Does Demography Really Matter?

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Japan as a front-runner of demographic change

Each line corresponds to G20 member countries from 1955 to 2015

Notes: 1. Old-age dependency ratio = elderly population (aged 65 and over) / working-age population (aged 15 to 64)
2. Annual population change is the average annual rate of population change in five-year intervals.
Negative effects of demographic change

Note: Figures for FY2018 are the values in 2018/Q2.
Note: Fiscal-year basis. The rates of change in the number of employed from 2018 onward are calculated using the population outlook (medium variant) and projected labor force participation rates (assuming the labor force participation rate for each age/sex group remains the same as in 2017). The labor productivity growth from 2010s onward is assumed to remain the same as in 2000s.

Sources: Cabinet Office; Ministry of Internal Affairs and Communications; National Institute of Population and Social Security Research.
Evidence of rejuvenation

Average walking speed

Average number of teeth

5 years’ rejuvenation since 2007!

10 years’ rejuvenation since 2005!

Note: Average walking speed is the arithmetic average between male walking speed and female walking speed.
Sources: National Center for Geriatrics and Gerontology; Ministry of Health,Labour and Welfare.
An increase in senior labor supply

Labor force participants

Change from CY2000, mil. persons

Seniors (aged 65 and over)
Women (aged 15-64)
Men (aged 15-64)
total

Note: Figures for CY2018 are January-October averages on a seasonally adjusted basis.
Source: Ministry of Internal Affairs and Communications.
Biological age deduced from mortality rates

Mortality rate (%)

Chronological age biologically equivalent to a 65 year old in 1970

Difference between chronological and biological age

Note: Old-age dependency ratio = elderly population (aged 65 and over) / working-age population (aged 15 to 64)
Difference between chronological and biological age across countries

As of 2016 or some years earlier depending on data availability

Note: Figures in parentheses are chronological ages biologically equivalent to a 65 year old in 1970 in Japan.