Help

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#if defined(PremiaCurrentVersion) && PremiaCurrentVersion <
     (2007+2) //The "#else" part of the code will be freely av
    ailable after the (year of creation of this file + 2)
#else

#ifndef INITIALYILEDCURVE_H_INCLUDED
#define INITIALYILEDCURVE_H_INCLUDED

#include "pnl/pnl_vector.h"

#define INC 1.0e-5
// Structure where the initial yield curve is saved.
typedef struct ZCMarketData
{
  char *filename; // Name of the file containing P(t,T) wh
    en the curve is not flat.
  int FlatOrMarket; // FlatOrMarket=0 if the initial yield
    curve is flat
  double Rate; // If FlatOrMarket=0, "Rate" is the constant
     yield of the curve.

  PnlVect *tm; // Vector of the dates
  PnlVect *Pm; // Vector of ZC price for every date tm[i]

  int Nvalue;  // Number of values read in the file.

} ZCMarketData;

/* InitYieldCurve_flag: Flag to decide to read or not ZC bo
    nd datas in "initialyields.dat" */
void SetInitYieldCurve(int InitYieldCurve_flag, double R_
    flat, ZCMarketData *ZCMarket);

// Read the ZC price from the file "initialyield.dat" and
    put it in the structure "ZCMarket".
void ReadMarketData(ZCMarketData *ZCMarket);

// Compute the ZC price P(0,T) by interpolating the initia
    l yield curve contained in ZCMarket.
double BondPrice(double T, ZCMarketData *ZCMarket);
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// Compute f(0, T) the forward rate, known at 0, maturing
    at T.
double ForwardRate(double T, ZCMarketData *ZCMarket);

// Delete the structure ZCMarket
int DeleteZCMarketData(ZCMarketData *ZCMarket);

// Computes the ATM swaption strike.
double ATMSwaptionStrike(double T_start, double T_end,
    double period, ZCMarketData *ZCMarket);

#endif /* INITIALYILEDCURVE_H_INCLUDED */

#endif //PremiaCurrentVersion
```

References