

## Section 2 Population, Population Structure, and Economy and Society

The postwar period saw the continuous growth of Japanese economy over the long term from the period of postwar reconstruction, rapid economic growth, and bubble economy, coupled with an increasing population. In the past 50 years there has been a major shift in Japan's population structure.

With respect to Japanese worker's lifestyles in the same period, from about 1960 to the first half of the 1970s, both real and disposable incomes grew significantly in line with rapid economic growth. At that time possession of the so-called "three holy durables", or "3Cs" became commonplace in ordinary households.

In addition, with the acceleration of changes in industrial structure, Japan shifted from being a nation of primary industries to one of secondary and tertiary industries.

With this shift in economic development Japan established a good social security system, which includes medical and healthcare services, and achieved the world's highest rate of longevity. However, it also faces the problems of having the lowest birthrate in the world. This could be the result of the increasing numbers of unmarried women or women getting married later, and the diversification of values. The population, which had continued increasing after the war, is now anticipated to peak in 2006, after which the population is expected to decline.

### (Postwar Population Change and Economic Growth)

With respect to the changes in population structure, the proportion of elderly (over 65) in the population continued increasing throughout the postwar period, and in 1997, it exceeded the proportion of youth (less than 15). The proportion of productive population (between 15 and 65) reached a peak in 1992, and then started to decline. Given this situation, the over-15 labour force also peaked in 1998, and then started to fall (Figure 18). Assuming that this trend will continue, as a result of aging and declining birthrate, a decrease in population will be inevitable, which gives rise to serious concerns about the future of Japan's economy.

When looking at economic growth since 1960 in terms of the level of contribution made by capital, labour, and total factor productivity, capital contribution continued to make a positive contribution after it reached a peak in 1970. Total factor productivity also remained a positive contributor to economic growth at this time. The contribution from labour, on the other hand, turned negative in 1995 and after, creating concern over the negative impacts on real GDP growth, which a serious decline in labour force together with population decrease might cause (Figure 19).

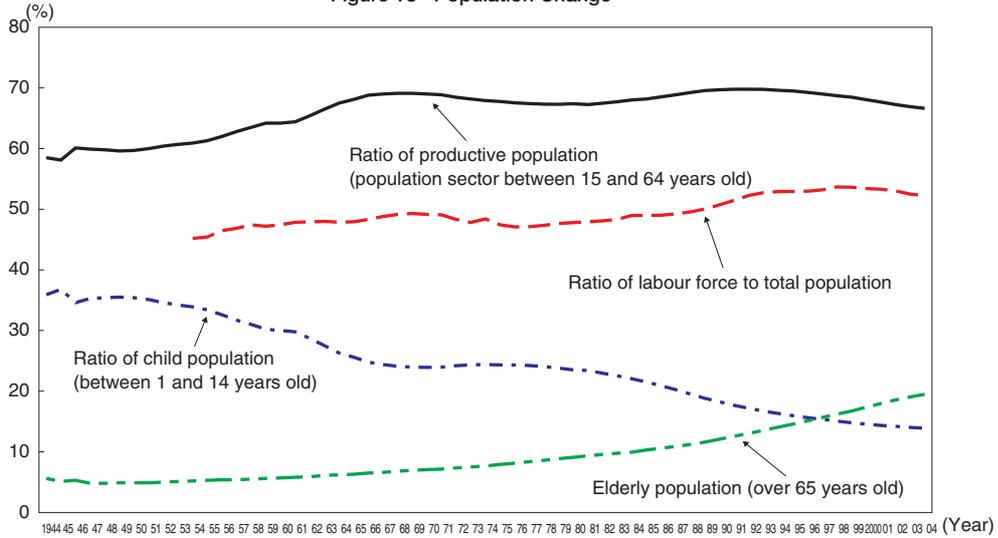
In terms of the effects of the changes in the quality of labour and the number of workers on economic growth, and when looking at the index of the number of employed person taking account of labour quality decline in the increase rate of labour quality and accelerated decrease in the number of workers led to a sharp contraction in growth. Given the declining number of workers, boosted by the retirement of baby-boomers, it is critical to raise the quality of labour in order to maintain the pace of economic growth (Figure 20).

The MOF's "Financial Statements Statistics of Corporations Industries Quarterly" indicated that the labour share (the share of corporate gross added value) was showing a long-term increasing trend, but after 1998, when it reached a peak, this became a modest downward trend, providing a 66% share in 2004.

### (Changes in Worker's Lifestyles and Household Spending)

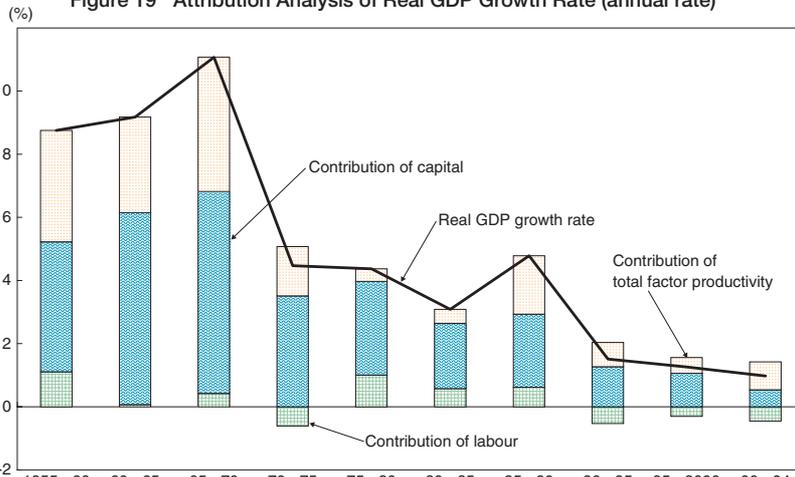
With respect to worker's lifestyles, both income and disposable income grew significantly in line with a rapid economic growth from 1960 to the first half of the 1970s, when possession of the so-called "three holy durables", or "3C's", became common among ordinary households. Income and disposable income both continued to rise until 1995, then fell for a few years; they moved back to an upward trend in 2004.

Figure 18 Population Change



Sources: Statistics Bureau, MIC "CURRENT POPULATION ESTIMATES AS OF OCTOBER 1", and "Labour Force Survey"  
 Note: Ratio of labour force to total population: "labour force/total population estimates as of October 1 (actual figures)"

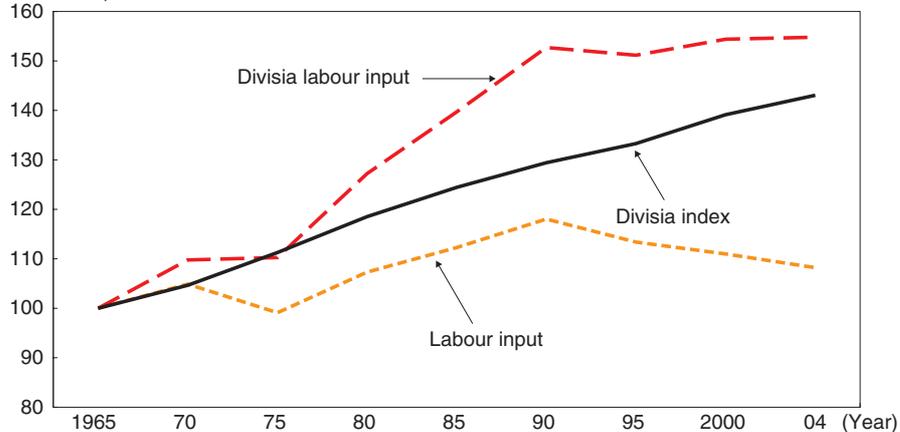
Figure 19 Attribution Analysis of Real GDP Growth Rate (annual rate)



Sources: The Office of Counselor in charge of Labour Policy, MHLW estimate calculated from MHLW "Monthly Labour Survey", Statistics Bureau, MIC, "Labour Force Survey", Cabinet Office "National Accounts" and "Gross Capital Stock of Private Enterprises"  
 Research and Statistics Department, Economic and Industrial Policy Bureau Ministry of Economy, Trade and Industry (METI)  
 Notes: 1) Contribution of labour is based on man-hours  
 2) The capital stock for years since the 1970s have been adjusted by operating ratio

Figure 20 Trends in Labour Input, Divisia Labour Input, and Divisia Index

(The year 1965 = 100)



Sources: The Office of Counselor in charge of Labour Policy, MHLW estimate calculated from MHLW "Basic Survey on Wage Structure" "Labour Force Survey" by Statistics Bureau, MIC  
 Notes: 1) Labour inputs are the number of workers  
 2) Divisia labour inputs are obtained by multiplying the number of workers by Divisia index  
 3) Divisia index shows the changes in the quality of labour

As regards real consumer spending by worker's households in the postwar period, measured by a simple age bracket cohort, the age brackets 60 to 64, and baby boomers, 55 to 59, have always supported real growth in consumer spending by making a positive contribution. These age brackets have led consumption since at least 1965. In terms of the rate of savings, the elderly group was at the top until 1995 but it now appears that there has been a gradual shift in the high saving rate to the younger generation since the late 1970s.

### **(Changes in the Industrial Structure)**

The proportion of workers in primary industries fell to 5.0% in 2000, after reaching a high of 48.5% in 1950. This result is due to the significant decrease in the number of workers in agriculture. The share of secondary industries increased to 34.0% in 1970, and then gradually fell in total number in line with the decrease in manufacturing industry share. The proportion of tertiary industry workers has continued to rise as the number of service industry workers has expanded substantially since 1970 (Figure 21).

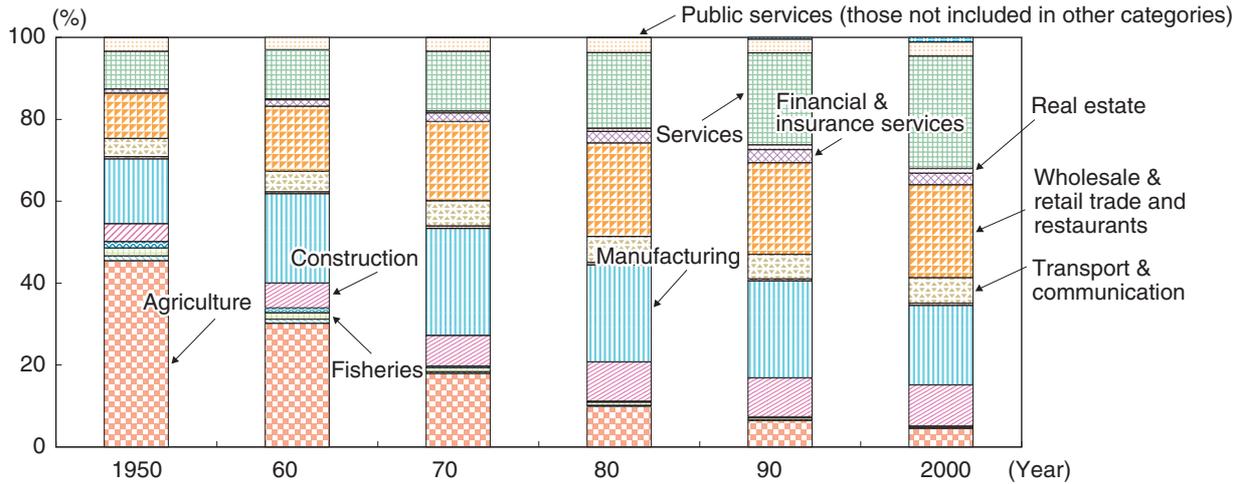
In terms of the employment status by industry, the number of workers has remained flat since the late 1990s. This is mainly due to a significant slowdown in the pace of increase as a result of a shift in demand for domestic final demand. The breakdown of factors affecting the pace of increase in the number of workers related to the shift in demand for domestic final demand indicates that the contribution made by private consumption has contracted and public expenditure on gross fixed capital formation is on a downward trend. On the other hand, the scale of declining contribution by private expenditure on gross fixed capital formation has weakened and the contribution by exports rose in the latter half of the 1990s. Other factors affecting the shift in demand during the same period may include weak private consumption, reduced public works expenditure, and growth in exports and capital investment.

### **(Population and Economy and Society)**

Japan's achievement of the longest life expectancy in the world is the result of well-established social security programs in the medical and health services. At the same time, however, the country has one of the world's lowest birthrates, due, it is thought, to an increasing number of women not marrying or marrying later, as a result of a changed sense of values. Amid such a trend, Japan's population is expected to peak in 2006, after following a consistent increase in the post-war period. It is also expected that there will be an ongoing trend towards a declining population, due to aging and the birth of fewer children.

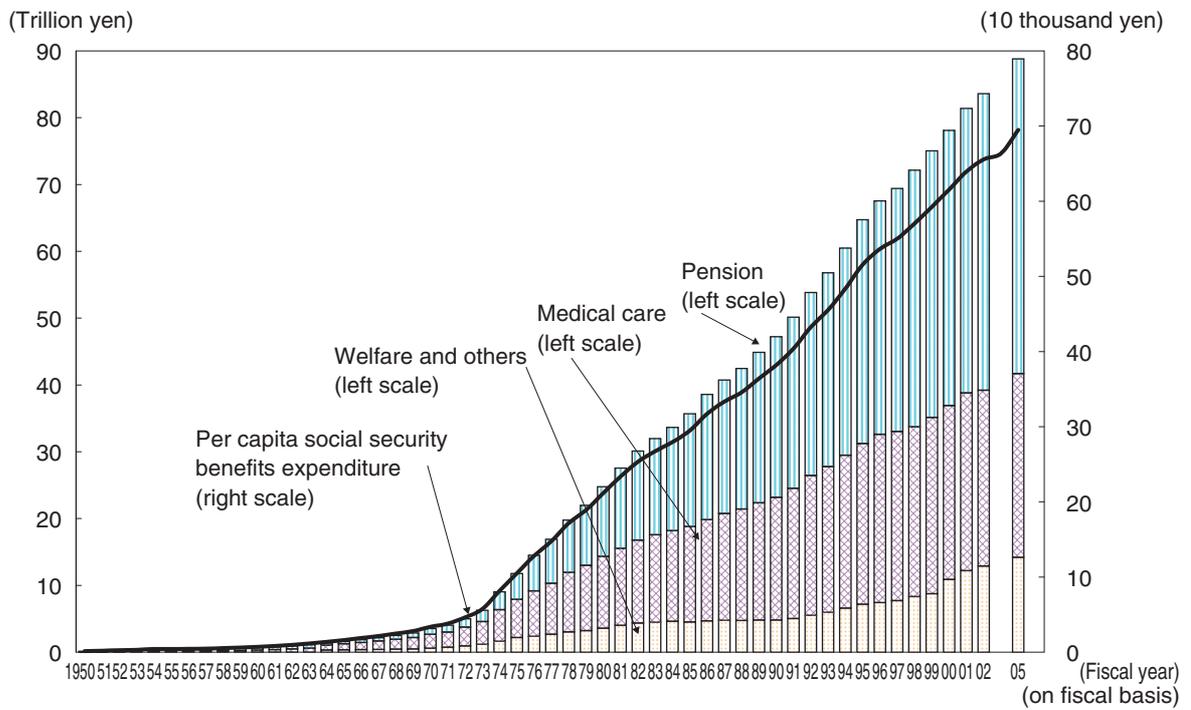
In terms of social insurance benefits and the burdens these have imposed on the economy during the postwar period, the cost of social security has gone up sharply along with the increase in the aging population (Figure 22). When compared to other developed countries, the ratio of social security costs to GDP in Japan is 17.5%, while that of the US is 15.2%; however, it is still relatively lower than that in the EU. The cost of social security in Japan is somewhat higher than in the US and the UK but is lower than in Sweden, Germany, and France. In general, however, the cost of social benefits are not only covered by social contributions but also by public funding, which is sourced from the tax take. The share of social security contribution among the Japanese, including tax burden, is slightly higher than the US, but much lower than the UK, France, Germany, and Sweden.

Figure 21 Ratio of Workers by Industry



Source: Statistics Bureau, MIC "Population Census"

Figure 22 Trends in Social Security Benefits Expenditure



Source: National Institute of Population and Social Security Research "The Cost of Social Security in Japan Fiscal Year"

The figures for fiscal 2005 (budgetary basis) are calculated by MHLW Social Security Counselor's Office

Note: Per capita social security benefits expenditure for 2005 is obtained by dividing the total social security benefits expenditure by total population as of January 1, 2005 (final report)