

[Help](#)

```
#include "bharchiarella1d_std.h"

int MOD_OPT(ChkMix)(Option *Opt, Model *Mod)
{
    TYPEOPT *ptOpt = (TYPEOPT *) (Opt->TypeOpt);
    TYPEMOD *ptMod = (TYPEMOD *) (Mod->TypeModel);
    int status = OK;

    if ((strcmp(Opt->Name, "ZeroCouponCallBondEuro") == 0) || (strcmp(Opt->Name, "
    {
        if ((ptOpt->OMaturity.Val.V_DATE) <= (ptMod->T.Val.V_DATE))
        {
            Fprintf(TOSCREENANDFILE, "Current date greater than maturity!\ n");
            status += 1;
        }
        if ((ptOpt->BMaturity.Val.V_DATE) <= (ptOpt->OMaturity.Val.V_DATE))
        {
            Fprintf(TOSCREENANDFILE, "Option maturity greater than Bond maturity!\
            status += 1;
        }
    }
    if ((strcmp(Opt->Name, "ZCBond") == 0))
    {
        if ((ptOpt->BMaturity.Val.V_DATE) <= (ptMod->T.Val.V_DATE))
        {
            Fprintf(TOSCREENANDFILE, "Current date greater than maturity!\ n");
            status += 1;
        }
    }
    if (strcmp(Opt->Name, "CouponBearing") == 0)
    {
        if ((ptOpt->FirstResetDate.Val.V_DATE) <= (ptMod->T.Val.V_DATE))
        {
            Fprintf(TOSCREENANDFILE, "Current date greater than first coupon date!
            status += 1;
        }
    }
    if ((strcmp(Opt->Name, "PayerSwaption") == 0) || (strcmp(Opt->Name, "ReceiverS
        if ((ptOpt->BMaturity.Val.V_DATE) <= (ptOpt->OMaturity.Val.V_DATE))
```

```

    {
        Fprintf(TOSCREENANDFILE, "Option maturity greater than Bond maturity!\n");
        status += 1;
    }

    if ((strcmp(Opt->Name, "Floor") == 0) || (strcmp(Opt->Name, "Cap") == 0))
    {

        if ((ptOpt->FirstResetDate.Val.V_DATE) <= (ptMod->T.Val.V_DATE))
        {
            Fprintf(TOSCREENANDFILE, "Current date greater than first coupon date!");
            status += 1;
        }
        if ((ptOpt->FirstResetDate.Val.V_DATE) >= (ptOpt->BMaturity.Val.V_DATE))
        {
            Fprintf(TOSCREENANDFILE, "First reset date greater than contract maturity!");
            status += 1;
        }
    }

    return status;
}

extern PricingMethod MET(CF_ZCBond);
extern PricingMethod MET(MC_BC_TEICHMANNBAYER);
extern PricingMethod MET(FD_ADI_ZCBond);
extern PricingMethod MET(FD_IMPLICIT_ZCBond);
extern PricingMethod MET(FD_ADI_ZBO);
extern PricingMethod MET(FD_IMPLICIT_ZBO);

PricingMethod *MOD_OPT(methods)[] =
{
    &MET(CF_ZCBond),
    &MET(MC_BC_TEICHMANNBAYER),
    &MET(FD_ADI_ZCBond),
    &MET(FD_IMPLICIT_ZCBond),
    &MET(FD_ADI_ZBO),
    &MET(FD_IMPLICIT_ZBO),
    NULL
};

```

```
DynamicTest *MOD_OPT(tests) [] =  
{  
    NULL  
};
```

```
Pricing MOD_OPT(pricing) =  
{  
    ID_MOD_OPT,  
    MOD_OPT(methods),  
    MOD_OPT(tests),  
    MOD_OPT(ChkMix)  
};
```