Unit 3: The company (II)

1. Financing and investment

The management of the company must intervene in two fundamental aspects: what resources to use (technical capital) and how to finance them (financing capital). The success and viability of the company depend on a great extent on the outcome of this double decision. Next, we will see how the company makes these decisions.

1.1. The operation of the company

Companies need to have investments (properties, furniture, machinery, office equipment, brands, software, raw materials, merchandise, collection rights, liquid money, etc.) that allow them to produce goods or provide services.
Now, how do companies acquire such investments? Through what we call funding sources, which are the following:

- Contributions from the founding partners: they can be cash or consist of assets (duly valued). This financing is considered non-enforceable, and could only be recovered if the company ceased its activity and was liquidated.
- Contributions from the company itself (self-financing): if the company generates annual profits, a part of them can be used to finance the investments. This financing is also considered non-enforceable.
- Contributions from third parties, outside the company: they are made through short or long-term loans, mainly. This type of financing has an explicit cost (interest) and is required; that is, it is about funds that the company must return in a timely manner.

The set of investments that the company has is called **economic structure**, and is what makes it possible for the company to produce goods or provide services. These investments have been acquired thanks to the funds obtained from financing. For this reason, this structure is also known as the application of funds. We will distinguish between non-current investments (local machinery, etc.) and current investments, which are consumed during the year (for example, raw materials).
The set of financing sources the company has are called a **financial structure**, and this is what makes it possible for the company to acquire the investments with which it works. For this reason, this structure is also known as the origin of funds.
What is the objective of the management of the company?

- Invest in goods and rights (economic structure) in order to obtain those goods and services with which to generate a high yield.
- Finance such assets and rights with a financial structure that allows reducing the cost of financing without forcing the company's partners to make constant contributions or to waive the benefit that the company obtains.

<table>
<tr><td colspan="2">The company's assets consist of its properties, rights (investments) and obligations (financing) that it has at a given moment.</td></tr>
<tr><td>Investments (goods and rights)</td><td>Financing (obligations)</td></tr>
<tr><td>- Economic structure.
- Application of funds.</td><td>- Financial structure.
- Source of funds.</td></tr>
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1.2 How to self-finance?

The company can obtain funds, mainly through contributions from partners and withholding of profits (which, by definition, belong to the partners), or through loans from third parties, outside the company.

When companies obtain funds through the first way, they do not assume a cost, since they do not have to return these funds. This type of financing, known as non-required, has no cost to the company, although it does have it for the partners or owners of this.
If the companies are financed by means of loans from sources outside their control (required or passive), they must assume the return of these funds at an explicit cost (interest). In spite of the cost, the owners will be freed of making new contributions to the company or of renouncing the benefit that it obtains.
In the example below, if the company had not obtained the indicated loans, the profits of previous years should have been retained in the company to finance the new investments, and the owners would never have enjoyed them.

A company has a total investment of 200,000 Euros. At the end of the year, the company obtained gross profits (income - expenses) of 25,000 euros. Therefore, the profitability of such investments is 12.5%.
These investments have been financed with 150,000 Euros of loans, which have a cost of 7.5%.
The company has achieved a more than enough profitability in its investments to face the cost of third parties financing without compromising its partners.

Activities
1. Why is the whole investment of a company also called "application of funds"?
2. If financing through contributions from members and withholding of profits does not have an explicit cost (interest), why aren't companies fully financed with these sources of funding?
3. A company has 120,000 Euros in investments. Its income has been 50,000 Euros, and the necessary expenses to generate them, 35,000 Euros. Calculate the return on investments.
4. What can be the risk of financing such assets with third parties financing at 6%?

2. Types of financing

In the previous section, we have introduced the concept of financing and the importance of its composition within the financial structure of the company. Next, we will discuss their types and costs, as well as their advantages and disadvantages.

2.1 The non-required financing

The contributions of the partners of the company and the withholding of the profits that this generates annually are the main sources of what we know as non-enforceable financing. The company has no obligation to return these funds while it is in operation. Only, if the company were liquidated and, therefore, disappeared, such funds would return to their owners.

- Does this mean that this type of financing has no cost?

Actually, no. Although these funds are not required, they do have a cost for the owners, since they renounce a part of the profits that the company generates, and we must remember that the people who invest their money in companies do so, hoping to obtain an income annual, which is nothing other than the benefits of the company.
In addition, the owners could well have invested their money in some other alternative business, obtaining a return for it. This alternative profitability is what is known as opportunity cost and is generally used to measure the cost of this type of financing.

- ¿Is there another drawback of financing investments with this type of financing?

Yes. Since these funds have no cost to the company, their use can lead to the selection of unprofitable investments.

Imagine that the management of a company studies investing in new machinery whose expected return is 5%. If the necessary funds are obtained through non-required financing (with an explicit cost of 0%), it is clear that the investment will return a net 5%. However, if the financing comes from a 4% bank loan, It turns out that the investment would only generate a net 1% return. This investment, in itself, was never adequate. The fact of financing it without cost can make us believe that it is.

- Does it have any advantages for the company to use this form of financing?

Evidently. The non-enforceable financing provides financial stability to the company, as it does not depend on third-party companies. In addition, in many cases, it is the main source of financing, due to the difficult access to credit, especially for individual companies (self-employed) and small and medium enterprises. In these, the sacrifice of the owners (retention of benefits) in most cases is the main funds contribution for the continuity of the investment process.

An example of financial structure	
Financial structure	
Contributions from partners. Withholding of benefits	NON-REQUIRED
Long-term loans	REQUIRED IN A LONG TERM
Short-term loans	REQUIRED IN A SHORT TERM
Debts with suppliers Debts with creditors Debts with Social Security Debts with the Treasury	REQUIRED IN A SHORT TERM (operating financing)

2.2 Required in a long term

The main source of long-term financing for companies is loans from financial institutions or suppliers with maturities of more than one year. The company, therefore, obtains some funds today that will have to be repaid in a period greater than the fiscal year and will have to pay interest periodically.
If the investments are profitable, the advantages are clear: the funds are being provided by third parties, thus freeing the partners from sacrificing their benefits. The high profitability of the investments will be more than enough to face the interests of the loans.
The drawback is given by the other side of the coin. If the investments are not profitable, it will not be possible to pay the interest on the loans, which, on the other hand, are not usually reduced.

2.3 Required in a short term

We speak of demand (required) in the short term when we are dealing with sources of financing from third parties that provide funds that the company must return before the period of one year.
Within this type of financing, we will distinguish two cases. On the one hand, loans from financial institutions granted to address short-term investments and whose costs, advantages and disadvantages are similar to those of the long-term demand. On the other hand, financing of suppliers and creditors that facilitate the company to postpone payments during a short period of time, something known as operating financing.

Operation financing of a cookie factory	Term and cost of financing
The supplier that serves us the containers will charge us the amount within 45 days.	The company gets 45 days of financing for its purchases. The cost supposes the loss of the discount for cash payment.

The company that maintains our machinery has an invoice for the last repair, and will charge it within 30 days.	The company gets 30 days of financing for the maintenance of its investments. Normally, the cost supposes the loss of the discount for cash payment.
The Treasury grants a period of time from August 1 to August 20 to submit VAT returns and IRPF withholdings corresponding to the month of July.	The company gets 20 days of free financing
The National Health Service contributions of the workers, as well as that of the company itself, will be paid by monthly instalments during the month following their accrual.	The company gets 20 days of free financing

Activity

A company finances its investments in the following way: contributions from partners: 100,000 euros; retained profits (reserves): 10,000 euros; Long-term loans:
60,000 euros (annual cost 6%); short-term loans: 12,000 euros (annual cost 9%); financing of suppliers and creditors: 5,000 euros (cash payment discount 2%).
It is known that, if the partners had invested their money in another alternative business, they could expect a 3% annual return.
With this data, calculate:
a) The weight of each funding source in percentage.
b) The cost of the financial structure, knowing that it is obtained by adding the multiples «financing cost ×% financing».

3. Income, costs and expenses

In the previous sections we have analyzed aspects related to business assets. Companies must have an economic structure that is capable of making them produce the goods and services that are the object of their mission. In addition, for this, they must have a financial structure that allows them to acquire such investments.
Now, what is a company pursuing? Why have the partners constituted it? The main purpose of companies is to generate value for their owners through obtaining benefits, which is nothing other than the difference between the income generated by their activity and the necessary expenses to obtain them.

3.1 Income

The management of the company is aimed, among other aspects, at generating income. These are generated through several channels, the main one being the sale of goods or the rendering of services.
Companies should always try to generate income from their main activity.
Therefore, we will distinguish three types of income in the company:

- Operating income: income obtained from the sale of goods or the provision of services. It is the most important one.
- Financial income: It is obtained by lending funds to other agents or companies (interests).
- Extraordinary income: income from extraordinary and exceptional activities (for example, the sale of machinery belonging to its technical capital).

3.2 Cost and expenses

We distinguish between these two terms:

- Cost: related to the production of the good or service (cost of raw materials, wage cost, cost of energy consumed, etc.).
- Expense: related to product sales (distribution, representation, management, promotion expenses, etc.).

Setting aside this difference, from now on we will talk about expenses:

- Exploitation: those that are incurred for the manufacture of the goods or for the provision of services (purchases of raw materials, supplies, labour, etc.).
- Financial: those in which it is incurred for having outside financing (interest).
- Extraordinary: those not related to the main activity of the company and that do not occur repeatedly.

Another classification of great interest is that which distinguishes between variable and fixed costs, insofar as these depend or not on the volume of production or distribution. Thus:

- Variable costs: depend on the volume of production. If the company does not generate any productive activity, they will not exist. For example, the cost of flour in a bakery factory.
- Fixed costs: they do not depend on the volume of production. Although the company does not generate any productive activity, they exist. In the case of the bakery, the rent of the industrial warehouse in which the bread is made.

Finally, we will distinguish between direct costs and indirect costs:

- Direct cost: production cost that is easily identifiable and attributable to a unit of the final product. In the example, the cost of flour used to make a loaf of bread.
- Indirect cost: production cost that belongs to several products and sections of the company and that needs subjective criteria to be imputed to a unit of the product. If the baker makes white bread, multigrain bread and spelled bread, distributing the expense of the company's telephone bill among each loaf of bread is not an easy task.5.0

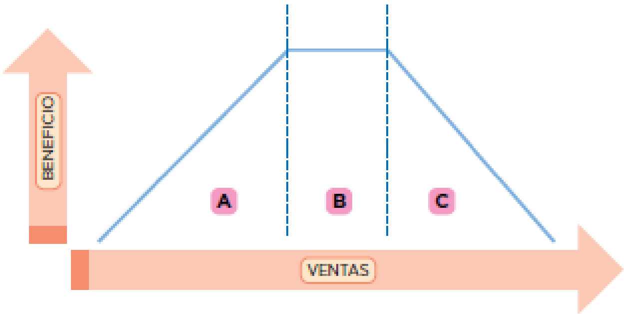
1. Classify the following income, costs and expenses of a baking company:
a) Sale of curry loaves of bread.
b) Right to charge 100 euros of interest on the loan granted to an associated company.
c) Rent of the machinery that the company uses to make bread.
d) Salaries of the staff.
e) Money to be received for the sale with profits of a disused oven.
f) Energy consumed by the ovens in the manufacturing process of six types of bread.
g) Amount of salt used in the manufacture of each type of bread.
h) Losses when selling a bread transport van.

4. The benefit (profit)

We can define the business benefit as the difference between the income that a company obtains in a period of time and the expenses that it has incurred to generate such income in the same period of time. Therefore, the benefit is the income of the company, since it is part of a temporary dimension.

4.1 The maximization of the benefit

Traditionally, the concept of profit maximization has been discussed when we have referred to the main objectives of the companies. Today, it remains one of the fundamental goals of any company: generating the maximum difference between total revenues and total expenses over a period of time.



La maximización del beneficio ocurre en el tramo B, donde los ingresos totales crecen al mismo ritmo que los costes totales.

In the previous chart, we have represented the evolution of the benefit (blue line) as the sales of the company increase. We distinguish three zones with benefit (positive result):

- Zone A: total revenues grow faster than total costs. As a result, as sales increase, the benefit increases more and more. The benefit function is growing.
- Zone B: total revenues grow at the same pace as total costs. As a result, the benefit is maximum. This is the area with the sales level that maximizes profits.
- Zone C: total revenues grow more slowly than total costs. As a result, as sales increase, the benefit decreases more and more. The benefit function is decreasing.

4.2 The exploitation dead centre or threshold of profitability (break-even point(BEP))

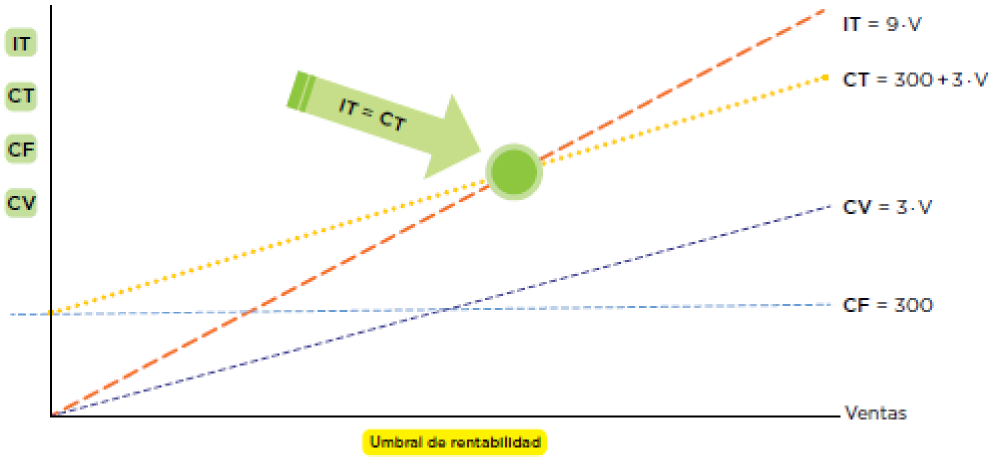
Another aspect that worries the management of a company, and that is very interesting to know, is the level of sales from which the benefits begin to appear. The question is: how many units do I have to sell to start earning?

The answer is what is known as the "Break-even point" or "threshold of profitability" or "exploitation dead centre".

Think of a company that does not bear fixed costs. Its only costs are variable, and therefore, if it does not produce or sell any unit, its costs will be zero, and so will its revenues. Of course, the moment you start selling units, your income will be higher than your costs and you will get benefit. In this case, the threshold of profitability is found at the zero sales level.

Is this usual? Evidently, no. All companies bear fixed costs. Consider, for example, a hairdressing salon where the business premises are rented. Even if our hairdresser does not perform any service during the month, he/she will have to pay the rent. That is a fixed cost.

Imagine now that our hairdresser must face a monthly rent of 300 euros for the business premises and that, after numerous calculations, the hairdresser estimates that the variable cost of performing a cutting service amounts to 3 euros. Assuming you charge the amount of 9 euros for the service, when will you start to get benefit?



Representación gráfica del punto muerto de explotación.

Total revenues and total costs in a company that manufactures a single product
Imagine a bakery that is dedicated to making only one type of product: white bread. In addition, this company lacks other income than those of exploitation. In this case, your total income will be given by the equation:
IT = p · V
where p is the sale price of a white loaf of bread and V is the number of loaves of bread sold in a period.
Your production costs will be fixed (rental of machinery and premises needed, staff expenses) and variables (amount of flour, water, salt, etc.). Therefore, the expression of the costs will be:
CT = CF + c · V
where CF is the total of fixed costs and c is the cost of flour, water, salt, etc., which a loaf of bread needs
So, the result of this company will be given by the expression:
R = IT – CT
R = p · V – CF – c · V
If the result is positive, we will call it BENEFIT.

The calculation of the Break-even point or dead centre:
In our hairdresser's example, we should divide the fixed rental cost (300 euros) between the margin of a cutting service (9 - 3 = 6 euros).
Thus, our hairdresser should perform 50 cutting services to cover the fixed cost (50 • 6 = 300). From cut 51 on, he would start to get a benefit.

$$U_R = \frac{CF}{(p - c)}$$

<u>Activities</u>
1. Following the given example of the hairdresser's, answer:
a) If the hairdresser performs a cut service per month, how much should he charge for it if he does not want to have losses? What if he did two services? What if he did three? What happens to the price of the service as its number increases? Why?
b) Calculate the total income, the total costs and the benefit that the hairdresser will obtain if he performs 100 cutting services in a month.

5. Business taxation

Taxation is one of the most important variables when deciding whether to establish business activity in the form of a society or through the figure of the self-employed, forms seen in the previous unit. By virtue of this decision, such activity will be taxed with a direct tax of a different nature. As for VAT (value-added tax), there will not be big differences.

5.1 Direct taxation

The individual or self-entrepreneur, as a natural person, will pay for personal income tax(IRPF), while companies do so through Corporate Tax (IS).
The IRPF is a **direct** and **progressive** tax, which means that, as the taxpayer (in this case, the self-employed) is getting more income, he will be contributing a higher percentage of this to the tax.

Escala general a aplicar a partir del ejercicio 2016:

Base liquidable	Tipo Estatal aplicable	Tipo autonómico *aplicable	Tipo Total
Euros	Porcentaje	Porcentaje	Porcentaje
Hasta 12.450,00	9,50	9,50	19,00
Los siguientes 7.750,00	12,00	12,00	24,00
Los siguientes 15.000,00	15,00	15,00	30,00
Los siguientes 24.800,00	18,50	18,50	37,00
En adelante (a partir de 60.000 euros)	22,50	22,50	45,00

(*) Téngase en cuenta que en la columna de "tipo autonómico" figuran los tipos aplicables a los contribuyentes por IRPF que no residen en España (art. 65). Los contribuyentes que residen en España deberán sustituirlos por la escala que haya aprobado la Comunidad Autónoma en que tengan su domicilio fiscal (art 74.1.1º) .

The IS is a direct and **proportional** tax, which means that the taxpayer (the corporation) will contribute a fixed percentage of the benefits obtained to the tax.

Sujeto pasivo	Tipo
Tipo general	25,00%
Entidades de nueva creación	15,00%
Sociedades cooperativas socialmente protegidas	20,00%

Tipos de gravamen. IS. 2017.

In general, we could conclude that, for significant income volumes, it would be more interesting to perform business activity in the form of a mercantile company.
Along with the above, it must be taken into account that both companies and self-employed people will be taxed by VAT(IVA) and Economic Activity Tax (IAE), although in the latter case, natural people and companies with a turnover of less than 1,000,000 euros are exempt.

5.2 Indirect taxation

Both individual enterprises and companies have the obligation to pay for the Value Added Tax, the most important indirect tax in the Spanish State.

VAT(IVA) is a tax of an indirect nature that falls on consumption and taxes the delivery of goods and services provided by businessmen and professionals, intra-community acquisitions and imports of goods.

Tipo de gravamen	IVA
General	21,00%
Reducido	10,00%
Superreducido	4,00%

Companies will pass on the VAT(IVA) quotas in their sales and services and the VAT(IVA)-supported instalments in their purchases may be deducted. Normally, the difference between the fees charged and the fees paid will be positive, with the companies having to deposit it in the Tax Agency.

Concepto	Presupuesto 2017
Recaudación IRPF	78.027 millones de euros.
Recaudación IS	24.399 millones de euros
Recaudación IVA	67.463 millones de euros
Ingresos no financieros totales	220.188 millones de euros

Informe económico financiero. PGE. 2017.

1. Explain the difference between the terms "progressive tax" and "proportional tax", associated with taxes IRPF and IS.
2. How is VAT (IVA) collected through the companies? Make a scheme.
3. Using the chart of expected collection of IRPF, IS and VAT(IVA) of section 5.2, assess the importance of these taxes within the set of non-financial income of the State. To which items do you think the funds raised by the State are allocated?