

Numerix Case Study



HDFC Bank

Promoted in 1995 by Housing Development Finance Corporation (HDFC), India's leading housing finance company, HDFC Bank is one of India's premier banks. It provides a wide range of financial products and services to its 28.5 million customers across hundreds of Indian cities. The Bank's competitive strength resides in the use of technology and the ability to deliver world-class service with rapid response time.

AT A GLANCE

Challenge

HDFC Bank's goal was to consolidate its market risk management and reporting capabilities, across multiple systems onto one platform—in addition to enhancing its market and counterparty credit risk analysis capabilities.

Solution

Numerix provided HDFC Bank with the only third-party risk management solution flexible and scalable enough to meet its requirements, combined with a unique level of support provided by its dedicated Numerix Mumbai office.

“ We were impressed by Numerix's strong quantitative team and with the firm's ability to understand our system requirements. ”

— Mr. Sanmoy Chakrabarti
Head, Market Risk, HDFC Bank



HDFC BANK'S BUSINESS CHALLENGES

In order to expand its regulatory compliance and firm-wide risk management efforts, HDFC Bank was seeking to consolidate its risk management and reporting capabilities, across multiple business segments, onto one platform.

HDFC Bank needed a risk engine powerful, scalable and flexible enough to achieve this goal. It also required the capability to create custom reports and interfaces—as required by the front office, middle office, IT and other desks, along with complete audit-trail and user-authorization features. Also, in light of evolving regulatory and other considerations, HDFC Bank wanted to enhance its market and counterparty credit risk analysis capabilities.

WHY HDFC BANK SELECTED NUMERIX?

In addition to its strong reputation as the industry leader in advanced analytics, HDFC Bank chose Numerix because of its ability to accurately price any financial instrument and consolidate trades and positions from multiple source systems on to a single platform. Moreover, Numerix provides HDFC Bank with a unique level of support. In fact, in 2011, Numerix opened a new office in Mumbai to provide local sales and quantitative support in the India region, which helped to support HDFC Bank with its initiatives to implement a globally acclaimed analytics system. Because of the flexible technological scaling and integration capability provided by Numerix, HDFC Bank can accurately compute and monitor complex risk-metrics in a time-frame that can positively impact its business decisions.

HOW NUMERIX HELPS SOLVE HDFC BANK'S BUSINESS CHALLENGES: NUMERIX PORTFOLIO AS CENTRALIZED RISK ENGINE

Numerix Portfolio enables HDFC Bank to effectively manage, monitor and report on market risk exposure for their entire range of portfolios, including its banking and treasury management groups, across vanilla products.

With a rapidly growing portfolio of a wide variety of trades that span various asset-classes (which are subject to Risk computations such as VaR, Backtesting, PFE etc.), the Numerix Onsite Project Management and Product Development Teams have partnered with, and are in constant deliberations with, the proactive IT Team of the Bank to ensure that the speed of the risk calculations is able to positively impact decision-making at the Bank.

BENEFITS OF USING NUMERIX

Numerix continues to provide HDFC Bank with the technology and support needed to take its risk management system capabilities to the next level. With Numerix Portfolio, HDFC Bank can aggregate risk, drill-down across all trades and rapidly price and calculate:

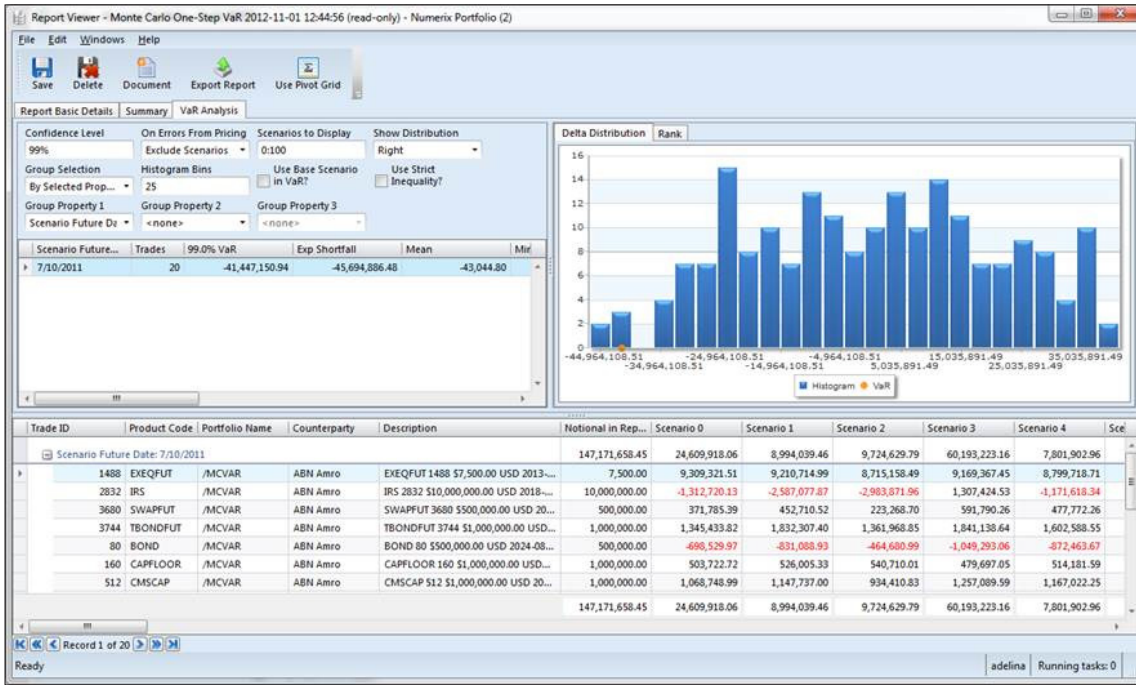
- *Mark-to-model*
- *Historical / stressed Value-at-Risk (VaR),*
- *Actual/No-action P&L*
- *Backtesting for all vanilla and OTC derivatives*

These capabilities seamlessly enable capital-charge computations for SMM (standardized approach), Basel 2.5 (IMA approach) and BASEL III with complete drill-down capability. Furthermore, the system is packaged with the complete capability to create custom reports and interfaces, as required by the front office, middle office, IT and other desks, along with complete audit-trail and user-authorization features.

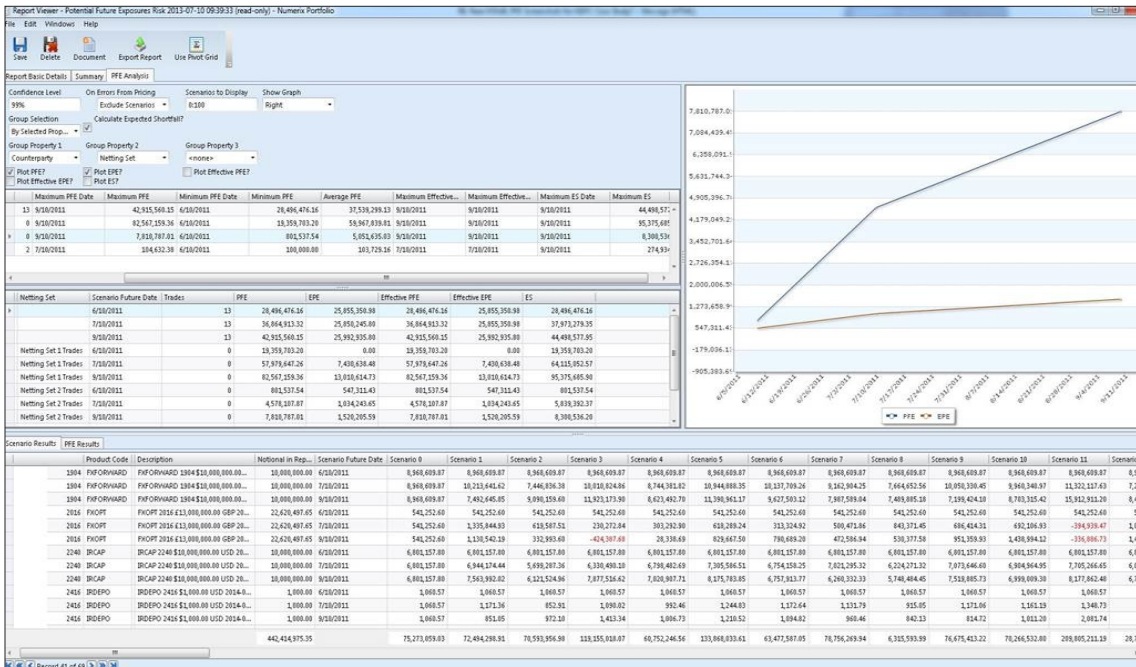
“ We look forward to continuing our close relationship with Numerix as the team provides us with the technology and support needed to take our risk management system capabilities to the next level. ”

— Mr. Sanmoy Chakrabarthi, Head, Market Risk, HDFC Bank

VaR Report Viewer in Numerix Portfolio



PFE Report Viewer in Numerix Portfolio



FUTURE DIRECTIONS

HDFC Bank is also set to implement Numerix's counterparty risk functionality for Credit Value Adjustment (CVA) and Potential Future Exposure (PFE), including Transactions and Counterparty Limits monitoring in the near future.

ABOUT NUMERIX

Numerix is the award winning, leading independent analytics institution providing cross-asset solutions for structuring, pre-trade price discovery, trade capture, valuation and portfolio management of derivatives and structured products. Since its inception in 1996, over 700 clients and 75 partners across more than 25 countries have come to rely on Numerix analytics for speed and accuracy in valuing and managing the most sophisticated financial instruments.

