

Demographic Trends in Japan

July 24, 2019

International Longevity Center-Japan

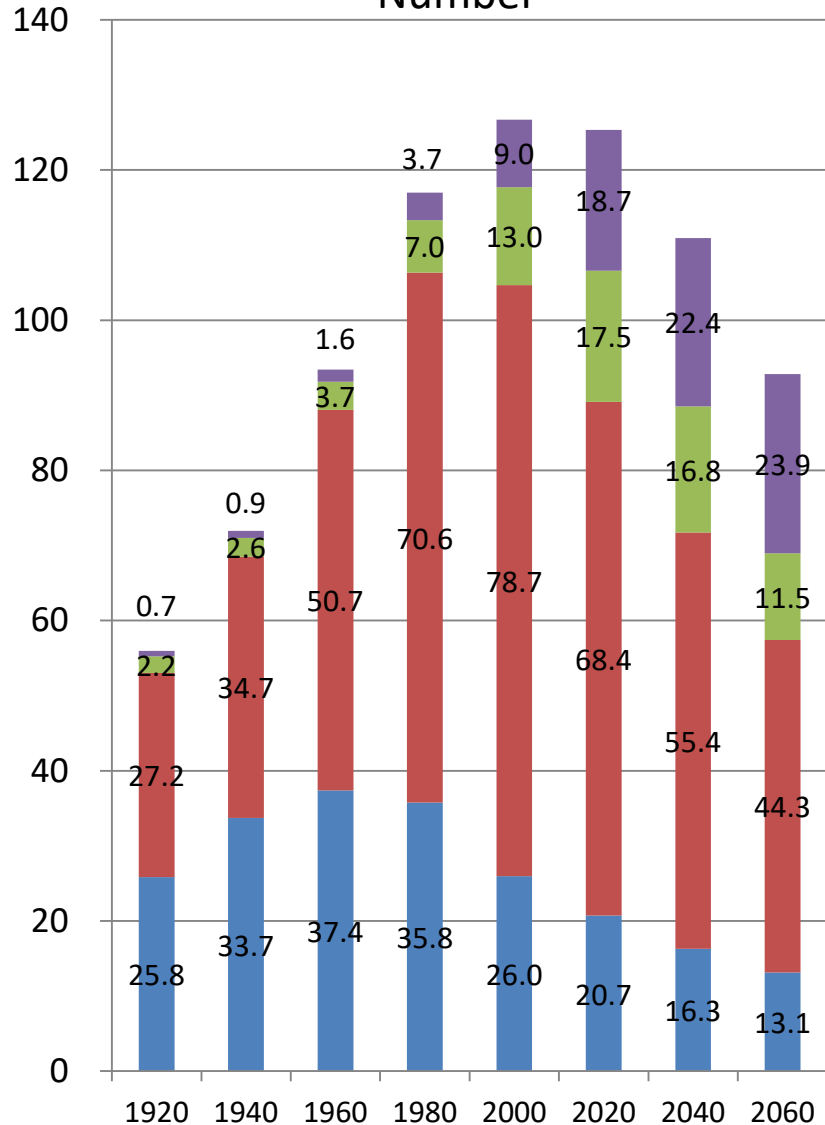
Discussion

- Why has the life expectancy been increasing in Japan?
- Why has the birthrate been declining in Japan?
- Direct and indirect effects that fewer children could have in the following decade in terms of economy and building sustainability
- Measures taken in Japan to face this challenge: What they are and their mid- and long-term effects

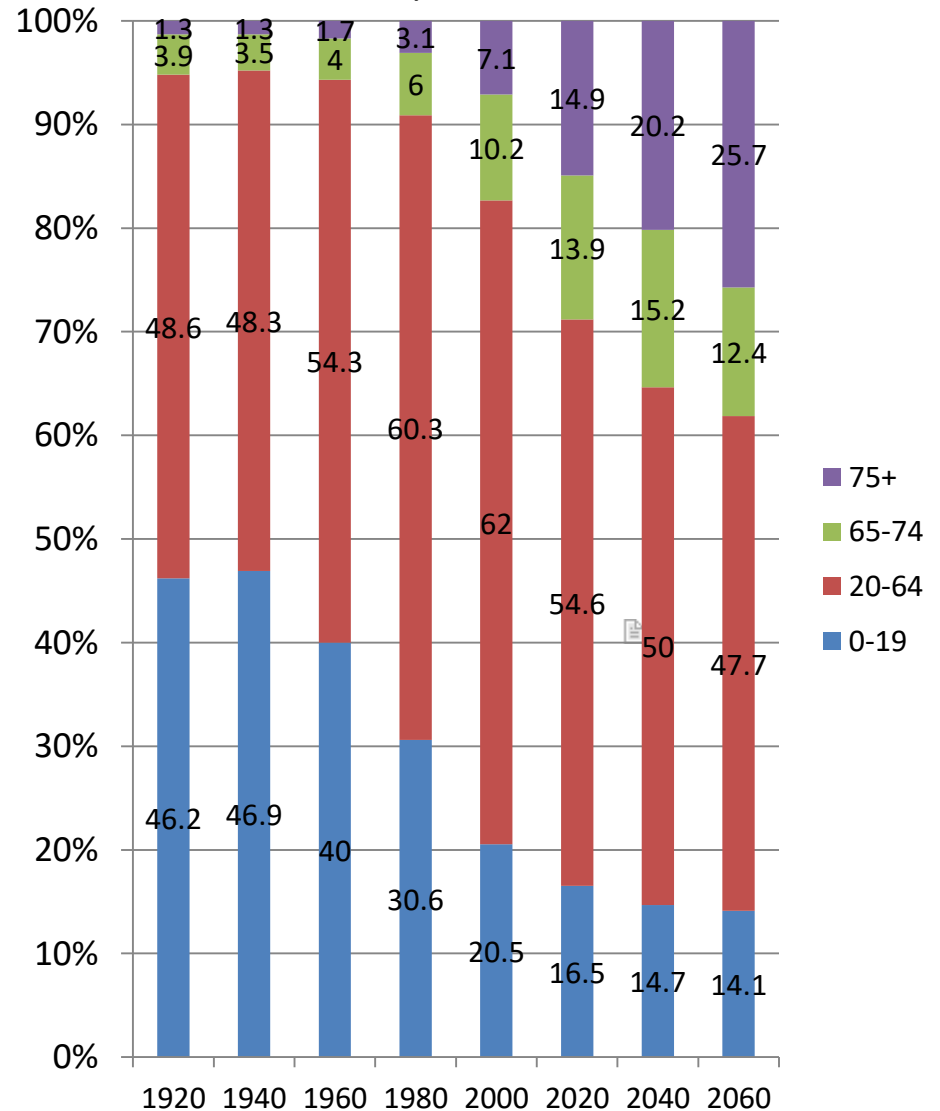
Trends in Population Aging and Projections for the Future

millions

Number



%



Population Aging & Declining Birthrate

- Population aging
 - Better living environment: housing, education, pension, etc.
 - Better diet/nutrition
 - Advance in medical technology
- Declining birthrate
 - More people stay single or marry later (In Asia, the number of births outside marriage is small)
 - Post-industrial society
 - Social advancement of women, growing number of nuclear families

Population Aging

Life Expectancy at Age 65 and Healthy Life Expectancy

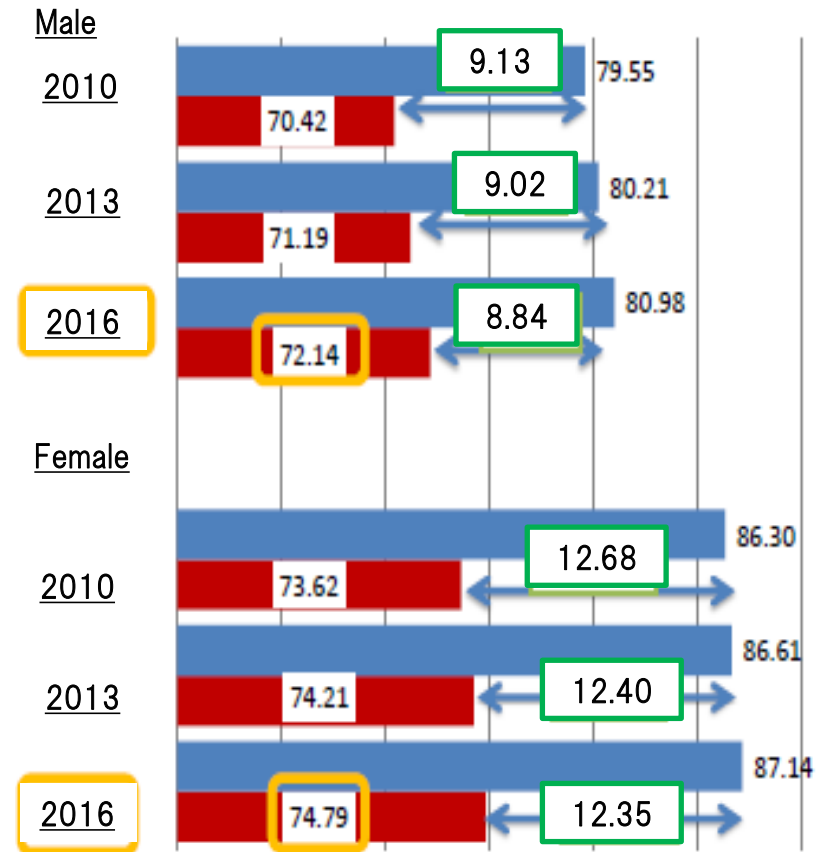
“Years w/ limitations in daily living” has been slightly decreasing.

◆ Life expectancy at age 65 (at age 0)

Year	Male	Female
1947	10.2(50.06)	12.2(53.96)
1955	11.8	14.1
1965	11.9	14.6
1975	13.7(71.73)	16.6(76.89)
1985	15.5	18.9
1995	16.5	20.9
2000	17.5	22.4
2010	18.7	23.8
2016	19.6	24.4

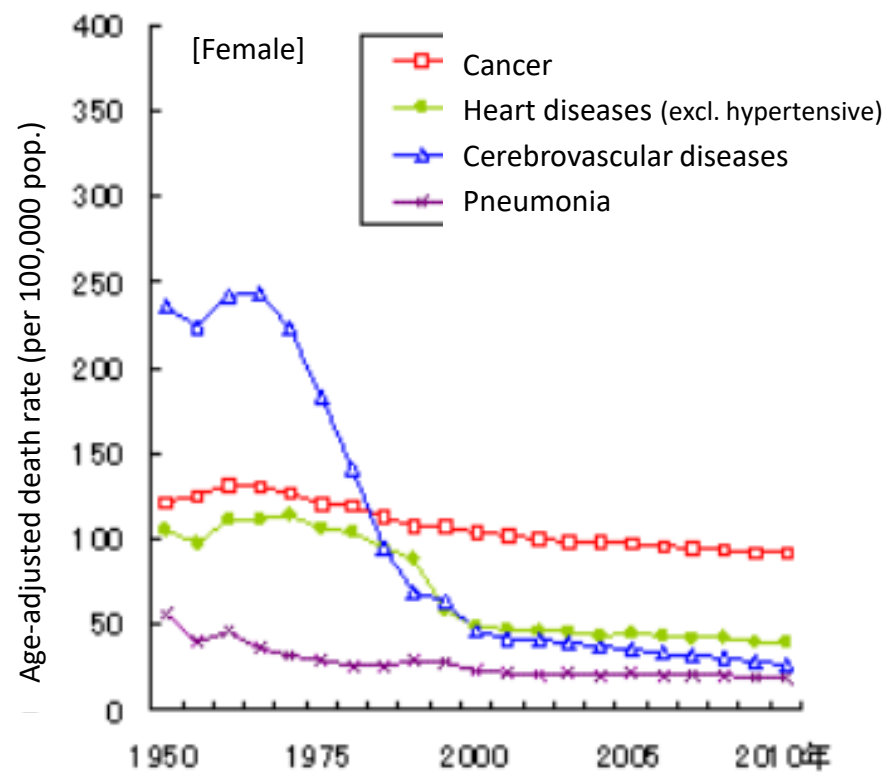
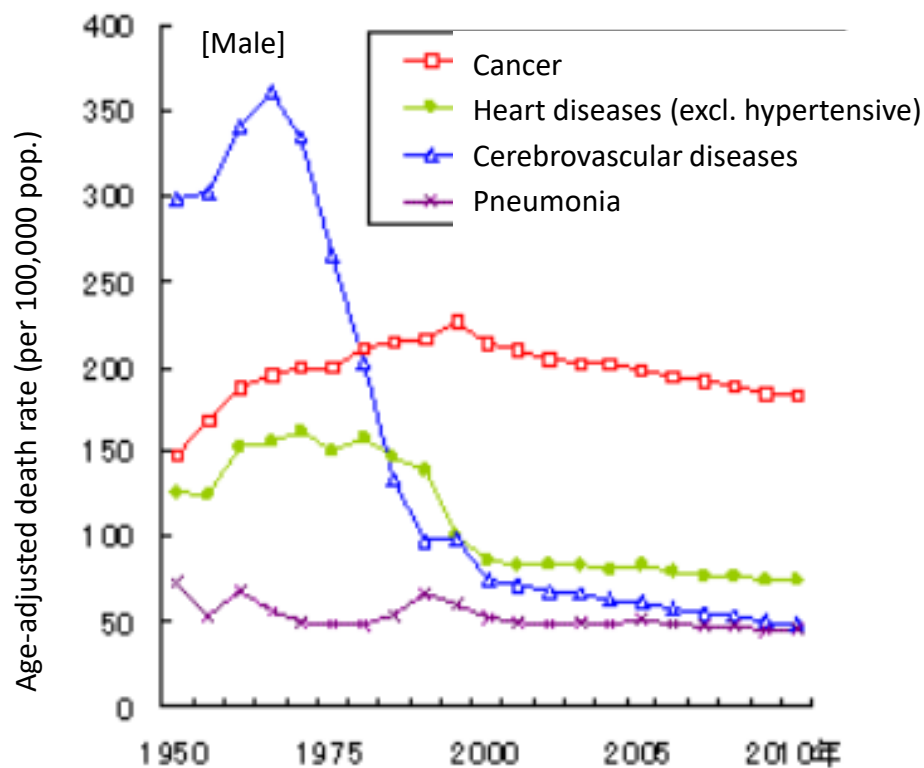
Source: MHLW. Complete Life Tables and Abridged Life Tables (2016).

◆ Healthy life expectancy (Blue arrows: years w/ limitations in daily living)



Source: MHLW. 11th Promotional Expert Committee for Health Japan 21 (2nd term): Reference 1-1.

[Age-Adjusted Death Rates (per 100,000 pop.) by Cause of Death]

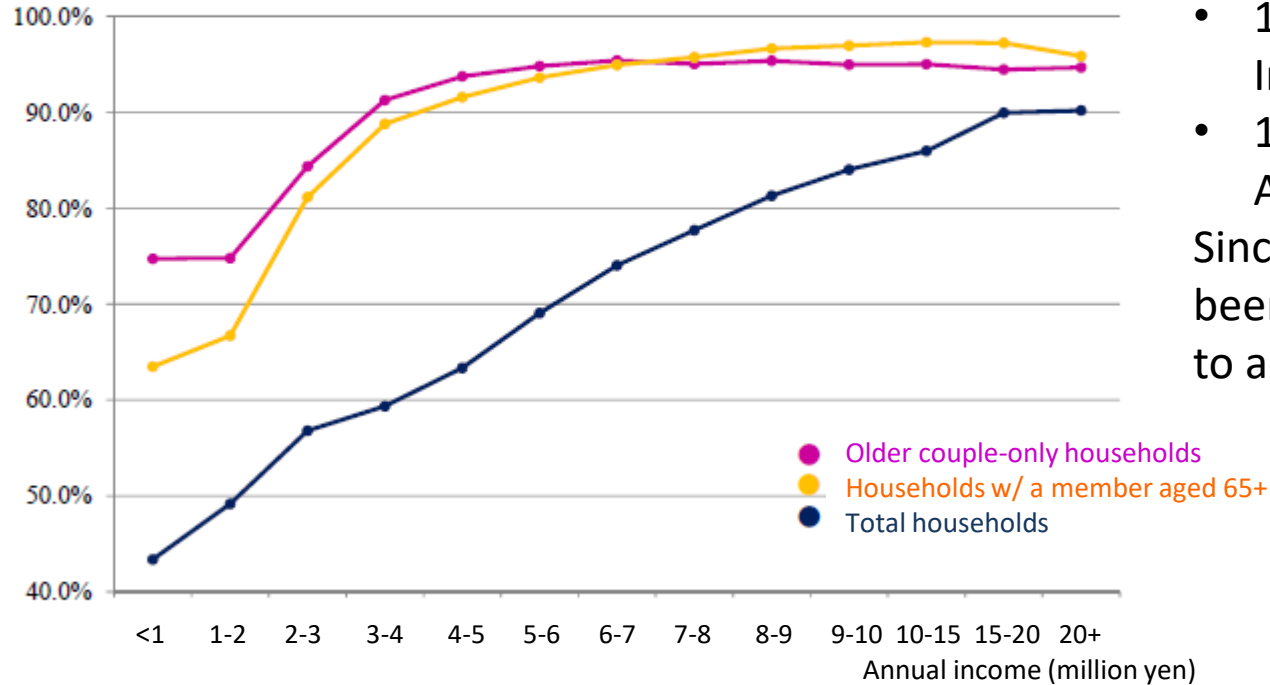


Source: 2010 Vital Statistics.

<https://www.nli-research.co.jp/report/detail/id=39996?site=nli>

Home Ownership Rates among Households with Older People

* The home ownership rates are high among older people regardless of their income level.



- 1942: Workers Pension Insurance Act
 - 1961: National Pension Act (universal coverage)
- Since then, the system has been enhanced and revised to address population aging.

Source: Statistics Bureau of Japan. 2008 Housing and Land Survey.

Housing assets among older people - Senior Housing Association.

Labor Force Participation Rates: International Comparison

In Japan, labor force participation rates among older people are higher than in other developed countries.

	55 - 64	65+	75+
Japan	75.3	23.5	9.0
Denmark	71.6	7.4	..
France	54.9	3.1	0.5
Germany	72.6	7.0	..
Netherlands	69.5	7.7	2.0
South Korea	69.1	31.5	18.5
UK	66.4	10.2	2.1
USA	64.5	19.3	..

* Definition of "labor force participation rate" by OECD: The proportion of people engaged in paid employment at least once a month.
Source: OECD Stat.

Average Income by Age Group (2016)

Older people have higher average income per capita than those in their 30s.

(1,000 yen)

	Total	<30	30 - 39	40 - 49	50 - 59	60 - 69	70+	65+
Average income per household	5,458	3,435	5,623	6,711	7,439	5,310	4,053	4,360
Average income per capita	2,124	1,846	1,771	2,096	2,640	2,175	1,918	1,995

Source: MHLW. 2016 Comprehensive Survey of Living Conditions.

Proportion of Older People Participating in Voluntary Activities (2015): International Comparison

In Japan, community/environmental activities are popular while fewer people engage in personal support.

Activity	Japan	USA	Germany	Sweden
Local events, community development	15.0	18.6	5.2	14.6
Cleaning parks, streets, etc. in the neighborhood	14.8	7.1	3.2	9.1
Supporting others while leveraging hobbies/skills	5.0	14.6	11.4	13.0
Traffic safety, crime/disaster prevention	4.8	2.5	1.1	3.2
Youth development	4.3	8.8	3.2	5.2
Assisting the elderly & people w/ disabilities	3.8	7.1	3.9	13.2
Environmental/nature conservation	3.0	5.3	4.0	8.1
Religious/political activity	2.3	32.5	10.2	12.1
Assisting at health/welfare facilities	1.3	3.2	2.1	4.5
International exchange/support	0.5	1.0	1.8	8.8
Consumer activity	0.3	2.1	1.1	0.4
Others	1.8	8.8	3.3	11.1
No longer participate (used to participate)	19.1	17.6	24.4	19.4
Never participated	47.6	23.5	44.2	22.4
No answer	-	0.2	0.7	-

Multiple answers. Subjects in each country: about 1,000 men and women aged 60+ (1,183 in Japan).

Source: Cabinet Office. FY 2016 the 8th International Survey on Living and Consciousness of Senior Citizens.

Living Arrangements among People Aged 65+ (2017): International Comparison

In Japan, older people are much more likely to live “with their child” than in other countries. Recently, a growing number of them live with “an unmarried child.”

	Live alone	With a spouse	With a child	With others
Japan (2016)	18.6%	38.9%	38.4%	4.1%
Denmark	26.6%	68.8%	1.9%	2.7%
France	34.1%	55.2%	1.7%	9.1%
Germany	33.8%	57.3%	1.2%	7.7%
Netherlands	33.0%	62.1%	1.1%	3.7%
UK	33.7%	54.4%	2.0%	9.9%

Year	Live w/ a married child and the child's spouse	Live w/ an unmarried child
1986	46.7%	17.6%
1992	38.7%	18.4%
1998	31.2%	19.1%
2004	23.6%	21.9%
2010	17.5%	24.8%
2016	11.4%	27.0%

Sources: Eurostat.

Ministry of Health, Labour and Welfare (MHLW). 2016 Comprehensive Survey of Living Conditions.

Average Length of Stay in Hospitals (Acute) in 2017: International Comparison

Significantly longer in Japan.

Country	Average length of stay (days)
Japan	16.3
Denmark	5.5 (2015)
France	5.7 (2015)
Germany	7.5
Netherlands	5.0
South Korea	7.3
UK	6.0
USA	5.5 (2015)

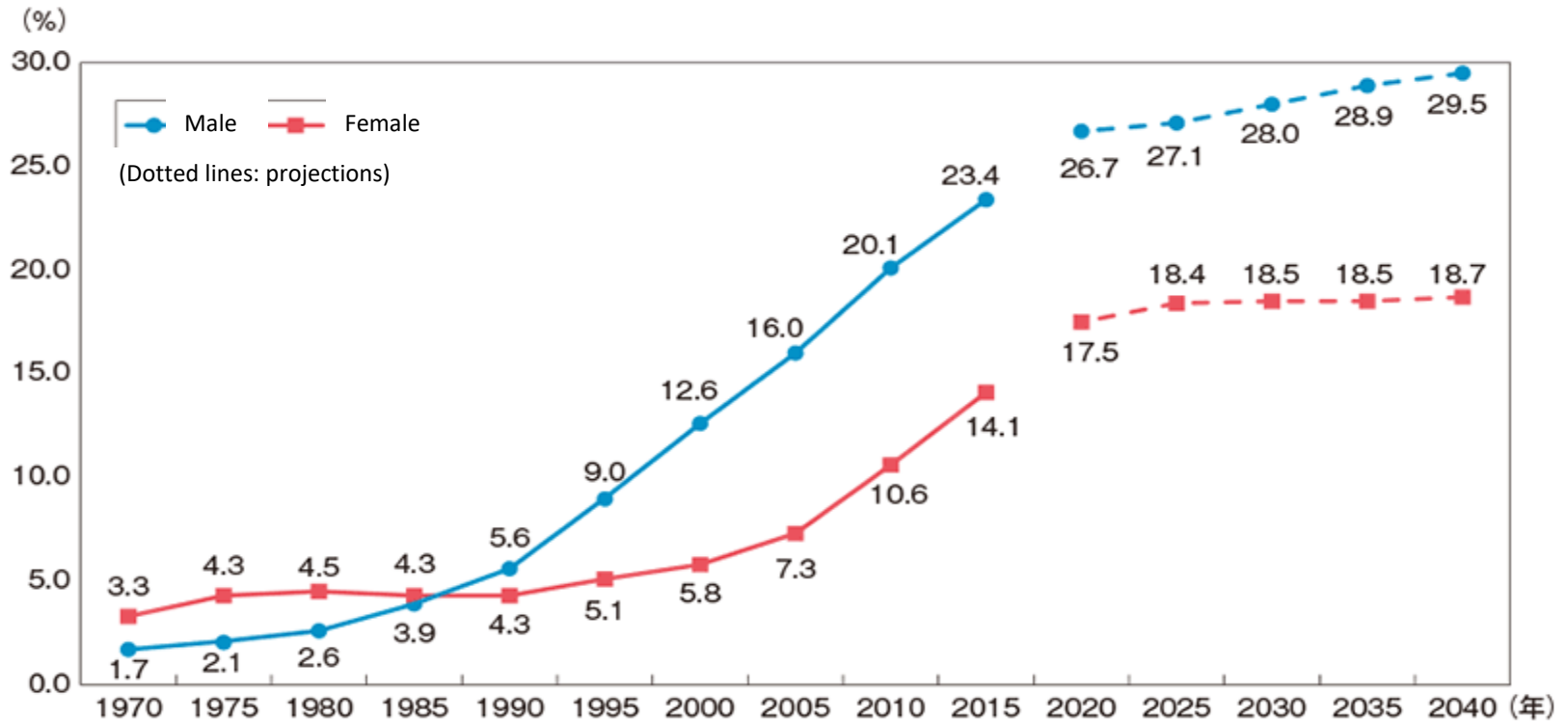
Declining Birthrate

Total Fertility Rate (TFR)

TFR in Japan		Country/Region	Year	TFR
1950	3.63	Japan	2017	1.43
1970	2.00	Singapore	2017	1.16
1990	1.54	Hong Kong	2017	1.13
2000	1.34	Taiwan	2017	1.13
		South Korea	2017	1.05

2018 Declining Birthrate White Paper

Proportion of Unmarried People at Age 50: Estimates & Projections

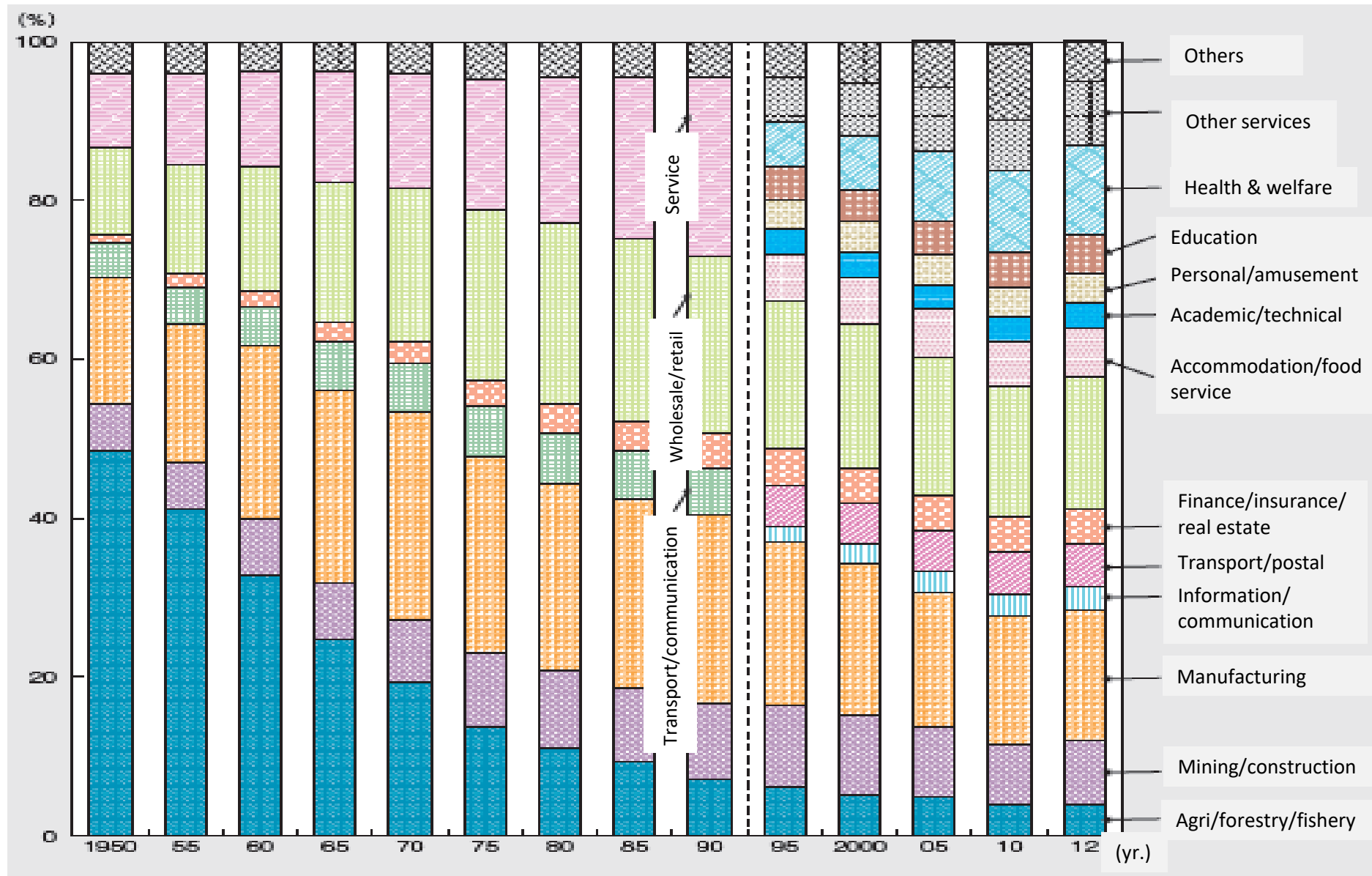


2018 Declining Birthrate White Paper.

https://www8.cao.go.jp/shoushi/shoushika/whitepaper/measures/w-2018/30webhonpen/html/b1_s1-1-3.html

Employed People by Industry: 1950-2012

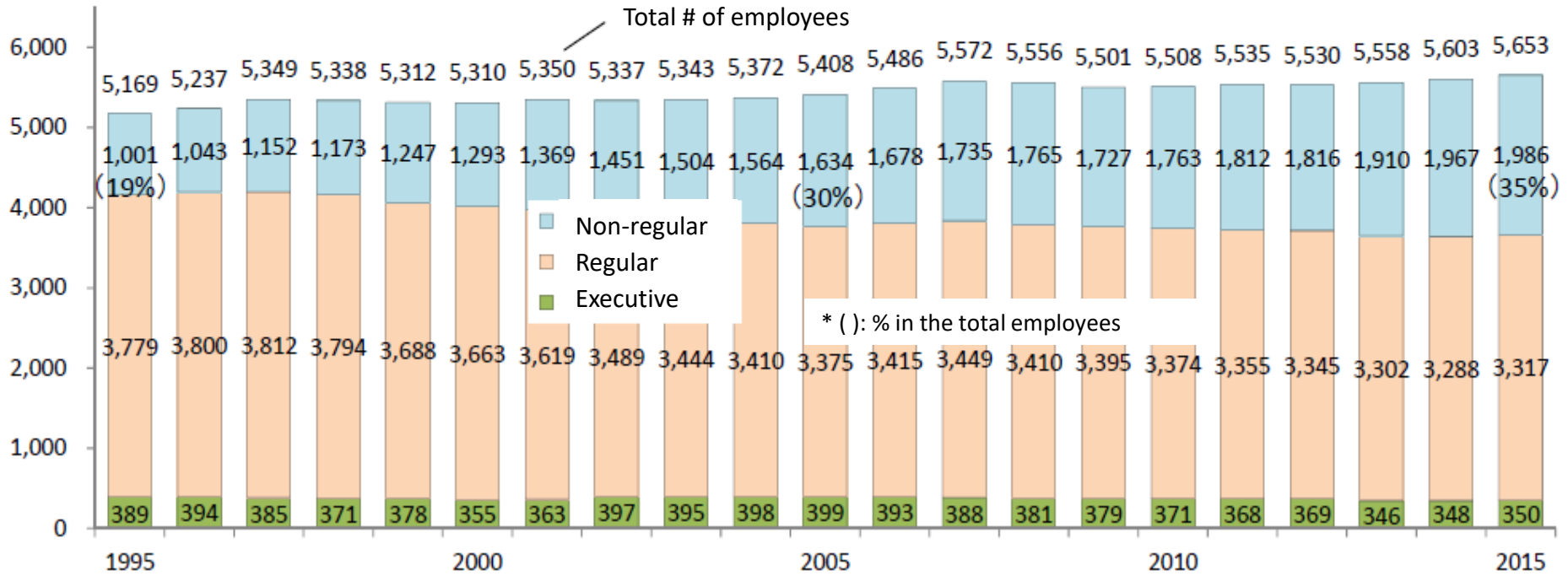
The number of employed people in primary & secondary industries has been declining, shifting toward the service industry.



Employed People by Employment Status

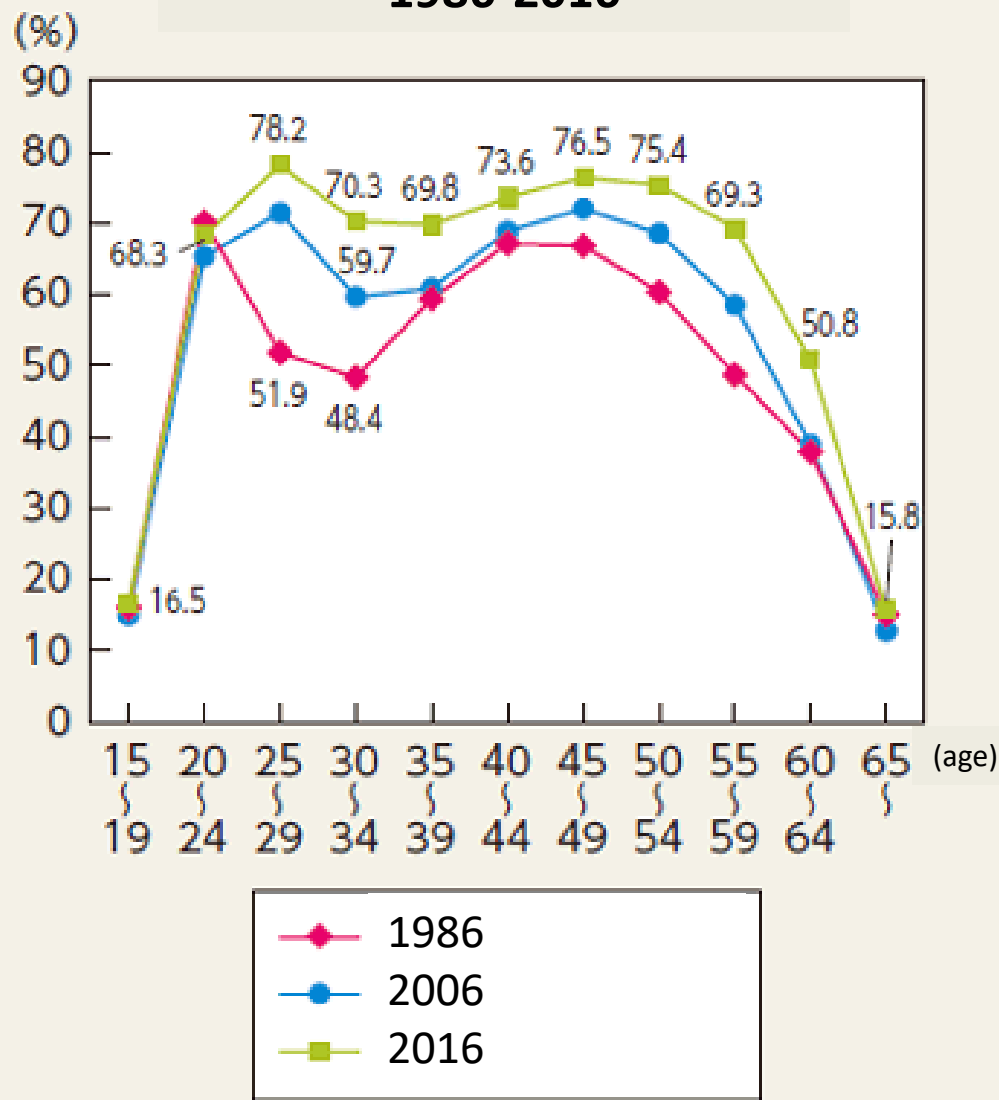
- ↓ Regular employees & ↑ non-regular employees in the last 20 years.

(10,000 people)

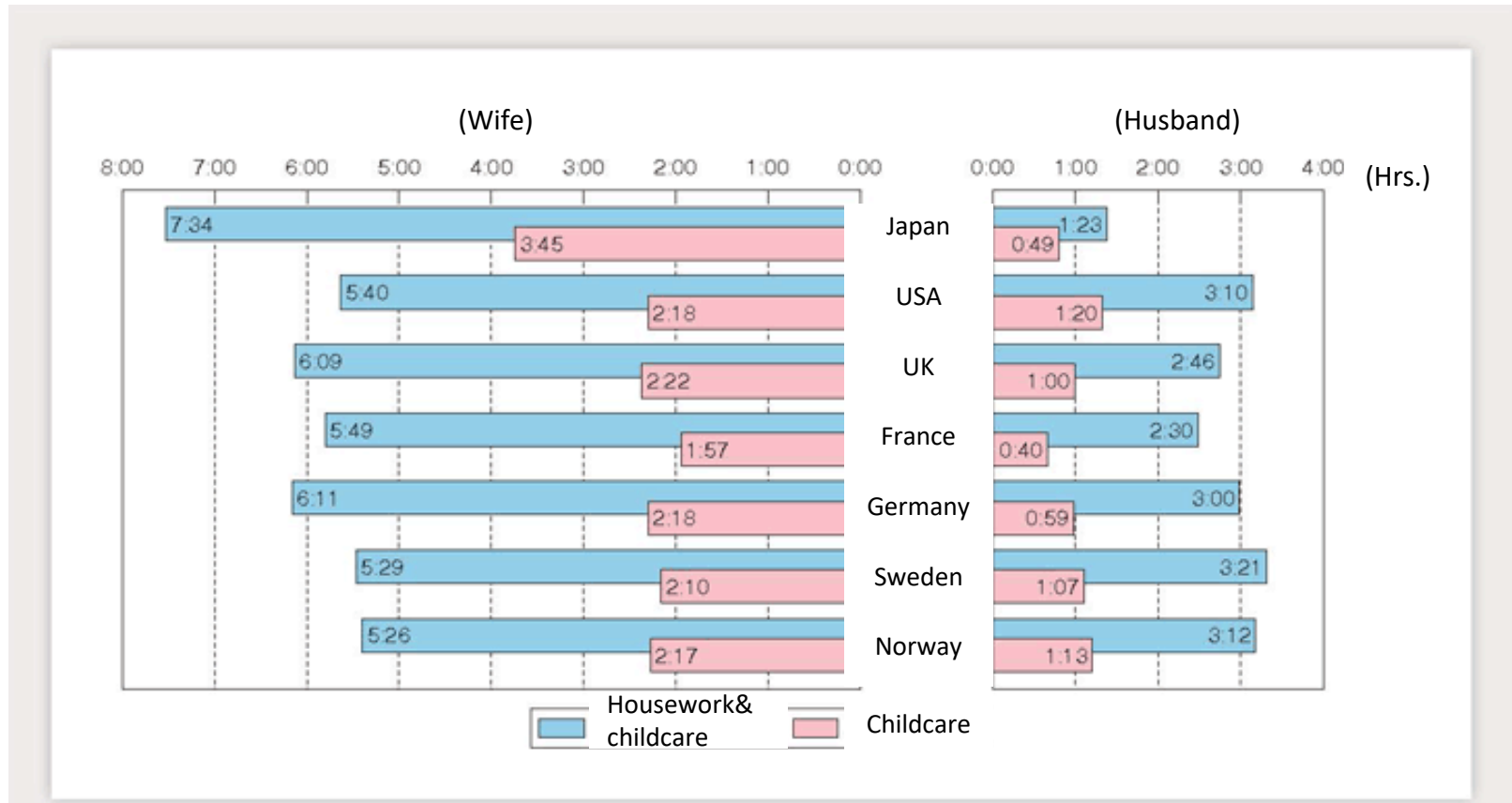


Recent trends in economic growth rate and wage increase rate: Focusing on the last 20 years since the bubble burst. 2nd expert meeting on economic assumptions in pension financing, Pension Subcommittee, Social Security Council (October 6, 2017): Reference 3.

Employment Rate of Women: 1986-2016



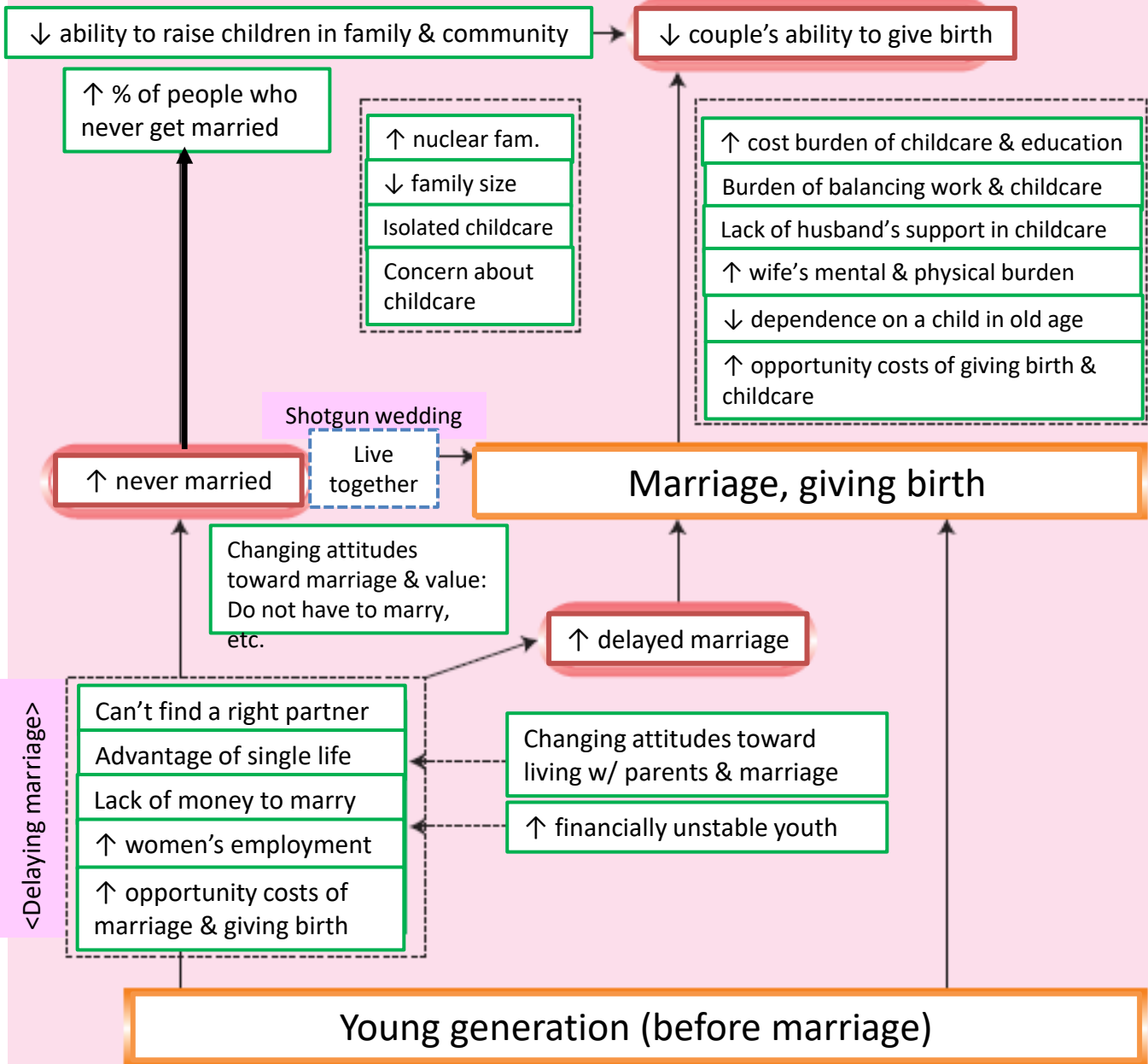
Time Spent on Housework & Childcare per Day among Husbands w/ a Child Aged <6: International Comparison



<https://www8.cao.go.jp/shoushi/shoushika/data/ottonokyouryoku.html>

Cabinet Office, Countermeasures against Declining Birthrate

Causes of & Factors behind Declining Birthrate



Countermeasures against Declining Birthrate

- ← Healthy development of children
- ← Child allowance, scholarship, tax credit, etc.
- ← Enhancing childcare services, promoting childcare leave, etc.
- ← Promoting corporate measures for work-life balance
- ← Promoting men's participation in childcare, ↓ working hrs.
- ← Local childcare support, etc.
- ← Deepening an understanding of the value of life, roles of a family, etc.
- ← Job assistance for youth

2004 Declining Birthrate White Paper.

GDP

National Burden Ratio (2014) & Consumption Tax (2018): International Comparison

In Japan, the national burden ratio & consumption tax rate are both low despite the extremely high proportion of older people .

	Japan	Denmark	France	Germany	Netherlands	South Korea	UK	USA
National burden ratio (% of national income)	42.2	70.7	68.2	52.5	52.3	36.8	45.9	32.7
Consumption tax, value-added tax (%)	8	25	20	19	21	10	20	-

Source: Ministry of Finance

Fiscal Balance & Government Debt (2018): International Comparison

The fiscal deficit & government debt are significantly high in Japan.

	Japan	Denmark	France	Germany	Netherlands	South Korea	UK	USA
Fiscal balance (% of GDP)	-3.7	0.4	-0.8	2.1	1.3	2.1	-0.6	-2.5
Government debt (% of GDP)	236	36	97	60	54	39	86	108

Source: IMF 2018

2018 National Budget

Budget related to measures for the aging society

Employment & income, health & welfare, learning & social participation, living environment, research/development & international contribution, etc.

General account: 21,068,961 million yen

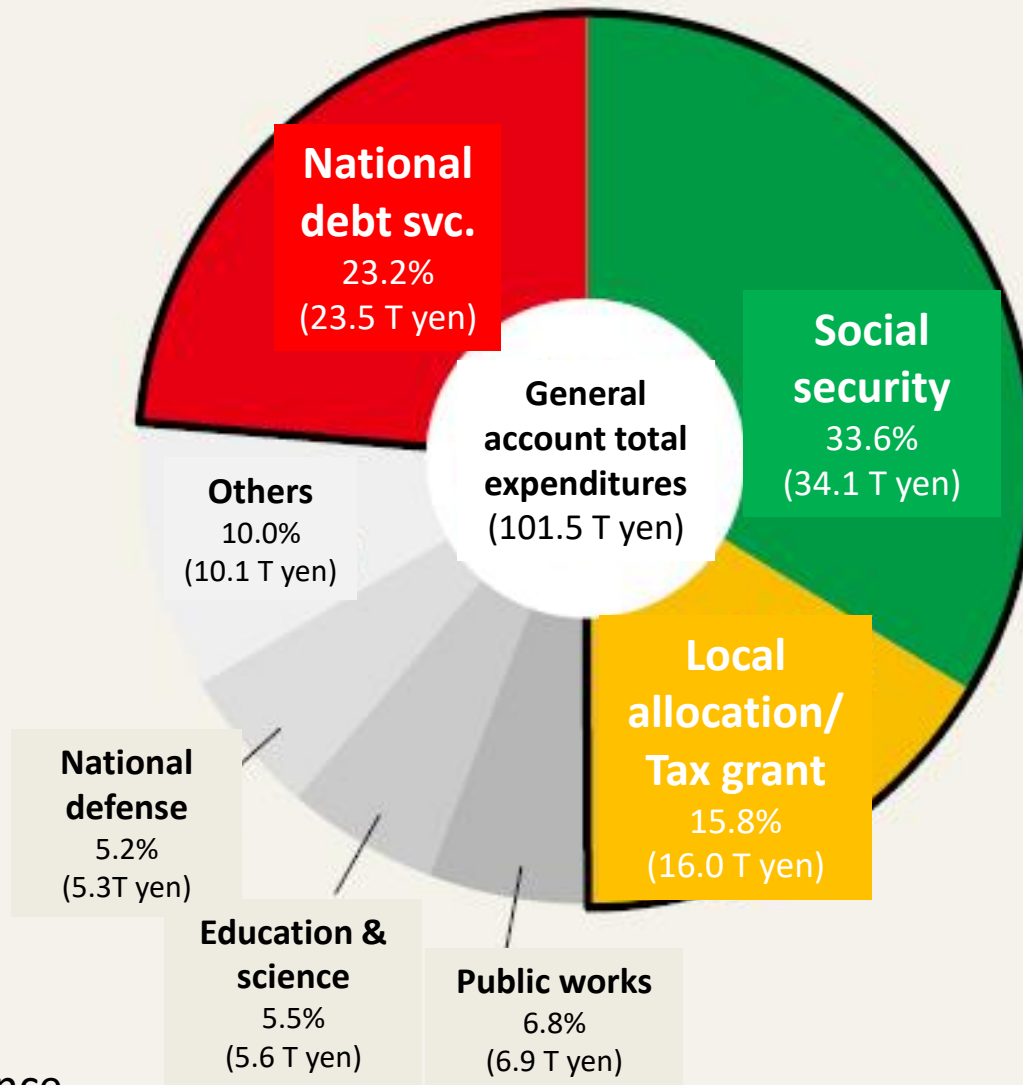
Special account: 51,271,615 million yen

Budget related to countermeasures against declining birthrate

Childcare support, support for households w/ multiple children, work style reform, etc.

4,573,975 million yen

[FY2019 Budget]



Ministry of Finance

https://www.mof.go.jp/budget/fiscal_condition/related_data/201906_kanryaku.pdf

Growth rate of GDP

= Growth rate of capital input

+

Growth rate of labor force

+

Growth rate of TFP (Total factor productivity)

Structural Changes in Japan and the World and Direction of Transformation through the 4th Industrial Revolution

February 2016

Ministry of Economy, Trade and Industry

1-1. Potential growth rate of Japan

- The potential growth rate of Japan has declined to <1%. TFP (total factor productivity), K (capital input) and L (labor input) are all stagnant.

Potential growth rate of Japan: 1981-2014

1981~1990	1991~2000	2001~2010	2011~2014	Current (2014)
4.4%	1.6%	0.8%	0.7%	0.6%

2020	
W/ economic revitalization	2.2%
Base-line	0.8%

International comparison & details of contribution: 2001-2007 Source: Cabinet Office

		Japan	USA	UK	Germany
Potential growth rate		0.9	2.3	2.9	1.7
Contribution	TFP	0.7	0.9	0.8	0.9
	K	0.5	1.3	1.6	1.0
	L	-0.2	0.1	0.5	-0.2

Source: Economic and Fiscal Projections for Medium to Long Term Analysis. (Cabinet Office, Jan. 2016)

<TFP (total factor productivity)>
About the same growth rate as other developed countries
<K (capital input)>
Lower growth rate than other developed countries
<L (labor input)>
Negative growth due to depopulation (Germany too)

Source: Council on Economic and Fiscal Policy meeting material (based on EU KLEMS, etc.)

- There used to be industries that would drive the economic growth on a macro level w/ high productivity and labor input growth rate (e.g., electronics). Yet, such industries are mostly gone since 2000.
- Population aging leads to an increase in labor input in the field of social security, where productivity is not necessarily high. If we are to highly dependent on domestic demand structure, the macro growth may slow down even further.