Annual monetary studies conference 2018

Transitioning to IFRS 9: Practical Challenges with Implementing IFRS 9 Requirements for Expected Credit Losses in the Caribbean

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Presentation Outline

- Introduction to IFRS 9
- Transition to and Implications of IFRS 9 (International Perspective)
- Methodology and Data
- Conclusion and Way Forward

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Introduction

- The new IFRS 9 Standard became effective 1 January 2018, with early adoption permitted.

- The new standard replaces the International Accounting Standard (IAS) 39: Financial Instruments, which was criticized as being late in recognizing credit losses.

- We deal specifically with the impairment step in the implementation of IFRS 9 and challenges observed in developing a model to calculate expected credit losses.

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Principles of IFRS 9

- Published by the IASB in July 2014, effective for annual periods beginning on or after 1 January 2018

- Based on expected credit losses as opposed to IAS 39's incurred loss models

Classification and measurement of financial assets

Impairment

Hedging

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Classification and measurement of financial assets

- The classification of financial assets is determined at initial recognition and it determines how they are categorized in the financial statements

- There are three categories by which financial assets can be classified:
  1. Amortized cost (AC)
  2. Fair value through profit and loss (FVTPL)
  3. Fair value through other comprehensive income (FVOCI)

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Classification and measurement of financial assets

Amortized cost:

- The asset is held within an entity whose business model allows it to hold assets in order to collect contractual cash flows
- The contractual terms of the financial asset should give rise on specified dates to cash flows that are solely payments of principal and interest (SPPI)

FVOCI

- Collecting contractual cash flows as well as the selling of financial assets, then the assets should be measured at fair value through other comprehensive income (FVOCI).
- Changes in fair value of FVOCI debt instruments are recognized in the income statement as other comprehensive income (OCI).

FVTPL

- Captures instruments that are held for trading – not holding the asset for contractual cash flows.
- It is the 'residual' or default category if assets do not meet the criteria to be classified as AC or FVOCI

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Impairment

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IMPAIRMENT

- Expected credit loss model (ECL), which is applied using the *general approach* which looks at significant increase in credit risk and 12 month- and lifetime ECL
- ECL is a probability-weighted estimate of credit losses over the expected life of a financial instrument
- Use of forward-looking macroeconomic indicators to determine ECLs.
- Entities will have to record a day-one loss on initial recognition for financial assets that are not credit impaired.

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THREE-STAGE IMPAIRMENT APPROACH

Stage 1
Performing

- Financial instruments that have not deteriorated significantly in credit quality since initial recognition or that have low credit risk at the reporting date
- 12-month expected credit losses are recognized
- Interest revenue is calculated on the gross carrying amount of the asset
- Low Credit Risk

Stage 2
Under-performing

- Financial instruments that have deteriorated significantly in credit quality since initial recognition but that do not have objective evidence of a credit loss event
- Lifetime expected credit losses are recognized
- Interest revenue is still calculated on the asset's gross carrying amount
- Credit Risk > Low

Stage 3
Non-performing

- Financial assets that have objective evidence of impairment at the reporting date
- Lifetime expected credit losses are recognized
- Interest revenue is calculated on the net carrying amount (reduced for expected credit losses)
- Credit Risk > Low

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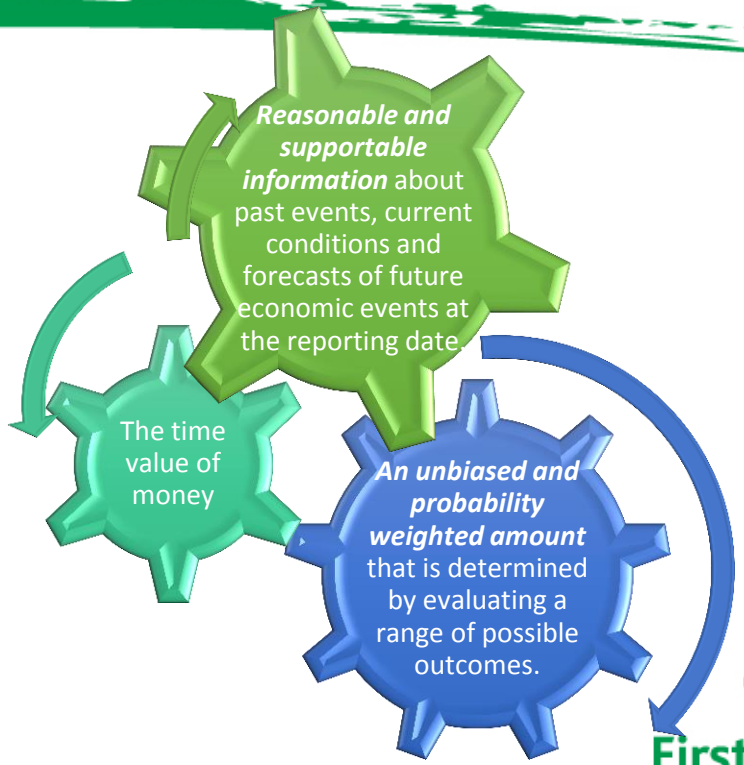
Measuring ECL

Credit risk must be well assessed and should reflect the following quantitative and qualitative information



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Measuring ECL

The most simplified measurement of the ECL is a *probability-weighted loss default (PLD) model*.

The PLD model represents a probability-weighted estimate of credit losses.

EAD × PD × LGD × DF = ECL

EAD = exposure at default, is the total value that a reporting entity is exposed to at the time of a default.
PD = probability of default, which is the likelihood of a counter-party defaults during a particular period
LGD = loss given default is the share of an asset that is lost if a borrower defaults. The recovery rate (RR) is calculated as 1-LGD
DF = discount factor, which is the factor which needs to be multiplied in order to convert future cash flows into the present value at the measurement date.

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TRANSITION TO AND IMPLICATIONS OF IFRS 9

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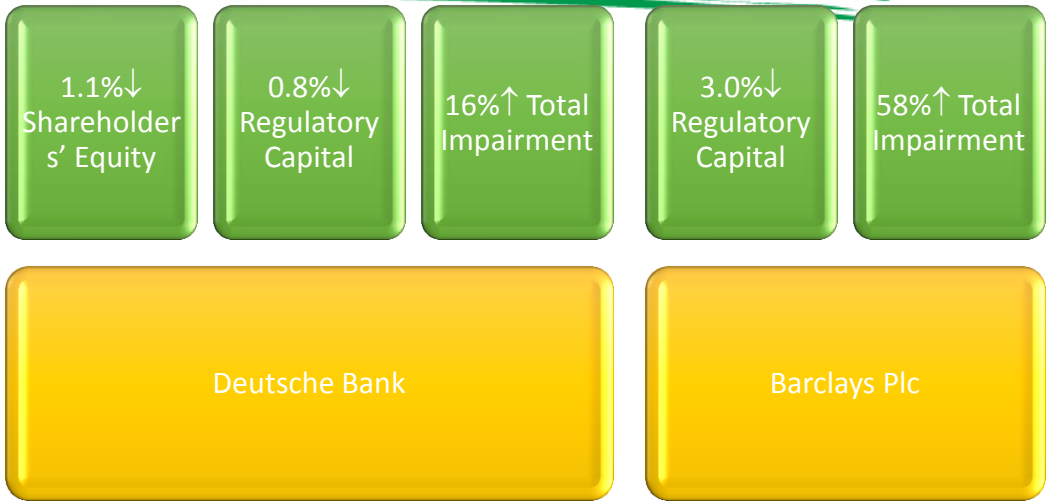
International perspective

Both entities leverage existing credit risk management processes

To measure ECL, both use existing parameters used under the Basel Internal Ratings Based Approach, making necessary adjustment for IFRS 9.

Deutsche's baseline scenario based on macroeconomic forecasts . Its stress test environment generates multiple scenarios and is used to derive multi-year PDs. 1-year PD is derived from the internal ratings system.



Barclays establishes five scenarios to ensure an unbiased representative sample. The Group's current stress testing methodologies are applied in forecasting these economic scenarios to fulfil the requirements of IFRS 9

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METHODOLOGY AND DATA

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PROCESS FLOW

- Establishing the ‘BASECASE’ Scenario
- Determining Alternative Scenarios
- Assigning Probabilities

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ESTABLISHING THE 'BASECASE' SCENARIO

The S&P Sovereign Rating Model

The five key factors that form the foundation of the sovereign credit analysis are:

- Institutional and governance effectiveness and security risks (institutional assessment)
- Economic structure and growth prospects (economic assessment)
- External liquidity and international investment position (external assessment)
- Fiscal performance and flexibility as well as debt burden (fiscal assessment)
- Monetary flexibility (monetary assessment)

Forecasted macroeconomic indicators provided by S&P, BMI, official sources

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DETERMINING ALTERNATIVE SCENARIOS

- Determine through simple OLS regression analysis, the main macroeconomic indicator (Y_k) that will affect the sovereign k's credit rating. We proxy credit risk (CR) with CDS or benchmark bond yields.

$$CR_k = \alpha + \beta(Y_k)$$

- Compute correlation matrix between Y_k and key rating drivers (macro indicators) and choose the most significant three V_1, V_2 and V_3 (sign and strength)
- Quantify impact of Y_k on each of the three determined above
- Obtain official forecasts three years out for all Y_k

- To determine the impact of changes in Y_k on V_1, V_2 and V_3 in the various scenarios, we calculate the standard deviation of each Y_k and apply a two standard deviation shock to the forecasted values for Y_k (Y_k^f)
- We then input Y_k^f into the equations: V_1, V_2,and V_3 to come up with their new values.
  - $V_1 = \alpha + \beta_1(Y_k^1)$
  - $V_2 = \alpha_2 + \beta_2(Y_k^2)$
  - $V_3 = \alpha_3 + \beta_3(Y_k^3)$

- These new values of V_1, V_2,and $V_3$are then used in the S&P sovereign rating model to determine the revised ratings under the different scenarios of Y_k

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ASSIGNING PROBABILITIES

- Once the credit rating is determined in years - t+1, t+2 and t+3, we then use the S&P's transition matrix to establish the probability of the credit rating moving to the forecasted rating from the current period's credit rating.

- S&P computes the transition rates by comparing the issuer ratings at the beginning of a period with the ratings at the end of the period.

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Limitations

- Data – we are limited particularly in the Caribbean, where countries are not rated
- Forecasted data for the lead indicator as well for the rating indicators
- Sufficient historically data to obtain a desirable sample size (we therefore use a significance level (α) of 5% - 10%) *{α of 0.05 refers to a 5% chance that a significant result is a false positive}*
- Some regressions did not meet economic expectations because of erratic movement in yields. *For example, in SLU, SVG and other Caribbean economies– even though tourism is the economic driver, the regression was not statistically significant*
- Because we only use ***one*** lead indicator per country, the regression may show some level of *autocorrelation.*

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CONCLUSION

- The introduction of IFRS 9 has expanded the need for more technologically driven analytics
- The new standard requires continuous monitoring of financial assets, not only at initial recognition, but throughout its life to determine if credit quality has deteriorated.
- The data inefficiencies, including the lack of historical data and consistent forecasts make it difficult to assess and monitor credit quality and to model expected credit losses.
- Aligning IFRS 9 impairment requirements with existing credit risk systems can assist in the transition and reduce implementation costs.
- The underdeveloped capital markets of the region also needs to be addressed. This has affected the implementation process since it stifles efficiency and transparency of both the estimation of yield curves and ultimately the valuation of financial assets.

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