

## CREDIT RATINGS FOR BANKERS

### Credit Analysis, Pricing and Return on Capital

#### **An in-depth look at Rating Agencies Methodologies**

*“Bridge the gap between credit analysis, capital requirements, pricing and returns.”*

### Course description

This intensive credit course seeks to enhance both credit analysis and pricing skills by providing an in-depth look into the methodologies of major rating agencies. (Moody's, Standard & Poor's).

The course covers, step by step, the mechanics of several rating methodologies across various industries. The choice of key factors and metrics, and how these are weighted in scoring systems to arrive at a rating, is explained in detail. This process is then compared with the conventional corporate credit application templates used by large banks.

The course also reviews the calculation of capital requirements under Basel II-III-IV and explains the close relationship between the ratings of rating agencies, probability of default (PD) and internal bank ratings. It then shows how rating methodologies, once understood, can be applied to unrated corporates exposures to determine their capital requirements and appropriate pricing.

This is a practical course, which is based on real life case studies discussed first in groups and then in class.



### Course objectives and benefits

Ratings are used by a wide variety of investors, banks and regulators, including the Basel Accords, and as such their workings are mandatory knowledge for analysts and credit professionals.

The primary objective of the course is to enhance the analytical skills of the delegates by giving them hands-on exposure to the technical aspects of the rating process: choice of key factors, choice and relevance of quantitative metrics, calculation of the score and conversion into a rating.

Beyond that however, the course also aims at bridging the gap between the credit analysis process and the calculation of capital requirements, pricing and returns, by applying rating methodologies to unrated corporate exposures.

This implies a review of capital requirements calculations under the various Basel Accords, including an introduction to the Basel IV revisions and fundamental concepts, such as Expected and Unexpected losses and economic capital.

## Audience

Understanding the workings and implications of credit ratings is essential knowledge for analysts, lenders, investors and fund managers.

This version of the course however is more specifically intended for bankers, analysts focussing on banks and regulators as it focussed on capital requirements.

Non-banking professionals will find most of the course relevant, but they may prefer to attend the version of the course dedicated exclusively to rating agencies methodologies.

The metrics (E.g. ratios) used by rating agencies are analysed in depth but no accounting knowledge is assumed.

**Duration:** 3 days

**Prerequisites:** understanding of basic accounting concepts

### Jean-Charles Pirlet



Jean-Charles spent seven years in the Credit, Corporate and Investment Banking divisions of Citibank, including three years in the World Corporation Group in London as Vice-President managing a portfolio of UK

multinationals on a worldwide basis.

He subsequently worked as Director of Project Finance and Acquisition Financing for Security Pacific in Frankfurt before returning to South Africa in 1993 as Head of Corporate Banking (Senior Vice-President) for the local operation of ABN-Amro.

Jean-Charles has broad credit experience gained over 20 years as credit analyst, credit officer and credit committee member

at Citibank and ABN-Amro, covering Corporate and Investment Banking, including , inter alia, Syndications, Project Finance, Leveraged transactions and Asset securitisation.

He was also in charge of ABN-Amro's Financial Institutions unit for the whole of Africa for a number of years and acquired extensive specialist credit and transactional experience in that field.

He has provided in house training to international banks such as Citibank, Deutsche Bank, ING, Nordea, CIBC, Investec and many others, in some cases for more than ten years.

He is Director- Credit and Basel IV Services at Bank T & D Consulting Limited, a London based consulting company.

He holds an LLM (Law) and an LLM (Tax Law) from the University of Liège in Belgium.

## Day 1

---

### I. Credit risk, Capital Requirements, Returns and Pricing

How margins and fees convert into ROE-RORAC/RAROC returns.

- Capital adequacy requirements - The regulatory frameworks.
- Risk weighted assets.
- ROE calculations- RORAC/RAROC pricing.
- “Hurdle rates”

### II. The Basel II-III Accords- a fast-track approach

- Capital adequacy requirements - The regulatory frameworks.
- Internal ratings and External ratings
- Economic capital
- Expected and Unexpected losses
- Probability of default, Loss Given Default and Exposure at Default.
- The Risk Weight Function (RWF)
- Capital Adequacy Requirements –The 3 Approaches
- Introduction to Basel IV

### III. External Ratings

- What do they measure?
- Ratings scales-Moody's, S&P, Fitch.
- Global vs. local scales
- Sovereign and Cross-border risk
- Ratings and probability of default (PD).
- Mapping internal ratings to external ratings.

**Exercises:** calculation of capital requirements and ROE in the Standardised and the Advanced IRB Approach, using the RWF.

### IV. Credit applications vs. Rating Methodologies

#### A. What they have in common

**A similar approach:** identification of industry fundamentals to guide the analysis.

**Exercise:** the retail industry

#### B. Where they differ

1. **Different focus:** investment grade bonds vs. loans
2. **Different financial metrics-Rationale**
3. **Credit Application vs. Scoring system**
  - Scoring system: the quantification of credit risk
  - Conversion of key factors into ratings-Calculation and mechanics
  - Ratings and Probability of Default (PD).

## Day 2

---

### V. Case studies applying the acquired knowledge.

Case studies are based on real-life companies, the use of industry analysis modules and the credit rating methodologies for the industries concerned. Cases are first discussed in groups, then presented and discussed in class.

In each case, delegates are required to:

- Identify the industry's fundamentals and critical success factors
- Assign their own rating, as though they were a rating agency, and motivate their choice.
- The rating agency's methodology for the industry in which the company operates is then reviewed and explained by the presenter
- Delegates must then use the rating agency's methodology to work out, step by step, a rating for the company.
- The PD associated with the rating and the Basel II Risk Weight Formula are used to calculate the RORAC return/correct pricing of the transaction.

#### Case Study 1- Retailer

- Read the company's latest annual report.
- The retail industry's fundamentals and critical success factors have already been covered.
- Assign a rating to the company.
- Apply the rating agency's methodology for the retail industry to the company to work out a rating.
- Calculate the capital required and RORAC return for the proposed loan and pricing.
- Presentation to class and discussion

#### Case Study 2 – Chemical Company

- Same steps as case study 1.

#### Case Study 3 – Pharmaceutical Company

- Same steps as case study 1.

## Day 3

---

#### Case Study 4 – Mining company

- Same steps as case study 1.

#### Case Study 5 – Steel company

- Same steps as case study 1.

#### Case Study 6 – Oil company

- Same steps as case study 1.



## Who we are

Analytiques C & F Ltd is incorporated in England and based in London. It specialises in all the aspects of Credit Risk including Financial and Credit Analysis, Capital requirements, the Basel II Accord, portfolio management and legal documentation.

It is a provider of both consulting and training services in these fields.

## Where we work

Analytiques was set up to address the needs of the African market, in line with the long association of its directors and staff with the continent. Although this remains the company's main focus, the directors of Analytiques are routinely involved in training or consulting assignments in other parts of the world, mainly in Europe and the Middle East, thus keeping abreast with the latest developments in finance.

## Our clients

Our clientele consists of banks or other financial institutions, either directly through bilateral contracts or through major international training firms to which we subcontract. The latter include 7City and Crown Agents in the UK and Ethan Hathaway in Hong Kong.

## Our approach

All our trainers or consultants have strong academic qualifications, conduct their own research and produce their own study material. But because it is practical guidance and concrete solutions that our clients expect, years of hands-on senior management experience gained with leading international banks and in major financial centres are a mandatory requirement for our staff and what best describes our business franchise.

## Analytiques

### Our Competitive edge

Contrary to most training firms, the owners and directors of Analytiques are *also* the key subject matter experts.

We eliminate expensive intermediaries and pass on the benefit to our clients.

Also, you discuss your training requirements with experienced finance specialists, not sales people.

## In-House Training

Although we do organise public courses at regular intervals most of our courses are delivered in-house, a cost effective solution that enables us to adapt the course contents to the precise requirements of our clients.

Some credit programmes for example have been run for more than 15 times for the same bank in the past 5 years.

In Africa, in-house courses have been provided to a large number of banks or corporates including, inter alia, Barclays (Kenya, Tanzania and Uganda), Nedbank, ABSA, Standard Bank, Rand Merchant Bank, Trust Bank (Ghana), National Bank of Malawi or Shell Africa.

See our [website](#) for a non-exhaustive list of in-house clients in other countries.