

The Impact of Recent Educational Reforms on the Japanese High School Tracking System

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Abstract: This paper aims to examine the linkage between the Japanese upper secondary school (high school) tracking system and the manner in which students progressed after their graduation. Since the 1990's, the courses offered by upper secondary schools have diversified; further, the number of students has decreased rapidly. Yet, the impact of these conditions on the future choices of students has not been evaluated empirically. Policy makers believed that the diversification of courses in high schools would lead to a smooth transition from secondary to tertiary school or the job market because this diversification would satisfy the requests, needs, and curiosity of many students as well as impart practical skills and knowledge. Therefore, in this study, we used the data collected from the panel survey conducted in 2004, before and after graduation from upper secondary schools, by the Institute of Social Science, the University of Tokyo. We estimated the multinomial logit coefficients, which explained the school characteristics and social backgrounds predicting their real choices of students after graduating from upper secondary schools. We found that the rate of advancement to university strongly influenced the students' choices. In other words, tracking strongly affected the prediction of the students' choices after graduation. In addition, social background distinguished graduates with the opportunity to obtain higher education from those without this opportunity. However, among those with the opportunity to obtain higher education, social background is not a good predictor of students' choices. Since the rate of advancement to higher education has increased, policy makers and educators have tended to overlook the unequal opportunity for higher education. In conclusion, the changes inside the educational system are unable to resolve the issue of unequal access to higher education. Further, students' social backgrounds should be taken into account and a supportive system that will compensate for the unequal access to higher education needs to be established.

Keywords: upper secondary school (high school) tracking, educational reforms in Japan, panel data, transition, social background.

*The author wishes to thank to Professor Hiroki Sato, Hiroshi Ishida, Kaoru Sato, Keiko Genji, Satoko Fukahori, Yukiko Nagao, Yasuo Hozawa, Yuko Morota, and other members of our research team for their valuable suggestions and permission to carry out a reanalysis of this data.

Introduction

The Ministry of Education, Culture, Sports, Science and Technology (MEXT) in Japan has been promoting educational reforms since the 1990s. Some of these reforms were inherited from the ideology of the Ad Hoc Council for Education (*Rinkyoshin*),¹ which emphasizes the value of individuality. The rightists employed the term ‘individual’ (*kosei* in Japanese) to resolve the problems of the lack of creativity and an extremely standardized educational system. The leftists also respected individualism because they attributed certain school problems such as bullying, school violence, and other delinquencies to the extremely competitive and rigid educational system. Therefore, it appeared that both sides were in concurrence about the need to construct a diversified school system that would address the individual needs of students. These discussions concerning educational reforms resulted in the diversification of courses designed for upper secondary schools.

In this paper we have examined the effects of these reforms after the 1990’s. Since most students who have completed their compulsory education enter the upper secondary schools, Japanese educational researchers and policy makers are inclined to make light of providing an equal opportunity for education. In their opinion, the resolution of the problem depends on the ability of all students to opt for schools of their choice and to enjoy their school life with considerable satisfaction. However, the inequality in educational opportunity persists. Moreover, in Japan, problems pertaining to social class have recently come under the spotlight because certain researchers and the mass media have noticed the expansion of the income gap between the upper and lower classes. Although unemployment among the youth has not been a serious problem in Japan, the number of people who are unable to find regular jobs is now on the rise. Yet again, policy makers have attempted to examine the linkage between education and the demand in the labour market. However, few people have investigated the relationship between social class and the courses provided by upper secondary schools. Since it is difficult for students who have finished only upper secondary school to acquire regular jobs, equality in the opportunity for higher education and the manner in which students choose from among several specialized courses are very important issues. Therefore, we attempt to describe how social class remains a determining factor in the selection of courses by students after they have graduated from high school.

¹ This council was established under the Nakasone cabinet; therefore, it was independent of the Ministry of Education. Nakasone criticized the Ministry of Education because its bureaucrats tended to be conservative, and some neo-liberalists joined the council as members. Although their opinion, which urged the abolition of the Ministry of Education, was too radical to be acceptable to most Japanese, some plans have been implemented after the closing of the council (Schoppa 1993, Hood 2001).

In order to resolve the above-mentioned issues, we used the panel survey data collected during a research project conducted by the Institute of Social Science, the University of Tokyo, in 2004². Although this data has certain inadequacies, there are few surveys that follow-up with an individual after he/she has graduated from school. Thus, this data and analysis will be valuable for researchers and policy makers.

The next section briefly describes the Japanese educational system and the recent educational reform, especially at the secondary school level. The section that follows will review the research conducted on the tracking system, and will examine the transition from secondary school to tertiary education or the labour market. The rest of the paper will clarify the research question and analyse the presented data. Finally, the Discussion section will argue that attention must be paid to the linkage between social class and the courses opted for by students.

Background of the recent Japanese educational reform

The current educational system, established in 1947, has been modeled on that of the United States. It is a simple system: six years of elementary school, three years of lower secondary school, three years of upper secondary school and two years of junior college or four years of university³. The first nine years (i.e. elementary and lower secondary school) are regarded as compulsory education, and any student who has finished lower secondary school can opt for upper secondary school. Although upper secondary schools have various courses and school levels based on academic achievement, in principle, any student who has finished upper secondary school is eligible to take entrance examinations for universities and colleges. This simple system led to competition among most students to pass the entrance examination because it gave the impression that the contest meant for the elite was open to anyone (Turner 1960). Since many Japanese people believed that their hard work to excel in academics would procure them admission into universities, they would participate in the competition on their own initiative. In 1974, the rate of entrance into upper secondary school exceeded 90 percent: however, by the time the harmful effects of this competition were already evident in lower secondary schools.

In order to ease the competition in the entrance examination, some educational boards adopted new entrance examination systems. In principle, students take the examinations of those schools that are their first preference. However, certain schools whose graduates

² This project has been conducted by a Grant-in-Aid for Scientific Research from the Ministry of Health, Labour and Welfare. For future reference, the data will be accessible to researchers through the SSJ Data Archive.

³ An outline of the Japanese educational system is available in Treiman and Yamaguchi (1993).

advanced to prestigious universities received many applicants; as a result, upper secondary schools offering vocational or some specialized courses became unpopular because these schools were at a disadvantage in terms of advancement to university. This led to the emergence of school ranking, and it became an important task for lower secondary school teachers to guide students on how to pass the entrance examination. The new entrance examination systems attempted to relax or eliminate the fixed school ranking. For example, the educational board of Tokyo set up the school districts, and applicants were supposed to take an examination for these ‘districts’. A committee for entrance examinations would then assign the applicants to each school based on their examination record: this was done in order to eliminate school ranking. However, students from affluent families began avoiding public schools because this system prevented them from entering their most preferred schools. At present, they tend to go to private 6-year secondary schools that charge high tuition fees. As a result of this reform, it was believed that the average performance of public secondary school students was deteriorating, and it became more difficult for students from less affluent families to obtain access to the courses for the elite. Kariya and Rosenbaum (1999) attributed the increase in the inequality in education to this educational reform implemented by the educational board of Tokyo.

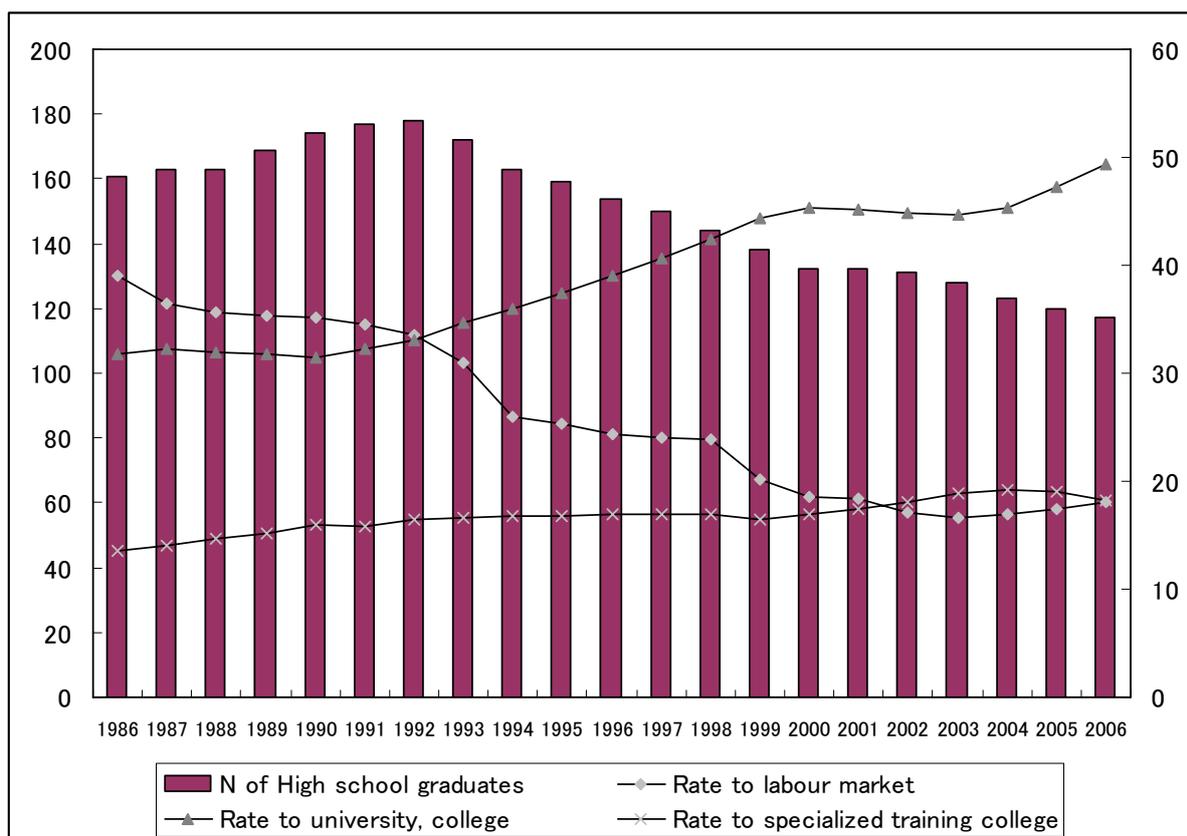


Figure 1: Change in the rate of advancement to higher education or the labour market in Japan

Note: Data source is the basic statistics of MEXT

Figure 1 shows the changes in the rate of advancement to higher education institutes or the labour market from 1986 to 2006 as well as the number of upper secondary school graduates. The category ‘university, college’ includes the students who enrolled in 4-year universities and 2-year junior colleges. Specialized training colleges (*Semmon-Gakko* or *Senshu-Gakko* in Japanese), which were established in 1976 by an amendment to the School Education Law, provide a minimum of two years of vocational, and practical education after graduating from upper secondary school. The number of upper secondary school (high school) graduates was on the rise until 1992: however, it has been decreasing thereafter because of the low fertility rate. Therefore, we can expect that this number will continue to decrease as of now. The rate of enrolment in universities and colleges had stabilized at around 30 percent during the 1980’s: however, this rate began to increase when the number of high school graduates began to decline. The rate of enrolment in specialized training colleges has been gradually increasing and, at present, approximately 20 percent of high school graduates enrol in these schools. On the other hand, the rate of acquiring a regular job has been rapidly decreasing: this is because with the decrease in the population of children, it has become easier to pass the entrance examinations of universities and colleges, and the resulting long recession has prevented high school graduates from being employed as regular workers. The system of transition from high school to work, as Rosenbaum and Kariya (1989) indicated and Rosenbaum (2001) covered as a good model, has been barely functional in recent times due to these phenomena.

When evaluation the results or motives of various educational reforms, it is necessary to consider the impact of the changes in the population of Japanese youth. Although upper secondary schools offer only one common course in principle, they actually offer several courses. General (academic) courses are in a majority: in addition, some schools offer certain vocational courses, for example, agricultural course, fishery course, technical course, commercial course, home-economics course, social welfare course, and nursery course. These vocational courses equip the students with certain skills that will help them in obtaining jobs soon after graduation, but the students are also entitled to take entrance examinations for universities. However, since the curriculum offered by vocational schools has a diminished academic standing, these schools became unpopular among students who wanted to study in universities. As a result of the efforts of these schools and the educational reform that emphasizes individual preferences, the situation of these schools has been improving since the mid-1990s. On the other hand, the problem faced by non-prestigious schools in their general (academic) course is serious. Since the number of children has been decreasing, upper secondary schools have to struggle to attract good students. Thus, the

quality of schools offering the general course has deteriorated, except for certain prestigious upper secondary schools.

Under these circumstances, MEXT promoted the diversification of upper secondary schools because it believed that students and parents required an education system that was adaptable to their needs and their individuality. Certain non-prestigious upper secondary schools offering the general course have changed into high schools offering an integrated course (*Sogo-Gakka*) that provide students with both academic and vocational or practical education. Hida, Iwaki, Mimizuka and Kariya (2000) summarized these reforms aimed at detracking general courses and placing emphasis on individuality, as the bipolarization of students, which implies that students were divided into the following categories (1) those who could obtain high academic achievements, who were few in number, and (2) those who were unable to obtain good academic scores and did not possess a strong motivation to study, who constituted the majority. Although this new type of school is not without merit, the number of students who are unable to choose their preferred course as well as those who are unable to obtain regular employment has been increasing (Kosugi 2003). In other words, the evaluation of these reforms may lead to ambiguous results.

Research pertaining to the linkage between school tracking and the courses opted for by students

Generally, class formation based on academic record is not very common, and the degree of freedom in the choice of class is quite restricted in Japan. However, as the variance in the academic record of upper and lower secondary education levels is increasing, providing tuition in a class that includes students from all levels is becoming more difficult. In fact, most upper secondary schools require that a student qualify through the entrance examination. Since public school examinations are common within a prefecture, the school rank based on academic record becomes clear. Educational sociologists in Japan typically consider this rank as tracking in the United States (e.g. Fujita 1980).

Tracking restricts the range of course choices available for students. Since the students socialize within their ranking, they are likely to choose their future plans by referring to past graduates. This tracking affects their original plan independent of their grades (Kariya & Rosenbaum 1987). Therefore, while a student who belongs to a higher tracking level but does not score well is unlikely to abandon his/her aspiration, a student who belongs to a lower tracking level but scores well is also unlikely to encourage his/her aspiration⁴. In addition,

⁴ A similar mechanism works when students in vocational courses opt for a job after graduating. Okano (1995) pointed out that a formalized school-based job-referral system

Ono (2001) indicated that in Japan, social origin and gender determined the tracking level of a student, which shaped his/her access to higher education. These researches suggested that tracking itself might have a relation with social class.

With regard to the linkage between social class and tracking, Mare (1980) examined the effect on the probability of the school continuation decision. He assumed that the decision to progress from one school stage to the next was regarded as a binary choice, and estimated the effects of socio-economic background on the school continuation decision by binary logistic regression models. According to him, the effect on the decision decreased as the grade progressed. However, Mare's model assumed that students progressed through the educational system in a unilinear mode: this means that if a student finishes one grade and decides not to leave school, given the option of continuing to stay in the educational track or leaving school, then he/she will necessarily make the same decision in the next grade. This model may be more adaptable to the United States since the educational system there is more flexible and people's decisions are diversified. However, Mare's model disregards the qualitative differences within the same levels in the educational system (Lucas 2001). Breen and Jonsson (2003) suggested that the multinomial logit model is more adaptable because the school system contains parallel branches of schools considered as qualitatively different.

Moreover, the reforms that were introduced from the 1990s included a review of the courses offered in upper secondary schools. Policy makers paid attention to the linkage between the content of vocational education and employment. On the other hand, since the students in vocational courses have recently been favoured by certain universities, the effects of vocational education on students' decisions after graduation may have changed. For example, Arum and Shavit (1995) pointed out that although vocational education reduces the risk of unemployment and obtaining admission to colleges and universities, it increased the chances of employment as skilled workers. Further, since the government has invested more in vocational education, the rate of dropping out from high school has declined (Arum 1998).

However, students with a higher education are at an advantage in the labour market since obtaining higher education takes precedence in the labour market. Although the rate of advancement to higher education has increased, many people are unable to access higher education because the tuition fee in Japan is generally very high. According to the OECD indicators 2004, Education at a Glance, the share of an individual's household expenses for higher education exceeded 50 percent. Moreover, the grant for higher education that does not need to be repaid is less, and even the subsidy for educational loan does not reach the OECD

promoted an efficient entrance into the labour market: however, at the same time, it restricted students' freedom of choice,.

average level. Accordingly, the choice of whether or not students can progress to higher education depends on the condition of their household economy. Moreover, at the same time, the social background also needs to be considered.

On the basis of these researches, we examined the effects on the decisions of students after their graduation from upper secondary schools.

Data, Variables and Methods

The data collected from the panel survey, which included the base-year survey and the first follow-up survey, were used for this study: the surveys were conducted by a project team of the Institute of Social Science at the University of Tokyo. Firstly, we classified the prefectures into four types based on the rate of advancement to university and the labour market: we then chose one prefecture from each category. Next, we proportionately assigned the number of students to each type based on the population and then asked these schools to conduct our survey from January to March of 2004. The number of questionnaires administered was 10,000: of these, 7,564 were collected. Although information regarding the personal addresses of students after their graduation was requested in the questionnaire in order to continue the follow-up survey, obtaining this information was very difficult. This is because Japanese people have become very sensitive about their privacy after the enforcement of the act of protection of personal information and due to various incidents of fraud using personal information. Therefore, we obtained the addresses of only 2,036 graduates. After their graduation, we mailed the first follow-up questionnaires and the parents' questionnaires to them in October 2004. Finally, we collected the total of 485 completed questionnaires: the response rate of this follow-up survey was 23.8 percent (For details about this survey, see Sato and Ishida 2006).

Table 1: *Details of the first follow-up survey sample*

Present status	Number
Regular worker	60
Specialized training college students	104
2-year junior college students	43
4-year university and <i>Yobiko</i> students	257
Others (e.g. freeter, unemployed)	21

The dependent variable is the present status of the students, obtained through the first follow-up survey. Table 1 shows the distribution of the students' status. It is necessary to consider that the university students were oversampled compared to the population. Further, since the sample included only a few freeters and unemployed persons, the category 'Others' with 21 people was excluded from the analysis. *Yobiko* are preparatory schools for the entrance examinations of universities, and students who have previously failed the entrance

examination and wish to reattempt it typically attend these schools. Such students are known as *ronin* in Japanese: the number of ronin obtained in our survey was 40. Since our survey had a small sample size and the many categories complicated the interpretation using multinomial logit models, we combined the university students and ronin into one category⁵. These categories cannot be ordered and are regarded as independent irrelevant alternatives⁶. Therefore, we followed the multinomial logit model of Breen and Jonsson (2003) defined below.

$$\log(p_j / p_U) = a_j + \sum_{k=1}^K b_{jk} x_k$$

The base category of the dependent variable is university students (U), and j refers to the other categories including regular workers, specialized training college students, and junior college students. ‘a’ is an intercept, and ‘b’s are the coefficients of independent variables such as sex, school characteristics and social backgrounds.

Table 2: *Descriptive statistics of independent variables*

Dummy variables	Percentage
Male	43.1
Female	56.9
Private school graduates	28.7
Public school graduates	71.3
General course graduates	79.5
Integrated course graduates	5.3
Vocational course graduates	15.2
Father’s education: less than high school	57.1
Father’s education: specialized training college, or junior college	7.8
Father’s education: university	35.1
Mother’s education: less than high school:	53.4
Mother’s education: specialized training college, or junior college:	34.1
Mother’s education: university:	12.5
Mother’s work: full-time	55.6
Mother’s work: part-time	26.5

⁵ In order to confirm that the combination of the two categories would not bias the results, we attempted to estimate the differences between university students and ronin in this sample. No differences were identified except that male students were more likely to be ronin. Typically, after one or two years’ as a ronin, they enroll into universities.

⁶ The null hypothesis of Hausman test for independence of irrelevant alternatives (IIA) is that the odds of dependent variables that are independent of other alternatives have not been violated. Regarding IIA and the Hausman test, see Powers and Xie (2000: 245-247), and Long and Freese (2001).

Mother's work: none (housewife)		17.9	
Household income per year: less than 5 million yen		40.3	
Household income per year: 5-7 million yen		17.0	
Household income per year: 7-10 million yen		23.1	
Household income per year: above 10 million yen		19.6	
Other variables	Range	Mean	S.D.
Academic record	1-5 (larger = better)	3.297	1.180
The rate of advancement to university	0-100	51.927	31.160

Since the base-year survey was conducted in upper secondary schools and we intended to estimate the impact of school environments, we considered the variables concerning school characteristics as independent variables. We constructed dummy variables of private schools (base category: public school), and general course and integrated course (base category: vocational course). Further, we included the variable of the rate of advancement to university for each school in order to examine the effect of tracking. It can be expected that as compared to other categories, a high rate of advancement to university promotes university enrolment. However, the effects may differ based on the courses that the students belong to. Upper secondary schools with the highest rate of advancement to university are restricted to general courses. Moreover, students opting for vocational courses may be at an advantage when acquiring jobs as compared to those from non-prestigious general courses or integrated courses because they appear to possess certain practical skills. In other words, the rate of advancement to university may have independent effects on student choices, besides the main effects. Therefore, we prepare the interaction terms between the rate of advancement to university and the dummy variables of the courses.

In addition to these school-based variables, socio-economic effects are also very important. Hence, we attempted to construct dummy variables concerning the parents' education, parents' occupation and household income. However, since our sample size is small and no variable concerning the occupation of the father has a significant effect on student choice, we excluded from our models the variables related to the occupation of the father. This is because too many independent variables reduce the reliability of these estimations, and we intend to explain our models parsimoniously. The variables concerning the occupation of mothers refer to their working styles, in terms of whether they work on full-time or part-time, or whether they do not work outside the home. We constructed dummy variables of part-time workers and housewives (base category: full-time workers)⁷. The

⁷ In Japan, a part-time worker is not someone who does not work for a long time. There are many 'part-time workers' who work similar to full-time workers. The difference between them is mainly the working condition. Typically, part-time workers are temporary contracted

working style of women is a very important factor to obtain some understanding of gender-role attitudes and values in Japan: moreover, it is influenced by the education, and social origins of the women as well as their husbands' occupations (Yu 2001). In general, gender roles are still deeply rooted in Japanese society: it is often observed that women leave the labour market after marriage. However, many women whose husbands have low incomes have to begin working again in order to repay a housing loan, pay for expensive tuition for the children or compensate for the deficit of the husbands income. In other words, only those women whose husbands have high incomes are able to spend their lives as housewives. Consequently, the working style of mothers is a good index of a student's social background. In addition to these variables, we also considered household income because a considerable amount of money is needed to progress to the next stage of education.

Finally, the school continuation decision will depend on the academic record of the students. This is because if the academic record is poor, the student will be unable to pass the examination. Unfortunately, we were unable to obtain accurate academic record data: therefore, we requested for approximate academic records in their schools.

Results

Table 3 presents the results of our analysis. Model 1 does not include interaction terms, and although Model 2 includes them, academic record has been excluded. Even though academic record has a strong effect on students' choices, the records are based on subjective evaluation and possess relative value only within the school. As mentioned above, students have a school rank in upper secondary schools: thus, a higher value means that the student is in the top stream of the school he/she attends and not necessarily in the top stream of all upper secondary schools. Therefore, this subjective and slightly unreliable variable has been excluded and only the objective and observable variables have been included.

Model 1 indicates that the type of school and courses offered strongly affects students' choices. Students opting for vocational courses are more likely to acquire jobs after graduating from high school as compared to other courses. Graduates from private schools are more likely to attend university or junior colleges as compared to obtaining jobs or enrolling into specialized training schools. This implies that private schools do not distinguish between students who enter universities and those who enter junior colleges. According to the specialized training colleges (S.T.C). vs. university equation, students who

workers, with lower wages. Often women with children opt for part-time work because it is difficult for them to acquire full-time jobs. Moreover, there is a tax stipulation that prevents women from working full-time because the husbands' income tax is deducted if the supported wives' income does not exceed the fixed price.

opted for the general courses in either specialized training colleges or universities are indistinguishable from each other. Although vocational courses were intended to promote enrolment into specialized training colleges, the effect was not significant as compared to the general courses. Integrated courses that were not prestigious and not so competitive in enrolment prevented the graduates from opting for specialized training colleges or acquiring regular jobs as compared to enrolment into universities and junior colleges. It is evident that the rate of advancement to university has a significant effect because the dependent variable is student choices: thus, a higher rate of advancement to university implies that a large number of students are attending universities. Moreover, even if academic records are based on subjective evaluation, a better record strongly promotes progression to university education.

Table 3: *Multinomial logit coefficients predicting status after graduation from upper secondary schools*

	Model 1			Model 2		
	Work	S.T.C.	J.C.	Work	S.T.C.	J.C.
Male	-.964*	-1.521***	-2.763***	-.468	-1.228***	-2.660**
	(.406)	(.322)	(.573)	(.399)	(.298)	(.568)
Private schools	-.132*	-.711*	.180	-1.729*	-.948**	.056
	(.672)	(.350)	(.148)	(.667)	(.336)	(.411)
General courses	-2.427***	-.654	-.142*	-.995	-.661	-1.194
	(.543)	(.482)	(.591)	(.767)	(.752)	(.890)
Integrated courses	-2.349**	-2.261**	-1.356	1.192	.117	-2.188
	(.729)	(.769)	(.834)	(2.076)	(2.086)	(2.792)
Rate of advancement to university	-.043***	-.046***	-.029***	-.010	-.068*	-.024
	(.009)	(.006)	(.008)	(.015)	(.029)	(.018)
Interaction: Rate * general courses				-.037*	.032	-.001
				(.019)	(.029)	(.020)
Interaction: Rate * integrated courses				-.198 ⁺	-.132	.066
				(.118)	(.128)	(.154)
Academic record:	-.748***	-.761***	-.518**			
	(.173)	(.138)	(.172)			
Father's education: S.T.C. or J.C.	.115	-.029	-.227	-.236	-.331	-.281
	(.725)	(.563)	(.837)	(.706)	(.534)	(.819)
Father's education: University	-1.998*	-.595	-.190	-1.824**	-.788*	-.071
	(.813)	(.376)	(.468)	(.700)	(.371)	(.465)
Mother's education: S.T.C. or J.C.	-.308	.034	-.276	-.469	.017	-.273
	(.461)	(.334)	(.436)	(.453)	(.323)	(.429)
Mother's education: University	-1.030	-.117	-.281	.384	.187	-.211
	(1.228)	(.556)	(.680)	(.928)	(.525)	(.678)
Mother as a part-time worker	1.173**	.434	.315	1.285**	.450	.386
	(.434)	(.347)	(.456)	(.423)	(.332)	(.444)
Mother as a housewife	.867	.555	.366	.520	.427	.363

	(.614)	(.400)	(.505)	(.613)	(.377)	(.498)
Income: 5-7 million yen	.085	.457	.049	.052	.462	.086
	(.492)	(.409)	(.568)	(.482)	(.391)	(.562)
Income: 7-10 million yen	-1.254*	.169	.212	-1.245*	.255	.316
	(.624)	(.389)	(.475)	(.618)	(.373)	(.469)
Income: above 10 million yen	-1.372*	-.126	-.444	-1.619*	.068	-.457
	(.689)	(.432)	(.576)	(.695)	(.416)	(.579)
Intercept	5.814***	5.201***	3.567***	2.050**	2.350	1.306
	(.944)	(.801)	(.980)	(.691)	(.721)	(.795)
Number	462			464		
-2LL	740.85			777.58		
LR chi-square (d.f.)	315.04 (45)			287.19 (48)		

Note: The number indicates the estimated coefficients: the standard errors are in parentheses. Since the academic record has two missing data, the sample used for this analysis comprised 462 observations. S.T.C. implies specialized training college and J.C. implies junior college.

+<.10, *<.05, **<.01, ***<.001 (two-tailed tests)

Variables concerning the social background have significant effects only on the work vs. university students' equation, that is, social background only distinguished the graduates who began working immediately from the graduates who advanced to higher education institutes. Students whose fathers did not receive university education, whose mothers worked part time and whose annual household income was less than 7 million yen were unlikely to opt for higher education. A similar tendency can be observed in Model 2. Among the students who were able to access higher education, male students were more likely to opt for universities as compared to specialized training colleges or junior colleges. Although the rapid decrease in the population of children resulted in the university entrance examination becoming non-competitive and the affairs of junior colleges deteriorating, most junior college students are biased towards women because they offer courses on literatures, home economics, nursery and education.

In model 2, the interaction terms were statistically significant in the work vs. university equation. This implies that a higher rate of advancement to university in the case of general and integrated courses leads to a lower rate of advancement to the labour market as compared to university students, which is in contrast with the case of vocational courses where the rate of advancement to university is controlled. In other words, graduates from vocational courses are in a more advantageous position to acquire jobs as soon as they graduate from upper secondary schools. As the main effects of courses and the rate of advancement to university are not statistically significant, only the rates of several courses to universities have significant effects on the decision to work as compared to enrolment into universities. Meanwhile, the effects of social background appeared to be quite similar to Model 1. In

Model 2, the dependent variable's work and university categories are distinguishable: however, the categories of specialized training colleges or junior colleges, and universities are undistinguishable based on social backgrounds with the exception of father's education on the categories of specialized training colleges and universities. These results indicated that the school continuation decision still depended on the household economy and social background.

Discussion

In this paper, we argued that the tracking in upper secondary schools influenced the students' choices after graduation. Although the courses that the students pursued depended on the educational progress, it is important to realize that social background also affected the students' decisions. Typically, Japanese families, especially those that include educated women, are enthusiastic about their children's education: thus, it is natural for them to willingly bear the burden of rearing and educating their children (Hirao 2001). They need to spend a considerable amount of money for their children's education if the children progresses to higher education levels. In general, the tuition fee for higher education in Japan is expensive even if the child enrolls into national universities: this is because all the national universities are incorporated. Parents tend to believe that they bear the responsibility of paying their children's school fees. In Japan, the scholarship system has always been poor. Moreover, the students are hardly able to pay their own tuition fees because they have become very expensive and there are fewer opportunities to receive scholarships. Although the rate of advancement to higher education has increased, the problem of ensuring equal opportunity for higher education has not yet been resolved. The divide between students who can access higher education and those who cannot still persists. Ishida (1998) observed that Japanese society emphasizes the educational background, and that educational credentials strongly affected the initial entry into the labour market. Unless the effect of unfavorable social background on the opportunity to access higher education is not eliminated, equal opportunity for higher education cannot be assured. However, the policy makers as well as many education researchers have overlooked this point.

Under these circumstances, even if the reform in the educational system had been effective, the range of its effects would certainly be limited. Moreover, the students who were unable to pay expensive school fees had no opportunity to progress to higher educational levels. Despite the reorganization of the courses of upper secondary schools, this reform will not lead to the fundamental resolution of the issue of unequal opportunity for higher education. Thus, expensive school fees should be compensated for instead of reforming the upper secondary school system. Our analysis finds that although the school tracking system strongly affects the school continuation decision, the effects of social background are unclear

among the students who progressed to higher education. This phenomenon might also prompt us to neglect the problem of unequal opportunity for higher education.

Although our data has several limitations for analysis and interpretation⁸, these findings are important for the Japanese educational system. The shortcomings of the Japanese educational reform have been based on the emotional discussions at the central council or the comments made by politicians, intellectuals, and business elites. Even though the long recession and the changes in the Japanese labour market system led to the emergence of freeters and unemployed youth, the above-mentioned parties tended to ascribe these problems to the students' competence or character. Thus, they believed that the resolution of the problem lay within the scope of the reform of the educational system, for example, students' cultivation of ability or skill. These trials are not inconsequential. However, we cannot prevent students who are unable to pay their tuition fees from deciding not to seek higher education and opting for learning certain practical skills.

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⁸ Unfortunately, we were unable to analyse freeters and other unemployed people because of the small sample. Moreover, Yajima and Mimizuka eds. (2005) indicated that the irregular temporary workers are more likely to be women living in rural areas who are relatively poor.

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