

SWEDEN

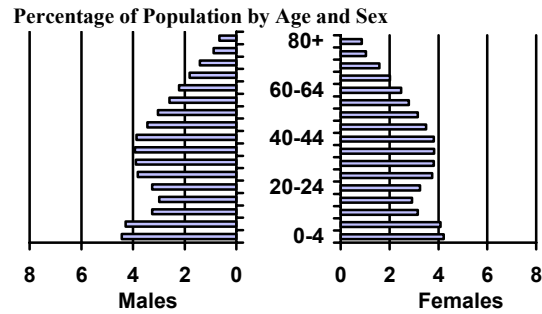
Sweden's population has aged rapidly over the last 50 years. The figures at right show the percentage of Sweden's total population by five-year age groups separately for males and females. In 1950, Sweden's population distribution reveals a classic pyramid shape, where each successively younger cohort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

However, the drop in fertility rates during the Depression and WWII created a slight indentation for several younger cohorts.

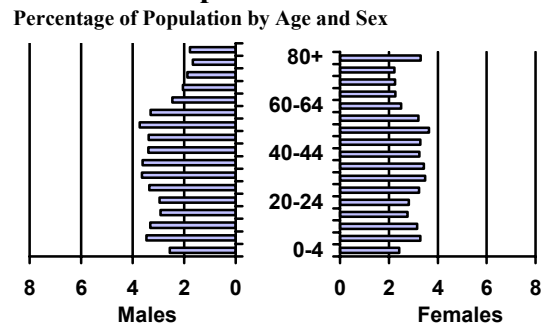
Between 1950 and 2000, Sweden's fertility rate plummeted from 2.21 to 1.29 and life expectancy at birth rose by 8 and 10 years for males and females, respectively over this period. As a result, Sweden's population structure diverged from the classic pyramid shape and was replaced by a formation more closely representing a pillar, where the percentage of the population in each age cohort is more evenly distributed.

By 2030, 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, Sweden will have an average age of 47 years, compared to an average age of 41 today.

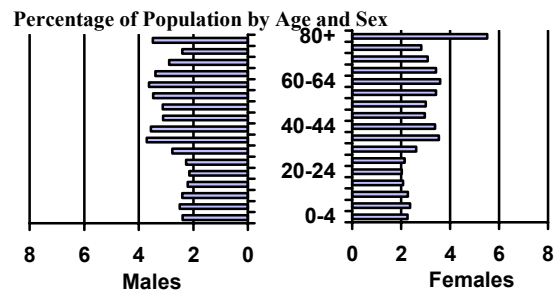
Sweden's Population Structure in 1950



Sweden's Population Structure in 2000



Sweden's Population Structure in 2030



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

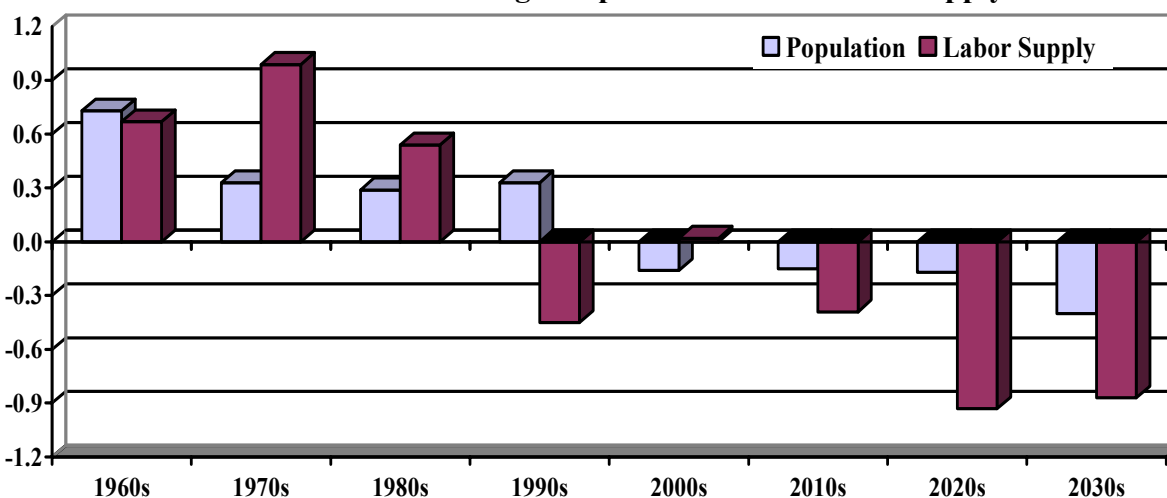
Demographic History

	1950	1960	1970	1980	1990	2000
Life Expectancy at Birth						
Males	70.40	71.60	72.10	73.37	75.47	77.58
Females	73.30	75.60	77.50	79.34	80.89	82.63
Life Expectancy at 65						
Males	-	-	79.06	79.54	80.71	81.73
Females	-	-	82.02	83.28	84.32	85.52
Fertility Rate	2.21	2.32	1.89	1.65	2.01	1.29
Net Migration Rate	0.62	0.99	0.24	0.32	1.76	0.57

A critical component of a society's ability to expand its production of goods and services is the growth of its labor force. As Sweden's population aged over the past half-century, the growth of its labor force underwent changes as well. Soon after the end of World War II, many industrialized societies, including Sweden, experienced a significant spike in birth rates that produced the generation known as the baby boom. Labor supply growth increased during the 1960's and 1970's as the baby boom generation, including an unprecedented number of its female members, entered the workforce. However, low fertility rates over the 1970's and 1980's caused population growth to slow considerably. This created a temporary period where a greater percentage of the population was economically active. Between 1970 and 2000, youth dependency rates in Sweden fell by about 12 percent, while total dependency decreased slightly by roughly 2 percent.

As the baby boom generation passes into retirement over the next few decades, labor force 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. The exception is over the current decade, where labor force growth is being propped up by the temporary spike in fertility rates that occurred in the latter part of the 1980's and early 1990's. However, looking out over the coming decades, Sweden's labor force is anticipated to shrink and in fact approach annual rates of decline of 1.0 percent. As a result, Sweden will face a much greater percentage of its population being inactive, reflected by over a 23 percent increase in the total dependency ratio and a 65 percent rise 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+	0.49	0.43	0.37	-11.88	-15.30
Aged- (Inactive pop 55+)/ LF 15+	0.33	0.40	0.67	21.29	65.08
Total- (Inactive pop 0-19 and 55+)/ LF 15+	0.82	0.84	1.03	1.55	23.55

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

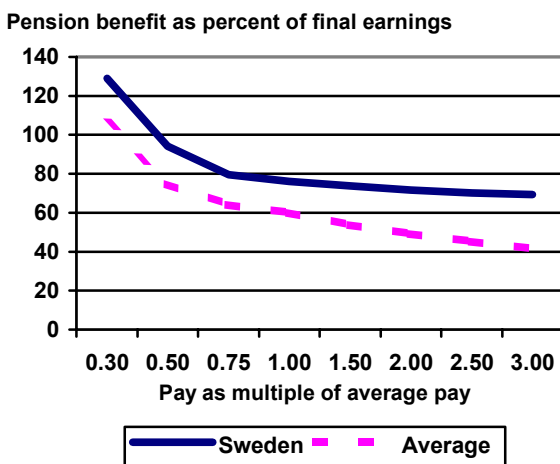
Sweden's public pension system underwent sweeping reforms in 1999, intended to eliminate most subsidization in the system and tie benefits more closely to contributions. The new system applies to all employees born after 1954 and is being gradually applied to those born between 1938 and 1953; employees born before 1938 will not participate in the new system. The new public system has three tiers: an "income pension", a "premium pension" and a "guarantee pension".

The income pension is an earnings-related benefit based on a notional accounts system. Contributions of 16 percent of pay on earnings in excess of SKr 8,952 are credited to an employee's notional account. At retirement, the value of the account is converted into an annuity based on age at retirement and life expectancy of the employee's birth cohort. Retirement is possible beginning at age 61, and the annuity is indexed to earnings growth and adjusted annually. The premium pension allows for 2.5 percent of an employee's earnings to be paid into personal pension account. The employee has a broad choice of investments options for the funds in their account and employees can opt to have the investments decisions made for them by a chosen fund manager. At retirement, the balance of the account plus interest is converted into an annuity. The last tier of the public pension system in Sweden is the guarantee pension, an income-tested benefit to top-up mainly low-paid workers with smaller notional-account levels. Three years of residency is required for this benefit, and the payment is reduced for less than 40 years' residency. For a single person, the maximum guaranteed benefit amount is SKr 77,958, about 36% average earnings and the payment is price indexed. As indicated by the figures below, Sweden's old age pension system provides a relatively rich benefit compared to other OECD nations and likewise workers can accumulate quite significant amounts of pension wealth within the system.

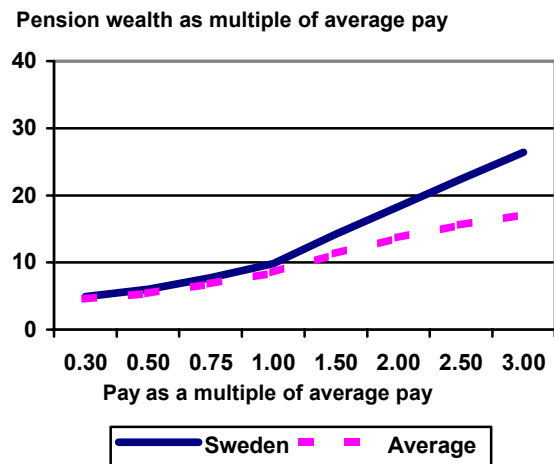
Additionally, about 90% of employees in Sweden are covered by occupational plans. Employees are typically required to join such plans if they are offered by an employer. Many of these plans are either defined contribution schemes or mixes of defined benefit and contribution elements.

Source: Whitehouse, Edward (2003) and Social Security Administration, Social Security Programs Throughout the World (2002).

Gross Replacement Rates
Sweden v OECD Average



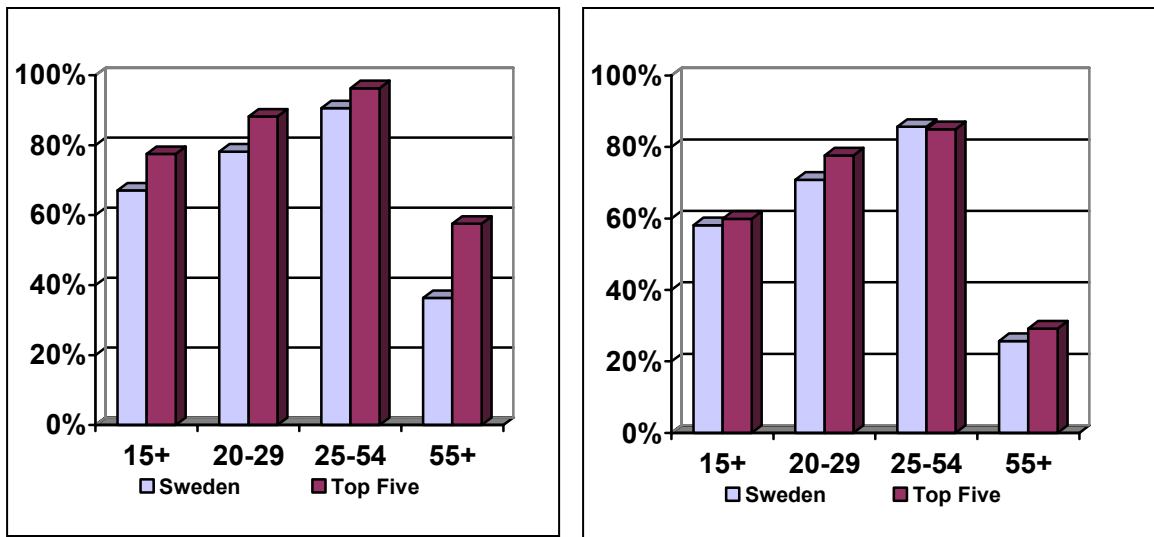
Gross Pension Wealth
Sweden v OECD Average



Source: Whitehouse, Edward (2003)

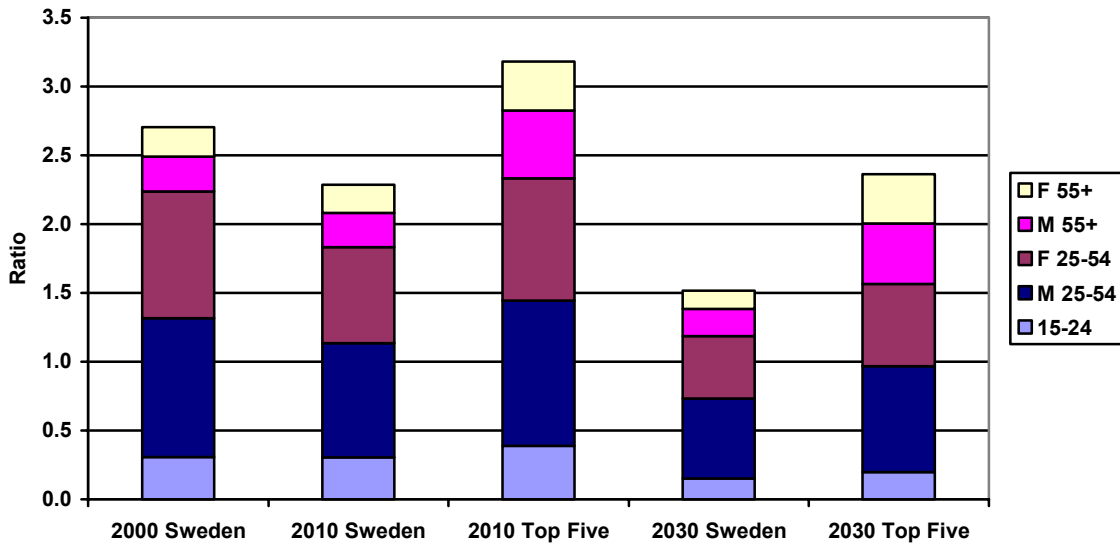
Notes: Pension wealth estimates are a multiple of economy-wide average.

Labor Force Participation Rates: Sweden v Top Five OECD Country Composite



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

Ratio of Workers in Sweden 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

Much of the burden caused by demographic aging is due to rising dependency rates. In the coming decades, Sweden 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 Sweden's labor force participation stacks up next to the average of the Top-five OECD nations. Activity rates in Sweden 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 much lesser extent than those in the Top-five countries. If Sweden 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 figures above, if Sweden maintains its current activity rates between 2000 and 2030, the ratio of workers to retirees is expected to fall from nearly 2.7 to 1.5. However, by adopting policies to entice workers to defer their retirement at rates similar to those achieved by the Top-five OECD nations, Sweden could reduce its dependency burden by raising its activity rate to 2.4 workers per retiree in 2030.