

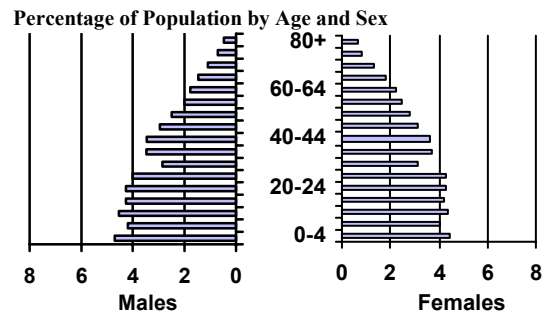
## ITALY

The Italian population has aged rapidly over the last 50 years. The population pyramids to the right show the percentage of Italy's total population by five-year age groups, separately for males and females for 1950, 2000 and 2030. In 1950, the distribution of Italy's population reveals a classic pyramid shape, where each successively younger cohort represents a larger percentage of the overall population.

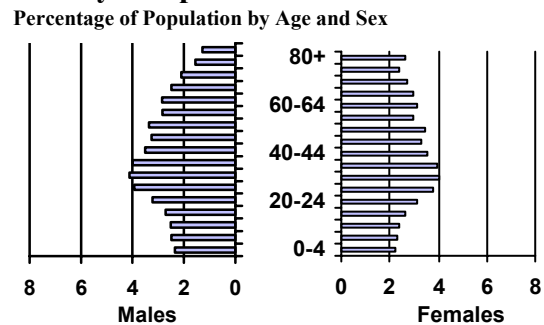
By 2000, Italy's population structure diverged from the classic pyramid shape and was replaced by a formation more representing a pillar, where the percentage of the population in each age cohort is more evenly distributed. The rapid change in Italy's population structure was caused by a combination of a drop in fertility rates between 1950 and 2000 from 2.32 to 1.20 and an increase in life expectancy at birth by over 11 years and 14 years for males and females, respectively.

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, Italy will have an average age of nearly 49 years old compared to today's average age of 42.

### Italy's Population Structure in 1950



### Italy's Population Structure in 2000



### Italy's Population Structure in 2030



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

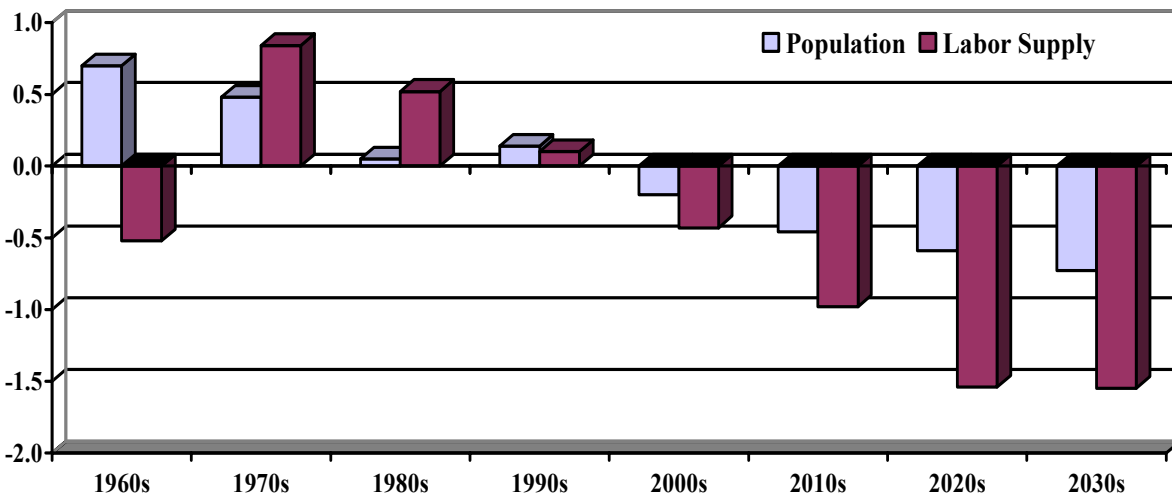
## Demographic History

	1950	1960	1970	1980	1990	2000
Life Expectancy at Birth						
Males	64.30	67.40	69.20	71.45	73.95	75.50
Females	67.80	72.60	75.20	78.02	80.47	81.90
Life Expectancy at 65						
Males	-	78.40	78.20	78.60	80.22	80.77
Females	-	80.30	81.20	82.30	83.97	84.98
Fertility Rate	2.32	2.50	2.33	1.53	1.27	1.20
Net Migration Rate	-1.05	-0.79	-0.22	-0.26	1.01	0.52

A critical component of a society's ability to expand its production of goods and services depends on the growth in its labor force. As Italy's population has aged over the last half-century, the rate of growth in its workforce has undergone significant changes. Soon after the end of World War II, many industrialized societies, although only for a brief period in Italy, experienced a significant spike in birth rates – better known as the baby boom. While population growth surged in the 1960's, labor force growth remained largely unaffected. However, as the baby boom generation entered their working years, including an unprecedented number of its female members, labor supply growth expanded rapidly throughout the 1970's and 1980's. Low fertility rates over the last few decades have caused population growth and the expansion of the labor force 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 Italy dropped over 17 percent, while youth dependency was nearly cut in half.

As an increasing portion of Italy's workforce reaches retirement age 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. In fact, over the 2020's and 2030's Italy's labor force is anticipated to shrink at an annual rate of over 1.5 percent. As a result, Italy will face a much greater percentage of its population being inactive, reflected by over a 45 percent increase in the total dependency ratio and an 85 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+	0.83	0.45	0.41	-45.63	-8.62
Aged- (Inactive pop 55+)/ LF 15+	0.47	0.62	1.16	31.82	85.02
Total- (Inactive pop 0-19 and 55+)/ LF 15+	1.30	1.07	1.57	-17.39	45.86

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

Italy has undergone two major reforms to its old age pension program in the 1990's with further changes under discussion. The new pension program is an earnings-related pension similar to the so-called "notional-account" schemes. The normal retirement age under the new system is 65 – yet it will be possible to draw an actuarially reduced pension from age 57. But the possibilities for early pensions from the seniority scheme have been significantly tightened since the 1990's reform. Benefits are determined by the contributions paid into the system. Contributions are uprated in line with a five-year moving average of GDP growth until retirement. The resulting 'notional capital' is multiplied by a variable coefficient (4.72 at age 57 or 6.136 at age 65) to calculate the benefit entitlement. There is a floor on earnings at roughly 41 percent of average earnings and an earnings cap at roughly 370 percent. Employees contribute 8.89 percent of earnings up to L65.3 million (roughly 168 percent of average earnings) and 9.9 percent thereafter. The standard employers' contribution rate is 23.81 percent, but may be lower depending on the specific industry and region. Pensions in payment are indexed to prices, but can be increased more rapidly if GDP growth exceeds 1.5 percent.

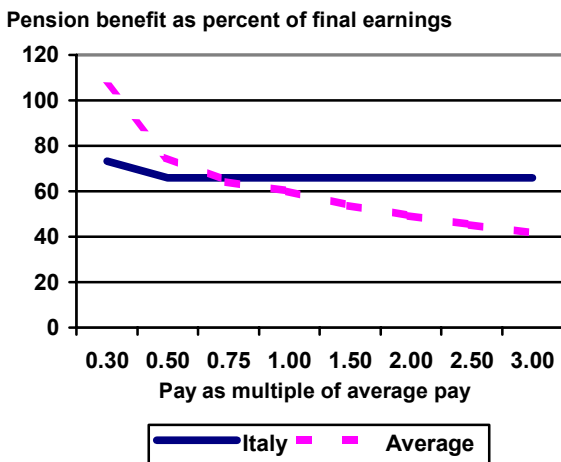
The switch to the new notional accounts system led to the elimination of the previous minimum pension. However, there still remains a social assistance benefit for the elderly equivalent to about 17 percent of average earnings for a single person.

As a result of the reforms of the 1990's that links benefits more closely to contributions, the new pension scheme is designed to provide all workers, including those with high incomes, with a retirement benefit that is a high proportion of pre-retirement income. This is evident in the figures below by the flat replacement rates across all income classes and by the ability of all income groups to accumulate significant pension wealth.

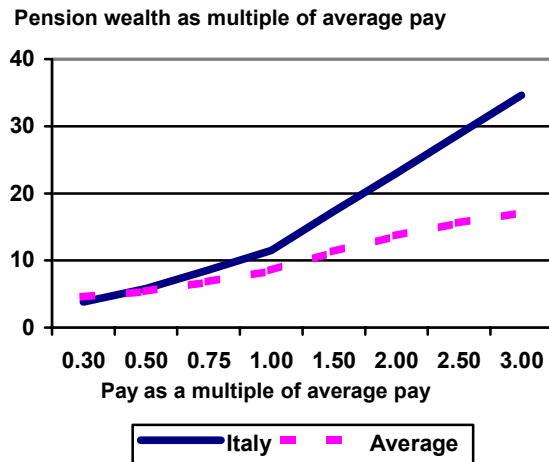
The recent reforms have tempered anticipated increases in old age pension costs as a percentage of GDP. While the average for all OECD nations old age pension costs as a share of GDP is expected to increase by roughly 43 percent between 2000 and 2050, pension costs are expected to decline by 2 percent in Italy over the same period.

Source: Whitehouse, Edward (2003) and Social Security Administration, Social Security Programs Throughout the World (2002) and Dang et al. (2001).

**Gross Replacement Rates**  
Italy v OECD Average



**Gross Pension Wealth**  
Italy v OECD Average



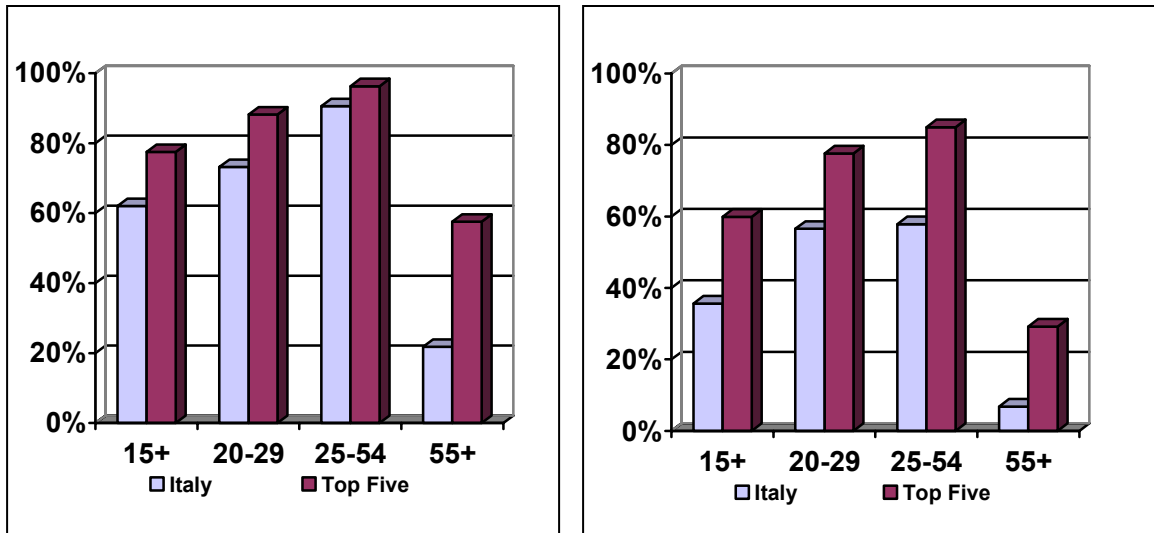
Source: Whitehouse, Edward (2003)

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

## Labor Force Participation Rates: Italy v Top Five OECD Country Composite

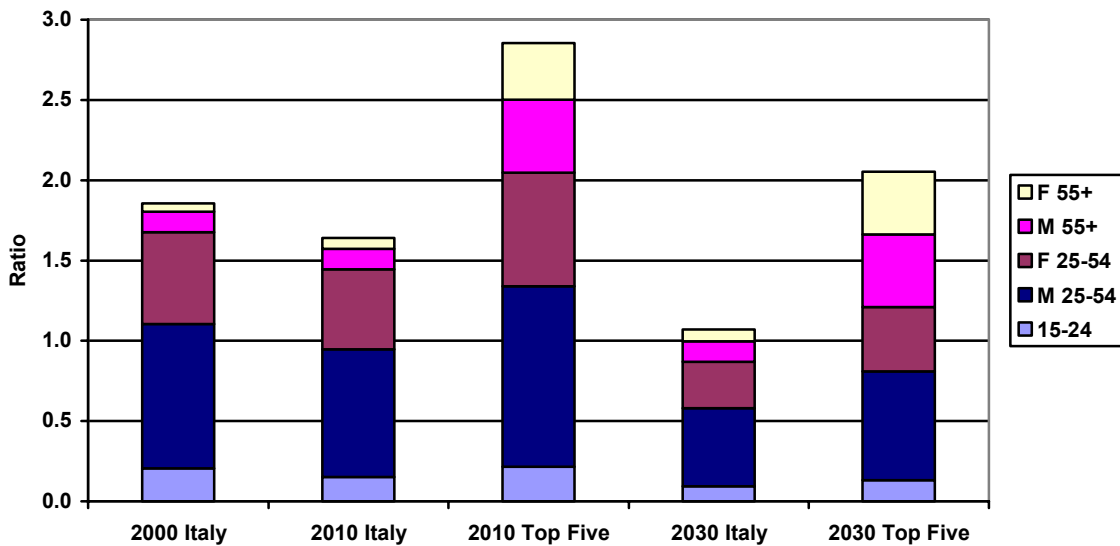
Males

Females



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

## Ratio of Workers in the Italy 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. As a result, many industrialized nations 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 do a very good job at achieving high workforce participation rates across various age and gender groups. The figures above show how Italy's labor force participation stacks up next to the average of the Top-five OECD nations. Activity rates in Italy fall short of rates in the Top-five countries for every age and gender group. Most noticeably, females and older individuals participate in the labor force to a much lesser extent than those in the Top-five countries. If Italy 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 Italy maintains its current activity rates between 2000 and 2030, the ratio of workers to retirees is expected to fall from nearly 1.9 to 1.1. However, by adopting policies to entice workers to prolong their retirement at rates similar to those achieved by the Top-five OECD nations, Italy could reduce its dependency burden by raising its activity rate to over 2.0 workers per retiree.