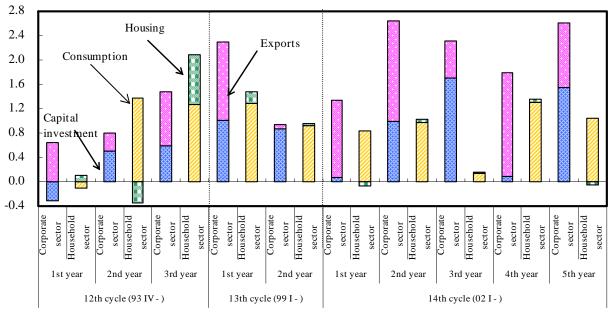
Role of the Household Economy during an Economic Recovery Chapter 2

Recovery Patterns of the Household Sector

In the previous economic expansion phase, the recovery of household demand was weaker than that of corporate demand.

Figure 2-1-2 Contribution of Demand to Real Growth Rates in Past Economic Expansion Phases The spillover effect of corporate demand on household demand has weakened. (Year-on-year change in the contribution ratio; %)



(Note) For example, the 1st year of the 12th cycle shows the year-on-year change in the contribution for the 4Q of 1994.

- In the previous economic expansion phase, although income growth was weak, the propensity to consume remained solid.
- Innovation creates new demand and increases the propensity to consume.

Figure 2-1-3 Factors Contributing to Private **Consumption in Past Economic Expansion Phases**

In the most recent economic cycle, the propensity to consume propped up consumption.

(Year-on-year change in the contribution ratio; %)

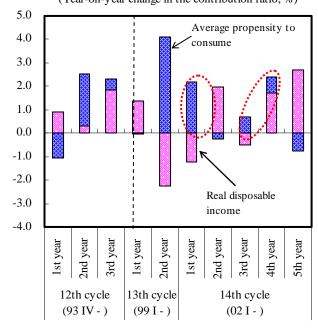
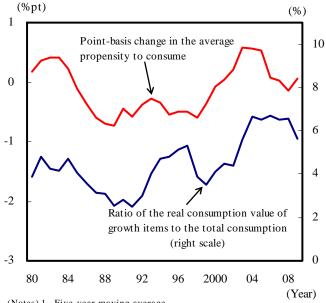


Figure 2-1-9 Growth Items and Average **Propensity to Consume**

(1) Average propensity to consume and the ratio of growth items

> Strong demand for growth items helps to increase the average propensity to consume.



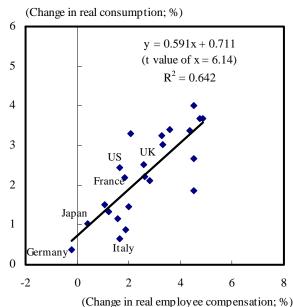
(Notes) 1. Five-year moving average.

- "Growth items" means items whose growth rate is higher by one standard deviation or more than the average growth rate.
- 3. Two-or-more-persons household.

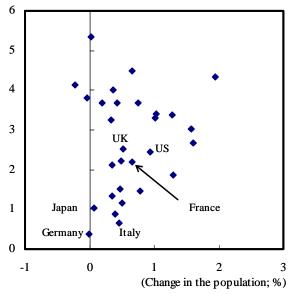
Private consumption has been sluggish due to a slow increase in employee compensation.

Figure 2-1-15 Employee Compensation, Population Movements and Private Consumption

(1) Real employee compensation A strong correlation exists between the rate of increase in private consumption and that in employee compensation.



(2) Rate of increase in the population There is no correlation between the rate of increase in private consumption and that in the population. (Change in real consumption; %)



(Note) Average of 2000-2008

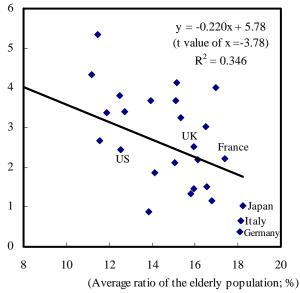
- Private consumption growth tends to be slow in countries with a rapidly ageing population.
- The ratio of private consumption tends to be low in countries where government spending is high.

Figure 2-1-15 Employee Compensation, **Population Movements and Private Consumption**

(3) Proportion of the elderly population

The higher the proportion of elderly in a country's population, the slower the rate of increase in its consumption.

(Change in real consumption; %)



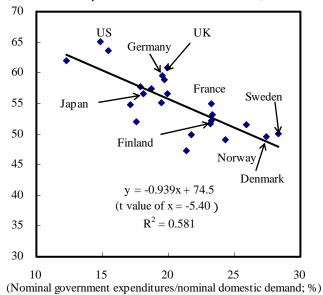
(Note) Average of 2000-2008

Figure 2-1-17 Factors that Increase the Ratio of Private Consumption

(2) Government expenditures and private consumption

Japan's ratio accounted for by private consumption of the total domestic demand is at a medium level.

(Nominal consumption/nominal domestic demand; %)



(Note) Average of 2000-2008

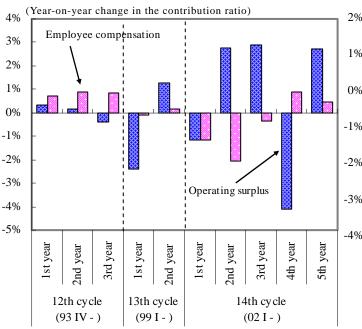
 In an economic recovery phase, corporate income tends to be slow in spilling over to household income.

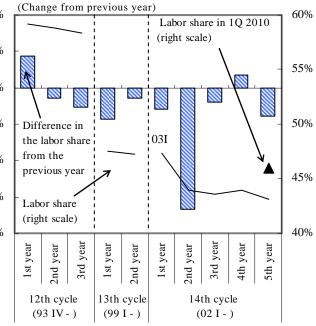
Figure 2-1-18 Contribution from the Operating Surplus and Employee Compensation in Past Economic Expansion Phases

Corporate income was slow in spilling over to household income.

Figure 2-1-20 Labor Share in Past Economic Expansion Phases

The share of labor was on a declining trend.





(Note) The plunge in employee compensation in the 2nd year of the 14th cycle is considered to be due partly to the introduction of a new social insurance scheme in April 2003 under which bonuses have come to be included in the covered earnings so that pension benefits are calculated based on the total earnings of the year.

(Note) Labor share = nominal employee compensation/nominal GDP

• Employee compensation is depressed by reduced hourly wages and working hours stemming chiefly from an increasing number of part-timers in non-manufacturing industries.

Figure 2-1-22 Factors Contributing to Real Employee Compensation in Past Economic Expansion Phases (1) All industries

The number of employees did not grow substantially even when the economy was expanding.

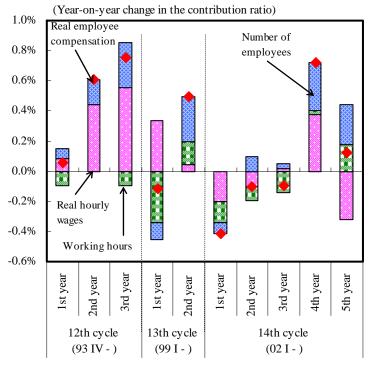
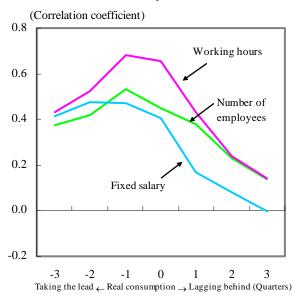


Figure 2-1-25 Time Difference Correlation between Japan's Employment-Related Indices and Consumption (2) From 1Q 2000 through 4Q 2009

Working hours are closely correlated with private consumption.



Section 2 Issues Surrounding Private Consumption

- Elderly households contribute to propping up private consumption.
- The impact of the collapse of Lehman Brothers on elderly households has been comparatively limited.

Figure 2-2-1 Contribution to Changes in Private Consumption from Households by the Age of the Head of the Household

Households whose head is aged 60 or more contribute to propping up private consumption.

(Year-on-year change in the contribution ratio; %)

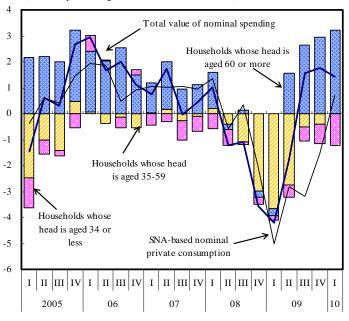


Figure 2-2-2 Consumption Value per Household and the Number of Households

(1) Consumption value per household

Since the collapse of Lehman Brothers, consumption by elderly households has not decreased as much as that by other households.

(Year-on-year change; %)

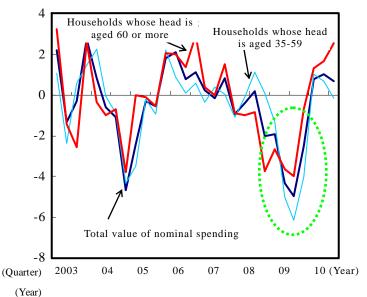


Figure 2-2-4 Average Propensity to Consume on the Basis of the System of National Accounts and the Family Income and Expenditure Survey

The average propensity to consume on the basis of the SNA and Family Income and Expenditure Survey after conceptual adjustment has been on the rise.

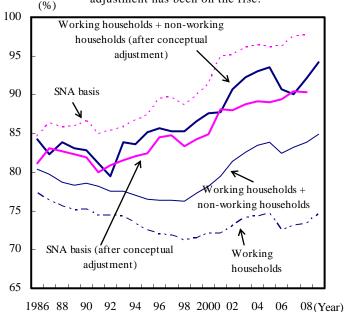
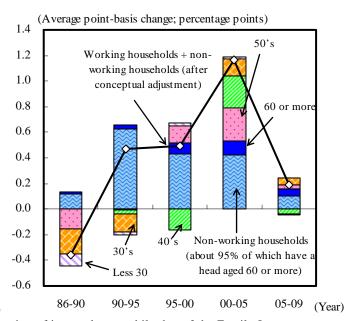


Figure 2-2-5 Contribution to the Average Propensity to Consume from Households by the Age of the Head of the Household

Elderly households have contributed to the rise in the average propensity to consume since around 1990.



(Note) The major adjustment to the SNA-based data is the deduction of imputed rent, while that of the Family Income and Expenditure Survey-based data is the correction for underestimated spending on durable goods through the use of the Survey of Household Economy.

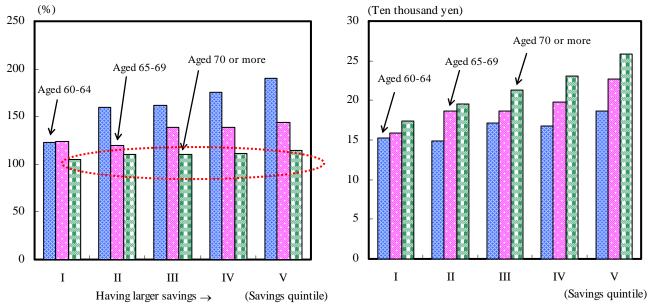
• Of non-working elderly households, those with a head who is of advanced age are able to spend without using savings.

Figure 2-2-12 Savings Levels and the Propensity to Consume of Non-Working Elderly Households

(1) Average propensity to consume

(2) Disposable income

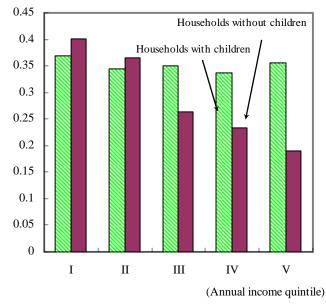
With regard to households whose head is aged 70 or more, the more they have saved, the more disposable income they can enjoy; however, their propensity to consume is around 100% regardless of their savings amount.



- (Notes) 1. Although the amount of savings of each quantile varies by age bracket, the approximate amounts that mark the quantile boundaries are as follows: I-II, about 6 million yen; II-III, about 13 million yen; III-IV, about 22 million yen; and IV-V, about 38 million yen.
 - 2. Average of 2002 and onward.
- An increase in "real" disposable income is essential mainly for households with children.

Figure 2-2-14 Marginal Propensity to Consume by Household Attribute

(2) With or without children aged less than 18 Income is less linked to the marginal propensity to consume in households with children.

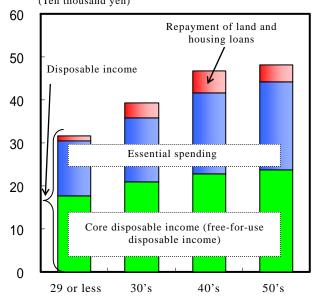


(Note) Estimates based on data for 2002-2009

Figure 2-2-16 Core Disposable Income by Age Bracket

Education-related spending squeezes the core disposable income of the 40's and 50's age groups.

(Ten thousand yen)



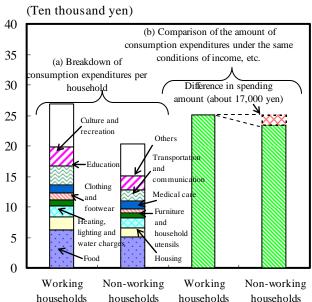
- (Notes) 1. Data for 2009.
 - 2. Core disposable income = disposable income essential spending repayment of land and housing loans.

• Consumption by working elderly households is greater than that by non-working elderly households.

Figure 2-2-19 Characteristics of Working and Non-Working Elderly Households

(1) Consumption expenditures

Even if the difference in income and savings is discounted, spending by working elderly households is higher than that of their non-working counterparts.



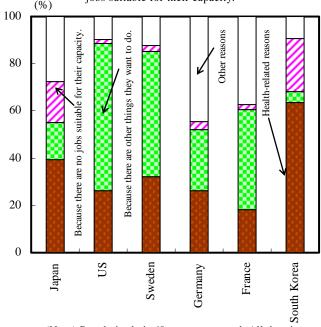
- (Notes) 1. (a) applies to households whose head is aged 65 or over and(b) applies to households whose head is in their 60s.
 - 2. (a): averages of 2007-2009; and (b): results for 2008

Figure 2-2-21 Attitudes of the Aged towards Work and their Reasons (International Comparison)

(2) Reasons why the unemployed elderly do not want to work

Compared with other developed countries, Japan has a larger
number of the aged who are not employed because there are no

jobs suitable for their capacity.



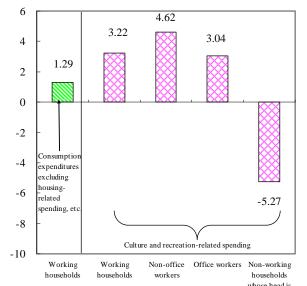
(Note) People in their 60s were surveyed. All data is as of 2005, excluding that for Sweden, which is as of 2000.

• Consumption by working households increases in line with an increase in their leisure time.

Figure 2-2-22 Trends in the Working Hours and the Amount of Consumption

(2) (3) Holiday consumption by working households The more holidays a worker's household has, the more they spend.

(Trend in the amount of spending; %)

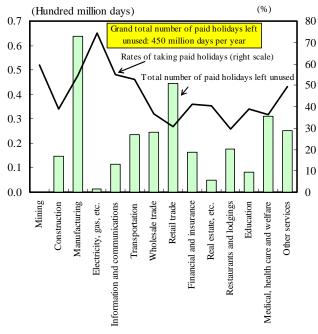


(Notes) 1. Estimated based on data for 1996-2009
2. The figures indicate the rate of increase in the amount of spending when the number of holidays of the Golden Week increases by one.

Figure 2-2-23 Total Number of Paid Holidays Left Unused by Industry and by the Scale of the Enterprise (1) By industry (enterprises with 30

employees or more)

Rates of taking paid holidays vary significantly across industries.



(Note) The data is as of 2009.

Section 3 Issues Surrounding Housing Demand

- Due to the slowing rate of the increase in the number of households, housing demand in terms of the number of houses is likely to remain weak over the medium to long term.
- Both existing house trades and renovation investments are stagnant in Japan.

Figure 2-3-1 Potential Housing Demand from the Viewpoint of Population Movements

(2) Housing demand
Housing starts have been sluggish due to the
decelerating rate of the increase in the number of
households.

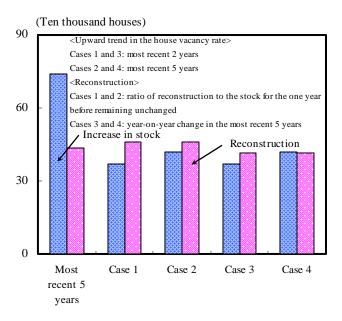
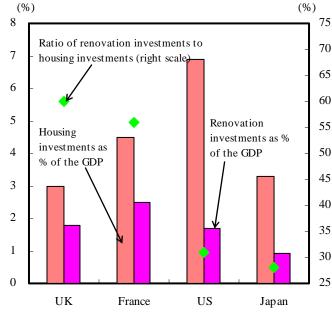


Figure 2-3-3 Existing House Trades and House Renovation Investments

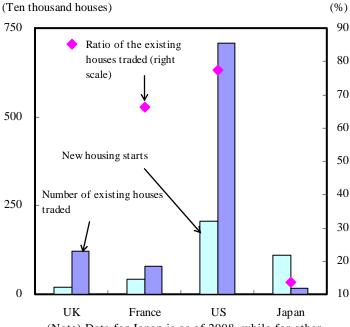
(3) Renovation investments (international comparison) Renovation investments are also low in Japan.



(Note) Data for Japan is as of 2008, while for other countries it is as of 2005.

Figure 2-3-3 Existing House Trades and House Renovation

(1) New housing starts, etc. (international comparison)
The number of existing houses traded is low in Japan.



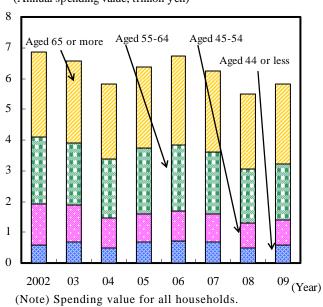
(Note) Data for Japan is as of 2008, while for other countries it is as of 2005.

Figure 2-3-7 Scale of the House Renovation Market

(3) Total annual spending value

Demand in the house renovation market is mainly from the elderly.

(Annual spending value; trillion yen)



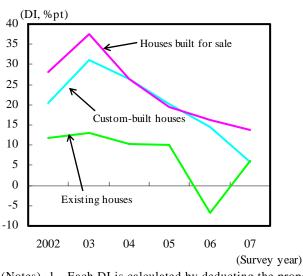
• Together with household income and land prices, political measures and interest rate trends have a significant impact on house purchases.

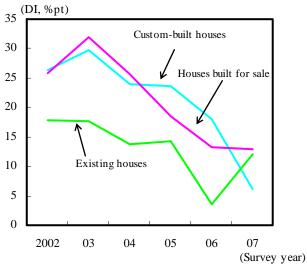
Figure 2-3-11 Factors Affecting House Purchases

(3) Housing policies

(4) Interest rate trends

Housing policies as well as interest rate trends spurred housing investments mainly in the first half of 2000s.



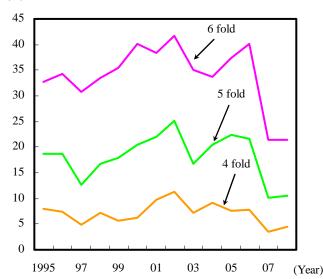


- (Notes) 1. Each DI is calculated by deducting the proportion of respondents who were affected negatively from the proportion of respondents who were affected positively.
 - 2. People who built, purchased or began to live in the house in the survey year are subject to the survey.
- A large number of young households fail to meet certain levels of the house price to annual income ratio. However, the capacity of the elderly for house renovation investment continues to be solid.

Figure 2-3-13 Trends in the Distribution of House Prices to Annual Income Levels

(2) Proportion of households whose head is in his/her 30s meeting certain levels of the annual income level

The proportion of households meeting the levels dropped. (%)

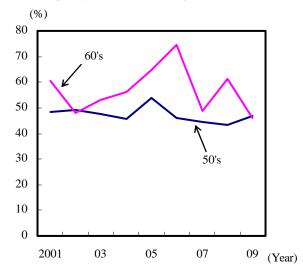


(Notes) 1. The ratio of the average price of a condominium in the Tokyo metropolitan area to the annual income of a household whose head is in their 30s

2. In 2008, the average annual income of people in their 30s was 6.4 million yen, while the average condominium price was 48 million yen.

Figure 2-3-15 Proportion of Households Capable of Purchasing a House

(2) Renovation capacity of the 50's and 60's age groups Renovation capacity in terms of savings has remained solid.



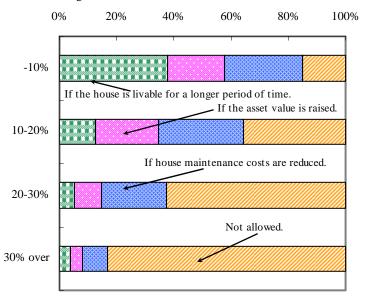
- (Notes) 1. Of all households whose head is in their 50s or 60s, the proportion accounted for by those with sufficient savings to pay for the average renovation contract value of 6.4 million yen or more.
 - 2. In 2009, the average savings of households whose head is in their 50s each consisting of two persons or more and having their own house was 10 million yen, while the corresponding figure for households whose head is in their 60s was 1.5 million yen.

• Incentives such as cost recovery are a key factor in promoting the spread of eco-friendly homes.

Figure 2-3-20 Extent to which Additional Costs are Allowed with Long-Term High Quality Housing

(1) Rate of responses according to the reason why additional costs are allowed

The average cost increase that can be tolerated is around 20%.

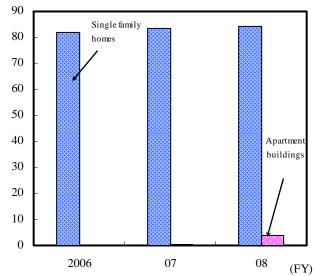


(Note) Surveyed in January 2009. Those who were planning to purchase houses are subject to the survey.

Figure 2-3-21 Energy-Efficient Single Family **Homes and Apartment Buildings**

(1) Proportion of prefabricated housing units put on the market with an energy efficiency rating of Grade 4 The development of energy-efficient apartment buildings lags behind that of energy-efficient single family homes.

(Provision ratio; %)



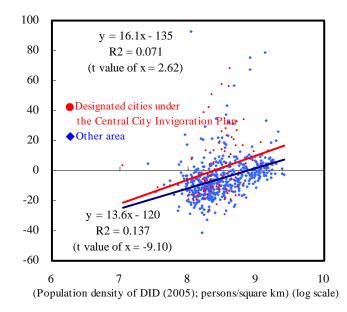
(Note) The ratio of the number of housing units with an energy efficiency rating of Grade 4 to the total number of housing units put on the market according to 11 housing companies.

A challenging task is to boost housing values through the accumulation of urban functions.

Figure 2-3-26 Population Density, Extent of Urbanization and Land Prices in **Densely-Inhabited Districts**

(1) Population density of DID As the density progresses, the land prices in the area tend to rise.

(Rate of increase in land prices; %)



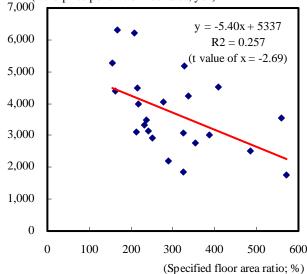
(Note) The rate of increase in 2009 from 2005

Figure 2-3-27 Floor Area Ratio and Land Price (Tokyo 23 wards)

(2) Land price per unit of floor area

In areas where the floor area ratio is high, the land price per unit of floor area is low.

(Land price per unit of floor area; yen)



- (Notes) 1. Data is as of 2008.
 - 2. Specified floor area ratio refers to the floor area ratio specified by the city plan.