```
   Help
#include "hullwhite1dgeneralized.h"
#include "chk.h"
#include "error_msg.h"
#include "model.h"

extern char* path_sep;

static PremiaEnumMember capletcurve_members[] =
{
     {"Caplet Volatility Curve 1",1},
     {"Caplet Volatility Curve 2",2},
     {NULL, NULLINT}
};

static DEFINE_ENUM(capletcurve, capletcurve_members);

double MOD(GetYield)(TYPEMOD *pt)
{
  VAR *Par;
  Par = lookup_premia_enum_par (&(pt->flat_flag), 0);
  return Par[0].Val.V_PDOUBLE;
}


static int MOD(Init)(Model *model)
{
  VAR *Par;
  TYPEMOD* pt=(TYPEMOD*)(model->TypeModel);

  if (model->init == 0 )
    {
      model->init = 1;
      model->nvar=0;

      pt->T.Vname = "Current Date";
      pt->T.Vtype=DATE;
      pt->T.Val.V_DATE=0.0;
      pt->T.Viter=ALLOW;
      model->nvar++;
```

```
      pt->flat_flag.Vname = "Initial Yield Curve";
      pt->flat_flag.Vtype=ENUM;
      pt->flat_flag.Val.V_ENUM.value=0;
      pt->flat_flag.Val.V_ENUM.members=&PremiaEnumFlat;
      pt->flat_flag.Viter=ALLOW;
      model->nvar++;
      Par = lookup_premia_enum_par (&(pt->flat_flag),0);

      Par[0].Vname = "Initial Yield";
      Par[0].Vtype=PDOUBLE;
      Par[0].Val.V_PDOUBLE=0.05;
      Par[0].Viter=FORBID;
      Par[0].Vsetable=SETABLE;

      pt->CapletCurve.Vname = "Caplet Curve";
      pt->CapletCurve.Vtype=ENUM;
      pt->CapletCurve.Val.V_ENUM.value=1;
      pt->CapletCurve.Val.V_ENUM.members=&capletcurve;
      pt->CapletCurve.Viter=ALLOW;
      model->nvar++;

      pt->a.Vname = "Speed of Mean Reversion";
      pt->a.Vtype=DOUBLE;
      pt->a.Val.V_DOUBLE=0.1;
      pt->a.Viter=ALLOW;
      model->nvar++;

    }
  return OK;
}
TYPEMOD HullWhite1dGeneralized;
MAKEMOD(HullWhite1dGeneralized);
```

References