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

        pt->r.Vname = "Interest rate";
        pt->r.Vtype = PDOUBLE;
        pt->r.Val.V_PDOUBLE = 0.04;
        pt->r.Viter = ALLOW;
        model->nvar++;

        pt->Recovery.Vname = "Recovery";
        pt->Recovery.Vtype = PDOUBLE;
        pt->Recovery.Val.V_PDOUBLE = 0.4;
        pt->Recovery.Viter = ALLOW;
        model->nvar++;

        pt->Intensity.Vname = "Intensity";
        pt->Intensity.Vtype = PDOUBLE;
        pt->Intensity.Val.V_PDOUBLE = 2.5;
        pt->Intensity.Viter = ALLOW;
        model->nvar++;

        pt->Y0.Vname = "Y0";
```

```
    pt->Y0.Vtype = DOUBLE;
    pt->Y0.Val.V_DOUBLE = 1.;
    pt->Y0.Viter = ALLOW;
    model->nvar++;

    pt->sigma.Vname = "Y Volatility";
    pt->sigma.Vtype = DOUBLE;
    pt->sigma.Val.V_DOUBLE = 1;
    pt->sigma.Viter = ALLOW;
    model->nvar++;

    pt->alpha.Vname = "Y drift";
    pt->alpha.Vtype = DOUBLE;
    pt->alpha.Val.V_DOUBLE = 0.3;
    pt->alpha.Viter = ALLOW;
    model->nvar++;

    pt->gamma.Vname = "Y jump";
    pt->gamma.Vtype = DOUBLE;
    pt->gamma.Val.V_DOUBLE = 0.2;
    pt->gamma.Viter = ALLOW;
    model->nvar++;

}

return OK;
}

TYPEMOD sli;
MAKEMOD(sli);
```