

NAME: **MARCO COSTANTINO**

SUMMARY:

Senior investment banking professional at executive director level with direct business experience of equity derivatives trading, as well as risk management and full trade life cycle, quantitative development, analytics, business analysis and project management.

MAIN BUSINESS KNOWLEDGE:

In-depth derivatives knowledge in equity, fx and interest rates derivatives and fixed income, acquired working on analytics and pricing as well as an equity derivatives trader at JPMorgan.

MAIN TECHNOLOGY SKILLS:

C#, C++, C, Python, Excel VBA, Java, MsSql, Sybase, Db2, Oracle, Shell Scripting, Unix, Windows

CAREER HISTORY:

04/2013 - present **Advanced Finance Ltd.**  
**Director**

12/2010 - 04/2013 **UBS**  
**Equity Derivatives - Commodities**  
**Executive Director - Global head of desk-dev and pricing team**

**Main technologies: C#, C++, VBA**

Lead developer and team leader of the global desk-development team. The team encompasses every business unit of equity derivatives, including flow derivatives, exotics derivatives, fund derivatives, market making etc. During my experience at UBS I remained fully hands on.

Projects included:

- global desk-dev framework (C# / C++ / VBA) which is used to expose pricing functionality to all front office users globally.
- exotics pricing framework both interfacing with the quant library and delivering all products pricing in Excel for every business area.
- market data analytics. The framework is responsible for the construction and handling of all derivatives pricing market data, including bumping, manipulating, displaying, caching and interfacing into the quant code for pricing.
- Cobra, main pricing and quoting applications for the flow desk globally (Java / Unix)
- Walrus. Global market data management application for manipulating and fitting volatility, dividends, interest rate curves and other market data.

- Designed and implemented a completely generic pricing framework which allows new products to be added to the pricing platform with no coding required by IT in any part of the application.

03/2005 - 10/2010

**ROYAL BANK OF SCOTLAND**  
**Global Head of Equity Derivatives Quantitative Development Team.**

**Main technologies:** C++,C, C#, VBA, SqlServer

Lead developer and team lead.

The main programming languages used were C, C++, C# , VBA. projects:

- Designed and implemented the RBS equity derivatives exotics proprietary scripting language used by the desk and the quants for quickly implementing new models and payoffs.
- Implemented all market data related analytics in the quant library: interest rate curve, forwards, volatility models, correlations etc..
- Integrated all quant analytics library into Excel and all equity derivatives systems.
- Implemented the main equity derivatives risk engine used to calculate risk for the entirety of the bank's equity derivatives positions.
- Implemented the distributed montecarlo pricing analytics (using grid technology) used by the desk for quickly pricing products for clients.
- Quant library rewrite and improvement.
- Regression tested the framework for the main analytics library and handling of all quant releases to the desk and IT systems.

08/2004 - 03/2005

**ROYAL BANK OF SCOTLAND**  
**Quant-Developer - Equity Derivatives.**

**Main technologies:** C++,C, C#, VBA, SqlServer

- Design and implementation of a new exotics derivatives structuring tool for the Equity Derivatives business. The tool is based on the RBS equity derivatives scripting language which allows to quickly design new products for the desk. The tool is written in C# with C/C++ analytics.
- Design and development of A.P.E.X., Auto Parameterisation of Exchanges. The tool calculates Black & Scholes implied volatilities from option prices chains. C#, Real Time Market Data, Multithreading

01/2003 - 08/2004

**ROYAL BANK OF SCOTLAND**  
**Global Head - Cross Products Analytics Team**

**Main technologies:** C++,C, C#, VBA, SqlServer

Hired by RBS to set up the cross products analytics team, positioned between the quantitative research team and IT.

The main responsibilities of the team were:

- Development of analytical tools for the structuring and quantitative sales teams across the following asset classes: IRD, Fixed Income and FX

Derivatives. Some of the applications were: Portfolio Analysis including IAS39, BackTesting, complex analytical calculations etc. Main development language, C#.

- Development of the main analytics library of the bank (CAF, Common Analytics Framework) supporting IRD, Fixed Income, Credit Derivatives and FX. Main development language, C++ on both Windows and Unix.

06/2000 - 12/2002

**JP MORGAN, LONDON**  
**Equity Derivatives Trader.**

**Main technologies:** Excel, VBA, Java, Sybase

- set up the Securitised Derivatives Business at JP Morgan  
- desk-development of all trading tools used by the desk for pricing, arbitrage, volatility management etc. (Excel / VBA/ Java / Sybase).  
- designed systems for trading and pricing derivatives quoting on the different exchanges.  
- responsible for market making, trading and risk management of the Telecom, Transport, Autos, Airlines and MIB30 equity derivatives books for a total of 60 underlyings and over 500 warrants quoted in Switzerland, Italy and Germany.

01/ 1999 - 06/2000

**JP MORGAN, LONDON, NEW YORK**  
**Quant Developer - Equity Derivatives**

**Main technologies:** Excel, VBA, Java, Sybase

Design and development of time series analytics for historical and implied vols, correlations, basked volatility analysis etc. (Java, VBA, Sybase database, Perl, Unix).

1997 - 1998

**JP MORGAN, LONDON/NEW YORK**  
**Equity Derivatives Risk Management Support (IT)**

**Main technologies:** Excel, VBA, Java, Sybase

1994 - 1997

**UNIVERSITY OF DURHAM, UK**  
Part-Time Teacher in the Department of Computer Science

**Main technologies:** Haskell

EDUCATION

University of Durham, UK (1997)  
**Department of Computer Science**  
**1Ph.D. in Computer Science**  
**2Sponsored by the Universities of Durham, UK and Trento, Italy**  
Field of research: Information Extraction in Finance

University of Trento, Italy (1994)  
**Faculty of Economics and Business Administration**

Laurea (equivalent to a four year **BSc** plus **MSc**) in Economics and Business Administration  
Dissertation in Computer Science  
Marks: 103/110 (equivalent to **First Class**)

University of Maastricht, Holland (1993)  
**Faculty of Economics and Business Administration**  
**ERASMUS** exchange student financed by the European Commission

Istituto Tecnico Commerciale of Tione di Trento, Italy (1989)  
**Diploma in Accountancy**  
Main courses: Mathematics, economics, banking and accountancy.  
Marks: 58/60 - (equivalent to "A" levels - Grade A)

PUBLICATIONS 2008. Information Extraction in Finance (book). Marco Costantino, Paolo Coletti

PROFESSIONAL QUALIFICATIONS SFA general representative qualification  
EUREX Trader Examination  
XETRA Trader Examination  
Euronext Trader Examination

LANGUAGES English (Fluent)  
Italian (Mother Tongue)  
German (Basic)  
Spanish (Basic)

HOBBIES Glider pilot