



0%

10% = 10%

10%

10% = 10% = 10%

10% - 20% = -10%

Real Interest Rate =

Nominal Interest Rate – Inflation Rate




If inflation is 0% during  
the life of the loan

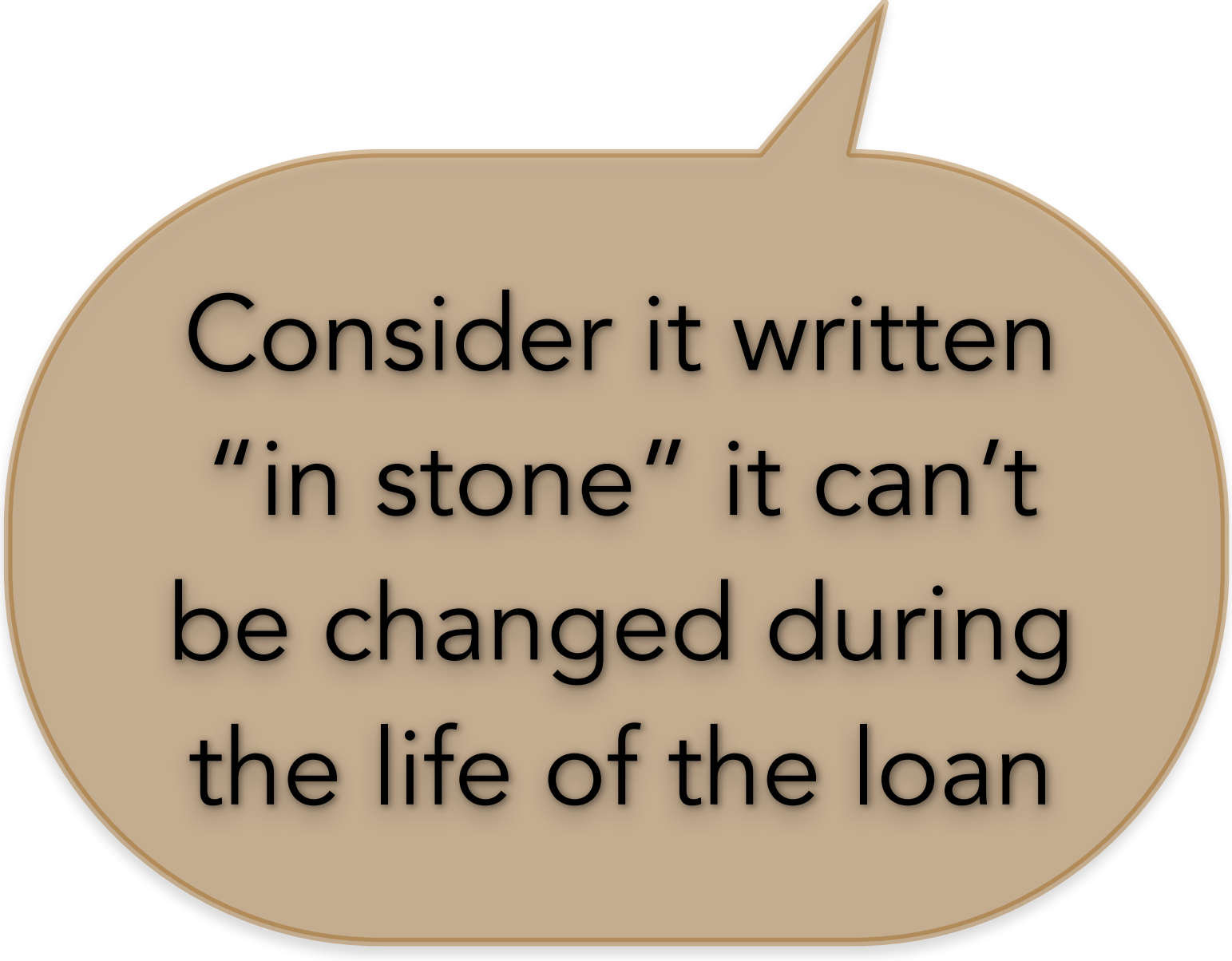
20%

If inflation is 10% during  
the life of the loan

If inflation is 20% during  
the life of the loan



The interest rate  
written in a contract  
between lender  
and borrower




Consider it written  
"in stone" it can't  
be changed during  
the life of the loan

The lender earns a  
positive (10%) real  
interest

The lender earns  
zero real interest



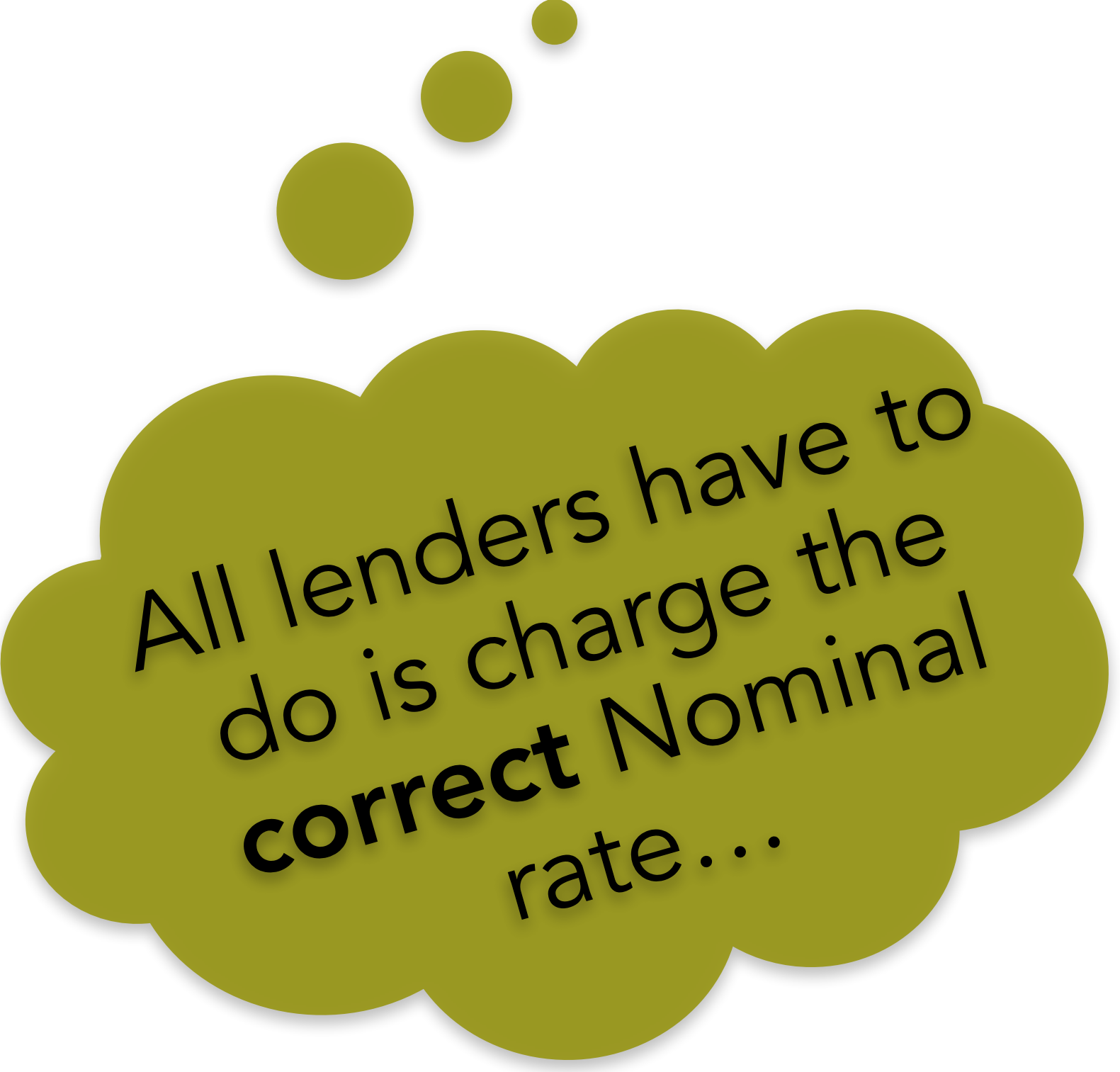
The lender earns a  
negative (-10%) real  
interest



**Lenders need to  
guess inflation  
correctly**

Nominal  
 $\tau_{\alpha\beta}$





All lenders have to  
do is charge the  
**correct** Nominal  
rate...



The lender earns a negative (-10%) real interest

$$\text{Real Interest Rate} = 10\% - 20\% = -10\%$$

Nominal Interest Rate – <sup>20%</sup>Inflation Rate

If inflation is 20% during the life of the loan



All lenders have to do is charge the **correct** Nominal rate...

Lenders need to guess inflation correctly

Investment: Purchase of Capital Goods