

[Help](#)

```

#include <stdlib.h>
#include "svj.h"
#include "merhes1d_std.h"

#if defined(PremiaCurrentVersion) && PremiaCurrentVersion < (2007+2) //The "#els
static int CHK_OPT(CF_CallMertonHeston)(void *Opt, void *Mod)
{
    return NONACTIVE;
}
int CALC(CF_CallMertonHeston)(void *Opt, void *Mod, PricingMethod *Met)
{
    return AVAILABLE_IN_FULL_PREMIA;
}
#else

int CFCallMertonHeston(double St0, NumFunc_1 *p, double T, double r, double divi
{
    double K, price, delta;
    double stdv;
    SVJPARAMS *svj;

    stdv = sqrt(v);
    K = p->Par[0].Val.V_DOUBLE;
    svj = malloc(sizeof(SVJPARAMS));
    svj->heston = 1;
    svj->merton = 1;
    svj->phi = 1.;
    svj->type_f = 1;
    svj->K = K;
    svj->St0 = St0;
    svj->T = T;
    svj->r = r;
    svj->divid = divid;

    svj->sigmav = sigmav;
    svj->V0 = V0;
    svj->theta = theta;
    svj->rho = rho;
    svj->kappa = kappa;

```

[illegible]

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        ptMod->Mean.Val.V_PDOUBLE,
        ptMod->Variance.Val.V_PDOUBLE,
        &(Met->Res[0].Val.V_DOUBLE),
        &(Met->Res[1].Val.V_DOUBLE));
    }
}

static int CHK_OPT(CF_CallMertonHeston)(void *Opt, void *Mod)
{
    return strcmp(((Option *)Opt)->Name, "CallEuro");
}

#endif //PremiaCurrentVersion
static int MET(Init)(PricingMethod *Met, Option *Opt)
{
    if (Met->init == 0)
    {
        Met->init = 1;
        Met->HelpFilenameHint = "cf_call_merhes";
    }

    return OK;
}

PricingMethod MET(CF_CallMertonHeston) =
{
    "CF_Call_MerHes",
    {" ", PREMIA_NULLTYPE, {0}, FORBID}},
    CALC(CF_CallMertonHeston),
    { {"Price", DOUBLE, {100}, FORBID},
      {"Delta", DOUBLE, {100}, FORBID} ,
      {" ", PREMIA_NULLTYPE, {0}, FORBID}
    },
    CHK_OPT(CF_CallMertonHeston),
    CHK_ok,
    MET(Init)
};

```