Mizuho Economic Outlook & Analysis

Japan’s Inequality Today and Policy Issues
September 30, 2015

Mizuho Research Institute
1. Inequality Issues Return to Center Stage

Debate on inequality refueled under Second Abe Administration

Key points

- Concerns about widening disparities have resurfaced under the second administration under Prime Minister Shinzo Abe.
- Disparities have been frequently revealed in past decades, for example, urban-rural disparities during the period of rapid economic growth, wealth inequality between haves and have-nots during the “bubble economy” era, and economic disparities exacerbated by former Prime Minister Junichiro Koizumi’s structural reforms.
- The Abe administration’s economic policies have achieved some positive results in economic recovery, but not enough to have a trickle-down effect on overall economic growth.
1 (1) Awareness of Inequality – Same issues debated repeatedly

- French economist Thomas Piketty’s best-selling book has raised awareness of inequality, but the same issues have been debated repeatedly.
- Japan faced urban-rural disparities during the period of rapid economic growth, a wealth gap between haves and have-nots during the economic bubble, and the adverse effects of structural reforms implemented by the Koizumi administration.
- The first administration under Prime Minister Shinzo Abe introduced the “Challenge Again” initiative to expand employment to temporary workers and promote job opportunities for young people.

### Inequality debates in the past

<table>
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<th>Period</th>
<th>Debate on inequalities</th>
<th>Policy measures</th>
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<td>1960s to 1970s Rapid economic growth</td>
<td>Economic and income disparities between urban and rural areas</td>
<td>Balanced development nationwide Local industrial promotion</td>
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<td>Late 1980s Economic bubble</td>
<td>Wealth inequality between haves and have-nots due to soaring stock and land prices</td>
<td>Land price control policy</td>
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<td>Mid 2000s Koizumi and Abe administrations</td>
<td>Income and employment inequalities under structural reforms (Increase in temporary employment)</td>
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<td>Generating a positive economic cycle with wage increases Revitalizing local economies</td>
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Source: Made by Mizuho Research Institute Ltd. (MHRI)

### Outline of the “Challenge Again” initiative under the First Abe Administration

- Generating a positive economic cycle with wage increases
- Revitalizing local economies
- Supporting the revitalization of start-ups and entrepreneurs
- Promoting employment in rural areas
- Equal treatment for part-time workers
- Supporting re-employment for women caring for children
- Re-education for adults
- Converting temporary workers to regular employees
- Supporting employment for single-mother families

Source: Made by MHRI based upon releases by the Cabinet Office
1 (2) Abenomics and Inequality Issues – Some positive results but insufficient for overall economic growth

○ Prime Minister Abe’s economic policies, known as “Abenomics,” have produced some positive results, but not enough to boost economic growth nationwide.
  • Abenomics consists of aggressive monetary policies, flexible fiscal policies, and economic growth strategies to encourage private investment.
  • While corporate performance has gradually improved with the weaker yen and higher stock prices, trickle-down effects have yet to reach employment and income distribution.
○ Criticized by small businesses, the low-income groups, and local communities, Abenomics economic policies have become the main issue in the lower house election in December 2014 and the nationwide local elections in 2015.

[Changes in major indicators under the Second Abe Administration]

<table>
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<th></th>
<th>2012</th>
<th>2014—2015</th>
<th>Results</th>
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<tbody>
<tr>
<td>Nikkei Stock Average</td>
<td>10,080 yen (December 25)</td>
<td>17,388 yen (September 30, 2015)</td>
<td>↑</td>
</tr>
<tr>
<td>Exchange rates (Yen/US dollar)</td>
<td>84.83 yen (December 25)</td>
<td>119.95 yen (September 30, 2015)</td>
<td>↑</td>
</tr>
<tr>
<td>Bankruptcy cases filed</td>
<td>12,124 (Jan-Dec)</td>
<td>9,731 (Jan-Dec)</td>
<td>↓</td>
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<tr>
<td>Current profit*</td>
<td>49.9 trillion yen (Oct-Dec)</td>
<td>65.7 trillion yen (Jan-Mar)</td>
<td>↑</td>
</tr>
<tr>
<td>Number of employees*</td>
<td>62.52 million (December)</td>
<td>63.91 million (June 2015)</td>
<td>↓</td>
</tr>
<tr>
<td>Non-regular employment ratio</td>
<td>35.6% (Oct-Dec)</td>
<td>37.9% (Oct-Dec)</td>
<td>↓</td>
</tr>
<tr>
<td>Unemployment rate*</td>
<td>4.3% (December)</td>
<td>3.4% (June 2015)</td>
<td>↑</td>
</tr>
<tr>
<td>Jobs-to-applicants ratio*</td>
<td>0.83 (December)</td>
<td>1.19 (June 2015)</td>
<td>↑</td>
</tr>
<tr>
<td>Gross cash earnings</td>
<td>360,945 yen (Oct-Dec)</td>
<td>364,899 yen (Oct-Dec)</td>
<td>↓</td>
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<tr>
<td>Real wage increase</td>
<td>-1.3% (Oct-Dec)</td>
<td>-2.8% (Oct-Dec)</td>
<td>↓</td>
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Note: Figures marked with asterisks are seasonally adjusted. The upward arrows show improvement and the downward arrows show deterioration. The weaker yen at the exchange rates is rated as positive. Debt from bankruptcy exceeds 10 million yen. Current profit is an annual rate.
2. Inequality from a Global Perspective

Income gap widening mainly in the US and the UK

Key points

- The income gap in developed countries, such as the US and the UK, has widened considerably since the 1980s.
- Income disparities in many countries, including emerging market (EM) countries, are wider than in Japan.
- Wealth inequality exceeds the income gap in most countries, with the level of inequality especially high in the US.
The income gap has expanded significantly in the US and UK since the 1980s, reaching its highest level since the 1920s.

- Income disparities in developed market (DM) countries declined in the early 1900s and leveled off in the 1940s, but a rise in income inequality was seen in the US and UK starting in the 1980s.
- Income inequality in continental Europe and Japan has been relatively benign since the 1980s.

Note: Data are based on income redistribution. Income does not include capital gains.
Source: Made by MHRI based upon the World Top Income Database
Income disparities in many countries, including EM countries, are greater than in Japan.

But the Gini coefficient of Japan’s income redistribution is slightly higher than the OECD average, indicating that Japan’s income gap is wide among the developed market (DM) countries.

Notes: 1. International comparison of the Gini coefficient: The Gini coefficient is an index for measuring distribution inequality like income. The values of the coefficient range from 0 to 1, where a coefficient close to 0 indicates a smaller gap, while a coefficient close to 1 indicates a larger gap. 2. The Gini coefficient of China is calculated in 2014, US and India in 2013, Brazil in 2011, Japan in 2009, and all others in 2012. Note that the calculation criteria of India, China, and Brazil are different from those of other countries. Source: Made by MHRI based upon OECD Data
All developed countries have greater wealth disparities than income disparities.

- The United States has a high level of both wealth inequality and income inequality, with 76% of its wealth concentrated in the top 10% of households.

[International comparison of wealth and income concentration in the top 10% of households]

Note: Data are based on the statistics in 2012 or the latest available year.
Source: Made by MHRI based upon OECD Data
3. Inequality in Japan

Abenomics – Limited impact on income and wealth inequalities

Key points

- Income and wealth inequalities have not changed much since the implementation of Abenomics.
- The effects of Abenomics are slow to spread to rural areas and differ depending upon regions (in rural areas).
- Regional populations are polarized between metropolitan and rural areas.
Income inequality (annual income inequality) has not changed much since the implementation of Abenomics.

Wealth inequality (savings gap) has gradually increased but is still around the same level as 2011.

Notes: 1. Changes in Gini coefficient: A coefficient close to 0 indicates a smaller gap, while a coefficient close to 1 indicates a larger gap.
2. The Gini coefficient is calculated by the number of households by income bracket and average annual income.
3. The Gini coefficient is calculated by the number of households by the current savings amount and average savings.

Source: Made by MHRI based upon Ministry of Internal Affairs and Communications, Family Income and Expenditure Survey
3 (2) Wage Inequality – Wage gap in the working-age groups is hardly affected by Abenomics

- There is a wide gap in wage distribution between full-time regular employees and full-time non-regular workers. The increase in non-regular workers has been a major factor in widening wage disparities in the working-age population since the late 1990s.

- The Gini coefficient of working-age household income does not indicate growing inequality since the beginning of Abenomics.

Note: Income shown here is annual income (including taxes) from regular work. Full-time work refers to working over 35 hours in a week and over 200 days in a year.
Source: Made by MHRI based upon Ministry of Internal Affairs and Communications, Basic Survey on Employment Structure (2012)
In general, Abenomics has not been effective enough to generate momentum in rural areas.

Current business conditions do not show a significant gap between metropolitan and rural areas.

Various factors are behind this trend, including the fact that the manufacturing industry is not serving as the driver of the economic recovery, the reinforcement of public works, the positive effect of inbound foreign visitors upon tourism, and the opening of the Hokuriku Shinkansen bullet train service.*

*The Hokuriku Shinkansen is a high-speed railway line connecting Tokyo to Nagano, and ultimately Osaka, through the Hokuriku region in the northwestern part of Japan’s main island. The Tokyo-Nagano route was first opened in time for the 1998 Nagano Winter Olympics. (It was called Nagano Shinkansen before its extension to Kanazawa.) The Nagano-Kanazawa route opened in March 2015.

In addition to the severe job market in rural areas compared with metropolitan areas, note that employment conditions also vary in both metropolitan and rural areas.

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3 (3) Regional Disparities – Effects of Abenomics are slow to spread to rural areas

- In general, Abenomics has not been effective enough to generate momentum in rural areas.
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In addition to the severe job market in rural areas compared with metropolitan areas, note that employment conditions also vary in both metropolitan and rural areas.
Regional populations have moved in the direction of urban-rural polarization since the late 1990s, with the concentration of people especially high in metropolitan areas.

- The population of shrinking prefectures is falling at an accelerating pace. Populations are also declining in Miyagi, Hiroshima, and Ishikawa prefectures, which are adopting a central role in local economic development.
- Population growth is dominated by prefectures with metropolitan areas, except for Okinawa Prefecture with its high fertility rate.

### [Changes in population growth rate by prefecture]

4. Essence of Inequality Problems in Japan

Significant increase in poverty

Key points

- Japan’s inequality problems are related more to the increase in poverty and the shrinking middle-class than concentration of wealth.
- The increasing number of non-regular workers, aging society, and job polarization due to advances in information technology are major factors behind the widening inequalities.
- With an increase in relative poverty rates, the number of welfare recipient families is also on the rise.
- The number of households with an annual income below five million yen is increasing, lowering income levels in the middle class as well as income distribution.
4 (1) Views on Inequality – Japanese perceptions of inequality

- Inequality issues need to deal not only with the actual conditions but also how people look at or feel about inequality.
- Opinion polls show that many people think inequality is increasing, and that income should be redistributed to address inequality problems.
- As there are different views on the perception of inequality, awareness of inequality, and actual level of inequality, it is important to fully understand the range and scale of inequality.
  - Exaggeration and biases concerning inequality can lead to one-sided views that ignore the different patterns and paces of change of inequality.
- Various issues involve income and wealth disparities, such as wealth concentration and inheritances, and hardships and loss of opportunities for the poor.
  - Inequality issues in Japan are associated more with increasing poverty and the shrinking middle-class rather than concentration of wealth.

[Attitudes toward inequality and actual levels of inequality]

[Income and wealth inequality: Exaggeration]
- Too much concentration of wealth
- Ever-widening disparities
- Views based on individual cases

[Inequality problems in each income class]

- **High-income class**
  - Wealth concentration, monopoly, and inheritances (a fixed dominant position)

- **Middle-income class**
  - **Declining and shrinking middle class** and rich-poor polarization

- **Low-income class**
  - **Increasing poverty** and decreasing living standards (→falling consumer demand)
  - Affecting stable and healthy lifestyles
  - Loss of opportunities - a fixed status of poverty and generational reproduction of poverty
  - Financial burden on revitalization programs

Source: Made by MHRI
4 (2) Major Factors in Widening Inequality – Increasing temporary employment and aging

- The biggest factor in widening inequality among the working-age population is the expanding low-income class due to increasing temporary employment.
  - With companies focused on cutting costs, more temporary workers are hired given their relatively lower wage levels and ease of labor adjustment.
  - The main source of income for almost half of all temporary workers is their wages.
- The wage gap continues to widen with innovations in information technology creating job polarization, in other words, decreasing the demand for unskilled workers and increasing the demand for skilled workers.
- Increasing numbers of the elderly with a wide income gap and non-employed people are also contributing to widening inequality.

![Diagram showing reasons for companies to hire temporary workers and major factors in widening inequality]

**Note:** The percentage is based on companies hiring temporary workers which answered each question with multiple answers allowed.

4 (3) Growing Poverty #1 – Relative poverty rates increasing since the 1980s

- Japan’s relative poverty rates (the percentage of people with a disposable income less than half the median income) rose from 12.0% in 1985 to 16.1% in 2012.
- The percentage of households on welfare (percentage of public assistance recipients) has grown in single-mother households and other households (mostly working-age group). The percentage of senior public assistance recipients has gradually increased since the 2000s, despite the decrease in past decades because of well-developed pensions programs.

![Graph showing changes in relative poverty rates and poverty line]

![Graph showing percentage of welfare recipients by household type]

Note: The poverty line refers to the income level of half the median equivalent disposable income (disposable income per person considering household size). Amounts on the graphs are calculated based on the consumer price index for 1985 as the base year (aggregate index except the imputed rent of owner-occupied housing for 2010 as the base year).


4 (3) Growing Poverty #2 – One in six children is relatively poor

○ The relative poverty rate of children in 2012 is 16.3%. One in six children live at less than half the average living standard.

○ The poverty rate of children in single parent households is 51%, the highest among OECD countries (around 2010). Major factors in child poverty include unstable employment status of single mothers, low possibility to receive child support from divorced fathers (20% of single-mother households), and inadequate social security systems to support single-parent or working-poor households.

○ Parental income affects disparities in children’s academic performance, academic and career decisions, and food expense per person per day. Child poverty also causes opportunity inequalities for education and health.

Note: The relative poverty rate of children is the percentage of children under the age of 18 with less than half the median equivalent disposable income (disposable income per person considering household size).


Notes:
1. Parental annual income is the total annual income including taxes.
2. “Work or others” include full-time work, part-time work, study abroad, helping with the family business, housekeeping, and others.

Source: Made by MHRI based upon Department of University Management and Policy Studies, University of Tokyo, The First Report on High School Graduates Follow-up Survey (2007)
4 (4) Declining Middle Class – Growing number of households with an annual income below five million yen

- The percentage of households with an annual income over five million yen has dropped.
  - The distribution of household annual income has shifted to lower income groups below the five million yen mark.

- Disposable income (median) per person has fallen since the 2000s, with the real value in 2012 at 2.21 million yen, equal to levels in the 1980s.
  - Middle class income levels are decreasing, raising the risk of slipping into poverty.

[ Distribution of household annual income ]

[ Median disposable income per person ]

Note: The graph shows changes in the equivalent disposable income (disposable income per person considering household size). The real value is adjusted based on the consumer price index for 1985 as the base year (aggregate index except the imputed rent of owner-occupied housing for 2010 as the base year).


Note: The average annual income was the highest in 1994.

5. Policy Issues about Inequality

Assistance to low-income groups as a top priority

Key points

- Measures to support non-regular employees and to expand assistance to the unemployed are vital.
- Educational support and income security are urgently needed to alleviate child poverty.
- Poverty is expanding with overall income levels declining during the prolonged economic slump.
- Boosting economic growth to exert a trickle-down effect is the key to addressing inequality issues.
5 (1) Employment Issues – Expanding public assistance to the unemployed

- The number of temporary workers converting to full-time employees is on the rise due to the labor shortage during the economic recovery. The percentage of temporary workers is expected to stop rising.
- Tax and social security systems need to offer more incentives for companies to increase stable employment.
- Inadequate policy measures for income security and job assistance make it difficult for low-wage workers with low savings to search for better job opportunities. Developing comprehensive income security and support programs for the unemployed are also important.

[ Number of temporary workers converting to full-time regular employees ]

Note: Converted full-time employees refer to previously employed workers who left a job in the past year.
Source: Made by MHRI based upon Ministry of Internal Affairs and Communications, Labor Force Survey (detailed tabulation 2002-2014)

[ Public spending on unemployment benefits and job support ]

Note: The proportion of GDP (%) is based on the results in 2011.
Source: Made by MHRI based upon OECD Statistics
5 (2) Pension Issues – Restricting the number of future low-paid pensioners to correct income disparities

Public pension payments are related to people’s working styles and income levels during their working years.

- Only regular employees can receive pensions surpassing the average monthly expenses (154,000 yen) of a single-senior household.
- Temporary workers only joining the national pension plan receive 64,000 yen a month even after paying premiums for 40 years.

Future income disparities during retirement age should be corrected by raising income levels for the working-age groups and by extending the coverage of employees’ pension insurance.

In fact, the coverage of employees’ pension insurance will be extended in October 2016, but only about 250,000 people will be qualified. Further extensions are necessary.

Notes:
1. Pensions (monthly payments at 2014 prices) refer to the amounts people will receive if they start working at age 23 and continue working for the same company in the same employment status until the retirement age of 60. They also include the national pension plan from 20 to 23 years old which they joined and paid in full.
2. Pensions of full-time employees are calculated based on wages in different categories, such as college degrees, gender, age groups, and years of employment. Pensions of part-time workers are calculated based on wages by educational background, gender, age group, and years of employment.
3. The average monthly expenses of a single-senior household are the total consumption and non-consumption expenditures of a single non-employed household aged 60 or over.

Sources:
5 (3) Tax Issues – Adopting tax systems to create work incentives, including tax refunds to low-income earners

- Other countries offer tax refunds (subsidies) called “the earned income tax credit (the EITC)” to low-income earners.
- The EITC, which is designed to encourage work, consists of three ranges: the “phase-in” range where benefits increase with earnings, the “flat” range where the tax credit amount remains constant, and the “phase-out” range where benefits are reduced.
- In the United States, the EITC has helped increase the labor supply of single mothers. This system can also effectively help the working poor in Japan.

[ Marginal tax rates by income class with EITC in the US ]

[ Changes in EITC benefits (image) ]


Note: $w$ refers to marginal earned income, $\tau_p$ benefit payment rates, and $\tau_r$ benefit reduction rates

5 (4) Child Poverty Issues – Educational support and income security are priorities

- In Japan, educational costs place a heavy burden on families, and there are not many scholarship programs available. These types of educational disparities can easily produce a generational reproduction of poverty.
  - Necessary measures should be taken, such as providing free pre-school education, promoting study support for children in low-income households, and developing scholarship programs with no repayment required.
- To address the poverty issues of children in single-mother households, assistance programs should be further developed to promote income security and stable employment for single mothers.
  - Other necessary measures include strengthening the collection of child support payments from divorced fathers, establishing a “child tax credit” system to provide tax deductions and credit for amounts not fully deducted to low-income families with children, and offering job training programs for low-income parents.

[ International comparison of higher education tuition and scholarship support ]

[Tuition of national and public higher education in dollars]

(Percentage of students receiving public educational loans, scholarships, and grants : %)

More scholarship support

Note: Data are obtained from the 2006-2007 school year. (Educational costs in the United States, France, Belgium, Italy, Sweden, and the Netherlands are from the 2007-2008 school year.) Tuition of each country is calculated in US dollars using purchasing power parity (PPP) rates.
Source: Made by MHRI based upon OECD, Education at a Glance 2010 - Tables and Charts

[ Changes in the number of single-mother households ]

(10,000 households)

Note: Single-mother households consist of females under 65 who are widowed, divorced, unmarried, or have no spouse for other reasons (including when the spouse is missing for a long period of time) and a child or children (including adopted) under the age of 20.
5 (5) Regional Revitalization and Population Gap – Community-based management to deal with population declines

- Regional population gaps are caused by social mobility rather than birthrate disparities.
  - Countermeasures against declining birthrates can increase fertility rates, but children are likely to leave their hometown for college and/or employment.
  - More women have chosen the path to higher education, especially since the late 1990s, resulting in a growing number of women leaving their hometown for college and/or employment.

- To deal with regional depopulation, it is important to revitalize local economies and provide job opportunities that attract young women.
  - The outflow of young women pursuing higher education is less likely to affect the Nagoya area, which is enhancing the development of its manufacturing industry.

- Many regions cannot avoid a population decline, with regional gaps expected to widen. It is essential to develop local business plans based on a declining population.

[ Changes in the percentage of students going to college by gender ]

[ Number of Japanese in-migrants by gender and age (the Nagoya area in 2014) ]

Source: Made by MHRI based upon Ministry of Education, Culture, Sports, Science and Technology, School Basic Survey (1954-2012)

Source: Made by MHRI based upon Ministry of Internal Affairs and Communications, Report on Internal Migration in Japan (2014)
Japan’s economic growth rate has declined since the collapse of the bubble economy, a period also referred to as “The Lost Two Decades.”

- Inequality debates tend to be spurred during the economic upturn (partly due to the increase in assets and temporary employment with rising stock prices).
- Without improving the environment where the wave of economic recovery sweeps the entire country, inequality and anxiety can precede economic growth, leading to a further widening of the gap.

The widening gap can be narrowed during the economic slowdown, but other problems can also rise, such as the decline or fall of the middle class to a lower class, or all class declining to lower levels.

- In addition to addressing inequality issues, policies stimulating economic revitalization are important to increase the overall income.

[ Inequality debates with real economic growth and stock prices ]

[ Changes in three classes during the economic slowdown ]
5 (6) Enhancing Economic Growth and Expanding the Pie #2 – Trickle-down boosting economic growth

- In the phase of an economic upturn, the pace of recovery tends to differ by region and by corporate size and type.
  - Promoting programs to revitalize local economies and support small businesses is the key to spreading the effects of Abenomics from metropolitan to rural areas and from large to small businesses.
- “Expanding the pie,” that is, expanding the economy as a whole, is effective way of improving income levels and fighting poverty.
  - Increasing wages and employment through improved business performance can create a positive economic cycle and enhance the trickle-down effect, which will help resolve inequality issues.

⇒ Revitalizing the economy by sustaining and enhancing Abenomics while maximizing its effects nationwide is a desirable course of action.

[ Creation and expansion of a positive economic cycle to local areas and small businesses ]

[ Policies on inequality issues ]

- Poverty countermeasures
  - Improving income and social securities to the unemployed, raising the minimum wage, providing tax credit to low-income workers (e.g., earned income tax credit), and extending the coverage of employees’ pension

- Avoiding the poverty trap
  - Reviewing income and inheritance taxes, improving education and job training, creating employment, and enhancing the child care environment

- Equal opportunities
  - Promoting women’s workforce participation, improving benefits for temporary workers, and facilitating the conversion to full-time employment

- Trickle-down effects
  - Enhancing the environment to create a positive economic cycle (increasing wages and employment), revitalizing local economies and supporting small businesses

- Expanding the pie
  - Developing a strategy to boost economic growth, raising overall income levels, and implementing effective fiscal and monetary policies

Source: Made by MHRI
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