arakawa
Partner
+81 80 4435 1568
dai.arakawa@tohmatsu.co.jp

South Korea

Ki Wan Kil
Partner
+82 2 6676 1585
kkil@deloitte.com

Singapore

Jeffrey Pirie
Executive Director
+65 6216 3168
jpirie@deloitte.com

Andrew Grimmett
Executive Director
+65 6530 5555
agrimmett@deloitte.com

Taiwan

Maggie Pan
Partner
+886 2 2725 9988
mpan@deloitte.com.tw

Indonesia

Edy Wirawan
Executive Director
+62 21 5081 9200
ewirawan@deloitte.com

Thailand

Thavee Thaveesangsakulthai
Partner
+66 2034 0141
tthaveesangsakulthai@deloitte.com

Malaysia

Siew Kiat Khoo
Executive Director
+60 3 7610 8861
skkhoo@deloitte.com

Abdul Malek Mohamed Said
Executive Director
+60 3 7610 8866
maleksaid@deloitte.com

Philippines

Diane Yap
Partner
+63 2 8 581 9053

Vietnam

Phong Le Viet Anh
Partner
+84 28 710 14577
phongle@deloitte.com

India

Aruna Pannala
Partner
+91 22 6185 4818
apannala@deloitte.com

Singapore

Boon Suan Tay
Partner
+65 6216 3218
bstay@deloitte.com

Indonesia

Rosita Sinaga
Partner
+62 21 5081 8700
rsinaga@deloitte.com

Richard Ticoalu
Executive Director
+62 21 5081 9605
rticoalu@deloitte.com

Thailand

Somkrit Krishnamra
Partner
+66 2034 0134
somkrishnamra@deloitte.com

Risk Advisory

Asia Pacific Financial Services Risk Advisory Leader

Tony Wood
Partner
+852 2852 6602
tonywood@deloitte.com.hk

China

Denise Long
Director
+852 2238 7050
miclong@deloitte.com.hk

Malaysia

Justin Ong
Executive Director
+60 3 7610 8895
keaong@deloitte.com

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Notes

Deloitte.

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