

[Help](#)

```
#include "cirpp1d.h"
#include "chk.h"
#include "model.h"
#include "enums.h"

extern char* path_sep;

double MOD(GetYield)(TYPEMOD *pt)
{
    VAR *Par;
    Par = lookup_premia_enum_par (&(pt->flat_flag), 0);
    return Par[0].Val.V_PDOUBLE;
}

static int MOD(Init)(Model *model)
{
    VAR *Par;
    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->flat_flag.Vname = "Initial Yields Curve";
        pt->flat_flag.Vtype=ENUM;
        pt->flat_flag.Val.V_ENUM.value=0;
        pt->flat_flag.Val.V_ENUM.members=&PremiaEnumFlat;
        pt->flat_flag.Viter=ALLOW;
        model->nvar++;
        Par = lookup_premia_enum_par (&(pt->flat_flag), 0);
        Par[0].Vname = "Yield Value";
        Par[0].Vtype=PDOUBLE;
        Par[0].Val.V_PDOUBLE=0.05;
    }
}
```

```
Par[0].Viter=ALLOW;

pt->a.Vname = "Speed of Mean Reversion";
pt->a.Vtype=PDOUBLE;
pt->a.Val.V_PDOUBLE=0.15;
pt->a.Viter=ALLOW;
model->nvar++;

pt->b.Vname = "Long Term Mean";
pt->b.Vtype=PDOUBLE;
pt->b.Val.V_PDOUBLE=0.05;
pt->b.Viter=ALLOW;
model->nvar++;

pt->Sigma.Vname = "Volatility";
pt->Sigma.Vtype=PDOUBLE;
pt->Sigma.Val.V_PDOUBLE=0.1;
pt->Sigma.Viter=ALLOW;
model->nvar++;

model->HelpFilenameHint = "CIRPP1D";

}
return OK;
}
TYPEMOD CirPlus1d;
MAKEMOD(CirPlus1d);
```

References