```
   Help
#include "stdndc.h"
#include "error_msg.h"
#include "premia_obj.h"

static TYPEOPT CDO_HEDGING =
  {
    {"Number of Companies", PINT, {0}, FORBID, UNSETABLE},
    {"Maturity",DATE,{0},ALLOW,SETABLE},
    {"Homogeneous Nominals", ENUM, {0}, IRRELEVANT, UNSETA
    BLE},
    {"Tranches", PNLVECT, {0}, FORBID, SETABLE},
    {"Type of Recovery",ENUM,{0},IRRELEVANT,UNSETABLE},
    {"Recovery",DOUBLE,{0},FORBID,SETABLE},
    {"Number of coupon payments per year",INT,{0},ALLOW,SE
    TABLE},
    {"Current date", DATE, {0}, FORBID, SETABLE},
    {"Number of defaults at current date", INT, {0}, FORBID
    , SETABLE}
  };

static int OPT(Init)(Option *opt,Model *mod)
{
  TYPEOPT* pt=(  TYPEOPT*)(opt->TypeOpt);
  VAR* ptMod=(VAR*)(mod->TypeModel);

  /* get the size from the model */
  mod->Init(mod);
  pt->Ncomp.Val.V_PINT = ptMod[0].Val.V_PINT;

  if (opt->init == 0 )
    {
      opt->init = 1;
      opt->nvar = 9;
      opt->nvar_setable = 5;

      pt->maturity.Val.V_DATE=5.0;
      pt->t_nominal.Val.V_ENUM.value=1;
      pt->t_nominal.Val.V_ENUM.members=NULL;
      pt->tranch.Val.V_PNLVECT=NULL;
      pt->t_recovery.Val.V_ENUM.members = NULL;
```

```
      pt->p_recovery.Val.V_DOUBLE=0.4;
      pt->NbPayment.Val.V_INT=4;
      pt->date.Val.V_DATE = 1.;
      pt->n_defaults.Val.V_INT = 5;
    }
  /* tranches */
  if ((pt->tranch).Val.V_PNLVECT == NULL)
    {
      double tranches[5] = {0, 0.03, 0.06, 0.1, 1};
      if ((pt->tranch.Val.V_PNLVECT =
           pnl_vect_create_from_ptr (5, tranches))==NULL)
        return WRONG;
    }
  return OK;
}

MAKEOPTGEN(CDO_HEDGING);
```

References