

# Points of the Analysis of the Labour Economy 2014 (White Paper on the Labour Economy 2014)

## - Full utilization of human resource capability -

### Background of the analysis

- Human resources are the most important world-class resource of Japan. Establishment a society where everyone participate in social activities, improve their ability and fully exercise their ability, requires to ensure the number (quantity) of workers and increase in labour productivity (quality).
- Based on problem awareness, the White Paper analyzes human resources management in which a company develops through training of employees and motivating them to work. It also analyzes the career development through occupational life in which occupational abilities are further developed by accumulating human capital through work experience and people are able to have a stable life.

### Chapter 1 Trends and features of the labour economy

The analysis mainly covers the trends of employment/unemployment, wages, working hours, prices/workers' household expenditures and labour-management relationship in 2013.

Movements toward increase in employment and wage

- The unemployment rate decreased to 3.6% in the period from January to March 2014 and the ratio of active job openings to active job applicants increased to 1.05, which shows the steady improvement of the employment situation and a trend of insufficient personnel. The ratio of active job openings to active job applicants in July 2014 was 1.10 and showed the highest level in 22 years for the second month running.
- In comparison with the past economic recovery period, the big feature of this time is extra working hours and the increased number of employed persons. The breakdown shows the greatly increased number of non-regular workers and decreased number of regular workers.
- shunto (annual spring wage offensive) of 2014, many companies agreed to raise wages including base ups because corporate profits and the employment situation have improved in conjunction with economic recovery.

### Chapter 2 Trend and issues of human resources management in a company

Chapter 2 analyzes human resources management in which a company develops through training of employees and motivating them to work as the competition environment surrounding businesses changes.

Human resources management that contributes to business growth

- In conjunction with changes in the competition environment surrounding businesses, such as the development of a technical revolution including globalization and IT and increase in the uncertainty of management, the number of workers in various employment forms besides regular workers is increasing.
- Companies are required to motivate employees to work and increase competitiveness. Companies that are considered to have employees with higher motivation tend to have the stability of the workforce and higher labour productivity and recurring profit margin.
- These companies are working towards proactive employment management regardless of employment form, compared to those that are considered to have employees with lower motivation.

### Chapter 3 Career development through occupational life

Chapter 3 analyzes career development through occupational life in which occupational abilities are further developed by accumulating human capital through work experience and people are able to have a stable life, in the situation where the number of workers in various employment forms is increasing.

Vocational  
career  
development  
in Japan

- Looking at the current situation of vocational careers in Japan, the ratio of men who continue to engage in the first job is high while the ratio of women who do so is low.
- On the other hand, a certain ratio of people changes jobs many times during their occupational life. Some high-income workers change jobs proactively.
- Shift from non-regular employment to regular employment, younger workers are more likely to achieve a shift to regular employment.

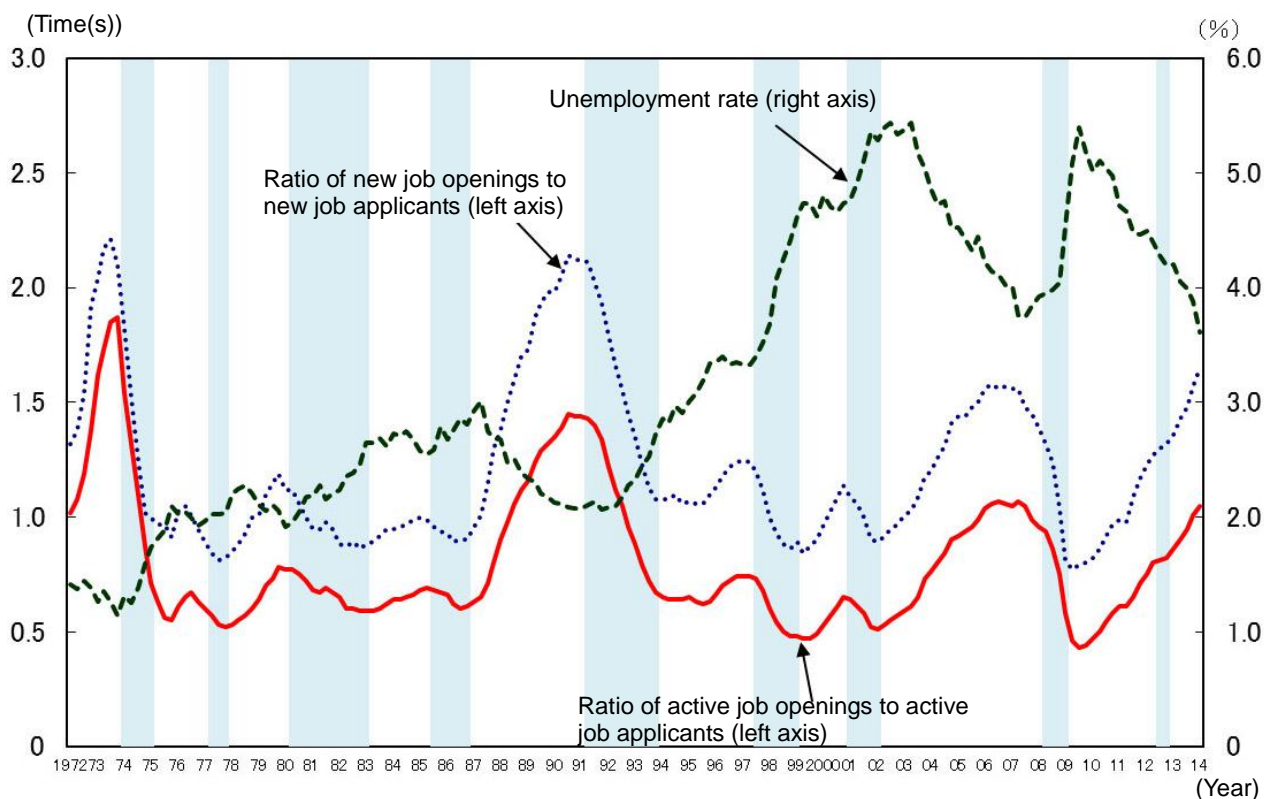
### Summary

- o It is important to increase labour productivity in order to link the expansion of corporate profits with sustainable increase of wages for the realization of a virtuous cycle of economic.
- o Proactive employment management to workers in various employment forms and human resources management that motivate employees to work will eventually lead to business growth and Japan's economic growth.
- o Developing occupational abilities by accumulating human capital through a continuous vocational life contributes to a sustainable occupational life for people and a strengthening of Japan's economic and social foundation.

## Employment situation has improved in a steady manner

The unemployment rate decreased to 3.6% in the period from January to March 2014 and the ratio of active job openings to active job applicants increased to 1.05, which shows the steady improvement of the employment

(Transition of the unemployment rate and the ratio of job openings to job applicants)



Source: "Report on Employment Service," Ministry of Health, Labour and Welfare (MHLW); "Labour Force Survey," Statistics Bureau, Ministry of Internal Affairs and Communications

(Note) The data is a quarterly average (seasonally adjusted). The shadowed part in the graph indicates a recession period. Figures between the period from July to September 2012 and October to December 2012 are provisional.

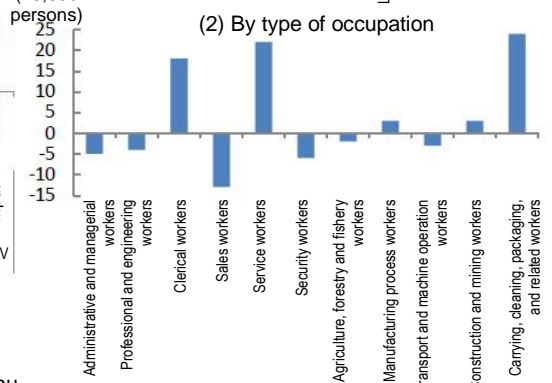
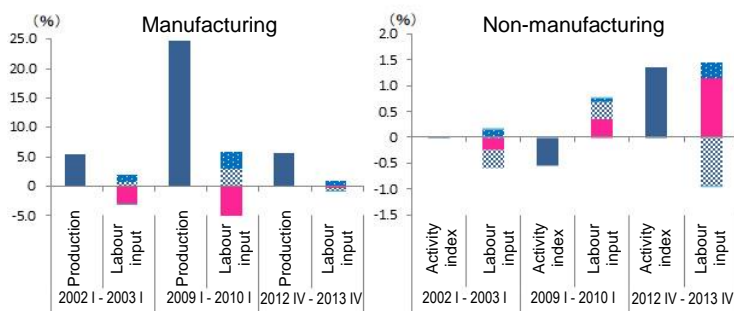
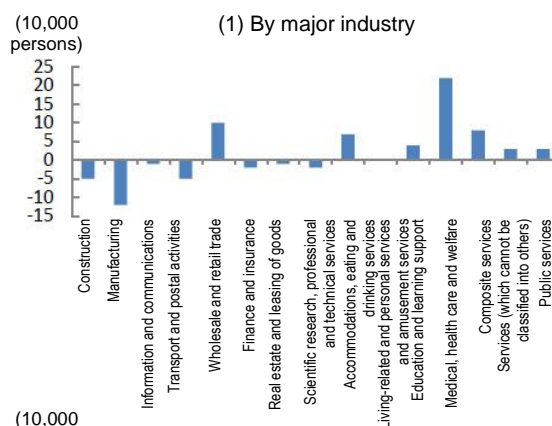
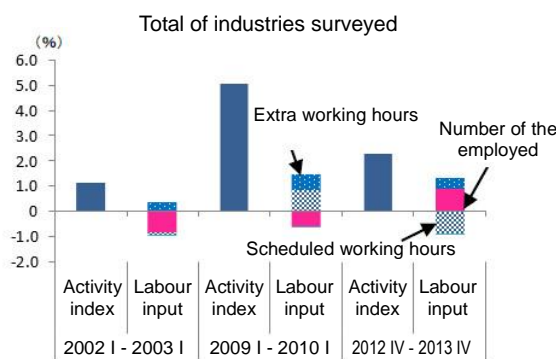
- After the financial crisis in the autumn of 2008, the Japanese economy bottomed out in early 2009 but turned to a rally, overcame the temporary fall due to the Great East Japan Earthquake in 2011, and has maintained momentum. From the middle of 2012, the economy weakened due to the global slowdown following the European sovereign debt crisis. However, thanks to such factors as the stock prices rising in hope of economic policy in 2013, the confidence of households and companies has been improving and the economy had shown a sign of recovery which was driven by domestic demands. It is on the track to a slow recovery.
- The improvement of corporate production activities has increased corporate profits and this positive movement is also affecting employment. The unemployment rate has fallen below 4.0% in June 2013 for the first time in four years and eight months. The ratio of active job openings to active job applicants has exceeded 1 in November 2013 for the first time in six years and one month. The unemployment rate decreased to 3.6% in the period from January to March 2014 and the ratio of active job openings to active job applicants increased to 1.05, which shows the steady improvement of the employment situation and a trend of insufficient personnel. The ratio of active job openings to active job applicants in July 2014 was 1.10 and showed the highest level in 22 years for the second month running.

# Employment opportunities increased significantly

**In comparison with the past economic recovery phases, the big feature of the economic recovery this phase is extra working hours and the increased number of the employed.**

(Relationship between production and labour input, in comparison with the past periods of economic recovery)

(Difference in the number of employees from the previous year by industry and occupation in 2013)



Source: Prepared by the Office of Counselor for Labour Policy, MHLW, based on "Monthly Labour Survey," MHLW, "Labour Force Survey," Statistics Bureau, Ministry of Internal Affairs and Communications, "Indices of Industrial Production," "Indices of All Industry Activity," and "Indices of Tertiary Industry Activity" Ministry of Economy, Trade and Industry.

Source: "Labour Force Survey," "Labour Force Survey (detailed tabulation)" Statistics Bureau, Ministry of Internal Affairs and Communications

- We shall compare production and labour input with those in the past recovery phases. The characteristic of the present phase is the slight decrease in the number of employees in manufacturing industries. In non-manufacturing industries, the significant rise in the level of activity has increased labour input, the number of employees in particular.

In this way, the big feature of the economic recovery this phase is extra working hours and the increased number of the employed. The breakdown shows the greatly increased number of non-regular workers and decreased number of regular workers.

- The number of employees in 2013 increased significantly for the first time in six years, up about 500,000 from the previous year. Let's have a look at the increase in the number of employees by industry and occupation.

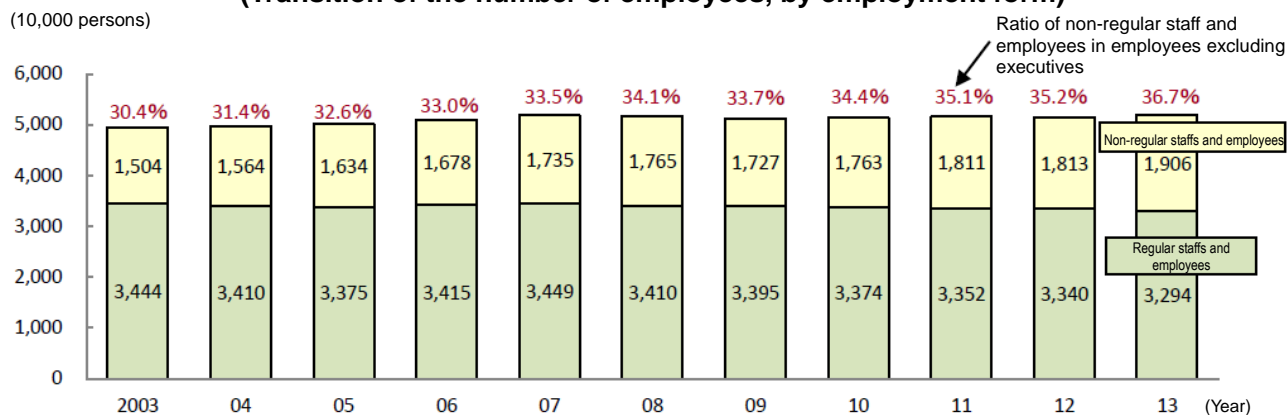
Looking at changes in the number of employees by industry, the number of employees dramatically increased in medical and welfare services with higher labour demands in conjunction with the aging population, wholesale and retail trades, and accommodation, eating and drinking services with an increased number of foreign tourists thanks to the weakening yen's exchange rate. Non-regular workers constitute the majority of increased numbers in medical and welfare services, wholesale and retail trades, and accommodation, eating and drinking services, while medical and welfare services and wholesale and retail trades are also characterized by the increased number of regular workers.

By occupation, the number of workers who are engaged in carrying, cleaning, packaging, and related industries, care service and food/drink preparation service and clerical workers increased significantly.

## Ratio of regular employees in population

The ratio of regular workers in the total population had remained unchanged. From 2003 to 2013, the ratio of female regular workers had increased in all age groups.

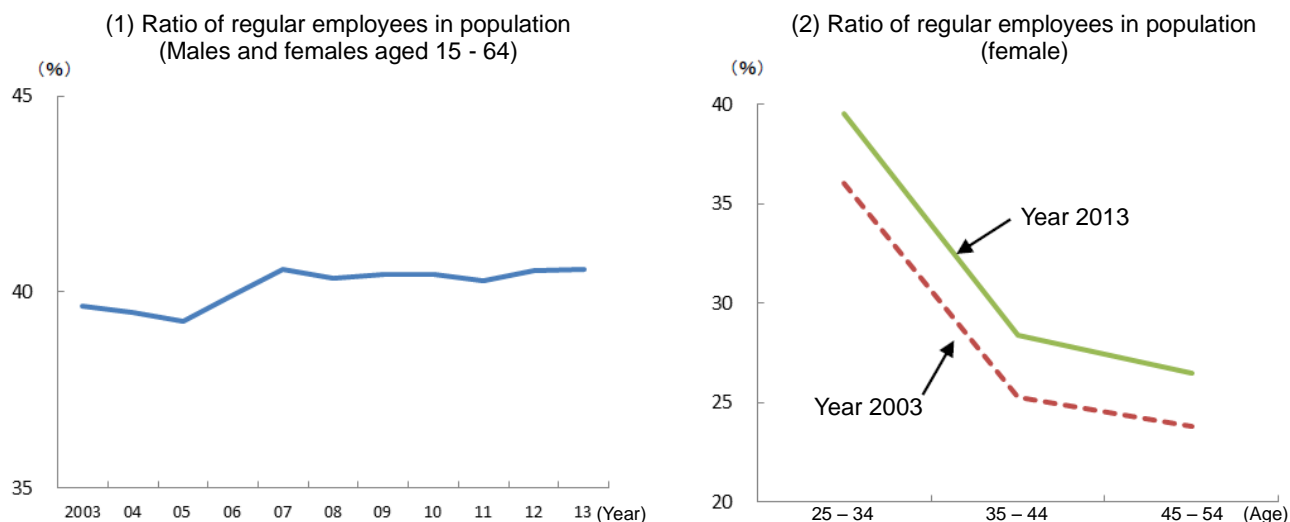
### (Transition of the number of employees, by employment form)



Source: "Labour Force Survey (detailed tabulation)" Statistics Bureau, Ministry of Internal Affairs and Communications

- (Note)
- 1) Figures from 2005 to 2011 are values tabulated by using the estimated population (new criteria) based on the population under the Population Census 2010.
  - 2) Figures in 2011 are alternative estimate values of the Great East Japan Earthquake.

### (Changes in the ratio of regular employees in population)



Source: Prepared by the Office of Counselor for Labour Policy, MHLW, based on the "Labour Force Survey," "Labour Force Survey (detailed tabulation)" Statistics Bureau, Ministry of Internal Affairs and Communications

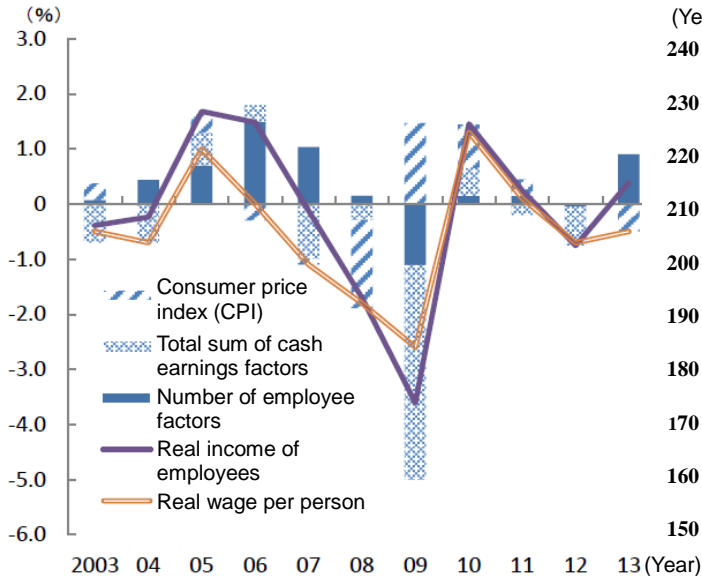
- Looking at transitions in the number of employees by employment form, the number of non-regular workers is gradually increasing, while the number of regular workers is slightly decreasing due to the influence of the population decline.
- In order to eliminate the influence of the population decline, we will look at the ratio of regular workers to population (sum of labour force and not in labour force). The ratio of regular workers to population aged between 15 and 64 had slightly increased in the period from 2005 to 2007, and has remained unchanged after that.

From 2003 to 2013, the ratio of female regular workers had increased in all age groups.

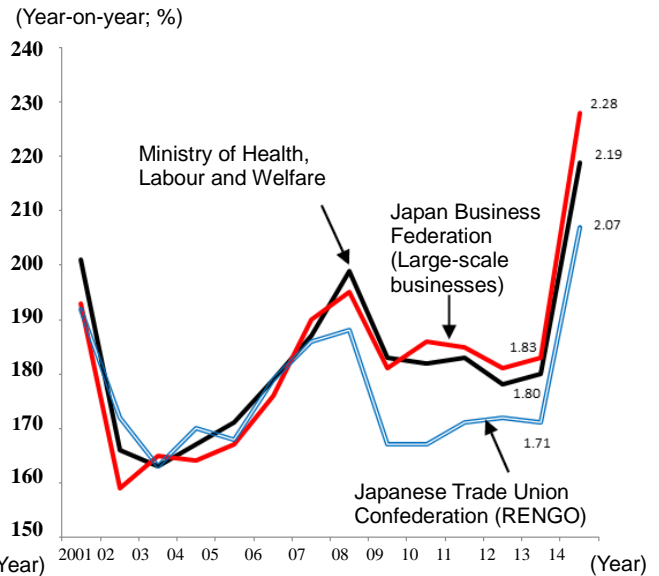
## Trend of wage increase

**The total sum of cash earnings is in a rising trend in 2013.  
In the shunto (annual spring wage offensive) in 2014, many companies maintained the amount corresponding to periodic wage increase and raised their wages including base ups.**

(Analysis of factors of employees' real income)



(Results of wage increase)



Source:

Prepared by the Office of Counselor for Labour Policy, MHLW, based on "Monthly Labour Survey," MHLW and "Labour Force Survey," "Consumer Price Index" Statistics Bureau, Ministry of Internal Affairs and Communications.

(Note)

- 1) Income of employees is calculated by multiplying the number of employees (excluding agriculture and forestry industry) by total sum of cash earnings and "general index excluding attributed rent of one's own house" is used to determine the deflator of real value.
- 2) Total sum of cash earnings is the total of the surveyed industries for business establishments with 5 or more employees.

Source:

"Situation of Demands and Conclusions of Negotiations for Wage Increase in Major Private Companies (Springtime)" MHLW, "Settlement Results of the Labour-Management Negotiations in the Springtime in Large-Scale Businesses (weighted average)(final results)" Japan Business Federation, "Results of Final Responses to the Policy for Spring Struggle for a Better Life" Japanese Trade Union Confederation

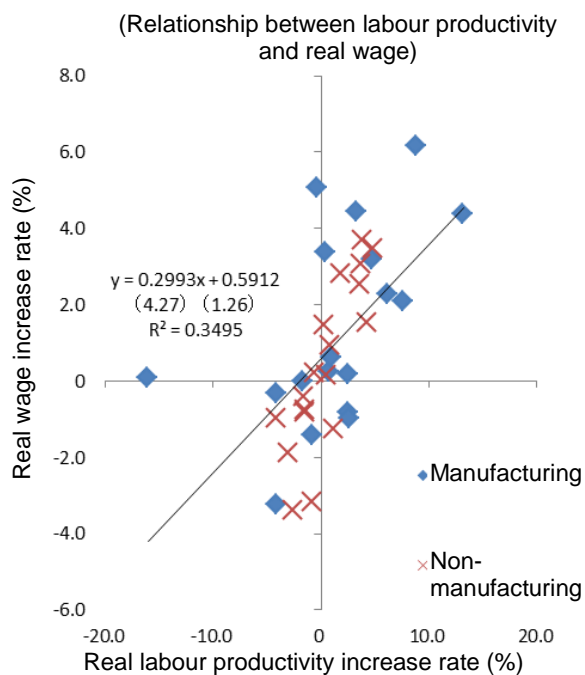
(Note)

- 1) In principle, major companies surveyed for the "Situation of Demands and Conclusions of Negotiations for Wage Increase in Major Private Companies (Springtime)" before 2003 are those having a labour union with a capital of 2 billion yen or more and 1,000 or more employees, of those which are listed on the first section of the Tokyo Stock Exchange or Osaka Securities Exchange. Companies surveyed after 2004 are basically those having a labour union with a capital of 1 billion or more and 1,000 or more employees (weighted average).
- 2) Calculation for Japanese Trade Union Confederation is the union total and includes unions of small and medium-sized enterprises with less than 299 employees.
- 3) Companies surveyed by Japan Business Federation (large-scale businesses) are basically those that are listed on the first section of the Tokyo Stock Exchange and with 500 or more employees.

- The total sum of cash earnings had been declining for the second consecutive year after 2011, but started to pick up in 2013. Specifically, a rise in the ratio of part-time workers put declining pressure on it and scheduled wages decreased. However, non-scheduled wages increased as a result of larger product activities, which also contributed to the rise in special wages.
- In order to see the influence on macro-level consumption, it is necessary to look at "income of employees" that can be found by multiplying wage per person by the number of workers. Real income of employees in 2013 increased from the previous year as the increase rate in the number of employees exceeded the decrease rate from rising commodity prices. It is considered that this has contributed to the private consumption growth at a macro level.
- In the shunto (annual spring wage offensive) of 2014, many companies maintained the amount corresponding to periodic wage increase and raised their wages including base ups. In the future, it is expected that the nominal wage will increase and the said actions of companies will put positive effects on real income of employees and consumption at a macro level.

# Toward the development of an environment that enables wage increase

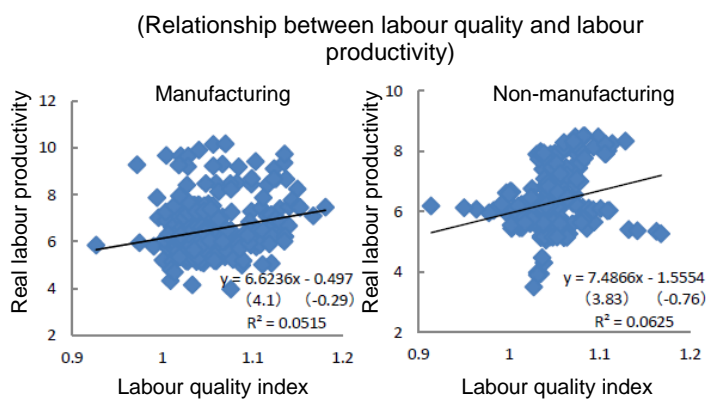
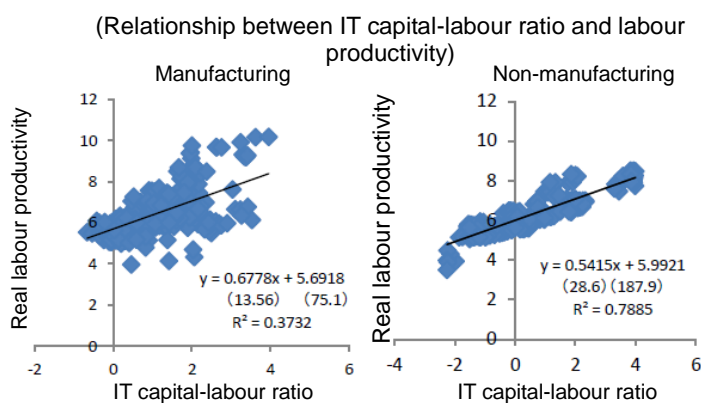
**It is important to improve labour productivity in order to increase real wages. In order to further increase wages, it is necessary to put investment on IT capital and improve labour quality by accumulating human capital through human resources development.**



Source:  
Estimated by the Office of Counselor for Labour Policy, MHLW, based on the "Financial Statements Statistics of Corporations by Industry" (quarterly journal) Ministry of Finance

(Note)

- 1) Labour productivity is determined by calculating real added value per employee using GDP deflator.
- 2) Real wage is determined by calculating real value using GDP deflator, based on the formula: nominal wage per person = personnel expenses/number of employees.
- 3) Figures from FY 1995 to FY 2012.



Source:

Estimated by the Office of Counselor for Labour Policy, MHLW, based on the "JIP Database 2013" The Research Institute of Economy, Trade and Industry

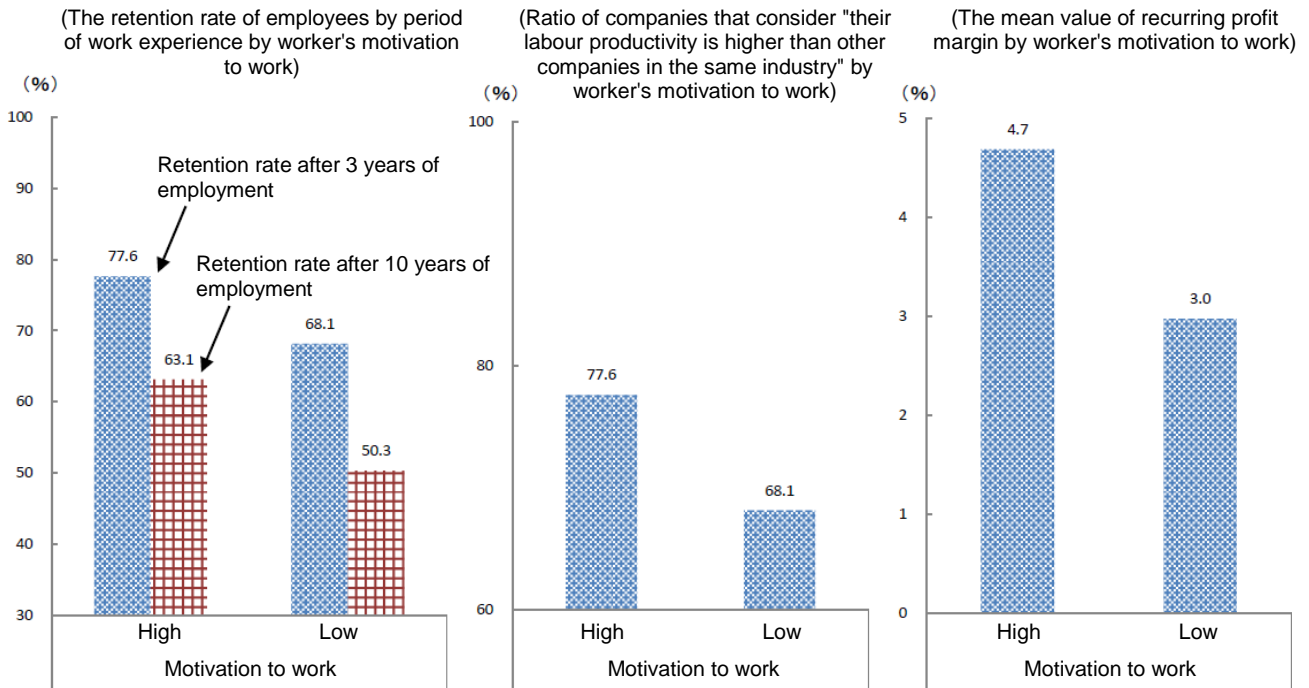
(Note)

- 1) Manufacturing industry includes businesses in industrial category 8-59 and non-manufacturing industry includes businesses in category 60-97 (excluding 72 residences that cannot use data) in JIP database.
- 2) Real labour productivity is calculated using real added value (1 million yen / man hours (1000 x total sum of real working hours) and logarithmically transformed.
- 3) IT capital-labour ratio is calculated as IT capital stock (1 million yen, price in 2000)/number of employees and logarithmically transformed.
- 4) Labour quality index: 2000 = 1.000
- 5) Pooled data from 2005 to 2010

- The increase rate of real wages becomes higher according to the increase rate of real labour productivity. Therefore, it is important to improve labour productivity in order to link the expansion of corporate profits with sustainable wage increases for the realization of virtuous economic cycle.
- There are two factors that increase labour productivity: increase in capital-labour ratio and increase in total factor productivity (TFP). TFP can be influenced by various factors including changes in capital quality (introduction of advanced IT technology, etc.) and labour quality (improvement of workers' abilities through educational training). Here, we will focus on IT investment and labour quality.
- Looking at the relationship between IT capital-labour ratio and labour productivity, labour productivity increases relative to the increase in IT capital-labour ratio in manufacturing and non-manufacturing industries, although there are some differences. At the same time, labour productivity increases as labour quality becomes higher.
- In this way, it is necessary to put investment on IT capital and improve labour quality by accumulating human capital through human resources development inside and outside the workplace.

# Human resources management and business performance that motivate employees to work

**A high percentage of companies that consider their employees have higher motivation to work tend to think they have the stability of the workforce and higher labour productivity and their recurring profit margin, which is an index for corporate profits, also tends to be high.**



Source: Compiled independently by the Office of Counselor for Labour Policy, MHLW. from the "Survey on the Way of Human Resources Management" (2014) Japan Institute for Labour Policy and Training

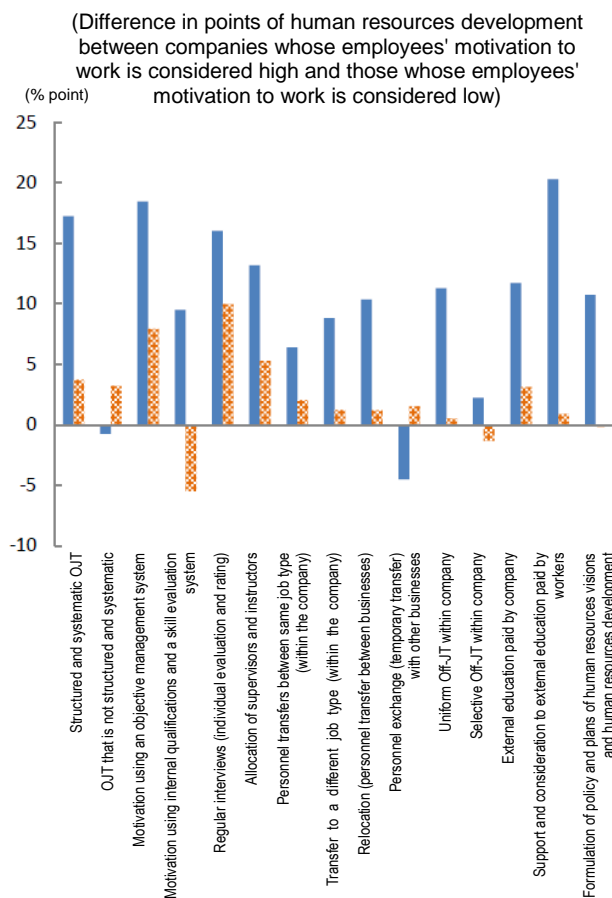
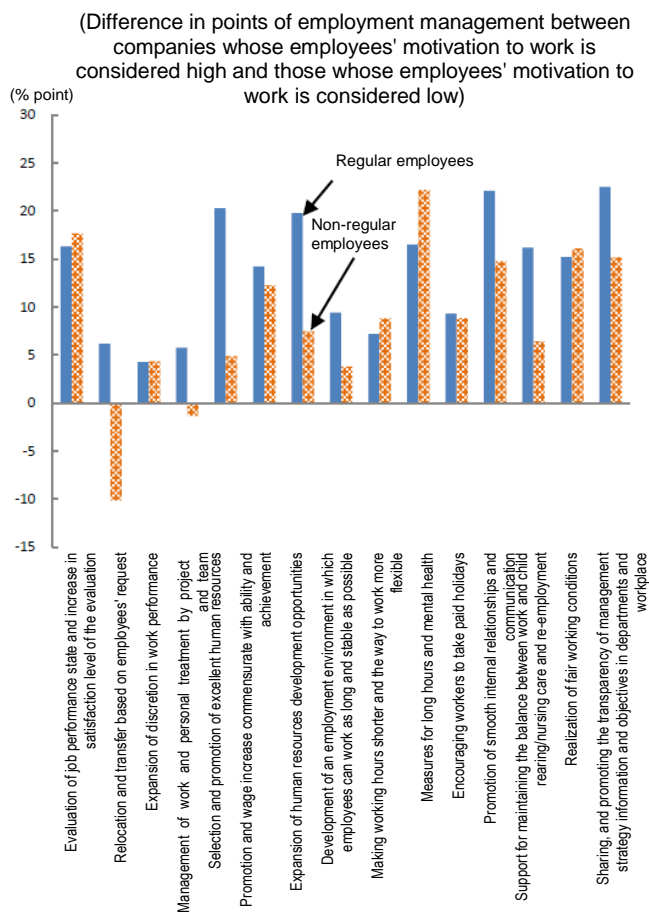
- (Note)
- 1) This survey asked workers how they "evaluate labour productivity (added value per employee) and employees' motivation to work in the company compared to other businesses in the same industry." In the figure, values are calculated for companies that answered that their employees' motivation to work and labour productivity are "high or higher" and companies that answered they are "low or lower."
  - 2) Retention rate by period of work experience shows "employees who have worked more than 3 years after being employed as a regular worker, of all newly employed regular workers."
  - 3) Recurring profit margin is a measurement of corporate profits and is defined as value determined by ordinary profits divided by sales.

- Human resources management that motivates employees to work and maximizes their abilities has a great impact on maintaining and strengthening the company's competitiveness. ○ Increase in workers' motivation to work directly related to the stability of workforce. Stable workforce means improvement in human capital with more experience through work. This is considered to have a positive influence on the company's productivity and profitability.
- Looking at the stability of a workforce by workers' motivation to work, companies that are considered to have employees with higher motivation tend to have a higher stability of workforce and higher labour productivity and a recurring profit margin.
- Besides, looking at the "recurring profit margin" as a financial index that shows business performance in a more objective way, the recurring profit margin is higher in companies whose employees' motivation to work is high.



# Human resources management that increases motivation to work

Companies that consider their employees' motivation to work is high, implement human resources management in a broad manner.



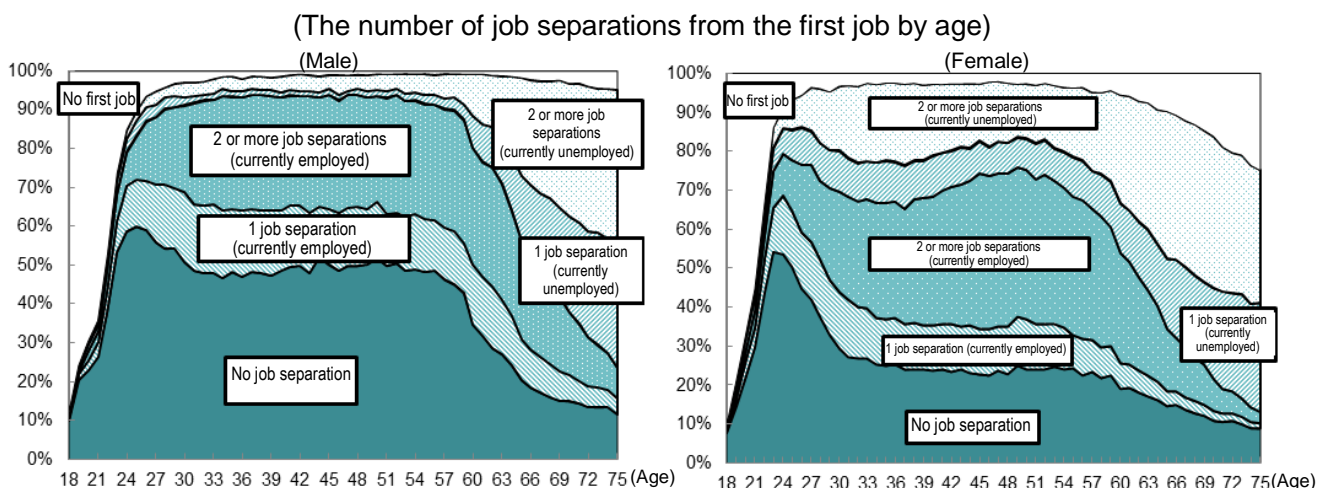
Source: Prepared by the Office of Counselor for Labour Policy, MHLW based on the "Survey on the Way of Human Resources Management" (2014) Japan Institute for Labour Policy and Training

(Note) Bar graphs show points of difference (ratio of companies that consider their employees' motivation to work is high - ratio of companies that consider their employees' motivation to work is low) determined by calculating the rate of companies that implement activities (separate rate for companies with high motivation and those with low motivation).

- Looking at the difference of employment management between companies whose employee's motivation is high and those whose employees' motivation is low, companies whose employees' motivation is high proactively implement employment management in a broad manner regardless of employment form.
- There are some differences in activities for regular workers, such as "business strategy information, sharing of objectives in departments and workplace, and promotion, "facilitating relationship and communication in the workplace," "selecting and promoting excellent personnel," "improvement in human resources development opportunities," and "evaluation of work progress and improvement in the satisfaction level to the evaluation."
- Activities for non-regular workers with difference include "measures for the long hours and mental health," "evaluation of work progress and improvement in the satisfaction level to the evaluation," and "realization of equal treatment."
- Looking at the differences in activities of human resource development, companies that consider their employees' motivation to work is high are implementing activities such as "support and consideration to training outside the company paid by employees," "motivating employees using an objective management system," "structured and systematic OJT," and "regular interview."
- In this way, human resources management that offers a wide range of human resources development for diversified workers and motivates workers is the basis of company's continuous growth. Furthermore, if these activities lead to the accumulation of human capital at a macro level, improvement in labour quality is expected to contribute to economic growth in Japan.

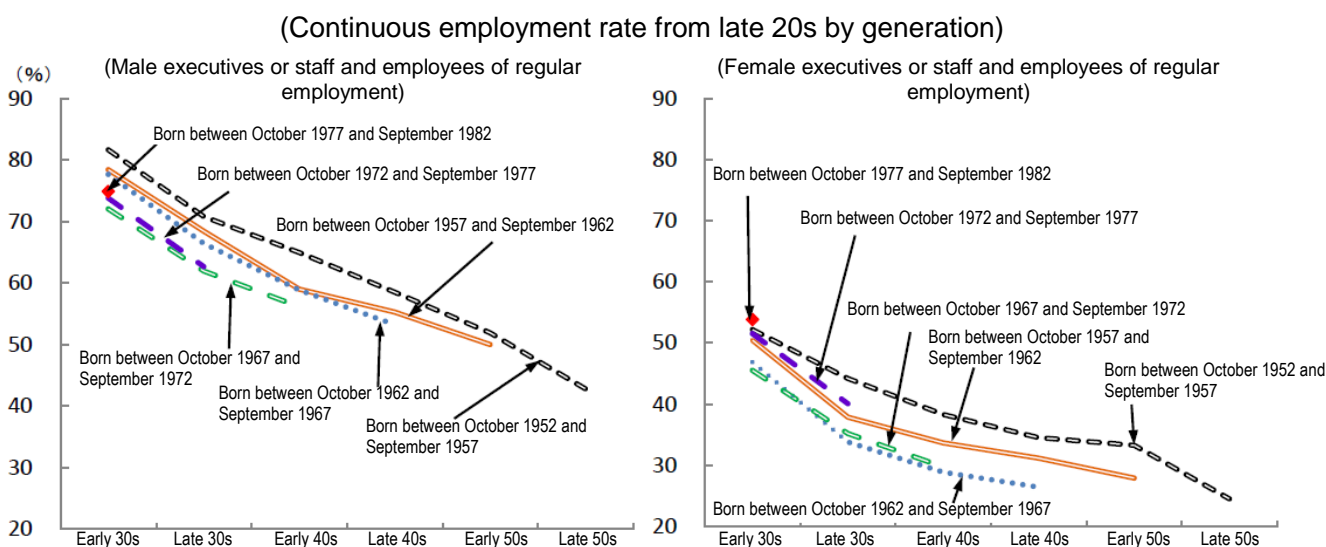
# Current situation concerning occupational careers in Japan

**Half the number of male workers continues to be employed in the first company until they are mid-50s. The number of female workers who continue to work in the first company is smaller than that of male workers. The continuous employment rate (of women in particular) is increasing in recent years.**



Source: Compiled independently by the Office of Counselor for Labour Policy, MHLW, from questionnaire data of the "Basic Statistical Survey on Employment Structure" (2012) Statistics Bureau, Ministry of Internal Affairs and Communications

- (Note)
- 1) People whose current job is the first job are those with "no job separation," people whose previous job is the first job are those with "1 job separation," and people whose job other than current and previous jobs is the first job are those with "2 or more job separations."
  - 2) People whose first job is unknown are excluded from the calculation.



Source: Compiled independently by the Office of Counselor for Labour Policy, MHLW, from questionnaire data of the "Basic Statistical Survey on Employment Structure" Statistics Bureau, Ministry of Internal Affairs and Communications

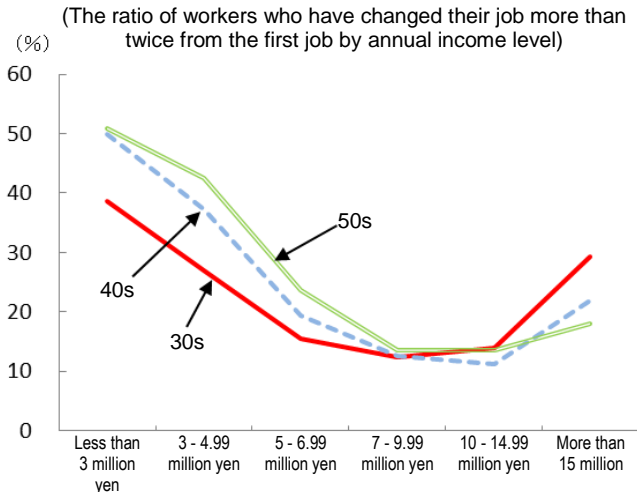
(Note) Rate determined by the number of people who have been continuously employed from late 20s divided by the number of currently-employed workers in late 20s.

- Half the number of male workers continues to be employed in the first company from 30s to mid-50s.
- About 25% of female workers aged between 30s and mid-50s continue to work without leaving the first job, which is less than male workers.
- Looking at the continuous employment rate by age group in regular workers after mid-20s, the rate has been gradually declining for both males and females, and bottomed out in those who were born between October 1967 and September 1972. The rate increases in those who were born after the generation, and in particular, the continuous employment rate of females (until early 30s) who were born between October 1977 and September 1982 exceeds that of the generation born between October 1952 and September 1957.

## Toward smooth labour turnovers

**Many people with relatively low income and high income have changed their job more than twice. Many of those with high income said that they want to change jobs because "they would like to use their knowledge and skills."**

**There is a tendency that people who carry out self-development earn high income.**

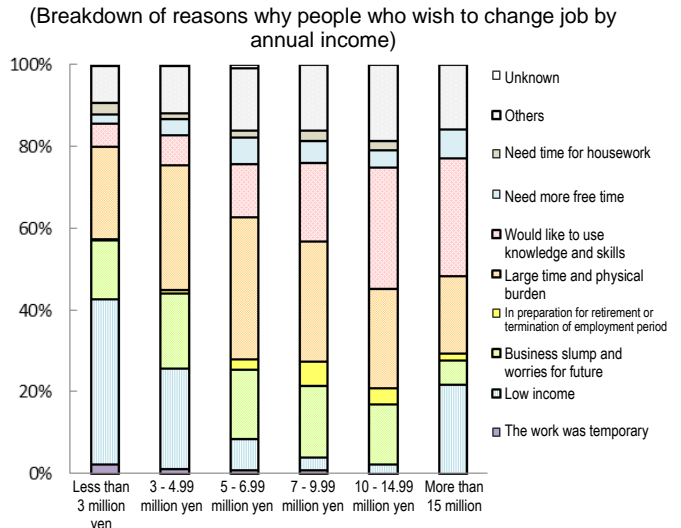


Source:

Compiled independently by the Office of Counselor for Labour Policy, MHLW, from questionnaire data of the "Basic Statistical Survey on Employment Structure" (2012) Statistics Bureau, Ministry of Internal Affairs and Communications

(Note)

- "Workers who have changed their job more than twice from the first job" are those whose first job is not the current or previous job.
- Figures of executives or staff and employees of regular employment

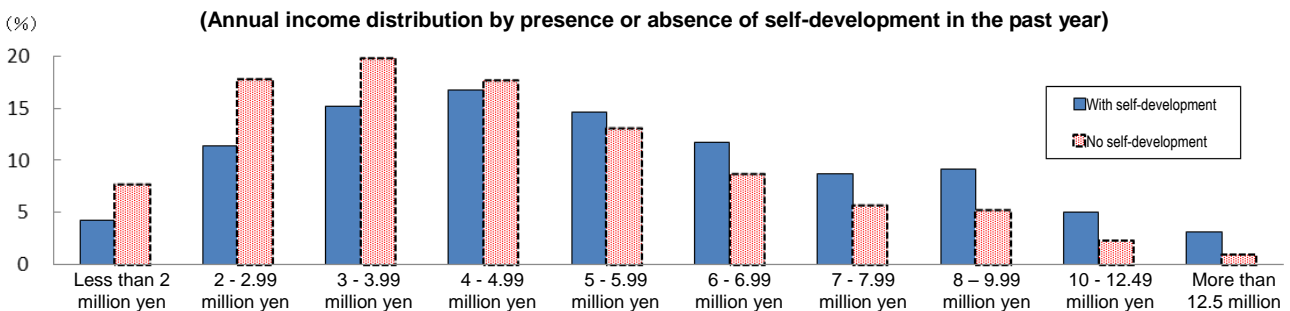


Source:

Compiled independently by the Office of Counselor for Labour Policy, MHLW, from questionnaire data of the "Basic Statistical Survey on Employment Structure" (2012) Statistics Bureau, Ministry of Internal Affairs and Communications

(Note)

Figures of executives or staff and employees of regular employment aged 30 or older and younger than 55.



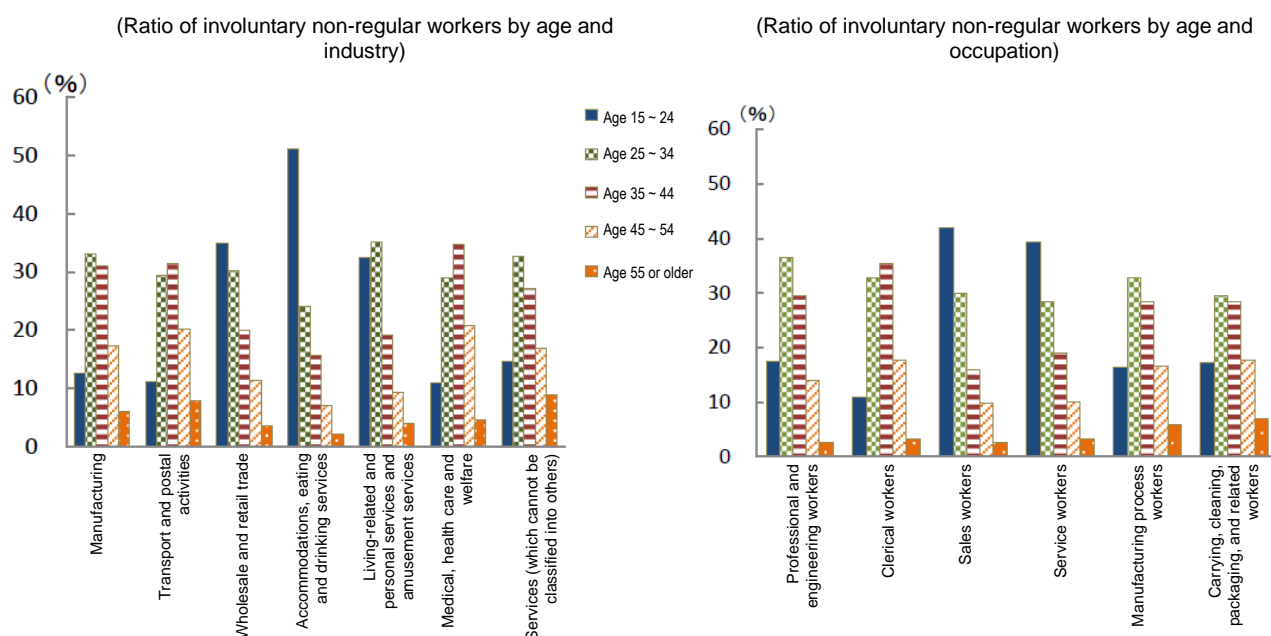
Source:

Compiled independently by the Office of Counselor for Labour Policy, MHLW, questionnaire data of the "Basic Statistical Survey on Employment Structure" (2012) Statistics Bureau, Ministry of Internal Affairs and Communications (Note) Figures of executives or staff and employees of regular employment aged 30 or older and younger than 55.

- Looking at the ratio of people who have changed job more than twice by annual income, in general, the ratio of those with an annual income of less than 5 million yen and those with a high annual income of more than 15 million yen is high. Looking at the breakdown of reasons why people who wish to change jobs by annual income, many of those whose annual income is high answered the reason is because "they would like to use their knowledge and skills," which implies that people with high income change jobs with positive reasons.
- Looking at the distribution of regular workers' annual income by the presence or absence of self-development in the past year, many workers who work on self-development gain a higher annual income. This implies that it is important to implement continuous self-development in order to gain a high personal treatment. Looking at the implementation rate of self-development by presence or absence of desire to change jobs, those with relatively high annual income who wish to change jobs implement more self-development. This shows that it is necessary to put efforts on self-development if one wishes to change jobs while retaining a high personal treatment. On the other hand, people with lower income are likely to have fewer opportunities of necessary self-development due to insufficient finance.
- In order to promote smooth labour turnovers, it is important to strengthen the labour market infrastructure in a strategic manner by improving public support for public vocational training and workers' self-development and providing transparency to workers' occupational abilities.

## Many involuntary non-regular workers of young age in sales and service workers

There are many involuntary non-regular workers of young age in "accommodation, eating and drinking services," "wholesale and retail trades," and "living-related and personal services and amusement services" by industry, and "sales workers" and "service workers" by occupation.



Source: Compiled independently by the Office of Counselor for Labour Policy, MHLW, from questionnaire data of the "Basic Statistical Survey on Employment Structure" (2012) Statistics Bureau, Ministry of Internal Affairs and Communications

- (Note)
- 1) Industries and occupations with a 5% or more ratio of involuntary non-regular workers are listed.
  - 2) The ratio of involuntary non-regular workers was calculated as: ratio of involuntary non-regular workers of individual job type or industry (number of involuntary non-regular workers/total number of non-regular workers in each job type and industry).

- According to the "General Survey on Diversified Types of Employment (2010)" by Ministry of Health, Labour and Welfare, about 20% of non-regular workers are so-called "involuntary non-regular workers" because no companies employed them as a regular worker.
- Looking at the distributional characteristics of industry and occupation in which involuntary non-regular workers work based on our analysis results of the "Basic Statistical Survey on Employment Structure" (2012), Statistics Bureau, Ministry of Internal Affairs and Communications, the ratio of involuntary non-regular workers is high in "accommodation, eating and drinking services," and "wholesale and retail trades" for those aged between 15 and 24. By occupation, many of those in the same age groups are engaged in "sales" and "service." By industry, many involuntary non-regular workers aged between 25 and 34 are engaged in "manufacturing," "transportation and postal services," "medical and welfare services," and "services (which cannot be classified into others)." By occupation, the ratio is high in a wide variety of fields including "professional and engineering workers," "clerical workers," "manufacturing process workers," and "carrying, cleaning, packaging and related workers."

# Industrial and occupational characteristics that promote shift from non-regular to regular employment

Industries with a high ratio of shift from non-regular to regular employment include scientific research, professional and technical services, medical and welfare services, education and learning support, and construction, etc. Occupations (detailed categories) with a high ratio of shift include sales, nurses, automobile drivers, etc.

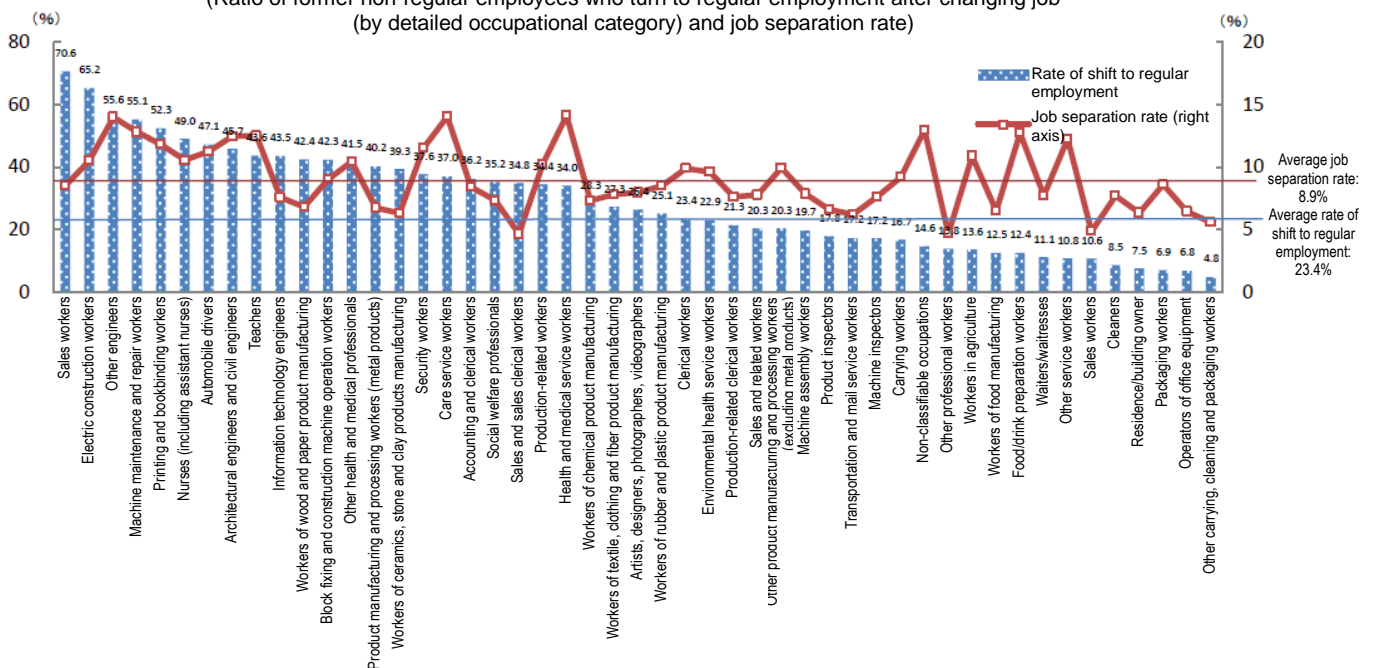
(Ratio of former non-regular employees who turn to regular employment after changing job (by industry))

(Ratio of former non-regular employees who turn to regular employment after changing job (by occupation))

Industry of previous job	Industry of current job (%)											
	Ratio of shift to regular employment from previous industry	Regrouped: construction	Regrouped: manufacturing	Regrouped: information and communications	Regrouped: transport and postal activities	Regrouped: wholesale and retail trade	Regrouped: finance and insurance	Regrouped: real estate and leasing of goods	Regrouped: scientific research, professional and technical services	Regrouped: accommodations, eating and drinking services	Regrouped: education and learning support	Regrouped: medical, health care and welfare
Construction	26.6	13.0	2.8	0.3	2.2	2.2	0.7	0.4	0.9	0.4	0.0	1.2
Manufacturing	22.7	1.9	9.3	0.3	1.8	2.3	0.5	0.2	0.5	0.6	0.1	3.1
Information and communications	19.6	1.1	2.8	6.0	0.4	1.5	0.4	0.6	0.8	0.4	0.6	1.4
Transport and postal activities	24.7	1.6	3.0	0.6	10.2	2.4	0.4	0.7	0.1	0.5	0.4	2.1
Wholesale and retail trade	19.2	1.1	2.5	0.6	0.9	5.7	0.9	0.3	0.4	0.8	0.4	3.6
Finance and insurance	18.2	0.9	1.4	0.4	0.6	2.9	4.4	1.1	0.8	0.1	0.3	3.5
Real estate and leasing of goods	24.2	1.0	3.4	0.4	2.2	3.2	1.3	2.1	1.9	0.4	0.5	3.5
Scientific research, professional and technical services	28.5	2.3	4.9	2.4	0.2	3.1	0.7	1.1	4.5	1.1	3.1	3.1
Accommodations, eating and drinking services	20.0	1.0	2.6	0.5	1.0	2.9	1.1	0.3	0.8	2.9	0.6	4.6
Education and learning support	26.9	0.3	2.0	1.0	0.7	2.1	0.4	0.1	1.9	0.2	13.1	3.9
Medical, health care and welfare	27.0	0.5	0.6	0.3	0.4	1.1	0.5	0.3	0.3	0.2	0.9	20.9

Previous occupation	Current occupation (%)							
	Ratio of shift to regular employment from previous occupation	Regrouped: Professional and engineering workers	Regrouped: clerical workers	Regrouped: sales workers	Regrouped: services	Regrouped: manufacturing process workers	Regrouped: transport and machine operation workers	Regrouped: construction and mining workers
Professional and engineering workers	33.0	21.3	4.7	1.6	2.2	1.8	0.2	0.2
Clerical workers	20.2	2.2	11.4	2.2	2.1	1.2	0.3	0.2
Sales workers	22.0	2.3	4.4	6.7	4.0	2.2	0.6	0.5
Services	22.3	3.6	3.4	3.1	8.0	1.9	0.6	0.6
Production Process	22.3	1.3	2.2	1.6	3.4	9.1	1.1	1.5
Transportation and machine operation workers	34.0	0.2	1.8	1.4	1.4	3.6	20.2	1.2
Construction and mining workers	29.1	1.3	0.8	2.2	0.5	4.8	2.9	12.8

(Ratio of former non-regular employees who turn to regular employment after changing job (by detailed occupational category) and job separation rate)



Source: Compiled independently by the Office of Counselor for Labour Policy, MHLW, from questionnaire data of the "Basic Statistical Survey on Employment Structure" (2012) Statistics Bureau, Ministry of Internal Affairs and Communications

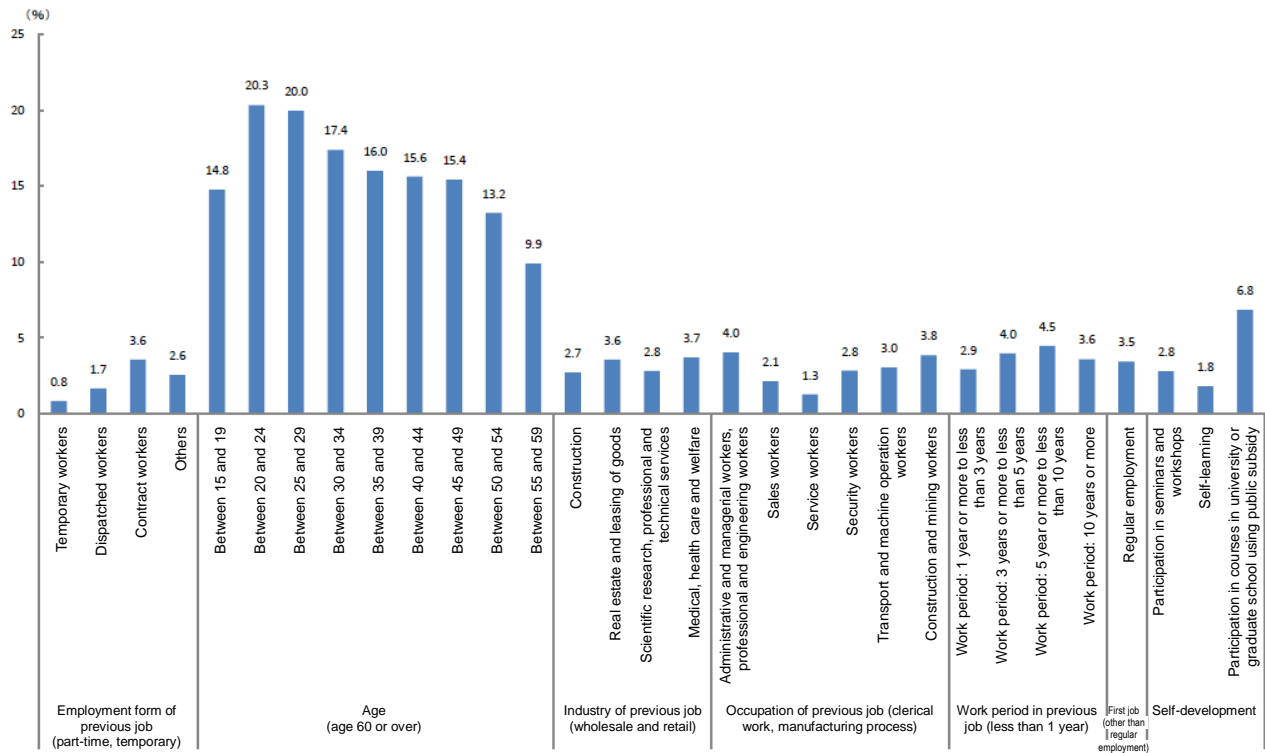
(Note) Shows the rate of shift to regular employment by occupation (the ratio of regular employees of current employees who separated from job in the past 5 years) and job separation rate (the ratio of people who separated from job in the past 5 years of employees of each occupation).

- When non-regular workers change their employment form to regular employment, the highest ratio of workers transfers job in the same industry and occupation. In particular, the rate of shift is high in industries such as medical and welfare services, education and learning support and construction. By occupation, the rate is high in professional and engineering workers and transportation and machine operation workers.
- Looking at occupations in more details, the rate of shift to regular employment tends to be high in occupations that require qualifications and skills, such as sales, nurses, automobile drivers, and construction workers.
- This shows that special knowledge and skills required for individual industry and occupation are likely to be evaluated when shifting to regular employment.

# Toward the shift from non-regular to regular employment

The probability of shift to regular employment is higher for younger workers. In addition, the employment form of the first job after graduation, experiences in the previous work, re-studying using public subsidy, etc. affect the shift to regular employment.

(Analysis of factors causing shift from non-regular employment to regular employment)  
(Probit analysis)



Source: Estimated by the Office of Counselor for Labour Policy, MHLW based on the questionnaire information of the "Basic Statistical Survey on Employment Structure" (2012) Statistics Bureau, Ministry of Internal Affairs and Communications

- (Note)
- 1) Factors of voluntary standard of less than 10% are shown in the above figure.
  - 2) Values in the above figure show the "marginal effect" of analysis results and the difference in the probability of shift to regular employment when compared with "base" shown in brackets for each factor. For example, if workers' ages are between 20 and 24, it shows 20.3% higher probability of shift to regular employment compared to those aged 60 or over who were previously non-regular workers. Therefore, it should be noted that there is no point comparing marginal effects between factors of difference base.

- Statistical analysis of characteristics of workers became a regular employee shows that the younger workers are the higher the probability of shift to regular employment is. By working period, former non-regular workers who have worked in the same company for 5 years or more and less than 10 years are most likely to become a regular employee.
- As for efforts in education and training, "participation in seminars and workshops," "self-learning" as well as "taking part in courses in university or graduate school using public subsidy" in support of self-development have the most positive effect on the shift to regular employment. Besides, it is implied that a person who was a regular employee in the first job after graduation can obtain a regular employment again more easily even if he or she temporarily became a non-regular worker.
- Helping young people including new graduates to obtain regular employment through public employment support such as Hello Works is important to stabilize occupational careers of workers throughout their life. Support for workers' voluntary efforts toward the development of occupational skills and providing appropriate opportunities to develop potential abilities can stabilize their lifelong employment.