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Utilization and Repayment of Student Loans in Japan: An Examination Using SSJDA Panel Data

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Abstract

While the use of student loans is increasing in Japan, information regarding repayment remains unclear despite frequent media coverage regarding difficulties in repayment. This study explored the use of student loans, repayment after graduation, and evaluations of financial aid systems using SSJDA Panel survey data. The analysis yielded the following insights. Households with lower incomes tend to use student loans more, as per the SSJDA Panel survey. Repayments typically amount to approximately 10% of the annual income of many individuals, posing a manageable financial burden. However, approximately half of the individuals experience difficulties with repayment, with the impact increasing as repayment amounts increase. Furthermore, those using student loans expressed a greater desire to improve the financial aid system.

Keywords: student loan, loan repayment, financial aid system, SSJDA Panel

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1. Introduction

In Japan, financial aid support for students is referred to as "scholarships," with the primary form being repayable loans, also known as student loans. In the 1990s, Japan's student loan policy expanded rapidly, leading to a significant increase in the number of users. According to surveys by the Japan Student Services Organization, one in every two university students utilizes student loans. However, how student loans are repaid after graduation, and the challenges involved remain unclear. During economic downturns, the risk of insufficient income increases, leading to difficulties with repayment. Media coverage of the challenges of repaying student loans has garnered attention; moreover, fear surrounding the use of student loans is growing, as evidenced by the emergence of terms like "repayment hell." However, overemphasizing the difficulties in repaying student loans may affect career choices and contradict the policy goals of equal educational opportunities and financial support. The repayment situation and living circumstances of student loan users, including their attitudes toward loan repayment, must be clarified. This study explored the usage of student loans, post-graduation repayment, and evaluations of financial aid support systems using SSJDA Panel survey data. This study aimed to provide an overview of the SSJDA Panel survey items related to student loans.

2. Data

This study utilized the SSJDA Panel data conducted by the Social Survey and Data Archives Research Center, affiliated with the Institute of Social Science at the University of Tokyo. The SSJDA Panel was an online survey based on probability sampling started from February 2021, targeting Japanese residents aged between 20 and 39 as of the end of December 2020. This survey is part of a collaborative research project in empirical social sciences, with additional survey items related to student loans added to the base survey. In this study, variables related to student loans were included in the survey conducted in October 2022, while attribute variables such as socioeconomic background were based on information from the base items. The data used in this paper targeted individuals who attended universities, junior colleges, or vocational schools (n=1303).

3. Analysis results

3.1 Who utilized student loans?

When asked about the usage of student loans, as shown in Figure 1, 37% of the respondents indicated that they had received student loans. Responses such as "applied but rejected" and "did not apply despite the desire to" were relatively low, at 1% and 2%,

respectively. Furthermore, 60% of respondents stated they did not need student loans.

While the percentage of respondents who reported receiving student loans in this survey

did not reach the proportion of students receiving student loans disclosed by the Japan

Student Services Organization (JASSO; 49.2%), they accounted for nearly 40% of the

total, indicating the validity of the survey data for examining student loan issues.

Moreover, the proportions of those who responded they were "rejected" or "did not apply

[for a student load] despite the desire to" were similarly low, consistent with JASSO's

survey, further validating the reliability of this survey data.

Figure 1. The usage of student loans
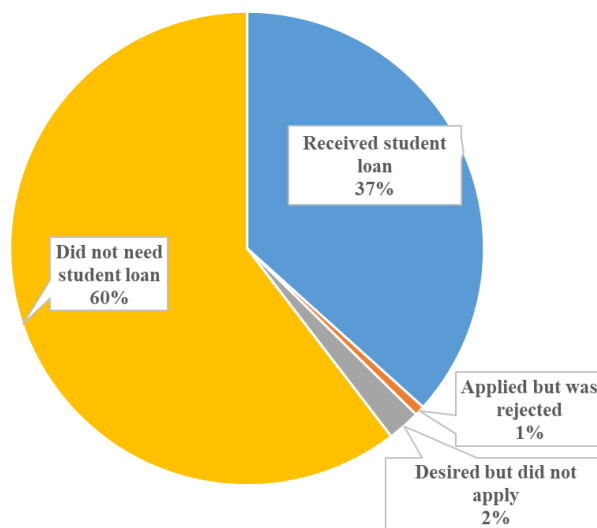
The utilization of student loans stratified by household income level is shown in

Figure 2. Living conditions at the age of 15 years were used as proxy variables for

household economic status. Specifically, when the household living conditions were considered poor at around 15 years old years, 93.8% of the individuals responded that they had received student loans. For households considered somewhat poor and with average living conditions, 63.0% and 38.6%, respectively, had received student loans. The percentage of individuals receiving student loans decreased as households became wealthier. In households with poor living conditions, few individuals did not apply for student loans despite their desire to, suggesting that they likely received student loans as desired.

Figure 2. Examining the use of student loans based on living conditions at age 15
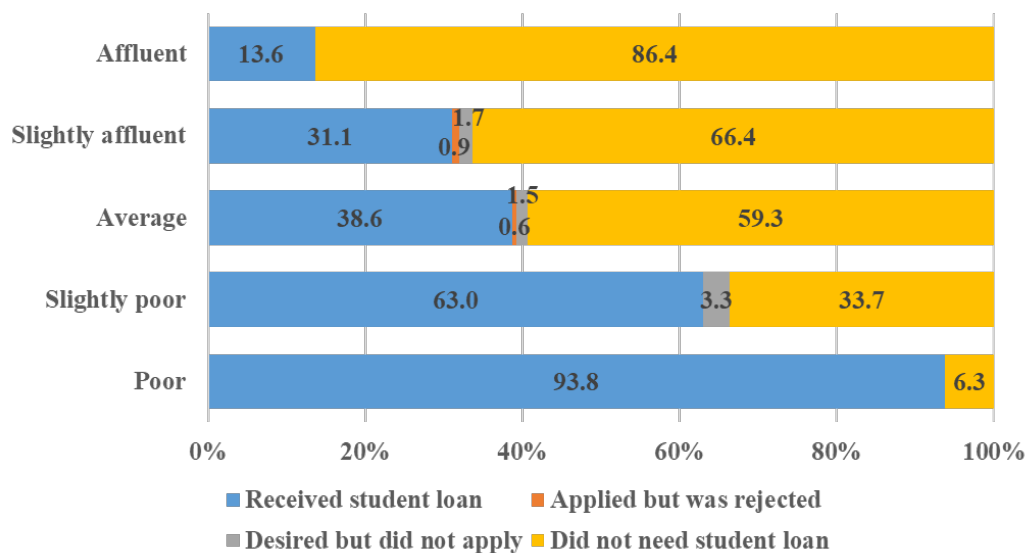
Figure 3. Analysis of determinants of student loan utilization

| Dependent variable: Dummy variable for using student loans	Coef.	S.E.	
Gender (ref: Male)			
Female	-0.200	0.180	
Grades in the third year of junior high school	0.011	0.086	
Type of high school attended (ref: Public)			
Private	-0.405	0.199	*
Number of individuals who went on to university or junior college from high school	0.021	0.082	
Father's employment status at around age 15 (ref: Regular employment)			
Non-regular employment or self-employment	0.486	0.203	*
Living conditions at around age 15	-0.672	0.106	***
Cox-Snell R2	0.105		***

A determinant factor analysis of student loan utilization was conducted to confirm the relationship between household living conditions and student loan utilization while controlling for other factors (Figure 3). A dummy variable indicating student loan utilization was included as the dependent variable. The independent variables included a female dummy variable, academic performance in the third year of junior high school, a dummy variable for attending private high school, the number of individuals progressing to university or junior college from high school, a dummy variable indicating paternal employment status (i.e., non-regular/self-employment) when the student was 15 years old, and a variable concerning household living conditions at around 15 years old (rated from 1. poor to 5. affluent). Statistically, the dummy variable for attending private high school

(−) and the dummy variable indicating paternal non-regular/self-employment (+) were

significant. Individuals who attended public high schools and whose fathers were engaged

in non-regular or self-employment were more likely to use student loans upon university

enrollment. Even after controlling for individual attributes, the variable representing

household living conditions around 15 years old significantly negative, indicating that

individuals from poorer households tended to use student loans upon entering university.

However, statistically significant results were not obtained for sex, academic performance

in the third year of junior high school, or the number of individuals progressing from high

school to university or junior college. No sex or academic performance differences were

observed in student loan utilization, suggesting that household economic circumstances

were the most influential factors affecting student loan utilization.

Figure 4 illustrates the relationship between household living conditions at

around 15 years old and student loan utilization. The utilization rate of student loans is

higher in poorer households and decreases as household economic conditions become

more affluent.

*Figure 4. The relationship between living conditions at age 15 and the use of student loans*
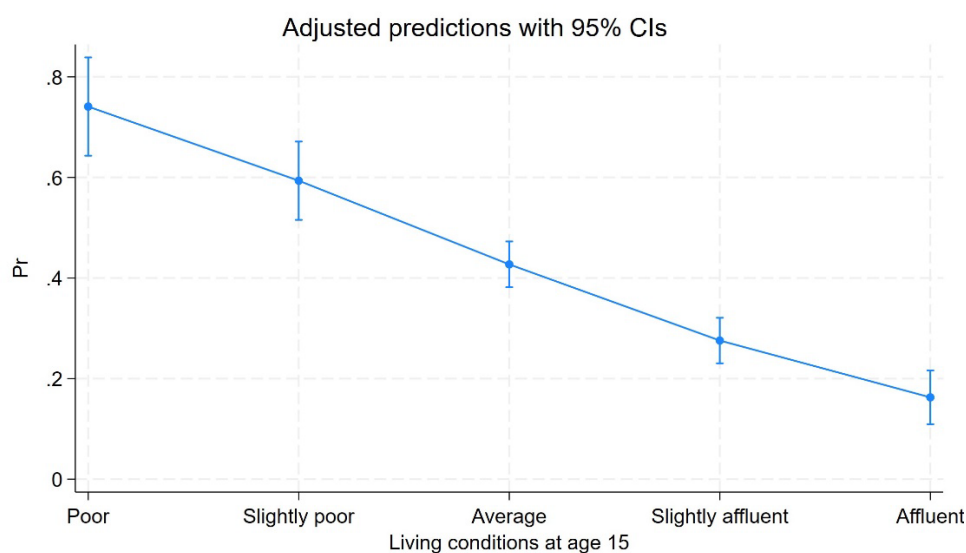
3.2 Who is struggling with student loan repayment?

For student loan recipients, the survey inquired about repayment using a 4-point scale, asking whether they found their student loan repayment "very difficult" or "somewhat difficult," and whether their student loan repayment was "strongly affecting" or "somewhat affecting" their life plans. The distribution of responses is outlined in Figure 5.

Regarding the difficulty of repaying student loans, 17.5% responded "strongly applicable." Combined with the 35.1% who responded with "somewhat applicable," over half of the respondents perceived repayment as challenging. Regarding the impact of

student loan repayment on life plans, 23.1% responded "strongly applicable." ombined

with the 27.1% who responded with "somewhat applicable," half of the respondents

acknowledged the impact of student loan repayment on their life plans. From these

aggregate results, significant challenges are inferred to be associated with student loan

repayment.

Figure 5. Assessment of the burden of student loan repayment
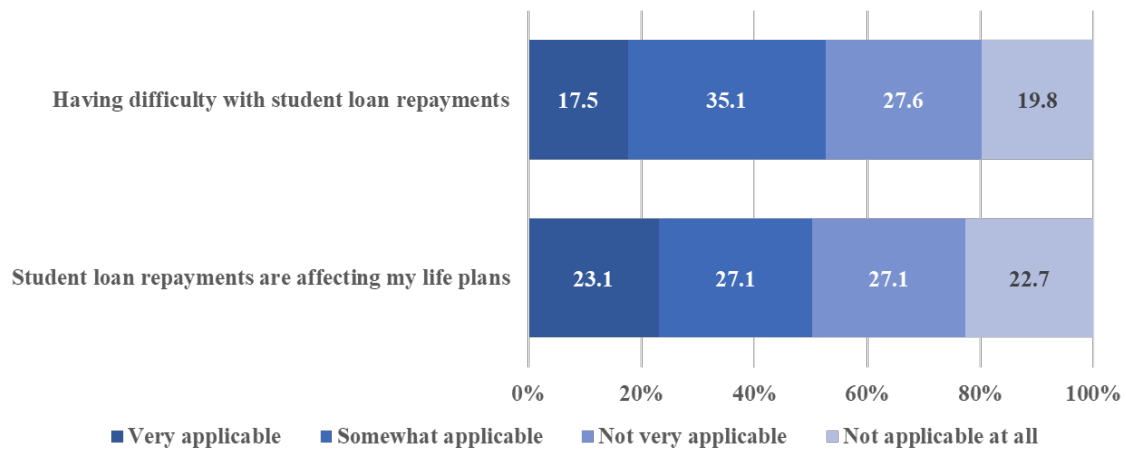
Regarding the amount of student loan repayment as a percentage of individual

annual income (Figure 6), 75% of the total repayment amounts accounted for less than

10% of the annual income. Furthermore, 13% of participants had repayment amounts

representing 20% of their annual income, whereas 6% had repayment amounts

representing 30–50% their annual income. Those with repayment amounts exceeding half

of their annual income accounted for 6% of the total. Based on the proportion of

repayment amounts relative to annual income, for approximately ¾ of the individuals, the

proportion of student loan repayment amounts to annual income remains at approximately

10%. Student loan repayment generally falls within the payment range of the annual

income. Meanwhile, less than 10% of individuals allocate half of their annual income to

student loan repayments, and although the number of people falling into this category is

small, the repayment burden is likely considerable.

Figure 6. The percentage of student loan repayment amount relative to individual
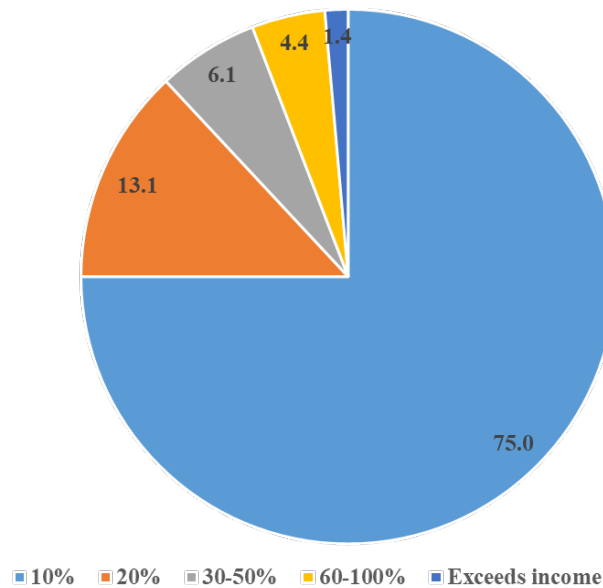*income*

Figure 7. Regression analysis of student loan repayment burden

	Difficulty in repaying student loans		Student loan repayment is affecting my life plans	
	Coef.	S.E.	Coef.	S.E.
Percentage of student loan repayment amount relative to individual income	0.098	0.035 **	0.121	0.039 **
Current employment status (ref: Regular employment)				
Non-regular employment	0.020	0.151	-0.178	0.166
Job type (ref: Manufacturing industry)				
Sales/service	-0.324	0.183 +	-0.264	0.201
Office work	-0.525	0.197 **	-0.191	0.214
Professional/technical	-0.417	0.171 *	-0.245	0.186
Gender (ref: Male)				
Female	0.004	0.120	0.089	0.130
Age	0.007	0.011	-0.014	0.012
Type of residence (ref: Homeownership)				
Not homeowner	0.179	0.112	0.173	0.123
Marital status (ref: Married)				
Unmarried/divorced/widowed	0.154	0.125	-0.003	0.137
_cons	2.301	0.428 ***	2.863	0.466 ***
R-squared	0.070	**	0.055	*

A determinant factor analysis of student loan repayment was conducted to confirm the relationship between student loan repayment amounts and the repayment burden while controlling for other factor. Two models were established with the dependent variable being the evaluation of the difficulty of student loan repayment (rated from 1. not applicable to 4. very applicable) and the evaluation of the impact of student loan repayment on life plans (rated from 1. not applicable to 4. very applicable). Multiple regression analyses were then performed with independent variables, including the proportion of student loan repayment amounts to individual annual income, current

employment status (non-regular employment), job content variables (sales and service dummy, administrative work dummy, professional/technical work dummy), gender dummy, current age, housing status (non-homeownership dummy), and marital status (unmarried/separated/divorced dummy).

Figure 7 illustrates that in the analysis model with the evaluation of the difficulty of student loan repayment as the dependent variable, statistically significant results were obtained for the proportion of student loan repayment to individual annual income when controlling for other variables. The higher the proportion of student loan repayment to annual income, the larger the amount of money to be repaid, and the more likely individuals are to perceive student loan repayment as difficult. Additionally, statistically significant results were obtained for the job content variables, indicating that individuals working in manufacturing or construction were more likely to perceive student loan repayment as difficult than white-collar workers in professional, administrative, or sales positions.

Similarly, in the analysis model, evaluating the impact of student loan repayment on life plans as the dependent variable, statistically significant results were obtained for the proportion of student loan repayment amounts to individual annual income. The higher the proportion of student loan repayment to income, the greater the perceived

impact of student loan repayment on life plans. Other variables did not yield statistically

significant results, thus the impact of the student loan repayment burden on individuals'

lives likely varies with how much the required repayment affects their income.

3.3 Evaluation and expectations of the financial aid system

When asked for opinions on the student loan system using a 4-point scale (Figure

8), 45.0% of respondents answered, "strongly agree" regarding the item "I want more

comprehensive information about student loans." Combined with the 44.4% who

responded, "somewhat agree," over 90% of the respondents desired improved information

about student loans. Regarding the item "We should expand grants that do not require

repayment," approximately 60% of respondents answered, "strongly agree," indicating a

strong preference for expanding non-repayable grant options.

When evaluating the student loan system based on the usage of student loans

(Figure 9), student loan users tended to provide more positive responses than those who

did not. Among student loan users, the proportion of respondents who desired "more

comprehensive information about student loans" exceeded 90%. Meanwhile, the

proportion of those suggesting "expanding grants that do not require repayment"

approached 90%. Consequently, student loan users tended to seek enhanced information

about student loans and to desire the expansion of non-repayable grant options.
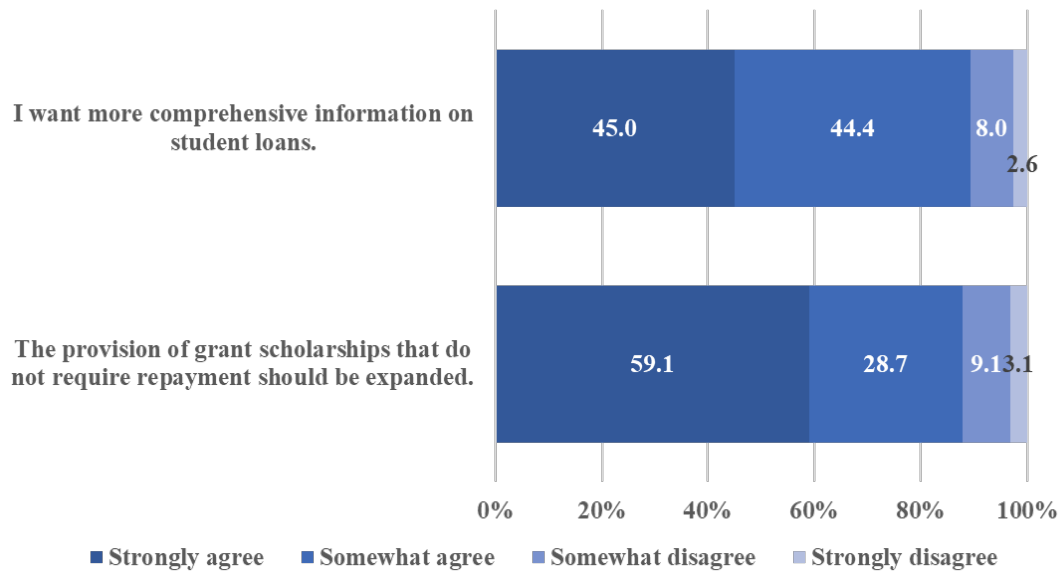
Figure 8. Expectations of financial aid programs

Figure 9. Evaluation of financial support systems by student loan usage (Number of "Agree" responses)
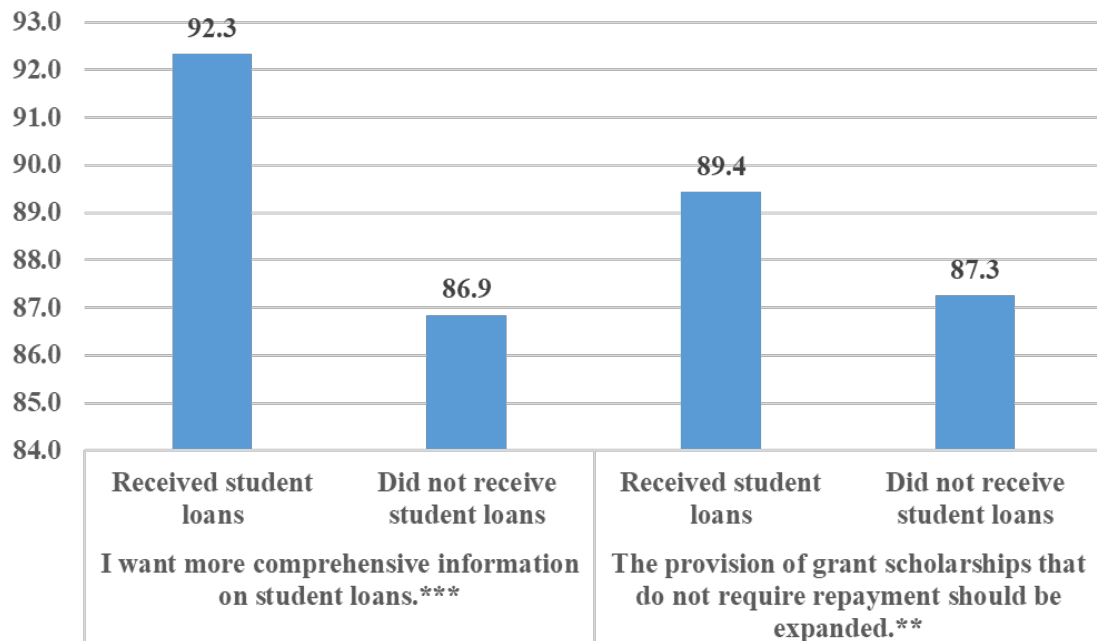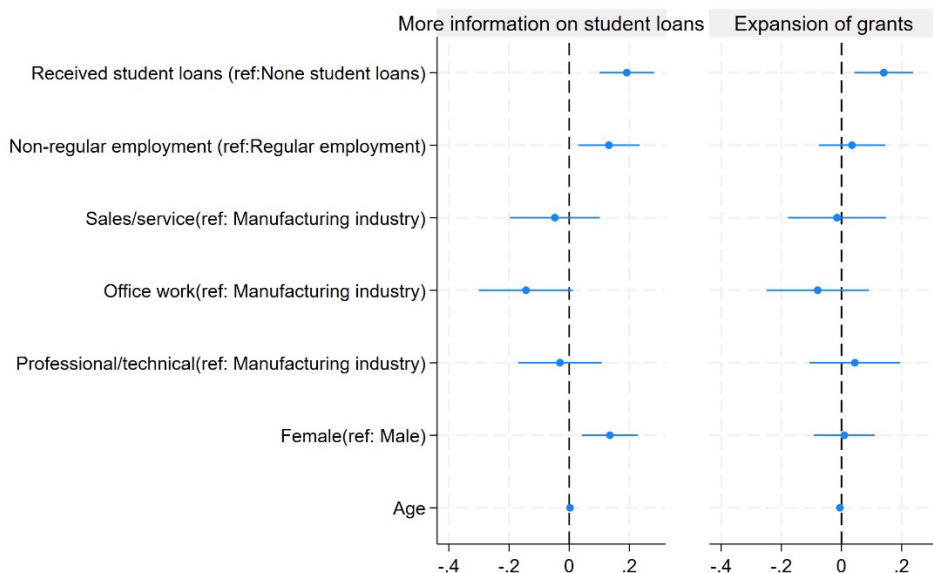
Figure 10. Regression analysis on the evaluation of financial aid support systems

In the regression analysis evaluating the student loan system as a dependent variable, the dummy variable for student loan usage showed statistically significant results for all models. Even after controlling for other factors, statistically significant tendencies were observed, indicating that student loan users were more likely to seek enhanced information about student loans and the expansion of non-repayable grants. In addition to student loan users, gender and non-regular employment also yielded statistically significant results, suggesting that those individuals tend to seek enhanced information related to student loans.

4. Summary and discussion

This study examined the utilization of student loans, burden of repayment, and evaluation of the student loan system using data from the SSJDA Panel survey. The SSJDA Panel survey confirmed that lower-income households tend to utilize student loans more. For students from financially disadvantaged backgrounds, student loans are a significant means of supporting university education. However, although the repayment amount constitutes approximately 10% of the annual income of many individuals, the financial burden is not significantly high. Nevertheless, approximately half of the individuals faced difficulties in repayment, and the impact tended to worsen with increasing repayment amounts. Furthermore, those who utilized student loans expressed a greater desire for improvements in the system, particularly in seeking enhancements in information provision and the expansion of non-repayable scholarships. This suggests that the users of the student loan system have a greater need for financial support.

The student loan system was established as a support measure for students facing financial difficulties pursuing education. The survey revealed that economically disadvantaged students from families with financial constraints were supported by the enhancement of student loans. However, while the repayment amount for student loans may not be significantly high for many individuals, repayment poses a burden for a

considerable proportion of individuals. Difficulties with student loan repayment should

be considered not only from an economic standpoint but also from a psychological

perspective. This study aimed to provide an overview of the survey items related to

student loans submitted to the SSJDA Panel Joint Project through basic analysis. It is a

preliminary analysis, so there are limitations to constructing the model. Future efforts will

focus on understanding changes in the livelihoods of borrowers and further refining

student loan models.

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