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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 LMM_NUMERICAL_H
#define LMM_NUMERICAL_H

#include "pnl/pnl_vector.h"
#include "pnl/pnl_cdf.h"
#include "lmm_header.h"
#include "lmm_volatility.h"
#include "lmm_libor.h"
#include "lmm_zero_bond.h"

double maxi(double a, double b);
double ppos(double x);
int Set_to_Zero(double *x, int dim);
void computeNumeraire(char *nameOfthmeasure, Libor *ptLib,
    Swaption *ptSwpt, double *Numeraire, int j, int k,
    double auxspot);
void Name_To_Measure(char *ErrorMessage, char *name,
    int (**computeEvol)(const PnlVect *pt
    Rand, Libor *ptLibOld, Libor *ptLibNew,
    Volatility *ptVol, double dt,
    double t, double sigma_cost));

double ps_lmm(int n, double *u, double *v); /*scalar produc
    t of 2 vectors*/
double BSFormula(Swaption *ptSwpt, Libor *ptLib, double ev
    alTime, double blackVol);

#endif

#endif //PremiaCurrentVersion
```

References