Unit 5: Money, insurance and loans

1. Money

Money has been with us for many centuries, it has had lots of forms, but it has always maintained its essence unaltered: Money is everything that, being generally accepted, is useful like payment method.

1.1 Money evolution

We have just studied the concept of money: means of payment generally accepted. Therefore, there are two conditions that money, in a first approximation, must meet to be considered as such:

- To be a payment or exchange method.
- To be accepted by the majority of the public.

Throughout history, different goods have been considered money, by fulfilling this double condition.
Thus, at some point, goods such as salt or grain have been used as money also cattle and, of course, precious metals.
All fulfilled the double condition of being generally accepted as a means of exchange or payment.
Therefore, if something remains over time, this will be the double condition, and what will be modified will be the goods or assets that we consider money.
If in the past they were precious metals or salt, nowadays they are banknotes, coins and bank deposits, in the future they will possibly take forms that we still do not know. What is certain is that it will continue to be a generally accepted means of change.

The barter

Before the appearance of money, how were transactions carried out?
The answer is using the barter, whereby two people could exchange their goods if they reached an agreement on them.
However, bartering presents a difficult problem to avoid: it requires the double coincidence of needs, since it is necessary to find a person who needs what another has and who has just what the latter wants.
It is not wrong to say that when economic exchanges began to gain complexity and became more numerous and frequent, bartering finally gave way to the appearance of the first forms of money.

1.2 Money types

In the previous section, we talked about very different goods that have come to be considered money.
Basically, we will talk about two types of money:

- Commodity money: these are goods that can be considered money, although they can also be considered or exchanged as merchandise. This is the case of salt, livestock, grain or precious metals.
- Fiat money: these are goods that have a greater value as money than as merchandise. In fact, they are not considered merchandise, and their value as money is based on the confidence that the public will accept them as a means of payment. It is, among others, the case of coins and banknotes.

In the case of money, ease of transport, divisibility and durability are desirable qualities.
This has led to the fact that commodity money is not currently used, and fiat money, which has these much more powerful qualities, is used.

Golden standard:

Nowadays, coins and banknotes in circulation have no more support than the confidence of being accepted as a means of payment. However, it was not always so. First gold and then the dollar were considered backing patterns on which the rest of the currencies based. This situation ended in 1971, when the US authorities stopped guaranteeing the convertibility of the dollar into gold.

1.3 Money functions

The basic and the main money function is being used as payment method. As a result, you do not need to find a person having what you want and you want what they have. Simply, we look for a person who has what you want and you will take the product giving the agreed-upon amount of money in exchange.
As money is generally accepted, this person then can get what he needs using that money. In addition to this primary function, money serves other functions:

- Value deposit: money becomes an asset capable of maintaining value; hence the importance of saving. However, there are circumstances under which money gradually loses its initial value if it is not properly managed (inflation).

- Unit of account: money serves to measure and express the prices of goods and services. In the euro zone, the unit of account is the euro.
- Standard of deferred payments: money serves to meet the future obligations established in the contracts, in such a way that the payments derived from such obligations will be made with it.

Activities

1. In relation to Commodity money, do you think that a good that is considered as such will have greater value as merchandise or as money? Reason your answer.
2. Coins and notes are fiat money. Its value as money is much greater than its value as a commodity. Thinking about it, do you think it has always been like this? I refer to the fact that its issuance is the exclusive power of the States or the monetary authorities, as in the case of the euro. What could happen if it were not like that?
3. Would you burn money for being cheaper than heating oil? Reason your answer relating it to the deposit function value.

2. Fiduciary money

In the previous section, we have advanced one of the basic characteristics of fiduciary money: its intrinsic value is almost nil. That is, its value as a commodity is much less than its value as money.
Another of the basic characteristics is the one related to the source of its value: it is the confidence that it will be accepted, normally due to a law.

2.1. Fiduciary money today

There is nothing to back fiduciary money except the public's confidence that it will be accepted as a means of payment. The monetary authorities (central banks) have no commitment to exchange coins and notes for gold or dollars. There is no pattern. Only trust maintains the value of fiat money.
The raison d'etre of fiduciary money is simple:
Increasing the amount of money leads, in the short and medium term, to an increase in economic activity, and vice versa. In the long term, such an increase will be reflected only in prices.
Therefore, as **economic activity** and the **volume of transactions** in an economy increase, a **greater amount of money** is required. If the currencies were subject to a gold standard, it is clear that the central banks could not create all the money they wanted for the economy to function, because they would be limited to the amount of gold they had.

- **System benefits**: Central banks, responsible for the creation of coins and banknotes, can create the amount of money they deem appropriate at any given time, depending on the needs of the economy.
- **Hazards of the system**: In the long term, increases in the amount of money lead to a generalized rise in the prices of goods and services. In other words, increasing the amount of money creates inflation. For this reason, central banks usually have as their main objective to control the growth of prices below 2%. Another threat to the system has to do with trust. If the behaviour of the central banks became capricious and erratic, or if there were doubts about the economic viability of a state, this would lead to a crisis of credibility, with the consequent loss of confidence in the currency in question. These crises can have very serious consequences for the affected economies.

The issuance of coins and bills (how euro system liquidity is managed)

We all, at some point, have wondered where money comes from, who issues the coins and the notes of an economy.
In the case of the euro zone, the European Central Bank is the body responsible for issuing the monetary policy, and a fundamental part of it rests on the control of the amount of money in the euro zone, which is carried out by directly controlling the amount of cash in circulation. Now, how is this injection of money in the economy carried out? Without going into details and in a simple way, the process is as follows: The European Central Bank lends money to banking financial institutions and these lend it, in turn, to citizens.

2.2 How much money is there in the economy?

The answer to this question requires, first of all, defining what we mean by money. For this, we will change the term, moving from talking about money to talking about **money supply.**
The **money supply** comprises more than bills and coins; In fact, we use other means of payment in our day-to-day operations. Thus, for example, we usually make payments using debit cards, which mobilize funds

deposited in financial institutions. Therefore, when defining the amount of money of a monetary economy or zone, we will attend to the following classification:

- M1 is the sum of currency in circulation (coins and notes) and overnight deposits;
- M2 is the sum of M1, deposits with an agreed maturity of up to two years and deposits redeemable at notice of up to three months; and
- M3 is the sum of M2, repurchase agreements, money market fund shares/units and debt securities with a maturity of up to two years.

Monetary aggregates euro zone December 17	**Thousands million euros**
currency in circulation	1 124
overnight deposits	6704
M1	
Deposits with an agreed maturity of up to two years	1195
Deposits redeemable at notice of up to three months	2 209
M2	
Repurchase agreements	68
Debt securities with a maturity of up to two years	75
Money market fund shares/units	504
M3	

Bank of Spain. Statistical Bulletin.

Activities

1. Complete the information offered in the monetary aggregates table of the euro zone, calculating M1, M2 and M3. Calculate, in addition, percentages that are useful to compare the different items that make up these aggregates.

2. Imagine that, suddenly, there was a loss of confidence in the currency of legal tender, so that almost nobody was willing to accept it as a means of payment.

a) Would you keep the money you have in that currency? What would you do?

b) What do you think the monetary authorities would do? You can search the Internet about the phenomenon known as «corralito».

3. The bank money

In the previous section, we have studied what we mean by quantity of money - monetary offer - and we have warned that not only coins and banknotes are considered money. In fact, the deposits that the public holds in the banking financial entities are considered money and assume, as calculated in exercise 1 of the previous page, the greater part of the amount of existing money in the economy.

3.1. Banks create money

The public does not keep all their money in cash. In fact, most of this is deposited in financial institutions using current accounts.

Through these, people manage their daily payments and collections (payroll, payment of various receipts, etc.). In addition, financial institutions are interested in maintaining these deposits, so they facilitate the use of debit and credit cards, thanks to which we do not need to, cash our funds to buy. We do not have to withdraw funds from deposits, but we can use our card to purchase goods and services.

Why do financial institutions act in this way? We will see it with an example:

Imagine that a person, Martin, enters the amount of 1,000 Euros into his checking account. What will the financial institution do?

- The financial entity that receives the deposit may lend most of the money deposited by Martín (up to 990 Euros) to other people who need it, keeping a small mandatory amount in the form of reserves (minimum, 1% of the deposit, 10 Euros).
- Imagine that the financial institution lends the 990 Euros to another person, Elena, who uses them to buy a refrigerator and a washing machine, which pays to the merchant. This enters the 990 Euros in his financial institution, and this last one keeps in the form of reserves 9.90 Euros and gives Carla a loan with the remaining 980.10 Euros that Carla enters in her current account.
- Up to now, there have been a few movements; But how much money is there in the economy from Martin's 1,000-euro deposit?

Total money generated = 1 000 + 990 + 980.10 = 2,970.10 euros
This is how financial institutions multiply money.

3.2 How does the ECB control the total amount of money?

If the ECB, a priori, controls only the amount of notes and coins (cash in circulation), how can it manage to control monetary aggregates such as M3? The answer lies in the current amount of cash in circulation, as well as in the establishment of the cash ratio.

The reserve ratio (θ)

Also called the cash ratio, it is the percentage of the deposits that the banking financial entities must keep in the form of liquid reserves in the national central banks. Currently, for the euro zone, this coefficient is 1% $R = \theta \times D$ System reserves = 0.01 • Deposits in banking financial institutions.

The ECB controls high-power money, also called monetary base, which is nothing but cash in the hands of the public and liquid reserves. As, in addition, the public keeps a part of their deposits in cash (e), we will have to:

$BM = E + R = e \cdot D + \theta \cdot D = (e + \theta) \cdot D$

On the other hand, the money supply (M) is composed of cash in the hands of the public plus the rest of the deposits. So:

$M = E + D = e \cdot D + D = (e + 1) \cdot D$

Relating the two expressions:

$$\frac{M}{BM} = \frac{(e+1)}{(e+\theta)} \rightarrow M = \frac{(e+1)}{(e+\theta)} . BM$$

With which, knowing the approximate value of the euro area cash coefficient (e), the European Central Bank, through the establishment of the reserve ratio (θ) and the control of the monetary base, will be able to determine the level and growth of the entire money supply.

Activities

1. Calculate the amount of money that would be created in an economy in which the monetary base was increased by 1 billion Euros, knowing that the cash ratio is 10% and that the public keeps 15% of their cash in cash deposits.
2. Do the previous exercise again, assuming that the monetary authorities reduce the cash ratio to 1%. a) What has happened? b) Explain what the difference in the result may be.

4. Financial contracts:

As we have seen, the public keeps a small amount of their balances in cash. Most of these are kept in deposits, being demand deposits, that is, current accounts the most widely used.

4.1. The current account:

The current account is a contract between a natural or legal person and a bank through which the first can deposit and withdraw funds from it in order to manage their collections and daily payments.

In this way, people usually have a checking account where they centralize all their routine financial operations (payroll income, payment of receipts, transfers, disposition of cash, etc.).

Normally, the banking entities make two types of cards: debit and credit available to the holders of the current accounts. The reason is to allow the holder the possibility of making purchases and meet expenses in shops without physically withdrawing the cash deposited in the account. In addition, with them, the owner can withdraw cash at ATMs that banks offer to their customers.

Traditionally, the maintenance of a current account in a bank has entailed the application of commissions and other expenses associated with the use of debit and credit cards. However, due to the competition of the sector and the increase of the operation through the Internet, banking entities offer current accounts free of commissions (even remunerated) under certain conditions, such as the direct debit of the payroll or the maintenance of a Minimum balance.

Concept	**Meaning**

Holder / Holders	Person or individuals or legal entities that conclude the contract with the bank. They are, therefore, owners of the rights and obligations to which this gives rise.
Indistinct character	When there are several holders in a current account of an indistinct nature, they can carry out operations without having the signature or authorization of the rest.
Character set	When the character of the current account is joint, the holders cannot carry out operations without the authorization or signature of the rest of the holders.
Remuneration	Normally, the performance of positive balances in a current account is very low or zero. However, some banks offer higher remuneration if minimum balances are maintained.
Overdraft	When the balance of a current account is less than zero, the account is uncovered or in red, so the owner becomes the debtor of the bank, and this will apply some interest on the debt.
Commissions	The bank can establish maintenance fees, card fees and uncovered commissions, among others.

Bank cards

Holders of current accounts usually have a debit card, which allows them to make purchases and withdraw cash from ATMs. Transactions made with this type of card are recorded in the current account at the instant in which they occur.

Financial institutions, having studied the case, can grant credit to the holder of a current account and offer a credit card, normally limited to a certain amount.

In this way, the holder may carry out transactions without the balance of his current account being altered until the time of the settlement, normally the following month.

Other cards

Prepaid card or purse

Card disconnected from any current account that, previously loaded with funds, allows to make payments or withdraw cash. It is a safe option to make purchases online, as well as trips abroad.

Business card

Cards that, normally in collaboration with financial entities, issue some shops (large supermarket chains, clothing, etc.) in order to facilitate payment of purchases to their customers.

Club card

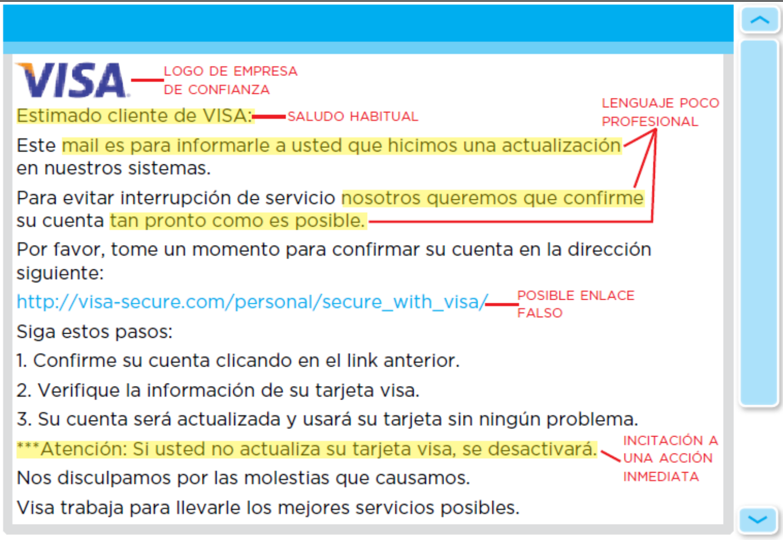
Issued by commercial companies in order to attract and maintain customers through discounts and promotions. Do not allow the payment of products.

4.2 Security.

The advantages of conducting banking operations through the Internet are numerous, especially in terms of time. However, it is advisable to take into account certain minimum security rules that keep us away from possible fraud.

Security advice
They should not open, let alone respond, emails that request information about banking data. It is also dangerous to open your attachments. No financial institution will ever request this information via email.
Computer and Smartphone must have antivirus protection systems, and application downloads must be made from official sites.

We must not activate the password reminder when starting an application.
The PIN of our cards must be memorized. We will never write it. It should not be part of a date, a telephone or anything that could be associated with our person.
If there is the possibility of using prepaid cards, we must use them to make our purchases online. If not, we must consult with the financial institution the possibility of registering purchase limits.
We must not provide our card number in unknown e-commerce stores.



Through the technique called phishing, someone impersonates the identity of a bank to ask us via email for our banking information. They usually replicate official web pages and induce us to solve an access problem urgently. We must remember that a bank will never request any information via email or telephone.

Activities:

1. What is a current account for? Do you think it would be useful for you to have a current account in a bank today? Why?
2. Explain the difference between an indistinct current account and a joint account.
3. Read the article published on the website actibva.com entitled "What should we know when a child is an account holder?" And explain the procedure to be followed so that a child can open a checking account in a bank. Who will be the owner? Who will have access to the deposited funds? https://www.bbva.com/es/que-debemos-saber-cuando-un-menor-es-titular-de-una-cuenta/

5. The insurance contract

The daily activities of life are exposed to unforeseen events. Unfortunately, some of these unforeseen events are unfortunate, and arise as an expression of the risk inherent in life, business activity or, simply, by chance.

In order to minimize the negative economic impact associated with these events, the figure of the insurance contract appears.

5.1 Concept and elements in the insurance contract

The Law 50/1980, October the 8th, of Insurance Contract, establishes in its first article that:

The insurance contract is that by which the insurer is obliged, through the collection of a premium and in the event that something whose risk is subject to indemnification occurs, within the agreed limits, the damage caused to the insured or to satisfy a capital, an income or other agreed benefits.

So, in the contract we necessarily find:

- **Insurance company**: he holds the right to collect a periodic amount called premium. If the event object of the contract occurs, the insurer will be obliged to indemnify the insured as established in the contract.
- **Insured**: holds the right to receive compensation if the event object of the contract occurs. It is obliged to periodically disburse the insurer an amount called premium.

- **Event**: Event that, in case of taking place in the conditions established by the contract, will give rise to the payment by the insurer of compensation. The event has two basic characteristics: it is probable and causes unfavourable consequences for the insured.
- **Premium**: amount of money that the insured gives to the insurer on a regular basis (monthly, quarterly, semi-annual, annual, etc.).

An insurance contract is configured, in this way, as a financial asset that links the two parties (insured and insurer) within an economic and legal relationship

The companies that issue these financial assets are the so-called insurance companies, which are considered as non-bank financial intermediaries.

Holder, beneficiary and insured

Insurance contracts usually include these three figures, which may or may not coincide in the same person. Let's see what their differences are:

- **Policy holder**: person who hires the insurance and who attends the payment of the premium.
- **Insured**: person who, according to contract, is covered by the agreed risk.
- **Beneficiary**: person who receives the compensation. Normally matches the insured, something that does not happen in life insurance.

5.2 Types of insurance

Depending on the risks assumed and the nature of the event that is the subject of the contract, the Law establishes several types of insurance, which fall into two categories: damage insurance and personal insurance. The Law devotes its Titles II and III to develop its articulated.

Next, we expose the main characteristics of them.

Damage insurance	**Fire**	The insurer is obliged, within the limits established in the Law and in the contract, to compensate the damages caused by fire in the insured object (art. 45).
	Robbery	The insurer is obliged, within the limits established in the Law and in the contract, to indemnify the damages derived from the illegitimate theft by third parties of the things insured. The coverage includes the damage caused by the commission of the crime in any of its forms (art. 50).
	Transport	The insurer is obliged, within the limits established by the Law and in the contract, to compensate for any material damage that may be suffered on occasion or as a consequence of transporting the ported goods, the means used or other insured objects. (art. 54).
	Losing profit	The insurer is obliged, within the limits established in the Law and in the contract, to compensate the insured for the loss of economic performance that could have been achieved in an act or activity if the accident described in the contract had not occurred. (art. 63).
	Caution	The insurer is obliged, in case of default by the policyholder [buyer] of its legal or contractual obligations, to compensate the insured [seller] as compensation or penalty for property damage suffered within the limits established in the Law or in the contract. Any payment made by the insurer must be reimbursed by the policyholder (art. 68).
	Credit	The insurer is obliged, within the limits established in the Law and in the contract, to compensate the insured for the final losses he experiences as a result of the final insolvency of his debtors. (art. 69).
	civil liability insurance	El asegurador se obliga, dentro de los límites establecidos en la Ley y en el contrato, a cubrir el riesgo del nacimiento a cargo del asegurado de la obligación de indemnizar a un tercero los daños y perjuicios causados por un hecho previsto en el contrato de cuyas consecuencias sea civilmente responsable el asegurado, conforme a derecho (art. 68).
	De defensa jurídica	The insurer is obliged, within the limits established in the Law and in the contract, to pay for the expenses incurred by the insured as a result of his intervention in an administrative, judicial or arbitration procedure, and to provide the assistance services legal and extrajudicial legal proceedings arising from insurance coverage (art. 76).
	Reinsurance	The reinsurer undertakes to repair, within the limits established in the Law and in the contract, the debt that arises in the reinsure's assets as a result of the obligation assumed by the latter as an insurer in an insurance contract (art. 77).
People insurance	**Life**	The insurer is obliged, by collecting the stipulated premium and within the limits established in the Law and in the contract, to satisfy the beneficiary with capital, income or other benefits in the event of death or survival of the insured, or of both events together (art. 83).
	Accident	Accident is understood as the bodily injury that derives from a sudden violent cause, external and beyond the intention of the insured, which produces temporary or permanent disability or death. The provisions contained in articles eighty-three to eighty-six of life insurance and in paragraph 1 of article eighty-seven are applicable to accident insurance (art. 100).
	Diseases and health care	The insurer may be obliged, within the limits of the policy, in case of loss, to pay certain sums and medical and pharmaceutical care expenses. If the insurer directly assumes the provision of medical and surgical services, the performance of such services will be carried out within the limits and conditions that the regulatory provisions determine (art. 105).
	Deaths and dependence	The insurer is obliged, within the limits established in this title and in the contract, to provide the funeral services agreed in the policy in case of death of the insured (art. 106).

Activities

1. Explain the difference between policyholder, insured and beneficiary and identify them in the following case:

«Jaime is quite foresighted and has contracted life insurance that covers the risk of death of his wife, Monica, in such a way that their children will enjoy an income until they reach 30 years of age».

2. It establishes before what type of insurance we are in the following cases:

a) Our children are very naughty and we are worried that they may commit some imprudence with consequences for third parties. We will hire insurance...

b) I have purchased a valuable item online and I have paid an additional amount for insurance...

3. Justify if the following statements are true or not:

a) Money is all that means of exchange used to exchange one good for another.

b) Fiduciary money demands the trust of the public to be considered money.

c) Goods that have been considered merchandise have a higher value as merchandise than as money.

d) One of the conditions for the success and guarantee of fiduciary money is that its creation and issuance is not free.

e) The main way in which the ECB puts cash into circulation is through loans to banking financial institutions.

f) The monetary authorities cannot control the total amount of money, only notes and coins.

g) Normally, the public never keeps all the money that they have in cash.

h) M2 is a monetary aggregate that includes M1, as well as deposits with a term of up to 2 years and liquid deposits with notice up to 3 months.

i) Banks create money through the multiplication of bank deposits.

j) The euro area cash coefficient (e) and the reserve ratio are the two main variables that influence the total amount of money from the monetary base established by the ECB.

k) A current account of an indistinct nature requires the signature of all its holders in order to manage it.

l) The figures of policyholder and policyholder always coincide in an insurance contract.