COVID-19

The potential impacts of COVID-19 on Credit
Risk Modelling & Provisioning requirements
A Southeast Asian Perspective

pwc

April 2020
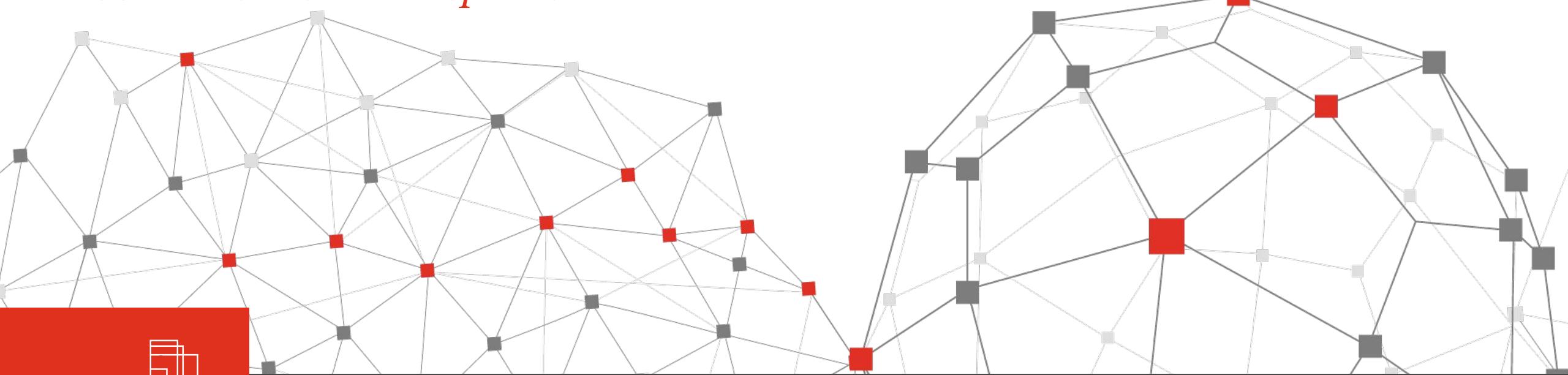
Implications of COVID-19 on Provisioning

Post the global financial crisis (GFC), regulators formulated plans which included requirements that financial institutions must hold provisions which make allowance for expected economic impacts
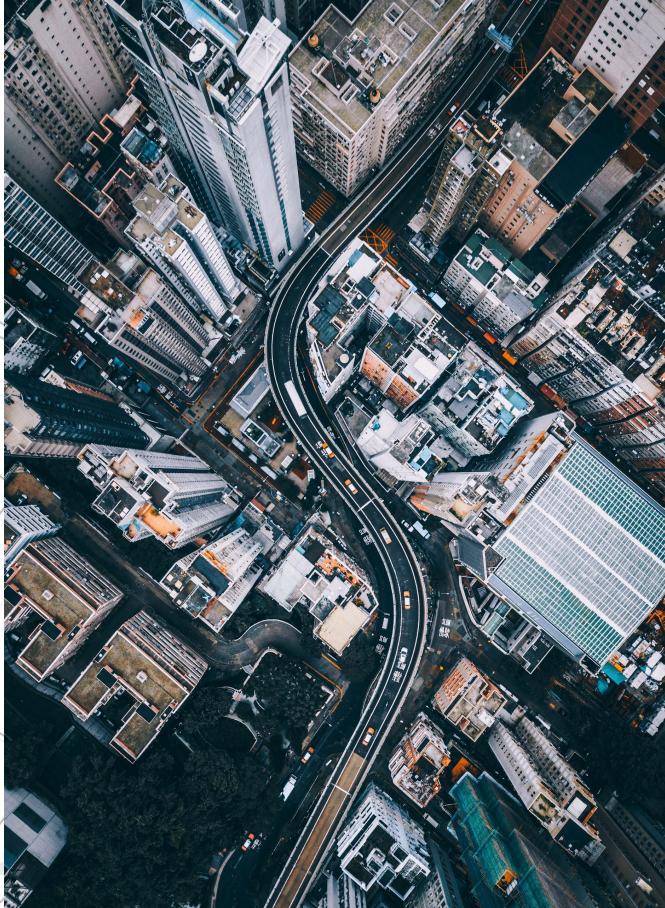
Forward-looking Provisioning Models

Banks across the globe have been (or are amid) developing sophisticated forward-looking provisioning models to allow for different simulated economic scenarios. These simulations include 'downturn' economic scenarios which are designed to stress test the bank's provisions and capital levels.

However, the COVID-19 pandemic, today, has brought almost the entire global economy to a virtual halt, and the decline seen in the global GDP (and other macroeconomic indicators) is significantly worse than what would have been forecasted in bank's forward-looking scenarios.

> "Implication of COVID-19 is expected to significantly increase default rates and credit losses leading to a large increase in provisioning requirements."

Impact on New Reporting Standard

One of the major challenges for financial institutions, during this period, would be to meet the key requirement under the International Financial Reporting Standard (IFRS 9), i.e. a forward looking approach which recognises impairment losses in a more timely manner. The Standard was designed in view of the weaknesses identified in the previous reporting standards and delayed recognition of losses during the GFC.

The global economy picked up and has been relatively stable since. However, with the current COVID-19 pandemic, it will be a challenge for most banks across the world, reporting under IFRS 9, to meet the key requirements of the Standard in computing 'forward-looking' expected credit losses (ECLs). As the IFRS 9 Standard requires banking institutions to incorporate "probability-weighted scenarios" when computing ECLs, the credit modelling teams within banks will need to re-think how forecasted economic shocks and respective probability weights can be incorporated into existing impairment models.

What does Virtual Halt mean?

Social norms and restrictions on several economic activities are rapidly changing

As we speak, major economies are being locked down as the virus spreads at an alarming rate. Many believe that the lockdowns and halts may help "flatten the curve" (impact of COVID-19).

Some adverse effects seen so far around Southeast Asia due to lockdowns are:
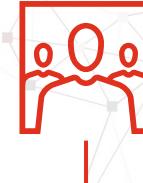
Increased Loss of Income
Retail borrowers and commercial borrowers are facing significant reductions in their monthly incomes

Plunge in Economic Activities
Lockdowns are leading closure of several business and disrupting supply chain and mobility

Increased Risk of Default
During this outbreak, many lenders are facing breach of loan contracts by their borrowers

**Low Financial & Operational Leverage**
Slowdown in economic activities is putting pressure on businesses' cash flows and working capital

These are only a few of the adverse effects seen to date, which have led to governments and regulators stepping in with some relief measures, and more importantly, moratoriums on some of the lending activities. These include downgrading a loan to default, downgrading due to breach of loan contracts etc. Furthermore, uncertainty in how long these lockdowns will last is a concern across industries as many of these measures will only offer temporary relief.

With uncertainty ahead and significant economic shocks, financial regulators and government interventions are critical in softening the impact

Regulatory Moratoriums across Southeast Asia (1/2)

Relief measures deployed to minimise the impact due to economic shocks as a result of COVID-19
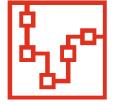
Monetary Authority of Singapore (MAS)[1]

- Letting borrowers with secured loans defer either principal payments or principal & interest payments until the end of the year as long as the borrowers are not in arrears for more than 90 days
- No interest charged on the deferred interest payments
- Flexibility to convert unsecured loans to term loans with a reduced rate of interest. This option is specially designed to support borrowers who suffered a huge loss of monthly income (more than 25%)
- Deferring principal payments on SME secured loans until the end of the year
- Potentially lowering interest rates on some of the SME credit facilities

Bank Negara Malaysia (BNM)[2]

- BNM's measures announced that the banks will let both retail and commercial borrowers to defer repayments for a period of 6 months.
- Some of the major Malaysian banks also mentioned they would not compound any interest on the deferred payments for this period
- Banks will also allow individuals to convert some of the outstanding balances of unsecured credit facilities to a term loan for not more than 3 years
- Banks will also now assist corporates in restructuring some of their loans to help with sustainability of businesses and jobs

Bank of Thailand (BOT)[3]

For customers who are not in arrears for more than 90 days, have not gone through debt-restructuring and not undergoing legal proceedings:
- A grace period of up to 1-year on the repayment of the principal
- A reduction of the instalment amount of up to 1 year
- A six-month maximum grace period for instalment payments

[1] https://www.mas.gov.sg/news/media-releases/2020/mas-and-financial-industry-to-support-individuals-and-smes-affected-by-the-covid-19-pandemic
[2] https://www.bnm.gov.my/index.php?ch=en_press&pg=en_press&ac=5018&lang=en
[3] https://www.bot.or.th/English/PressandSpeeches/Press/2020/Pages/n2063.aspx
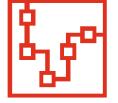
Regulatory Moratoriums across Southeast Asia (2/2)

Relief measures deployed to minimise the impact due to economic shocks as a result of COVID-19

Bangko Sentral Ng Pilipinas (BSP)[1]

Major banking institutions and banks:
- To exclude from the past due loan ratio of loans to affected borrowers for a period of one (1) year
- Stagger booking of provision for probable losses over a period of five (5) years, subject to prior approval of the BSP
- Flexibility to provide a grace period of 30-90 days for loan payments and/or restructure loan accounts for their customers
- To relax eligibility criteria for borrowers affected by the COVID-19 pandemic
- Strongly encouraged to suspend fees and on-top charges for online banking transactions to facilitate smooth banking experience for customers

Otoritas Jasa Keuangan (OJK)[2]

- Banks to relax debt quality assessment and restructuring requirement for affected debtors (including individuals and micro, small and medium enterprises (MSMEs) for a period of up to 12 months
- Banks encouraged to ease up on debt collection process for affected individuals who are working in informal sectors or workers with daily income

State Bank of Vietnam (SBV)[3]

- Banks to reconsider debt repayment terms, exempting/lowering interest rates in view of the customers who suffered great loss of income and decrease in revenues as a result of COVID-19
- Financial institutions advised to extend credit lines to businesses and exempt or reduce interest payments. Some businesses are given flexibility to extend the loan maturity to a maximum of 12 months from contractual maturity

[1] http://www.bsp.gov.ph/publications/media.asp?id=5315
[2] https://www.ojk.go.id/id/regulasi/Pages/Stimulus-Perekonomian-Nasional-Sebagai-Kebijakan-Countercyclical-Dampak-Penyebaran-Coronavirus-Disease-2019.aspx
[3] https://www.sbv.gov.vn/webcenter/portal/en/home/

From an IFRS 9 Modelling Perspective

Banks to adapt to the current situation and incorporate government moratoriums

A widely discussed international financial reporting standard, IFRS 9, requires most financial institutions to determine forward-looking expected credit losses. However, due to the pandemic bringing major economies to a near shutdown and **uncertainty creeping into economic activities**, banks are finding it extremely challenging to quantify the impact with the existing forward-looking lenses or models in place. Additionally, banks may experience a **significant increase in ECLs** which would mean tightening some of the existing credit policies.

Regulators and governments across the region, as we speak, are mandating **moratoriums such as payment holidays** etc. This would require that the banks' credit modellers should take note of these moratoriums and ensure some of these loans (under payment holidays policies) are not transferred into 'Stage 2' / 'Stage 3' classifications (attracting lifetime ECL) purely based on the 30 days past due criteria.

Due to the pandemic, banks are now expecting an increase in IFRS 9 provisions which would also have a significant impact to the banks' capital requirements. At present, major banks in Southeast Asia appear to have enough capital cushion, but the uncertainty in how long the pandemic will last is cause for concern amongst the banking institutions. Key areas that banks should focus on given the current turbulent situation are:

- Economic scenarios
- Staging Criterias
- Underlying Credit Models
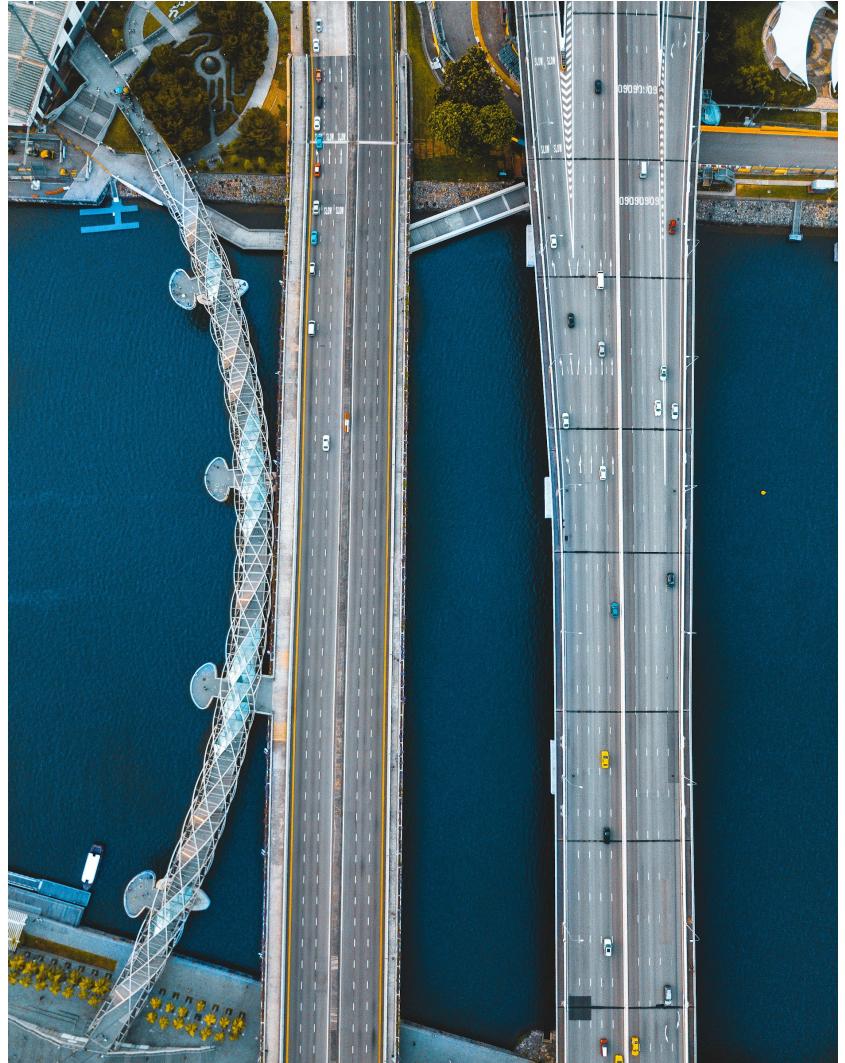
Adapting to new Economic Scenarios
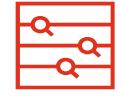
Banks to start capturing reliable and robust economic scenarios for forward-looking provisioning

Changes in Economic Scenarios

Many central banks acknowledge the fact that due to sudden and unexpected effects of COVID-19, it is difficult to obtain reliable and detailed macroeconomic forecasts to calculate forward-looking ECLs. Under these circumstances, it will be important for banks to rely on robust qualitative overlays and expert judgments applied on the model outputs to determine IFRS 9 provisions.

For example, for retail banking portfolios, many banks, especially in the Southeast Asian region, can expect macroeconomic variables like household debt, income, unemployment rates, and interest rates etc. to drive some of the risk factors. As most macroeconomic forecasts are concerned, the above-mentioned variables may generally be offset and computed based on the performance of GDP. However, during this outbreak, a large fall in GDP may not necessarily mean an increase in unemployment rates but may mean a decrease in retail expenditure. This could be due to companies looking to retain employees, but at lower remuneration levels. Banks' management teams will have to closely monitor these variables and apply post model adjustments to capture the current challenging conditions.

Expanding Staging Criteria

Flexibility in applying Staging triggers based on regulatory moratoriums

Impact on IFRS 9 Staging

Most banks should expect that many of their existing loans will be triggered into "Stage 2" from "Stage 1" given the current economic conditions, which also means a significant increase in provisions. However, for most banks, it will be arduous to source reasonable and supportable information at the reporting date at individual or loan level when assessing increase in credit risk.

Banks may consider incorporating additional macroeconomic information at the reporting date to perform the Staging assessment and potentially consider further segmentation of their existing portfolios to identify vulnerable pools/segments that may need to be placed under "Stage 2" bucket.

In the short-term, the management teams in the bank may have to apply factors based on the moratoriums released by the regulators to ensure there is no sudden spike or overestimation in provisions due to loans transitioning to "Stage 2" or "Stage 3" during this period. This is also likely to have an impact in the way the bank captures, tracks and reports these customers over time. It is highly recommended that banks work with and seek guidance from their regulators to finalise their first quarter provisions.
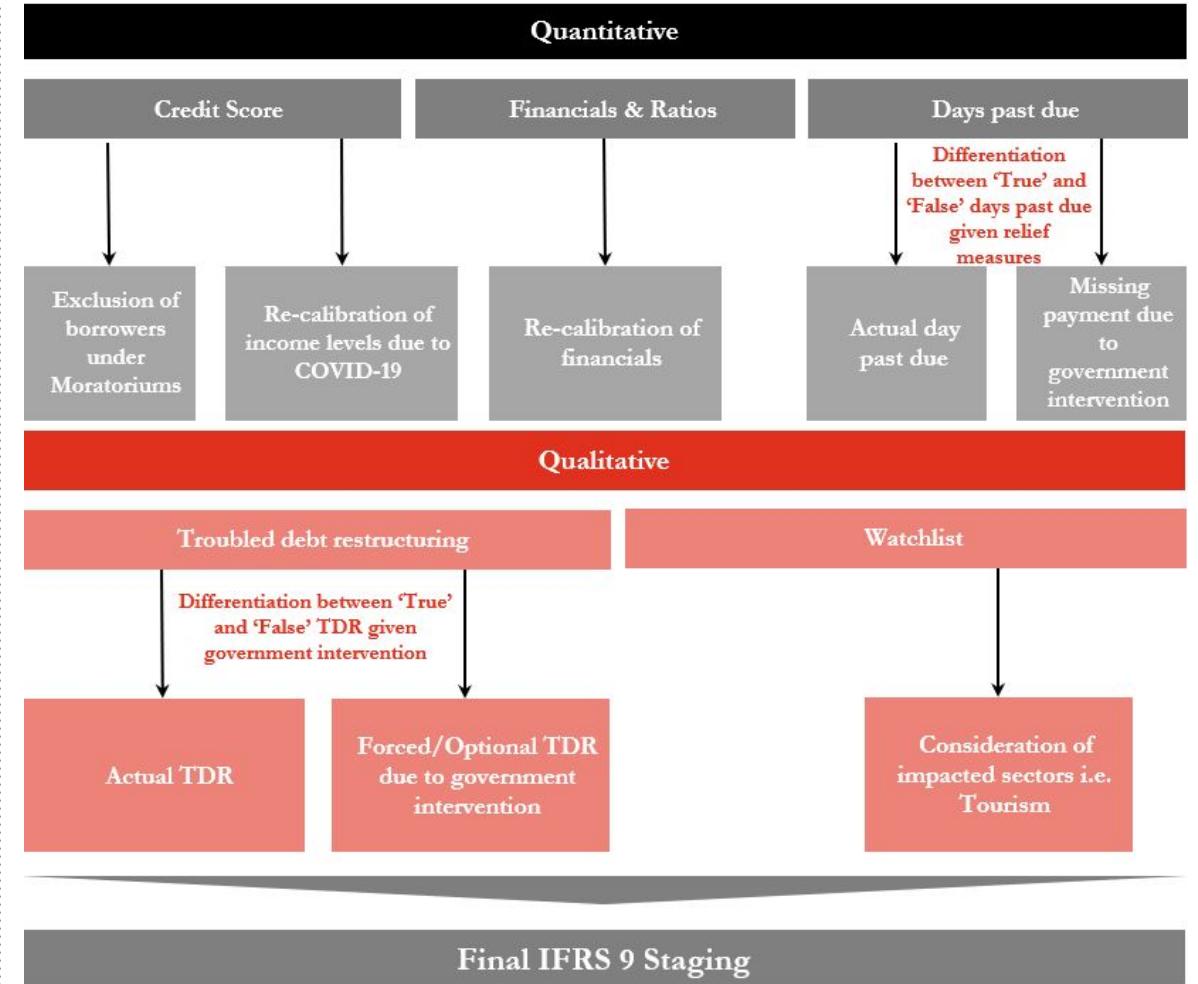
Enhancing underlying Credit Models

Banks' internal credit risk teams should continue working on monitoring and enhancing risk models

Credit Model Adjustments

The banks' internal credit risk management teams should continue to work on enhancing the existing credit models and allow for the measurement of credit risk with and without any moratoriums. Banks may also consider recognising significant increase in credit risk, under IFRS 9 requirements, without making allowance for the impact of the pandemic. This could then be allowed for in an additional overlay.

Existing forward-looking or macroeconomic linkage models that help predict default risk should capture those variables that have been directly affected by COVID-19. Variables considered as predictors may no longer be relevant. Structural breaks in economic variables and default / loss rates should be tested for when developing and enhancing forecasting models.

Many banks in Southeast Asia have been facing challenges from a data collection perspective :
- Banks will need to continue collecting data points at requisite levels of granularity to ensure for robust modelling and stable model outputs
- Capturing reliable macroeconomic data and forecasts will be very critical during this outbreak

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Some of the credit risk models that banks may focus on are:

Application Scorecards
➔ Re-calibrate based on updated scale of wage or income, valuation and financial ratios of borrowers
➔ Consider relaxing eligibility criteria for new retail and commercial applications to maintain cash flows and internal funding

Behavioural & Collection Models
➔ Flexibility in systems and models to exclude borrowers under moratorium or relief packages

Stress Testing
➔ Adding new severe and dramatic scenarios is highly recommended. Some of the banks in this region may draw some insights from the sophisticated Stress Test models from the West (e.g. CCAR models)

IFRS 9 Forward-Looking
➔ Recalibrate existing macroeconomic linkage models with relevant factors that drive the default risk factors.
➔ Incorporating tests for structural stability in regression models can be explored and incorporated.

Moratoriums announced by major regulators are only applicable to borrowers and regulatory reporting. Existing models, risk process and systems will need close monitoring and upgrading as the economic outlook changes in the region.

What's next and How we can help

## Helping you navigate through these challenging times

Banks' internal risk processes, policies, models and systems are very much in the eye of the storm right now. As retail and commercial customers come under financial stress for cash flow and loan repayments, banks have difficult decisions to make about how to help clients while maintaining their own balance sheets. IFRS 9 has onerous modelling and provision implications which will not be sustainable in the current environment. Governments are stepping in with relief programs to help struggling consumers and businesses.

It is important to consider substantial correlation of various other risks, including but not limited to credit risk, market risk, operational risk, liquidity risk, cyber security risk etc. Linkages between different categories of risk are likely to emerge in times like this and should be fully understood and prepared for. Most banks will be under scrutiny during this period and will be closely watched on how the internal risk systems and models cope with current turbulent environment.

We understand this period will be a challenge for many banks and we welcome discussions in navigating approaches and considerations in enhancing internal risk models based on the ever-changing regulatory requirements.

> You can access our webpage here.

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