

Résumé of Duc Pham-Hi, Ph.D

Duc started his career as Assistant-Director at the **Banque de France**. Between 1983 and 1989, he led the implementation of Artificial Intelligence in corporate solvency rating and default forecasting systems still in use today. On leaving the French National central bank, he acquired from 1989 to 1996 a diversified IT experience as **chief of Management Information Systems** at Credit National and as project director of a Business Process Reengineering program spanning 1200 Insurance branches of Group Victoire, overseeing a staff of 75 involved in the reorganisation of 3000 workstations, and development of software in insurance underwriting, claims, and KYC.

He served the next 3 years (1996-1999) as **proprietary Forex Trader and Head of Research** at Natexis Banque, as well as risk consultant for the Derivatives Sales desk. He directed memoirs and research papers of graduate engineering student groups on such topics as volatility term structure of interest rates, fat tail structures in return distributions, HJM model based decomposition, and digital and barrier options pricing. He also helped implement the first Value-at-Risk metrics at Natexis.

At the rise of the Internet economy, he became **Director at PricewaterhouseCoopers** in Global Risk Management Solutions between 1999 and 2003. His line of business included Corporate Treasury and Energy trading and Operational Resiliency audits, with a focus on the pricing and hedging of both financial and commodities derivatives in corporate finance functions. Other assignments are external audit (FASB and SEC compliance) and trading floor robustness audit. Clients are typically NYSE listed French companies.

Between 2003 and 2007, Duc Pham-Hi served as a **quantitative and regulatory senior officer** dealing with Operational Risk subjects in the Policy Department of the French Banking Commission. His main responsibilities included developing new regulations in line with Basel II, analyzing foreign central banks positions in this field, examining practices and techniques of operational risk management, co-authoring a Guidebook for French on-site and off-site supervisors, managing questionnaires-based fact-finding surveys to establish cross banks benchmarks, keeping watch on progress of banks projects in implementing operational risks models, management, IT and documentation. He has led, or participated in, on-site missions inside Paris-based international banking groups.

As a permanent member of many joint task forces from Central Banks of G10 countries, he **represented French positions** in the Joint Workgroup

for Validation, inside the Committee of European Banking Supervisors. He is also a member of the subgroup of the Basel Accord Implementation Group dealing with operational risk.

Since 2007, Duc Pham-Hi is in full time teaching position and **Head of the Computational finance department** at ECE Graduate School of Engineering in Paris. Besides taking charge of a post-graduate program in “IT architecture and Quantitative Finance”, he also heads consultancy and advisory services to the banking community in modelling Risks, and presents and publish his research papers every year.

Education

After a French Baccalaureate, Duc went to Prep school in Lycée Louis-Le-Grand to prepare the national contest for engineering schools. He graduated as an econometrics engineer from Ecole Centrale de Paris in 1980, then obtained his Ph.D with a thesis on a numerical solution to a family of Hamilton-Jacobi-Bellman equations.

He also graduated from the Institute for Political Studies of Paris, where he later gave lectures in Economic policies for 4 years.