

Occupational pensions

Worksheet

1) The role of occupational pensions (= pension funds)

- a) As an introduction read the section entitled [Why do we have to provide for old age?](#) in the factsheet. Then estimate what the minimum cost of living is for a single pensioner in Switzerland. To do this, specify a realistic total per month for each budget item and calculate the possible total. If you have already done the worksheet on the OASI system you can start directly with task 1c).

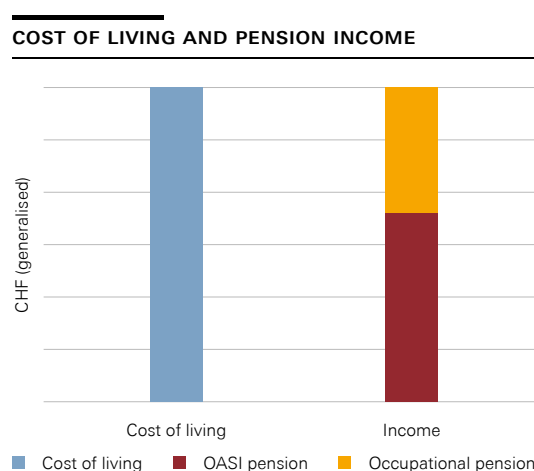
Housing and utilities	_____
Food and beverages	_____
Health (health insurance, deductible, co-payment and dentist)	_____
Taxes	_____
Miscellaneous (transport, communication and entertainment, clothes and shoes, personal care, insurance, leisure)	_____
Possible total	_____

- b) OASI pensions come to between CHF 1,195 and CHF 2,390 per month. Compare this amount with the total minimum cost of living calculated in task 1a). Mark the correct answer in the table below with a cross. Then write down what you have found in one sentence.

The OASI pension is ... the total cost of living.

higher than	the same as	lower than
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- c) In the factsheet read the two sections [The three-pillar system](#) and [What is the purpose of the occupational pensions scheme?](#) Then explain the role of the occupational pensions scheme in two to four sentences. Use the following chart to help you:



2) OP (= pension fund) contributions and pensions compared

The chart below shows different people at working age (left) and in retirement (right). First read the section [Who has to pay OP contributions?](#) and study the various [examples](#).

Then fill in the gaps in the left-hand column. Tip – if you would like a more detailed explanation of the term ‘coordination deduction’, watch [this video](#) (in German only), focusing on the animated graphics in particular.

Then read the sections [How are retirement assets generated?](#) and [How is the occupational pension calculated?](#) before completing the gaps in the chart below.



¹ The figures are based on realistic salary assumptions and annual interest of 2% on the accumulated retirement assets.

3) OP contributions (= pension fund contributions) on the payslip

The following table shows the information on Timon's payslip. Timon is 18 and in the third year of his retail apprenticeship. From his payslip you can see the deductions for OASI, DI, IC, UI, NOAI and OP (cf. legend below). People who are paid a monthly salary have these amounts deducted from their gross salary. Study the payslip closely and then solve task 3a).

Payslip (amounts in CHF)				
	Amount/basis	Rate	Deduction	Salary
Basis for OASI (gross salary)				1,500
Basis for OP (insured salary)				0
OASI	1,500	4.35%	65.25	
DI	1,500	0.7%	10.50	
IC	1,500	0.25%	3.75	
UI	1,500	1.1%	16.50	
NOAI	1,500	1.48%	22.20	
Subtotal		7.88%	118.20	
OP = occupational pension / pension fund	0.-	0%	0	
Total			118.20	
Net salary				1,381.80
Amount paid out				1,381.80

DI: disability insurance
 IC: income compensation
 UI: unemployment insurance
 NOAI: non-occupational accident insurance

- a) What can you tell about Timon's OP deductions from his payslip? Explain in one sentence. Then give reasons for your answer with the help of the section [Who has to pay OP contributions?](#) and the different examples from the factsheet. Give two reasons.

Here you see Johanna's payslip from task 1). Study this payslip closely before continuing with task 3b).

Payslip (amounts in CHF)				
	Amount/basis	Rate	Deduction	Salary
Basis for OASI (gross salary)				4,000
Basis for OP (insured salary)				1,908.75
OASI	4,000	4.35%	174.00	
DI	4,000	0.7%	28.00	
IC	4,000	0.25%	10.00	
UI	4,000	1.1%	44.00	
NOAI	4,000	1.48%	59.20	
Subtotal		7.88%	315.20	
OP = occupational pension / pension fund	1,908.75	5.0%		
Total			410.65	
Net salary				
Amount paid out				

DI: disability insurance
 IC: income compensation
 UI: unemployment insurance
 NOAI: non-occupational accident insurance

- b) Compare Johanna's payslip with Timon's. What can you say about their occupational pension fund deductions? Explain in one sentence and give reasons for your answer with the help of the section [Who has to pay OP contributions?](#) and the different examples from the factsheet. Give two reasons.

c) What strikes you about the basis for calculating the pension fund contribution? Is this different from the basis used to calculate the OASI contribution?

d) Demonstrate the basis of Johanna’s OP contribution mathematically. To do so use the following information:

Insured annual salary = annual salary (gross) – coordination deduction

Coordination deduction 2022 = CHF 25,095

$$\text{Insured monthly salary} = \frac{\text{insured annual salary}}{12}$$

Insured annual salary _____

Insured monthly salary _____

e) Calculate Johanna’s monthly occupational pension fund contribution on the basis of the earnings and deductions on her payslip. Then calculate the resulting net salary. Round the amount to the nearest 5 centimes. Enter the amounts you calculated in the empty fields in the payslip above.

OASI employee contribution _____

Net salary paid out _____

f) Study the different examples of pension fund (OP) contributions in the factsheet again. Then calculate the minimum amount paid into Johanna’s pension fund each month.

4) Accumulating retirement assets

- a) The charts below show the pay profile and development of retirement assets for each of the people from tasks 1) and 2). Assign the correct salary profile and retirement asset development to each of the three descriptions of people.

After his retail apprenticeship, Timon always worked hard in his employer’s shop. But at 55 he got a nasty surprise – the company had to close due to insolvency and all the employees were dismissed. Unfortunately, Timon only found a few temporary part-time jobs before he retired.

Salary profile: ___
Retirement assets: ___

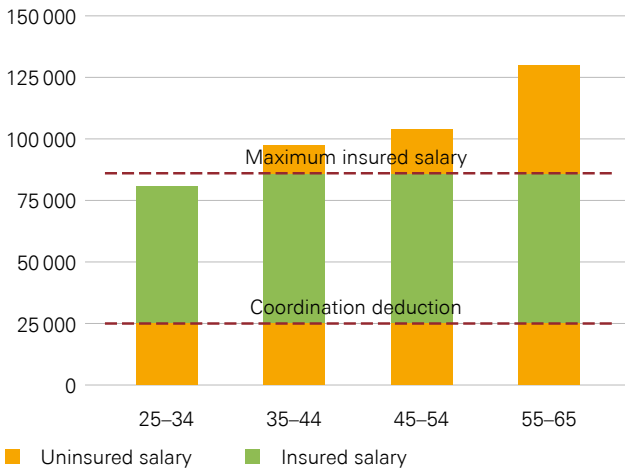
Johanna worked her whole life long. When she became a mother in her mid-30s she reduced her hours to 70%, but then continuously increased them again. Although she was working full time again by the time she retired, the gap in her pension fund assets is clearly visible.

Salary profile: ___
Retirement assets: ___

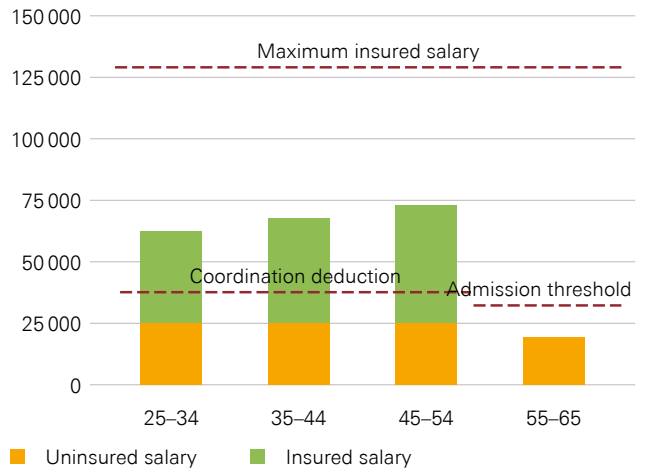
Bernhard continued to train as a nurse over the years and by the end of his career was even head of the nursing department. Initially his pension fund contributions were fairly modest, but with age they rose to a considerable level.

Salary profile: ___
Retirement assets: ___

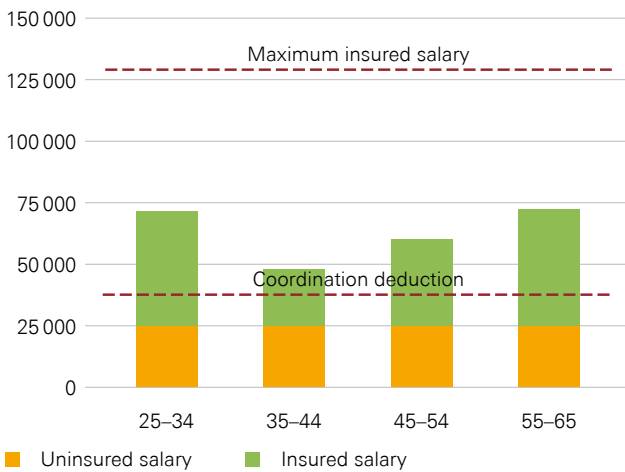
SALARY – PROFILE 1



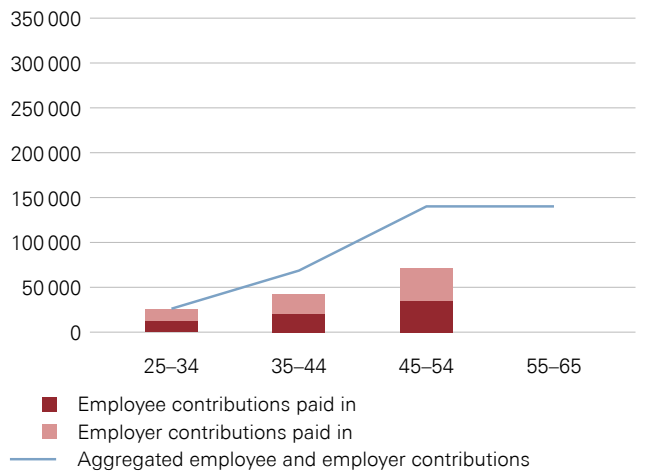
SALARY – PROFILE 2



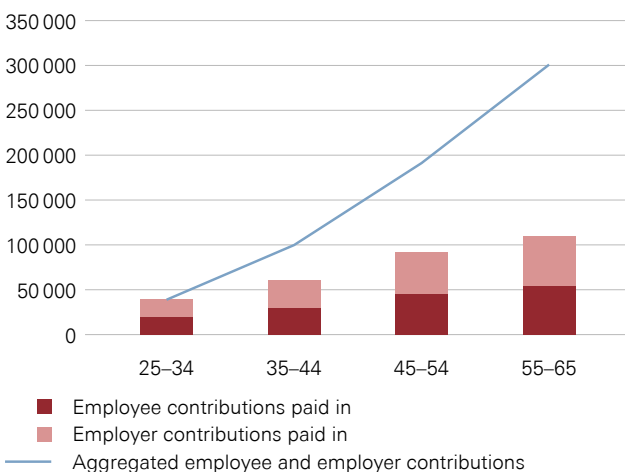
SALARY – PROFILE 3



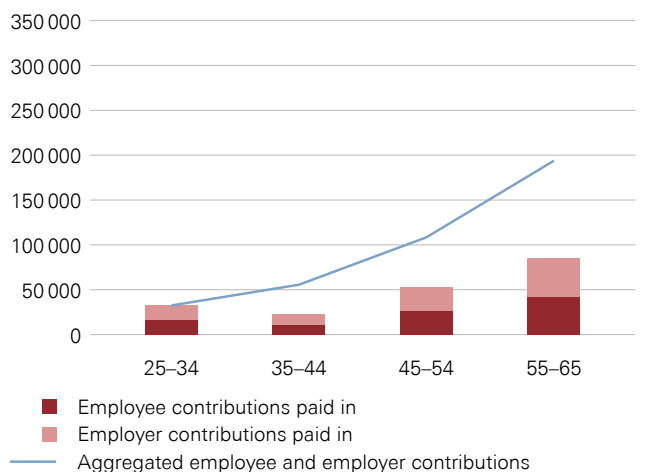
RETIREMENT ASSETS – PROFILE 1



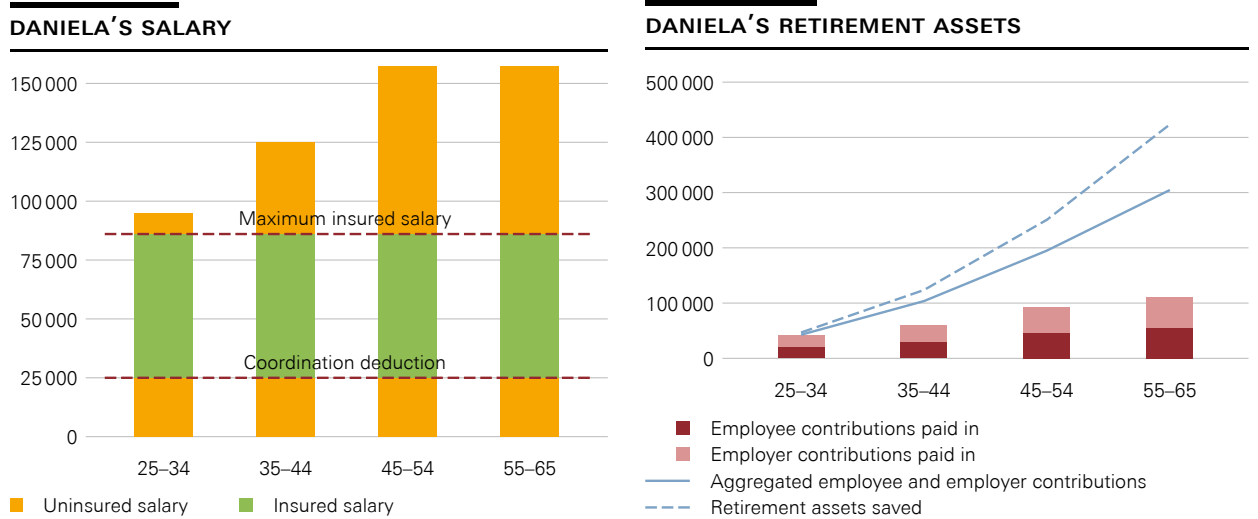
RETIREMENT ASSETS – PROFILE 2



RETIREMENT ASSETS – PROFILE 3



- b) If we add up all the contributions (employee and employer contributions) paid for a given person we arrive at a total amount that is lower than the ‘accumulated retirement assets’ (cf. the example for Daniela below). Note the ‘contributor’ that helps increase the retirement assets. (Tip – the answer can be found in the factsheet under [How are retirement assets generated?](#))



	Employee (EE) contributions paid	Employer (ER) contributions paid	Aggregate contributions paid in by EE and ER	Accumulated retirement assets
Daniela	CHF 152,363	CHF 152,363	CHF 304,726	CHF 434,435

5) Extra-mandatory benefits

The following table shows a projection of how much Johanna and Daniela will earn on average during their working lives and how much they are likely to receive as occupational pension (cf. task 2).

	Average monthly salary (annual salary)	Projected monthly (annual) occupational pension
Johanna	CHF 5,251 (63,012)	CHF 1,538 (18,457)
Daniela	CHF 9,684 (116,208)	CHF 2,462 (29,542)

- a) In one or two sentences, formulate an idea as to why the difference between Johanna's and Daniela's pensions is significantly smaller than the difference between their salaries. Tip – in your answer, consider the mandatory maximum insured salary for the pension fund.

6) The fully-funded system and early withdrawal

- a) First read the following four statements, which you have to assess. Then study the section [How do occupational pensions work?](#), particularly the chart. Then assess whether the following two statements relating to occupational pensions are true or false. Check the boxes.

	True	False
In the OP scheme, working people fund current pensions. In doing so they trust that subsequent generations will do the same.	<input type="checkbox"/>	<input type="checkbox"/>
In the OP scheme, only those who have contributed to a pension fund receive a pension.	<input type="checkbox"/>	<input type="checkbox"/>
In the OP scheme, higher earners pay in more than those who are economically worse off but also receive a larger pension in return.	<input type="checkbox"/>	<input type="checkbox"/>
In the OP scheme, everyone receives the same amount of pension.	<input type="checkbox"/>	<input type="checkbox"/>

- b) Under certain circumstances, the assets accumulated in the 2nd pillar can be withdrawn early (i.e. before retirement). Assess whether early withdrawal is possible in the following cases. Check the boxes.

- | | |
|--|--|
| <input type="checkbox"/> Financing special events (e.g. a wedding) | <input type="checkbox"/> Buying a home |
| <input type="checkbox"/> Becoming self-employed | <input type="checkbox"/> Leaving Switzerland/moving abroad |
| <input type="checkbox"/> Repaying debts | <input type="checkbox"/> Buying a car |
| <input type="checkbox"/> Financing training or education | <input type="checkbox"/> Early retirement |

- c) Assess whether the three following statements relating to early withdrawal are true or false. Check the box for the true statements, and for each false statement explain in a complete sentence why it is not correct.

- Using pension fund money to become self-employed is something that should be given very careful thought. If the business does not succeed, you lose a large portion of your retirement assets and will often have to live close to the minimum subsistence level in old age.
- Buying your own home with pension fund money can make sense, because it means you need less capital from the bank and will thus also have lower interest costs. Added to this, house prices in Switzerland are relatively stable.
- Using pension fund money to become self-employed always makes sense. With your own business you can earn your own money.

7) Funding the OP (= pension fund)

The following table shows the total income and expenditure of all pension fund providers (pension foundations, banks and insurance companies) from 2016 to 2020 in CHF billion. Study the table and read the text below it (Aid to reading the table) carefully. You will need the information for the following tasks.

Income and expenditure in the OP (= pension fund)

	2016	2017	2018	2019	2020
Contributions from insured persons and employers	46.6	48.6	49.3	50.6	51.4
Return on capital	36.4	69.9	-21.4	102.1	49.0
Other	7.8	6.8	7.4	9.1	15.5
Total income	90.8	125.3	35.3	161.8	115.9
Social benefits	36.4	37.7	39.1	40.7	42.5
Other	16.3	15.9	19.6	13.2	13.3
Total expenditure	52.7	53.6	58.7	53.9	55.8
Balance	38.1	71.7	-23.4	107.9	60.1
Capital	825.1	895.6	874.0	1,005.3	1,064.6

Amounts in CHF billion

Aid to reading the table

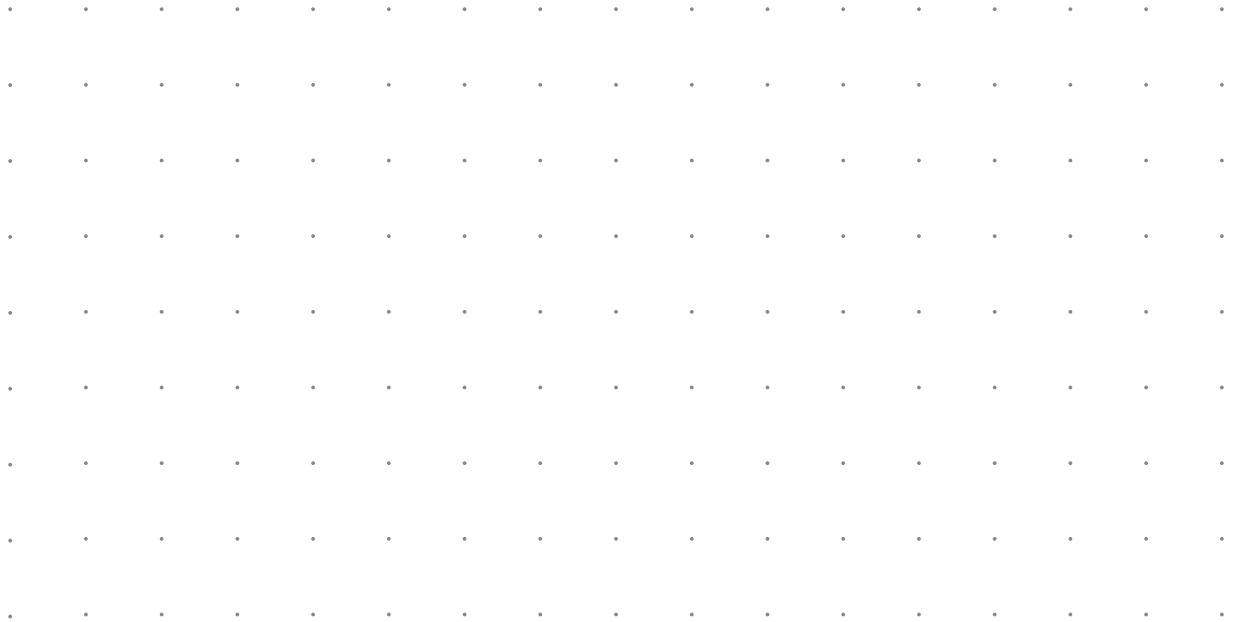
In 2020, the total income of all pension funds came to around CHF 115.9 billion. The largest part, around CHF 51.4 billion, came from pension fund contributions. Returns on capital accounted for CHF 49 billion.

In 2020, the total expenditure of the pension funds came to around CHF 55.8 billion. The largest part, around CHF 42.5 billion, was paid out as benefits (including administrative costs).

Overall, the pension funds recorded a plus of CHF 60.1 billion in 2020.

- a) Show the development of the two main sources of income of all the pension funds in the table in a diagram.

First think about what type of diagram is most suitable for this. Then decide what units are best to represent the information from the table in the diagram. Draw by hand or with a ruler and use the dot grid as a sketching aid. Label the diagram by subdividing and labelling the axes appropriately, and draw up a legend.



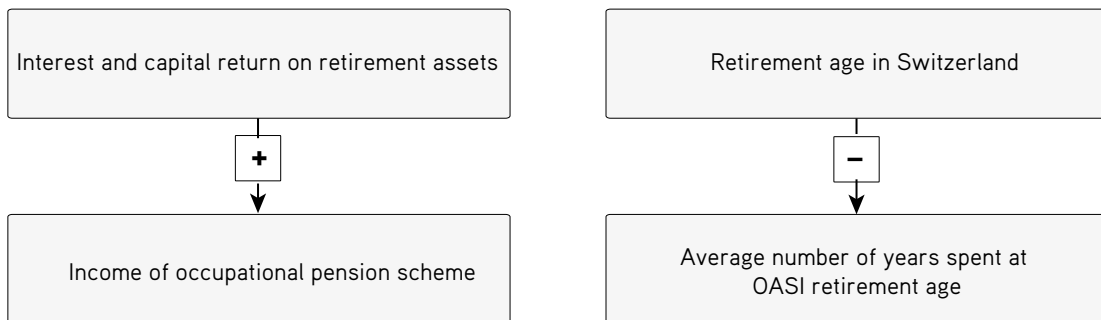
- b) Use the chart(s) you have drawn to assess whether the following statements are true or false.

- Returns on capital are an extremely constant source of income for occupational pension funds.
- Occupational pension funds are funded in large part by contributions from insured persons and employers.
- One reason for the negative balance in 2018 was the poor returns on capital.
- Occupational pension fund income from contributions paid by insured persons and employers fluctuates heavily.
- Returns on capital are of fairly low importance in funding occupational pensions.

8) Problems and challenges faced by occupational pension schemes

The table on the funding of occupational pension schemes (cf. task 7) shows that their income is not stable. Not only that, but because of growing life expectancy, in the near future there will also be a sharp rise in expenses. The purpose of the following task is to structure the factors influencing the income and expenses of occupational pension funds.

- a) Look at the following reading aid for the chart on the next page and read the notes in the boxes. Make sure that you have understood them before continuing with the next task.



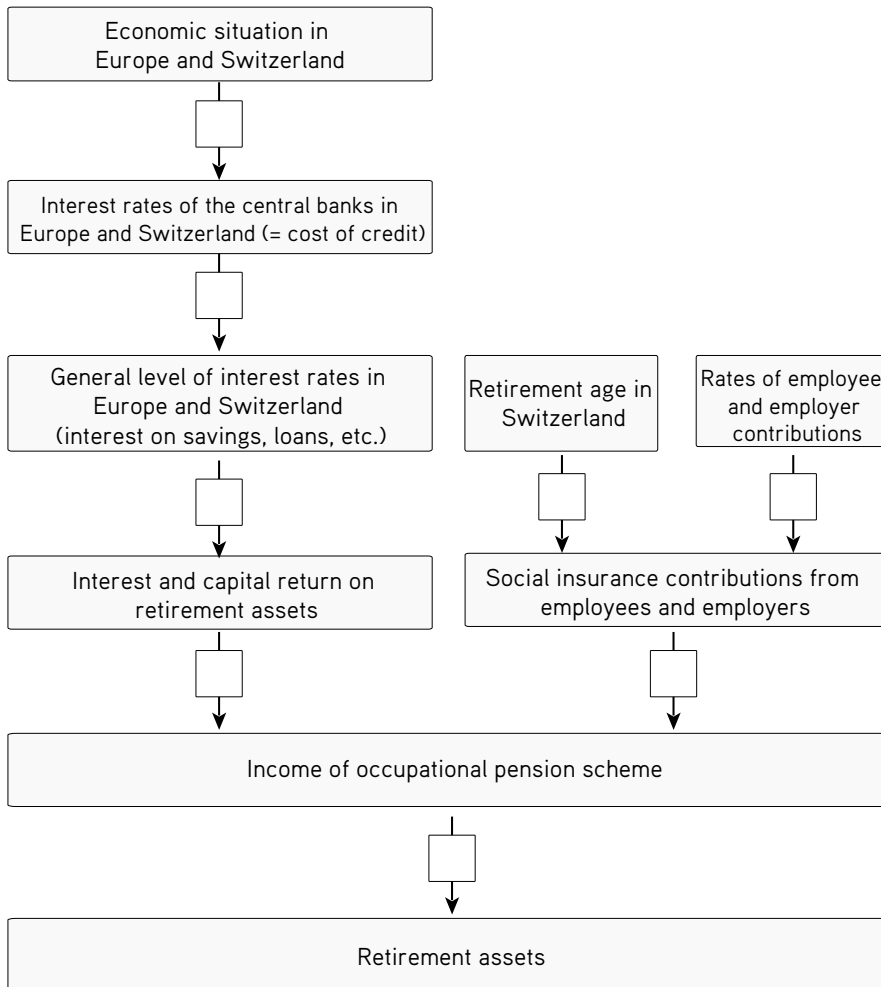
A + (plus sign) means that there is a direct correlation between two elements.
 For example you could say:
 the bigger ... is, the higher ... is
 if ... increases, ... also increases
 Or:
 the lower ... is, the lower ... is
 if ... declines, ... also declines

Example: The higher the interest and investment returns income on the retirement assets, the higher the income of the occupational pension system (= pension funds).

A – (minus sign) means that there is an inverse correlation between two elements.
 For example you could say:
 the higher ... is, the lower ... is
 if ... increases, ... declines
 Or:
 the smaller ... is, the bigger ... is
 if ... falls, ... rises

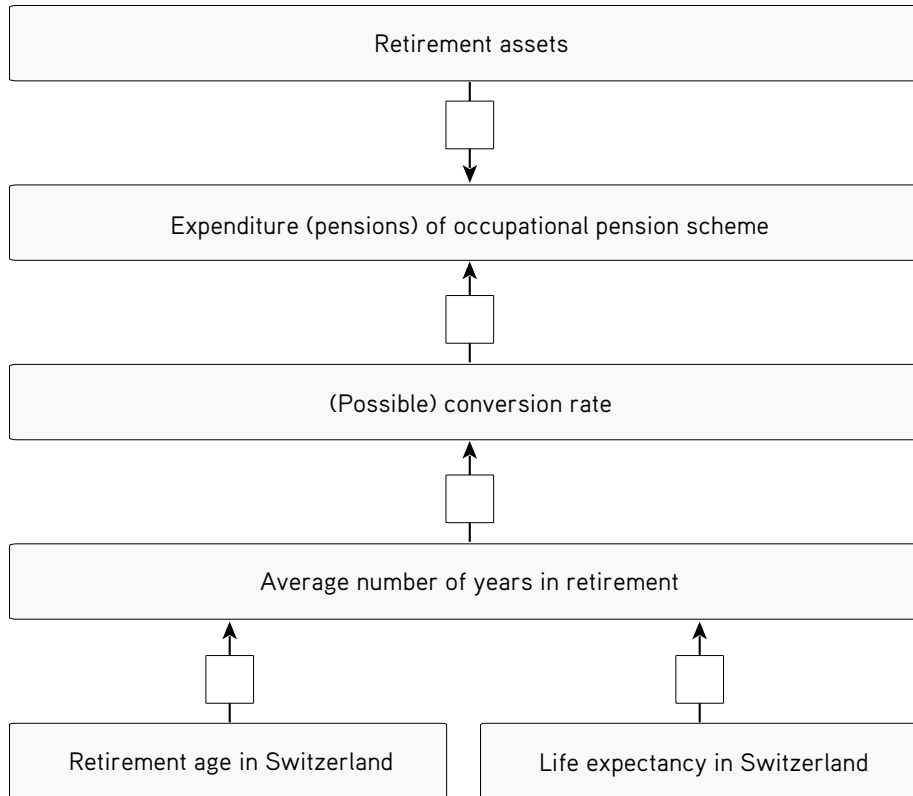
Example: The higher the retirement age in Switzerland, the fewer years people spend in retirement.

- b) The following chart shows the income streams of occupational pension funds. Think about what effects the developments below could have on income. Place a plus or minus sign in the empty boxes depending on the influence one factor has on the next.



- c) Which of the income streams of occupational pension funds has changed significantly in the last ten years? Say what this income stream is and explain in two or three sentences the challenge for occupational pensions. Tip – read the section [What are the challenges faced by the OP scheme?](#) in the factsheet.)

- d) The following chart shows the expense streams of occupational pension funds. Think about what effects the developments below could have on the expenditure of occupational pension schemes. Show the connection between two boxes by placing plus or minus signs in the boxes in the same way as in sub-task a).



- e) Which of the expense streams of occupational pension funds has changed significantly in recent decades? Say what this income stream is and explain in two or three sentences the challenge for occupational pensions (tip – read the section [What are the challenges faced by the OP scheme?](#) in the factsheet).