

Probability of Default Models – Beyond regulation

1.0 Learning objectives

This intermediate level workshop serves as a Probability of default (PD) calculation refresher as well as reviews intermediate topics and implementation issues related to Probability of default models.

The workshop compliments material covered in the Internal Capital Adequacy Assessment workshop scheduled for 5th February 2008 and is meant as a pre-requisite for first time participants.

At the end of this workshop, participants will be able to:

- Compare key methods used for PD calculations and work with them
- Apply these methods within the local environment
- Work with statistical test of significance to identify and drive key patterns
- Link PD calculation with internal rating, facility risk rating and capital charge calculation

2.0 Schedule and Location

4th February 2008

9:00 am – 4:30 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

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 fifteen 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 Merrill Lynch, Aegon, Goldman Sachs, ING, Manufactures Life, Sumitomo Mitsui Bank, Met Life, Sun America, Nationwide, Pacific Life, Fidelity Investments, Transamerica, Skandia, GE Financial Assurance, AXA Equitable, Washington Mutual Bank, Riyadh 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, Askari 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, derivative transactions, market risk and capital management solutions, and conducted more than 50 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 1000 plus senior banking and treasury professionals from client institutions in Bangkok, Singapore, 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 probability of default calculations 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.

5.0 Probability of Default Models

Day	Session	Title	Topics
One 09:15am – 11:15am	One 2 hrs	PD Models – All you ever needed to know in less than 90 minutes.	Overview and introduction. Key terms and concepts. The mortality, KMV and regression approaches. Ground rules and datasets. Structuring a PD study. Common issues and challenges
One 11:30am – 01:30pm	Two 2 hrs	Hands on review I	Scoring models in use. Linking scoring models and PD's. Refining models with usage. PD calculation exercise.
One 02:30pm – 04:30pm	Three 2 hrs	Hands on review II	Linking PD's and capital charge calculation Extending models for anticipated regulation Applying and interpreting statistical tests Wrap up and review.

6.0 About Alchemy Technologies

Alchemy is an Enterprise Risk advisory firm that has grown annually by one hundred percent year-on-year for the last five years. As of the date of this workshop we have picked up three industry and peer awards, conducted more than 50 workshops, employ 35 professionals and our list of 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. Our international partners now include risk practices in Thailand, Vietnam, Cambodia, Laos and Singapore

7.0 Workshop Fee, Restrictions and Cut off dates: 30 participants only. Course fee is Rupees 45,000 per participant. Fees cover cost of materials, workshop facilities, lunch and three teas. Discounted fees are applicable to Alchemy Risk Manager, Treasury One and Rating One solution customers in deployment or maintenance.

To avoid disappointments, please ensure that your nomination and payments have been received before 12:00 noon Thursday, 31st January 2008. Please make all cheques payable to Alchemy Technologies Pvt. Ltd.

For more information, please contact
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Jawwad Ahmed Farid

**Fellow Society of Actuaries,
MBA, Columbia Business School,
BCS, FAST ICS
Chief Executive and Actuary
Alchemy Technologies**



Jawwad is the Chief Executive and Actuary at Alchemy Technologies, 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 fifteen 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, Pakistan Kuwait Investments, Union Bank, Prime Bank, KASB Bank, Shell Pakistan, JSIBL, Financial Market Association, Pakistan Bank Association 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 Framework. 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 Revised Framework for Market, Credit and Operational Risk Capital. The product is now **live at five midsize** financial institutions in Pakistan, has been exhibited at multiple regional technology shows and has won three industry awards.
- ❖ Appointed actuary for the largest life insurance company in Pakistan with more than three 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, 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 fifty plus workshops on Basel II, Derivative Pricing, Risk Management, Market Risk Management, Interest Rate Derivatives, Currency Options, Portfolio Optimization and Interest Rate Modelling. Participants have included 1000 plus senior banking and treasury professionals from client institutions in Bangkok, Singapore, Pakistan, Saudi Arabia and UAE, with 700 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.