

## Higher Education Module: Personal Finances A summary<sup>1</sup>

### Teaching cases of financial literacy

This module introduces students to key concepts and issues related to selected life events that can occur in one's financial life. It covers five cases:

1. Getting an education and finding a job
2. Planning for a family and children
3. Buying property and setting up a business
4. Planning for retirement and pension
5. Making insurance choices

The module targets bachelor students with limited background knowledge in economics and/or finance. To give them a good overview of the practical knowledge and skills for addressing issues related to the selected life events, students who enroll in the course should work in group on all the tasks of the above-mentioned cases. To make most of the case studies, they should read the cases before each class and develop, within their group, the solutions to the tasks indicated in each of the cases. The estimated amount of time they should spend on each of these assignments is between three to four hours. Class time (approximately two academic hours) should be devoted to the open discussion and/or debate on the solutions devised by students for each of these cases. We recommend the size of groups not to exceed three or four students, and to distribute the cases in advance. A proposed structure of the classes with related time allocation is as follows:

Time allocation	Activities
20 min.	Discussion of the case problem (synthesis)
60 min.	Each participant/group presents the solution. They must prepare a power-point slides and use it for the presentation.  At the end of each presentation, there is a brief discussion led by the instructor. In this articulation, maximum 3 groups can present (10 min. each presentation).
40 min.	The instructor presents the proposed solution and discusses it with the students.

---

<sup>1</sup> EUFin

Personal Finances (Teacher version)

Teaching cases of financial literacy and teaching notes  
2021, E-Book (PDF), ISBN 978-3-8309-1469-3

## 1. Case: Getting an education and finding a job

The case focuses on the planning of the financial future of a 14-year-old boy, Ahmed from the Netherlands, who wants to be a software engineer. He wants to get his Bachelor degree at the Amsterdam University of Applied Sciences.

Detailed explanations and tables of the most commonly used financial products are provided with a description of Ahmed's living expenses and budget. The students get a detailed overview of the estimated costs of this 4-year course, for example the expected living costs, tuition fee and expected inflation rate. On the income side, besides his possible income from a part-time student job, the possibilities of government student loan are pointed out, as well as different ways to save and invest.

The students are asked to calculate the sum Ahmed needs at the start of his study. They will also discuss the non-financial advantages and disadvantages of the different given options, for instance savings with or without withdrawal restrictions.

The financial situation of Ahmed's family is also taken into account, in detail. What will happen if they decide to use their savings for Ahmed's study? Are they better off with simple interest or compound interest, or maybe by investing the money in bonds? Ahmed's younger siblings may also opt for a higher education in the future, so deciding to take a personal loan or revolving credit may also be wise. The students calculate the financial implications with the given, clearly specified options. They are asked to make them visible in diagrams and discuss the results.

After finishing his 4-year bachelor, Ahmed could apply for a 2-year master study. Two more years of investing time and money, but will it pay off in the long run? The students are asked to research this.

The student can use and obtain the following learning outcomes:

- describe forms of saving with or without withdrawal restrictions (understand);
- explain the difference between simple and compound interest (understand);
- calculate interest of a savings account based on simple interest (apply);
- calculate the present value and the end value for an amount of money based on compound interest (apply);
- calculate the future and the present value as well as the periodic instalments for saving in instalments (apply);
- describe transferable securities like equities, bonds and stock options (understand);
- explain the difference between risk and return on different investments (understand);
- describe several options for consumer credit (understand);
- describe the financial implications of consumer credit for the borrower (understand);
- calculate regular interest amounts, regular repayment amounts and the remaining debt for the several options of consumer credit (apply);
- make a well-founded decision on financing a study (evaluate).

## 2. Case: Planning for family and children

In this case students learn some key, fundamental concepts of financial literacy. The case allows the students to act as the father/mother of a middle-class family, in a Western Europe country; he/she will face some typical situations and problems with the management of their financial resources.

After having discussed the situation described in the case, and simulated the potential solutions to the problems presented, the participants should have developed critical reasoning around three main issues (which represent the key learning goals of the case):

1. The current economic and financial situation of the family should not be taken for granted. Unexpected events can happen, and put pressure on the stability and future prospective of economic and social well-being. Current lifestyle should take into account this eventuality, and being flexible enough to adjust short-term shocks.
2. When planning for the future, two elements are fundamental. On one side, the family should be able to forecast running costs proportional to operating revenues. On the other side, investments matter. Using part of today's resources for facing tomorrow's challenges is safe. In addition, the future presents scenarios which require more money than available today anyway – planning to reach the desired goals requires planning at all times.
3. Adjusting plans and realizing investments implies trade-offs. More consumption today automatically reduces the ability to invest for tomorrow – and vice versa. However, even when a prudential attitude is in place, it can be the case that different families make different choices. The reason is pretty clear: different individuals/families have different preferences. The preference structure shapes the way individuals and family actually develop their consumptions and investments.

### 3. Case: Buying property and setting up a business

The idea behind this case is that students learn to filter through the massive information that is to be found on the internet starting from the wish to buy a house. If those differ too much from your countries' averages, please feel free to adjust. The choice of the character is one thing, the choice of the house is the next. Of course, both choices should add up. In a next phase, the students shift through the information in search of a good way of financing the house. To conclude this case, students can present their point of departure and final conclusions.

Working on entrepreneurship spirit and entrepreneurship requires an activating approach where students discover themselves, formulate solutions themselves, and devise strategies. Educational institutions who wish to prepare young people to start (or taking over) a company must give would-be starters the knowledge, skills and attitudes that are needed to start a micro or small business with a reasonable chance of success.

The student can use and obtain the following learning outcomes:

- draw up a definition of a mortgage (remember);
- detect the different varieties in mortgages (apply);
- classify the key factors the bank uses to decide on a mortgage (understand);
- filter through and select/value information on the internet in relation to the costs linked to the buying of a house (evaluate);
- weigh the choice between a self-employed profession or a career as an employee (evaluate).

#### 4. Case: Retirement and pension planning

This case is about pension planning. The student takes the role of a young person (either male or female or as a family) in a specific pension system of Estonia. Individuals around the world are faced with choices that will affect their well-being in retirement, regardless of the specific elements and nuances of the pension system that their country has. In this specific case study, students are challenged to think how to plan for the retirement age as a member of a young household within the Estonian pension system. As the aim is to give students a realistic opportunity to learn from a case study, they must think of the choices and their consequences in the light of personal pension planning. They will be introduced to some individuals on behalf of whom they have to make the choices as well as the particularities of the current Estonian pension system. As with any system, the Estonian one has particular characteristics that students need to understand in order to make the educated choices that will affect the financial well-being of the household. Students do not have to worry about the fact that their native country differs in some specifics from Estonia because having learned how to make choices within one system they will be able to make them in their own national setting as well. The instructor can ask students to collect background information about the pension system in their own country in order to compare and contrast how their choices would differ from Estonian one in the specific national setting.

The student can use and obtain the following learning outcomes:

- explain difference between pillared and pay-as-you-go pension systems (understand);
- calculate future and present value of pension payments (apply);
- describe the financial implications of the pension planning (understand);
- describe challenges of the pension system regarding ageing and demographic change (evaluate).

## 5. Case: Making insurance choices

Life brings us unexpected situations. It is vital to take this risk into account and to do our best to minimize possible harms and damages to our health and property. It is wise to anticipate possible complications and to take out the most suitable insurance for each life event. A risk is something that exposes us to danger, harm, or loss. We face risks every day, and often these risks can have a financial impact on our lives. Getting sick, breaking a leg, having a car accident, or experiencing a house fire are examples of risks that may happen to any of us. If we had to pay the full costs for doctor's visits, surgeries, and automobile repairs ourselves, it could cause a substantial financial burden in our lives. To protect against the financial consequences associated with these risks, people often choose or are required to purchase insurance policies. Insurance policies reduce a person's financial risk in areas such as health (medical insurance), travelling (travel insurance), automobiles (auto insurance), homes (homeowner's insurance or renter's insurance), and death (life insurance). Consumers pay a fee for these policies, called a premium, which is typically much less than the costs associated with this risk without insurance. The consumer who buys the insurance policy is called a policyholder. The policyholder might pay the premium all at once or through a payment plan that divides the total cost into payments that are made monthly, quarterly, or some other agreed payment schedule.

After having discussed the situation described in the case, and simulated the potential solutions to the problems presented, the participants should have developed critical reasoning around six main issues, representing the key learning goals of the case.

The student will be able to:

- remember basic terms;
- understand how insurance market works and how are the principles of insurance;
- apply theoretical knowledge and practical skills in insurance issues;
- analyze risks and characterize the insurance risk focusing on commercial and non-commercial insurance as well as life and non-life insurance;
- evaluate insurance products which are available on the market;
- create individual insurance portfolio personalized on the basis of his or her actual needs.