

# Numa IFRS9 / Expected Credit Loss

## End-to-end ECL Calculation

During the financial crisis, the incurred loss model of FRS139 was identified as one of the main weakness of existing accounting standards.

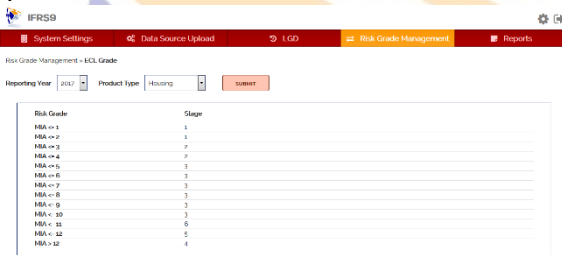
Introduction of IFRS9 aims to remediate the weakness of FRS139. The standard :

- Replaces FRS139 'Incurred Loss' Model with new Forward-looking Expected Credit Loss (ECL) Model.
- Recognized 12-months loss allowance at initial recognition and lifetime loss allowances on significant increase in credit risk.
- Requires incorporation of forward-looking information in ECL estimates.

Hence, we've created a solution to facilitate the end-to-end calculation for the ECL estimates.

### Stage 1, 2 and 3 Tagging

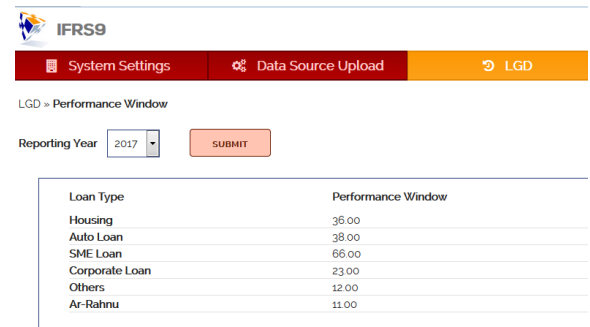
Users can use this module to do Stage 1, 2 and 3 tagging via a flexible input according to product type and different period.



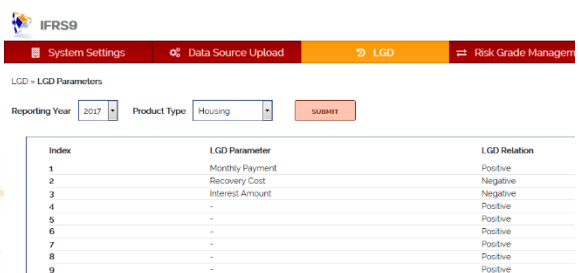
This will cater for future changes to both regulatory and business decisions.

### PD and LGD Model

The system would be able to cater for both vintage and migration PD calculation method.



As for LGD calculation, the system enables flexible parameter selection in the calculation.



Additionally for entities which have their own PD results, the solution would be able to link and feed into the ECL calculation engine, hence enabling seamless transition between the two system.

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## Forward-Looking PD

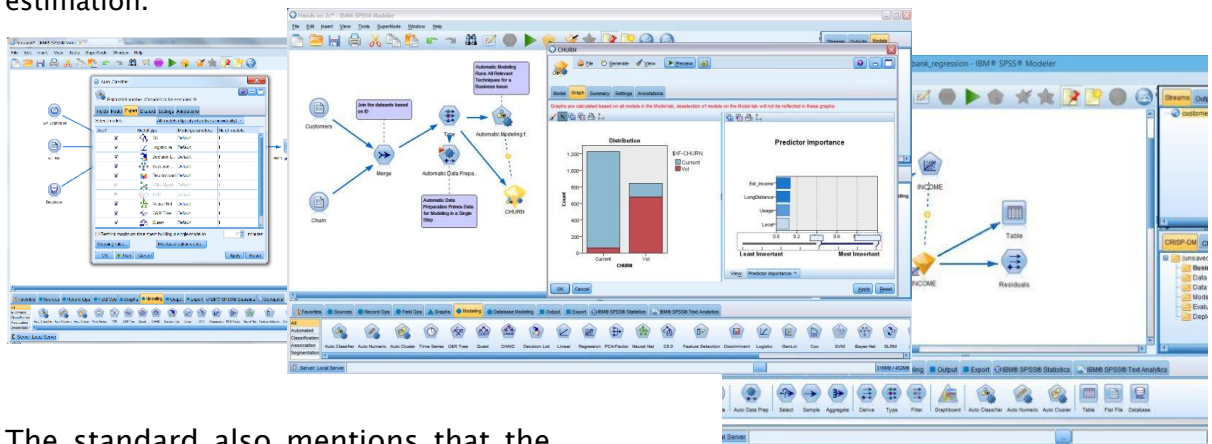
The Forward-Looking PD is a new requirement under the IFRS9.

The guideline requires model which includes the consideration of forward looking information and macro-economic factors to forecast future economic condition in the expected credit loss estimation.

## ECL Calculation

The ECL calculation itself is simple. However, the complex part is the need to amortized each account for its remaining lifetime.

The system is able to accelerate the calculation by utilizing efficient algorithm and the capability of the software.



The standard also mentions that the measurement should reflect reasonable and supportable information available.

The difficulty in calculating the Forward-Looking PD lies in forecasting permutation of the PD figures with the possible macroeconomic factors

## Disclosure

Produced numbers can be integrated with the current excel reporting template or uploaded into the GL system.

Flexibility in producing output will enable the users to integrate with existing reporting systems.

Year	0	1	2	3	4	5
Cash flow	-202,000	12,000	12,000	12,000	12,000	212,000
Effective Profit	5.76%	11,644	11,623	11,601	11,578	11,554
<b>IAS 139</b>						
Prime Book Value	0	202,000	201,644	202,021	202,420	202,842
Current Book Value	202,000	201,644	202,021	202,420	202,842	0
<b>IFRS 9</b>						
Probability of Default	0.00%	0.01%	0.02%	0.50%	1.00%	2.00%
Lifetime Credit Loss	0	19	36	851	1,605	3,029
Prime Book Value	0	196,460	199,132	200,361	200,813	200,427
Current Book Value	196,460	199,132	200,361	200,813	200,427	0
<b>IAS 139 vs IFRS 9</b>	<b>-5,540</b>	<b>-2,512</b>	<b>-1,660</b>	<b>-1,607</b>	<b>-2,415</b>	<b>0</b>