```
    Help
#include  "stdi.h"
static NumFunc_1 call=
  {
    Call,
    {
        {"Strike",PDOUBLE,{100},FORBID,UNSETABLE},
        {" ",PREMIA_NULLTYPE,{0},FORBID,SETABLE}},
    CHK_call
  };

static TYPEOPT ReceiverSwaption=
  {
    {"Payoff",NUMFUNC_1,{0},FORBID,SETABLE},      /* PayOff;
     */
    {"Euro",BOOL,{EURO},FORBID,SETABLE},          /* EuOrAm
    */
    {"Option Maturity",DATE,{0},FORBID,SETABLE}, /* OMatu
    rity;*/
    {"Contract Maturity",DATE,{0},ALLOW,SETABLE},/* BMatu
    rity;*/
    {"Nominal Value",PDOUBLE,{0},ALLOW,SETABLE}, /* Nomina
    l;*/
    {"Strike",PDOUBLE,{0},ALLOW,SETABLE},       /* FixedRa
    te;*/
    {"Reset Period",PDOUBLE,{0},ALLOW,SETABLE},  /* ResetPe
    riod;*/
    {"First Reset Date",DATE,{0},ALLOW,SETABLE}, /* FirstRe
    setDate;*/
    {"Nb of Reset",PINT,{0},FORBID,SETABLE},     /* NbReset
    Date;*/
  };

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

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

```
        opt->nvar_setable=9;

        pt->PayOff.Val.V_NUMFUNC_1=&call;

        (pt->EuOrAm).Val.V_BOOL=AMER;
        (pt->OMaturity).Val.V_DATE=2.0;
        (pt->BMaturity).Val.V_DATE=7.0;
        (pt->Nominal).Val.V_PDOUBLE=1.0;
        (pt->FixedRate).Val.V_PDOUBLE=0.0578;
        (pt->ResetPeriod).Val.V_PDOUBLE=0.5;
        (pt->FirstResetDate).Val.V_DATE=(pt->OMaturity).Val.
   V_DATE+(pt->ResetPeriod).Val.V_PDOUBLE;
        (pt->NbResetDate).Val.V_PINT=10;
        (pt->PayOff.Val.V_NUMFUNC_1)->Par[0].Val.V_PDOUBLE=0.
   0578;

        /* the following variables are not set interactively
   */

        pt->PayOff.Vsetable=UNSETABLE;
        pt->EuOrAm.Vsetable=UNSETABLE;
        pt->OMaturity.Vsetable=SETABLE;
        pt->BMaturity.Vsetable=SETABLE;
        pt->Nominal.Vsetable=SETABLE;
        pt->FixedRate.Vsetable=SETABLE;
        pt->ResetPeriod.Vsetable=SETABLE;
        pt->FirstResetDate.Vsetable=UNSETABLE;
        pt->NbResetDate.Vsetable=UNSETABLE;

     opt->HelpFilenameHint = "ReceiverSwaptions";

     }

   return OK;
}

MAKEOPT(ReceiverSwaption);
```

References