1. Outline of the Survey

| Purpose of the Survey | Reveal dynamics and variation of employment and non-employment all over the country |
| :--- | :--- |
| Items surveyed | Status of employment, Living dynamics, Status of initial and previous <br> employment, Attribute of individual person of the Previous one year |
| Survey volume | about 100 questions Survey 2023: 108 questions |
| 2. Period of the Survey |  |

Survey period

## 3. Coverage of the Survey

| 3. Coverage of the Survey |  |
| :--- | :--- |
| Survey districts | All over the country |
| Conditions of persons | Male and female 15 years old and over to be surveyed |
| Exclusion conditions | None (no condition on occupation/survey cooperation records) |
| 4. Method of the Survey | Internet monitoring survey (Sample survey) |
| Survey technique | Extract persons satisfied the conditions by the monitor (Mighty monitor) <br> possessed by Intage Inc. |
| Sampling method | Based on "Labour force survey" data of Statistics Bureau, Ministry of Internal <br> Affairs and Communications, allocation was implemented by gender, stratified <br> age group, type of employment, district block, education background. The <br> allocation was set to reflect the population. However, as for 10s of non-labour <br> force, and 70 years old and over, the allocation was adjusted less than actual <br> count of persons. |
| Sample design | Survey 2023: 55,807 samples <br> * From Survey 2018 onwards, each survey consists of 3 sample types, continued <br> (previous year answerers), additional (new answerers of the year) and revived <br> (answerers of Survey before 2021 who didn't answer Survey 2022). <br> - Continued samples (continuous answerers since last year): 42,643 persons <br> Persons requested: 54,209 Effective collection rate: 78.7\% |
| Additional samples (new answerers, this year): 9,204 persons <br> Persons requested: 19,117 Effective collection rate: 48.1\% |  |
| Revived samples (no answer in survey 2022, but answered in 2021): 3,960 <br> persons <br> Persons requested: 27, 204 Effective collection rate: 14.6\% <br> * 14 samples out of the above are excluded from aggregating subjects due to <br> overseas emigration |  |
| count/effective collection |  |
| rate |  |


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| count/effective collection |  |
| rate |  |

## 5. Aggregation Method

Survey period is fixed as every January
January 5 ~ January 31, 2023

## ```Weighted \\ sampling aggregation``` <br> Weighted <br> sampling aggregation

Weighted sampling aggregation is necessary to implement aggregation according to the population construction since the collection was conducted with less allocation than actual count of persons for 10s and 65-69 years old of non-labour force, and 70 years old and over.

## Japanese Panel Study of Employment Dynamics 2023

 1. Outline of the SurveyIn Japanese Panel Study of Employment Dynamics, following items were questioned in survey 2023 for the purpose of grasping status of employment, living dynamics, etc. during the previous one year prior to the survey (in case of survey 2023, one year period of 2022).

Attribute
Q1 Gender
Q2 Age
Q3 Birth month and year
Q4 Present residential place
Q5 Final educational background
Q6 Graduated faculty
Q7 Present school year
Q7-1 Faculty to plan to graduate from
Q8 Dropout experience
Q9 Marital status
Q10 With or without a child/children
Q11 Number of children
Q12 Age of the child
Q13 Type of residence
Q14 Cohabiter
Q15 Principal household income earner
Q16-1 Labour force status of January ~April
Q16-2 Labour force status of May $\sim$ August
Q16-3Labour force status of September $\sim$ November
Q17 Labour force status of December

## Status as in Last December

Q18 Type of working
Q19 Type of employment
Q20 With or without store
Q21 Reasons of being engaged in work as in December
Q22 Reasons of absence from work
Q23 Could be engaged in work upon availability?
Q24 Desire to work
Q25 Degree of desire to work
Q26 With or without job seeking
Q27 Reasons of seeking no job
Q28 Reasons of unemployment
Q29 The reason of no desire to work
Q30 Industry
Q31 Number of employees
Q32 Occupation
Q33 Position title
Q34 With or without employment contract term
Q35 Employment contract term
Q36 Status of employment (unemployment) insurance coverage
Q37 Working days and hours per week
Q38 Presence of request to increase/decrease the work hours
Q39 Degree of increase/decrease in work hours
Q40 Possibility to increase work hours and content of work
Q41 Reason of not possible to increase work hours even when wanting to increase them
Q42 Salary payment method
Q43 Hourly rate
Q44 Work flexibility
Q45 Working place
Q46 Job style
Q47 Job percentage
Q48 Commuting methods
Q49-1 Time for living (Commutation)
Q49-2 Time for living (Housework, childcare)
Q50 Time for telework
Q51-1 Status of telework system introduction and adoption
Q51-2 Subject person to telework system
Q52 Condition of HRM at the workplace
Q53 Number of resignation times in the past

Status of the Previous One Year

## Q54 Level of happiness

Q55 Life satisfaction
Q56 Annual events and living
Q57 Annual occupational events
Q58 Self-development activities
Q59 Holiday acquisition condition
Q60 Rate of taking paid leaves
Q61 Health condition (Stress)
Q62 Income source of living expenses
Q63 How to cover the living expenses
Q64 Job upskilling
Q65 On-the-Job-Training opportunity
Q66 Off-the-Job-Training opportunity
Q67 With or without self-development
Q68 Work place status
Q70 Nature of work
Q71 Job satisfaction, career outlook
Q72 Stress of taking balance of work and family life

## Status of Second Job

Q73 With or without taking second job
Q74 Desire to take second job
Q75 Reasons of desire to take second job
Q76 Reasons of taking second job
Q77-1Type of working of the highest income second job
Q77-2 Content of work of the highest income second job
Q77-3 Job details of the second job that provided the highest income
Q77-4 With or without store of second job
Q77-: Number of the second jobs
Q78 Working hours per week of the second jobs

## Status of Initial Employment

Q79 Type of working of initial employment
Q80 Industry of initial employment
Q81 Number of employees of initial employment
Q82 Occupation of initial employment
Status of Previous Employment
Q83 Type of working of previous employment
Q84 Industry of previous employment
Q85 Number of employees of previous employment
Q86 Occupation of previous employment
Q87 Number of working days/hours in previous employment
Q88 Annual income of previous employment
Q89 Channels to find current place of work
Q90 Order of timing between the last resignation and adoption of current employment
Q91 Reasons of the last resignation
Status around the Delivery of the Youngest Child
Q92 Working status before and after the birth of your youngest child / child of currently one year old
Q93 Working status before and after the birth of your youngest child / child of currently one year old
Q94-1 System used at the birth of the youngest child (female)
Q94-2 System used at the birth of the youngest child (male)
Q95-1 Number of consecutive days taken for childcare leave
Q95-2 Number of consecutive holidays taken for childcare
Others
Q96 Residential place
Q97 Academic achievement at the last junior high school year
Q98 Month and year of school graduation, month and year of entry to and resignation from the initial
Q99 emnlovment.
Q99 month and year of entry to and resignation from the previous employment,
Q100 month and year of entry to the current employment
Q101 Annual income of the previous year (main job, second job, non-occupational)
Q102 With whom can you consult?
Q103 Type of working of the spouse
Q104 Event in work (resignation or employment of spouse)
Q105 Annual income of the spouse
Q106 With or without doing nursing care
Q107 Desire for changing or hunting job
Q108 Approach taken related to future career plan in the past one year
Q109 Desired future plan after graduation

## 2. Period of the Survey

As the purpose is to grasp the status of the previous one year prior to the survey period, the survey period is fixed as every January. The survey 2023 was actually implemented from January 5 to January 31, 2023.

## 3. Coverage of the Survey

The subjected persons are male and female of 15 years old and over, and without upper age limit. The survey was implemented not as a complete census but sample survey. (Refer to " 4 . Method of the Survey")

## 4. Method of the Survey

Internet monitoring survey was used as the technique of survey by asking the monitors for the survey after extracting male and female of 15 years old and over. The survey applied the system to receive answers on internet screens.
When monitors are surveyed, discrepancy would be seen in age and occupation construction between monitors and the population subject to survey. In order to conduct the survey with representativeness reflecting the population as much as possible, necessary sample numbers were calculated by gender, stratified age group, type of employment, district block and education background, then collected answers aiming these numbers (allocation).
On this stage, if the samples are allocated according to the population construction, total volume of unworking groups of 10 s and 65-69 years old, and 70 years old and over increases and results decrease of sample numbers of working people groups on the target for the desired close analysis. Therefore, the survey was designed to obtain larger number of working people samples by allocating less figures to nonlabour force of 10 s and 65-69 years old, and 70 years old and over.
(Refer to Reference (1) "Production method of population value data and allocation by gender, stratified age group, type of employment, district block and education background")
In survey 2023, at first we asked all the people who could be requested out of the answerers of survey before 2022 (continued samples and revived samples), to answer the survey. 81,413 persons could be requested for the survey as they remained in the monitor. 46,603 persons answered out of the above number. In the next stage, new answerers were extracted from the monitor and asked for the survey, imagining deficient cells to be filled up for the allocation. Out of the requested 19,117 persons, answers were obtained from 9,204 persons. In survey 2023 , total number of effective samples was 55,807 .
(Refer to "Reference (2) Allocation and collection count")

## 5. Aggregation Method

Weighted sampling aggregation is necessary to implement aggregation according to the population construction so that the number of the samples can get near to the population value calculated in the stage of sample design in "4. Method of the Survey", since less figures than actual count of persons were allocated to 10s and 65-69 years old of non-labour force, and 70 years old and over.
(Refer to "Reference (3) Calculation method of weighted values" and "Reference (5) Calculation method of weighted values")
It is verified that big bias can be eliminated from the survey results even compared with official statistics by allocation with smaller segmentation under consideration of the representativeness in the stage of sample design, then making correction by weighted aggregation.
(Refer to "Reference (4) Comparison of the survey results and official statistics")

# Reference (1) Production method of population value data and allocation by gender, stratified age group, type of employment, district block and education background 

<Data production procedures>
I. Produce population data: Produce population data using multiple official data adapting to the targeted allocation cells
II. Correct population data for allocation: Adjust number of persons in the population
III. Produce allocation: Make allocation adapting to the population data construction after correction
<Data production procedures in detail>
I. Produce population data:

Produce population data using multiple official data adapting to the targeted cells for allocation

## I-i. Produce basic data

<Data used>
"Table II Population aged 15 years old and over by status of employment, position of employment, type of employment, marital status, and age group" from October to December 2021 version "Labour Force Survey (Basic Tabulation) by Region" issued by Statistics Bureau, Ministry of Internal Affairs and Communications

- Extract number of persons of self-employed workers, family workers, executives of company or corporation, regular employees, non-regular employees, unemployment and non-labour force by gender age group (divided by 10s) for each area of whole Japan (divided by 11 areas), from "Table II Population aged 15 years old and over by status of employment, position of employment, type of employment, marital status, and age group" of October to December 2021 version "Labour Force Survey (Basic Tabulation) by Region"
* The latest yearly data are used
- Data are produced by following cells x 11 areas

|  |  | Labour force |  |  |  |  |  | Non-labour force |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Self employed worker | Family worker | Executive of company or corporation | Regular employee | Non-regular employee | Unemployment |  |
| Male | 15-24 years old <br> 25-34 years old <br> 35-44 years old <br> 45-54 years old <br> 55-64 years old <br> 65 years old and over |  |  |  |  |  |  |  |
| Female | 15-24 years old <br> 25-34 years old <br> 35-44 years old <br> 45-54 years old <br> 55-64 years old <br> 65 years old and over |  |  |  |  |  |  |  |

## Japanese Panel Study of Employment Dynamics 2023

I-ii. Age group division change (by 5 from 10 years)
<Data used>
"Table I-2 Population aged 15 years old and over by status of employment, position of employment, type of employment (number of employees for non-agricultural/forestry industry employees), main activity status, agriculture/forestry, non-agricultural/forestry, type of household, family type of household and age group" from October to December 2021 version "Labour Force Survey (Basic Tabulation) Whole Japan" issued by Statistics Bureau, Ministry of Internal Affairs and Communications

- The data in I-i are divided into groups of 10 years, therefore the above data are divided so that 15-24 years old becomes 15-19 years old/20-24 years old, and 65 years old and over becomes 65-69 years old/70-74 years old/ $/ 75$ years old and over
(Get the rate of $15-19$ years old out of 15-24 years old, then multiply the data of $15-24$ years old by the rate to get number of persons. For other age segments, the same procedures are to be followed as above.)
- On this stage, utilise the data corresponding to the segments by self-employed workers, family workers, executives of company or corporation, regular employees, non-regular employees, unemployment, non-labour force that were sorted in I-i
* As for executives of company or corporation, the data of regular employees are used
* The data uniformed throughout the country are used
- In this way, cells will be arranged as follows;


I-iii. Calculation of number of persons attending school
<Data used>
"Table I-2 Population aged 15 years old and over by status of employment, age group, main activity status, agriculture/forestry, non-agricultural/forestry, whether wishing to work, marital status, type of household, relation to the head of household, and education background" from October to December 2021 version "Labour Force Survey (Detailed Tabulation) Whole Japan" issued by Statistics Bureau, Ministry of Internal Affairs and Communications

- From the above data, ratios of "attending schools" for labour force/non-labour force by gender age (divided into groups of 10 years) are calculated. The results are multiplied by the basic data to get the count of persons "attending school" by labour force/non-labour force x gender age (divided into groups of 10 years)
* Since there are no data by labour force breakdown (self-employed, regular employees, etc.), the ratio is as uniformed for every type of employment
* Since there are no data by each region, whole Japan data are used
- In the above way, attending school was extracted and arranged as in following cells;

|  |  | Labour force |  |  |  |  |  |  | Non-labour force |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Self employed worker | Family | Executive of company or corporation | Regular employee | Non-regular employee | Unemployme nt | Attending school |  | Attending school |
| Male | 15-19 years old <br> 20-24 years old <br> 25-34 years old <br> 35-44 years old <br> 45-54 years old <br> 55-64 years old <br> 65-69 years old <br> 70-74 years old <br> 75 years old and over |  |  |  |  |  |  |  |  |  |
| Female | 15-19 years old <br> 20-24 years old <br> 25-34 years old <br> 35-44 years old <br> 45-54 years old <br> 55-64 years old <br> 65-69 years old <br> 70-74 years old <br> 75 years old and over |  |  |  |  |  |  |  |  |  |

Japanese Panel Study of Employment Dynamics 2023

I-iv. Divide persons other than attending school into the groups of below university graduates and university graduates or higher
<Data used>
"Table I-2 Population aged 15 years old and over by status of employment, age group, main activity status, agriculture/forestry, non-agricultural/forestry, whether wishing to work, marital status, type of household, relation to the head of household, and education" from October to December 2021 version "Labour Force Survey (Detailed Tabulation) Whole Japan" issued by Statistics Bureau, Ministry of Internal Affairs and Communications

- Like as in I-iii, ratios of below university graduates and university graduates or higher for the persons "graduated from" by labour force /non-labour force x gender age (divided into groups of 10 years) are calculated. The results are multiplied by the basic data to get the count of persons by education background (below university graduates/university graduates or higher)
* Since there are no data by labour force breakdown (self-employed, regular employees, etc.), the ratio is as uniformed for every type of employment
* Since there are no data by each region, whole Japan data are used
- Now, the count of persons of the population adapted to the aimed allocation cells is completed. Produce 3,168 cells (cells x 11 areas $=3,168$ ) as below;

|  |  | Hokkaido |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Labour force |  |  |  |  |  |  |  |  |  |  |  | Attending <br> school | Non-labour force |  |  |
|  |  | Self employed worker |  | Family worker |  | Executive of company or corporation |  | Regular employee |  | Non-regular employee |  | Unemployment |  |  | Non-labour force |  |  |
|  |  | Below university | $\begin{array}{\|l} \hline \text { University } \\ \text { or higher } \end{array}$ | Below university | $\begin{array}{\|l} \hline \begin{array}{l} \text { University } \\ \text { or higher } \end{array} \\ \hline \end{array}$ | $\begin{array}{\|l\|} \hline \begin{array}{l} \text { Below } \\ \text { university } \end{array} \\ \hline \end{array}$ | University or higher | Below <br> university | $\begin{array}{\|l\|l} \hline \begin{array}{l} \text { University } \\ \text { or higher } \end{array} \\ \hline \end{array}$ | Below <br> university | $\begin{array}{\|l\|l} \hline \begin{array}{l} \text { University } \\ \text { or higher } \end{array} \\ \hline \end{array}$ | Below <br> university | $\begin{array}{\|l} \hline \begin{array}{l} \text { University } \\ \text { or higher } \end{array} \\ \hline \end{array}$ |  | $\begin{array}{\|l\|} \hline \begin{array}{l} \text { Below } \\ \text { university } \end{array} \\ \hline \end{array}$ | $\begin{array}{\|l\|} \hline \text { University } \\ \text { or higher } \end{array}$ | $\begin{aligned} & \text { Attending } \\ & \text { school } \end{aligned}$ |
|  |  | 12 | 5 | 2 | 1 | 10 | 5 | 83 | 45 | 63 | 22 | 6 | 3 | 7 | 149 | 25 | 22 |
| Male | 15-19 years old | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 8 |
|  | 20-24 years old | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 1 | 1 | 0 | 0 | 0 | 3 | 0 | 0 | 3 |
|  | 25-34 years old | 1 | 0 | 0 | 0 | 1 | 0 | 8 | 8 | 2 | 1 | 1 | 0 | 0 | 1 | 0 | 0 |
|  | 35-44 years old | 1 | 0 | 0 | 0 | 1 | 0 | 12 | 9 | 2 | 1 | 1 | 0 | 0 | 2 | 0 | 0 |
|  | 45-54 years old | 2 | 1 | 0 | 0 | 2 | 1 | 15 | 9 | 2 | 1 | 1 | 0 | 0 | 2 | 1 | 0 |
|  | 55-64 years old | 2 | 1 | 0 | 0 | 2 | 1 | 10 | 6 | 4 | 3 | 1 | 0 | 0 | 2 | 1 | 0 |
|  | 65-69 years old | 1 | 0 | 0 | 0 | 1 | 0 | 2 | 1 | 3 | 1 | 0 | 0 | 0 | 5 | 2 | 0 |
|  | 70-74 years old | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 2 | 1 | 0 | 0 | 0 | 10 | 3 | 0 |
|  | 75 years old and over | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 23 | 7 | 0 |
| Female | $15-19$ years old | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 8 |
|  | 20-24 years old | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 2 | 1 | 0 | 0 | 3 | 0 | 0 | 3 |
|  | 25-34 years old | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 4 | 4 | 3 | 1 | 0 | 0 | 3 | 2 | 0 |
|  | 35-44 years old | 1 | 0 | 1 | 0 | 0 | 0 | 7 | 3 | 7 | 4 | 1 | 0 | 0 | 5 | 2 | 0 |
|  | 45-54 years old | 1 | 0 | 0 | 0 | 0 | 0 | 10 | 2 | 14 | 3 | 1 | 0 | 0 | 6 | 1 | 0 |
|  | 55 - 64 years old | 1 | 0 | 1 | 0 | 1 | 0 | 6 | 1 | 11 | 2 | 1 | 0 | 0 | 9 | 2 | 0 |
|  | $65-69$ years old | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 4 | 0 | 0 | 0 | 0 | 11 | 1 | 0 |
|  | 70-74 years old | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 3 | 0 | 0 | 0 | 0 | 18 | 1 | 0 |
|  | 75 years old and over | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 51 | 3 | 0 |

* Created population data using data of October to December 2021 since the data of October to December 2022 are not disclosed yet at the time of survey implementation. Weighted tabulation is used to assign back to the composition of the population data created by the data of October to December 2022 at the tabulation phase since the data of October to December 2022 will be disclosed by the end of the survey


## II. Correct population data for allocation: Adjust number of persons in the population

II-i. Reduce the actual count of persons 70 years old and over by half

- Reduce actual data of number of persons for each cell of 70-74 years old and 75 years old and over by half

II-ii. For generation of 10 s and 65 years old and over, make the non-labour force a half of the labour force

- As for age groups 15-19 years old, 65-69 years old, 70-74 years old and 75 years old and over, make the total of non-labour force count a half of the labour force
- The construction of education background (below university graduates/university graduates or higher/attending school) within the non-labour force is to be kept same as of the original population construction.

II-iii. After adjustment, construction ratio of the population is calculated

- Calculate overall construction ratio of each cell for the population data in II-ii
III. Produce allocation: Make allocation adapting to the population data construction after the correction
- Allocate 43,000 persons adapting to the construction ratio calculated in II-iii
- Now, allocation of 3,168 cells is completed ( $18 \times 16$ cells x 11 areas $=3,168$ ). Actual survey was implemented aiming the number of persons to be collected for the allocation





## Japanese Panel Study of Employment Dynamics 2023

## Reference (2) Allocation and collection count

The number of persons from whom actual effective answers were obtained is as below after the implementation of survey with the target of the allocation produced in Reference (1).


* Above data show total of whole Japan. In detail, total throughout the country by 11 areas. Figures in the brackets represent number in deficiency
* 14 samples are excluded from the above collection count for this year survey due to their overseas emigration


# Reference (3) Calculation method of weighted values of the survey 

## <Calculation procedures>

I. Calculate number of persons for each cell in case collection can be made up according to the population construction
II. Calculation of weighted values

## <Calculation procedures in detail>

I. Calculate number of persons for each cell in case collection can be made up according to the population construction

I-i.

- Using the data of October to December 2022, create the data on the number of people in the population following the same procedure as the reference (1)-I and calculate the entire component ratio for each cell
However, 70-74/75 years old and over cells will be included in one cell with 70 years old and over.
I-ii.
- Calculate number of persons for each cell in case of collection of 55,793 can be made up according to the population, multiplying 55,793 excluded 14 samples of overseas emigrants out of the effective answer count of the survey by overall construction ratio of the population


## II. Calculation of weighted values

- Calculate the coefficient (weighted value) to make the actual collection count for each cell as the same number of persons calculated in I-ii
- The calculation was handled in the following 3 patterns; As for unemployment and non-labour force, the weighted value calculated with Pattern A is to be used; As for labour force of ages between 15 and 24 , and 65 or over (excluding completely unemployed persons), the weighted value calculated with Pattern B is to be used; As for labour force of ages between 25 and 64, the weighted value calculated with Pattern C is to be used.

Pattern A: Number of all cells of the population produced in Reference (1)-I (2,816 cells)
Pattern B: 96 cells for other age groups by gender, stratified age group, status of employment, education background.
Pattern C : 1,056 cells for 25-64 years old by gender, stratified age group, status of employment, education background and areas.

## Japanese Panel Study of Employment Dynamics 2023

Pattern A * Hokkaido only as an example


Calculate the coefficient to make the left table figures as the same ones in right table
$=$ weighted value Pattern A
As for unemployment and non-labour force in blue frames, the weighted value calculated in this way is to be used

* For attending school cells of labour force, Pattern A is to be used only for the persons of unemployment


## Pattern B \& Pattern C * All over the Country and Hokkaido as an example




Calculate the coefficient to make the left table figures as the same ones in right table $=$ weighted value Pattern B and Pattern C

Pattern B: For labor force of 15-24 years old and 65 years old and over (excluding unemployment) in blue frames, the weighted value calculated in all areas of the country is used.
Pattern C: For labor force of 25-64 years old (excluding unemployment) in red frames, the weighted value calculated in each area is used.

## Japanese Panel Study of Employment Dynamics 2023

## Reference (4) Comparison of the survey results and official statistics

Comparison between aggregated results in the survey (after weighted aggregation) and construction ratio in official statics shows as below; The results of this survey appear not strongly biased, even compared with official statics.
<Construction ratio by gender, stratified age group and type of employment>

Japanese Panel Study of Employment Dynamics 2023


The population produced in Reference (1)-I

* \% values in the table represent percentage of total
* Since the weighted aggregation is implemented, total (n) of Japanese Panel Study of Employment Dynamics 2023 is not identical with the actual collection count
<Construction ratio of regular and non-regular by gender and stratified age group, for employees>

Japanese Panel Study of Employment Dynamics 2023

|  |  | (\%) |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | n (persons) | Regular employee | Non-regular employee |
| Male | 15-24 years old | 1250 | 42.8 | 57.2 |
|  | 25-34 years old | 2886 | 85.2 | 14.8 |
|  | 35-44 years old | 3317 | 88.0 | 12.0 |
|  | 45-54 years old | 3791 | 89.3 | 10.7 |
|  | 55-64 years old | 2694 | 72.3 | 27.7 |
|  | 65 years old and over | 1510 | 25.0 | 75.0 |
| Female | 15-24 years old | 1247 | 36.1 | 63.9 |
|  | 25-34 years old | 2429 | 65.3 | 34.7 |
|  | 35-44 years old | 2731 | 51.4 | 48.6 |
|  | 45-54 years old | 3406 | 44.1 | 55.9 |
|  | 55-64 years old | 2342 | 33.7 | 66.3 |
|  | 65 years old and over | 1348 | 14.3 | 85.7 |

<Unemployment rate by region>

Japanese Panel Study of Employment Dynamics 2023

Statistics Bureau, Ministry of Internal Affairs and Communications "Labour Force Survey (Basic
Tabulation)" December, 2022

|  |  | (\%) |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{gathered} \hline \mathrm{n}(\mathrm{x} 10,000 \\ \text { persons }) \\ \hline \end{gathered}$ | Regular employee | Non-regular employee |
| Male | 15-24 years old | 261 | 49.8 | 50.2 |
|  | 25-34 years old | 564 | 86.3 | 13.7 |
|  | 35-44 years old | 622 | 90.2 | 9.8 |
|  | 45-54 years old | 741 | 91.8 | 8.2 |
|  | 55-64 years old | 542 | 75.1 | 24.9 |
|  | 65 years old and over | 292 | 27.1 | 72.9 |
| Female | 15-24 years old | 267 | 43.8 | 56.2 |
|  | 25-34 years old | 489 | 69.3 | 30.7 |
|  | 35-44 years old | 536 | 51.9 | 48.1 |
|  | 45-54 years old | 679 | 43.6 | 56.4 |
|  | 55-64 years old | 474 | 32.9 | 67.1 |
|  | 65 years old and over | 247 | 16.2 | 83.8 |

Statistics Bureau, Ministry of Internal Affairs and Communications "Labour Force Survey (Basic Tabulation)" October - December 2022
(Seasonally adjusted values)

| Hokkaido | Tohoku | Minami kanto | Kitakanto <br> /koshin | Hokuriku | Tokai | Kinki | Chugoku/ Shikoku | Kyusyu/ Okinawa |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2.8 | 2.7 | 2.6 | 2.3 | 1.8 | 1.9 | 2.8 | 2.3 | 2.8 |


| Hokkaido | Tohoku | Minami kanto | Kitakanto /koshin | Hokuriku | Tokai | Kinki | Chugoku/ Shikoku | Kyusyu/ Okinawa |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2.2 | 2.2 | 2.3 | 1.9 | 1.4 | 1.6 | 2.4 | 1.8 | 2.3 |

## Additional Survey Design of Japanese Panel Study of Employment Dynamics

## 1. Outline of the Survey

| Purpose of the Survey | Reveal the actual conditions of activities of employed persons when changing <br> their jobs and provide suggestions that also improve their quality of work |
| :--- | :--- |
| Items surveyed | Actual conditions of activities to change jobs or seek employment (reason, <br> activity period, activity route, important items, level of satisfaction, change in <br> annual income, etc.) |
| Survey volume | 20 questions |
| 2. Period of the Survey |  |

Survey period
January 13 ~ February 7, 2023

## 3. Coverage of the Survey

| Survey districts | All over the country |
| :--- | :--- |
| Conditions of persons | Males and females of 15 years or older who replied that they changed their jobs <br> or had intention to seek employment after 2018 in this survey conducted on <br> January 2023 |
| Exclusion conditions | None (no condition on occupation/survey cooperation records) |

## 4. Method of the Survey

| Survey technique | Internet monitoring survey (Sample survey) |
| :--- | :--- |
| Sampling method | Extract persons satisfied the conditions by the monitor (Mighty monitor) <br> possessed by Intage Inc. |
| Sample design | Request a survey toward respondents who are applicable to the target people <br> described above among valid respondents of the JPSED2023 main survey |
| Effective collection <br> count/effective collection <br> rate | 21,930 samples <br> Persons requested: 21,162 Effective collection rate: 83.8\% |

## 5. Aggregation Method

## Weighted <br> sampling aggregation

Perform weighted tabulation to tabulate according to the composition of the population

Apply weighted value calculated in this survey

