

Basel II Compliance in Finacle Treasury

Basel II is the second of the Basel Accords, which provides recommendations on banking rules and regulations issued by the Basel Committee on Banking Supervision. The Basel Capital Accord targets the following:

- › Ensuring that capital allocation is attuned to the risk that the bank is carrying on its books
- › Segregating operational risk from credit risk, and quantifying both;
- › Attempting to bridge the gap between economic and regulatory capital to reduce the scope for regulatory arbitrage

One of the principal objectives of supervision is to alienate depositors from the financial risks of the bank. In today's volatile markets, it is imperative to ensure that capital set aside for capital adequacy measures is readily available for depositors in adverse market conditions.

Basel II has largely left unchanged the question of how to actually define bank capital, which diverges from accounting equity in important respects. The definition, as modified up to the present, remains in place.

Basel II uses a "three pillars" concept to promote greater stability in the financial system.

- › Minimum capital requirements
- › Supervisory review
- › Market discipline

The earlier accord dealt with only parts of each of these pillars. For example: credit risk, was dealt with in a simple manner and market risk was an afterthought. Operational risk were not dealt with at all.

In this document we will outline the key features provided by Finacle treasury solution to achieve Basel II compliance for each of the 3 pillars.

Minimum Capital Requirement

Credit Risk

Standardized Approach

The solution allows banks to capture ratings for various issuers or customers required for calculation of Credit Risk Capital. It supports capture of ratings from multiple credit rating agencies. Using this information, exposure from the transactions outstanding categorized by the issuer/customer rating and risk weights as per Basel II, it can provide a credit risk capital adequacy report both for audit and action purposes.

Internal Ratings Based (IRB) Approach

The solution enables FIs to create their own internal credit rating structure for rating various issuers and customers. It can facilitate the capture of PD, LGD and EAD. It can also provide actual exposure for issuers/customers, which can be grouped (using transactional/holding information) as per the rules for categorization of exposure mentioned in Basel II. This actual exposure can be used for arriving at the EAD for the issuer/customer. It can also provide historical repayment information to arrive at the PD. Once these factors are captured in the system, it can provide reports for credit risk capital for internal as well as external consumptions.

Operational Risk

Basic Indicator Approach

The solution can provide a report for operation risk capital using interest and non-interest income values. It has provisions to separately capture these values either at the transaction, P&L or GL levels. It provides information at a granular level regarding P&L for audit sufficiency as well. This information can easily be used with risk weights for credit rating to arrive at the operational risk capital required by the institution.

Standardized Approach

For standardized method of operational risk measurement, the solution provides a feature for manual or auto classification of assets and liabilities as per classification given for Basel II compliance. This information can then be used along with the P&L information to get the details for operational risk capital adequacy through a report.

Advanced Management Approach (AMA)

The solution provides inputs regarding operational efficiency through the comprehensive transaction history for implementation of AMA based approach for operational risk measurement. It also provides detailed information for audit purposes to the operations risk based system.

Market Risk

Standardized Approach

The solution provides an add-on module for measurement of VaR which implements the standard models (Parametric for cash flow based instrument). It is being enabled to provide Monte Carlo simulation for derivative instruments and historical method for all instruments. Finacle treasury solution also provides a facility to stress test the portfolio using any of these models. It can be configured to work with any of the dataset provided for VaR computation. It breaks down market risk into its basic constituents as required by Basel II norms. These VaR figures can then be used for reporting market risk capital.

Internal Models Approach

The solution provides exposure, cash flow, valuation and market risk related data. This can be fed further into the internal model implementation for calculation of market risk (capital).

Supervisory Review

Finacle treasury solution provides all the details required for a supervisory review and can be configured to meet the standards set by Basel II regarding controls for MIS reporting and systems. It also provides detailed audit information required for supervision of capital adequacy by auditors as well as supervisory institutions.

The solution provides globally accepted valuation models for use in the calculation of asset value for VaR. It also provides a feature to value the asset with or without the credit spread.

The solution is being augmented to provide back testing features for testing the efficacy of the market risk model used by the bank. It will serve a dual purpose of fine tuning the market risk model employed and also provide auditors detailed information regarding variance in actual vs.

projected Loss due to market risk. Traffic light model for measurement of effectiveness of model will be provided by default. The other tests (Conditional and Unconditional) for variance check can be easily built using the data in the system.

Market Discipline

Finacle treasury solution can provide inputs and data (both transactional and auditory) for disclosure norms as specified in Basel II for credit risk, market risk and operational risk. These inputs can form the basis for disclosure of appropriate information dissemination as per the 3rd pillar of the accord.

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