COVID-19 Fair Value Implications

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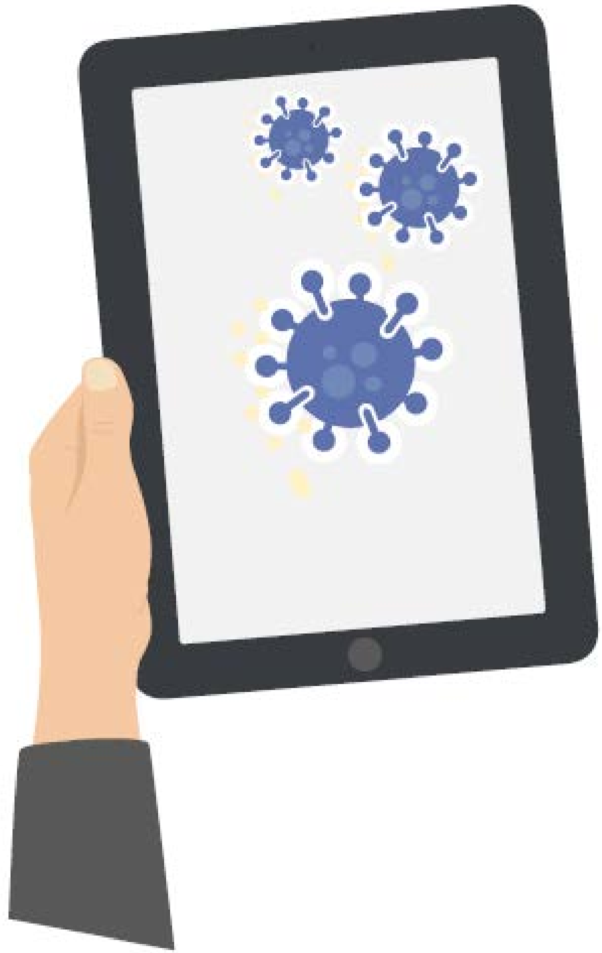
AGENDA

- The Global Picture
- Fair Value Measurement : PSAK 68 (IFRS 13)
- Valuation of Uncertainty
- Financial Asset Adjustment
- Non-Financial Asset Impairment
- Wrap Up



COVID-19 Fair Value Implications

The Global Picture

The COVID-19 Pandemic

- Significantly affected financial markets in the first quarter of 2020.
- Stock markets (Volume and Activities) have declined sharply
- Volatility has increased.
- Treasury bond yields have reached record lows
- Credit-Default-Swap indices have been surging, reflecting concerns of increased corporate defaults.

The Consequences

- Uncertainty Factor – Judgement on Orderly and Not Orderly transaction
- For many assets and liabilities, fair values may have changed significantly, reflecting changes in cash flow forecasts, higher uncertainty and elevated risks.

The Valuation Impact

- Uncertainty equal to risk. Increase of cost of capital to justify return for holding riskier assets
- Surge of Debt, a combined factor of withdrawal of new credit to finance working capital, enhance liquidity and forex loss.
- The unwind of leverage always creates collateral damage. As investors sell good assets to fund non-performing assets, the prices of all assets decline.
- The sharp decline in growth will result in bankruptcies and all of the spillovers from debt unwinding episodes of the past can be expected this time around as well.

Adjustment to Valuation

- Valuation Adjustments to account for liquidity constrains & widening of bid-offer spreads
- Model uncertainty due to high volatility levels and ultra low interest rates
- Parameter uncertainty due to significant intra-day market movements and decline in price quotations in particular markets
- Limited observability of certain market parameter which may require alternative valuation approaches and adjustments to Fair Value Hierarchy classification
- Impaired hedge effectiveness and increased hedging costs

Fair Value Measurement : PSAK 68 (IFRS 13)

Uncertainty can influence the company judgement on the fair value of financial instruments, reflected in financial statements

PSAK 68 (para 77)
- "Quoted Price" is the best "fact" reference on FV.
- Can be used without necessarily make any adjustment
- Apply on "orderly transaction"

Revisit - Principles of Fair Value Assumptions
- Orderly Transaction
- Traded in Principle Market
- Most Advantageous Market

Key Questions on COVID-19 Situation
- When the transactions are traded at low volume and level of activities, should it still be considered as "Orderly" or it becomes "Non Orderly" Transactions ?
- The Judgement Factor

The Valuation Hierarchy (INPUT)
- Level 1: Quotation Price (no adjustment)
- Level 2: Input other than Quotation Price, Observable, both Direct and Indirect
- Level 3: Input Non-Observable

Disclosure on Valuation Techniques
- PSAK 68 require additional disclosure for No quotation Valuations
- PSAK 68 (para 91) : objective of disclosure is to assist report users to understand the impact of FV measurement to P/L statements or other comprehensive income during the reporting period
- For example : Should the company change the valuation method from level 1 to level 2 or 3, the company should make the disclosure and explain the impact

FV Measurement : OJK Application of Covid-19 Stimulus

Recent COVID-19 Pandemic led OJK to establish a guidance on PSAK 68 and PSAK 71 accounting treatments

PSAK 68

1. Postpone the mark to market valuation of government issued securities for 6 months. During this period, use the quoted price on March 31, 2020.
2. Postpone the mark to market valuation for other securities for 6 months if you believe the performance of the SSB issuer is considered satisfactory based on the criteria's that have been set.
3. Make disclosures that explain the differences in accounting treatment that refers to OJK guidelines with SAK as required in PSAK 68.

PSAK 71

1. Comply and implement IAI's guidance while proactively identifying debtors that has been performing well but is declining due to the Covid-19 pandemic.
2. Implements a restructuring scheme that refers to the result of an accurate assessment that have been adjusted to the profile of debtors for a period of 1 year and only provide restructuring to debtors that have been affected by the pandemic.
3. Classify debtors that are eligible for a 'stage – 1' restructuring scheme that does not require additional *CKPN*.
4. Conduct continuous identification and monitoring while at the same time prepare to continue forming CKPN incase that debtors that have been granted a restructuring scheme is unable to recover after the pandemic has passed.

Valuation Uncertainty : The Measurement

How to value in times of uncertainty

1. Define significance of uncertainty

Determine materiality of uncertainty:

- Adjustment on Valuation assumptions, i.e. interest rates, credit spread, issuance credit risk.
- Increase in cost of capital as investors may require higher yield on investment to justify the uncertainty risk.

Determine the impact:

- Is it only impacting certain assets or the whole portfolio?
- What kind of risk will be exposed to the end user of the valuation result?

2. Measure the value of the uncertainty

- Apply sensitivity analysis of different possible circumstances.
- Provide alternative assumptions based on the probability of occurrence.
  - —Forecasting worst case scenario is unnecessary.
- Quantify the uncertainty value and provide detail explanations in regards to the value.
- Ensure that all implications of a change in input are taken into account.

Source: International Valuation Standards Council ("IVSC") article, KPMG Advisory Indonesia

Valuation Uncertainty : Unobservable Inputs

Unobservable inputs

Unobservable inputs are inputs for which market data is not available and that are developed using the best information available about the assumptions that market participants would make in pricing the asset or liability, including assumptions about risk.

Some key factors to consider when measuring fair value using discount rate :

Economic activity levels	Credit risk and liquidity risk	Forecasting risk	Foreign exchange risk	Commodity price risk
Decreasing economic activity such as production and demand of goods and sales. This might have a negative impact on future cash flow	Economic uncertainty increased credit risk and liquidity risk for many companies.	Should incorporate the economic uncertainty in financial forecast.	Companies with significant sales or purchases in foreign currencies may be adversely affected by exchange rate movements.	Companies with significant sales or purchases in foreign currencies may be adversely affected by exchange rate movements.

Significant judgment may be needed to quantify risk premiums and other adjustments for these risks. Also, the number of fair value measurements classified as Level 3 in the fair value hierarchy may increase.

Source: KPMG Global insight website, KPMG Advisory Indonesia

Financial Asset

Some of the potential impacts that COVID-19 may have on the accounting for financial instruments, including:

— Expected credit losses
— Loan modifications (lender accounting)
— Financial guarantees
— Debt modifications and loan covenants
— Derivatives: Normal purchases and normal sales scope exception
— Hedge accounting
— Equity method investments
— Investments in debt and equity securities

Financial Instruments : Fixed Income and Interest Rate

Bond Markets

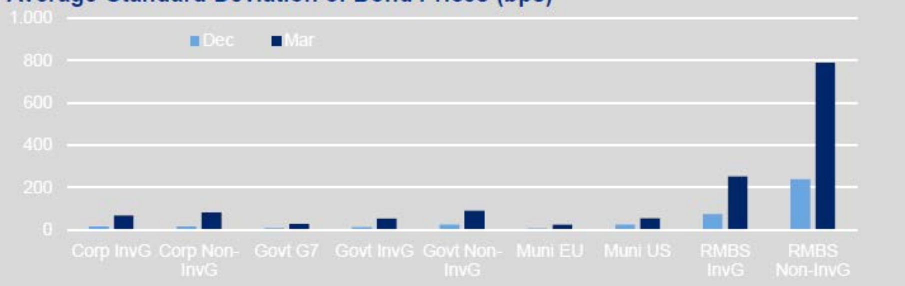
Summary of current market developments

– Significant loss in convergence of pricing feeds from established pricing services across almost all asset classes. Most affected are securitizations as well as non-investment grade bonds (both corporate and government).

– Bid-offer spreads have gone up remarkably since December, from corporate bonds, government bonds to securitization.

– The chart below illustrates the average standard deviation of bond prices from different pricing services. The analysis is conducted for a sample portfolio of 810 fixed income securities for which there are 3 or more pricing feeds per security.

Average Standard Deviation of Bond Prices (bps)



Fair Value Considerations

– Thorough quality assurance of pricing feeds from external vendors

– Increased amount of Mark-to-Model positions expected

– Considerations of fair value adjustments to account for liquidity discounts, close-out costs (bid-offer) and movements in funding spreads (FVA)

– Potential implications on Fair Value Hierarchy classification due to reduced observability and consistency of market data

Source: KPMG Germany

Interest Rate Markets

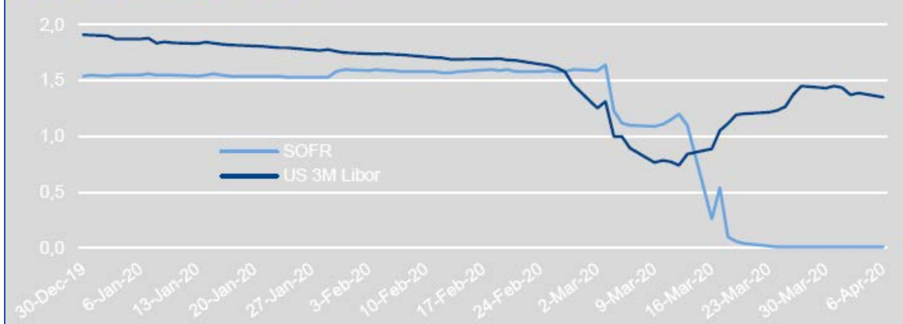
Summary of current market developments

– Reduction in market liquidity lead to an increase in bid-offer spreads and a widening between over night rates (OIS/SOFR) and term funding (Libor). The chart below illustrates the latter.

– National bank interventions lead to a significant drop in rates across the entire term structure in particular for USD.

– Implied volatilities has increased significantly in particular for short dated expiry dates affecting the valuation of swaptions and Cap/Floors.

USD 3 month LIBOR vs SOFR



Fair Value Considerations

– The drop in interest rates can result in a strong one-sided exposure in the respective interest rate derivatives with effects on counterparty credit risk. Together with the widening of CDS spreads this may give rise to wrong-way-risk.

– Discrepancies between money market rates and OIS rates may constitute challenges in the construction of consistent interest rate curves.

– High volatility levels may constitute a stress to option pricing models which may require additional validation.

Financial Instruments : FX Market and Equity

FX Markets

Summary of current market developments

– In general we do not observe a clear tendency towards a significant appreciation of any individual major currency.

– However, intraday fluctuation and market volatility (both realized and implied) has increased significantly in the majority of the currency pairs. The chart below shows the development of the JP Morgan G7/Emerging Market (EM) Volatility Indices which measure the ATM implied volatility of G7/EM currency pairs.

– In FX spot and forward markets, market activity remains high with no significant widening of bid-ask spreads. However, bid-ask spreads for FX options have increased.

JP Morgan Implied Volatility Indices

Source: Bloomberg L.P.

Fair Value Considerations

– Due to the increase in intra-day fluctuations a clear and consistent application of cut-off timing of FX spot and forward rates gets of greater relevance when determining fair values. Concerns could arise over a mismatch in the fair values derived as of end-of-business day as compared valuations which is based on earlier snap shots.

– Valuation of FX Options are affected by the increase in implied volatilities as well as widening of bid-offer spreads which may impact also close out costs and counterparty credit risk.

Source: KPMG Germany

Equity Markets

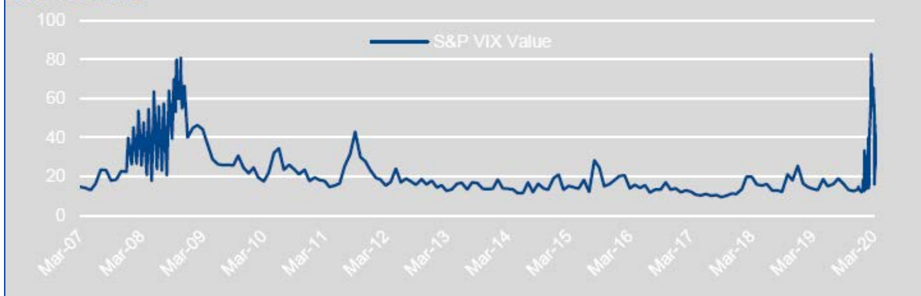
Summary of current market developments

– Stock prices and indices dropped significantly in March 2020. The MSCI World Index fell 34% as of 23 Mar 2020 compared to end of Dec 2019.

– For the constituents of the MSCI World Index the traded volume almost doubled in Mar 2020 driven by investors reallocating their portfolios to less risky asset classes. This accelerated the downturn even more.

– At the same time the volatility of equity markets spiked to similar levels as during the GFC in 2008/2009 as illustrated below for the S&P 500 Volatility Index (VIX):

S&P 500 VIX



Fair Value Considerations

– The significant decline in stock / index prices may push positions in equity derivatives from at-the-money to either deep-in-the-money or out-of-the-money. This may affect the observability of valuation parameter (e.g. volatility) and hence might require a revisit of the Fair Value Hierarchy of such positions.

– The significant increase in market volatilities may constitute a stress scenario for valuation models (e.g. stochastic volatility models) and their calibration. A re-assessment of the adequacy of valuation models in the current market environment may be necessary.

– Un-hedge gap risk may result in fair value losses and increased hedging costs.

– Cancellation of dividends lead to lower dividend projections and higher uncertainty in estimating expected dividend yields.

COVID-19 Fair Value Implications

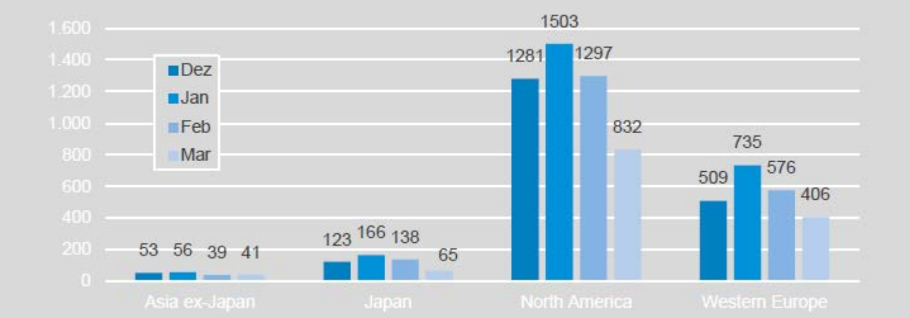
Financial Instruments : Credit Market and Structured Finance

Credit Markets

Summary of current market developments

- CDS Spreads have widened significantly during the first quarter and in particular during March
- On average the increase is 43bps for investment grade and 340bps for non-InvG reference entities as compared to spread levels in December 2019. In both cases this constitutes an increase of more than 100%.
- At the same time bid-offer spreads have doubled from ~19bps in Dec to ~41bps in March (average for 5 year single name CDS) and the number of market participants providing CDS price indications has reduced as illustrated below:

Number of CDS Spread Quotations (5 year single-name CDS)



Fair Value Considerations

- Consideration of Close-out-Costs due to increased bid-offer spreads in particular for non-investment grade exposure.
- Consideration of Observability of CDS spreads due to the reduction of quotations
- Implications on CVA and DVA due to increase in market implied credit risk and widening of spreads
- Wrong-Way-Risk in XVA in particular for non-investment grade exposure.

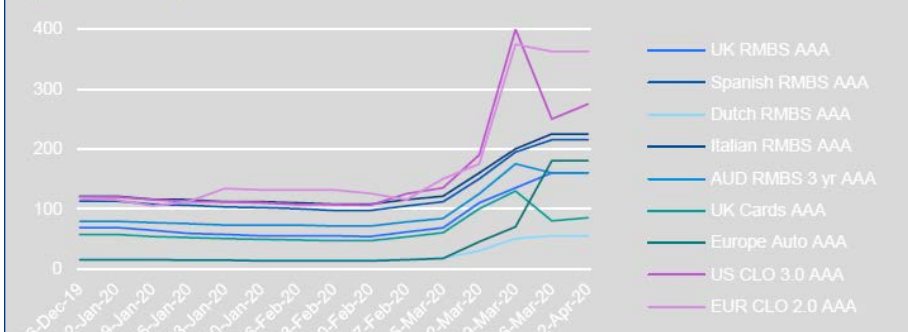
Source: KPMG Germany

Structured Finance

Summary of current market developments

- Spread levels for structured finance assets have widened during the first quarter
- Spread levels and valuation uncertainty increases across all SF exposures while CLOs and non-investment grade tranches in ABS and MBS are mostly affected.
- At the same time market participants are seeking to liquidate SF holdings with BWIC volumes in March being 70% higher as compared to Feb.
- The chart below illustrates the spread developments during Q1 2020 for AAA tranches of selected structured finance types.

Spread Development in selected SF Markets



Source: J.P. Morgan Securities LLC

Fair Value Considerations

- Identify exposure in CLOs as well as other SF assets with exposure to countries which are significantly affected by COVID-19
- Consider modelling assumptions in CLOs in particular with respect to potential rating downgrades in the underlying loan pool and implications on cash diversions
- Re-assess management's pricing sources and models used for SF valuation as well as sample sizes for substantive testing procedures

Non-financial Assets Impairment - The Basis

Conducting an Impairment Test is Required

What is the base standard for impairment assets ?

PSAK 48 : Impairment of Assets

What type of non-financial assets does IAS 36 apply to ?

- Property
- Plant and equipment
- Right-of-use assets
- Intangible assets and goodwill
- Investment properties measured at cost
- Investments in associates and joint ventures

When do non-financial assets need to be tested for impairment ?

- Indefinite-lived intangible assets , intangible assets not yet available for use, goodwill acquired in a business combination → Annually
- Other non-financial assets → When there are triggering events

What are included in triggering events ?

- Significant changes with an adverse effect such as technological, market, economic, legal environment
- Carrying amount value > market capitalization

Source: KPMG Global insight website, KPMG Advisory Indonesia

Non-Financial Assets Impairment: PPE, Intangible assets, and Goodwill

Many governments of countries have implemented some adjusted regulations to contain the spread of COVID-19 coronavirus. One of the regulations that are implemented by the Indonesian Government is Pembatasan Sosial Skala Besar ("PSBB") which started on 10th April 2020, it stated that all activities including working, studying, and praying should be conducted in-home. This regulation and situation resulted in triggering events :

Triggering events has occurred :

- Deterioration in economic environment and sentiment
- Disrupting the business operation of companies
- Increase in uncertainty in the macroeconomic
- Sharp fall in stock markets
- Fluctuation in exchange rate
- Increasing in commodity prices

Need to do impairment test

Indicators of triggering events

Adjusting discount rate

Risk-free rate

Market risk premium

Debt to equity ratio

Country risk premium

Tax

Cost of debt

Challenges in estimating cash flow

Uncertainty rise

What can companies do ?

Impact on useful life and residual value

Are useful life, residual value, and depreciation method still appropriate ?

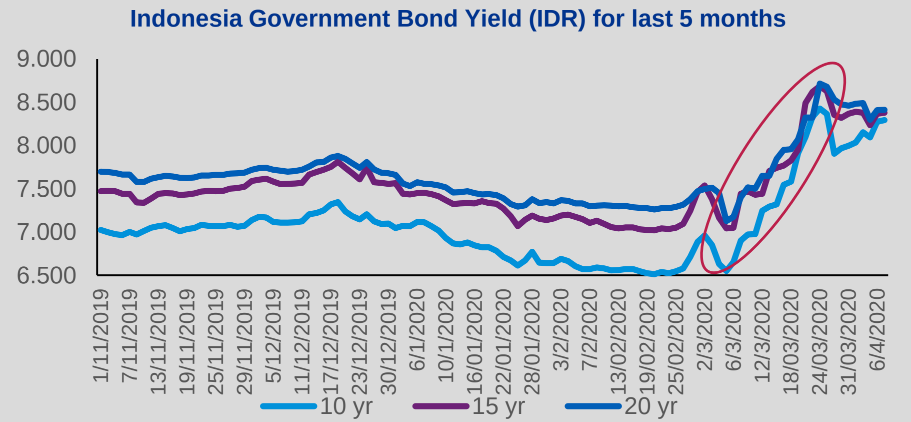
Source: KPMG Global insight website, KPMG Advisory Indonesia

Non-Financial Impairment - Discount rate(1/2)

Risk Free Rate

Summary of Indonesian government bond yield

- For a lot of Indonesian companies, Indonesian government bond yield is considered of key component of discount rate for Indonesian companies therefore Indonesian government bonds are often selected as Risk Free Asset in Indonesian market
- Treasury bond yields have reached record low level, however Indonesian government bond yield have increased significantly from March.
- This increase was caused by investor's fear towards the pandemic, which led to a massive withdrawal of funds.



Source: Investing.com access on 7 April 2020, KPMG Advisory Indonesia

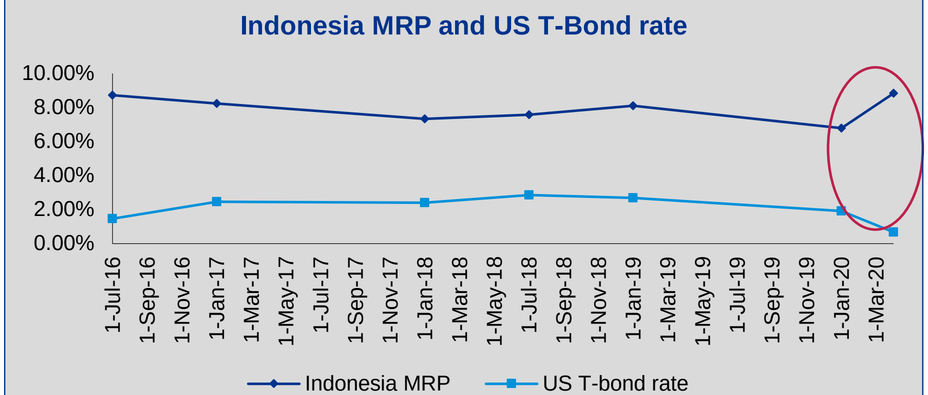
Considerations

- Increase of Indonesian government bond is considered to bring general increase of discount rate (both of Cost of Equity and Cost of Debt)
- Potential triggering on impairment loss for non financial assets

Market Risk Premium (MRP)

Summary of MRP

- Damodaran has re-estimated the latest US market risk premium ("MRP") from S&P and Indonesia country risk premium ("CRP") as of 1 April 2020 due to unprecedented volatility regarding COVID-19 situation
- Duff and Phelps also increases its U.S. market risk premium recommendation from 5.0% to 6.0% when developing discount rates beginning on March 25, 2020 and thereafter
- The chart below illustrates Indonesian MRP (US MRP + Indonesia CRP) and US T-bond rate



Source: Damodaran's website, KPMG Advisory Indonesia

Considerations

- Increase of Indonesian MRP implies increase of Indonesian CRP and brings general increase of discount rate (both of Cost of Equity and Cost of Debt)
- Potential triggering on impairment loss for non financial assets

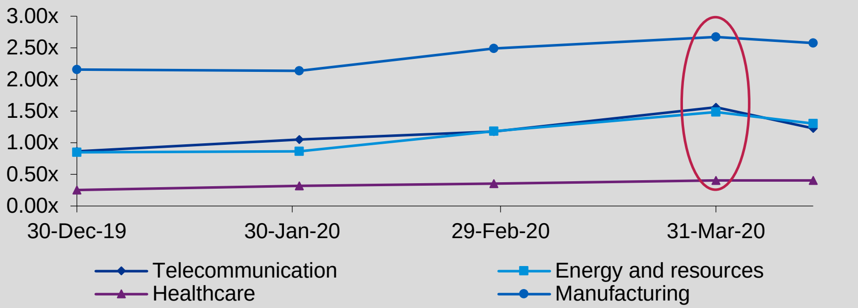
Non-Financial Impairment - Discount rate(2/2)

Debt to Equity Ratio

Summary of Debt Equity Ratio

- Covid-19 causes not only equity price fall down but also dropping in sales.
- Depending on the industries, it has an enormous impact on revenue decrease
- Several Indonesian listed companies announced that they have tried or already raised to fund through additional bank loan or bond issued.

Debt to Equity Ratio of Industries



Source: CapitalIQ, IDX website, KPMG Advisory Indonesia

Considerations

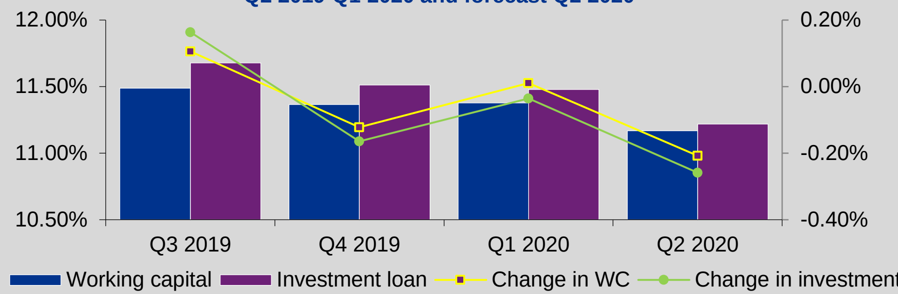
- Under current market situation caused by COVID-19, equity market shrinks and procurement of debt are increasing.
- This causes more higher Debt Equity Ratio than before, and in some cases based on the new Debt Equity ratio, discount rate may be more lower than previously.
- But it needs to pay attention to cash flow estimation carefully used for impairment test if the conclusions or variations of value are inconsistent with relevant market.

Cost of Debt

Summary of Cost of Debt

- At 19th April 2020, Bank of Indonesia has not provided interest rate of loans by Group of Banks after March yet.
- However, Bank of Indonesia has published a questionnaire survey article regarding lending rate forecast in Q2 2020 of 40 sample banks in Indonesia; which shows decreasing trend in the chart below. This questionnaire result is in line with BI's instructions to banks to reduce lending rate in order to stimulus the market to get more loans and economic support in this pandemic situation.
- Bank of Indonesia's has decided to cut SBI rate from 5% in Nov 2019 to 4.5% in April 2020. OJK also has applied debt restructuration in response to COVID-19 situation to small-medium enterprises or Usaha Mikro Kecil Menengah ("UMKM") such as extended period, rearrangement of principal and interest installment schedules, and reducing interest rate.

Lending rate of various Banks in Indonesia for the period historical Q2 2019-Q1 2020 and forecast Q2 2020



Source: Bank of Indonesia's website, KPMG Advisory Indonesia

Considerations

- Even though the restructuration by regulator applied to subject company, it requires to assess long term cost of debt for the company which stands for the credit worthiness of the company. We believe it's Important to look carefully on tendency of loan yield.

Non-Financial Asset Impairment - Estimating Cash Flow

Challenges in estimating cash flow

Recoverable amount should be the higher amount between :

Value in use ("VIU")

VS

Fair value less cost of disposal ("FVLCD")

Need to estimate cash flow, challenges could arise, due to uncertainty of :

- The nature, severity and duration of measures taken to contain the spread of COVID-19
- How long it could take for business operations and economic activity to return to normal
- The expected trajectory of the recovery (i.e. how quickly economic growth will resume) and the likelihood of a recession
- Any lasting impact on the economy or the sector.

What companies can do in tackling these challenges ?

- Consider the approach to projection cash flow by using the expected cash flow approach which uses multiple probability-weighted cash flow projections.
- Base the forecast by using external sources such as economic projection issued by Central Bank and other international organizations.
- Companies will always need to equip themselves with information and updated news and regulation and consider what impact they might have on their cash flow projections.

Source: KPMG Global insight website, KPMG Advisory Indonesia

Wrap Up - Non Financial Assets

High level view on impacts

P&L Effect	Cost of Equity Impact	Cost of Debt Impact	Fair Value Impact
Increase in Risk Free Rate	↗	↗	Negative
Increase in MRP	↗	-	Negative
Increase in Debt Equity Ratio	↗	↘	Neutral or Attention*2
Decrease in Interest rate of lending rate	-	↘	Positive
Increase yield of return on debt instruments	-	↗	Negative

Legend
Increase : ↗
Decrease : ↘

* In some this causes more lower discount rate than previously. However it needs to pay attention to cash flow estimation carefully used for impairment test if the conclusions or variations of value are inconsistent with relevant market

Source: KPMG Advisory Indonesia