Hysteresis and Sluggish Growth in Wages and Prices: The Case Study of Japan

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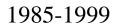
Makoto Sakurai

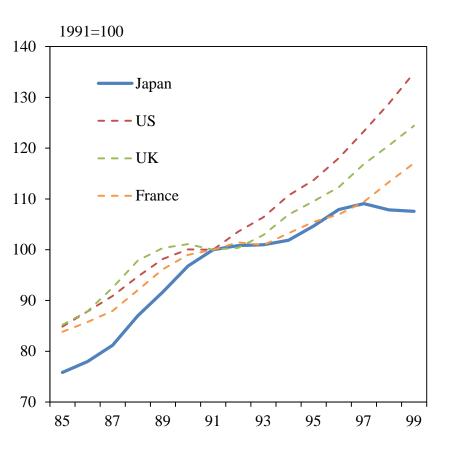
Masahiko Kataoka

Member of the Policy Board

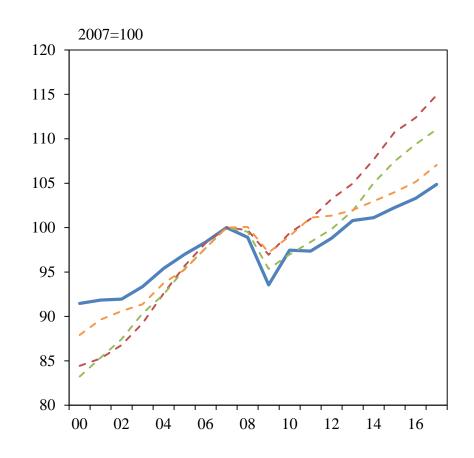
Director, Secretariat of the Policy Board

Real GDP Growth





2000-2017



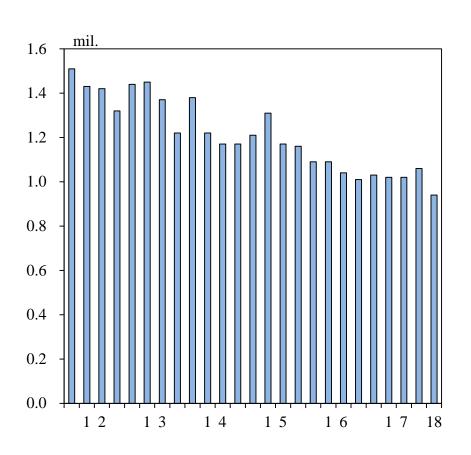
Source: OECD.

Labor Force Participation Rate

Labor Force Participation Rate

63 62 61 60 59 58 91 93 95 97 99 01 03 05 07 09 11 13 15 17

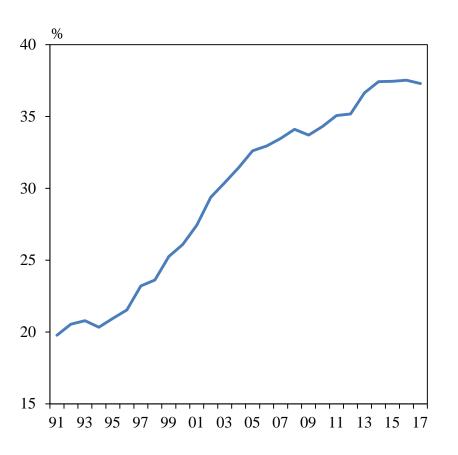
Discouraged Workers



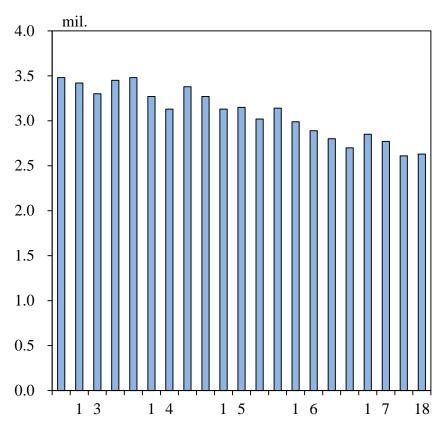
Note: Discouraged workers are people who are not seeking employment because they feel that they have no prospect of finding a suitable job.

Non-Regular Employment

Non-Regular Employment Ratio¹



Non-Regular Employment due to Economic Reasons²

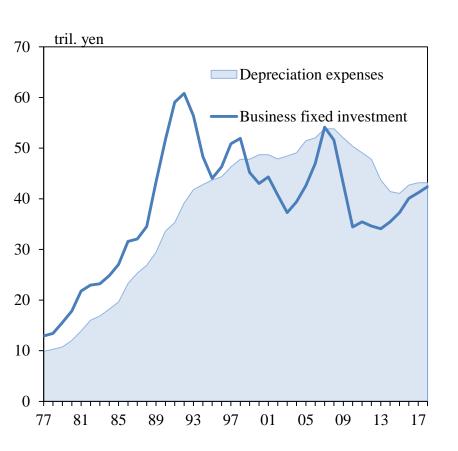


Notes: 1. The ratio of non-regular employment to total employment excluding executives of a company or corporation.

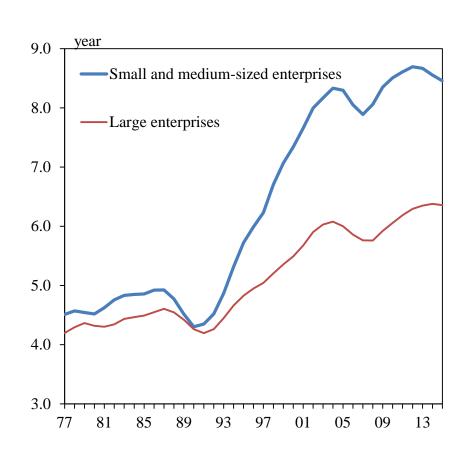
2. The number of those who work as non-regular employees due to the absence of firms that will employ them as regular employees.

Business Fixed Investment

Business Fixed Investment



Vintage Year



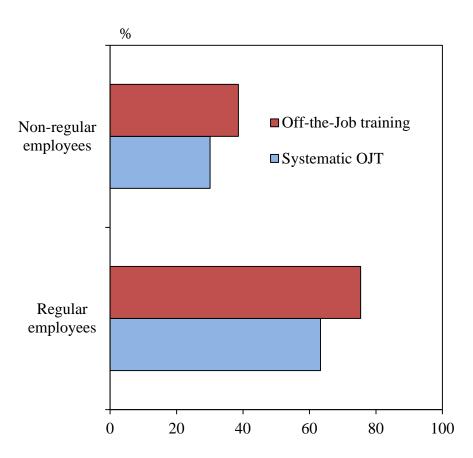
Sources: Ministry of Finance; The Small and Medium Enterprise Agency.

Education and Training

Cost of Education and Training

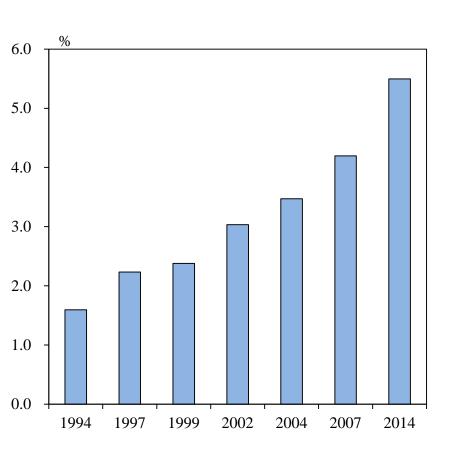
thous. yen 2.8 2.0 ■Monthly cost of education and training (left scale) 2.6 Percentage for total labor cost (right scale) 1.6 2.4 2.2 1.2 2.0 1.8 0.8 1.6 1.4 0.4 1.2 0.0 95 88 91 98 02 06

Implementation of Job Training

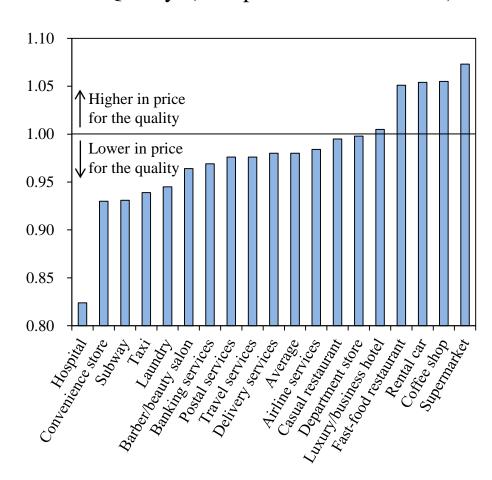


Extravagant Services

Proportion of 24-hour Stores



Services in Japan Higher/Lower in Price for the Quality (Comparison with the U.S.)

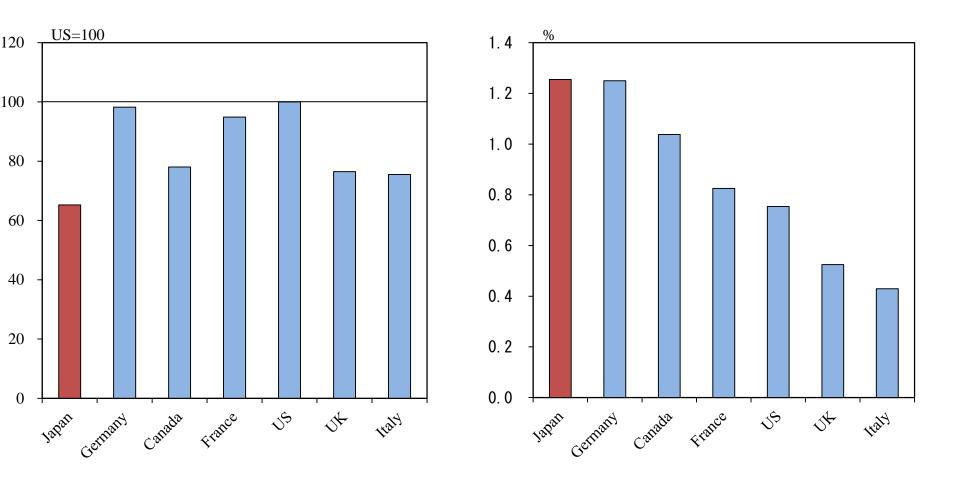


Sources: Ministry of Economy, Trade and Industry; Japan Productivity Center.

Labor Productivity per Hour Worked

Labor Productivity in 2017

Productivity Growth (2010-2017)



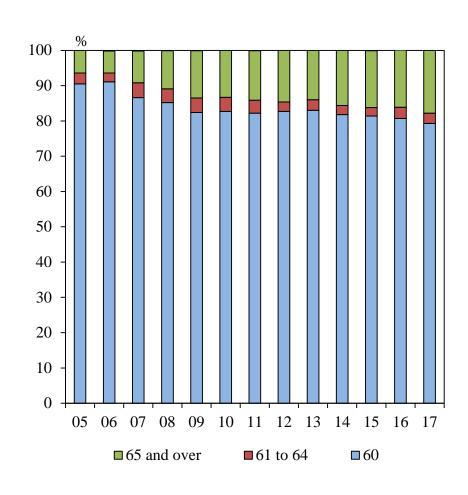
Source: OECD.

Women and Elderly Labor Force Participation

Capacity in Nursery Schools

mil. 3.0 2.7 2.4 2.1 1.8 06 07 08 09 10 11 12 13 14 15 16 17

Mandatory Retirement Age

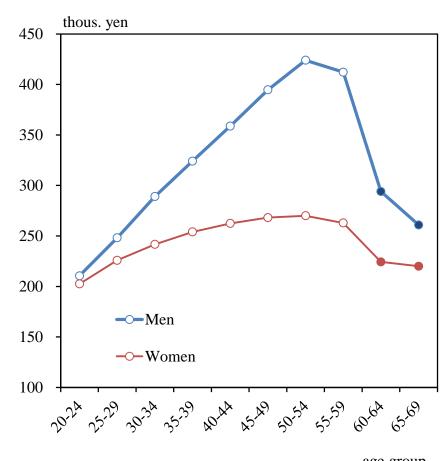


Employment and Wage Structure

Share and Number of Employees

10 thous. 2007 2017 Difference 48.7% 44.1% -4.6%p Under 60 (3,133)(2,881)(-252)Men 9.8% 12.1% +2.3%p60 and over (790)(628)(+162)35.6% 35.6% +0.0%pUnder 60 (2,288)(2,322)(+34)Women 5.9% 8.2% +2.4%p60 and over (378)(538)(+104)

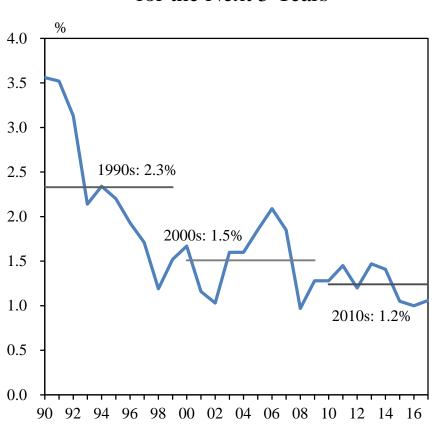
Wage Structure



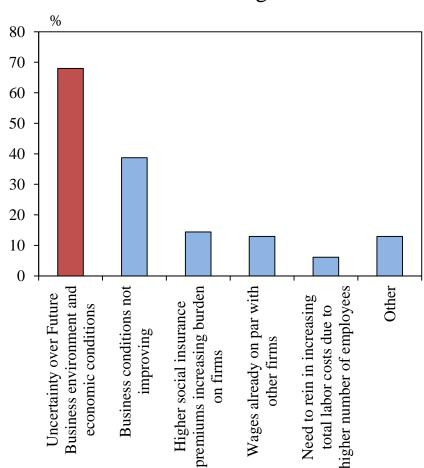
age group

Business Confidence and Wage Increase

Firms' Forecast on the Real Growth Rate for the Next 5 Years



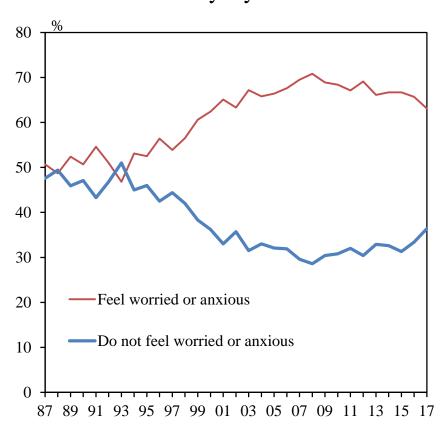
Reasons Firms Are Passing Over/ Undecided on Wage Increases



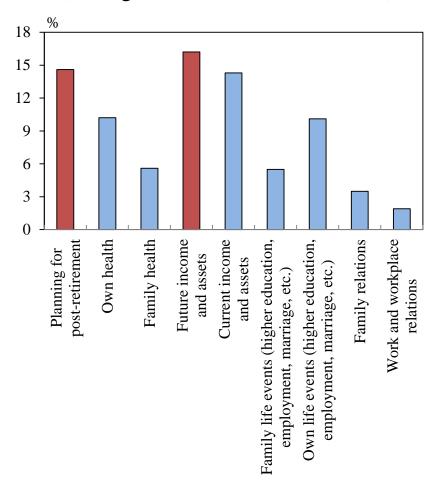
Sources: Cabinet Office; The Japan Chamber of Commerce and Industry.

Anxiety of Households

Worries or Anxieties in Everyday Life

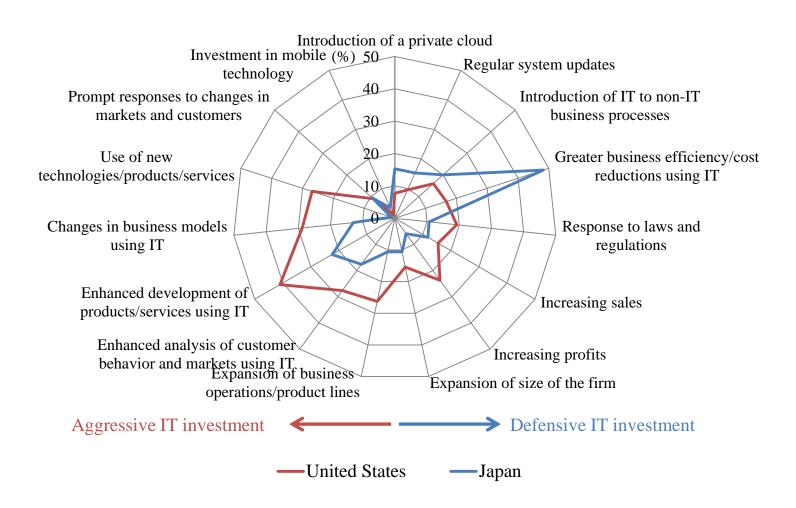


Causes of Worries or Anxieties (Changes between 1992 and 2017)



Source: Cabinet Office.

Purpose of Increasing IT Budgets

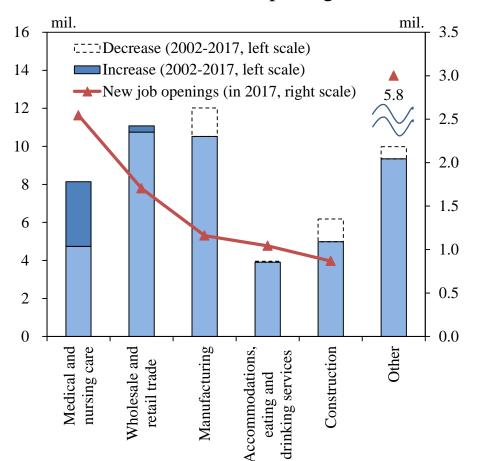


Note: 85 Japanese firms and 156 U.S. firms answered to the questionnaire. Figures in the chart indicate the proportion of firms that selected each choice. Since this was a multiple-choice questionnaire, the sum of figures exceeds 100%.

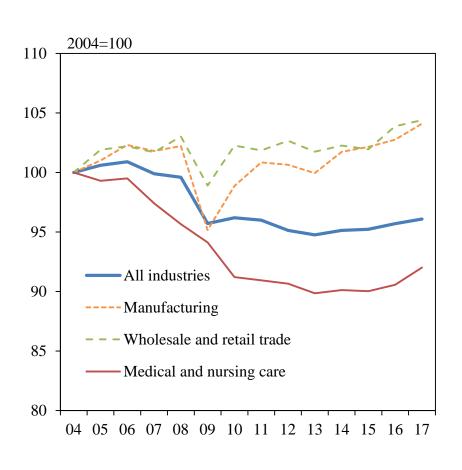
Source: JEITA.

Demand for Labor and Wages

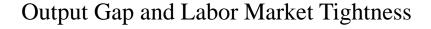
Change in Number of Employees and New Job Openings



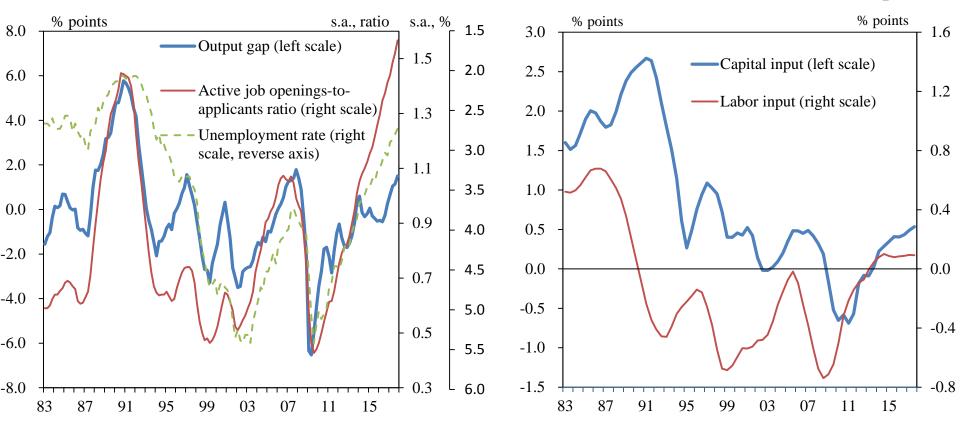
Change in Wages



Output Gap and Changes in Supply Capacity

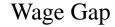


Capital and Labor Input Growth (Contribution to the Potential Output)

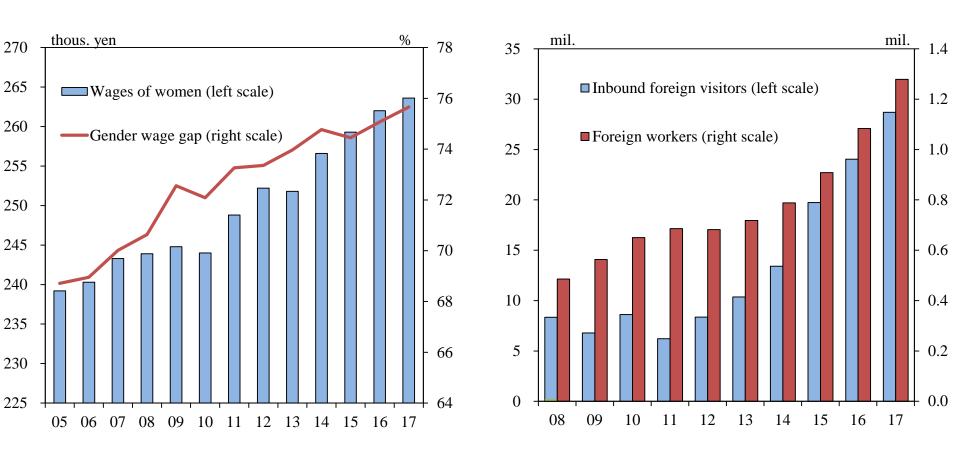


Sources: Ministry of Health, Labour and Welfare; Bank of Japan.

Structural Reform



Foreign Visitors and Workers



Sources: Ministry of Health, Labour and Welfare; Ministry of Land, Infrastructure, Transport and Tourism.