

# **Linkages Between IFRS 9 Impairment And Stress Testing**

by Claire Yu

IFRS 9 is an accounting framework in nature, but its impact goes far beyond accounting assessment and calculation as it affects a bank's key planning processes such as strategic planning, financial planning and budgeting, and capital and liquidity planning. As a result, IFRS 9 should not be implemented in isolation for the purpose of regulatory compliance only; instead, it should be considered in a broader business and risk management context. In particular, the following questions should be answered during the course of implementing IFRS 9:

- What commonalities/interconnections exist between IFRS 9 and other key business processes?
- To what degree and how can existing business processes (including IT infrastructure, data, Management Information System, methodology and more) be leveraged for IFRS 9 implementation?
- If leveraged, can key differences be clearly identified, rationalized and documented?

In this article, analysis was done to focus on if links between IFRS 9 impairment and stress testing can be established.

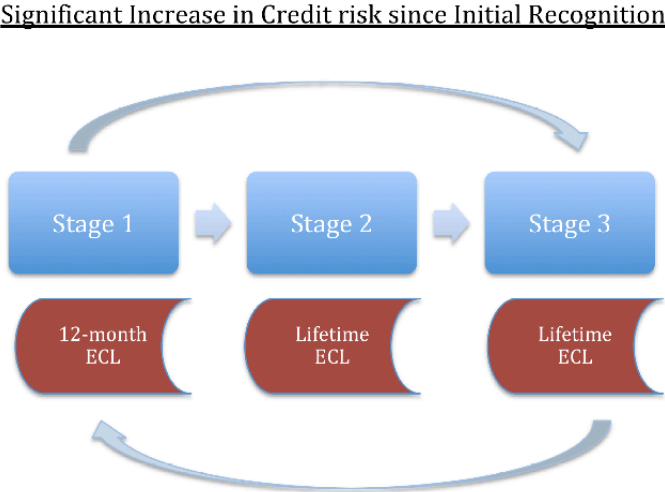
## **Overview**

### **IFRS 9 Impairment**

During the financial crisis, an issue that recognition of credit losses on loans could be delayed was identified. To address the issue, the International Accounting Standards Board (IASB) introduced into IFRS 9 a forward-looking expected credit loss (ECL) model. With the new model, credit exposures will be categorized into one of three stages, namely, Stage 1, Stage 2 and Stage 3. If it is determined that there is a significant increase in credit risk since initial recognition, the impairment measurement should be changed from 12-month expected loss for Stage 1 to lifetime

expected loss for Stage 2 or Stage 3. This model requires IFRS 9 impairment calculation to be based on “forward-looking information (FLI)” rather than historical data of “incurred loss”.

Figure: A forward-looking Expected Credit Loss model



**Stress Testing**

Stress testing, particularly enterprise-wide stress testing (EWST), has become an integral part of the bank’s planning processes to ensure that capital and liquidity ratios remain at targeted levels during extreme but plausible economic downturns. EWST are typically based on various macroeconomic stress scenarios. Select macroeconomic variables used in a stress scenario would then be translated to the risk drivers for a particular risk type (e.g., credit risk, market risk, liquidity and funding risk, and so on), based on which stress test results are calculated. In addition to EWST, portfolio or risk specific stress tests are run on both regular and ad hoc basis to provide supporting information for business decision making. Stress testing includes both scenario analysis and sensitivity analysis.

**Commonalities**

IFRS 9 impairment and stress testing share the following attributes:

- **A combination of art and science.** IFRS 9 impairment requires to produce a forward-looking term structure of risk so as to estimate lifetime expected losses. Stress testing relies on forecast and assumptions to form extreme and plausible stress scenarios. Both forward looking views are based on historical events as well as expert judgment. As with everything else, when expert judgment plays a key role, art factor sets in with respect to how to interpret, extrapolate, and translate numerical analysis.
- **A collaborative process.** As both processes have impacts upon almost all of the bank's key business and risk management processes, buy-in from various stakeholders across the bank is necessary for effective implementation. Key function groups such as business units, Finance, Economics, Risk Management, Model Development and Model Validation, Technology as well as Internal Audit should all be involved and collaborate with each other.
- **A requirement for robust data infrastructure and calculation engines.** Capability to aggregate (and disaggregate) data completely and accurately is critical in building a forward-looking risk term structure. Old credit data that have not been used before may need to be retrieved, new data may need to be added, and some data may not be readily available and therefore proxy data are to be identified and collected. Examples of such data include lifetime PD curve at origination, data for transferring between different stages, and certain credit data unavailable for the portfolios currently risk-assessed using the standardized approach. Once data are obtained, calculation engines need to be in place to convert raw data into meaningful results.

## Linkages

### How stress testing can be leveraged for IFRS 9

- Current stress testing processes are typically managed by the joint leadership of Finance and Risk Management, with collaboration with Economics, IT, Operations and affected business units. The same or similar collaborative processes can be leveraged for IFRS 9 implementation.

- Many banks are still in the process to establish detailed control framework for IFRS 9. Although it is still hard to tell how many controls are overlapping, the control framework developed for stress testing may be referenced for consistency. For example, the controls surrounding the model development and validation process should be consistent, if not the same in some banks.
- Certain credit risk stress testing can be directly used for IFRS 9 impairment. For example, for a mortgage portfolio, existing stress testing process can be applied to LTV (Loan to Value) value which affects secured LGD (Loss Given Default) as a key credit parameter for impairment calculation.
- The macroeconomic variables and scenarios used in EWST can be leveraged for forward looking information required by IFRS 9 impairment. For IFRS 9, many banks are designing multiple scenarios, typically 3 scenarios (i.e., Best, Worst and Base scenarios), and using a probability-weighted approach to calculate expected credit losses. The EWST scenarios and IFRS 9 scenarios are both developed primarily by Economics, and should not be drastically different from each other. Note that EWST result is generated from a single scenario, while IFRS 9 impairment result is generated from multiple scenarios weighted by probability of occurrence.

### **How IFRS 9 can be leveraged for stress testing**

The platform of IFRS 9 will be leveraged for stress testing purpose going forward. Due to the regulatory deadline, many banks are calculating IFRS 9 impairment using a tactical platform. For example, without changing current data flow or integrating separate systems, additional impairment calculators are being added into existing risk engines in some banks. As banks make effort in not only meeting but also leveraging various regulatory requirements, IFRS 9 implementation will be transferred from a tactical platform to a strategic platform, particularly benefiting from the completed compliance to the Basel Committee on Banking Supervision's 239 Principles (BCBS Principles on Risk Data Aggregation and Risk Reporting). No doubt that stress testing can be further facilitated and enhanced based on the more integrated systems, data, methodologies and processes which are being developed during the IFRS 9 implementation.

## **Conclusion**

Banks got to find ways to harvest from the significant investment they have made in various initiatives, whose initial purpose may simply be to meet regulatory compliance. This would require an iterative feedback process to identify gaps to the target model, analyze the similarities and differences, and finally capture the synergy between existing processes and new processes. There are linkages between IFRS 9 impairment and stress testing. Exploring and utilizing these linkages will enable the bank to realize a better investment return; on the contrary, ignoring these linkages may result in that regulatory compliance is not fully achieved.

*Claire Yu is a capital market and risk management practitioner, currently working as a Researcher at ZTE Quant Research ([www.zte.ca](http://www.zte.ca)). She has led many large-scale complex consulting engagements and internal audit projects with respect to financial risk management in various financial institutions.*