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```

#include "vol.h"

static NumFunc_1 volatilityswap =
{
    Call,
    {"Strike in volatility terms", PDOUBLE, {100}, ALLOW, SETABLE}, {" ", PREMIA_NULLTYPE, {0}, FORBID, SETABLE}},
    CHK_call
};

static TYPEOPT VolatilitySwap =
{
    /*PayOff*/      {"Payoff", NUMFUNC_1, {0}, FORBID, SETABLE},
    /*Maturity*/    {"Maturity", DATE, {0}, ALLOW, SETABLE},
    /*Variance Budget*/ {"Variance Budget", PDOUBLE, {0}, FORBID, UNSETABLE},
    /*EuOrAm*/      {"Euro", BOOL, {EURO}, FORBID, UNSETABLE}
};

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

    if (opt->init == 0)
    {
        opt->init = 1;
        opt->nvar = 4;
        opt->nvar_setable = 2;

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

        (pt->EuOrAm).Val.V_BOOL = EURO;
        (pt->Maturity).Val.V_DATE = 1.0;
        (pt->VarianceBudget).Val.V_PDOUBLE = 0.0625;

        (pt->PayOff.Val.V_NUMFUNC_1)->Par[0].Val.V_PDOUBLE = 10.0;
    }
}

```

```
    return OK;  
}  
  
MAKEOPT(VolatilitySwap);
```

## References