

[Help](#)

```
#include "Hawkes_Intensity.h"
#include "chk.h"
#include "error_msg.h"
#include "model.h"

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

    if (model->init == 0 )
    {
        model->init = 1;
        model->nvar=0;

        pt->lambda0.Vname = "lambda_0";
        pt->lambda0.Vtype=DOUBLE;
        pt->lambda0.Val.V_DOUBLE=1.;
        pt->lambda0.Viter=ALLOW;
        model->nvar++;

        pt->kappa.Vname = "Long-Run Variance";
        pt->kappa.Vtype=DOUBLE;
        pt->kappa.Val.V_DOUBLE=2.;
        pt->kappa.Viter=ALLOW;
        model->nvar++;

        pt->c.Vname = "Mean reversion";
        pt->c.Vtype=DOUBLE;
        pt->c.Val.V_DOUBLE=1.;
        pt->c.Viter=ALLOW;
        model->nvar++;

        pt->delta.Vname = "Loss impact";
        pt->delta.Vtype=DOUBLE;
        pt->delta.Val.V_DOUBLE=1.;
        pt->delta.Viter=ALLOW;
        model->nvar++;

        pt->r.Vname = "Interest Rate";
```

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    pt->r.Vtype=DOUBLE;
    pt->r.Val.V_DOUBLE=0.05;
    pt->r.Viter=ALLOW;
    model->nvar++;

    pt->Ncomp.Vname = "Number of Companies";
    pt->Ncomp.Vtype=PINT;
    pt->Ncomp.Val.V_PINT=125;
    pt->Ncomp.Viter=ALLOW;
    model->nvar++;

}

return OK;
}

TYPEMOD Hawkes_Intensity;
MAKEMOD(Hawkes_Intensity);
```

References