

Source | Option Family

stda

Premia 18

1 Insurance Derivatives

2 Code Implementation

```
#ifndef _STDa_H
#define _STDa_H

#include "optype.h"
#include "var.h"
#include "chk.h"
#include "numfunc.h"
#include "option.h"

#define TYPEOPT STDa

typedef struct TYPEOPT
{
    VAR      PayOff;
    VAR      EuOrAm;
    VAR      Maturity;
    VAR      DeemedContribution;
    VAR      InitialAge;
    VAR      Premium;
    VAR      MinimumGuaranteed;
    VAR      NumberofMonitoringDates;
    VAR      Alpha;
    VAR      Alpha_m;
```

```
VAR      MultiplieriCPPi;
VAR      Ratchet;
VAR      Gamma;
VAR      Bonus;
VAR      WithdrawalRate;
VAR      SurrenderCharges;
VAR      SurrenderTimes;
VAR      MortalityData;
VAR      MaximumWithdrawalRate;
VAR      RateAccumulation;
VAR      PremiumPercentage;
VAR      CompoundRollUpRate;
VAR      ForceOfMortality;
VAR      TermCertainAnnuityMaturity;
} TYPEOPT;

int OPT(Get)(int user, Planning *pt_plan, Option *opt, Model *mod);
int OPT(FGet)(char **InputFile, int user, Planning *pt_plan, Option *opt, Model
int OPT(Show)(int user, Planning *pt_plan, Option *opt, Model *mod);
int OPT(Check)(int user, Planning *pt_plan, Option *opt);

#endif
```