

Value at Risk crash course

1.0 Learning objectives

This intermediate level workshop serves as a Value at Risk refresher and reviews intermediate topics and implementation issues related to Value at Risk. The workshop compliments material covered in the Economic Capital and Limit Management workshop scheduled for 7th February 2007 and is meant as a pre-requisite for first time participants. At the end of this workshop, participants will be able to:

- a. Assess the impact of methods and parameter choices on VaR numbers
- b. Translate VaR numbers into capital charge requirements
- c. Evaluate the magnitude of capital savings or additional capital requirements by comparing standardized approach capital charge with VaR based capital charge using local market data
- d. Extend the VaR framework for economic capital calculations

2.0 Schedule and Location

6th February 2007

9:00 am - 5:30 pm

Karachi Marriot Hotel

Mezzanine Floor

2.1 Day outline

09:00 am - 09:15 pm - Registration, feedback & networking

09:15 am - 11:15 am - First Session

11:15 am - 11:30 am - Tea break

11:30 am - 01:15 pm - Second Session

01:15 pm - 02:30 pm - Lunch break

02:30 pm - 04:30 pm - Third Session

04:30 pm - 05:00 pm - Review and day end wrap up

3.0 Facilitator:

Jawwad Farid is a Fellow Society of Actuaries (Chicago), an MBA from Columbia Business School (New York City) and a computer science graduate (FAST ICS). During the last thirteen years, he has worked as a consultant in North America, Pakistan, Middle East and the United Kingdom with a number of blue chip clients including Hartford Life, Merrill Lynch, Aegon, Goldman Sachs, ING, Manufactures Life, Sumitomo Mitsui Bank, Met Life, Sun America, Nationwide, Sun Life of Canada, Pacific Life, Fidelity Investments, Transamerica, Skandia, GE Financial Assurance, AXA Equitable, Washington Mutual Bank, Riyadh Bank, Saudi British Bank and Dubai Islamic Bank. His domestic client list includes Karachi Stock Exchange, State Bank of Pakistan, State Life Insurance Corporation of Pakistan, National Bank of Pakistan, Muslim Commercial Bank, United Bank, Union Bank, Saudi Pak Commercial Bank, Soneri Bank, Crescent Commercial Bank, KASB Securities, KASB Bank, ABN AMRO Bank, Pak Kuwait Investments, Prime Bank, PICIC, International General Insurance Company, InvestCap Securities, Crescent Lease, IHFL & others.

Jawwad has advised clients on Basel II gap analysis, multiple Basel II implementations, product development initiatives, interest rate swaps, caps, floors, FX derivatives, market risk and capital management solutions, and conducted more than 40 workshops on Basel II Risk Modeling, Derivative Pricing, Enterprise Risk Management, Market Risk Management, Currency Options, Portfolio Optimization and Interest Rate Modeling. Participants have included 700 plus senior banking and treasury professionals from client institutions in

Pakistan, Saudi Arabia and UAE, with 800 logged instruction hours and an average score of 4 out of 5 on learning experience, facilitator knowledge, communication and market relevance.

4.0 Workshop level: Intermediate and Advance users. This advance level workshop is aimed at individuals responsible for capital allocation and risk management within banks, insurance companies and mutual funds.

The workshop assumes familiarity with economic capital, local markets, portfolio management concepts and the Basel II framework. All participants are requested to arrange Laptops with a functional version of Microsoft Excel Solver.

3.0 The value at risk crash course

Day	Session	Title	Topics
One	One 9:15am - 11:15 am	9 concepts in 90 minutes.	Introduction. Course objectives. Format. Statistical distributions. Fat Tails and asymmetry. Volatility. Return series. Log normal returns. Market data and adjustments to fixed income and capital markets data. Probabilities and applications.
One	Two 11:30am - 1:15pm	Value at Risk Debate	The Nassim Taleb versus Philippe Jorion debate. Comparing Historical Simulation, Variance Covariance, Monte Carlo simulation. Results and trends from local market data. Full Valuation versus Delta Normal models. Value at risk for Fixed Income instruments. The duration and convexity adjustment.
One	Three 2:30pm - 4:45pm	VaR Applications	Value at risk interpretation. Value at risk, Basel II and Economic capital. The VaR to capital charge transformation. Unexpected loss. Risk budgeting.

6.0 About Alchemy Technologies

Alchemy is an Enterprise Risk advisory firm that has grown annually by more than a hundred percent year-on-year for the last four years. As of the date of this workshop we have picked up two industry and peer awards, conducted more than 40 workshops, employ 30 professionals and in the list of our 35 customers represent more than 75% of banking and 90% of life insurance assets in Pakistan. Alchemy Risk Manager, our Basel II compliant enterprise risk solution is now live at five client sites in Pakistan.

7.0 Workshop Fee, Restrictions and Cut off dates: 25 participants only. Course fee is Rupees 33,000 per participant. Fees cover cost of materials, workshop facilities, lunch and three teas. To avoid disappointments, please ensure that your nomination and payments have been received before 12:00pm Wednesday, 31st January 2007. Please make all cheques payable to Alchemy Technologies Pvt. Ltd.

Discounts are available for participants who plan on attending the Value at Risk crash course and the Economic Capital workshop.

For more information, please contact

Jawwad Farid / Mujtaba Iqbal / Uzma Salahuddin at:

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Jawwad Ahmed Farid

**Fellow Society of Actuaries,
MBA, Columbia Business School,
BCS, FAST ICS**

Chief Executive and Actuary

Alchemy Associates / Alchemy Technologies



Jawwad is the Chief Executive and Actuary at Alchemy Associates, a fast growing boutique risk management and financial advisory firm. He is a Fellow Society of Actuaries, an MBA from Columbia Business School (New York City) and a computer science graduate (FAST ICS). During the last fourteen years, he has worked as a consultant in North America, Pakistan and the United Kingdom with a number of blue chip clients including Hartford Life, Aegon, American General, Goldman Sachs, ING, Manu Life, Safeco, Merrill Lynch, Met Life, Sun America, Nationwide, Phoenix Life, Sumitomo Mitsui Bank, Sun Life of Canada, Pacific Life, AllState, Fidelity Investments, Transamerica, Skandia, GE Financial Assurance, Lincoln National, Ohio National, AXA Equitable, Washington Mutual Bank, Riyadh Bank, and Dubai Islamic Bank. His domestic client list includes State Bank of Pakistan, State Life Insurance Corporation of Pakistan, National Bank of Pakistan, Muslim Commercial Bank, Karachi Stock Exchange, Pakistan Kuwait Investments, Union Bank, Crescent Commercial Bank, Prime Bank, KASB Bank, Shell Pakistan, JSIBL, InvestCapital and others.

Jawwad's core areas of expertise include Asset/Risk Management, Investments, Contingent liabilities, Product design and development, Derivative instruments, the financial services Middle Office and the Basel Regulatory Frame work. He blends a rare combination of information systems, international standards, business and product development skill set side by side with his actuarial expertise. Some of his assignments include:

- ❖ Design, development, marketing and deployment of an Enterprise Risk Management product that complies with domestic central bank's Market Risk Capital as well as Basel (BIS) Risk Capital requirements for regional markets as per the 1996 amendments to the Capital Accord and the Basel II Guidelines as per the Revised Framework for Market, Credit and Operational Risk Capital. The product is now **live at five midsize** institutions in Pakistan,

has been exhibited at multiple regional technology shows and has won two industry awards.

- ❖ Appointed actuary for the largest life insurance company in Pakistan with more than two billion dollars in assets under management, six million covered lives and branch network in Middle East and Pakistan. Responsibilities include oversight for valuation, regulatory reporting, investment policy, product development and portfolio management.
- ❖ Middle Office Risk assessment, model validation, M&A due diligence, the central bank's risk management framework and Basel II gap analysis for a number of domestic banks and treasuries in Pakistan with balance sheets ranging from five hundred million dollars to five billion dollars.
- ❖ Design and conduct forty workshops on Basel II, Derivative Pricing, Risk Management, Market Risk Management, Interest Rate Derivatives, Currency Options, Portfolio Optimization and Interest Rate Modeling. Participants have included 700 plus senior banking and treasury professionals from client institutions in Pakistan, Saudi Arabia and UAE, with 800 logged instruction hours and an average score of 4 out of 5 on learning experience, facilitator knowledge, communication and market relevance.
- ❖ Risk management and pricing consultations on Interest Rate Swaps, Interest Rate Caps and currency options transactions in the Pakistan to both payer and receiver counter parties.
- ❖ Comprehensive analysis & extension of risk exposure measurement & management system for the hedge fund margin lending business of a bulge bracket investment bank and brokerage institution in Western Europe.
- ❖ Review of capital adequacy rules and framework for insurance and reinsurance organizations in a financial services free zone in the Middle East.
- ❖ Value added actuarial advisory services for employee benefit plans, life insurance companies and M&A transactions.
- ❖ Initial feasibilities, projections, evaluation and business plans for traditional and micro pensions, micro insurance, low income housing finance, interest rate options, inflation indexed products, equity indexed products, foreign exchange, lifestyle ideas, mutual funds and insurance distribution solutions as well as their presentation in front of representatives of Multi-lateral Donor agency, project sponsors and boards of directors.
- ❖ The launch of 100 plus tax advantaged savings products across 6 broker dealers, banks and 25 insurance carriers in 10 months in North America on a platform averaging 30,000 transactions per month with an average transaction volume of one billion dollars a month.