An experiential game around 'financial literacy'



#### Introduction

- Welcome
- Split up in groups of 3/4
- General game setup
- Fill out the 'investment profile' (if not done already)
- Each student receives a character sheet
- The 3 life stages we will go through based on our character:
  - Student Phase
  - Career phase 1
  - Career phase 2

#### **1** INFO

The learning outcomes around economic and financial competences (EFC) were integrated into this game in a practical and understandable way.

Some elements were simplified without compromising the underlying concepts.



- Look at your character sheet and the topics on that sheet.
- Make your personal choices regarding your free time on the 2nd page:
  - Indicate *3 choices* yourself: what will your character spend free time on?
  - 2 choices have already been made



You will be confronted with the consequences of your choice during the game.



# Example character sheet (front)



AGE	20
DEGREE	Bachelor's in journalism
INTERESTS	- Reading - Family
INFO	<ul> <li>Has 2 younger sisters, 1 of whom has autism</li> <li>Dreams of becoming a newsreader</li> <li>Phase 1 factor: 2,0</li> <li>Phase 2 factor: 2,3</li> </ul>
WORK EXPERIENCE FIRST CAREER PHASE	7 years = 84 months

NINA

		FIRST CAREER PHASE		SECOND CAREER PHASE		
	POSSIBLE JOBS	AVERAGE GROSS MONTHLY SALARY	AVERAGE NET MONTHLY SALARY	AVERAGE GROSS MONTHLY SALARY	AVERAGE NET MONTHLY SALARY	NET PENSION PAYMENT
1-2	Communications officer	2,450.00	1,854.00	2,975.00	1,981.00	€2,375.00
3-4	Editorial assistant	2,517.00	1,869.00	3,108.00	2,037.00	€2,317.00
5-6	Communications manager	3,067.00	2,023.00	3,625.00	2,264.00	€2,211.00

EMPLOYEE BENEFITS	/
SUPPORT FROM PARENTS (First career phase)	/
NUMBER OF CHILDREN (Second career phase)	
SUPPORT FROM PARTNER'S PARENTS (Second career phase)	



### Example character sheet (back)

#### STUDENT PHASE PERSONA: NINA **VOLUNTEER WORK** · You get to meet new people Determine how your persona spends their time. · You feel fulfilled and appreciated The choices you make now may be to your advantage or disadvantage later. Some choices have already been made for you. You can make 3 additional choices. SOCIAL LIFE TIME WITH THE FAMILY EDUCATION AND TRAINING · You have a large social network · You get support when times are hard Investing in lifelong learning · Parties, going to bars with friends, etc. · But you also offer your support and help Lots of opportunities for work STUDENT JOB - GOAL: SPEND STUDENT JOB - GOAL: SAVE **HEALTHY LIVING** Work experience Work experience · Sports and healthy food · Self-confidence and social contact · Budget for partying, travelling, etc. · Save for later during the student phase €5.000.00 €5.000.00 €5.000.00



- View calculation sheet > personal budget
- View 'file working phase 1 and 2' -> we make decisions around:
  - Housing renting/buying
- Ħ

- 2. Other living expenses
- 3. Transport 🗲



- 4. Insurances
- 5. Savings and investments (only for work phase 2)



#### **1** INFO

We work in a structured and systematic way.

If things go too fast, give a sign to the teacher.



- Calculation sheet → draw up a personal budget based on your character sheet and personal preferences
- Step 1: roll the dice → determine starting wage → net monthly wage (+)
- Step 2: housing choice (time horizon 10 years) → file overview options (-)
- Step 3: other living expenses (-)
- Step 4: transport (-)
- Step 5: insurances (-)



We go through these 5 steps together.



#### ROLL THE DICE TO DETERMINE YOUR SALARY!





Communications

3.067.00

Roll the dice to determine your starting salary.

2.023.00

Elements such as sector, status (clerk, worker, self-employed, civil servant), experience, responsibility etc. will impact your wage in real life.

Continue to work with your monthly net salary (see next slide)!



### Topic: from gross to net salary

FROM GROSS TO NET SALARY	EXAMPLE AMOUNT (FICTIONAL)	EXTRA INFORMATION
Gross salary	€2,720.00	Stated in the employee's employment contract.
- Social security contributions	- €355.50	Used for social benefits such as child allowance, pensions,
= Taxable salary	= €2,364.50	
- Payroll withholding tax	- €437.50	Used for general facilities such as infrastructure, culture, police, education,
= Net salary	= €1,927.00	Paid into the employee's bank account.



Belgium has a high tax burden, meaning we pay a significant amount to the government. This should imply that we receive substantial benefits in return (see the 'extra information' column).



### Step 2: housing

- Rent or buy → at 'buy' you can see what starting budget is needed per type of property! You can only buy if you have the necessary budget. In work phase 1, this is only for the 'happy few'.
- Also take into account the maximum % of your salary that you spend on repaying the loan (borrowed capital + interest)

The own contribution or resources (either from parents or yourself) is/are substantial, i.e. 20% of the purchase value of the property + one-time costs.

This is automatically calculated in the game  $\rightarrow$  see file 'work phases 1 and 2', housing > buying, 'one-time purchase costs'.



# Step 2: housing



#### **†** HOUSING - RENT

CHOICE OF HOME (You are not the owner)	MONTHLY RENT	MAXIMUM SPACE	IMPACT ON TRANSPORT
CONTINUE TO LIVE AT HOME	€250.00	No room for partner or children	Your choice
5 YEARS AT HOME, 5 YEARS RENTING WITH 3 OTHERS	€325.00	No room for partner or children	Your choice
RENT A FLAT WITH 3 OTHERS	€450.00	No room for partner or children	Your choice
RENT A FLAT IN THE CITY	€900.00	4 people	No car required
RENT SOCIAL HOUSING * Second career phase only	€350.00	4 people	No car required
RENT HOME IN THE COUNTRYSIDE	€1,200.00	5 people	Car needed





CONDITION FOR RENTING SOCIAL HOUSING \*

Net monthly salary – (number of children x €200.00) < €1,600.00

For example:

Single mother with 3 children, net salary €2,000.00/month. €2,000.00 - (3 x €200.00) < €1,600.00 → qualifies for social housing



#### Step 3: other living expenses

OTHER LIVING EXPENSES (= Nutrition, health, energy, care and education of children ... taking child allowance into account)

FAMILY SITUATION	NO CHILDREN	1 CHILD	2 CHILDREN	3 CHILDREN
LIVE AT HOME	€500.00	/	/	/
5 YEARS AT HOME, 5 YEARS RENTING WITH OTHERS	€650.00	1	1	1
RENT FLAT WITH OTHERS	€750.00	/	/	/
SINGLE	€900.00	€1,400.00	€1,900.00	€2,500.00
PARTNER	€1,300.00	€1,800.00	€2,400.00	€2,900.00

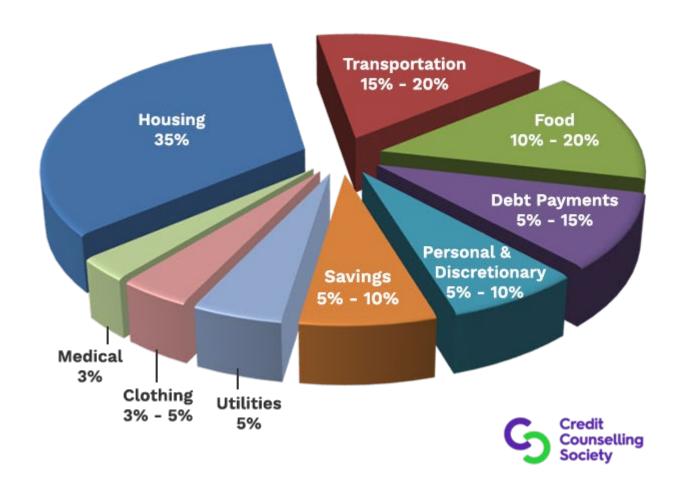
Child allowance is included in 'other living expenses'.

You only have to check the first column since you don't have children yet in work phase 1.





# Example budget breakdown for monthly costs





#### Step 4: transport

- Transport is linked to the type of housing you chose.
- Certain choices of mobility come with a certain price tag, e.g. high monthly repayments and fees.

Don't forget that as a car owner you **must** underwrite a third-party insurance!

The coverage means what kind of damage is covered.

The **franchise** is the part of the claim you have to pay yourself. The higher the franchise or exemption, the lower the premium.



# Step 4: transport





#### TRANSPORT

OPTIONS	(ELECTRIC) BICYCLE OR PUBLIC TRANSPORT	SMALL CAR	FAMILY CAR	SPORTS CAR
PURCHASE PRICE OF MEANS OF TRANSPORT	€3,000.00	€18,000.00	€25,000.00	€50,000.00
ADDITIONAL INFO / CONDITIONS	Per person	2 adults and 2 small seats	5 full seats	2 seats
MONTHLY PURCHASE AMOUNT	€25.00	€150.00	€210.00	€420.00
MONTHLY COST (Fuel, traffic tax, maintenance)	€20.00	€150.00	€175.00	€200.00

CAR INSURANCE						
Ţ	LEGALLY REQUIRED CI	IVIL LIABILITY	COMPULSORY CL + CO INSURANCE	MPREHENSIVE	COMPULSORY CL + FU INSURANCE	LL COVERAGE
	Civil liability insurance physical damage cause event your car is involve You are required to tak soon as your car goes of	ed to third parties in the ed in an accident. e out CL insurance as	A comprehensive insur- cover damage to your o		Full coverage includes car, even if the acciden	
	Coverage  Physical and material damage to third parties.  Physical damage to occupants of your own car.  Your own material and physical damage is not covered if you are liable.		Coverage  See civil liability insur. + damage as a result breakage, collision widamage	of fire, theft, glass	Coverage  • See comprehensive i  • + also material dama	
	Franchise: €250.00		Franchise: €500.00		Franchise: €1,000.00	
	Cost/year: €300.00	Cost/month: €25.00	Cost/year: €660.00	Cost/month: €55.00	Cost/year: €860.00	Cost/month: €70.00



#### Step 5: insurances

- What risks do you want to mitigate?
- Check your character sheet for any 'employee benefits'.
- Read the section 'coverage' carefully.



Certain insurances are contractually mandatory e.g. life insurance and fire insurance in a credit agreement (mortgage loan).

Certain insurances are required by law e.g. CL motor vehicles (see 'transport') and , fire insurance for tenants (housing).



# Finalizing career phase 1

Remaining budget per month x number of months of work experience in work phase 1 (see character sheet!).

Divide this by the phase I factor on your character sheet!

#### Add:

Revenues student job (see student phase) (+)

Financial support parents (+)

One-time purchase costs (-)

Total career phase 1= balance

CAREER PHASE 1: 20-30 YEARS	CALCULATION	١	
BUDGET BALANCE AFTER 1 MONTH (Budget/month x # months of work experience first career phase) (character sheet)	<b>A</b>	x	=
REVENUES STUDENT JOB (GOAL: SAVE) (Student phase, max €15.000,00)	+		
FINANCIAL SUPPORT PARENTS (character sheet)	+		
ONE-TIME PURCHASE COSTS (Only complete this section if you are able to buy a house in career phase 1)	-		
SUBTOTAL / FACTOR PHASE 1 (character sheet): expenses that do not fit under 'other living expenses' like outings, hobby's, gadgets,	=		/
TOTAL CAREER PHASE 1	=		•



### I'm 30 years old, what now?

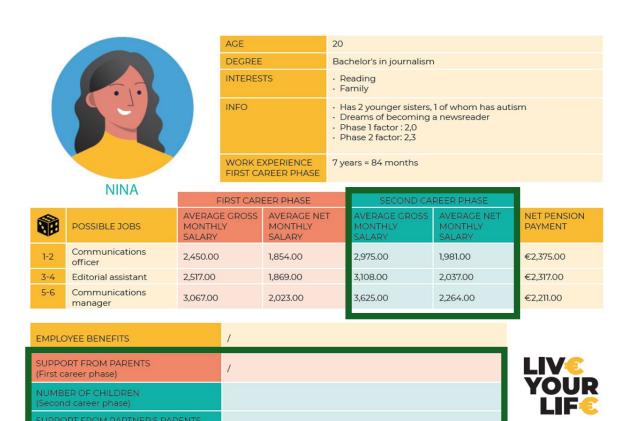
#### **Short reflection:**

- Revenues (+) expenses (-)
- Do you have some money left? You can save or invest (see work phase 2).
- Are you short? Pay extra close attention to your choices in the following phase!





# Career phase 2 (30 – 50 years)



- Choices have to be made again, taking into account:
  - Seniority: higher salary
  - Partner or not? (dice)
  - Children or not? (dice)
- Transfer these data to your character sheet (number of children and support parents partner)
- Write down your partner's net monthly salary on the worksheet (top page 1)



- Go through the same choices as in work phase I and complete the front page of the calculation sheet.
- Keep in mind your new family situation, they can impact your choices!

#### Steps:

Step 1: increase net monthly salary (seniority) and possibly net monthly salary partner (+)

Step 2: housing: rent or buy (-)  $\rightarrow$  See back of calculation sheet to determine start budget!

Step 3: other living expenses (-)

Step 4: transport (-)

Step 5: insurances (-)





### Housing: renting or buying? (back of the calculation sheet)

CAREER PHASE 2: 30-50 YEARS	CALCULATION
TOTAL CAREER PHASE 1	
SUPPORT PARENTS PARTNER	+
TOTAL 2: STARTBUDGET CAREER PHASE 2 (This budget can be used to buy a house or appartment)	=
ONE-TIME PURCHASE COST (Only complete this section if you are able to buy a house in career phase 2)	-
SUBTOTAL 3 / FACTOR PHASE 2 = TOTAL 3 (This amount must be fully allocated across a bank account, savings account, and investment funds. It's recommended to maintain a safety buffer in the savings account. Ideally, equivalent to 3 months of net salary).	= / =
maintain a safety buffer in the savings account. Ideally, equivalent	

		K
CURRENT ACCOUNT	SAVINGS ACCOUNT (per € 5 000)	INVESTMENT FUND (per € 5000)



# Total 3: bank account, savings account and/or investing?

- Bank account: balance available on demand
- Savings: no risk and low return
- Investing: higher risk and chance of higher returns
  - This is where the investor profile comes in handy!
  - 3 possible profiles: defensive, neutral or dynamic



Attention: amounts need to be rounded per € 1 000 to € 5 000; thereafter + € 5 000 to € 150 000. There's no rounding needed for 'bank account'.



#### TIP

Savings account: ideally, 3 times the family's monthly salary.

Investing: recommended to use money that you can miss over several years.

Bank account: 'remainder' (does not have to be a rounded number).



### Return saving versus investing after 20 years

#### Return saving versus investing after 20 years

Amount	Inflation
Amount	
€1.000,00	<b>(2%)</b> -€ 672,97
€ 2.000,00	-€ 1.345,94
€ 3.000,00	-€ 2.018,91
€ 4.000,00	-€ 2.691,89
€ 5.000,00	-€ 3.364,86
€10.000,00	-€ 6.729,71
€ 15.000,00	-€ 10.094,57
€ 20.000,00	-€ 13.459,43
€ 25.000,00	-€ 16.824,28
€ 30.000,00	-€ 20.189,14
€ 35.000,00	-€ 23.554,00
€ 40.000,00	-€ 26.918,85
€ 45.000,00	-€ 30.283,71
€ 50.000,00	-€ 33.648,57
€ 55.000,00	-€ 37.013,42
€ 60.000,00	-€ 40.378,28
€ 65.000,00	-€ 43.743,14
€70.000,00	-€ 47.107,99
€ 75.000,00	-€ 50.472,85
€ 80.000,00	-€ 53.837,71
€ 85.000,00	-€ 57.202,56
€ 90.000,00	-€ 60.567,42
€ 95.000,00	-€ 63.932,28
€100.000,00	-€ 67.297,13
€ 125.000,00	-€ 84.121,42
€ 150.000,00	-€ 100.945,70

Savings account	Investment fund / Profile*		
1%	Conservative (5%)	Neutral (6%)	Dynamic (7%)
€ 220,19	€ 1.653,30	€ 2.207,14	€ 2.869,68
€ 440,38	€ 3.306,60	€ 4.414,27	€ 5.739,37
€ 660,57	€ 4.959,89	€ 6.621,41	€ 8.609,05
€ 880,76	€ 6.613,19	€ 8.828,54	€ 11.478,74
€ 1.100,95	€ 8.266,49	€ 11.035,68	€ 14.348,42
€ 2.201,90	€ 16.532,98	€ 22.071,35	€ 28.696,84
€ 3.302,85	€ 24.799,47	€ 33.107,03	€ 43.045,27
€ 4.403,80	€ 33.065,95	€ 44.142,71	€ 57.393,69
€ 5.504,75	€ 41.332,44	€ 55.178,39	€ 71.742,11
€ 6.605,70	€ 49.598,93	€ 66.214,06	€ 86.090,53
€ 7.706,65	€ 57.865,42	€ 77.249,74	€ 100.438,96
€ 8.807,60	€ 66.131,91	€ 88.285,42	€ 114.787,38
€ 9.908,55	€ 74.398,40	€ 99.321,10	€ 129.135,80
€ 11.009,50	€ 82.664,89	€ 110.356,77	€ 143.484,22
€ 12.110,45	€ 90.931,37	€ 121.392,45	€ 157.832,65
€ 13.211,40	€ 99.197,86	€ 132.428,13	€ 172.181,07
€ 14.312,35	€ 107.464,35	€ 143.463,81	€ 186.529,49
€ 15.413,30	€ 115.730,84	€ 154.499,48	€ 200.877,91
€ 16.514,25	€ 123.997,33	€ 165.535,16	€ 215.226,33
€ 17.615,20	€ 132.263,82	€ 176.570,84	€ 229.574,76
€ 18.716,15	€ 140.530,30	€ 187.606,52	€ 243.923,18
€ 19.817,10	€ 148.796,79	€ 198.642,19	€ 258.271,60
€ 20.918,05	€ 157.063,28	€ 209.677,87	€ 272.620,02
€ 22.019,00	€ 165.329,77	€ 220.713,55	€ 286.968,45
€ 27.523,75	€ 206.662,21	€ 275.891,93	€ 358.710,56
€ 33.028.51	€ 247.994.66	€ 331.070.32	€ 430.452.67



#### Calculation: 'impact inflation' & return 'saving and investing'

TOTAL 3: 50 YEARS OLD	*
BUDGET BALANCE CAREER PHASE 2 (Budget/month x 12 months x 20 years)	+ <b>x</b> 240 =
IMPACT EVENT CARDS	+ or -
IMPACT EVENT CARDS	+ or -
IMPACT EVENT CARDS	+ or -
TOTAL 4	=
RETURN SAVING	+
RETURN INVESTING	+
IMPACT INFLATION (ON TOTAL 3)	-

### Event cards (distribute them)

# Nwe printscreen nodig



Je rijdt in op een file. Naast schade aan verschillende wagens, heb jij ook lichamelijk schade opgelopen.

BA	- € 7.500
BA + Kleine omnium	- € 3.500
BA + Grote omnium	/
Ongevallen- verzekering	/

- The dice determine your starting position (highest throw chooses first).
- Each player has 3 event cards.
- Earlier choices from the 'student phase' come into play!
- Note the impact of the event card on the calculation sheet.
- Bike only or public transport? You cannot choose 'car accident' since you don't have a car.



# Calculation impact event cards

TOTAL 3: 50 YEARS OLD	*
BUDGET BALANCE CAREER PHASE 2 (Budget/month x 12 months x 20 years)	+ <b>x</b> 240 =
IMPACT EVENT CARDS	+ or -
IMPACT EVENT CARDS	+ or -
IMPACT EVENT CARDS	+ or -
TOTAL 4	=
TOTAL 4  RETURN SAVING	+
RETURN SAVING	+



# Final budget on the age of 50

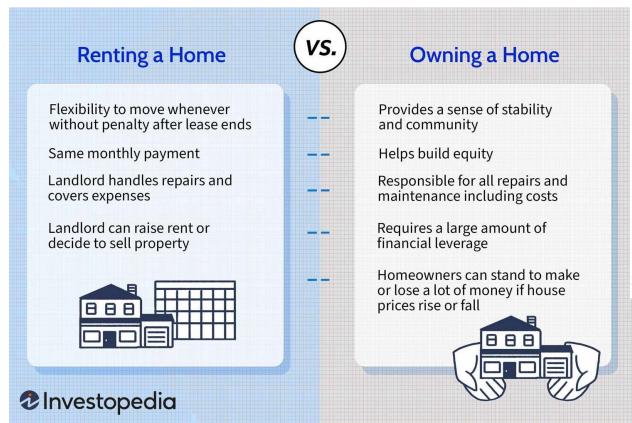
TOTAL 4	=
RETURN SAVING	+
RETURN INVESTING	+
IMPACT INFLATION (ON TOTAL 3)	-
TOTAL 5: TOTAL CAREER PHASE 2	=



#### Important sidenotes

Renting versus buying!

Both short-term and long-term assets can change substantially in value.



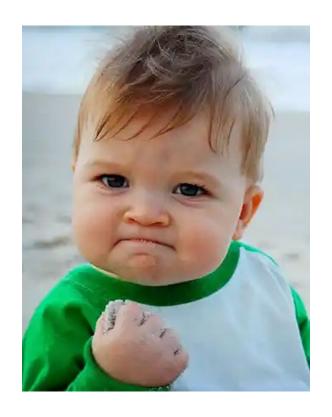




#### Reflection

Money may not buy happiness, but it sure makes budgetting a lot easier.









#### Reflection

#### WHAT HAPPENED?

- What is your final budget after the second career phase?
- What makes you had this result? What had the biggest impact?
- Which event cards had a major impact on the final result?
- Which choices had a positive/negative impact?
- What would you do differently?
- Did you expect the 'other living expenses' to be lower or higher?
- Which expenses surprised you?
- Which expenses could actually be even higher?
- If necessary, compare the lives of the same characters.
- Is this a realistic end result? Are there any issues that were not addressed?
- ...

