

WDA Forum



University of St.Gallen

The WDA – HSG Discussion Paper Series

on Demographic Issues

Switzerland and its Demography

by Hans Groth

No. 2009/3



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Switzerland and its Demography

Hans Groth*

- **Evolution of the population until 2030/50 and foreseeable regional differences**
- **Migration and long-term demographic policy scenarios**
- **Health and education as economic growth reserves**
- **A side glance on the structure of the economy and its key sectors**
- **Comparison with European neighbours**
- **Demography and sustainability**

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Summary

The Berlin-Institute for Population and Development published a highly regarded study in 2008 titled "The Demographic future of Europe". This study analysed, compared and evaluated the demographic and economic development of 285 European regions utilising a recognised analysis tool. These regions, for the most part, accord with the national administrative bodies of the countries, as for example, the Swiss cantons, which in turn combine into seven large regions. It is only at such an administrative level as this, that socio-economic data are available and comparable across Europe.¹ The analysis of the seven regions has been updated as a result of the latest data until 2008. Hence, the indicators reflect the latest available demographic development in the Swiss regions and, as such, the scientific basis for a discussion pertaining to questions on population-politics, and the economic and structural development of Switzerland.

The fundamental findings for Switzerland are:

- In the last years, the Swiss population has grown by roughly 1 percent annually. This is mainly due to migration gains from abroad, which are above average when compared with the rest of Europe.
- At the same time, this migration has reduced the speed of the aging of the population. Nevertheless, the many varied challenges of aging remain. In 2007, around 5 percent of the population were over eighty years old. By 2030, this percentage will have increased to about 8 percent.
- Switzerland has one of the highest life expectancy rates in Europe and has, at the same time, the highest increase in healthy life years for those above 65 years.
- The strong economic boom of the last years caused a rapid increase in the demand for foreign workers. In addition, the labour participation of 55 to 65 year olds and women has continuously increased, and is among the highest in Europe.
- Since the beginning of 2009, as a consequence of the economic crisis, the first signs of a change in the trends of this positive overall development are apparent. These indicators are: negative economic development, a predicted recession, rising unemployment figures and a reduction in migrants from abroad.

In order to act upon these expected population developments with vision and confidence, the

• ¹ European Commission (2007): European Regional and Urban Statistics. Luxembourg.

forthcoming young generations need to be prepared and educated accordingly. Only a creative approach to solutions and new business models can successfully meet the challenges of the economy and society, which will definitely be prominent in 15 to 20 years' time.

Switzerland

The regions of Switzerland have profited very differently from the cyclical development of the country during the last years. The federalism and associated autonomy of the cantons, as found for instance, in the educational system, additionally support this trend. How the regions develop in the areas of demography, economy or the labour market – areas, in which they are different and alike, shall be clarified by means of a regional examination of selected indicators. On a regional level, two large regions of Switzerland were chosen, which correspond to the NUTS-2-Regions of the European Commission. The statistical system of the territorial apportionment, called NUTS in short, provides a classification and comparison of the territorial areas of the member states of the European Union. In Switzerland, the region of Lake Geneva, Espace Mittelland, North West Switzerland, Zürich, East Switzerland, Central Switzerland and Ticino are among the NUTS-2-Regions.²

The Alps bestow upon the country a North-South divide, so that the development of the Swiss regions is strongly dependent on this geographical premise. Since the larger regions contain smaller heterogeneous areas that present themselves differently in their structure, this study will revert to additional single indicators at the smaller level of the cantons.

The examination of Switzerland is rounded-off by a comparison with selected countries such as Germany, France or Italy. The goal of this comparison is to highlight the similarities and differences with other European countries.

• ² European Commission (2007): European Regional and Urban Statistics. Luxembourg.

Demography

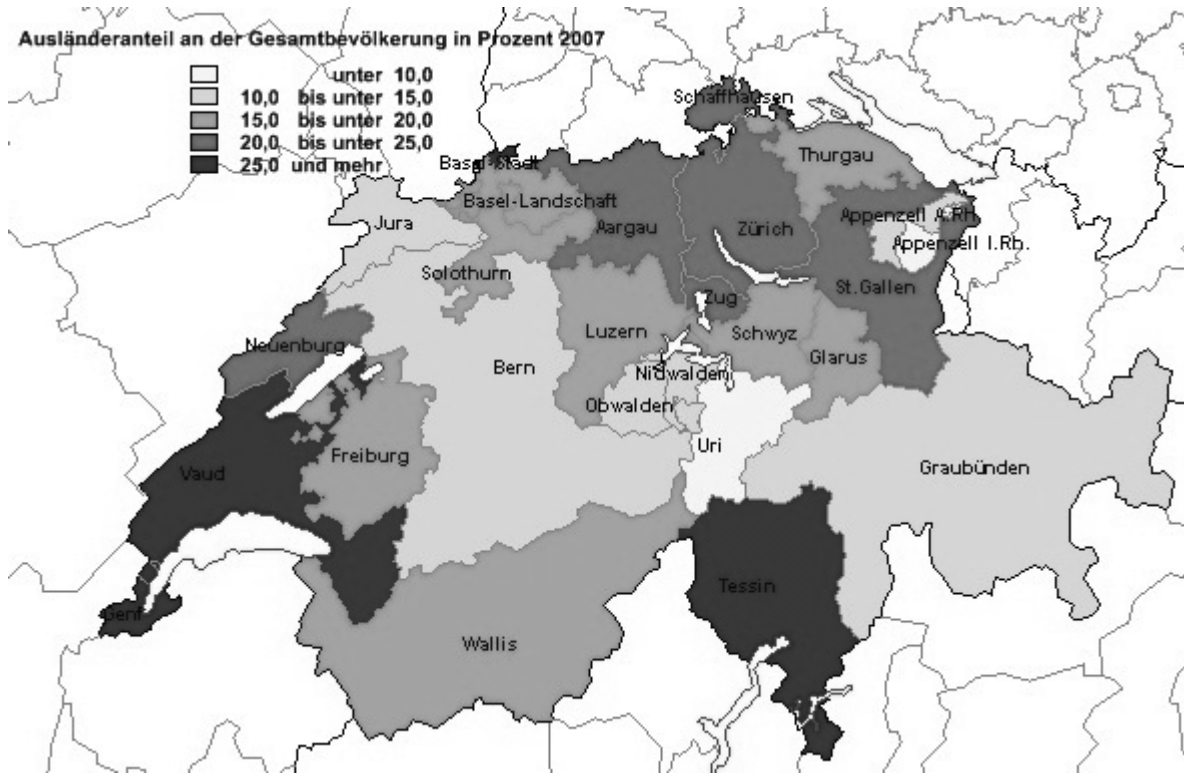
In the last years, Switzerland has grown strongly economically and changed demographically. The urban and rural areas, as well as the northern and southern regions profited from this positive development, even when not to the same degree. This picture of Switzerland is decisively influenced by migration, which not only leads to a rise in highly qualified workers in the labour market, but also slows down aging in urban agglomerations.

In 2007, around 22 percent of the Swiss population were foreign nationals; this corresponds to an increase of 1.8 percent on the previous year; only Liechtenstein and Luxembourg show a higher percentage in Europe. Since years, neighbouring countries such as Germany and Austria have a relatively constant proportion of foreign nationals - in Germany, this represents 8 percent and in Austria, 10 percent of the whole population. By contrast, the number of residents with foreign citizenship living in Italy has doubled over the last five years; nonetheless, its share of roughly 5 percent of the total population is relatively low.³ The number of immigrants residing for a short period in Switzerland is continuously abating in favour of a longer duration. In 2007, about half of those born abroad had been living in Switzerland for fifteen years and longer. Thanks to this development, the Swiss population grew in the period 2006 to 2007 by 1.1 percent to 7.59 million inhabitants.

According to provisional data, the population at 31.12.2008 was 7.7 million, which corresponds to a further increase of close to 100,000 inhabitants.

• ³ Organisation für wirtschaftliche Zusammenarbeit und Entwicklung (OECD)(2009): Datenbank.

Large regional differences as a percentage of foreigners



Data: Swiss Federal Statistical Office (Bundesamt für Statistik Schweiz).

Switzerland has roughly 22 percent of foreign nationals (2007). In relation to the population, the majority of foreign nationals live in the cantons of Geneva (37 percent) and Basle-Stadt (30 percent). The cantons of Uri (9 percent) and Appenzell Innerrhoden (10 percent) have the smallest number of foreign nationals.

In 2008, the Swiss population reached a peak growth rate of 1.4 percent, which at the same time corresponds to a gain of fourteen immigrants per 1,000 inhabitants; 86 percent thereof resulted from a change in status of foreign nationals who originally came to Switzerland on short-term work permits to permanent residence. The first monthly statistics of 2009 indicate a continuing growth of the Swiss population, however, at about 1 percent only.⁴

Across Europe a similar rise in population as found in Switzerland in 2008 was recorded in Ireland – an additional fifteen inhabitants for every 1,000 inhabitants.⁵ A clearly stronger growth is evident in the populations of smaller states such as Luxembourg, San Marino and Andorra. These countries are gaining nearly twenty new inhabitants per 1,000 annually. In contrast, countries such as Sweden, Holland, France and Italy only have an annual gain in population of between five and eight new

• ⁴ Bundesamt für Statistik Schweiz (2009): Datenbank.

• ⁵ Ein Bevölkerungszuwachs kann aus einem positiven Wanderungssaldo und einem Geburtenüberschuss resultieren.

inhabitants per 1,000.⁶

On separate examination of the nationality of immigrants in Switzerland, the 225,000 Germans constitute after the Italians, the second largest group of foreign nationals living in Switzerland. This trend of German migration continues – in 2007, about 41,000 Germans migrated to Switzerland; triple the number of immigrants in 2001. Thereby, migration from abroad is concentrated primarily on the urban agglomerations of Zurich, Geneva and Basle, which are the recognised commercial centres in Switzerland. At the same time, the Swiss population inside of Switzerland is migrating from peripheral regions to the city areas and from the city areas to the nearby suburbs.

Migration into all Swiss regions

Currently, all regions show a population growth – also in rural areas. Since 1997, there has been an opposite development in urban and rural regions, where only the urban regions have recorded growth. However, this opposite development showed a slight weakening due to the constantly high immigration into all regions. The splinter development in the midlands, which was strongly effected by the polarisation between the cities as growth regions and the rural areas as shrinking regions, has indeed not ended; since 2006 it is happening albeit at a slower pace.⁷ Consequently, the rural areas are also profiting from the migration from abroad as well as the sustained domestic migration. A similar development is also evident in France and Great Britain, where likewise the peripheral regions are showing a population growth.⁸

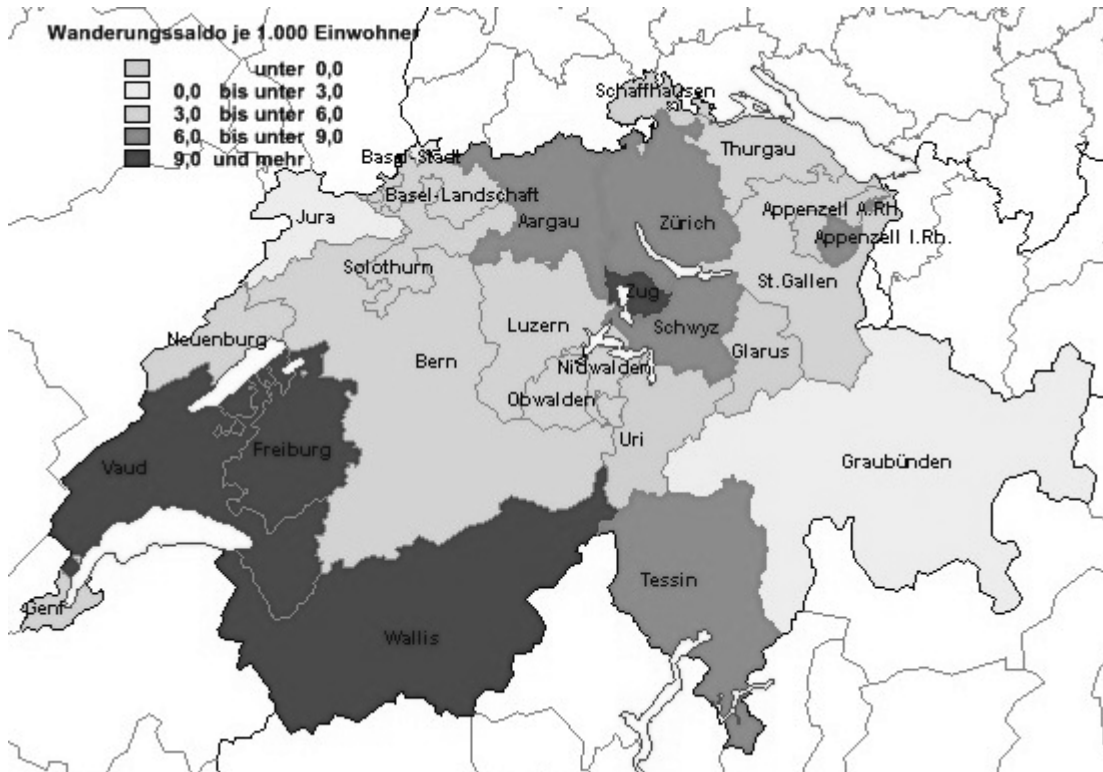
Large regions such as Espace Mitteland and Eastern Switzerland are still losing inhabitants due to domestic migration. However, these losses are compensated and contained by migration from abroad and still lead to a yearly rise of seven per 1,000 inhabitants. The highest rate of migration in the last four years is evident in the Swiss regions of Ticino and Lake Geneva – for every 1,000 inhabitants there are annually nine newcomers.

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- ⁶ Europäische Kommission (2009): Eurostat Online-Datenbank.
 - ⁷ Schuler, Martin et. al. (2007): Atlas des räumlichen Wandels der Schweiz. Neue Zürcher Zeitung. Zürich.
 - ⁸ Kröhnert, Steffen/Hoßmann, Iris/Klingholz, Reiner (2008): Die demografische Zukunft von Europa. Wie sich die Regionen verändern. München.

Migration causes strong rise in population figures

Annual migration balance per 1,000 inhabitants

Average of years 2004-2007



Base Data: Swiss Federal Statistical Office (Bundesamt für Statistik Schweiz).

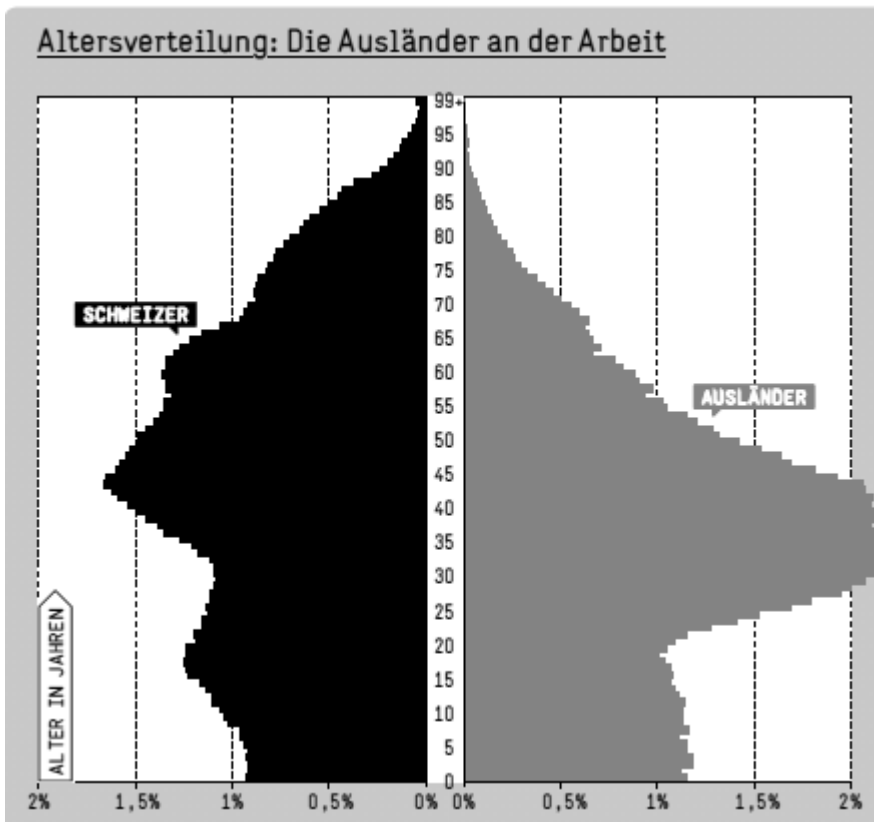
Due to migration, the population is growing in all large regions in Switzerland. Only in three from a total of 26 cantons are more people emigrating than immigrating: Appenzell Ausserrhoden (-0.3), Glarus (-0.9) and Uri (-1.0). In contrast, canton Freiburg, for example, gained thirteen new arrivals per 1,000 inhabitants in the years 2004 to 2007.

This high gain in population is based on migration and was only exceeded in 2007 by booming countries such as Iceland, Ireland and Spain; they gained between thirteen and seventeen new migrants per 1,000 inhabitants annually. The countries from which people previously emigrated have now the highest number of immigrants. However, not all European countries are benefiting from the strong migration. Countries such as Bulgaria and Poland are losing thousands of their population through emigration to Ireland and Spain. In contrast to Austria, countries such as Bulgaria and Poland cannot compensate, respectively mitigate for this loss caused by emigration. Therefore, on balance, Austria still gains two per 1,000 inhabitants. ⁹

• ⁹ Europäische Kommission (2009): Eurostat Online-Datenbank.

The immigration of people from abroad, who are primarily of an employable age, leads to interesting and special developments in the current demographic composition of the working population and will for certain have an influence in the future. Using Switzerland as an example, the Think Tank Avenir Suisse illustrates this:

Age Distribution: number of foreign nationals working



Source: Avenir aktuell, July 2009.

Foreign nationals are not only the larger group than the Swiss of an employable age, but they also have more offspring depending on their migration background. The majority of the people move abroad in their younger years in order to work or study. If they decide to stay longer or permanently they, at the same time, enter a phase of starting a family because of their age. Due to the foreign nationals, Switzerland not only compensates for the lack of skilled workers but also their lack of offspring.

Higher number of children per woman thanks to migrants

The fertility rate of Swiss women has increased slightly in the last years contrary to the prognosis of 2005 and is on average 1.33 children per woman. In addition, foreign women maintain, in comparison to local women, the number of children at a constantly higher level. On average, migrant women have about 1.86 children. Both of these developments have led to an increase in the average number of children to 1.46 in 2007 in Switzerland.

Particularly in the regions of Lake Geneva and Ticino, women have even more children. In the Lake Geneva region, the average number of children per woman rose from 1.45 in 2004 to 1.5 in 2006. Within these two years, Ticino was also able to raise the number of offspring from 1.19 to 1.24. Nevertheless, they are still below the national average and far below the number of children per woman in neighbouring Italy.¹⁰ In 2007, Italian women, for the first time again, had 1.38 children – a number which was last reached in the 1980s.

In relation to offspring, it is similar in Germany and Austria. In these countries, the average number of children per woman increased to 1.37. Also in France (1.98 children per woman) or in Sweden (1.88), women had on average more children in 2007 than compared to previous years. Already since the 1970s, countries such as France and Sweden have a higher number of offspring than Switzerland.¹¹ As is known, both have, as it were, “historically” working models and childcare structures, which are more family-friendly.

All in all, this is true for all countries. However, it remains to be seen if this is a common reverse in trend or a special phenomenon as seen in the increase of births among women aged above thirty, which is evident in Western Europe at the moment or if this is a “catching up” effect after a longer phase of smaller numbers in offspring due to transformation processes, which have occurred and still continue in the Baltic countries.

Accelerated aging of the population

All Swiss regions are fighting an aging society; particularly as the long-term outlook regarding offspring is too low to “rejuvenate” the population. Alone, the national and international migration caused by the immigration of young adults leads to the fact that the aging process is slower in city cantons. The peripheral regions suffer twice as much from aging, because they lose their employable population through migration and are also not attractive enough for foreign immigration. This “structural” aging process will even accelerate in the coming years. In particular, the regions Ticino, Eastern and Central Switzerland have lost about 3 percent of their population under the age of 35 in the last three years. At the same time, the ratio of people above 75 years of age has increased by roughly 6 percent. The economically attractive regions such as Lake Geneva and Zurich cannot extract themselves from this trend, but the aging of their populations is considerably slower.

• ¹⁰ Bundesamt für Statistik Schweiz (2009). Datenbank.

• ¹¹ Europäische Kommission (2009): Eurostat Online-Datenbank.

Future population developments in Switzerland

The latest projection issued by the Swiss Federal Statistical Office in 2009, assumes that the population will increase until 2038. Until this time, the population will have reached about 8.4 million, which is equivalent to an increase of 9.1 percent compared to the population of 2008. Thereafter, the positive balance in migration will not compensate for the death surplus and the population will decrease until the end of 2050 to about 8.3 million people. However, it remains open as to whether or not Switzerland, as the projection assumes, is capable of continuously gaining 0.2 percent through migration until 2050, because if there were a reverse trend in the economic development, the stream of migration would also change strongly. This current forecast cannot account for this, since reliable data from the labour market and economic development and their actual impact on the demographics are missing.¹²

The age quotient of 27 in 2008 (i.e., 27 people above the age of 64 per 100 people in the age range of 20 to 64 year olds) will continuously increase over the next decades and will have reached fifty by 2050. For each person in retirement age, there will be two people who are of employment age. In 2050, countries such as Germany, Spain, Italy, Slovenia and Greece will most likely be those with the highest age quotient in the EU-27. Germany will have an age quotient of 61; while in Italy there will even be 64 inhabitants over the age of 64 per one hundred 20 to 64 year olds.¹³

From a regional perspective, between 2008 and 2030 all of the seven large Swiss regions will have a population increase. Especially in Zurich, the region of Lake Geneva and in Central Switzerland, the number of inhabitants will increase by roughly 10 percent. Among the smaller cantons, there will be only three cantons with a decrease in population growth, namely Uri, Glarus and Basle-Stadt.

In 22 cantons, the age quotient in 2030 will be above forty persons in retirement age per 100 persons in employable age. Only the cantons Geneva, Waadt, Zurich and Zug, which are the most attractive for young working individuals, will have relatively low values of between 34 and 37. The rural cantons and those on the edge of the urban agglomerations will have values close to fifty or even above as young adults emigrate and aging persons in more or less large numbers remain.¹⁴

Increasing life expectancy and gain in healthy life years

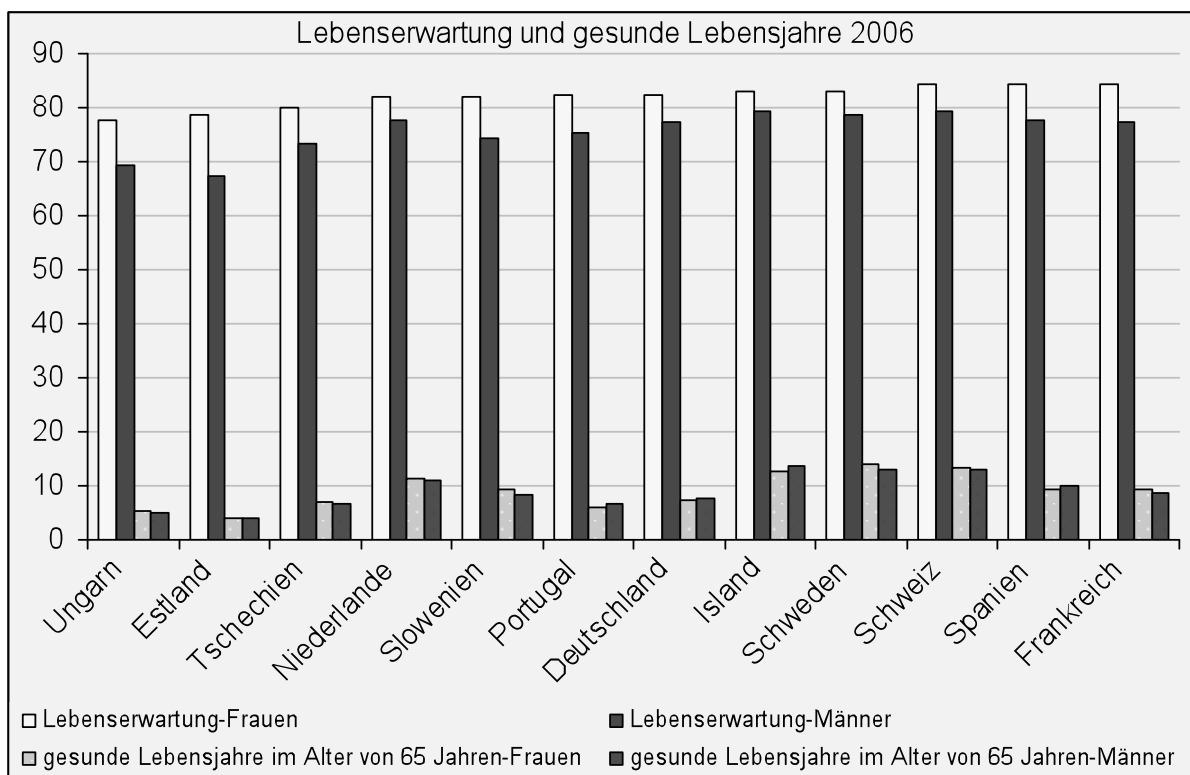
Even if the vast immigration of predominantly young people into Swiss regions slowed down the process of the aging population, the size of the older age group will continuously and inevitably increase. There

• ¹² Bundesamt für Statistik Schweiz (2009): Datenbank.
• ¹³ Europäische Kommission (2009): Eurostat, Online-Datenbank.
• ¹⁴ Bundesamt für Statistik Schweiz (2009): Datenbank.

is a distinct trend evident across Europe: without any exception, life expectancy is increasing especially in the age group of 60 years and older. This will not necessarily lead to an increase in mortality, but to possibly new and longer forms of chronic morbidity. A healthier lifestyle, genetic predisposition and, above all the availability of an efficient health system for all groups of people, influence this development significantly. During the last years, Switzerland has, similarly to all developed countries, registered a decreasing mortality rate and, at the same time, a rising percentage of older people.

High life expectancy in Switzerland

Life Expectancy and healthy life years 2006



Base Data: European Commission, Eurostat Online-Database. (Europäische Kommission Eurostat Online-Datenbank).

The Swiss population has not only one of the highest life expectancies in Europe, but is also comparably much healthier in old age. A 65-year old Swiss has approximately thirteen healthy years in front of him. High life expectancy does not necessarily equate to better health in old age; countries such as Germany and Portugal illustrate this. Both countries have a higher life expectancy than Slovenia or Holland; however, their 65 year olds have an average of two healthy life years in front of them.

The cause of the reduction in mortality is in part due to the rise in life expectancy, which in Switzerland is the highest across Europe. Currently, women reach 84.2 years, which is also the case in Spain and France, while male life expectancy is 79.4 years, which after Iceland, is the highest value in Europe; the Scandinavian countries Sweden and Norway with 78.8 years follow this closely. In contrast, since two

years, the life expectancy of men and women from Germany and Austria are two years below the Swiss values.

Another reason for the reduction in mortality could be gender-specific differences in life expectancy. Since the 1950s, the sixty to eighty year olds gain life years, although there is a strong difference between the sexes. This difference has decreased steadily since almost twenty years and has reduced to only a few years in Switzerland. The reason for the sex difference and corresponding life expectancy are explained by sex-specific illnesses. Men are more often affected by cardiovascular diseases, which are among the most common causes of death in Switzerland. In comparison, more young women are currently affected by an increase in lung cancer mortality.¹⁵ For example, in Eastern Switzerland, it has been documented that in the last twenty years the mortality rate of women dying from lung cancer has doubled.

The decisive reason for either a stagnating or sinking number of deaths in a continually aging society in Switzerland is most likely caused by a gain in healthy life years in older age. Since 1970, this ratio among very old people has multiplied increasingly. At the same time, the mortality rate has significantly decreased in all age ranges as a result of good health.

The gain in healthy life years means that 65-year-old Swiss men have a minimum of thirteen years in good health and, for women of the same age, almost half-a-year more. A similar picture in life expectancy can be observed when compared internationally. Icelandic men are not only getting older than the Swiss, but also have, at the age of 65, almost one more healthy life year in front of them. In Germany and Austria, the number of remaining years in good health is shrinking for the 65 year olds to about 7.4 years - a thought provoking value which is even outperformed by countries such as Italy, Poland and Slovenia.¹⁶

Increase in Dementia diseases

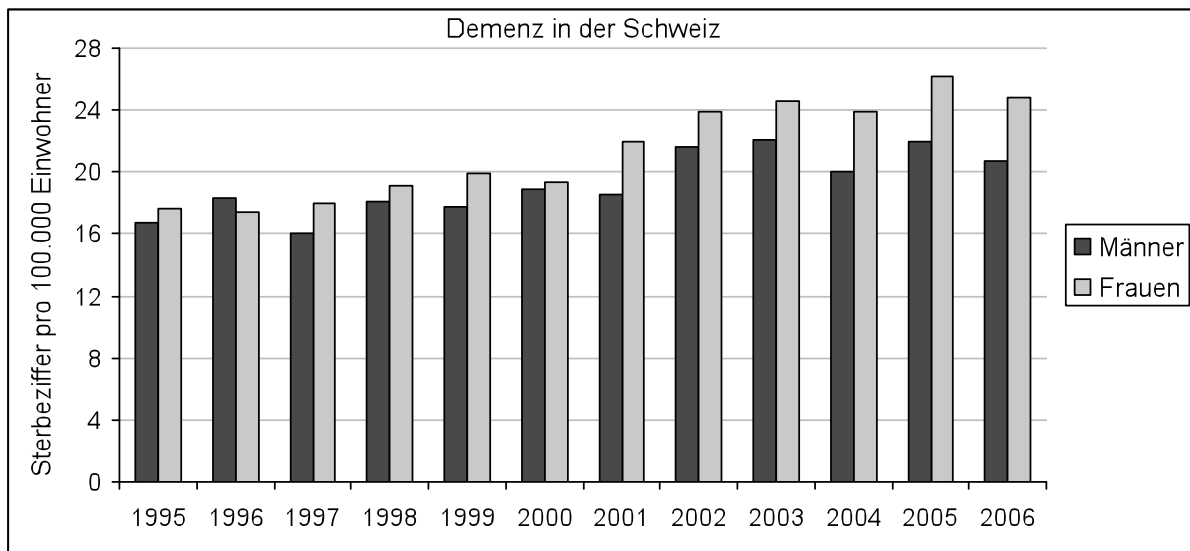
The three highest causes of death among the Swiss population are cardiovascular diseases (37 percent), cancer (26 percent) and for the first time since 2007 – dementia. The number of dementia diseases has practically doubled since 1997. Indeed, one can assume that the diagnosis of doctors today is faster and correct. In contrast, cardiovascular diseases as a cause of death have exhibited the highest decrease since many decades and are constantly below the level of Germany and Austria.

• ¹⁵ Bundesamt für Statistik (2009): Die Zukunft der Langlebigkeit in der Schweiz.
• ¹⁶ Europäische Kommission (2009): Eurostat Online-Datenbank.

There are approximately 5.3 to 5.8 million people living in the EU-27 who are suffering from dementia; this is equivalent to between 1.14 and 1.27 percent of the European population. In the last 45 years, this percentage has increased due to the aging population. According to the European Commission, the absolute number of sixty year olds and above suffering from dementia will increase from roughly five million to ten million in 2040. The highest number of people with dementia can be found in Italy and Sweden where around 1.5 percent of the entire population suffer from this disease. Germany and France show a similarly high rate as Switzerland - between 1.2 and 1.3 percent.¹⁷

Increase in dementia diseases as cause of death

Dementia in Switzerland



Base Data: Swiss Federal Statistical Office (Bundesamt für Statistik Schweiz).

In 2006, 3,606 people died from dementia diseases, whereof twice as many women as men. Two thirds of these people were older than 85 years. Since 1995, the death rate of women with dementia increased by 70 percent and men by 60 percent. The reasons for this are the increase in life expectancy and an aging population who predominantly fall ill to dementia.

Currently, the ratio of Swiss suffering from dementia doubles every five years for those aged 65 and above. In the age range of ninety year olds and above, some type of dementia causes already more than 30 percent of the illnesses. According to the calculations of the Swiss Health Observatory, this development could cause long-term care costs to double until 2030 due to the increasing number of people above eighty years of age.¹⁸

¹⁷ Alzheimer Europe (2009): Dementia in Europe. Yearbook 2007.

¹⁸ Schweizerisches Gesundheitsobservatorium (2008): Nationaler Gesundheitsbericht 2008. Neuchatel.

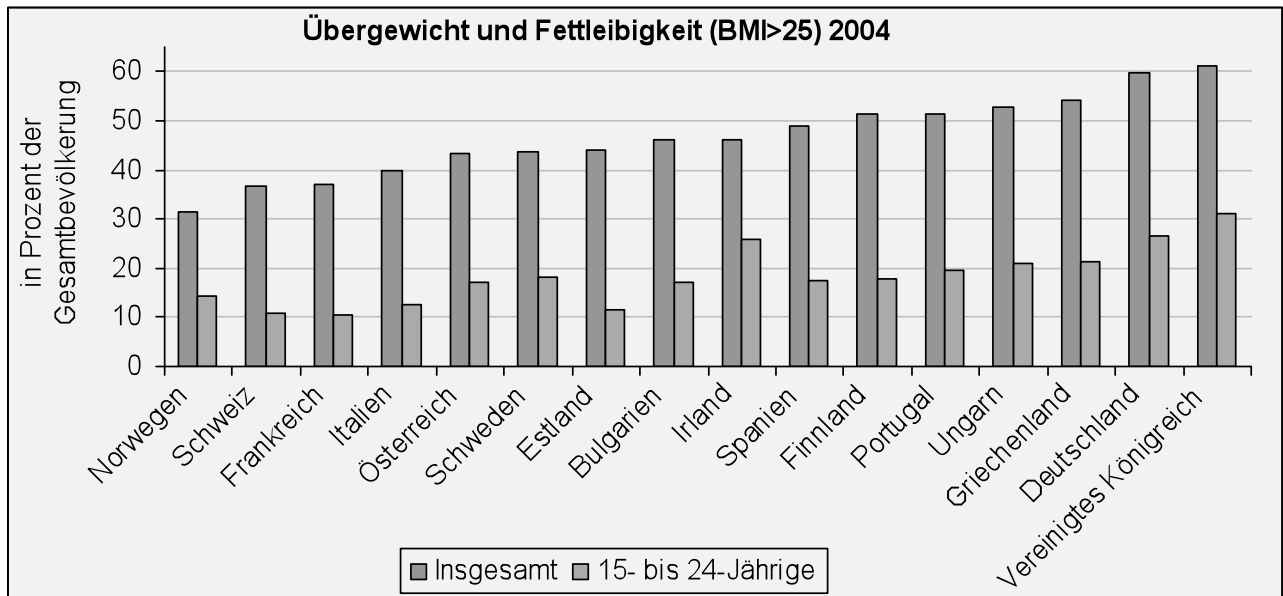
Adolescents are also an endangered group health-wise

The National Health Report of Switzerland criticises the state of health of its younger population. In particular, overweight and obesity arising from bad nutrition and a lack of exercise are increasing and reaching epidemic proportions. Already every ninth young Swiss aged between 15 and 24 years suffers from overweight, whereby this number is increasing with age. In comparison with the EU, this percentage is relatively low and is exceeded by countries such as Great Britain, Germany and Ireland – almost every third person in Great Britain, and every fourth in Germany and Ireland, between 15 and 24 years of age is above the average normal weight.¹⁹

Overweight and obesity often starts at a young age

More than a third of the Swiss population is overweight or obese. In comparison to the rest of Europe, this is by no means a peak value. In countries such as Greece, Germany and the United Kingdom, more than half the population has a Body Mass Index of above 25, which does not comply with normal weight. Particularly among the young population, being overweight is no longer an exception, which arises from insufficient exercise and a preference for fast food over a balanced diet.

Overweight and Obesity (BMI>25) 2004



Basis Data: European Commission, Eurostat Online Database. (Europäische Kommission Eurostat Online-Datenbank)

• ¹⁹ Europäische Kommission (2009): Eurostat Online-Datenbank.

At the same time, the consumption of legal drugs such as alcohol, and illegal drugs like cannabis has been increasing during the last twenty to thirty years. According to this report, the consumption of cannabis among the young in Switzerland is more prevalent than in any other country.

Furthermore, the suicide rate among adolescents in comparison to neighbouring countries is relatively high. According to the National Health Report, the rate among young men amounts to twenty cases of suicide per 100,000 inhabitants – twice as many as in France or Germany.²⁰

The economy

Switzerland's economy grew by more than 3 percent in the last two years until 2007 and, therefore, was above the average of the EU-27 countries having roughly 2.6 percent. Similarly high growth rates were achieved in Austria with 3 percent and Sweden with 3.6 percent. In contrast, the neighbouring countries Germany and Italy were only able to raise their average economic performance in comparison to the previous year by 1.5 and 1.9 percent respectively.

Switzerland is among those countries in Europe, which are the poorest in terms of natural resources, and contrary to countries like Norway with its oil reserves, is unable to gain from such profits. In order to maintain a prospering economy and to successfully compete in international markets, the Swiss economy, in sectors such as banks and insurances, life sciences and industrial markets, plays an above average value-adding role. The aggregate profit in the banking sector alone is more than 14 billion Euros; the entire financial sector accounts for 24 percent of the value creation of Switzerland.²¹

Another important factor in the Swiss economy is the tourist trade, the workplaces of which are location-wise secured. Particularly in the mountain areas and border regions, the tourist trade is the most important growth sector. In relation to the number of inhabitants, Ticino leads in terms of the numbers of guests staying overnight – for each inhabitant there are eight overnight stays per year. In Graubunden (region in East Switzerland) 30 percent of the GDP is created by the tourist industry and every third person employed is working in this sector. In Switzerland, in total, every tenth person is working in the tourist trade.

Up until 2008, Switzerland was able to record a growing demand for services in the tourist trade, but

• ²⁰ Schweizerisches Gesundheitsobservatorium (2008): Nationaler Gesundheitsbericht 2008. Neuchatel.
• ²¹ Europäische Kommission (2009): Eurostat Online-Datenbank.

already this year, a slight decrease in foreign hotel guests has begun. At the same time, the duration of stay is getting shorter. The first numbers for 2009 show a clear decrease in overnight stays at hotels for foreign as well local guests.²²

Social transfer decreases the difference in household income

Job markets with a high level of income are especially attractive to workers who are highly qualified and, for the most part, better paid; they move to the suburbs of the core cities having a high tax income. According to the salary index of the Swiss Federal Statistical Office, salaries have risen in 2008 by 2 percent. However, at the same time, the buying power of the salaries has decreased by half a percent. In Switzerland, there is a North-South divide due to the Alps with respect to salaries. Whereas, the difference in availability of household income is much smaller when compared to Great Britain or Germany.

During the last years, the urban areas of Zurich, Lake Geneva and Basle show a constantly high gain in household income. In contrast, rural regions in Graubünden and between Bern and Luzern show a below average income. In spite of this, the federalism in Switzerland allows for a high quality of living and low tax rates in some of these regions. Particularly on a communal level, good taxpayers are attracted which results in decisive advantages for the regional development of these locations.²³

In Eastern Switzerland and Ticino, household income, which is below the national average due to low salaries, is rising as a result of considerable financial aid. A Ticino household earns about 30 percent less per head compared to the affluent region of Zurich. Due to the fact that the dues and taxes for households with a lower income are lower and, at the same time, the measures for social contributions are higher, the difference in household income between Ticino and Zurich decreases by 5 percent. Consequently, due to their available household income, the people living in Ticino are “only” 25 percent below households in Zurich and about 17 percent lower than the average Swiss income.

The labour market

Three quarters of employed people work in the tertiary sector, which during past years has, simultaneously, also had the largest increase in the number of jobs compared to the primary and

• ²² Bundesamt für Statistik Schweiz (2008): Tourismus

• ²³ Thierstein, Prof. Dr. Alain et. al. (2006): Regionale Disparitäten in der Schweiz. Teilbericht 1. Zürich.

secondary economic sectors.²⁴ The strongest growth in this so-called service sector is accounted for by the health and social welfare sectors in which about 13 percent of all employees in Switzerland are employed; not even half thereof are working fulltime. At the same time, women dominate the social welfare and health sectors and account for three quarters of the employees.

A gain in workplaces has been recorded mainly in the large agglomerations. Strongly industrialised regions along the Jura, as well as the peripheral areas of the Alpine regions of Ticino and Graubünden have, by comparison, reduced the number of workplaces. The region Goms in canton Wallis shows, with minus 15.8 percent, the strongest loss percentage-wise; since 1995, every fifth workplace has ceased to exist.²⁵

Increased labour participation of the elderly and women

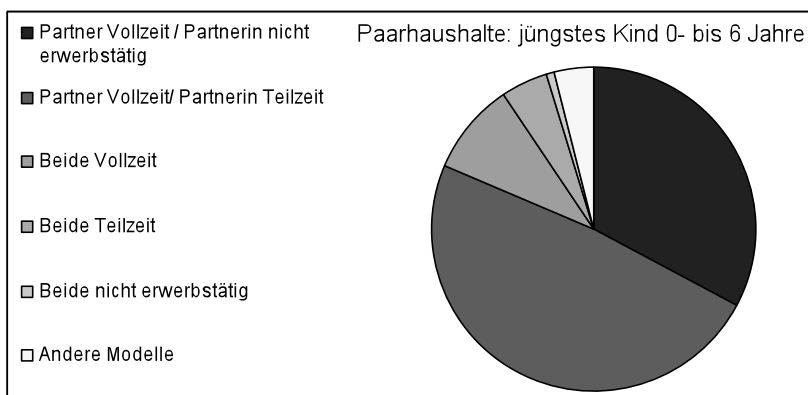
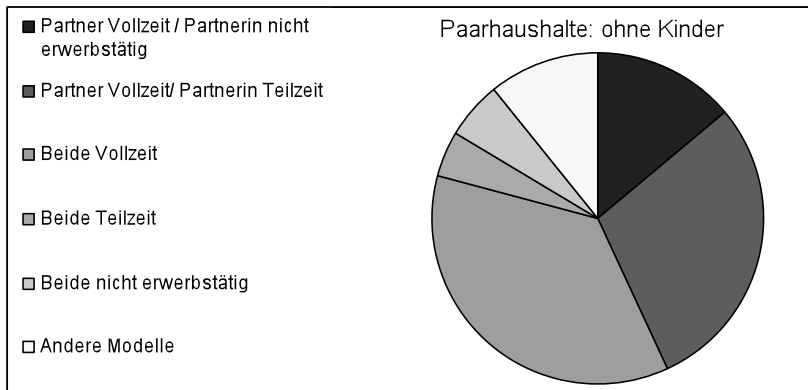
In six of the seven large regions, the employment quota has risen in the last two years. Ahead of all the regions is Zurich and Central Switzerland with about 82 percent of people of an employable age working; the national average is about 80 percent. Thus, in 2008 Switzerland reached, after Iceland, the highest employment quota in Europe.²⁶ The Scandinavian countries Norway and Denmark, where almost 78 percent of persons of employable age have a job, follow it closely. Also Holland, Austria and Germany have been able to raise their employment quota in the last years and have currently reached 77 percent in Holland, 72 percent in Austria and 71 percent in Germany. Only a small number of European countries have a lower labour participation of less than 60 percent. Among these are Italy, Hungary and Rumania where the quota of employment has been oscillating since years at 58 percent.

The increase in the employment quota in Europe and Switzerland can be traced back to the labour participation of women, which since the 1970s has risen continuously. During the last years, this last development has been accompanied by, and notwithstanding, an increase in the number of children per woman. Nevertheless, only every third woman employed in Switzerland has one or more children below the age of fifteen - in Zurich and North West Switzerland the figure is even only every fourth woman.

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- ²⁴ The labour market is divided into three economic sectors: the primary sector contains agriculture, the secondary sector – the industrial areas and trade; the tertiary sector encompasses the service sectors.
 - ²⁵ Schweizerische Arbeitsmarktstatistik (2009): Die Lage auf dem Arbeitsmarkt.
 - ²⁶ The Labour Force Survey defines the employment quota as a percentage of the employed persons of the employable population (15 years and older). Those who work at least one day per week counts as an employed person.

Couples employed full-time rarely have infants

Working model in percentages of households with a couple in 2008



Basis Data: Swiss Federal Statistical Office (Bundesamt für Statistik Schweiz).

In every Swiss household without children both partners work fulltime. Where one child is living in the same household, this is the case only in every eleventh household. Until the child is six years of age, mothers reduce their working hours or totally stop working. A lot less of a change occurs among male partners who work fulltime, independent of the birth and age of a child.

In addition, more and more older people between the age of 55 and 64 are pursuing employment. This has led to a stronger effect on the total rising employment quota than the number of employed women. The Swiss region Ticino comes last in the area of employing older people. Having a rate of less than 55 percent of older people being employed, this large region is way below the national rate of 69 percent. Still, in Switzerland, the level of employment in all regions is higher compared to the neighbouring countries Austria (41 percent), France (38 percent) and Italy (34 percent). By contrast, in Germany and Holland every second person aged between 55 and 65 has a job; this is a rising tendency.

In the face of an aging society and a gain in healthy life years in older life, the employment of older people contains an important potential to counteract the foreseeable shrinking population, which is employable. However, the numbers demonstrate that many employees do not work until retirement age – either for health reasons, missing opportunities to be part of employed life until the age of 65 or due to

offers from employers to opt for early retirement.

In Switzerland, employees on average reach retirement by the age of 63.5. However, the legal retirement age is 65 and thus more than one year above the average age of retirement. Thereby, Switzerland next to Norway, Sweden and Holland is among the few countries in Europe in which this discrepancy is relatively small and which has significantly decreased in the last years.

Also in the face of the rising costs of pensions (AHV) and pension funds, it is in the interest of Switzerland to make the legal retirement age a reality. This is not only dependent on the employability of employees, but also on the declared will of employers to keep older employees in their jobs.

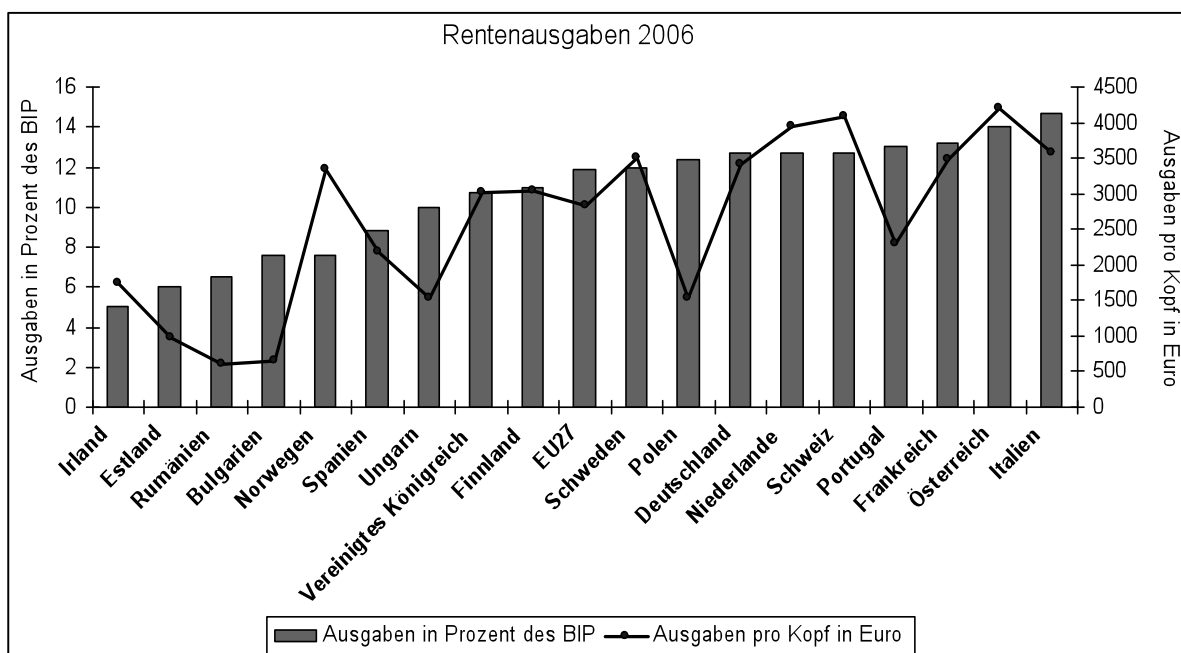
The state expenses of Switzerland for retirement provisions, when measured against the GDP, have not risen in the past years. However, this appears contradictory given the continuously larger group, which is receiving state and private pension payments. Still, this can be explained by the continuous rise in both the cost of pensions and GDP. Nonetheless, the absolute cost of the state per head shows a rise in pension costs.

The rise in pension costs in Switzerland is no exception when compared to the rest of Europe. The Eastern and South European countries easily surpass this increase three-fold. Rumania has increased its expenses for pensions since 2003 by 51 percent, Estonia by 45 percent, Slovakia by 31 percent and Hungary by 27 percent. Nevertheless, these countries reach, even after these enormous increases, only one third of the costs per head that Switzerland incurs. Estonia spends about 970 Euros per head for pension payments; in 2006, it was about 4080 Euros per head in Switzerland.²⁷

• ²⁷ Europäische Kommission (2009): Eurostat Online-Datenbank.

High pension expense per head in Switzerland

Pension Expenses 2006



Basis Data: European Commission (2009): Eurostat Online Database. (Europäische Kommission Eurostat Online-Datenbank)

Compared to the GDP, the expense for pensions in Europe is between 5 percent in Ireland and 14.7 percent in Italy. The discrepancy between the amounts of expenses of the single countries is more imminent if the amount per head is compared. Here the expense for pensions in Rumania is only 14 percent of the amount of pension in Austria or Switzerland.

Unemployment tightly coupled with the state of the economy

The unemployment rate of 5 percent in the Swiss region of Ticino is the highest in Switzerland. In the regions of Eastern and Central Switzerland less than 3 percent are unemployed - therefore reaching practically full employment. Since 2005, the unemployment rate in all seven large regions has decreased. Simultaneously, the number of people not working and thus not available for the employment market has also decreased. However, the first market data for 2009 has announced a significant increase in unemployment and forecasts no further increase in employment.²⁸

A similar development is becoming apparent in all European countries. The sinking unemployment rates until mid 2008 have been constantly rising again since Spring 2009 at the latest. Countries such as Holland and Austria reached almost full employment of its population in 2008. Within a few months since the beginning of 2009, having unemployment rates of 2.8 percent and 3.8 percent respectively,

²⁸ Bundesamt für Statistik Schweiz (2009): Themen, Datenbank.

they had to register a rise of 0.4 percentage points and thus thousands of newly registered unemployed. Nevertheless, these unemployment rates are below the average of the EU-27 countries in which about 7 percent of the employable population in 2008 were registered as unemployed and were also available for a job. Similar figures can be found in France (7.8 percent), Germany (7.3 percent) and Italy (6.8 percent).

The unemployment rate among adolescents aged between 15 and 24 years has developed similarly to that of the overall unemployment. However, unemployment among adolescents reacts stronger to the economic situation and fluctuates more strongly than the quota of unemployment as a whole. The economic upturn of the last years has led to a decrease of 7 percent in the unemployment of young people, but the number of young people without work will increase in 2009. Still, unemployment among young people is relatively low in comparison to France with its rate of 19 percent. Especially in Spain, young people have been strongly affected by the downturn in the economy. In May 2009, already 37 percent of those below 25 years of age and able to work were registered as seeking work. One year before, it was about 24 percent. Thereby, adolescents having a low education and/or having a background of migration are more often affected by unemployment than well-educated and local people of the same age.²⁹

“Brain Drain” in peripheral regions

Single peripheral areas such as Ticino have a high quota of people who have completed high school and university. Every third person in Ticino has a high school diploma and almost every sixth has a university degree. Nonetheless, the region cannot directly benefit from this. It suffers from highly qualified people leaving, because they are unable to find adequate jobs, the lack of career possibilities and long distances to the Swiss centres. This so-called “Brain Drain” hinders the development possibilities of many mountain and border regions because knowledge-intensive services are found predominantly in the large centres. Zurich, with its concentration of highly qualified workplaces in the banking and insurance industry as well in the area of specialised services, is far above the average for the country.

• ²⁹ Kröhnert, Steffen/Hoßmann, Iris/Klingholz, Reiner (2008): Die demografische Zukunft von Europa. Wie sich die Regionen verändern. München.

Effects of the depressed economy

The state institution of the European Commission, Eurostat has projected a recession of 2.3 percent in 2009 compared to the previous year.³⁰ The first figures from the Swiss Federal Statistical Bureau acknowledge a loss of jobs and increasing unemployment. Already in 2008, there is evidence of a change in trend in the tourist trade due to an absence of foreign visitors. Up until now, most of the migrants having low qualifications have found a job in this sector.

The influx of immigrants from abroad has not decelerated until now. Compared to the previous year, 30 percent more people immigrated to Switzerland in 2007; the migration balance (immigration minus emigration) doubled during this period. Also in 2008 and 2009 immigration from abroad reached peak figures and only started to slightly decrease during the last months. Still, these three years are to be seen as an upward statistical anomaly which were primarily influenced by the economic boom taking place simultaneously.

The current migration in Switzerland can therefore be seen as a mirror image of the economic situation. This can additionally fluctuate considerably, for example, due to other factors such as asylum seekers coming from conflict regions, the alleviation of family unification and implementation of free movement within the EU. This was the case on June 1, on which date, the full free movement within the 17 EU and EFTA states was implemented.

To date, Switzerland has lost only little attraction for foreign immigrants. In particular, Germans continue to make use of this free movement of persons. The decisive engine of immigration and emigration is and has always been the economic development. In the case of a continuing recession in the country, the implications for thousands of migrants and their families are not foreseeable. In retrospect, the policy is inclined, in the case of economic crisis situations, to react with restrictive measures to limit immigration and hinder the acquisition of permanent residence permits.³¹

• ³⁰ Europäische Kommission (2009): Eurostat Online-Datenbank.

• ³¹ Vuilleumier, Marc (2007): Schweiz. In: Bade, Klaus et. al.(Hg.) (2007): Enzyklopädie Migration in Europa. Paderborn.

Demography and sustainability

What actually are the driving forces, which at first glance explain the rather less spectacular topic of “Switzerland and its demography?”

Demography allows, on the one hand, a view into the future of a community, the economy and prosperity. On the other hand, every nation demonstrates with its current population composition a form of chronicled historical incidences. By no means bound to the “blink of a moment”, man lives namely from the past and with a view into the future. In order to be able to accept individual responsibility in this situation, one relies upon a far-sighted and elementary framework of accountability of the delegates responsible for policy, society and the economy.

Demographic change is a global phenomenon, which will also not leave Switzerland untouched. Like any other country, Switzerland has a unique demographic pattern as well as an individual timetable in the future. In this timetable, the specialities of migration will, on the one hand, when compared with other European states, be delayed and, on the other hand, possibly somewhat weakened. However, Switzerland will also need to actively deal with the following question and strive to find an answer:

“How can sustainable prosperity and competitiveness be ensured in a shrinking society with low birth rates, a decreasing portion of a population in a traditionally employable age and an almost exponentially growing older generation?”

On an individual level, this means bringing income and consumption into balance, which can be accounted for due to the realities of a continuing and increasing life expectancy for a good 200 years. First and foremost, at the state level, a new balance of income and expenses of the social security systems (AHV, IV, Pension funds, etc.) must be found.

While designing this new balance it needs to be considered that, we are not only faced with “over-aging”, but also with “too few young”. What is important is a fair and, at the same time, productive relationship between the generations. In order to achieve this, not separating the generations, but having one society for all is to be aspired to in the future. The gain arising from increased life expectancy contains human capital potential that is currently not even close to being utilised.

Ultimately, in Switzerland today the social contract that goes back to the social laws of Bismarck in the nineteenth century is valid – a strict and legally-governed separation of the learning, working and

retirement phases. While in the nineteenth century the retirement phase consisted of only a few years at best, we are now facing a situation in Europe in which the retirement phase is increasingly longer than the working phase. In addition to this, a shortening of the learning and working phases is for sure not an option in an economy which is based on knowledge.

Nonetheless, the national economies with aging populations are not damned to stagnation and zero growth. It is essential to strengthen the existing human capital through the life-long attainment of further qualifications, albeit on the basis of having a healthy body and mind as well as up-to-date working models for men and women, which will also facilitate compatibility between profession and family.

In principal, Switzerland is in a good starting position to meet this challenge. In comparison to other countries, the level of preparedness is high to adjust work-life flexibly and according to the situation. Contributing to this is the very good state of health of the Swiss population, which is one of best compared to the rest of Europe.

It is particularly for this reason that one of the European Unions' "Lisbon Goals" is to advocate, respectively to raise the employment of older people, and thus continue to ensure prosperity and growth. What should be in the foreground are suitable work models, which correspond to the interests of everybody involved rather than generally raising the retirement age. Some countries' model calculations, which are especially affected by a loss in population (e.g. Germany), show interesting possibilities. According to this, through better activation of the 55 to 65 year olds, the expected decrease of 0.4 percent of employed people in the future can be compensated and even over-compensated for regardless of the shrinking population.³² A full time employment in the production or building sectors might not be an option for a 67 year old, but it might be of interest for a manager of this age. The transition to a flexible working environment needs to be accompanied by flexible working models, especially in relation to retirement.

The gain in health in older age should not belie the forthcoming enormous and growing care requirements of this group. In particular, a heavy burden will arise for those family members involved in homecare. With the current working models and the lack of salary concepts for family members involved in caretaking means this job can be barely performed.

The demographic change demands from society and policy an interminable and sustainable change in

• ³² Eberstadt, Nicholas / Groth, Hans (2008): Die Demografiefalle, Stuttgart.

thinking and acting in the key areas of education, health and working hours.

Awareness - a solution

In order to seize the highlighted demographic challenge with vision and confidence – defined as a shrinking society with a low birth rate, declining population groups of an employable age and an almost exponentially-growing aging population – it is our responsibility to prepare the future affected parties. We have to particularly prepare and educate today's twenty year olds so that they, facilitated by a creative approach to solutions and new working models, can successfully meet the challenges of the economy and society which will definitely be prominent in 15 to 20 years' time.

The first step on the way to this decision is a broad public discourse on the question: "What happens to a country such as Switzerland if one does not tackle demographic change?" Then the arising pressure will undoubtedly lead to courses of action and the setting of priorities.

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Appendix

The Demographic Future of Europe - Updated Regional Analysis Switzerland 2009; Berlin-Institute for Population and Development

Data and Score (1 = highest value, 6 = lowest value)

Total Score

Schweizer Großregionen (NUTS-2)	Gesamtnote	
	2005/2006	2008
Genfersee	2,08	1,92
Espace Mittelland (mit Bern)	2,13	2,04
Nordwestschweiz	2,17	2,08
Zürich	2,00	1,88
Ostschweiz	2,00	2,00
Zentralschweiz	2,08	1,92
Tessin	2,42	2,29
Schweiz	2,08	1,92

Sector: demography

Schweizer Großregionen (NUTS-2)	Kinderzahl je Frau				Unter 35-Jährige				Frauenanteil je 100 Männer			
	2004	Benotung	2006	Benotung	2005	Benotung	2008	Benotung	2005	Benotung	2008	Benotung
Genfersee	1,45	4	1,50	4	42,8	4	42,3	4	101,4	1	100,0	1
Espace Mittelland (mit Bern)	1,43	4	1,43	4	40,8	4	39,8	5	99,3	1	99,6	1
Nordwestschweiz	1,35	4	1,37	4	40,4	4	39,5	5	100,0	1	98,9	2
Zürich	1,43	4	1,46	4	40,7	4	40,3	4	99,6	1	98,3	2
Ostschweiz	1,40	4	1,38	4	42,8	4	41,3	4	99,4	1	99,0	2
Zentralschweiz	1,44	4	1,47	4	43,4	4	42,0	4	100,3	1	98,7	2
Tessin	1,19	5	1,24	5	37,8	5	36,4	5	103,1	1	102,0	1
Schweiz	1,42	4	1,43	4	41,5	4	40,6	4	100,1	1	99,3	1

Base Data: Eurostat, Swiss Federal Statistical Office (Datengrundlage: Eurostat, Bundesamt für Statistik Schweiz)

Schweizer Großregionen (NUTS-2)	Jährlicher Wanderungssaldo				Über 75-Jährige				Prognose 2030				Zwischennote Demografie	
	2001 bis 2004	Benotung	2004 bis 2007	Benotung	2005	Benotung	2008	Benotung	2005 bis 2030	Benotung	2009 bis 2030	Benotung	2005	2008
Genfersee	6,0	2	8,9	1	7,3	3	7,5	3	12,1	2	9,2	2	2,67	2,50
Espace Mittelland (mit Bern)	8,4	1	4,8	2	8,3	4	8,6	4	7,8	3	6,0	3	2,83	3,17
Nordwestschweiz	4,5	2	5,1	2	7,5	3	8,0	3	6,3	3	6,0	3	2,83	3,17
Zürich	5,8	2	8,9	1	7,4	3	7,6	3	13,1	2	10,3	2	2,67	2,67
Ostschweiz	7,9	1	3,4	3	7,6	3	7,8	3	5,8	3	6,3	3	2,67	3,17
Zentralschweiz	3,1	3	6,4	2	6,7	3	7,0	3	11,4	2	9,8	2	2,83	2,83
Tessin	5,8	2	9,0	1	8,8	4	9,3	4	9,3	2	7,5	3	3,17	3,17
Schweiz	6,4	2	6,4	2	7,6	3	7,9	3	9,2	2	7,8	3	2,67	2,83

Base Data: Eurostat, Swiss Federal Statistical Office (Datengrundlage: Eurostat, Bundesamt für Statistik Schweiz)

Sector: health

Schweizer Großregionen (NUTS-2)	Lebenserwartung*				Säuglingssterblichkeit*				Zwischennote Gesundheit	
	2005	Benotung	2008	Benotung	2005	Benotung	2008	Benotung	2005	2008
Genfersee	81,3	1	81,8	1	4,2	2	3,9	1	1,50	1,00
Espace Mittelland (mit Bern)	81,3	1	81,8	1	4,2	2	3,9	1	1,50	1,00
Nordwestschweiz	81,3	1	81,8	1	4,2	2	3,9	1	1,50	1,00
Zürich	81,3	1	81,8	1	4,2	2	3,9	1	1,50	1,00
Ostschweiz	81,3	1	81,8	1	4,2	2	3,9	1	1,50	1,00
Zentralschweiz	81,3	1	81,8	1	4,2	2	3,9	1	1,50	1,00
Tessin	81,3	1	81,8	1	4,2	2	3,9	1	1,50	1,00
Schweiz	81,3	1	81,8	1	4,2	2	3,9	1	1,50	1,00

* No data available at regional level

Base Data: Eurostat, Swiss Federal Statistical Office (Datengrundlage: Eurostat, Bundesamt für Statistik Schweiz)

Sector: education, science and technology

Schweizer Großregionen (NUTS-2)	Jugendarbeitslosigkeit*				Hoch Qualifizierte			
	2006	Benotung	2008	Benotung	2006	Benotung	2008	Benotung
Genfersee	7,8	1	7,0	1	33,2	2	35,7	2
Espace Mittelland (mit Bern)	7,8	1	7,0	1	27,8	3	29,8	2
Nordwestschweiz	7,8	1	7,0	1	29,3	3	33,3	2
Zürich	7,8	1	7,0	1	34,4	2	36,6	1
Ostschweiz	7,8	1	7,0	1	25,1	3	27,1	3
Zentralschweiz	7,8	1	7,0	1	27,2	3	30,0	2
Tessin	7,8	1	7,0	1	27,5	3	30,9	2
Schweiz	7,8	1	7,0	1	29,7	3	32,2	2

* No data available at regional level

Base Data: Eurostat, Swiss Federal Statistical Office (Datengrundlage: Eurostat, Bundesamt für Statistik Schweiz)

Schweizer Großregionen (NUTS-2)	Forschung und Entwicklung*				Patentanmeldungen*				Zwischennote Bildung, Wissenschaft, Technologie	
	2003	Benotung	2004	Benotung	2003	Benotung	2006	Benotung	2006	2008
Genfersee	2,9	2	2,9	2	366	1	212	1	1,50	1,50
Espace Mittelland (mit Bern)	2,9	2	2,9	2	366	1	212	1	1,75	1,50
Nordwestschweiz	2,9	2	2,9	2	366	1	212	1	1,75	1,50
Zürich	2,9	2	2,9	2	366	1	212	1	1,50	1,25
Ostschweiz	2,9	2	2,9	2	366	1	212	1	1,75	1,75
Zentralschweiz	2,9	2	2,9	2	366	1	212	1	1,75	1,50
Tessin	2,9	2	2,9	2	366	1	212	1	1,75	1,50
Schweiz	2,9	2	2,9	2	366	1	212	1	1,75	1,50

* No data available at regional level

Base Data: Eurostat, Swiss Federal Statistical Office (Datengrundlage: Eurostat, Bundesamt für Statistik Schweiz)

Sector: economy

Schweizer Großregionen (NUTS-2)	Verfügbares Einkommen				Umverteilung				Bruttoinlandsprodukt*		Fremdenverkehr				Zwischennote Wirtschaft	
	2004	Benotung	2005	Benotung	2004	Benotung	2005	Benotung	2005	Benotung	2003 bis 2005	Benotung	2006 bis 2008	Benotung	2005	2008
Genfersee	18073	1	20237	1	71,4	1	69,3	1	34149	1	6,6	2	7,0	2	1,25	1,25
Espace Mittelland (mit Bern)	17569	1	19602	1	71,9	1	71,2	1	29233	2	3,3	4	3,6	3	2,00	1,75
Nordwestschweiz	20334	1	22248	1	74,6	1	74,3	1	48277	1	1,5	5	1,8	5	2,00	2,00
Zürich	23671	1	22968	1	75,4	1	75,8	1	45734	1	2,8	4	3,2	4	1,75	1,75
Ostschweiz	17686	1	18396	1	72,7	1	71,4	1	33962	1	7,1	2	7,5	2	1,25	1,25
Zentralschweiz	19203	1	20958	1	76,4	2	73,9	1	38384	1	4,6	3	5,2	3	1,75	1,50
Tessin	17040	2	16955	2	74,2	1	74,8	1	27476	2	7,9	2	8,3	2	1,75	1,75
Schweiz	19085	1	20548	1	73,8	1	72,6	1	36745	1	4,8	3	4,8	3	1,50	1,50

* No data available at regional level

Base Data: Eurostat, Swiss Federal Statistical Office (Datengrundlage: Eurostat, Bundesamt für Statistik Schweiz)

Sector: employment market

Schweizer Großregionen (NUTS-2)	Erwerbstätigkeit				Arbeitslosigkeit				Langzeitarbeitslose*			
	2006	Benotung	2008	Benotung	2006	Benotung	2008	Benotung	2006	Benotung	2008	Benotung
Genfersee	74,2	2	75,6	2	5,2	2	4,6	2	37,2	4	34,3	3
Espace Mittelland (mit Bern)	79,2	1	80,5	1	3,8	1	3,3	1	37,2	4	34,3	3
Nordwestschweiz	77,4	1	80,0	1	4,0	1	3,1	1	37,2	4	34,3	3
Zürich	80,6	1	81,6	1	3,8	1	3,1	1	37,2	4	34,3	3
Ostschweiz	78,8	1	81,3	1	3,7	1	2,7	1	37,2	4	34,3	3
Zentralschweiz	80,2	1	81,6	1	2,7	1	2,3	1	37,2	4	34,3	3
Tessin	70,1	2	70,0	3	5,5	2	5,0	2	37,2	4	34,3	3
Schweiz	77,9	1	79,5	1	4,1	2	3,4	1	37,1	4	34,3	3

* No data available at regional level

Base Data: Eurostat, Swiss Federal Statistical Office (Datengrundlage: Eurostat, Bundesamt für Statistik Schweiz)

Schweizer Großregionen (NUTS-2)	Frauenerwerbstätigkeit				Altersbeschäftigung				Zwischennote Arbeitsmarkt	
	2006	Benotung	2008	Benotung	2006	Benotung	2008	Benotung	2006	2008
Genfersee	66,8	2	69,6	2	61,0	2	62,5	1	2,40	2,00
Espace Mittelland (mit Bern)	73,0	1	74,7	1	66,2	1	70,4	1	1,60	1,40
Nordwestschweiz	71,5	2	73,8	1	63,9	1	67,9	1	1,80	1,40
Zürich	73,7	1	76,4	1	70,3	1	71,7	1	1,60	1,40
Ostschweiz	71,7	2	75,9	1	70,2	1	71,9	1	1,80	1,40
Zentralschweiz	74,1	1	75,3	1	67,9	1	71,4	1	1,60	1,40
Tessin	60,9	3	61,0	3	52,5	3	54,8	2	2,80	2,60
Schweiz	71,1	2	73,5	1	65,7	1	68,4	1	2,00	1,40

Base Data: Eurostat, Swiss Federal Statistical Office (Datengrundlage: Eurostat, Bundesamt für Statistik Schweiz)

Sector: climate

Schweizer Großregionen (NUTS-2)	Kohlendioxid-Emission*				Trend Kohlendioxid*				Regenerative Energien*				Zwischennote Klima	
	2005	Benotung	2006	Benotung	1990 bis 2005	Benotung	1990 bis 2006	Benotung	2005	Benotung	2007	Benotung	2005	2007
Genfersee	6,2	2	6,1	2	3,3	4	2,2	4	17,5	2	19,9	2	2,67	2,67
Espace Mittelland (mit Bern)	6,2	2	6,1	2	3,3	4	2,2	4	17,5	2	19,9	2	2,67	2,67
Nordwestschweiz	6,2	2	6,1	2	3,3	4	2,2	4	17,5	2	19,9	2	2,67	2,67
Zürich	6,2	2	6,1	2	3,3	4	2,2	4	17,5	2	19,9	2	2,67	2,67
Ostschweiz	6,2	2	6,1	2	3,3	4	2,2	4	17,5	2	19,9	2	2,67	2,67
Zentralschweiz	6,2	2	6,1	2	3,3	4	2,2	4	17,5	2	19,9	2	2,67	2,67
Tessin	6,2	2	6,1	2	3,3	4	2,2	4	17,5	2	19,9	2	2,67	2,67
Schweiz	6,20	2	6,1	2	3,3	4	2,2	4	17,5	2	19,9	2	2,67	2,67

* No data available at regional level

Base Data: Eurostat, Swiss Federal Statistical Office (Datengrundlage: Eurostat, Bundesamt für Statistik Schweiz)

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