



### OBJECTIVE

The fundamental function under all loans or investments is tied to understanding and forecasting cash flow and its particular volatility. To plan and control future performance, make investment decisions concerning projects the analyst needs to examine cash flow issues that eventually result in a credit risk. The course will also cover the forecasting process and project valuation techniques for a business's future viability. While the fundamentals of cash flows are explained in detail, the course will also show how to build a portfolio of assets which can be mixed to reduce risk, it will also show how to benchmark each project.

### KEY AREAS

- Growth functions of various assets
- Define credit risk of contractual cash flows
- How can a project be structured to remain solvent and dimension how risk is measured
- And then priced for the project, the Beta.
- How to value stable businesses
- Country risk and market risk premiums
- Cash forecasting models for different types of assets.
- How to leverage and gear cash flows

### FOCUS

#### THE MICRO LEVEL

At the firm level, methods for forecasting cash and understanding the contribution factor of leverage and return will be clearly explained. Examples will be given to show how to price firm wide risk to future flows.

#### MACRO LEVEL

Understand how projects can be valued against industry benchmarks, how risks between assets are priced. Learn how to use market valuation to understand firm risk and how this can be factored into a portfolio

### WHO SHOULD ATTEND

- Financial Analysts
- Investment Managers
- Financial Controllers
- Credit Managers
- Valuation Analysts
- Portfolio Managers
- Project Financiers

Receive spreadsheet models for forecasting cashflow

### About your trainer



Martin specializes in designing financial measurement systems with a particular focus on economic capital frameworks. He has more than 10 years experience developing bespoke knowledge / workflow and scorecard solutions for banks, stock exchanges brokerages, regulators and energy houses in both strategic and processing areas of the business. He has a particular interest in lending products and in assisting firms reduce capital arbitrage in their economic capital models. Primarily he is banker with experience in both the markets and investment banking and he is currently working with several institutions throughout South East Asia. In the capital markets arena Martin has worked closely with a stock exchange in the region assisting the exchange design a new energy instrument and futures contract. In addition to Martin's work within the capital markets and banking sector he is a credited trainer for structured finance, project finance, cost modelling, credit and operational risk.

Day 1 Agenda • • • • •

**VALUING A CASH FLOW FOR A FIRM**

**OBJECTIVE**

The course will begin with an introduction to cash flows which brings all class members up to a base standard before moving into the more complex areas of the analysis. Each session will consist of an academic theory with a real life spreadsheet example.

“This course has extensive depth, is well documented, provides excellent workshop case studies and example spreadsheets” – Abu Dhabi Investment Council

**KEY LEARNING**

- Understand the contribution effect of operating cost and cash flow.
- Learn how to dimension terminal value of an asset to make strategic investment decisions.
- Show the effects of leverage and gearing on cash flow.

**Session 1**

- 08:30 **TVM, BS, IS, CF**  
Overview of basic time value of money, understand a cash flow statement and look at the effects it has on the other structures of the financial statements. Gain insight operating leverage and leases.
- 09:30 **Discounted Cash Flow**  
Understand the extent and importance of DCF how to estimate and apply it to a cash flow, how to dimension a beta and the differences between top down and bottom up risk premiums.
- 10:30 Coffee Break
- 10:45 **Leverage and Gearing**  
Understand the effects of WACC on funding a firms future cash flows, learn about the J-Curve funding strips and understand how mixing debt and equity changes the internal rate of return of a project.
- 11:45 **Revenue Forecasting**  
Look at the various methods of forecasting revenue, taking in seasonally adjusted returns, extrapolation techniques for time series analysis.
- 11:45 Coffee Break
- 12:00 **Different Growth Models**  
Learn about different growth models and how to value a firm how can terminal value of a cash flow using FCFE and FCFF.

**Session 2**

- 14:00 **Relative Valuation & CAPM**  
Look at market based methods for firm valuation, how firms are benchmarked against a synthetic market and using a spreadsheet how can matching of a firms leverage and credit rating be used to predict future cash flows.
- 15:00 Coffee Break
- 15:15 **Relative Valuation**  
Look at the differences between income methods, market methods for valuation how are the various estimates aggregated and how can a set of scenarios be built to show the market relative effects for a firm.
- 16:15 Coffee Break
- 16:30 **Risk Free Rates**  
Show the various approaches for dimensioning market risk premiums and risk free rates. Why are they important and how are they used in estimating the true value of a cash flow stream.
- 17:30 Day One Complete

This is an extensive day however examples will be given to the class that can be taken away on a spreadsheet. In addition all training material is made available in hard and soft copy.

Day 2 Agenda • • • • •

**LOOK AT THE BROADER CONCEPTS OF DISTRESS**

**OBJECTIVE**

The second day takes a different angle and reviews risks that cause contractual cash flow expectations to fall, how is this priced? What is the best practice standard being used by banks to measure such exposures.

“In two days were taken through some exciting examples of valuation of cash flow, highly useful to us” – CIMB

**KEY LEARNING**

- How to price credit risks in a portfolio.
- What are healthy indicators for a project in respects to its cash flow.
- How can projects be credit scored, how to build a credit scoring model.
- How can Monte Carlo be used to show the revenue function of a firm?

**Session 1**

- 08:30 **Distressed Cash Flows**  
How to measure the value of firms that have high growth negative earnings and understand how to estimate cash flows to the firm importantly how to adapt the DCF valuation approach to handle such model estimates.
- 09:30 **Pricing Risk into Cash Flows**  
Look at how different risks can be priced into a single consolidated view of volatility or sigma for a firm. This is a causative technique for valuing cash flow volatility and how it eventually translates to credit risk.
- 10:30 Coffee Break
- 10:45 **Healthy Indicators**  
What are the best practice project indicators for predicting a firms risk and likelihood of default. How can this be used to estimate the probability of distress.
- 11:45 **Credit Score Card Models**  
Gain insight into how to credit score a firm, what the key dynamics for building a sound scoring model and how are liquidation values used for distressed assets.
- 11:45 Coffee Break
- 12:00 **Monte Carlo**  
Use Monte Carlo to show the contribution of firm assumption input volatility on cash flows. Such stochastic bottom up models have an accurate

**Session 2**

- 14:00 **Valuation Real Options**  
Use real options to price risk on a volatility cash flow how can this model be used to give us a good understanding on when to invest and divest and what the expected return will be from such actions is shown using examples.
- 15:00 Coffee Break
- 15:15 **Pricing Country Risk**  
Understand how to dimension country and political risk for potential firms then learn how to integrated these variables into the estimation of distressed cash flows.
- 16:15 Coffee Break
- 16:30 **Portfolio and Risk**  
How to build a portfolio of assets that is diversified and has an immunised default adjusted return that reduces volatility of earnings. The workshop will also review how to create a value at risk measure of potential loss across the portfolio that is cohesive and transparent allowing benchmarking relative value of reinvestment and divesture of the portfolio.
- 17:30 Day Two Complete