Fierce competition and stringent regulatory requirements in the current business environment have emphasized the need for effective capital planning and management. Financial institutions need to control operational risk and identify the sources of operational risk to optimize their capital requirements. Oracle Financial Services Operational Risk Economic Capital provides pre-configured models based on actuarial methods that enable institutions to calculate capital for operational risk. This is achieved through the computation of risk measures such as Operational Risk VaR and Conditional VaR.

Effective Risk and Capital Management
Oracle Financial Services Operational Risk Economic Capital allows financial institutions to implement an enterprise wide approach to manage and monitor operational risk, and assess capital requirements. It helps the banks to compute capital adequacy, improve capital planning and identify the risk hot spots across different lines of business. With its robust modeling capabilities, organizations can select parameters to perform risk assessment and economic capital calculations.

Advanced Modeling Capability
Oracle Financial Services Operational Risk Economic Capital adopts a Loss Distribution Approach for estimation of risk and capital. It provides multiple distributions for modeling both frequency and severity of loss events. The list of distributions includes Poisson, Binomial and Negative Binomial for modeling frequency of events and Log-Normal, Pareto for modeling severity of loss events. In addition to standard distributions, the application also supports using a combination of two distributions, one for the body and another for the tail while modeling severity of losses. This Extreme Value Theory approach allows for a thick distribution to be fitted to the tail, so as not to underestimate the probability of large loss events. Correlation in the occurrence of loss events across lines of business – event type cells is modeled using copulas. Copulas allow for the joint distribution of loss events to be modeled independent of the marginal frequency distributions. This provides the flexibility of using separate distributions for each of the cells. Oracle Financial Services Operational Risk Economic Capital allows for copulas to be calibrated using either rank correlation or linear correlation coefficients.

Oracle Financial Services Operational Risk Economic Capital makes use of Monte Carlo methods to simulate the institution level loss distribution and calculate Value-at-Risk and Conditional Value-at-Risk. Scenario data is merged with loss data during the simulation process using credibility algorithms.
KEY BENEFITS

- Confidently compute capital under the Advanced Measurement Approach to comply with Basel II regulations.
- Understand capital consumption and operational hot spots to mitigate operational risks under various business strategies.
- Save time and money with a pre-built application that is seamlessly integrated with a comprehensive suite of enterprise risk management solutions.

RELATED PRODUCTS

The following products are available from Oracle Financial Services:

- Oracle Financial Services Operational Risk
- Oracle Financial Services Basel Regulatory Capital
- Oracle Financial Services ICAAP Analytics
- Oracle Financial Services ICAAP Assessments
- Oracle Financial Services Market Risk
- Oracle Financial Services Economic Capital Advanced

Figure 1: Operational Risk Simulated Loss Distribution

Provides Enterprise Wide Risk Management

Institutions need to quantify risk, allocate capital assess performance based on risk contribution and identify risk hot spots. Oracle Financial Services Operational Risk Economic Capital provides an enterprise-wide holistic assessment of operational risk capital and adopts a bottoms-up approach for estimating risk followed by a top-down approach of allocating it to lower levels of granularity along lines of business and event types. It allows institutions to incorporate Risk & Control Self Assessment (RCSA), Key Risk Indicators (KRI) and Insurance data in the risk quantification and allocation process.

Figure 2: Economic Capital Allocation

Flexible and Parameterized Process

Oracle Financial Services Operational Risk Economic Capital allows for computation of risk and capital under multiple specifications of parameters. This flexibility allows for comparison across multiple parameters and enables attribution of changes in capital to specific assumptions.
Scarcity of relevant data is one of the key challenges being faced in estimation of economic capital for operational risk. Oracle Financial Services Operational Risk Economic Capital allows use of external loss data and scenario data in addition to internal loss data for the purpose of risk modeling. It also provides relevant statistical techniques to scale external loss data to reflect the size and scale of an institution’s operations.

Compliant with Basel II Regulatory Requirements

Basel II requires internationally active banks and banks with significant operational risk exposures to use a sophisticated approach that is appropriate for the risk profile of the institution. Oracle Financial Services Operational Risk Economic Capital computes the Expected and Unexpected Loss components of the loss distribution that enables institutions to assess capital under the Advanced Measurement Approach specified in Pillar I of Basel Accord and also to make provision for operational risk losses.

Advanced Business Intelligence and Reporting

Oracle Financial Services Operational Risk Economic Capital provides pre-configured reports and dashboards that enable institutions to analyze loss data and risk at various levels in the organization. These include reports covering risk measures, capital estimates, goodness-of-fit statistics and loss event statistics.
About Oracle Financial Services Analytical Applications

Oracle Financial Services Operational Risk Economic Capital is part of the Oracle Financial Services Analytical Applications family of solutions for the global financial services industry.

Oracle Financial Services Analytical Applications are built upon a commonly available analytical infrastructure consisting of a unified financial services data model, analytical computations and the industry-leading Oracle Business Intelligence platform.

Oracle Financial Services Analytical Applications include award-winning solutions for Enterprise Risk Management; Governance, Risk, and Compliance (GRC); Enterprise Performance Management (EPM); and Customer Insight for financial services.

Contact Us

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