Unit 3: Personal Economy

0. Introduction: The future

The financial planning of the future staff is important to the extent that people go through life stages in which we do not generate income and we need to continue to meet the expenses that normally appear.

Being aware of this will make us think about the need to manage our savings in order to constitute sufficient capital to face life periods such as retirement or unemployment.

- How much do you need to live?
- Do you really know the amount of your expenses?
- Would you be able to make a personal budget and manage it?

A rough-and-ready Economy

The situation

The González family goes through times of economic difficulties. Ten years before, all of its working-age members had a job and generated more than enough income to lead a comfortable life. Currently, they are unemployed, and reducing their personal expenses has become a really complex task. They must allocate the majority of their income (from aid and subsidies) to the payment of the mortgage loan instalments they signed during the real estate bubble if they do not want to contemplate the possibility of losing the family home.

Diego runs a neighbourhood butcher's shop. He is 40 years old and he makes a living from the family business he inherited from his parents. Last week he was lucky to be the winner of a lottery ticket. The prize was 900,000 euros. After cashing the ticket, Diego has made the decision to close the business and dedicate himself to living life together with his wife and two children.

1 Do you know what a mortgage loan is? Do you know the possible consequences of not paying your instalments? Would you go into debt for 30 years?

2 How much money do you think you will spend throughout your life? How much money do you think would be enough to never worry about your expenses?

3 What are the advantages of planning your financial future? Why should we save a monthly amount?

1. Income and expenses

In the previous unit, we studied the concepts of income, expenses and costs from the point of view of the company.

Now we will try to do the same, although we will review these concepts from the point of view of personal economy.

1.1. Personal earnings

Roughly speaking, we will distinguish two types of personal income:

a) The one that is originated with a certain continuity in time (earnings).
b) The one that is received in a timely and isolated manner.

Earnings are the most important personal income, and often the only one that many people receive in their life. Within them, we will distinguish:

- Income from work and economic activities: periodic income obtained from doing a job as an employee or self-employed person. They constitute, for most people, the main and basic source of all their income.
- Income from movable capital: periodic income generated by investments in different types of financial assets (bank accounts, investment funds, stocks and shares, etc.).
- Real estate capital income: periodic income from real estate (flats, houses, villas, premises, etc.). Normally, these earnings come from rental operations.

In addition to the earnings, people can obtain specific income, derived from the sale of part of their assets, inheritances or operations linked to chance (games, lottery, etc.). Normally, this income alone does not guarantee the maintenance of personal expenses throughout life.

Article 21 of Law 35/2006 on Income Tax for Individuals
They are considered as full returns on capital "the totality of the profits or remunerations, whatever their denomination or nature, monetary or in kind, that come, directly or indirectly, from patrimonial elements, assets or rights, whose ownership corresponds to the taxpayer and are not affected by the economic activities carried out by him».

1.2. Personal expenses

One of the most appropriate ways to approach the problem of personal expenses is to analyse the types of needs that, as a general rule, people experience.
First, we will consider vital expenses as those that originate when basic needs are met, such as food, clothing, housing, health and education.
We will consider the rest of expenses as luxuries, that is to say, those destined to satisfy needs of superior order (leisure, hotels, communications, etc.), which appear once the vital ones are covered.
The Survey of Family Budgets (EPF) of 2014 reveals that the average annual expenditure per household was 27,038 euros, with 61.4% of them allocated to basic needs, and the rest, 38.6%, to luxurious needs.

1.3. Control of income and expenses

The necessary tool for the control between income and expenses is the budget. Through the budget, people can analyse the quantity and quality of their income, as well as the destination and the dynamics of their expenses. The next section is dedicated to go into detail about it.
Some basic rules for controlling income and expenses would be:

- The planning of the budget must depend temporarily on the reception of the income. If our income is monthly, we must also plan the expenses monthly.
- Basic expenses must be paid with regular income, usually from labour income.
- Luxurious expenses should not be made without having covered the vital expenses.
- Special attention should be paid to instalment purchases and consider committed monthly instalments as basic expenses, since their non-payment can have significant consequences.
- Expenses should be lower than income so that you can have savings with which to face unforeseen expenses.

Activities

1. Identify the following income and classify it:
    a) Monthly salary received for working as a baker in an industrial furnace.
    b) Money paid by a bank for savings account interest.

2. Based on the following data, in euros, of the 2014 EPA, it determines the percentage of the five largest annual expenditure items of an average household in our territory. Classify each expense as vital or a luxury:
    – Food and non-alcoholic beverages, 4 028.
    – Alcoholic beverages and tobacco, 510.
    – Clothes and footwear, 1 376.
    – Housing, water, electricity and fuels, 8 747.
    – Furniture and other housing expenses, 1 100.
    – Health, 955.
    – Transport, 3 227.
    – Communications, 793.
    – Leisure, shows and culture, 1 533.

- Teaching, 369.
- Hotels, cafés and restaurants, 2 334.
- Others, 2 066.

2. Budget management

Forcing you to make a personal or family budget is the starting point to manage household expenses and income. As we will see below, there are three types of advantages in its preparation that will undoubtedly make it worth the time invested.

2.1. Budget advantages

Based on a temporary criterion, we find three types of advantages in the preparation and monitoring of a personal budget.

- Advantages a priori. Whatever the budget and the amounts that we include in it, to consider its elaboration entails the establishment of objectives. The person who makes a budget always does so guided by an objective or goal (saving a certain amount, reducing expenses by a percentage, etc.) The act of simply setting a goal is already an advantage, by establishing a realistic spending ceiling and marking the way forward.
- Advantages during execution. As we complete the budget, noting the actual expenses and comparing them with those originally planned, we will be aware of our level of expenditure. In other words, we will be at all times with our feet on the ground and we can easily calculate the dynamics of income and expenses, as well as the possible fulfilment of the objectives. This will help us, if there are deviations, to make decisions during budget execution (cutting costs, cancelling any activity initially planned, increasing the saving target, etc.).
- Advantages after execution. Once the budget is settled, we will have a still picture of the total of income and expenses made during the period (normally one month), as well as deviations (unforeseen) with respect to the objective. We have, in this way, the advantage of knowing if the initial objectives were acceptable, if we have a problem when it comes to containing some kind of expense or if, instead, we can increase the power of our goals.

2.2. How to make a budget

Preparing a personal budget is technically simple. The complicated part affects, in general, the psychological aspect of the consumer. It is not easy to be realistic in terms of consumption.
To make a budget, we will have a sheet of paper or, if possible, a spreadsheet. From here, separately, we must list the different types of income and expenses that will arise throughout the month.

- List of income: we will record the income by category and importance in the left part of the sheet, in a column. At the end of this, we will calculate your total. It is interesting to distinguish between regular income (salary) and specific income.
- List of expenses: in the right part of the sheet, we will record the expenses, grouped by categories. In this sense, we can expect to classify the expenses as:
  - Vital and obligatory: destined to food and housing, as well as those contracted by contract.
  - Luxurious: all those that we can eliminate at a given time without this supposing to stop satisfying basic needs.

Within the vital expenses, we can find two subcategories: on the one hand, there are those expenses that we have committed by contract and of fixed amount (rent, mortgage quota, loan instalment, monthly instalment, etc.), and, on the other hand, those that, although necessary, we can vary their amount by adjusting our consumption (food and energy, basically).
As we did with the income, at the end of the expense column, we will write down the total, which must coincide with the sum of the subtotals of each category. In addition, to the right of each

expense, we will reserve a blank box to write down the actual expenses that occur during the execution of the budget.

Incomes		Expenses		Real expenses
Salary	1500	**Mandatory fixed**	**810**	
Weekend hours	200	Mortage Car loan Academy Transport Saving	350 150 50 60 200	
		mandatory variables	**750**	
		Light Water Phone Food Clothes	60 20 40 600 30	
		Unforeseen / luxury	**140**	
TOTAL	**1 700**	**TOTAL**	**1 700**	

<u>Activities</u>

1. Suppose you are a person who lives alone, in rented accommodation, in a city of about 60,000 inhabitants. Using the information provided by the Internet, prepare a monthly budget knowing that you work as an administrator receiving a salary of 950 euros in cash.
You must justify the amounts you enter in expenses with the information obtained.
2. Elena works in a company that is obtaining poor economic results. As a result, your monthly salary will be reduced from 1,500 to 1,100 euros per month. Elena also usually works a few hours during the weekends in a bar in her neighbourhood, so she receives about 200 euros a month, although she could increase the number of hours and receive 100 euros more. Using the budget of this same page, make the decisions you think appropriate to adjust it to the savings goal set by Elena.

3. <u>Savings and indebtedness</u>

From the strictly economic point of view, life is a succession of stages in which monetary flows of input (income) and output (expenses) occur, yielding positive (savings) or negative balances (indebtedness) that will force us to take decisions at every moment. Throughout this section, we will explain the concepts of saving and its opposite, indebtedness.

3.1. <u>Save or get into debt?</u>

Classical economic theory tends to divide consumers into two groups: those who prefer to spend today and those who prefer to do it tomorrow. The truth is that some people sacrifice their present consumption because they value their future needs to a greater extent, and, therefore, save money. Others, on the other hand, prefer present consumption and, for this, they decide to get into debt, sacrificing their future consumption.

The above can be a completely rational behaviour as long as certain conditions are met; for example, the absence of uncertainty about the future, the performance of a fixed job during the entire active life of the individual or a minimum amount of income that forces you simply to decide if you want to save or get into debt.

However, today, few occupations are guaranteed throughout life, which means uncertainty about the income that people will receive in the future. In addition, as we saw in the activity of the previous section, with certain situations of indebtedness (mortgage, loans) there is little margin to assume sumptuary expenses or, even, for saving.

If we have something left from the experience lived during these last years of economic crisis, is the problem generated by the indebtedness related to the bubble of the real-estate market. Private debt (families and businesses) in our economy in 2014 amounted to almost double all the quantity that is produced in it (GDP).

In a country where the idea of owning a home is so entrenched (Article 47 EC), housing prices rose year after year, while the possibilities for borrowing money easily also increased.
However, the risks were not correctly estimated, and many households assumed very high debts with very long terms, in relation to income that at that time was high, but that collapsed with the fall of economic activity, brutally linked to this sector: the real-estate.
The result of the cocktail (speculation-financing-indebtedness) has been translated into the fact that households are in a situation of over-indebtedness such that this is one of the factors that prevent the economy from recovering vigorously.

What is a bubble in economics?
In economics, we talk about a bubble when the prices of a good rise in such a way that they stop having a real relation with the good in itself. That is when, after successive increases in prices, the public begins to understand that these are not real, and it happens that what was once demand now becomes supply. Everyone wants to sell and nobody wants to buy now. As a result, the bubble (swollen year after year) explodes, and prices plummet.

Can I take out a mortgage loan to buy my house?
If you are thinking about the possibility of applying for a mortgage loan with which you can deal with the purchase of your home, you should know that:

- Repayment terms are long (up to 30 years).
- The interest is usually variable.
- In case of non-payment, the bank will normally proceed to the seizure of the house and its subsequent auction.
- If the amount of the auction is not enough to settle the debt, the rest will remain outstanding.
- It is not advisable to assume a monthly payment of more than 40% of your regular income. Be careful, people. Think you commit to repay a debt for 30 years.

3.2. <u>Pension plans</u>

As we have seen in the practice of the previous section, it is always advisable, as far as possible, to include in the personal budget an amount destined for saving. Having this will make it easier to take on unforeseen events and, most importantly, create a fund with which to face vital periods without income (unemployment or retirement) or the needs of the children (studies or training). When creating this fund, it is important to generate profitability, in order to protect its value.
One of the most popular tools are pension plans, financial instruments in which the subscriber makes periodic contributions (his savings), which are invested in financial markets to achieve profitability. At the beginning of retirement, the subscriber may dispose of these accumulated funds.
However, pension plans have some drawbacks. As a matter of fact, although the annual contributions are non-taxable, at the time of withdrawing the capital, it will be taxed. In addition, in general, capital cannot be turned into cash until retirement.
Another option may come hand in hand with investment funds, which can be turned into cash at any time, although their contributions are not tax deductible and their commissions are usually high.

<u>Activity</u>

1. Emilio works for a hospitality company for nine months a year. In addition, he usually works seasonally in a packing factory for a few hours. He is married and he has two children. His wife, Maria, works part-time for six months a year, and some weekends she is employed as a waitress, depending on the season. The family lives on rent, although they would like to acquire a property, so they have gone to several banks to be interested in a mortgage.
Could this family take on a 30-year mortgage debt? On which conditions?

4. Financial planning of the future

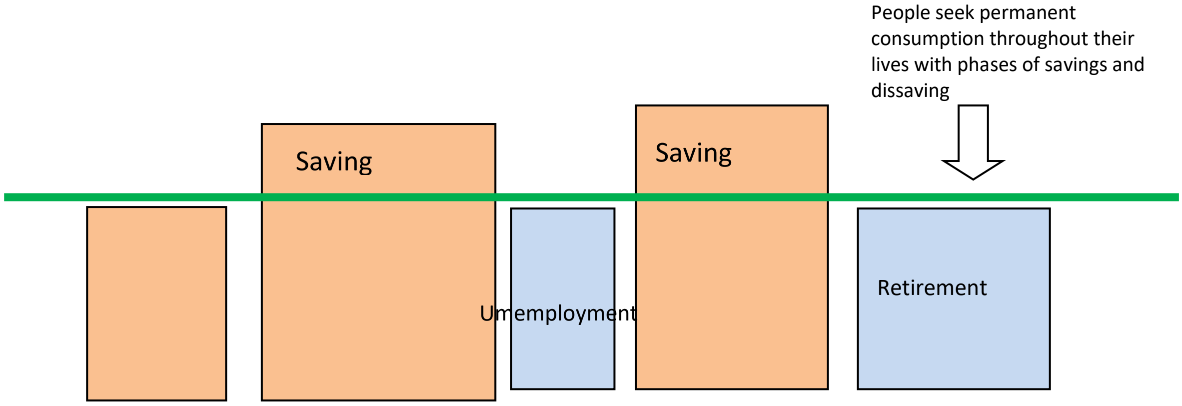
As a rule, all people go through several stages in their life. During the first ones, they are usually economically dependent on their parents, but from the end of adolescence on, sooner or later, all people begin to worry about satisfying their own needs independently and continuously.

4.1. The life cycle and permanent income

People, in general, do not always get the same income. In fact, we started earning money from the beginning of working life, after a period of more or less extensive academic training.

During the first years of our working life, salaries tend to be small, but, as training and experience increase, they will be increasing.

There may also appear phases in which we do not generate income, either because we are unemployed, due to professional inactivity or due to medical leave. These phases are critical, as personal expenses, far from disappearing, tend to increase, so we must have some type of personal protection (savings) that complement the possible institutional or private assistance we can obtain. As we anticipated, the expenses will grow with the emancipation and the establishment of a family of their own. Finally, from the moment of retirement, no income is generated, and new (health) expenses must be met from the savings generated during the active life and from the yields of the pension funds (public or private) that have been constituted during this period.



Saving, therefore, is important because it guarantees the individual to survive in times when it does not generate income (retirement, unemployment, inactivity, illness, etc.). For this reason, most people at some point in their lives begin to worry about having savings and protecting them from inflation.

In this way, we can say that people continuously seek a permanent path of consumption that guarantees a sufficient level of savings to address the end of their lives.

4.2. The financial planning of the future

Given the above, people wishing to plan their future in an economic and financial key must have two fundamental premises:

- The existence of current and regular income, provided by the labour or professional activity, that allow saving.
- The willingness to use financial products that enable the protection of such savings, generating sufficient returns to maintain its value, or even increase it.

In addition to the coverage provided by the Social Security system, the financial products available to the person who saves go from the savings account to the investment funds, through the remunerated bank accounts, the Public Debt, the pension plans, financial trading, etc. In short, a list of products that, according to the profile of the investor, can generate returns that protect their saved flow.

Milton Friedman. The permanent income
Individuals do not enter a constant income throughout their lives, but this varies depending on the stage in which they are. For this reason, individuals do not model their consumption in relation to their current income, but according to a line or path of stable consumption that is linked to their permanent income, which is calculated based on the expectations that individuals have about their future income.

Activity

Martín, at 30 years of age, earns an average annual income of 30,000 euros. With his training and experience, he expects a promotion within 5 years, which would provide an average annual income of 45,000 euros.
Knowing that you will retire at 67 years of age, could you calculate your permanent income? What would happen to him if at the age of 32 Martín won a lottery ticket of 300,000 euros?

5. Risk and diversification

5.1. The financial risk

If a saver wishes to grow his savings, he must acquire a financial product with them. In this way, the saver expects, after a while, to collect their savings plus a return or interest.
The financial risk that is assumed when acquiring one of these financial products can be, therefore, of two types:

- The risk of losing all or part of the savings (principal risk).
- The risk of not generating sufficient returns to defend against inflation.

Thus, depending on the risk, we will have risk-free financial products and risky financial products. Logically, at lower risk, lower yield and, therefore, lower growth of savings.
What should a person with savings do?
Obviously, you should protect them and invest them according to your personal profile.
From a financial point of view, individuals can be:

- Risk averse: they will invest their savings in products with low yield (low protection against inflation) and without risk of principal.
- Prone to risk: they will invest their savings in products with high yield and risk of principal.

Other factors to take into account when hiring a financial product for our savings
The profitability of the product We define profitability as the relationship between the returns (interest, dividends, profits, etc.) that the product will generate and the amount invested in it. Some products guarantee a fixed return and others point to certain expected returns. The first are the so-called Financial Assets of Fixed Income and the last ones, Financial Assets of Variable Income. **The liquidity of the product** Possibility of recovering the amounts invested at any time. There are illiquid products, completely liquid products and term products. In the latter, the investor must wait at the end of the term to recover his investment.

Savings and inflation
Inflation is the process by which the prices of goods and services rise in a **continuous and generalized** way. In the presence of inflation, **money increasingly buys less goods and services**. Therefore, if there is inflation, our savings will be worth less, since each time you can buy smaller amounts of goods and services.

Inflation always hurts the saver. Because of this, we need to invest the savings in financial products that make them grow beyond inflation. That is, if we want to prevent savings from disappearing over time, we have to invest them and, therefore, take risks.

5.2. **Diversification**

Investing savings in risk-free assets carries an opportunity cost: giving up their growth and not sufficiently protecting them from inflation.

Therefore, a saver should also invest in risky financial products, although he should never do so using a single financial product. In other words, you must diversify your investment, reducing the risk substantially, and not giving up on high returns. Thus, it can be invested in:

- Risk-free assets and risk assets (savings plans, guaranteed pension plans, Public Debt, shares, derivatives, etc.).
- Short-term liquid assets and medium and long-term assets (stocks, bonds, obligations, etc.).
- Assets related to different sectors (Public Debt, national, foreign, technological, industrial securities, etc.).

Depending on the profile of the saver, a greater proportion will be invested in some assets than in others, but it will always be diversified, thus avoiding "placing all the eggs in the same basket", as it is popularly said.

Activity

Elena has invested 12,000 euros in 10-year State Obligations, which is nothing more than lending that money to the State for 10 years.

Knowing that your performance is 2.1% per year, answer the following questions:

a) Who guarantees the yield rate and return of the 12,000 euros invested?

b) How much will Elena receive each year?

c) Is Elena risk averse or prone to risk?

d) Would you recommend Elena to buy Public Debt from a country with a bad economic situation? Why?