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#if defined(PremiaCurrentVersion) && PremiaCurrentVersion < (2007+2) //The "#els
#else

#ifndef INITIALLYILEDCURVE_H_INCLUDED
#define INITIALLYILEDCURVE_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) when the curve is not fl
    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 bond datas in "initialy
void SetInitYieldCurve(int InitYieldCurve_flag, double R_flat, ZCMarketData *ZCM

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

// Compute the ZC price P(0,T) by interpolating the initial yield curve containe
double BondPrice(double T, ZCMarketData *ZCMarket);

// 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, ZCMarketDa  
#endif /* INITIALYILEDCURVE_H_INCLUDED */  
#endif //PremiaCurrentVersion
```