For many advanced economies, maintaining a constant ratio of workforce to population over the next 50 years would require large increases in participation rates and retirement ages and/or very substantial amounts of immigration.

**Increasing the Labor Participation Rate**

(percentage point change)

- **Projected required change in labor participation rate, 2000–50**
- **Historical change in labor participation rate, 1960–2000**

**Immigration**

(percent of end-of-period total population)

- **Projected required cumulative immigration, 2000–50**
- **Cumulative immigration, 1960–2000**

**Raising Retirement Age**

(years)


1. Increase in the labor participation rate necessary to maintain the ratio of labor force to total population in 2050 at its 2000 level.
2. For Japan, even if the labor participation rate increased from its 2000 value of 78.8 percent to 100 percent, the relative size of the labor force would still decline.
3. Cumulative immigration over 2000–50 necessary to maintain the ratio of labor force to total population in 2050 at its 2000 level.
4. Increase in the retirement age necessary to maintain the ratio of labor force to total population in 2050 at its 2000 level.