

[Help](#)

```
#include "mer1dlocvol.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->Lambda.Vname = "Lambda";
pt->Lambda.Vtype = DOUBLE;
pt->Lambda.Val.V_DOUBLE = 0.1;
pt->Lambda.Viter = ALLOW;
model->nvar++;

pt->Mean.Vname = "Mean of Jumps";
pt->Mean.Vtype = DOUBLE;
pt->Mean.Val.V_DOUBLE = 0.;
pt->Mean.Viter = ALLOW;
model->nvar++;

pt->Variance.Vname = "Variance of Jumps";
pt->Variance.Vtype = DOUBLE;
pt->Variance.Val.V_DOUBLE = 0.16;
pt->Variance.Viter = ALLOW;
model->nvar++;

pt->beta.Vname = "beta";
pt->beta.Vtype = DOUBLE;
pt->beta.Val.V_DOUBLE = 1.0;
pt->beta.Viter = ALLOW;
model->nvar++;

pt->vega.Vname = "vega";
pt->vega.Vtype = DOUBLE;
pt->vega.Val.V_DOUBLE = 0.25;
pt->vega.Viter = ALLOW;
model->nvar++;

model->HelpFilenameHint = "MER1DLOCVOL";

}
```

```
    return OK;
}

TYPEMOD Merton1dimLocVol;

MAKEMOD(Merton1dimLocVol);
```