CreditRiskCapital 설명서

이 모델은 신용VaR 및 신용리스크자기자본 산출 모델입니다.

1. 자신의 엑셀 bit수 확인

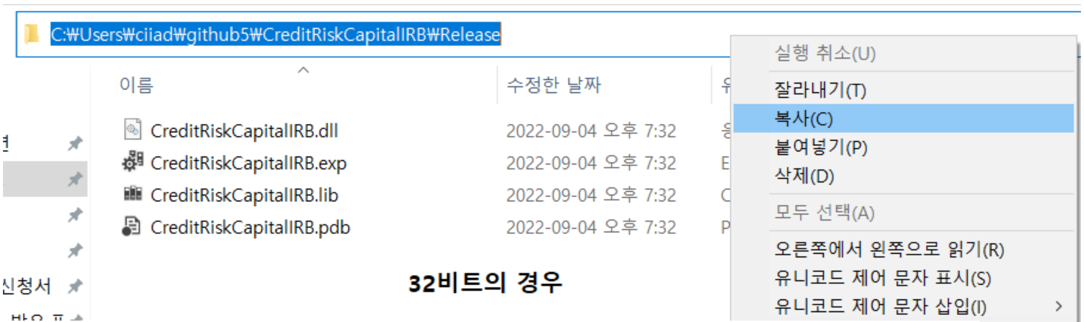
   파일>계정>엑셀정보

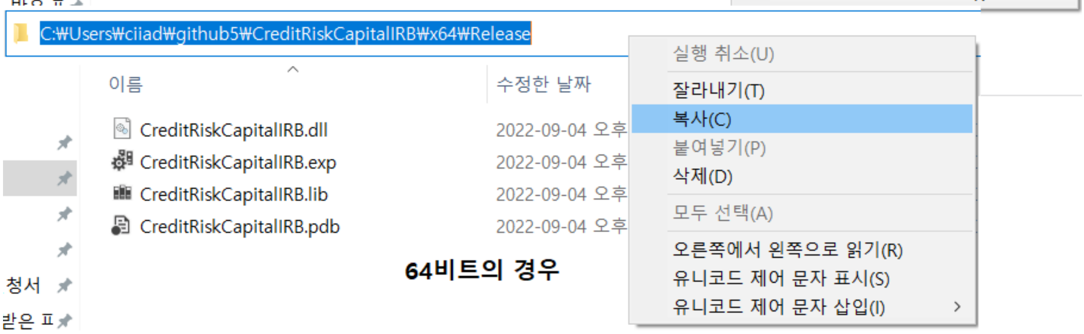
2. Alt + F11로 VBA창 키기

3. VBA 모듈 들어가서 다음 순서에 따라 dll의 디렉토리 바꾸기 (현재 dll이 설치되어있는 디렉토리로 바꾸기)

   또한 엑셀이 64bit일 경우 Declare Function -> Declare PtrSafe Function으로 바꾸기

   3-1. dll이 존재하는 디렉토리 복사





3-2. VBA 모듈 디렉토리 변경

```
Public Declare PtrSafe Function Calc_CreditRiskCapital Lib "C:₩Users₩KDB₩github5₩CreditRiskCapitalIRB₩x64₩Release₩CreditRiskCapitalIRB.dll" ( _
    ByVal Number_Of_Portfolios As Long, ByRef Port_Correlation_Reshaped As Double, ByRef Number_Loan_Array As Long, ByRef MaturityFlag_Array As l
    ByRef RecoveryRate_Array As Double, ByRef PD_Array As Double, ByRef CopulaCorrAutoFlag_Array As Long, ByRef Copula_Corr_Array As Double, ByR
    ByRef IsRetail As Long, ByRef ReshapedLoanAmount As Double, ByRef Output_Copula_Corr As Double, _
    ByRef Expected_Loss As Double, ByRef Credit_VaR As Double, ByRef RiskCapital As Double, ByRef ExpectedDefaultRate As Double, _
    ByRef Default_Rate_Std As Double, ByRef WorstCaseDefaultRate As Double, ByRef Beta As Double, ByRef MA As Double, ByVal Method As Long, ByRe
) As Long
```

32비트의 경우 CreditRiskCapitalIRB₩Release₩CreditRIskCapitalIRB.dll

```
Public Declare PtrSafe Function Calc_CreditRiskCapital Lib "C:₩Users₩ciiad₩github5₩CreditRiskCapitalIRB₩x64₩Release₩CreditRiskCapitalIRB.dll" ( _
    ByVal Number_Of_Portfolios As Long, ByRef Port_Correlation_Reshaped As Double, ByRef Number_Loan_Array As Long, ByRef MaturityFlag_Array As l
    ByRef RecoveryRate_Array As Double, ByRef PD_Array As Double, ByRef CopulaCorrAutoFlag_Array As Long, ByRef Copula_Corr_Array As Double, ByR
    ByRef IsRetail As Long, ByRef ReshapedLoanAmount As Double, ByRef Output_Copula_Corr As Double, _
    ByRef Expected_Loss As Double, ByRef Credit_VaR As Double, ByRef RiskCapital As Double, ByRef ExpectedDefaultRate As Double, _
    ByRef Default_Rate_Std As Double, ByRef WorstCaseDefaultRate As Double, ByRef Beta As Double, ByRef MA As Double, ByVal Method As Long, ByRe
) As Long
```

4. 채권포트폴리오 정보 입력

	채권포트폴리오1	채권포트폴리오2	채권포트폴리오3
채권개수	120	120	120
리스크기간지정Flag	0	0	0
리스크측정기간			
회수율	0.5	0.5	0.5
개별 부도율	1.000%	1.000%	1.000%
Correlation Flag	0	0	0
Copula Correlation			
유의수준	0.10%	0.10%	0.10%
Retail 채권여부	1	0	0

	채권포트폴리오1 액면금액	채권포트폴리오2 액면금액	채권포트폴리오3 액면금액
Idx1	8	8	8
Idx2	8	8	8
Idx3	8	8	8
Idx4	8	8	8
Idx5	8	8	8

5. 가격계산 매크로 실행

RC계산

VaR	113.3631333
ExpectedLoss	12
RiskCapital	101.3631333

	채권포트폴리오1	채권포트폴리오2	채권포트폴리오3	채권포트폴리오4
Copula Correlation	0.1216	0.1928		
Expected Loss	6.0000	6.0000		
Credit VaR	56.0000	88.0000		
RiskCapital	50.0000	103.3044		
DefaultCorrelation				
E[Default Rate]	0.0100	0.0100		
Stdev[Default Rate]	0.0109	0.0149		
WCDR	0.0914	0.1403		
Beta	0.1375	0.1375		
MA	1.0000	1.2598		