KPMG

IFRS 9 Expected Credit Loss and COVID-19

Financial Risk Management

# Expected Credit Loss (ECL) in times of COVID-19

The economic outlook and the integration of forward-looking information

Impact of COVID-19

The COVID-19 pandemic has induced numerous countries to impose lockdowns in a bid to stem the spread of the new coronavirus. In many cases all non-essential businesses have been ordered to shut, travel restrictions have been introduced and borders partially closed. Although governments and central banks around the world have stepped up their efforts to mitigate the economic fallout, COVID-19 is expected to have a very considerable impact on the economy; global supply chains are being interrupted, falling consumer spending causes businesses to lose revenue (the resulting layoffs will reinforce and worsen the drop in consumer spending) and the ensuing rise in corporate defaults will put pressure on the financial system.
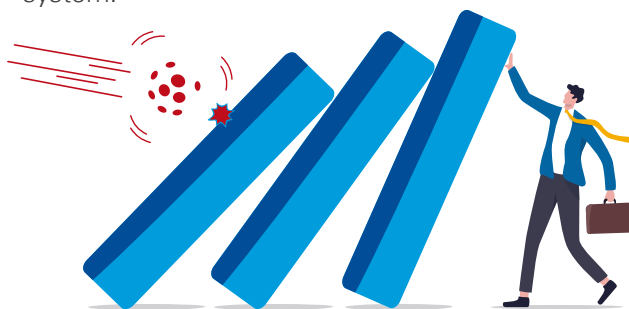
Forward-looking ECL estimates must consider the worsening economic outlook

Under IFRS 9, impairment allowances for loans booked at amortised cost are based on Expected Credit Losses (ECL) and must take into account forecasted economic conditions. It is because of this forward-looking characteristic that the rapid and dramatic change of the economic outlook entailed by the coronavirus outbreak will impact ECL estimates even before increased credit losses show up in the data. The expected economic crisis will feed through in ECL estimates via several channels:

- An expected rise in corporate defaults not only leads to higher probability of default (PD) estimates, but is also likely to push a significant portion of credit exposures into Stage 2 with impairments no longer reflecting the losses caused by a potential default occurring within the following year, but rather taking into consideration all possible default events over the lifetime of a credit exposure

- Falling asset prices lower the value of collateral and may cause the loss given default (LGD) risk parameter to increase; and

- Liquidity issues incentivise borrowers to utilise their credit lines to the full extent and may put upward pressure on exposure at default (EAD) estimates.

A V-shaped recovery doesn't seem the most likely scenario

Based on the Chinese experience, lockdowns apparently have to last for a period ranging anywhere from two to three months in order to be effective. During this period economic activity all but comes to a grinding halt. Once the rate of increase of the COVID-19 outbreaks has been slowed down, restrictions might be lifted. However this will probably be only gradually, since it is unlikely that the COVID-19 transmission chain will have been broken. A total turn around would require finding all suspected cases, quarantining and testing them, and isolating all confirmed cases. Currently many countries seem to be scrambling just to successfully implement the lockdown measures and treat the most severe patients, raising doubts about their capacity to effectively take the necessary measures to break the transmission chain.

Until the mass production of a vaccine or an affordable cure, there will be significant uncertainty around the evolution of the spread. Even if the number of COVID-19 cases were to drop to a low and manageable level, the risk of a new exponential phase of outbreak would constantly be lurking around the corner.

Against this background it doesn't seem likely that the economic slowdown will be short-lived with GDP bouncing back to its previous growth levels within a few quarters (V-shaped recession). A U-shaped recovery path (slow return to trend growth) seems the more likely scenario. However, if fiscal and monetary stimulus fall short of preventing a prolonged deleveraging cycle also a L-shaped scenario (a long period of stagnant growth) looks possible.

Changing probabilities of current macro scenarios might not suffice

In order to tackle nonlinearities in the relationships between economic variables and ECL estimates, a probability-weighted multiple scenario approach is typically used. It has been suggested to cater for the worsening economic outlook by changing the probabilities assigned to the most recent economic scenario set.

Until the outbreak of the pandemic, such a set would have consisted for example of three scenarios; a base line scenario (e.g. based on expected GDP growth with a probability of 50 per cent), an optimistic scenario (e.g. accelerated GDP growth and falling unemployment with a likelihood of 20percent) and a pessimistic scenario (e.g. lower growth and rising unemployment expected to occur in 30percent of all cases). It is however unlikely that merely changing the probabilities of these scenarios would yield similar ECL estimates as those to be obtained by correctly incorporating the most recent developments. Indeed, a pessimistic scenario would now probably have to be based on a deep recession with an L-shaped recovery path, while the most optimistic scenario would still have to take into account a recession (albeit short-lived and V-shaped).

## Even changing the forward-looking scenarios will probably not be enough

However, updating the forward-looking scenarios might not be enough. The models that provide the link between macroeconomic factors and default rates often don't allow consideration of the different impacts that the pandemic is likely to have across sectors. It is reasonable to expect that the travel and hospitality industry will be far more affected by the lockdowns than, for example, the medical equipment manufacturers. Whether these heterogeneous

sectorial impacts are taken into account through modelling or an ad-hoc created overlay (possibly making use of expert-based judgement) will depend on the level of adaptability of the existing model, but not taking them into account doesn't seem like an option.

Existing linkage models might not be able to handle 'COVID-19 macroeconomics'

It will be important to assess whether the models that link macroeconomic data to default rates (i.e. the linkage models) also remain robust under the current circumstances. Indeed, in the current crisis, the pessimistic scenario to be considered in a multiple scenario approach might be more adverse than any scenario tested until now. Unrealistically high forecasted default rates are one of the possible consequences, especially if the linkage model uses linear relationships.

Expert-based judgement is likely to be needed in order to assess the reasonableness of forecasted default rates.
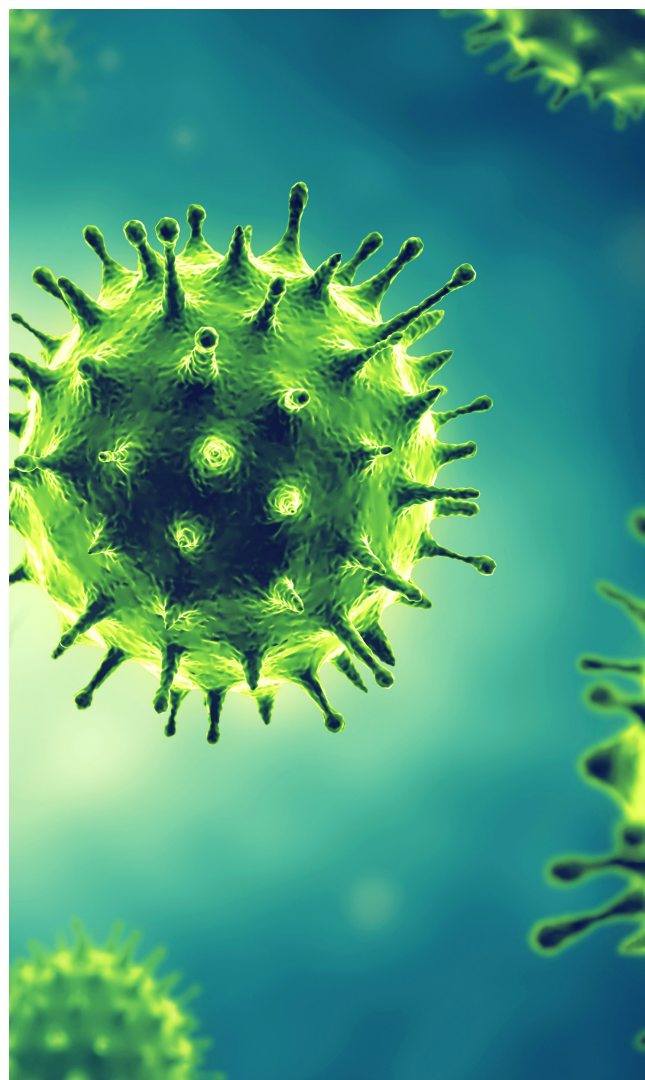
Payment holidays might moderate the number of transfers to Stages 2 and 3

The efficiency of payment relief in lowering stage transitions will also depend on the expected recovery path

In several countries, creditors can obtain payment holidays under certain conditions. A payment holiday changes the cash flow structure of a loan implying that the necessity for derecognition will have to be verified. If derecognition isn't necessary, the gross carrying amount would have to be recalculated and a modification loss may be required to be recognised. The level of creditworthiness at inception and the effective interest rate however remain valid (as opposed to the case of derecognition).

After the recognition of a modification loss it must be assessed whether a significant increase in credit risk has occurred, using the risk of default at initial recognition based on the original contractual terms. This assessment will to a large extent depend on how likely an L-shaped recession path is believed to be (specifically for the exposure or the sector in question).[1]

Additionally, when calculating the minimum required amount of capital and reserve funds relating to credit risk, the PD's assigned to COVID-19 related restructured loans may be the same as or higher than the PD's assigned before the restructuring of those loans. COVID-19 related restructured loans are defined as loans where restructuring is being considered due to COVID-19 related factors and that were up to date as at 29 February 2020 and are expected to remain in an up-to-date status subsequent to the relief period.

Applying a similar reasoning to the calculation of impairment levels under IFRS 9 would obviously require taking into account the switch from through-the-cycle to point-in-time PD's. Apart from that, it would, however, imply that an exposure in Stage 1 before the pandemic could in theory avoid seeing a significant increase in its credit risk, if the risk of not being up-to-date subsequent to the relief period is considered not significantly higher than at initial recognition. The latter will depend on the expected economic recovery path and the length of the relief period.

It is difficult at this stage to gauge what the impact of payment holidays will be on stage transfers, but it seems safe to assume that the number of exposures transferred to Stage 2 or 3 would be significantly higher without payment holidays.

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1. Theoretically in case of derecognition the asset could end up in stage 1, but if modifications to the cash flow structure are big enough to justify derecognition, the exposure would typically be considered distressed and therefore to be originated credit-impaired.

India specific details
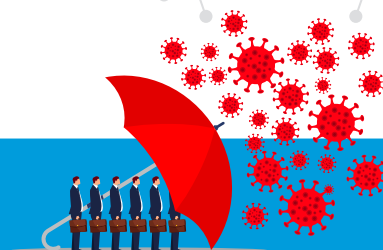
COVID-19's India story

India had first reported the Novel coronavirus (COVID-19) case on 30 January 2020 in Kerala. By 21st March as the number of cases were increasing (315 active cases till that date), India observed a 1-day lockdown in all states as announced by central government followed by 21-day lockdown from 24th March 2020. The early lockdown helped India to contain the community spread in many districts. As the number of cases were increasing (more than 9,000 cases by April 13), the government had increased the country wide lockdown for another 2 weeks till 3rd May 2020. Since then, the lockdown has been increased to 31st May. During the lockdown, differential activities are allowed in areas based on their risk characteristics.[2]

Relief measures as announced by Government of India and the Regulators

On 26 March 2020, Government of India announced relief measures amounting to INR1.7 trillion[3] (~USD22 Bn). The reliefs were in form of direct benefit transfers, contribution to social security, food security related benefits and general compliance related benefits. In addition to that Reserve Bank of India also came up with their set of relief measures with first announcement on 27 March 2020 and then the second one on 17 April 2020[4]. As a relief measure, on 27 March 2020, the RBI has announced steps to facilitate and incentivise the bank credit flows which included measures to reduce the repo and reverse repo rate, reduction of cash coverage ratio, three-month moratorium on all the loans extended by the banks to list a few. On 17 April 2020, RBI addressed the liquidity issue in the market, eased the revered repo rate and provided surplus cash to refinancing institutions to increase liquidity and credit flow in the market.

RBI had also permitted moratorium of three months on installments of any term loan (including agriculture term loan, retail and crop loan) falling between March 2020 and 30 May 2020. The repayment schedule for such loans as well as the residual tenor, will be shifted by three months. Though lending institutes can keep on accruing interest on the outstanding portion of the term loans during the moratorium period. Similarly, for CC/OD facility, lending institutes can defer the recovery of interest due between 1 March 2020 and 30 May 2020. The interest will be accumulated and should be collected immediately after the completion of 3-month period. Lending institutes can also review the granted working capital facilities and may recalculate drawing power by reducing margins and/or by reassessing the working capital cycle for the borrowers. Recently, government has announced a mega stimulus package of 20Lakh crore amounting to 10 percent of GDP. Out of 15 measures announced, 6 are aimed towards the vast MSME sector.

Assessment of macroeconomic impact on the levels of provisioning by financial institutions

The sudden shock in the overall economy would translate into the credit, liquidity and market related stresses across the gamut of industries. Specifically, from a credit risk perspective, the deterioration of underlying cash flows for the lenders would negatively impact the provisioning levels and hence the profit erosion.

Most of the available macroeconomic forecasts point to a deteriorating economic outlook for short to medium term. Each increase in the lockdown days, incrementally erodes hopes of economic recovery and further deteriorates the macroeconomic outlook.

Institutions are looking at variety of approaches to apply these macro-economic shocks for assessment of required impairment levels.

The portfolios are being assed for borrower specific attributes (ratings, liquidity, business revenue, profitability, self-employed, other income, collateral), industry specific attributes (certain industries getting more impacted than others) to identify segments of customers which are expected to experience low, medium and high stress.

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2. COVID-19 INDIA, Ministry of Health and Family Welfare, Government of Inida, accessed on 3 May 2020

3. Nirmala Sitharaman Press Conference Live: FM Announces Rs 1.7 lakh Crore Coronavirus Relief Package, Bloomerg Quint, Mahip Kapoor, 26 March 2020

4. Reserve Bank of India, Accessed on 3 May 2020

These approaches may be segregated in broad categories:-

Historical experience

The construction of currently applied macroeconomic models is usually based on historical data. The re-analysis of data with the use of modern disaggregation methods will allow to distinguish components of long-term trend and local disturbances. On their basis, it will be possible to develop dedicated models for long-term projection and to study the shock impact of the current situation.

For e.g. after giving the moratorium benefit, institutions may look at all accounts availing this benefit for historical trends. Identification of problem accounts historically would help the lenders to assess realistic chances of defaults post the moratorium.

It is likely that the industries which have been impacted least due to the pandemic, will recover the fastest. The recovery shapes (V, U, L) will vary specific to industry. Accordingly, institutions need to adopt customized approach for provision computation.

Financial Institutions having exposure to industries like consumer durables, pharma, diagnostics and utilities are likely to have a lesser impact while institutions having exposure to industries like metals, banking, realty and auto are expected to have a significant impact.

In case there is a V-Shaped recovery, the institutions are likely to witness a steep decline and a strong rebound of economy. This would lead to increased cash flows, repayment capacity of the obligors especially the segment availing moratorium benefits, hence a steep improvement in default rates would be expected.

The collateral valuations are also like to see declines, particularly loans secured by securities.

The haircuts for various collaterals would need to be analyzed considering liquidity crunch.

Forced Sales Value (FSV) sensitivity analysis would provide the institutions an overall range of haircuts. Once the economy improves, the valuations and recoveries are likely to improve significantly.

In case of a U-Shaped recovery, the institutions are likely to steep decline without a clearly defined trough followed by a period of stagnation followed by healthy improvement back to the previous growth.

This would translate to a period of stagnated cash flows and increase in number of customers availing moratorium benefits. The stagnated cash flows would significantly affect repayment capacity of the customers leading to increased migration to sub-standard credit performance.

The collateral valuations would be critical during the trough period, and the institutions are likely to use stressed values of underlying assets followed by stressed recoveries till the time economy starts improving.

In case of a L-Shaped recovery, the institutions are likely to experience a steep decline followed by a slow state of recovery with stagnated economic growth and unemployment. This would likely translate to a period of stagnated cash flows for a longer duration. The stagnated cash flows and unemployment rates would significantly affect repayment capacity of the customers and potentially causing a cliff effect due to significant shift of standard customer to sub-standard regions.

The collateral valuations and haircuts are likely to be significantly affected with institutions relying on extreme rare event stress scenarios with specific focus on tail risks.

Forward looking macroeconomic models

Due to the unpredictable effects of the pandemic, it may be necessary to build dedicated models for times of crisis. These crisis models will focus on modelling the tails of the distribution of macroeconomic variables and modelling the potential duration of the downturn considering individual industries. Unlike normal models, dedicated crisis models are conditional and only work in stress conditions. However, most of the macroeconomic forecasts like GDP, Unemployment shift only after the economy changes, hence reliance on macroeconomic data should be exercised judicially.

Ex-post model adjustments

The availability of quality data for forecasts has been a challenge in this scenario. The range of forecasts have been huge with GDP projections ranging from ~5[5] percent to 0[6] percent for FY21. Additionally, the increase in lock down days makes these projections more dynamic.

Forecasts made in conditions of uncertainty, both in terms of real events and economic de-freeze policy, may be burdened by great uncertainty. However, while considering the selection of right source for the forecast, it is necessary to consider the elements indicated in the supervisory guidelines.

Institutions should assess the need for recalibration of models, post model adjustments (PMAs) or management overlays backed by empirical evidence to address the impact of the lockdowns, social distancing restrictions and government relief packages.

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5. S&P cuts India GDP growth forecast for FY21 to 5.2 per cent, Hindu Business Line, 23 March 2020

6. Moody's expects India to see no GDP growth in FY21; Growth to remain lower than in past, CNBC, 8 May 2020

The support programmes should be considered regardless of their origin (government moratoria vs self-initiatives). The institutions should also consider the criteria for support, which industries will be covered and supply chain dependencies between connected clients. Additional relevant elements include issues related to the speed of distribution, the duration of the support and ultimately the impact of the support on the borrower.

Stressed scenarios

It is common practice to use macroeconomic information for three scenarios: pessimistic, baseline and optimistic. In view of the current situation, such differentiation may not be enough, especially given the heterogeneous nature of the impact of a pandemic on individual industries.

Institutions should look at reassigning weightage to scenarios with more weight to the specific-period macroeconomic forecast especially in a U-shaped recoveries for the short-term outlook and should look to systematically reduce that weight as the economic outlook improves for time horizons (V-shaped) or continue to use the stressed forecasts (L-shaped recovery). Also, it should be assessed whether reversion to the long-term forecasts could be faster than expected and hence a mean reversion could still be acceptable under those conditions.

All or any of these layers that are applied for the provision computation should pass the governance structure of instituition.

Way forward

Based on the assessment across the above categories, institutions need to reassess the impact on provisioning due to different risk characteristics. Each risk characteristics would be impacted in different quantum for different products, geographies, sector, customer segments etc. Some of the key elements that would be impacted are Probability of Default (PD), Loss Given Default (LGD) and significant increase in credit risk (SICR).

PD would be impacted considering moratoria being granted by RBI as a result of COVID-19 pandemic. Institutions should assess whether the borrower availing the benefits is likely to meet its financial obligations or whether the borrower is expected to experience significant delays to meet financial obligations, accordingly an assessment of creditworthiness of the borrower should be done on a consistent basis based on reliable information.

The assessment must be on a longer period as the current moratorium is only 3 months while assessment has to be performed for the lifetime of the facility.

Institutions should review the LGD models to assess the appropriateness of collateral valuations given the current conditions. Specific valuation adjustments to collaterals such share-backed lending, CRE/RRE, should be considered.

Additionally, for highly impacted industries like tourism, hotel, airlines, commodities, the repossession time and recovery forecasts should be adjusted in the current conditions. Institutions should look at both recoverable value and time to recovery to assess the LGD factor.

Considering Covid-19 several relief measures have been announced by the RBI such as payment moratoriums and relief funds; the institutions should analyse these measures to assess whether the credit risk on the financial instrument has significantly increased or whether the borrower is only experiencing a temporary liquidity constraint.

Exercising these measures would contribute to mitigate any potential cliff effect of transfers between stages and would help to avoid exaggerating the effects of the shock.

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