

[Help](#)

```
#include "
href../../mod/cir1d/cir1d_stdi/cir1d_stdi_h_src.pdfstdi.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}, /* OMaturity;*/
    {"Contract Maturity", DATE, {0}, ALLOW, SETABLE}, /* BMaturity;*/
    {"Nominal Value", PDOUBLE, {0}, ALLOW, SETABLE}, /* Nominal;*/
    {"Strike", PDOUBLE, {0}, ALLOW, SETABLE}, /* FixedRate;*/
    {"Reset Period", PDOUBLE, {0}, ALLOW, SETABLE}, /* ResetPeriod;*/
    {"First Reset Date", DATE, {0}, ALLOW, SETABLE}, /* FirstResetDate;*/
    {"Nb of Reset", PINT, {0}, FORBID, SETABLE}, /* NbResetDate;*/
};

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->ResetP
(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 = UNSETTABLE;
pt->EuOrAm.Vsetable = UNSETTABLE;
pt->OMaturity.Vsetable = SETTABLE;
pt->BMaturity.Vsetable = SETTABLE;
pt->Nominal.Vsetable = SETTABLE;
pt->FixedRate.Vsetable = SETTABLE;
pt->ResetPeriod.Vsetable = SETTABLE;
pt->FirstResetDate.Vsetable = UNSETTABLE;
pt->NbResetDate.Vsetable = UNSETTABLE;

opt->HelpFilenameHint = "ReceiverSwaptions";

}

return OK;
}

MAKEOPT(ReceiverSwaption);

```