

# ***Product***

## **Rich Curve Fit**

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### **Product Objectives**

- Provide smooth, consistent forward rates of any tenor at any horizon
- Accurately fit an arbitrary collection of benchmark instruments
- Rigorously capture the futures-forward and long-end convexity effects
- Fast, reliable execution

### **Method**

- Smoothing of interest rate expectations based on the finite element method
- Optimal path of rate expectations
- Reproduces all benchmark prices

### **Uses**

- Consistently value aged and off-market swap transactions
- Smooth, precise rate curve for advanced analytic applications, like BGM
- Calculate nominal-, real- and inflation-forward curves
- Flexible forward pricing for break-even analysis of slope-trades, butterflies
- Constant maturity series for historical analysis (eliminate aging effects)
- Principal Component Analysis of forward rates or CMT
- Rich/cheap analysis of bonds & strips within any risk bucket framework
- Optimization of roll-down and carry

### **Software**

- VC++ console applications
- Excel *add in* based on .NET assemblies
- Separate modules for fitting benchmarks and recovering discount factors
- LIBOR instruments: deposits, deposit futures and par swaps
- TSY instruments: term repo, non-call bonds and inflation-linked bonds
- Extensively tested and deployed in most major markets