```
   Help
#include "lrshjm1d.h"
#include "chk.h"
#include "error_msg.h"
#include "model.h"

extern char* path_sep;

double MOD(GetYield)(TYPEMOD *pt)
{
  VAR *Par;
  int val;
  val = pt->flat_flag.Val.V_ENUM.value;
  Par = lookup_premia_enum_par (&(pt->flat_flag), val);
  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 Yields Curve";
      pt->flat_flag.Vtype=ENUM;
      pt->flat_flag.Val.V_ENUM.value=0;
      pt->flat_flag.Val.V_ENUM.members=&PremiaEnumFlat2;
      pt->flat_flag.Viter=ALLOW;
      model->nvar++;
      Par = lookup_premia_enum_par (&(pt->flat_flag), 0);
      Par[0].Vname = "Yield Value";
```

```
      Par[0].Vtype=PDOUBLE;
      Par[0].Val.V_PDOUBLE=0.05;
      Par[0].Viter=ALLOW;
      Par = lookup_premia_enum_par (&(pt->flat_flag), 1);
      Par[0].Vname = "Initial r0";
      Par[0].Vtype=PDOUBLE;
      Par[0].Val.V_PDOUBLE=0.05;
      Par[0].Viter=ALLOW;


      pt->Sigma.Vname = "Sigma Parameter";
      pt->Sigma.Vtype=PDOUBLE;
      pt->Sigma.Val.V_PDOUBLE=0.1;
      pt->Sigma.Viter=ALLOW;
      model->nvar++;

      pt->Kappa.Vname = "Kappa Parameter";
      pt->Kappa.Vtype=PDOUBLE;
      pt->Kappa.Val.V_PDOUBLE=0.02;
      pt->Kappa.Viter=ALLOW;
      model->nvar++;

      pt->Rho.Vname = "Rho Parameter";
      pt->Rho.Vtype=PDOUBLE;
      pt->Rho.Val.V_PDOUBLE=1;
      pt->Rho.Viter=ALLOW;
      model->nvar++;

      pt->Lambda.Vname = "Lambda Parameter";
      pt->Lambda.Vtype=PDOUBLE;
      pt->Lambda.Val.V_PDOUBLE=1.224744871;
      pt->Lambda.Viter=ALLOW;
      model->nvar++;

      model->HelpFilenameHint = "LRSHJM1D";

    }
  return OK;
}

TYPEMOD LiRitchkenSankarasubramanian1d;
```

```
MAKEMOD(LiRitchkenSankarasubramanian1d);
```

References