The European Central Bank’s October bulletin focuses on the euro area’s changing demographics. As an area becomes more developed, its birthrate begins to decline and life expectancy increases. The combination of these two factors causes a demographic shift in which a greater proportion of the population is “old.” The euro area is currently in the midst of one such demographic shift, which may have major economic implications. Its labor force, defined as men and women aged 15 to 64, is projected to expand through 2015 but at a declining rate; in fact, by 2020 the labor force is expected to be declining. This makes any increase in output growth, which can be thought of as a combination of labor growth and productivity growth, entirely dependent on increased productivity.

Moreover, the euro area’s workers will be responsible for supporting an increasing number of dependents. A country’s dependency ratio measures how many people outside the labor force must be supported by 100 people within the labor force. By 2050, the euro area’s old-age dependency ratio is expected to reach 53.6. This means that about every two working-age people will be responsible for supporting one “old” person. In contrast, the U.S., which likewise is experiencing a demographic shift, will have a dependency ratio of only 34.6 or approximately three workers for every “old” person.

The old-age dependency ratio is the ratio of the population aged 65 and older to the population aged 15 to 64. The total dependency ratio is the ratio of the population aged 65 and older plus the population aged 14 and younger to the population aged 15 to 64. The economic old-age dependency ratio, as calculated by the EU Commission, is the ratio of the inactive population aged 65 and older to the employed populations aged 15 to 71.