Declining Response Rates Boosted by Demographic Changes in Japanese Labour Force Survey: Steady Measures to Recover Response Rates

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- 1. Outline of the Japanese Labour Force Survey (JLFS)
- 2. Status of response rate and demographic change
- 3. Attributes of poor responses and their causes and countermeasures
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1. Outline of the Japanese Labour Force Survey (JLFS) <1/2>

- Basic matters concerning employment status are surveyed every month. Household survey
- Number of questions (approximate number of questions in the Basic Questionnaire): 4 face questions, 8 questions for employed persons (including 2 questions to be filled out freely), 3 questions for unemployed persons, and 2 questions for persons not in labour force
- Selection of the sample households: "Dwelling Units" were selected by stratified two stage extraction. 40,000 households with 100,000 persons* on the sample design *aged 15 years old or over
- Request to respond: Self-reporting and retention method. In principle, our enumerators visit and explain to the sample households, but if it is difficult to contact the sample households, the questionnaires are dropped into letterboxes.



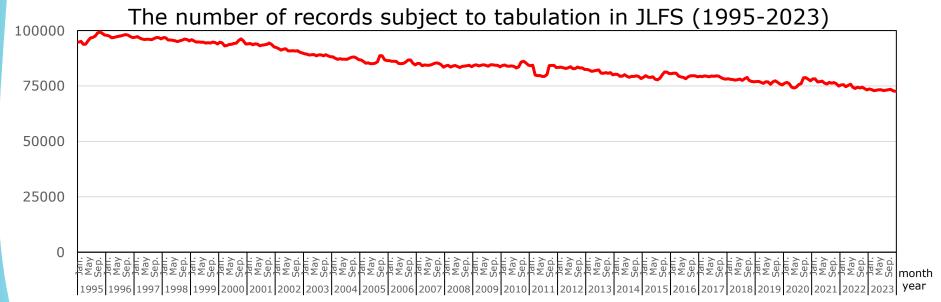
1. Outline of the Japanese Labour Force Survey (JLFS) <2/2>

- Collection questionnaires: The respondent selects whether to have a paper questionnaire (both sides of an OCR paper) collected by our enumerator or to respond online. The responses were split roughly evenly.
- The law stipulates the obligation of the person subject to the survey to respond, the protection of the confidentiality of the person engaged in the survey, and ensures accuracy and reliability (from the viewpoint of the citizen). There are also penal provisions (fines of up to 500,000 JPY (about 3,400 USD) in the case of violation of the obligation to respond), but there are no examples of penal provisions being applied to simple non-responses in household surveys.



(1) Changes in the response rate

- Transition in the number of records subject to tabulation (proxy variable for response rate)
- The decline was not triggered by any specific event, but rather a gradual decline over a long period, which may indicate some structural change.



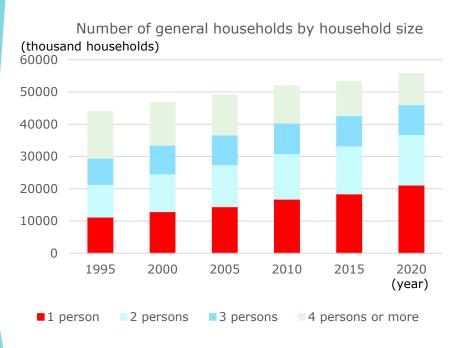


- 2. Status of response rate and demographic change
- (2) Attributes with low response rates and attributes with declining response rates
 - Once every five years, the attributes of household members who responded to the Population Census but did not respond to the JLFS are identified by comparing the Population Census and the JLFS, and the attributes with low response rates to the JLFS are identified.
 - → Single, living in collective housing, renting a house, young people in their 20s, foreign nationals
 - We identify the age group in which the response rate is declining by ascertaining the discrepancy between the assumed multiplication factor in the sample design and the linear multiplication factor actually obtained by household member age monthly
 - → In addition to the young generation, the recent decline is somewhat large for those aged 85 or older etc.



(3) Demographic changes as a background <1/3>

- □ Household size → Increase in number of general one-person households
- Decrease in number of households with married couples where only one spouse is working

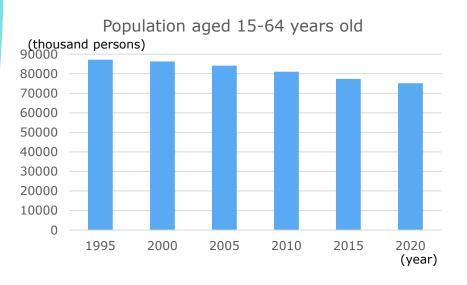


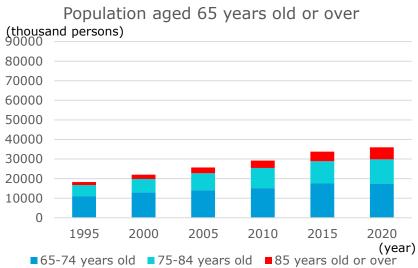


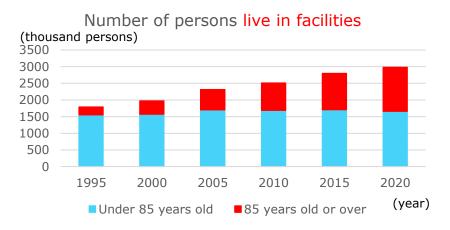


(3) Demographic changes as a background <2/3>

□ Age structure → Aging, increase in the number of facility household members aged 85 or older





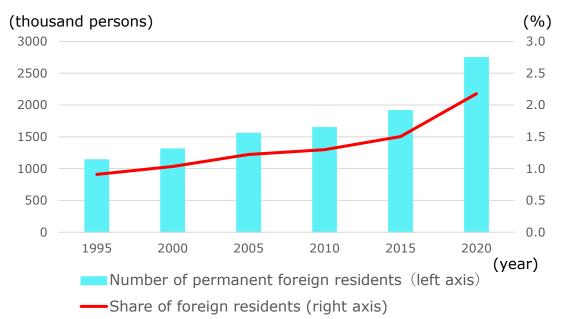




(3) Demographic changes as a background <3/3>

□ Permanent foreign residents → Increase







- 3. Attributes of poor responses and their causes and countermeasures
- (1) Household size and dual income <1/2>
 - A reduction in household size leads to a greater absence of whole household members and decreases the probability that our enumerators can meet with the sample households.
 - *Of the households that did not respond, 3/4 were considered "absent" by our enumerators
 - The household absence rate is particularly high for one-person households. "Absence" includes pretending not to be at home. Households are likely to stay away from suspicious visitors.





- 3. Attributes of poor responses and their causes and countermeasures
- (1) Household size and dual income <2/2>
 - In the case of dual income households, the main respondent may be busy balancing family care (childcare / nursing care) and work responsibilities and may hesitate to start responding to the JLFS.
 - The response period was set short (7 days) because of the strongly required timeliness of the results announcement for the JLFS.
- The deadline for online responses was extended in April 2025 (the response period, including the reminder period, is set at 10 days, which means that the reminder period always includes weekly holidays, and the responses are made on weekly holidays when it is easy to secure free time). → The response rates improved about 1% points in these 3 months (preliminary results)

Attributes of poor responses and their causes and countermeasures Online response <1/2>

- It seems that the introduction of online responses as a measure against absence is effective to some extent (A certain percentage of households categorized as "absent" in the JLFS are responding to the Population Census by online).
- Households are requested to respond using their own smartphones or PCs (no response equipment is provided or loaned). Although we do not pay the communication expenses for responses, there are no complaints, probably because online responses were not mandatory, the communication volume is small, and the communication unit price is low.

Attributes of poor responses and their causes and countermeasures Online response <2/2>

- The average time required for the response is about 15 minutes. However, respondents may need to log in on multiple days as they are required to provide the actual hours worked per week.
- Previously, some households gave up on answering because they could not log in successfully.
- In the case of smartphones, when the QR code is scanned by a camera, the response site is accessed, and the response ID is automatically entered. Respondents only need to enter the password to proceed to the answer screen. (as a result of improvement in the survey conducted in August 2025). We expect the response rate to improve in the coming months.



3. Attributes of poor responses and their causes and countermeasures

(3) Facilities for the elderly

- Of the 7.26 million people requiring care or certification of needed support, 966,000 live in facilities for the elderly (permanent residence).
- The questions are simple (in the case of facility residents, the answers are completed after confirming the sex, age, and fact that they have not done any job search in the past month (that they are not in the labor force)).
- It is often difficult for the person concerned to answer, but facility staff can respond as proxies.
- If we look at the data only from the perspective of counting the number of people who are not in the labor force, we would like to use administrative data, but there are problems such as the inconsistency of residence in the resident register (in many cases, people do not report their relocation to the facility address due to personal reasons) and the slow compilation of facility statistics.

- 3. Attributes of poor responses and their causes and countermeasures
- (4) Elderly living outside facilities
 - There are a certain number of elderly households where no one lives in an elderly care facility and no caretakers live with them (elderly single persons, elderly married couples only).
- Some elderly households are independent in daily life but have no equipment or are unfamiliar with the operation of the equipment when answering online, and have difficulty answering by themselves when answering on paper due to decreased physical function (presbyopia, hand tremors)
- It is important for our enumerators to assist in responding (support answers by interviewing, etc., and persuade them to answer politely). However, respondents who need assistance are often not in labor force, and the survey content is simple and can be handled by a proxy answer by our enumerators.



- Attributes of poor responses and their causes and countermeasures
 Foreign nationality <1/2>
 - The number of foreign permanent residents has increased in recent years (increase in new permanent residents). It is difficult to request answers from new permanent residents because many of them have difficulty communicating in Japanese.
 - Most of our enumerators are available only in Japanese. It is difficult to communicate directly with native speakers of Asian languages, which are popular these days. The only thing our enumerators can do is somehow to identify the language understood by the household and distribute the translated questionnaires.





- Attributes of poor responses and their causes and countermeasures
 Foreign nationality <2/2>
 - Many of the recent new permanent residents came to Japan for the purpose of employment. Because they are employed, the volume of responses in the JLFS is large (free entry is also required). Sometimes the employer is asked to cooperate and the employer answers on behalf of the employee, but the employer is doubtful about the accuracy of the answers in terms of working hours, etc. (Sometimes the employee is the only one who can accurately understand and answer the actual working hours, including side jobs).
 - Measures to facilitate answers by individuals, such as multilingual online answers, need to be taken (measures to log in for multi languages, etc. are being prepared).



3. Attributes of poor responses and their causes and countermeasures

(6) Deterioration of the survey environment <1/2>

Decline in the function of the local community

In the past, neighborhood associations played a major role in conducting large-scale household surveys conducted through local governments, such as the Population Census and the JLFS, by promoting responses from individual households and by publicizing. However, in recent years, the rate of participation in neighborhood associations has declined, and the function of promoting responses through community associations has also declined.

Deterioration of perceived public safety

- Although the number of crimes has decreased significantly, the percentage of people who answered that "Japan's public security has deteriorated in the last 10 years" was 54.5% (2021 survey), still accounting for more than half of the total.
- The percentage of those who cited crimes such as special fraud and fraudulent business practices as crimes that they are worried about themselves or their close relatives being victimized was 52.6% (2021 survey), indicating that they are particularly wary of crimes committed by suspicious visitors in recent years → It is difficult to conduct statistical surveys by visiting enumerators.



3. Attributes of poor responses and their causes and countermeasures

- (6) Deterioration of the survey environment <2/2>
 - Heightened awareness of privacy and personal information protection
 - Citizens are highly concerned about privacy protection and are cautious about providing their own information (more than 70% in both surveys in 2021). The background to this is thought to be the following: the improvement of people's awareness with the development of laws and regulations on the protection of personal information; the increase in the risk of information diffusion due to the progress of digitalization; and the occurrence of information leaks and the abuse of information for crimes, which have become social problems, etc.
 - The level of trust in the "national administrative organ" is not high (only 58% in the 2024 survey).
- (Reference) Impact of 2020 pandemic caused by COVID-19
 - The response rates dropped by about 3% points in the early days of the pandemic, as it became harder for our enumerators contacting the sample households to explain directly. But rates recovered to pre-pandemic level from September 2020.



- 3. Attributes of poor responses and their causes and countermeasures(7) Young generation <1/2>
 - The response rate among teenagers is relatively high, but the response rate among those in their 20s is low.
 - Many teenagers live with their parents, and their parents responded, but the response rate is expected to be low in the 20s, as many people live in one-person households.
 - High absence rate in 20s. When paper documents are dropped into letterboxes, the responses are poor (they are indifferent to the paper documents). Almost all of them have smartphones but few have fixed-line phones (household heads in their 20s: smartphone ownership rate: 97%, fixed-line phone ownership rate: 3%)

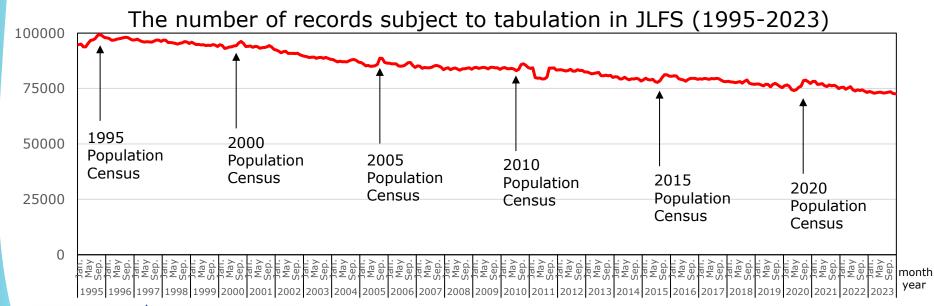
3. Attributes of poor responses and their causes and countermeasures(7) Young generation <2/2>

- For those in their 20s, social media seems to be an effective means of information transmission. However, in a random sample survey, it is necessary to identify the contact information of the residents of the surveyed dwelling units on social media, but in some cases, it is not possible to identify even the names of the residents in an apartment buildings with high anonymity.
- Currently, the level of difficulty in contact is high, and there are no effective measures other than general measures for absent households (such as facilitating online responses).



3. Attributes of poor responses and their causes and countermeasures(8) Public relations

- The response rate of the JLFS increases when the Population Census is conducted.
- This suggests that the large scale of public relations in the Population Census may influence the survey response, and that public relations are still effective in responding to the survey.



3. Attributes of poor responses and their causes and countermeasures(9) Demand procedure

- The importance of demand procedure is increasing due to the deterioration of the survey environment.
- Although the sampling rate was about 1/1000, the survey participants were informed that they were obliged to respond if they were selected as a target and that there were penal provisions.
- Training our enumerators is also important to prevent any trouble with the target households when making demands.



4. Effect on bias and sampling error of results

(1) Bias <1/2>

- The effect of bias in the size of households on the main results in the JLFS: The effect is small when the results are calculated using the 2020 Population Census. Specifically, the employment rate is considered to be about 0.05 points lower. (In the JLFS, low response rate of young people is covered by the ratio estimation with a benchmark of the population by age)
- The low response rate of permanent foreign residents in the JLFS affected the main results: As shown in the 2020 Population Census, the percentage of non-Japanese excluding those who did not report nationalities was 2.0%, and the percentage after correcting for unknown nationality was 2.3%. If the ratio of non-Japanese is 0.3 points lower in the JLFS, the employment rate is about 0.04 points lower, and the impact is expected to be small (however, the JLFS may have a higher percentage of non-Japanese who do not respond than the Population Census, and thus cannot be optimistic).

4. Effect on bias and sampling error of results

(1) Bias <2/2>

Measures against the deterioration of population information (the deterioration of population information due to the decline in the response rate in the Population Census (increase in unknowns: 2.3% of ages were unknown in the 2020 Population Census)): The sampling of the enumeration districts for JLFS was based on the population by industry, etc. in the Population Census results which had not imputed unknown values until the 2020 Population Census. In the 2025 Population Census, we consider improving imputation method that can provide imputed population by industry for each enumeration districts. So, the stratification criteria used for the sampling of the enumeration districts for JLFS are expected to improve the accuracy of sampling after 2028.



4. Effect on bias and sampling error of results

(2) Error rate

- The relative standard error for major items has been on an upward trend in recent years among persons not in labor force, etc.
- The relative standard error for unemployed persons also appears to be on an upward trend, but the error rate has also risen in part due to the decline in the level of unemployed persons since the peak immediately after the 2008 financial crisis (the standard error has been almost flat).

Relative standard error (%)

Year	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Employed person	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.4	0.4	0.4
Unemployed person	1.5	0.9	1.2	1.2	1.4	0.6	1.0	1.4	1.7	1.1	2.2	1.8	1.6
Not in labour force	1.2	1.3	1.3	1.4	1.4	1.3	1.3	1.6	1.7	1.6	1.5	1.7	1.8

Standard error (10 thousand persons)

Year	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Employed person	24	26	26	26	27	25	26	22	23	22	25	25	28
Unemployed person	4	2	3	3	3	1	2	2	3	2	4	3	3
Not in labour force	54	58	60	61	61	56	56	66	70	66	60	68	72



5. Next steps

- There are issues that are difficult to resolve by extending the existing response measures, such as the fact that there are no effective measures against the low response rate of young oneperson households in their 20s.
- We expect that various innovations will be realized as discussed at the plenary session.
- On the other hand, we recognize that the Labour Force Survey will continue to play a role as a statistical survey that serves as a basis for the compilation of labour force statistics. We believe that there is no change in the need for steady measures.

