

[Help](#)

```
#include "variancegamma1d.h"
#include "chk.h"
#include "model.h"

extern char *path_sep;

static int MOD(Init)(Model *model)
{
    TYPEMOD *pt = (TYPEMOD *) (model->TypeModel);

    if (model->init == 0)
    {
        model->init = 1;
        model->nvar = 0;
        pt->T.Vname = "Current Date";
        pt->T.Vtype = DATE;
        pt->T.Val.V_DATE = 0.;
        pt->T.Viter = ALLOW;
        model->nvar++;

        pt->S0.Vname = "Spot";
        pt->S0.Vtype = PDOUBLE;
        pt->S0.Val.V_PDOUBLE = 100.;
        pt->S0.Viter = ALLOW;
        model->nvar++;

        pt->Mu.Vname = "Trend";
        pt->Mu.Vtype = DOUBLE;
        pt->Mu.Val.V_DOUBLE = 0.;
        pt->Mu.Viter = ALLOW;
        model->nvar++;

        pt->Divid.Vname = "Annual Dividend Rate";
        pt->Divid.Vtype = DOUBLE;
        pt->Divid.Val.V_DOUBLE = 0.;
        pt->Divid.Viter = ALLOW;
        model->nvar++;
    }
}
```

```
    pt->R.Vname = "Annual Interest Rate";
    pt->R.Vtype = DOUBLE;
    pt->R.Val.V_DOUBLE = 10.;
    pt->R.Viter = ALLOW;
    model->nvar++;

    pt->Sigma.Vname = "Sigma";
    pt->Sigma.Vtype = SPDOUBLE;
    pt->Sigma.Val.V_SPDOUBLE = 0.12;
    pt->Sigma.Viter = ALLOW;
    model->nvar++;

    pt->Theta.Vname = "Theta";
    pt->Theta.Vtype = DOUBLE;
    pt->Theta.Val.V_DOUBLE = -0.33;
    pt->Theta.Viter = ALLOW;
    model->nvar++;

    pt->Kappa.Vname = "Kappa";
    pt->Kappa.Vtype = SPDOUBLE;
    pt->Kappa.Val.V_SPDOUBLE = 0.16;
    pt->Kappa.Viter = ALLOW;
    model->nvar++;
}

return OK;
}

TYPEMOD VarianceGamma1dim;

MAKEMOD(VarianceGamma1dim);
```