***First: the concept of interest:***

1- Definition of interest:

Benefit is language: it is what you benefit from knowledge and money.

As for the term, interest is defined as the price of debt financing (or by borrowing), which is the price that the borrower pays to obtain an amount of funds allocated for borrowing, for an agreed period of time, and the interest rate is often expressed as a percentage during a certain period.

It was also defined as the increase in the principal of the debt in exchange for the term, whether it was conditional at the beginning or specified at maturity for deferral of payment.

Interest in Islamic law is a type of usury, which is categorically forbidden in many Quranic verses and hadiths, and is considered one of the biggest sins.

And usury in general is strictly forbidden in all monotheistic religions, and the writings of many social and economic reformers in this regard are in complete agreement with this prohibition.

Usury represents a person's injustice to himself in the form of his non-participation in an economic activity that is productive and beneficial to him and his society, and it is an exploitation of his fellow man for himself in the form of taking money for nothing in return, and then it clashes with the Islamic principle that says, "There is no harm or harm, and usury is malicious earning generated by the money itself." Thus, he took it out of what it was found for, that is, as a medium of exchange and a measure of values, because money is definitely not a “commodity” that is traded in, and it should not give birth to money by itself, just as it cannot by itself produce anything good, and then the usurious gain was earning without any economic return. And without being exposed to a loss, and therefore constitutes an unjustified futility on its payers, consumers and producers, and then directly harms the economy and society.

2- Elements of interest: Elements of interest are determined by three essential elements:

A- Principal (amount): It is the monetary value of the loan, which the creditor assigns to the debtor in exchange for the second handing over to the first the agreed interest value, and it is symbolized by the symbol “C”.

The relationship between the interest and the amount is a direct relationship, so that the higher the amount lent, the higher the value of the interest earned, and vice versa.

B- The lending period: It is also called the employment period, and it is the period agreed upon between the lender and the borrower to use the principal of the loan. This period may be specified in years or months and days and is symbolized by the symbol “n”.

It is noted that the relationship between interest and term is a direct relationship, the longer the loan period, the higher the interest rate, and vice versa.

C- The interest rate: The interest rate may be determined in advance between the lender and the borrower, but most often its value is determined on the basis of a specific percentage of the loan principal that is paid per unit of time. his with "t"

Through the foregoing, it is clear that the amount of interest is determined by multiplying the above three elements, and accordingly, the simple interest is calculated in the case of employment with money according to the following relationship:

Example: “Zed” lent 5,000 DZD to “Omar” for a year, at an annual interest rate of 10%.

- Calculate the value of interest by adopting days, months and years as a basis for calculating the period?

the solution:

I=c×t×n/360=5000×0.1×360/360=500DA ........the case of days

I=c×t×n/12=5000×0.1×12/12=500DA ............... the case of the months

I=c×t×n=5000×0.1×1=500DA ............... the case of years

3- Types of interest: In financial transactions, two methods are used to calculate interest:

A- simple interest:

Simple interest is related to short-term financial operations, as it is calculated on the original amount (initial capital) during the period of employment, meaning that the interest earned during the first periods of employment does not charge the depositor any interest later, and the value of interest calculated at each period is stable as long as it does not change The original amount.

Example: Calculating the interest value of 500 DZD for a period of 6 months at an annual interest rate of 10%.

Interest at the end of the first six months is equivalent to:

I=c×t×n/12=500×10/100×6/12=25DN

B- Compound interest:

Compound interest is applied to long-term financial operations, and it refers to the return on the initial capital in addition to the compound interest accumulated during the previous years, meaning that the compound interest for a particular year is calculated on the initial capital plus the interest accumulated over previous years.

We point out that the value of simple or compound interest does not differ if the period is less than a year.

Example: Calculate the benefits resulting from hiring an amount of 1000 DZD for a year, then two years, then three years using compound interest, knowing that the interest rate is equivalent to 12% annually.

the solution:

Interest at the end of the first year:

I\_1=c×t×n=1000×10/100×1=100DN

- Interest at the end of the second year: It is not calculated on the basis of the principal amount only, but rather the interest value for the first year is added to it, and the amount becomes equal to:

C\_(2=) 1000+100=1100DN

I\_2=C\_2×t×n=1100×10/100×1=110DN

- Interest at the end of the third year: It is calculated on the principal amount plus the accumulated interest for previous years (I\_2 + I\_1), and accordingly we find:

C\_3=1000+100+110=1210DN

I\_3=C\_3×t×n=1210×10/100×1=121DN

Through the foregoing, it is clear that the application of the compound interest method led to a difference in the benefits achieved during each employment period, and this is due to the fact that the initial employed capital is constantly increasing over time because it contains the accumulated interest during the previous periods, but if we apply the simple interest method, we will get one result for the value of The interest at the end of each year is 100 DZD.