

ANDREA BUGIN

Date and Place of Birth: Nov. 4, 1970 in Dolo (Venice), Italy
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EXPERIENCE

Oct. 2008 - today

Banca IMI

MILAN

Capital Markets

Head of Fincancial Engineering

Main Recent Projects include:

1. **CVA Platform development and application management:** the application computes all the counterparty fair value adjustments for uncollateralized contracts at *pre-deal analysis* level;
2. **Central Clearing Web Platform:** the application computes the Initial Margin and Variation Margin at *pre-deal analysis* level. Available via web also for Banca IMI clients;
3. **Internal Financial Libraries development for FO applications:** interest rate, credit, commodity and inflation libraries connected to Murex, equity libraries connected to Sophis (forthcoming) and ORC;
4. **Kx DB development and application management:** collected data from markets in an high performance DB used for backtesting algorithmic strategies;
5. **Develompent of Algorithm Trading and Execution Strategies:** plugged in ORC and FastTrack;
6. **Excel application management:** competence center for the development and maintenance of financial Excel spreadsheets.

Oct. 2000 - 2007

Banca IMI

MILAN

Product & Business Development

Joint Head of Product Development and Equity Trading Research

Product Development Activities included:

7. **C++ financial library development:** this is the reference financial library for the bank, it is interfaced with Excel, MarketView, Murex, Oracle;
8. **new product development:** for example new portfolio insurance strategies (as improvement of the Constant Proportion Portfolio Insurance);
9. **quatitative support to the ABS origination:** development of the cash flow models for any kind of securitisation; see for example MOSAICO (the first Italian multi-originator MBS).

Equity Trading Research Activities included:

1. **volatility forecast research note:** the analysis involves the historical and implied volatility of the main european equity indices;
2. **warrant:** for example development of the new *IMINext* indices: Reflex, Select and DynaMix.

Referees: Aleardo Adotti (Head of Product & Business Development), PhD Fabio Mercurio (Head of Financial Models).

Sept. 1998 – Oct. 2000

Banca IMI

MILAN

Product & Business Development

Activities included:

1. **implementation of C++ routines** for fixed income security evaluation (yield, sensitivities, asset swap spread...), government zero curve interpolation using BSplines, libor zero curve estrapolation, libor volatility stripping (from caps), Monte Carlo simulation for the evaluation of american or bermudian option (Longstaff-

- Schwartz approach), Volatility surface interpolation using 3D BSpline, etc (see working papers);
2. **evaluation of structured bond** through the implementation of Excel spreadsheet (collared bonds, constant maturity treasury bonds, equity linked bonds, collared bonds, convertible bonds) etc.
 3. **teaching internal course for traders and sales.**

Oct. 1997 - Sept. 1998 **Credito Italiano** **MILAN**
 Risk Management Office.
Activities included: risk control of the whole investment bank through an in-house-developed software, study of the cubic spline method for interpolating the zero curve, study on volatility measures and estimates (ARCH, GARCH models) , Risk Watch™ implementation.
Referees: Ferdinando Samaria (Head of Risk Management Office), PhD Giorgio Consigli.

Jul. 1997 - Aug. 1997 **Internship at the MedioSim S.p.A. (Medio Credito Centrale).** **MILAN**
 Forex Desk.
Activities included: sales of option's structure (that included exotic option: knock out, knock in, binary...), economic update of customers, study of new derivative's structures.

EDUCATION

Sept. 1997 - Feb. 1998 **Program of Specialisation in Financial Economics.**
 Organised by Università Commerciale "Luigi Bocconi", taught by the London Business School's faculty with the sponsorship of Credito Italiano Bank.
Courses included: Fixed Income, Asset Management, Corporate Finance, Stochastic Calculus, Options and Futures and Financial Engineering.

Sept. 1996 - Jun. 1997 **MEc Master in Economics, Università Commerciale "Luigi Bocconi".**
 Master degree "with distinction".
Courses included: Macroeconomics, Microeconomics, Advanced Econometrics, Advanced Statistics, Theory of Finance, Monetary Economics, International Monetary Economics.

Sept. 1989 - Jun. 1994 **Degree in Economics, Università Commerciale "Luigi Bocconi".**
 Final Grade: 110/110 magna summa cum laude and printing dignity.
 Major: Monetary and Financial Economics.
Courses included: Advanced Statistics, Theory of Finance, Mathematics of Finance, Econometrics, Information and Capital Markets, Game theory, Monetary Policy Analysis.

TEACHING EXPERIENCES

Oct. 2001 - Feb. 2013 **ASSIOM FOREX Corso Base di Front Office** **MILAN**
"Titoli Strutturati"

May 2001 **MEBS Master in Economia e Banca** **SIENA**
"Le operazioni di Cartolarizzazione"

Mar 1999 **MEBS Master in Economia e Banca** **SIENA**
"Introduzione alle Opzioni Finanziarie"

LANGUAGE Native Italian, Fluent in English, Proficient in French.

SOFTWARE C++, java, Visual Basic, Matlab, Excel.

ACTIVITIES **Sport:** tennis, soccer and windsurf. **Hobby:** comix, cinema and tango.