Japanese labor force in future

with JIDEA7 simulation

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THE EVOLUTION JIDEA6 TO JIDEA7

1. New data 2006 added
2. PSeidel: arguments arranged correctly
3. Rhoadjustment: make it work properly
4. Coefchg: calculation process readjusted
5. Productivity function: changed and revised
6. Balance checked rigidly
Japanese Population by age class: 1950 – 2055

Source: National Institute of population and social security research
MAIN CAUSES OF DECREASE

Total fertility rate of Japan (1925~2006) (%)

Japanese birth rate by mothers age (%)
Labor participation rate (%)

- **Total**
- **Men**
- **Women**


Values: 0.0, 10.0, 20.0, 30.0, 40.0, 50.0, 60.0, 70.0, 80.0, 90.0

**Labor Force Participation Rate**
The JIDEA model simulation is done. Use Vam or Compare to view results.
Total execution time: 15 seconds

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GDP components by expenditure category (Trillions of Yen)

- Imports
- Exports
- Inventory Change
- Government Investment
- Business Investment
- Consumption of Government
- Consumption of Households
- Consumption of Business
GDP BY INCOME CATEGORY

Current price GDP by income category (Trillions of Yen)

- Less: Subsidies
- Consumption Outside Household
- Indirect Tax
- Capital Consumption
- Surplus (Profits, Rent, Interest)
- Labor Compensation
DISPOSABLE INCOME & SAVING

Wages and income (Trillions of Yen, %)

- Total Wages
- Disposable Income
- Savings
- Savings Rate (%)

Graph showing the trends of Total Wages, Disposable Income, Savings, and Savings Rate from 1985 to 2020.
LABOR PRODUCTIVITY IN MANUFACTURING

Labor productivity index by manufacturing (2000=1)

- 03 Food & beverage, etc.
- 04 Textile
- 05 Wood products & papers
- 06 Chemical products
- 07 Petro & coal products
- 08 Glass & cement, etc.
- 09 Iron & steel
- 10 Non-ferrous metal
- 11 Metal products
- 12 General & special machine
- 13 Electrical & electronic equipment
- 131 Computer & Communication equipment
- 132 IC & Electronic parts
- 133 Heavy Electrical equipment
- 14 Transportation equipment
- 15 Precision instruments
- 16 Miscellaneous manufacturing
LABOR PRODUCTIVITY BY SERVICE

Labor productivity index by service sector (2000=1)

- Service industry total
- Trade (19)
- Finance, Real estate (20)
- Transportation (21)
- Communication (22)
- Public administration (23)
- Education, Research & Med (24)
- Information service (25)
- Business service (26)
- Personal service (27)
Labor force participation rate in 3 cases

![Labor force participation rate graph](image)
Labor force and unemployment in 3 cases

**Case I: Population, labor force and unemployment rate**
(Millions of person, %)

**Case II: Labor force and Unemployment rate**
(Millions of person, %)

Graphs showing labor force, NIPA workforce, number of unemployment, and unemployment rate over time from 1985 to 2020.
CASE II: HIGH PRODUCTIVITY

Case II: Labor productivity (yen/person, 2000=1.0)

- Base line
- Case I
- Case II

- Total industry
- Total Manufacturing
- Service industry total