

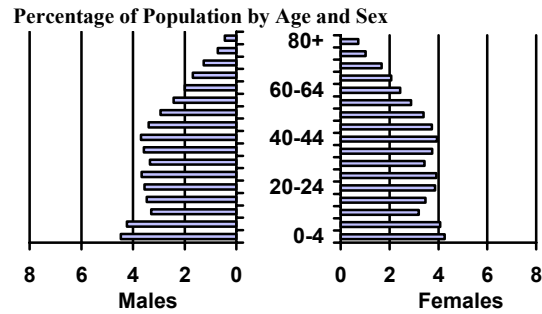
SWITZERLAND

Switzerland's population has aged rapidly over the past 50 years. The figures at right show the percentage of Switzerland's total population by five year age groups, separately for males and females. In 1950, Switzerland's population distribution formed essentially a pyramid shape, where each successively younger age cohort represents a larger portion of the total population.

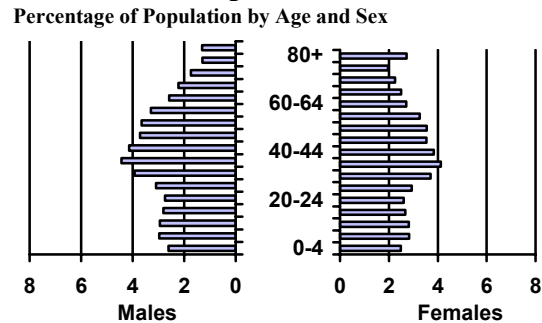
Between 2000 and 2050, Switzerland's birth rate fell to 2.28 to 1.38, and life expectancy rose about 9 and 11 years for males and females, respectively. These factors caused the population structure to shift to a formation more representing a pillar shape, where the total population is more evenly distributed among the age cohorts. The bulge in the middle-aged cohorts was caused by the surge in fertility rates and immigration that occurred during the 1950s and 1960s.

Looking to the future, the anticipated mix of low birth rates with continued improvements in life expectancy will result in a much older society, where the population structure more closely depicts an inverted pyramid. By 2030, Switzerland will have an average age of nearly 48 years old compared to today's average age of 41.

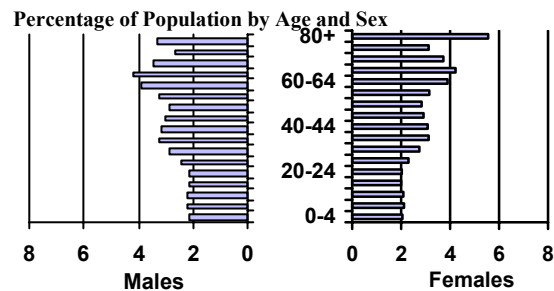
Switzerland's Population Structure in 1950



Switzerland's Population Structure in 2000



Switzerland's Population Structure in 2030



Source: UN Population Division, World Population Prospects (The 2000 Revision).

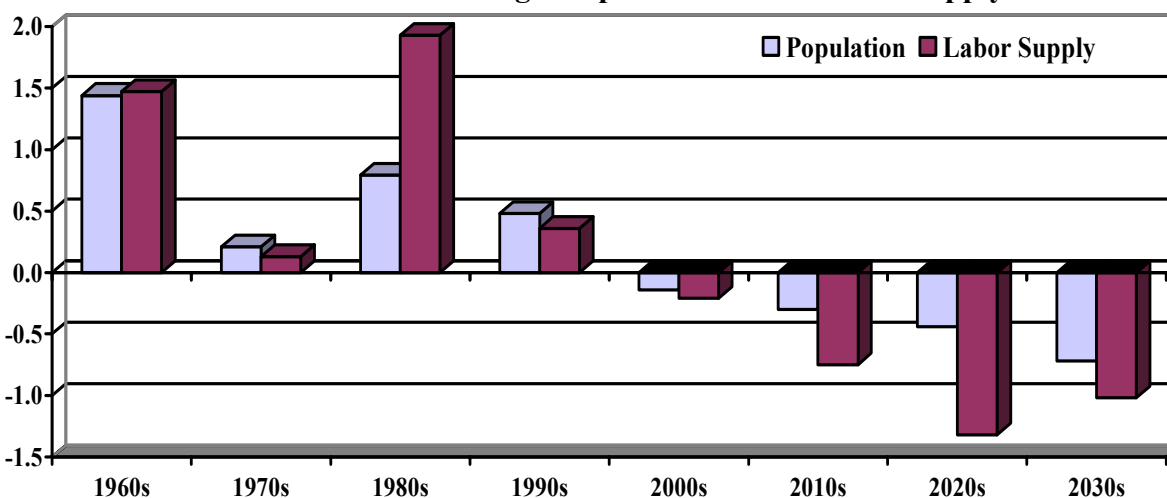
Demographic History

	1950	1960	1970	1980	1990	2000
Life Expectancy at Birth						
Males	67.00	68.90	70.80	72.90	74.60	75.90
Females	71.60	74.60	77.00	79.59	81.30	82.30
Life Expectancy at 65						
Males	-	-	-	79.70	80.50	81.42
Females	-	-	-	83.47	84.45	85.58
Fertility Rate	2.28	2.51	1.82	1.53	1.54	1.38
Net Migration Rate	2.38	4.34	-0.17	2.27	3.04	0.28

A critical component of a society's ability to expand its production of goods and services is the growth of its labor force. As Switzerland's population aged over the past half-century, its labor force has undergone considerable changes as well. Soon after the end of World War II, many industrialized societies, including Switzerland, experienced a significant spike in birth rates that produced the generation known as the baby boom. Switzerland also saw its immigration rates increase dramatically, to over 4 percent per year during the 1960s. Labor supply growth increased considerably during the 1960s and 1980s as immigrants and baby boomers entered the workforce, including an unprecedented number of females. However, more restrictive immigration policies in the late-1960s caused immigration rates to plummet throughout the 1970s, which also slowed the pace of labor supply growth over the period. Overall, sizeable labor supply growth combined with lower fertility rates created a period of high workforce participation in Switzerland. This led to a decrease in total dependency rates of about 19 percent between 1970 and 2000, and a drop of 41 percent in youth dependency over this period.

As the baby boom generation passes into retirement over the next few decades, labor supply growth is expected to decline at a pace even faster than the rate of change of the population. This is caused by the combination of several factors – prolonged low fertility, improving life expectancy and a greater proportion of the population in age groups that have lower propensities to work. In fact, over the 2020's and 2030's Switzerland's labor force is anticipated to shrink at an annual rate of over 1.0 percent. As a result, Switzerland will face a much greater percentage of its population being inactive, reflected by over a 50 percent increase in the total dependency ratio and more than a doubling in old age dependency rates between 2000 and 2030.

Annual Percent Change: Population versus Labor Supply



Source: World Bank, World Development Indicators database

Dependency Ratios

	1970	2000	2030	% change 1970-2000	% change 2000-2030
Youth- (Inactive pop 0-19)/ LF 15+	0.57	0.34	0.31	-40.46	-8.53
Aged- (Inactive pop 55+)/ LF 15+	0.29	0.36	0.75	23.96	107.76
Total- (Inactive pop 0-19 and 55+)/ LF 15+	0.86	0.70	1.06	-18.60	51.59

Source: Sources: International Labor Office, LABORSTA database, current through 2001; UN, Population Division, World Population Prospect (The 2000 Revision); OECD, CDE database on labor statistics, current though 2002

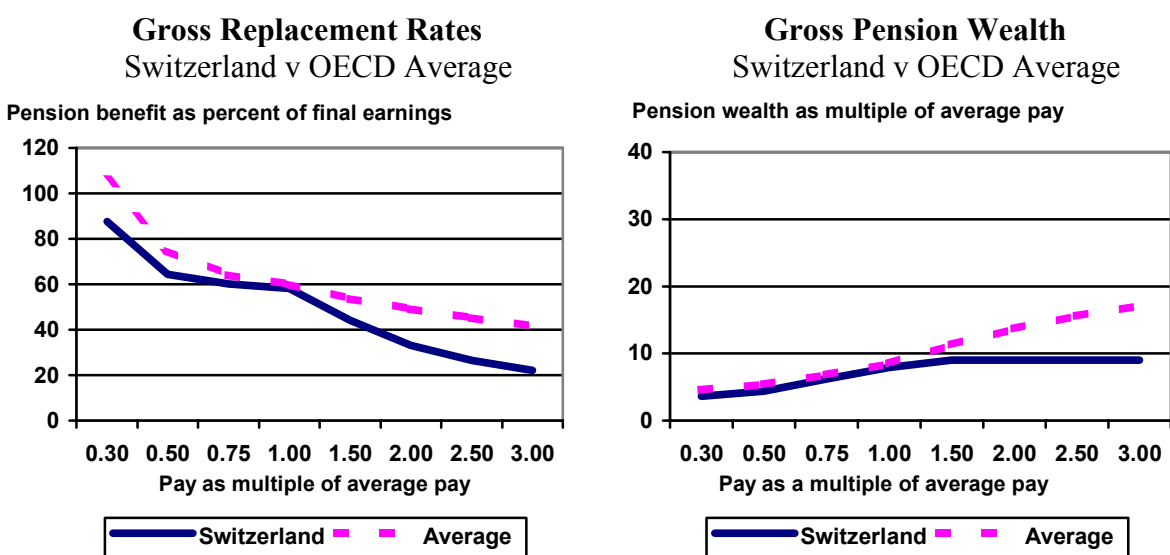
Old Age Pension System

Switzerland's old age pension system consists of a flat-rate benefit and an earnings-related benefit, with various supplements paid in respect to dependents. For an employee who has contributed for all years from age 21, the two portions are calculated with respect to a base index of CHF 12,660 and revalued average annual earnings. If a retiree's average lifetime earnings are less than three times the base index, then a benefit amount of CHF 9,368 plus 0.26 times revalued average annual earnings is paid. Otherwise, the flat benefit is equal to CHF 13,166 plus 0.16 times revalued average annual earnings. There is a minimum pension of CHF 12,660, about 20 percent average earnings, and a maximum benefit of twice that level, about 40 percent average earnings. There is a limit on the earnings of a single person at retirement to the career average revalued salary of six times the minimum annual pension. In the case of a married couple, both spouses receive an individual pension that is split equally between them. In determining the benefit, each individual's earnings are used before marriage and 50 percent of the joint earnings during the marriage. A male retiree must be 65 and a female 63 with at least one year's worth of contributions into the system to claim any benefit. By January 1, 2005, female retirement age will increase to age 64. To fund the system the insured and employers each contribute 4.2 percent of earnings for old-age and survivors and 0.7 percent for disability insurance.

Switzerland's benefit system is also comprised of mandatory occupational plans that were established in 1985. Each employee has an individual pension account which accrues credits based on employee contributions. Mandatory contributions vary from 7 percent to 18 percent (depending on sex and age) of income between CHF 25,320 and CHF 75,960. At retirement, the credits are converted into a benefit amount payable under the same age qualifications as the basic benefit. Both sections of Switzerland's old age system are price indexed and adjusted every two years. Finally, there is a supplemental benefit that increases a single retiree's pension to a minimum of about 27 percent of average earnings.

As indicated by the figures below, Switzerland's old age pension system is a rather progressive scheme provides lower than OECD average replacements rates for all employees except those earning close to average earnings over their career. Pension wealth is in line with the OECD average for employee's earnings up to average earnings, but is capped at just less than 10 percent for those with higher earnings.

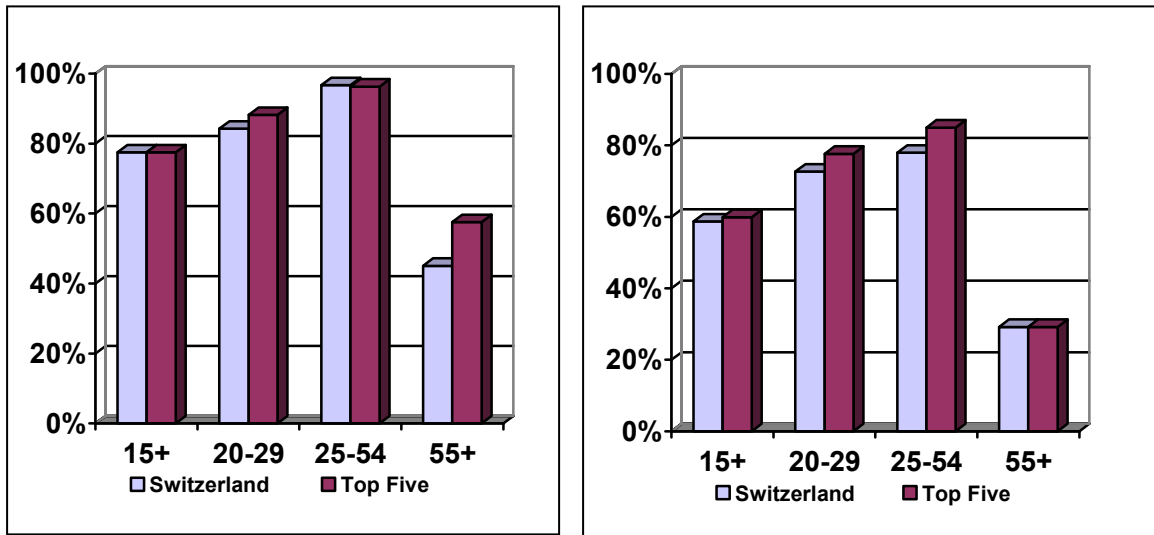
Source: Whitehouse, Edward (2003), Social Security Administration, Social Security Programs Throughout the World (2002) and Watson Wyatt Data Services (2003) "Benefits Report Western Europe, USA & Canada".



Source: Whitehouse, Edward (2003)

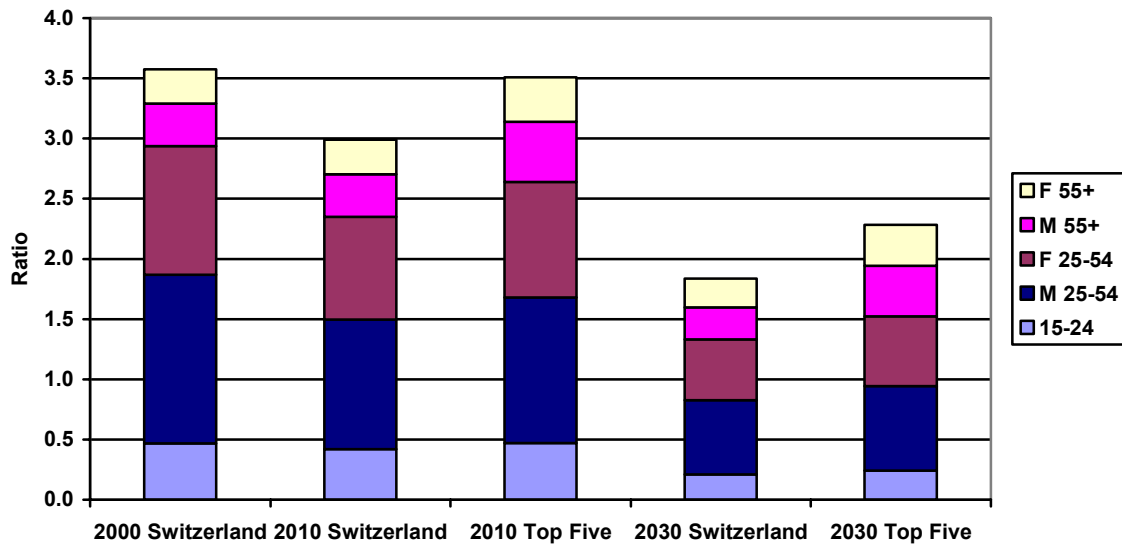
Notes: Pension wealth estimates are a multiple of economy-wide average.

Labor Force Participation Rates: Switzerland v Top Five OECD Country Composite
 Males Females



Source: OECD, Corporate Data Environment database on labor statistics, current though 2002

Ratio of Workers in Switzerland 15+ to Retirees 60+ in 2000, 2010 and 2030 and Under Alternative Assumptions of Old Age Participation Rates for the Top Five OECD Countries



Source: UN Population Division, World Population Prospects (The 2000 Revision); OECD, Corporate Data Environment database current though 2002

A major source of the burden caused by demographic aging is due to rising dependency rates. In the coming decades, Switzerland will need to figure out how to support a growing inactive population with fewer workers. A remedy to this problem is to adopt programs that promote greater workforce participation at all ages. Some countries excel at achieving high workforce participation across various age and gender groups. The figures above show how Switzerland's labor force participation stacks up next to the average of the Top-five OECD nations. Activity rates in Switzerland fall short of rates in the Top-five countries for every age and gender group. Most noticeably, older individuals participate in the labor force to a lesser extent than those in the Top-five countries. If Switzerland adopts measures to increase labor force participation of older age groups (55+) to rates similar to the Top-five OECD nations, it could significantly reduce its old age dependency rates. As shown in the figure above, if Switzerland maintains its current activity rates between 2000 and 2030, the ratio of workers to retirees is expected to fall from about 3.6 to 1.8. However, by adopting policies to entice workers to defer their retirement at rates similar to those achieved by the Top-five OECD nations, Switzerland could reduce its dependency burden by raising its activity rate to 2.3 workers per retiree in 2030.