

[Help](#)

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#include "inflation_lmm_heston1d.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=0.0;
        pt->T.Viter=ALLOW;
        model->nvar++;

        pt->I0.Vname = "Flat Initial Libor Forward CPI";
        pt->I0.Vtype=PDOUBLE;
        pt->I0.Val.V_PDOUBLE=0.08;
        pt->I0.Viter=ALLOW;
        model->nvar++;

        pt->SigmaI.Vname = "Volatility Libor Forward CPI";
        pt->SigmaI.Vtype=PDOUBLE;
        pt->SigmaI.Val.V_PDOUBLE=0.01;
        pt->SigmaI.Viter=ALLOW;
        model->nvar++;

        pt->F0.Vname = "Flat Initial Libor Nominal Rates";
        pt->F0.Vtype=PDOUBLE;
        pt->F0.Val.V_PDOUBLE=0.04;
        pt->F0.Viter=ALLOW;
        model->nvar++;
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pt->SigmaF.Vname = "Volatility Libor Nominal Rates";
pt->SigmaF.Vtype=PDOUBLE;
pt->SigmaF.Val.V_PDOUBLE=0.75;
pt->SigmaF.Viter=ALLOW;
model->nvar++;

pt->Sigma0.Vname = "Current Variance";
pt->Sigma0.Vtype=DOUBLE;
pt->Sigma0.Val.V_DOUBLE=0.7;
pt->Sigma0.Viter=ALLOW;
model->nvar++;

pt->SpeedMeanReversion.hname = "Speed of Mean Revers
ion";
pt->SpeedMeanReversion.htype=DOUBLE;
pt->SpeedMeanReversion.hal.V_DOUBLE=0.2;
pt->SpeedMeanReversion.hiter=ALLOW;
model->nvar++;

pt->LongRunVariance.Vname = "Long-Run Variance";
pt->LongRunVariance.Vtype=DOUBLE;
pt->LongRunVariance.Val.V_DOUBLE=1.4;
pt->LongRunVariance.Viter=ALLOW;
model->nvar++;

pt->Sigma2.Vname = "Volatility of Volatility";
pt->Sigma2.Vtype=DOUBLE;
pt->Sigma2.Val.V_DOUBLE=0.001;
pt->Sigma2.Viter=ALLOW;
model->nvar++;

pt->RhoFI.Vname = "RhoFI";
pt->RhoFI.Vtype=DOUBLE;
pt->RhoFI.Val.V_DOUBLE=0.0;
pt->RhoFI.Viter=ALLOW;
model->nvar++;

pt->RhoFV.Vname = "RhoFV";
pt->RhoFV.Vtype=DOUBLE;
pt->RhoFV.Val.V_DOUBLE=0.0;
pt->RhoFV.Viter=ALLOW;
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model->nvar++;

pt->RhoIV.Vname = "RhoIV";
pt->RhoIV.Vtype=DOUBLE;
pt->RhoIV.Val.V_DOUBLE=0.4;
pt->RhoIV.Viter=ALLOW;
model->nvar++;

pt->RhoI.Vname = "RhoI";
pt->RhoI.Vtype=DOUBLE;
pt->RhoI.Val.V_DOUBLE=0.8;
pt->RhoI.Viter=ALLOW;
model->nvar++;

}
return OK;
}
TYPEMOD INFLATION_LMM_HESTON1d;
MAKEMOD(INFLATION_LMM_HESTON1d);
```

## References