Help

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#include "mrc30d.h"
#include "chk.h"
#include "error_msg.h"
#include "model.h"
#include "premia_obj.h"
static int MOD(Init)(Model *model)
{
  TYPEMOD* pt=(TYPEMOD*)(model->TypeModel);

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

      pt->Size.Vname = "Size";
      pt->Size.Vtype=PINT;
      pt->Size.Val.V_PINT=30;
      pt->Size.Viter=FORBID;
      pt->Size.Vsetable = UNSETABLE;
      model->nvar++;


      pt->T.Vname = "Current Date";
      pt->T.Vtype=DATE;
      pt->T.Val.V_DATE=0.;
      pt->T.Viter=ALLOW;
      model->nvar++;

      pt->R.Vname = "Annual Interest Rate";
      pt->R.Vtype=DOUBLE;
      pt->R.Val.V_DOUBLE=10.;
      pt->R.Viter=ALLOW;
      model->nvar++;

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

  pt->gama.Vname = "gamma";
  pt->gama.Vtype=DOUBLE;
  pt->gama.Val.V_DOUBLE=8;
  pt->gama.Viter=ALLOW;
  model->nvar++;

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

  pt->InitialStocksWeights.Vname = "InitialStocksWeight
s";
  pt->InitialStocksWeights.Vtype=FILENAME;
  pt->InitialStocksWeights.Val.V_FILENAME=NULL;
  pt->InitialStocksWeights.Viter=FORBID;
  pt->InitialStocksWeights.Vsetable = SETABLE;

  model->nvar++;
  if (( pt->InitialStocksWeights.Val.V_FILENAME=malloc(
sizeof(char)*MAX_PATH_LEN))==NULL)
    return MEMORY_ALLOCATION_FAILURE;
  sprintf( pt->InitialStocksWeights.Val.V_FILENAME, "%
s%sInitialStocksWeights.dat", premia_data_dir,path_sep);

  pt->LocalVolatilities.Vname = "LocalVolatilities";
  pt->LocalVolatilities.Vtype=FILENAME;
  pt->LocalVolatilities.Val.V_FILENAME=NULL;
  pt->LocalVolatilities.Viter=FORBID;
  pt->LocalVolatilities.Vsetable = SETABLE;

  model->nvar++;
  if (( pt->LocalVolatilities.Val.V_FILENAME=malloc(si
zeof(char)*MAX_PATH_LEN))==NULL)
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        return MEMORY_ALLOCATION_FAILURE;
      sprintf( pt->LocalVolatilities.Val.V_FILENAME, "%s%sL
    ocalVolatilities.dat", premia_data_dir,path_sep);

      pt->Basket_Correlation.Vname = "Basket_Correlation";
      pt->Basket_Correlation.Vtype=FILENAME;
      pt->Basket_Correlation.Val.V_FILENAME=NULL;
      pt->Basket_Correlation.Viter=FORBID;
      pt->Basket_Correlation.Vsetable = SETABLE;

      model->nvar++;
      if (( pt->Basket_Correlation.Val.V_FILENAME=malloc(si
    zeof(char)*MAX_PATH_LEN))==NULL)
        return MEMORY_ALLOCATION_FAILURE;
      sprintf( pt->Basket_Correlation.Val.V_FILENAME, "%s%
    sBasket_Correlation.dat", premia_data_dir,path_sep);

      pt->BasketLocalVolatility.Vname = "BasketLocalVolati
    lity";
      pt->BasketLocalVolatility.Vtype=FILENAME;
      pt->BasketLocalVolatility.Val.V_FILENAME=NULL;
      pt->BasketLocalVolatility.Viter=FORBID;
      pt->BasketLocalVolatility.Vsetable = SETABLE;

      model->nvar++;
      if (( pt->BasketLocalVolatility.Val.V_FILENAME=mal
    loc(sizeof(char)*MAX_PATH_LEN))==NULL)
        return MEMORY_ALLOCATION_FAILURE;
      sprintf( pt->BasketLocalVolatility.Val.V_FILENAME, "%
    s%sBasketLocalVolatility.dat", premia_data_dir,path_sep);

    }

  return OK;
}

TYPEMOD mrc30d;
MAKEMOD(mrc30d);
```

References