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Project overview

Design and development of a tool for the valuation and hedging of inflation-indexed rental agreements

Client / sector	**Large European bank**
Project description	**Design and development of a tool for the valuation and hedging of inflation-indexed rental agreements** • Analysis of complex index-linked clauses in rental contracts and portfolios of rental contracts • Depiction of cash flows and the sometimes very complex index-linked clauses containing option-like characteristics (i.e. capped lookback options) • Set up for provision of market data (inflation curves and volatilities) • Implementation of a seasonality model • Calculation of present value and optimisation/derivation of hedging strategies with inflation derivatives and portfolios of inflation derivatives (swaps, caps/floors, swaptions) • Simulation of different scenarios (historic, Monte Carlo) • Reporting of results in tables and graphs
Service	• Business analysis and development of the architecture • Model selection and further mathematical development/adjustment • Development and implementation in an independent application
Technology	Independent application in C#/.Net
Professional input	Inflation models, seasonality model
Scope	4 months, 2 consultants
Tags	inflation, rental contracts, index-linked clauses, Monte Carlo, seasonality, inflation swap, inflation options