Economic Effects of Retiring Baby Boomers

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"Dankai no Sedai" (baby boom generation) is ..

Baby boomers who were born in 1947-1949 in Japan. More than 8 million babies were born. Their age is 66-69 this year. The name "Dankai no Sedai" means generation of nodule, which came from the title of the novel written by Mr. Taichi SAKAIYA, the former Minister of Economic Planning Agency.



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<u>Estimate of Population</u>

Population in 2100 would be the same as population in 1900

Population peaked at around 128 million in 2010. It is expected to be about 52 million in 2100.



Demographic Movement (1872-2110)

Source: National Institute of Population and Social Security Research. Note: Population(2011-2110) is estimated.(medium fertility/ medium mortality),

Population decrease is expected to accelerate.

Demographic change rate has already been negative since 2010-2015 and decreasing speed is expected to be accelerated.



Total fertility rate (TFR) was 1.42 in 2014.

TFR has decreased rapidly since the 1st baby boom ("Dankai no Sedai") 1947-1949. From mid-1950s till mid-1970s, TFR was around 2.0. Since then, TFR has been decreasing steadily.



Forecast of low birth rate and aging population The 1st and 2nd baby boomers peak in population distribution.

The 1st baby boomers are in retired age and the 2nd baby boomers are around 40 in age. The 2nd Baby boomers are the generation of "Dankai no Sedai"'s children, and called "Dankai Jr.". We did not have a 3rd baby boom.

Population Distribution by age (2014)



Ratio of dependent population is increasing dramatically since around 2025.

Ratio of dependent population (0-14 & 65-) is increasing rapidly. Especially, over 75 aged population is expected to increase dramatically from around 2025 when "Dankai no Sedai" will become over 75 years old.



Population is expected to decrease through three stages.

All three stages have common trend as 0-14 age population decreases and 15-64 age population decreases. The difference among three stages is the trend of over 65 aged population as follows. 1st stage: increase 2nd stage: remain/decrease 3rd stage: decrease (Cabinet Secretariat, "Overcoming Population Decline and Vitalizing Local Economies: Japan's Long-term and Comprehensive Strategy Reference Materials").



<u>Challenge 1 Decrease of productive age population and</u> <u>potential growth rate</u>

Productive age population had already peaked in 1995.

Productive age population (15-64) peaked in 1995 and is decreasing steadily. Ratio of productive age population to total (15-64/total) is expected to be about 50% in 2060. As productive age population decreases, over 75 aged people are expected to increase rapidly.



Potential growth rate has decreased since 1990s.

Changes in Japan's potential growth rate

(Average annual growth rate, %)



Potential growth rate between 2001 and 2010 was 0.8. The contribution by labor has been negative since the 1990s. The contribution by capital has been decreasing steadily since the 1990s.

Source: Committee for Japan's Future "Interim Report <Reference Charts>" (2014)

. http://www5.cao.go.jp/keizai-shimon/kaigi/special/future/chuukanseiri/04_e.pdf

There is much room for greater integration of females into the labor force.

Female labor force participation rates by age shows an M-shaped curve. It means that a number of women in their 30s (typical child-rearing age) do not work outside the home.



25% of 1st baby boomers want to work as long as possible.



Compared to other developed countries, labor force participation of elderly people (65-) in Japan has already been high (2011: JP 19.3%, US 16.7%, UK 8.8%, FR 2.0%).

According to a survey, however, 25% of "Dankai no Sedai" want to work as long as possible. There is room for elderly people to keep on working longer.

Source: Cabinet Office, Survey of "Dankai no Sedai (baby boomers)"(2013)

Potential growth rate is expected to decrease and TFP is the key for growth.

Even if the labor force participation of women and the elderly progresses and working hours of elderly people become longer, contribution by labor between 2031-2060 is estimated to be negative (-0.6). TFP is an important factor for growth.



Changes in Japan's potential growth rate(presented as previous page)

"New productive age population" does not show negative future.

In case that "new productive age population" is defined as age of 20-70 and that the TFR is assumed to recover to 2.07 by 2030, "new productive age population" is estimated to reach around 56 million in 2060. There is a gap of 11 million between productive age population (15-64) and "new productive age population(20-70)" in 2060.



Source: Committee for Japan's Future "Interim Report <Reference Charts>" (2014)

<u>Challenge 2 Increase of manpower and cost of social</u> security

Aging society requires rapid increase of medical and nursing care staff.

As for medical service, demand for doctors, nurses, and medical staff is expected to increase by about 30% in 2025 compared to in 2011. As for nursing care service, demand for nursing care staff is expected to increase by 50% in 2025 compared to 2013. However, productive age population (15-64) is expected to decrease during the same period.

Estimation of demand for medical and nursing care service (thousand)

	2011/2013	2025
doctor	290	330-350
nurse	1410	1720-1810
medical staff	850	1020-1070
nursing care staff	1710	2530
productive age population (15-64)	79010	70772

Source: Ministry of Health, Labor and Welfare, "Long-term estimation of				
medical and nursing care service" (2011), "Demand and supply				
estimation for nursing care staffs toward 2025" (2015)				
Institution for Population and Social Security				
Note: Population(2013 & 2025) is estimated.				
(medium fertility/ medium mortality)				
Doctor/nurse/medical staff for 2025 is estimated on the condition				
that the current medical system is kept on.				
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Social welfare benefit: Medical care 54.0 trillion JPY, Nursing care 34.4 trillion JPY in 2025.



As the ratio of aged 75 and over persons to total population increases, social welfare benefits increase. In contrast with pensions, medical care sector and nursing care sector are expected to increase rapidly, which will cause a serious fiscal burden.

Public share of the cost of social welfare benefit is 38.8% for medical service (2016), 51.9% for nursing care service (2016) and 50% for basic pension (2004-).

Source: Committee for Japan's Future "Interim Report <Reference Charts>" (2014)

Rapid increase of medical care and nursing care spending is expected around 2025 due to increase of over 75 aged population.

The population over age 75 is expected to be 18% of total population in 2025. This group of people needs more medical and nursing care spending than other generations.

	population and ratio per total population (million, %)		medical care (2013) (10000 JPY)	nursing care (2013) (10000 JPY)
	2013	2025	medical spending per person	nursing care spending per person
65-74	1.63 12.8%	1.479 12.3%	55.3	5.0
over 75	1.56 12.3%	2.179 18.1%	90.3	47.0

Source: Ministry of Finance "Data on Fiscal situation in Japan" (2016)

People over age 75 need more nursing care.

People over age 75 need more nursing care than those age 65-74. Concretely, just 3% of people age 65-74 need nursing care. However, that percentage increases dramatically, to 23.6%, for those over 75.

	Number of insured persons	Number persons needing care	Percentage of people needing care
65-74	17,164,412	507,865	3.0 %
75-	15,856,142	3,733,437	23.6 %

Source: The percentage is calculated based on the Ministry of Health, Labor and Welfare's "Report on nursing care insurance (FY2014)" (2016)

Is nursing care service received at home or at a nursing care institution?

Nursing care service is mainly received at home in 2016. As number of people needing nursing care increases, striking a balance between service at home and service at nursing institutions is necessary. This issue is mainly due to the difficulties of getting family nursing care for service at home in the face of Japan's tight labor supply.

Types of nursing care service	Number of nursing care received person over 65 years old (thousand)
Service at home	2,716
Service in local community	400
Service at nursing care institution	909

Source: The data is calculated based on Ministry of Health, Labor and Welfare's "Report on nursing care insurance" (2016.4)

How will share of equity in Japan change?



Japan's households hold their financial assets mainly as cash and deposits (52.4% in 1st quarter 2016). The share of equity is 9.0%.

It is necessary to be paid attention how this small share of equity in Japan is expected to change in the future.

Source: Bank of Japan "Flow of funds – overview of Japan, the United States, and Euro area-" (2016).

Japan's Plan for Dynamic Engagement of All Citizens was adopted on 2nd June as a Cabinet Decision.

"Toward a society participated by all citizens, whether they are women or men, the elderly or youths, people who have experienced a failure, people with disabilities and people fighting an illness, can play active roles in their respective homes, workplaces and local communities or any other places."

- ➤Working style reforms
- Improvement in the environment for childcare toward the "Desirable Birth rate of 1.8"
- Improvement in the environment for nursing care towards the "No one should leave their jobs to perform nursing care"
 Other efforts
 http://www.kantei.go.jp/jp/singi/ichiokusoukatsuyaku/pdf/plan2.pdf 22

Concretely...

- To realize "Desirable Birth rate of 1.8", we will improve working conditions of childcare providers. Concretely we will newly implement a pay rise equivalent to 2% (about 6,000 JPY per month). In addition, we will additionally improve working conditions for childcare providers with skills and experiences to eliminate the wage gap between childcare providers and female workers across all industries, which is currently around 40,000 JPY.
- To improve the environment for nursing care providers, and to eliminate the wage gap between nursing care providers and workers in other competing industries, we will improve their wages by 10,000 JPY per month on average. (average wage of nursing care providers after revision in FY2015: 287,000 JPY as of 2015.9)
- To promote employment of the elderly, we will provide supports for businesses raising the retirement age to 65 and extending employment beyond the age of 65 while encouraging other businesses to do so.

Thank you for your kind attention !