

Отчет о разработке версия 0.01

Основная модель Hybrid Cheyette1Factor
DupireLocalVolatility
Model

PS Model Name	Supported Asset classes	Supported trade type	Risk Factor	Risk Factor Model	Calibration Instruments	Comments
Hybrid Cheyette1Factor or DupireLocalVolatility Model	IR, FX, CM, EQ	IRS CIRS Caps/Floors Quanto IRS Any IR exotics (e.g. TARF) FX Swap FX Forward NDF CommoditySwap CommodityOption AsianCommodityOption ... Generally any IR/FX/CM/EQ exotic	Interest Rate	Cheyette 1Factor with Local Volatility	Vanilla caplets/floorlets (all maturities)	
			Interest rate basis	Deterministic	Inferred from calibrated rates curves	The model is not appropriate when spread volatility is a main risk factor e.g. options on spread
			FX rate	DupireLocalVolatility	FX options (all maturities)	
			Correlations	Deterministic	Trader's input	
			Equity Spot	DupireLocalVolatility	Equity options	Currently with an approximation which works when rates vol is much smaller than equity vol (usually the case)
			Commodity futures	CommoditySpotCheyette1F	Commodity futures, options on commodity futures	Currently with a limitation: only zero correlations between commodity and rates

						are allowed Fairly good model for commodities where futures/options expirations are closely aligned and there is little seasonality (works for our portfolio for now).
			Credit	Deterministic	Input calibrated curve	Credit curve bootstrapping can be added if really needed