```
   Help
#include "libor_affine_cir1d.h"
#include "chk.h"
#include "model.h"

extern char* path_sep;
extern PremiaEnum flat;


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->x0.Vname = "x0";
      pt->x0.Vtype=PDOUBLE;
      pt->x0.Val.V_PDOUBLE=1.2500;
      pt->x0.Viter=ALLOW;
      model->nvar++;

      pt->lambda.Vname = "lambda";
      pt->lambda.Vtype=PDOUBLE;
      pt->lambda.Val.V_PDOUBLE=0.0125;
      pt->lambda.Viter=ALLOW;
      model->nvar++;

      pt->theta.Vname = "theta";
      pt->theta.Vtype=PDOUBLE;
      pt->theta.Val.V_PDOUBLE=0.50;
      pt->theta.Viter=ALLOW;
      model->nvar++;

      pt->eta.Vname = "eta";
      pt->eta.Vtype=PDOUBLE;
      pt->eta.Val.V_PDOUBLE=sqrt(0.5);
      pt->eta.Viter=ALLOW;
      model->nvar++;

    }
  return OK;
}


TYPEMOD Libor_Affine_Cir1d;
MAKEMOD(Libor_Affine_Cir1d);
```

References