

Demography

Worksheet 1

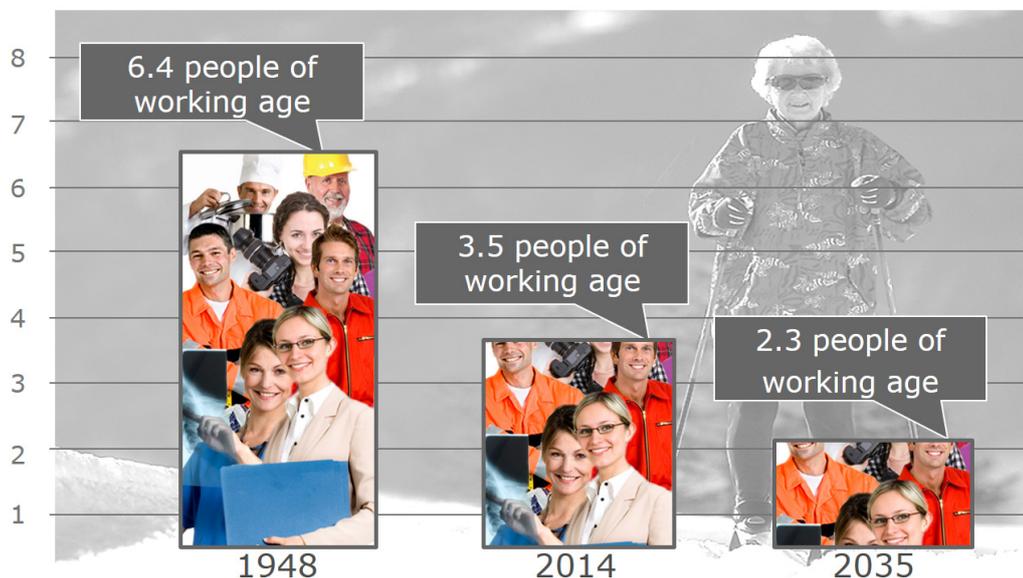
1. In Switzerland, men and women receive a state pension (old age and survivors' insurance, AHV/AVS) from the ages of 65 and 64 respectively. It is financed on a pay-as-you-go basis. This means that economically active people start paying AHV contributions out of their salary from the age of 17. These funds are used to finance the pensions of people currently drawing an AHV pension. When AHV was set up in 1948, insured persons' salary deductions amounted to 4% of their salary. With the expansion of AHV between 1969 and 1975, contribution rates were increased to 8.4% (or 7.8% for the self-employed). Employees pay half of the contribution and the other half is paid by their employer. Self-employed people pay the full contribution themselves.

The following chart illustrates the development in the ratio of working-age people to pensioners.

This number describes how many people of working age (20–64) live in Switzerland per pensioner (65+).

Illustrative example: In 1948, there were 6.4 people of working age per pensioner.

Development in ratio of working-age people to pensioners



Source: Federal Social Insurance Office, 2016

- a. Draw a line to link the years on the left with the statements on the right, and add the missing numbers.

1948	The lowest number of people of working age per pensioner, namely _____
2014	_____ people of working age per pensioner
2035	The highest number of people of working age per pensioner, namely _____

¹ The Swiss Federal Statistical Office (SFSO) bases its calculations on the number of people aged 20–64 since all persons over the age of 20 have to pay AHV contributions. Source: SFSO, Old-age dependency ratio

b. Why are AHV contributions today (8.4%) higher than in 1948 (4.0%)?

c. How will the financial burden on people of working age change by 2035? Explain your answer.

d. What are the consequences of the trend in the ratio of working-age people to pensioners?
Tick the appropriate boxes.

- The number of people of working age to finance one pensioner is steadily falling.
- The trend in the ratio of working-age people to pensioners will ease the burden on AHV in the future.
- The number of people of working age to finance one pensioner is steadily rising.
- The trend in the ratio of working-age people to pensioners may increase the burden on AHV.

Difference between 'people of working age per pensioner' and 'old-age dependency ratio'

There are two different concepts to represent the number of people of working age to the number of pensioners:

People of working age per pensioner:

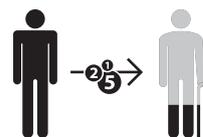
This concept describes how many people of working age finance **one AHV pension**.



Four people of working age pay one pension.

Old-age dependency ratio:

This concept describes what fraction of a pension is paid by **one person of working age**.

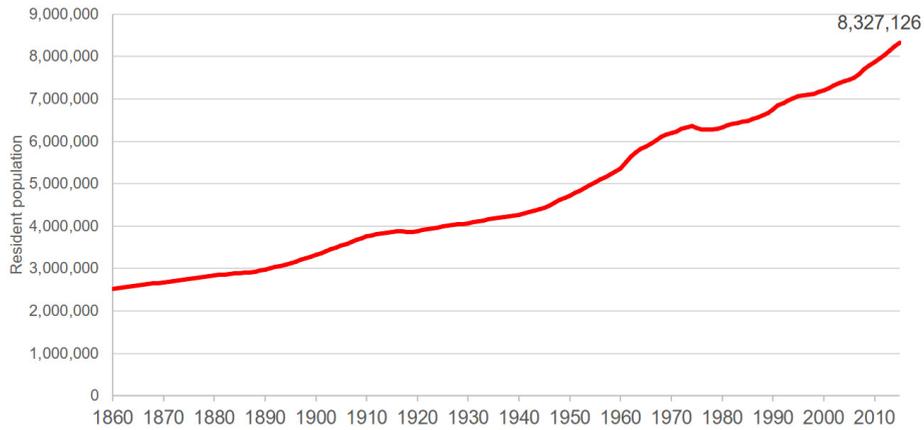


One person of working age pays 0.25 of a pension.

2. The following chart shows the trend in the permanent resident population (staying at least 12 months²) in Switzerland since 1860.

Illustrative example: In 1930, approximately four million people lived in Switzerland.

Development in the permanent resident population in Switzerland



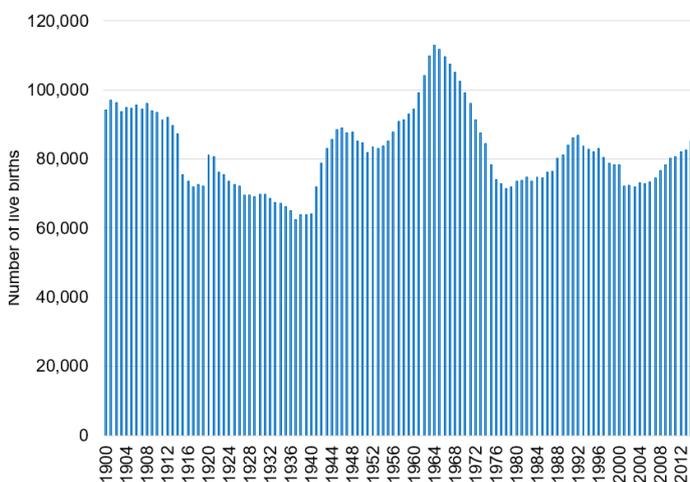
Source: SFSO

How did the permanent resident population in Switzerland develop between 1940 and 2010?
Tick the appropriate boxes.

- | | |
|--|--|
| <input type="checkbox"/> The resident population decreased | <input type="checkbox"/> The resident population doubled |
| <input type="checkbox"/> The resident population increased | <input type="checkbox"/> The resident population trebled |
| <input type="checkbox"/> The resident population remained constant | <input type="checkbox"/> The resident population halved |

3. The following chart shows the number of live births per year in Switzerland between 1900 and 2015. Illustrative example: In 2012, just over 80,000 babies were born in Switzerland.

Number of births in Switzerland



Source: SFSO

² Source: SFSO, Population

- a. How did the number of births in Switzerland develop between 1940 and 1970?
Explain in a few sentences.

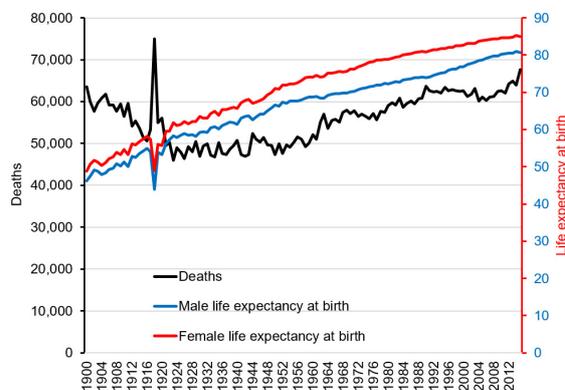
- b. Looking at the whole period, which year had the highest number of births?
Which year had the lowest?

- c. What is the demographic term often given to the period between 1940 and 1970?
Tick the appropriate box.

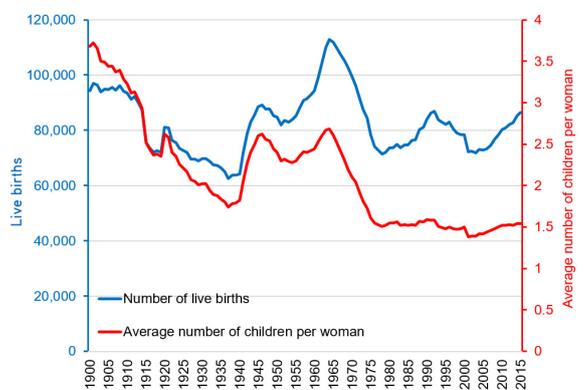
- 'Childhood disease'
 'Baby boom'
 'Spanish flu'
 'Economic crisis'

4. The chart on the left shows the number of deaths (lhs) and the life expectancy of males and females at birth (rhs). The chart on the right shows the number of live births (lhs) and the average number of children per woman (rhs). Illustrative example: The life expectancy of a girl born in 1984 is about 80 years. Some 60,000 people died in Switzerland in the same year. In 1970, the average number of children per woman was 2.0 and some 100,000 children were born.

Number of deaths and life expectancy



Number of live births and average number of children per woman



Source: SFSO

a. Tick the appropriate box. Explain your decision each time on the basis of the chart.

	True	False
Male life expectancy is higher than female.	<input type="checkbox"/>	<input type="checkbox"/>
<hr/>		
<hr/>		

Life expectancy has risen in the last 100 years.	<input type="checkbox"/>	<input type="checkbox"/>
<hr/>		
<hr/>		

The average number of children per woman was higher in 1900 than in 2000.	<input type="checkbox"/>	<input type="checkbox"/>
<hr/>		
<hr/>		

b. How many children did one woman have on average in 2015?

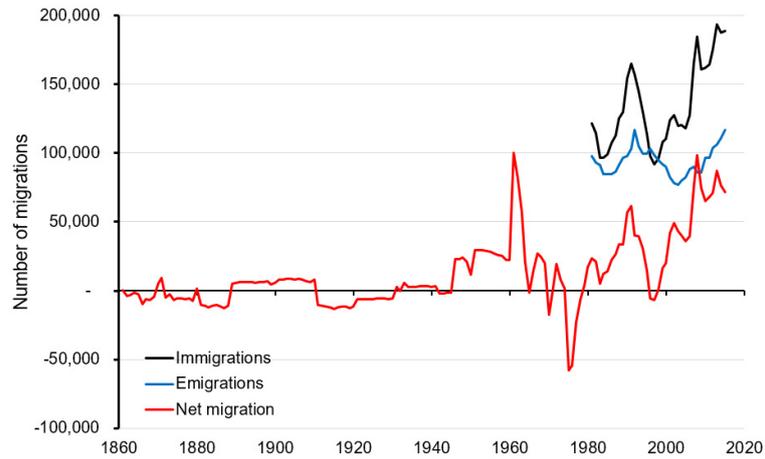
- 0.4 children
- 1.5 children
- 2.1 children
- 3.2 children

c. A flu epidemic (Spanish flu) hit Switzerland in 1918/1919 and claimed the lives of almost 25,000 people. How is this event visible in chart 4.

5. Net migration is defined as the difference between the number of people moving into a country (immigrants) and the number of people moving out of that country (emigrants). The following chart shows net migration and the number of immigrants and emigrants in a particular year.

Illustrative example: In 2000, some 110,000 people moved into Switzerland and some 90,000 people moved out of Switzerland. This gives a net migration rate of some 20,000 people.

Net migration



Source: SFSO

- a. Fill in the gaps with the following terms:

higher, lower, positive, negative, rising, falling, more, less, increase, decrease, net migration, immigration, emigration.

Note: You do not need to use every word.

The difference between the number of immigrants and the number of emigrants is termed _____.
 Since 1980 net migration has been largely _____. Just before 1980 it was _____.
 This means that _____ people moved away from Switzerland than moved to the country. Net migration was _____ in 2015 than in 2000. The sharp rise in _____ has been the main reason for the _____ in net migration over the last ten years.

- b. Net migration has fluctuated considerably over the last 100 years. Why do people emigrate?

Give at least two reasons.

6. Look at the following chart. On the left you can see a change in a demographic factor (e.g. increase in life expectancy). The increase or decrease in the number of people of working age per pensioner is shown on the right. For each of the changes on the left, decide whether the number of people of working age per pensioner rises or falls. Join up the boxes as appropriate.

Fall in average number of children per woman		Number of people of working age per pensioner falls
Increase in life expectancy		
Rise in average number of children per woman		Number of people of working age per pensioner rises
Fall in net migration		
Decrease in life expectancy		
Rise in net migration		

7. How can financial bottlenecks in AHV funding be avoided in future? Tick the appropriate box and briefly explain your answers.

	True	False
Increase AHV pensions.	<input type="checkbox"/>	<input type="checkbox"/>
<hr/> <hr/>		
Increase the retirement age for men and women to 67.	<input type="checkbox"/>	<input type="checkbox"/>
<hr/> <hr/>		
The AHV contributions of working-age people and employers decline.	<input type="checkbox"/>	<input type="checkbox"/>
<hr/> <hr/>		
Increase VAT or increase the Confederation's AHV contribution.	<input type="checkbox"/>	<input type="checkbox"/>
<hr/> <hr/>		