

NORWAY

Norway's population has aged rapidly over the past 50 years. The figures at right show the percentage of Norway's total population by five year age groups separately for males and females. In 1950, Norway's population distribution formed a classic pyramid shape, where each successively younger age cohort represents a larger portion of the total population. However, the drop in fertility rates during the Depression and WWII created a slight indentation for several younger cohorts.

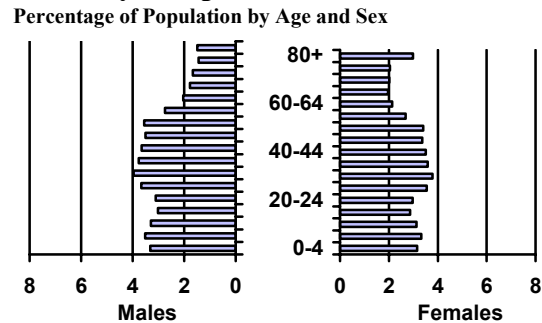
By 2000, Norway's birth rate fell from 2.6 in 1950 to 1.7, and life expectancy rose 5 and 7 years for males and females, respectively. These factors caused the population structure to shift to a shape more representing a pillar, where the total population is equally distributed among the age cohorts. The bulge in the middle aged cohorts represents the surge in fertility rates following WWII that produced the baby boom generation.

Looking to the future, the anticipated mix of low fertility rates with rising life expectancy will lead to a fulfillment of a pillar formation. By 2030, the Norway will have an average age of nearly 44 years old compared to today's average age of 39.

Norway's Population Structure in 1950



Norway's Population Structure in 2000



Norway's Population Structure in 2030



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

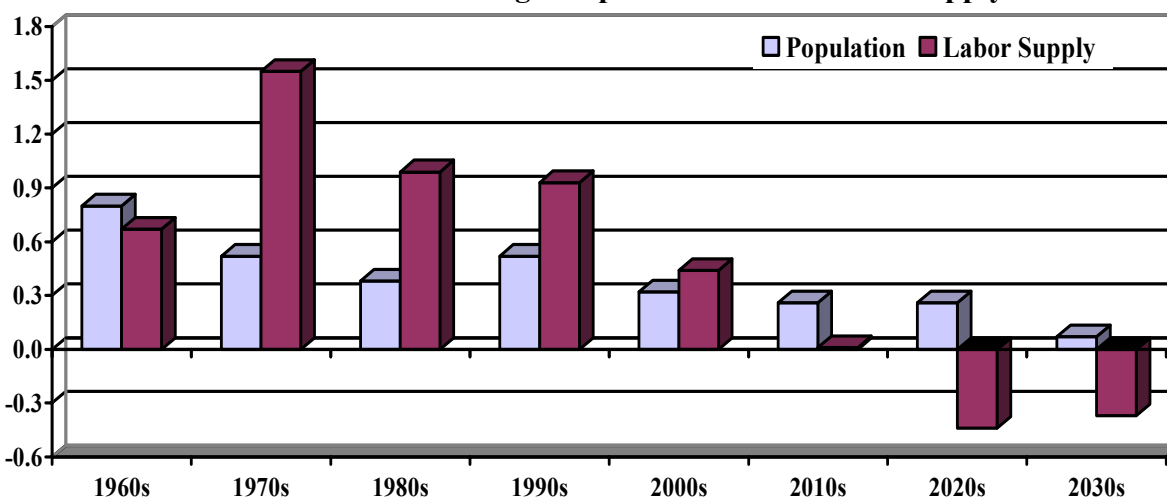
Demographic History

	1950	1960	1970	1980	1990	2000
Life Expectancy at Birth						
Males	70.92	71.10	71.38	72.85	74.28	76.00
Females	74.50	75.90	77.60	79.53	80.33	81.90
Life Expectancy at 65						
Males	-	79.22	78.94	79.38	79.96	80.86
Females	-	80.96	81.92	83.32	83.96	85.05
Fertility Rate	2.60	2.90	2.25	1.69	1.89	1.70
Net Migration Rate	-0.44	-0.08	0.41	0.60	1.00	1.12

A critical component of a society's ability to expand its production of goods and services is the growth of its labor force. As Norway's population aged over the past half-century, its labor force has undergone changes as well. Soon after the end of World War II, many industrialized societies, including Norway, experienced a significant spike in birth rates that produced the generation known as the baby boom. Labor supply growth increased dramatically during the 1970's, as the baby boom generation entered the labor force and has remained strong over the last few decades. This is also partly the result of an unprecedented number of female members entering the workforce as well as the up tick in net migration rates over the same time period. Low fertility rates over the last few decades have caused population growth to slow considerably. This created a temporary boon where a greater percentage of the population was economically active – often referred to as a “demographic dividend”. Between the 1970 and 2000, total dependency rates in Norway fell by about 38 percent, while youth dependency fell by about 46 percent.

As the baby boom generation begins to retire, Norway's labor supply growth will begin to grow at a slower pace than the population starting in the 2010's. 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, by the 2020's, these forces will actually cause Norway's workforce to shrink by about 0.4 percent per year. Norway's relatively high fertility rates have kept this reduction from being even more dramatic; however, by 2030 a greater portion of the population will be inactive, causing Norway's total dependency rate to rise by 23 percent and old age dependency to increase by 65 percent from rates in 2000.

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+	0.79	0.43	0.39	-45.86	-9.88
Aged- (Inactive pop 55+)/ LF 15+	0.45	0.33	0.55	-24.98	65.35
Total- (Inactive pop 0-19 and 55+)/ LF 15+	1.24	0.76	0.94	-38.33	23.11

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

The old age pension system in Norway is comprised of a flat-rate component with a supplementary earnings-related component, financed as one system and governed under the same legislation. In 2002, the flat rate benefit for a single person was equal to the base amount of NOK 54,170, about 17 percent average earnings. To receive the full benefit, pensioners must contribute for forty years into the system. Proportional reductions are taken if this qualification is not met. The pension is payable at age 67 with three years' participation into the system between ages 16 and 66 and subject to a means-test. At age 70 both men and women can retire without a means test. There is no early retirement benefit. Similar requirements apply for the earnings-related benefit. Benefits are updated automatically to correspond to changes in general price and income levels.

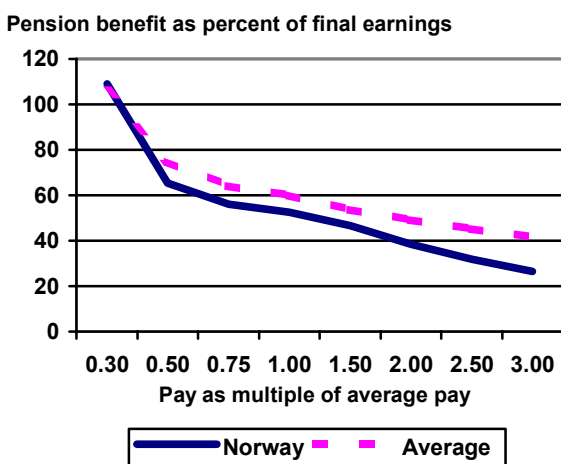
The earnings-related benefit has a progressive formula and only covers pay above the value of the base amount. For accruals from 1992 and onward, 42 percent of earnings between the base pension amount and less than six times the base amount are replaced, while one-third of pensionable earnings between six and 12 times the base amount are replaced (roughly a 14 percent rate). For accruals prior to 1992, the percentage is 45 percent and the break point is eight rather than six times the base amount. For those ineligible for the earnings-related pension, there is an income-tested supplement up to 79.33 percent of the base amount, which results in a minimum pension of NOK 97,140 or about 30 percent average earnings. The maximum benefit for a single pensioner is NOK 235,402. Additionally, over the past 30 years, occupational pension plans have become increasingly widespread – estimated to cover some 40 percent of the total workforce. Most private plans are integrated with the state scheme.

The financing of the program relies on employees contributing 7.8 percent of income and employers contributing 14.1 percent of payroll. The self-employed must contribute up to 10.7 percent of income up to 12 times the base, plus 7.8 percent of income exceeding 12 times the base. Any deficits are made up by the government. A large number of assets are invested in the Government Petroleum Fund.

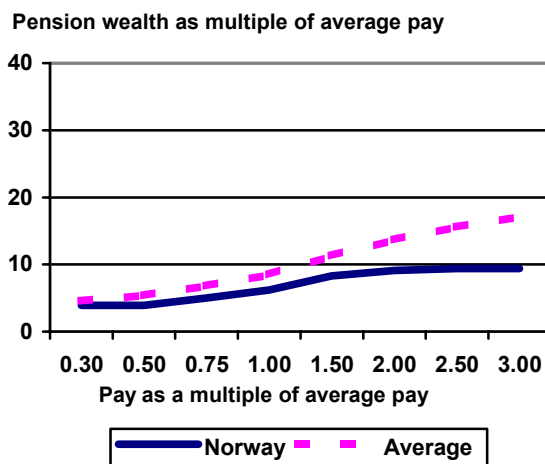
As shown in the graphs below, the old age pension system in Norway provides lower gross replacement rates and accumulated wealth for all income groups, except the lowest income class, compared to those offered on average across the OECD nations. Despite this fact, expectations are for Norway's pension costs as a percentage of GDP to increase over two and a half times between 2000 and 2050, while the average for all OECD nations are expected to increase by roughly 43 percent over the same period.

Source: Whitehouse, Edward (2003), Social Security Administration, Programs throughout the World (2002), Watson Wyatt Data Services (2003) "Benefits Report Western Europe, USA & Canada" and Dang et al. (2001).

Gross Replacement Rates
Norway v OECD Average



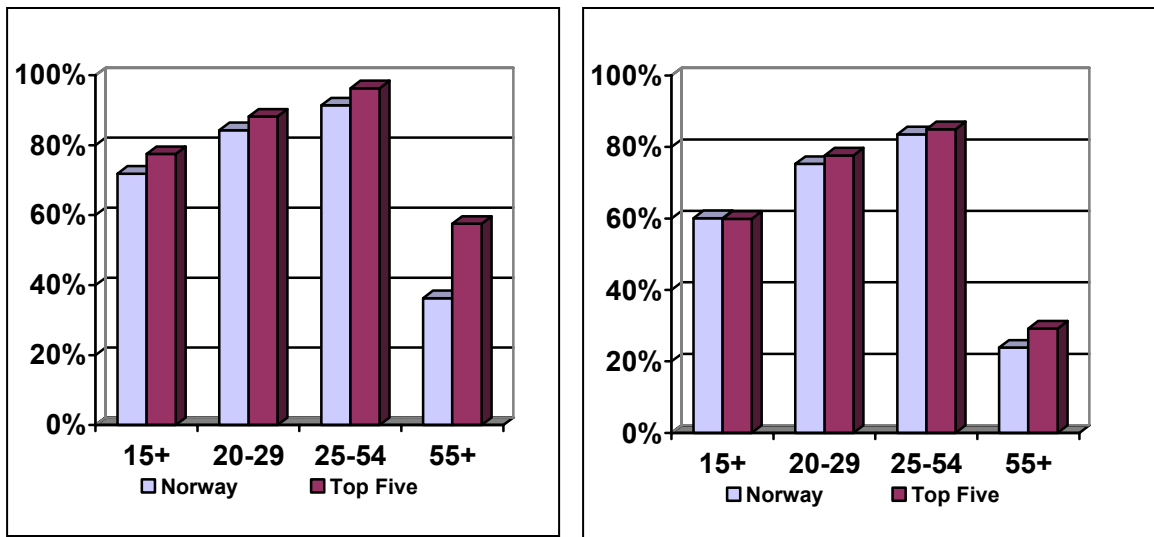
Gross Pension Wealth
Norway v OECD Average



Source: Whitehouse, Edward (2003)

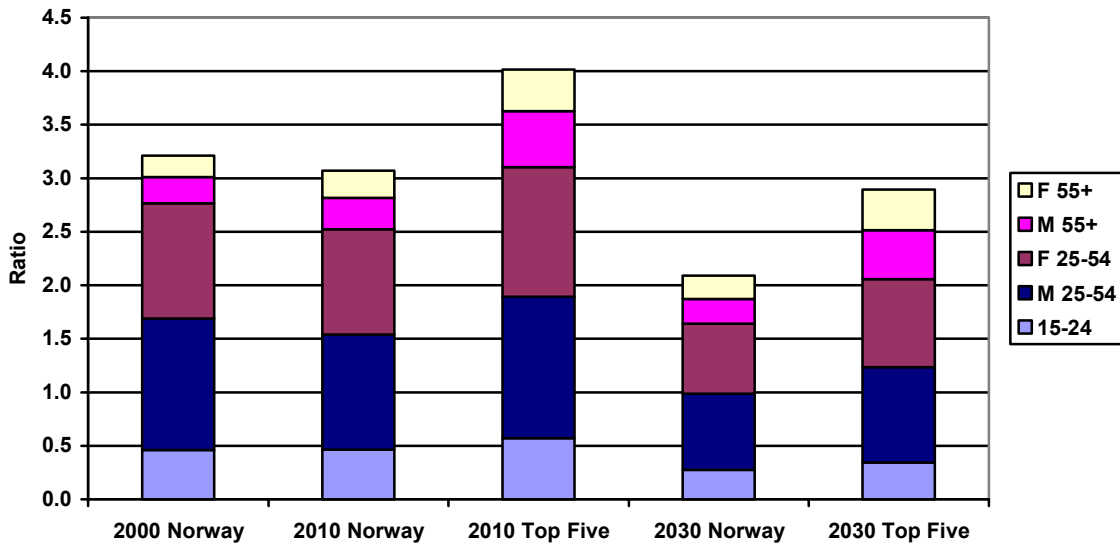
Notes: Pension wealth estimates are a multiple of economy-wide average.

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



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

Ratio of Workers in Norway 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, Norway 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 Norway's labor force participation stacks up next to the average of the Top-five OECD nations. Activity rates in Norway 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 Norway 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 Norway maintains its current activity rates between 2000 and 2030, the ratio of workers to retirees is expected to fall from nearly 3.2 to 2.1. However, by adopting policies to entice workers to defer their retirement at rates similar to those achieved by the Top-five OECD nations, Norway could reduce its dependency burden by raising its activity rate to 2.9 workers per retiree in 2030.