INSTITUTIONAL CHANGE, COMPETITIVE PRESSURE AND OVER-INFLUENTIAL PROFFESSORS: THE NEW JAPANESE BAR EXAMINATION

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This paper attempts to analyze the results of Japan's new bar examination, so far held in 2006 and 2007, and to investigate why the new bar examination had unanticipated outcomes. The major findings from regression analysis are: (1) The ratio of professor committee members affects the pass rate. Further, committee members specializing in the compulsory common subjects have a more significant effect than those specializing in the selective subject areas. (2) The high pass rate for prestigious national law schools is mainly to the result of the high ratio of professor committee members, while the pass rate of private law schools is partly related. (3) Ratios of committee members from prestigious law schools at 8-22% is significantly higher than for non prestigious law schools. The unexpected outcomes that stem from the shortcomings of the new bar examination are in line with concept that high-powered incentive schemes are likely to induce behavior distortions (Jacob and Levitt, 2003). To prevent professorial cheating and to achieve fairness in the new bar examination, the Ministry of Justice should at least take steps not to appoint law schools professors as committee members.

JEL classification; I28, K23, K40.

Key words; Competitive pressure, Japanese bar examination

I. INTRODUCTION

As a response to the new bar examination, which came as part of Japan's legal reforms and was planned to commence in 2006, new law schools began operation from 1 April 2004. The reforms were aimed to overcome the strict and extraordinarily competitive bar examination by transplanting aspects of the US law school model. Such a deregulation of the lawyer market was anticipated have benefits through increasing the supply of lawyers (Kinoshita 2000, 2002), and also hoped to resolve problems arising from the former examination which required a particular set of skills and specific techniques (Ministry of Education, Culture, Sports, Science and Technology 2004). Consequently, 68 new law schools commenced operation in 2004 with another 6 opening in 2005; thus the number of new law schools reached 74. The mushrooming of new law schools actually resulted in the new bar examination becoming even more competitive than it was predicted. This was mainly because of the larger number of new entrants than initially expected. This competitive pressure seems to have induced the new law schools to focus on the skills and techniques emphasized in the new bar examination; however, the desire was for the new law schools to focus on legal qualification through a 'process' of legal education, rather than focus at the 'point' of the bar examination(Asahi Newspaper 2007d,Tamura 2007).

The Ministry of Justice appointed the members of the new bar examination committee that is responsible for setting and grading the examination. These members were selected from public persecutors, attorneys, and university professors[1], including those at the new law schools (Ministry of justice 2005, 2006, 2007). This meant that a new law school professor who was also member of examination committee could legitimately obtain copies of the examination prior to the examination date. Under the competitive circumstance that the new law schools envisaged, a member of the new bar examination committee, who was also a professor at Keio University Law School[2], informed his students about the content of a new bar examination in 2007[3]. The scandal clearly cast doubt on the fairness of the newly introduced bar examination (Asahi Newspaper 2007b, Enomoto 2007). This situation appears consistent with

[1] Not only professors but also associate professors and lecturers are able to lecture in Japanese law schools. For the sake of simplicity I call all such lecturers 'professor' in this paper.

[2] Keio university is regarded as a prestige university in Japan,

[3] This professor was dismissed as a committee member of the new bar examination and eventually resigned his position as professor (Nihon Keizai Newspaper 2007a). This is the first time that a member of the committee, for either the old or new bar , has been dismissed.

the evidence from the US of high stakes testing provided by Jacob and Levitt (2003). That is, that unexpected distortions such as cheating are induced depending on how the incentive systems are schemed, which is theoretically explained by general incentive theories, particularly the notion of multi-tasking (Holmstrom and Milgrom 1991)[4].

The inception of the new bar examination is predicted to greatly affect not only the market structure of the legal profession but also Japan's legal education system (Lawley 2005). As well, the unfairness resulting from the professors cheating would be induced by the way of the committee members are selected and by the rise of competitive pressure, both caused by institutional shortcomings. Thus it appears important to assess the effect of the policies regarding the institutional change of the bar examination and the launching of many new law schools. It is also necessary to explore how and why the incidents of cheating occurred so that fairness can be restored to the examination. Although a number of reports about legal education reform and Japan's new law schools have been presented by lawyers (e.g., Chan 2005, Foote 2005, Nishida 2005, Nottage 2005, Omura et al. 2005, Saegusa and Dierkes 2005, Steele 2005, Taylor 2005), there is little, with the exception of Kinoshita (2000, 2002), that analyzes the influence of the reforms from an economic view point[5]. Accordingly, this research uses data of the 2006 and 2007 bar examinations to find the determinants of the pass rates for various law schools, and to ascertain the effect of the rate of professor committee members. The mechanism of the current system of the new bar examination is also analyzed to show how it impedes the market for law schools.

The organization of this paper is as follows: Section II provides an overview of the bar examination reforms and background. A cursory examination is made of the new bar examination results to see how the committee member ratios contribute to the pass rate. Section III presents a simple econometric framework. The results of the estimations and discussion are provided in Section IV. The final section offers

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[4] Recently, besides the case of the new bar examination, a growing number of undesired distortions stemming from competitive pressure on schools and teachers have been detected in Japan. For instance, since 2004 the Adachi ward in Tokyo has held an localized achievement test and then announced the results of each school; this resulted in a schoolmaster to oversee a system of cheating to gain a high score for their school (Nihon Keijzai Newspaper 2007b, 2007c). As well, an examination related to gaining a teacher's license was leaked with the aim of improving the pass rate (Asahi Newspaper 2007 a, Ichikawa 2007). Many high schools skipped teaching the compulsory subjects that are not directly related to the university entrance examination (Ariyoshi et al. 2007).

[5] Ramseyer and Rasmusen (2007) investigate whether Japanese courts experienced problems related to recruiting and resignations after the political turmoil in 1993.

concluding observations and some policy implications.

II. OVERVIEW OF THE BAR EXAMINATION REFORMS

A. Background to the new bar examination

It was well known that the number of judicial professionals such as judges, public prosecutors, and attorneys was scarce in Japan compared with other developed countries, mainly due to the strict regulation of the market for lawyers[6]. The strict regulation appeared to result in a great loss for the Japanese economy (Kinoshita 2000). The Justice System Reform Council (JSRC) was established by the government to study basic policies and programs for the purpose of making the justice system more familiar and accessible to the general public[7]. In 2001, the Council issued an opinion paper calling for fundamental reforms;, this represented a transition from "small-scale justice" to "large-scale justice" and sought to extend the rule of law to all of society. One specific issue of judicial reform was to realize a substantial augmentation of the number of people working in the legal profession. The policy would be relevant to the emergence of various new types of conflicts concerning commercial enterprises, medical treatment, construction work, and so on (Yamada 2002)[8].

Based on the 2001 opinion report, new law schools commenced operation from 1 April 2004. In the case of the old bar examination of Japan, candidates were usually law majors and had laid made plans for the bar examination when they were undergraduates. However, in response to the latent demand for new legal services from many sections of modern Japanese society, these new schools were designed to be open to graduates from any field, and welcomed those who were already working. This would enable individuals with backgrounds in business, government or other professions to develop more specialized legal careers based on their prior work experience. Most students took the standard course (*Mishu Course*) with a training term of three years. Students who possessed sufficient knowledge of the law were permitted to enter a special course (*Kishu course*) where the program could be completed in two years. Accordingly, applicants for the new law examination in 2006,

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[6] In 2001, the number of judicial professionals was 21,000 in Japan, while there were 36,000 in France and Britain, whose populations are each about half that of Japan (The daily Yomiuri 2001).

[7] For more detail, see the web site of JFBA.
http://www.nichibenren.or.jp/en/about/judicial_system.html

[8] In recent years there has been a rapid expansion of foreign law firms operations in Japan, which has also increased the demand for new types of lawyers (Chan 2005).

the first to be held would be those who had completed the special course, meaning that the number of applicants for the 2006 examination was predicted to be small. That is to say, a full-scale new examination, which would include students from both the special and standard courses, would be held in 2007. The total numbers of examinees and successful applicants were 2,087 and 1,009, respectively, in 2006 and 4,607 and 1,851, respectively, in 2007.

The JSRC originally called on law school administrators to provide a legal education that would be comprehensive enough that about "70 to 80 %" of candidate students would pass the new bar examination (JSRC 2001). This anticipated pass rate was far higher than that of the previous law examination, of approximately 2-3%, and therefore was expect to encourage university students to invest more effort to become judicial professionals. The JSRC set the objective of raising the number of applicants allowed to pass the new bar examination to 1,500 in 2004 and 3,000 by 2010, with the aim of achieving a total of approximately 50,000 judicial professionals by 2018 (JSRC 2001). This implied that the total number of judicial professionals in 2018 would be more than twice that of 2001, which would result in a substantial increase in the net benefit to Japan[9]. In fact, once the new law school system was formally launched, most of Japan's major universities rushed to establish a law school, presumably because they felt that they could not maintain their previous grades and might lose their prestigious social evaluation without a new law school (Yamada 2002, p.49). Consequently, a larger number of schools were built than had originally been expected. Prior to the 2006 examination, the JSRC announced that the anticipated pass rate in 2005 would be approximately 50 %, which was far smaller than initially planned (Kakumu 2005). The actual pass rates for 2006 and 2007 turned out to be 48 % and 40%, respectively.

Prior to inception of the new law schools, applicants in the past tended to rely greatly on a preparatory school system that specialized in "teaching to the test", not on a university curriculum that would not be relevant to the 'old' bar examination (Yamada 2002). The original plan for the new system aimed to decrease the influence of preparatory schools (Kakumu 2005). Whether applicants passed or failed the new bar examination would, depend on the method of education and the guidance from lecturers at the law schools, in combination with the students' own efforts and ability, especially when the pass rate declined. The most important thing was for the schools to offer a quality education that would enable students to pass the examination.

[9] Kinoshita (2002) indicated that net increase of total benefit per year is about 0.12-0.6 % of GDP if the civil service of the Japanese district courts were to be doubled.

Hence, contrary to the original plan, professors would be more likely to shift away from non-tested areas or increased placement in special education, and end up, as before, merely "teaching to the test" (Jacob 2002). Inevitably, law schools turned out to be just quasi-preparatory schools (Ishiwatari 2006).

Prior to the first new examination being conducted, besides members of the committees, professors were unable to obtain definite information concerning the form and tendency for the problem set in the new bar examination. As well, in the new bar examination, a concrete marking standard has not even been publicly announced (Yonekura 2007). Therefore, professors cannot easily offer classes focusing on "teaching to the test," even if they are willing to do so because they lack the basic information required for this which would allow them to shift away from non-tested areas. This is probably why professors had to undertake teaching classes utilizing their sense, given thie appreciation of the highly competitive pressure. Accordingly, it appears impossible to have judged whether the methods and syllabus plans of the law schools were suitable to taking the examination, or to evaluate qualities of the various education plans when the new law schools were launched. From an applicant's view point, when they chose the law school they will apply to, only the school fees are apparent, without information of the educational quality offered to pass the examination. As a consequence, the larger the demands for law school are, the lower the school fees be[10]. Hence, top students might enter a law school whose fee is low, thus its pass rate could be expected to be high. It is widely acknowledged that the fees of the national law schools are lower than private ones, leading them to have pass rates of higher than private schools partly because of their better students.

B. Results and committee of new bar examination

Members of the new bar examination committee that is the responsible for setting and marking examination are appointed by the Ministry of Justice Members were selected from jurists such as public persecutors, attorneys, and university professor, including those from the new law schools (Ministry of justice 2005, 2006, 2007). Professors usually specialize in a specific area, within their major subject, and they appear to favor this field when they teach students at law schools and also when they set questions for the new bar examination. Such conditions ensure that questions tend to be closely related to the contents of these professor's lectures, even if they do

[10] A scholarship would decrease the cost that students pay even if tuition fees are high. As most law schools offer scholarships (Nikkei Career Magazine 2006, 2007), the influence of scholarships is considered small.

not intend to “teach to the test”. As a consequence, students who are able to take lectures from committee members have a great advantage when they take the examination. Furthermore, the system for selecting committee member could be one reason that the new law school professors who were also members of the committee were able to legitimately acquire accurate information about examination prior to the examination date. The unexpected competitive environment, as previously mentioned, seems to have increased the incentive for professors on the committee to put some emphasis in their lectures on particular areas scheduled to be in the examination. In fact, besides the case of a Keio University Law School member of the committee who informed his students about the content of the new bar examination in 2007, some similar unfair cases where committee members gave special lectures at law schools have been reported (Asahi Newspaper 2007 e). I see from table 1 that the ratio of professors among the committee members is between 20-30%, indicating that the effects of committee member on the results of the examination cannot be ignored.

In more detail, the subjects of the new bar examination can be roughly divided into compulsory common subjects and selective ones. All students must take the 7 compulsory common subjects and select one subject from among 8 selective subjects[11]. Even in a law school employing a committee member as a professor, the advantage of selective subjects might be limited to those students who select it, whereas all students can enjoy benefits concerning common subjects. Therefore, a committee member specializing in compulsory common subjects is expected to have a greater effect on examination pass rates than a professor specializing in a selective subject.

Looking at Table 2(a) reveals that the number of successful candidates and the pass rates of the new bar examination are significantly higher in law schools that have committee members on their staff than those schools without such staff members. Thirty-nine law schools have a committee member on their staff, 87do not.

It is widely known that the “big five”, the University of Tokyo and Kyoto University, regarded as the leading national universities, and Waseda, Keio, and Chuo University, the leading private universities, produced a large number of successful candidates for the “old bar examination” (Omura et al. 2005). As well, many lawyers graduated from Hitotsubashi University, which is also considered a leading university. In this paper, these 6 universities are defined as the “prestigious universities”. This

[11] 7 compulsory common subjects comprise constitutional law, administrative law, commercial law, civil law, civil procedure law, criminal law, and criminal procedure law. . The 8 selective subjects are taxation law, labor law, international law, international private law, economic law, bankruptcy law, environment law, and intellectual property law.

might be a result of the quality and focus of their students rather than to the quality of their education, since most students still relied heavily on preparatory schools. On the other hand, most of the influential and capable professors are thought to be concentrated in these universities. Table 2 (b) tells me that the numbers and success rates of candidates from these prestigious university law schools are significantly larger and higher than for other schools. Numbers of successful candidates from these universities are nearly 9 times larger than other schools, even though this might partly be thanks to the large number of applicants. After controlling for this scale effect, their pass rate is approximately twice that of the other schools. The fact that the number of committee members from national university law schools is greater than those from private universities can be seen in Table 3 (a). This tendency remains when just law schools with committee members are analyzed; suggesting that committee members are more likely to be selected from national universities. When we compare the prestigious university law schools with all others in Table 3 (b), the very surprising result that the number of committee members from the prestigious schools is nearly 20 times greater than those from the others. It is also noteworthy that if samples are restricted to law schools with committee members, the rate of committee members from prestigious schools is approximately three times that of the others. Taking these results together, the dominance of the prestigious university law schools might be partly thanks to the advantage of having committee members on their staff.

III. ESTIMATED MODEL AND INTERPRETATION OF RESULTS

A. Data

The data set used in this study is at the law school level data from 2006 and 2007. Table 4 includes variable definitions, means, standard deviations, and maximum and minimums of analyzed data. The variables are discussed later. The pass rate is the number of successful candidates over that of total examinees[12]. Tuition fees are collated from the Nikkei Career Magazine (2005, 2006). The ratios of professors committee members, those specializing in compulsory common subjects and those in selective subjects are each a variable over the total number of full-time professors; data obtained from the Ministry of Justice (2005, 2006) and the Nikkei Career Magazine (2005, 2006). Aggregated numbers of successful applicants for the old bar

[12] The data of 2006 is available at http://www.moj.go.jp/SHIKEN/SHINSHIHOU/h18-04kekka.pdf. That of 2007 is at http://www.moj.go.jp/SHIKEN/SHINSHIHOU/h19kekka01-6.pdf

examination during the period 2000-2005 were collated from Asahi Newspaper Publishing (various years). Per capita GDP where a law school is located was derived from the Index Corporation (2006).

I see from Table 4 that the pass rates ranged from 0% to 100%; clearly indicating that there is large gas among the performances of the various law schools. This might partly relate to the remarkable difference in the ratio of committee members of between 0 % and 22.8 %; as mentioned previously, professors who are committee members are positively related to the pass rate.

B. Function form

Following from the discussion above, the estimated function of the pass rate takes the following form[13]:

$$PASRAT_{it} = \alpha_0 + \alpha_1 TUIT_{it} + \alpha_2 COMRAT_{it} + \alpha_3 RIVAL_{it} + \alpha_4 NATIO_i + \alpha_5 NPAS_i + \alpha_6 PGDP_{it} + \omega_{it},$$

where *PASRAT* represents the pass rate of a law school *i* in year *t*, and α's represents the regression parameters. ω_{it} represents the error term. Added to the simple OLS model, a sample selection model (Heckman model) is also employed to control for selection bias since there were no applicants from 10 law schools for the 2006 examination and from 6 in 2007[14]. With the exception of dummy variables, dependent and independent variables are evaluated at the sample means and therefore coefficient values reported can be interpreted as elasticity[15].

Following from the discussion in the previous section, *TUIT* stands for tuition and

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[13] Besides dummy variables, the values of coefficients can be interpreted as the elasticity of the number of victims with respect to the corresponding independent variables, which are evaluated at the sample mean values of the variables.

[14] Probit and OLS estimations are calculated simultaneously in a Heckman model. Independent variables in Probit estimations are *TUIT*, *COMRAT, NATIO, NPAS* and the total number of full-time professors. The reason why the total number of full-time professors is included in the Probit estimation but not in the OLS estimation is that the large scale of the law schools seems to reduce the likelihood that nobody takes the examination would not directly affect the pass rate.

[15] See more details for Greene (Greene1997, p.280).

In the linear model, $y = x'\beta + e$ the elasticity of y with respect to changes in x is

$$\gamma_k = \frac{\partial \ln y}{\partial \ln x_k} = \beta_k \left(\frac{x_k}{y} \right).$$

This values can be estimated by computing it at the sample means as

$$\lambda_k = \beta_k \left(\frac{\overline{x_k}}{\overline{y}} \right)$$

is predicted to be negative if scarcity of information concerning education quality leads to an increase in demand for law schools with low tuition, resulting in excellent students concentrating in low tuition law schools. *COMRAT* represents the rate of committee members and is incorporated to capture the effect of committee members on the pass rate and is expected to take a positive sign if a committee member makes a contribution to raising the pass rate. *RIVAL* denotes the number of other law schools belonging to the same prefecture and is considered to be a proxy for the substitute, and therefore its sign becomes negative. *NATIO* is the national university's law school dummy and controls for the characteristics of a law school. *NPAS* represents the aggregated number of successful applicants for the old bar examination during the past six years and examines how prestigious universities dominated both the old bar examination and continued to do so for the new bar one. Because of scarcity of information concerning educational quality, the brand is considered to signal high quality even if such a "brand" is not because of the educational quality but to the quality of students. The "brand" effect can be why top students are more inclined to enter the law schools of prestigious university's and thus *NPAS* is expected to be positive. *PGDP* stands for per capital GDP where the law school is located and would take a positive sign since higher income would lead to higher investment for the examination; as well, students living in more urban areas are more likely to access useful information partly because preparatory schools are concentrated there[16]. This is because preparatory schools are considered to be complementary to law schools, rather than a substitute (Yonekura 2007).

Alternative specification incorporates prestigious law school dummies, instead of *NATIO* and *NPAS,* to explore how educational quality is related to the pass rate. Most law schools including the renowned private law schools such as Waseda, Keio and Chuo attempt to offer courses suitable for the examination to raise their pass rate while prestigious laws schools of national universities such as Tokyo, Kyoto and Hitotsubashi are less likely to do so, although competitive pressure will induce a law school to "teach to the test" (Ishiwatari 2006). On the other hand, the high ratio of committee members from these prestigious national and private law schools seems to be positively associated with their high pass rates. Accordingly, the high pass rate of

[16] There are differences between law schools' stated principles which decrease influence of preparatory schools and their real intentions. A number of law schools ordered the preparatory school located in Tokyo to give professors a lecture on the know-how of passing new bar examination (Ida 2007). To this end, law schools located in urban area can enjoy its proximity to the urban center in which preparatory schools concentrate.

the national prestigious schools appears to the result of the high ratio of committee members, rather that to examination oriented education. Hence, after controlling for *COMRAT,* dummies for private schools such as *WASEDA, KEIO*, and *CHUO* are expected to become positive, but those for national ones such as *TOKYO, KYOTO*, and *HITOT* are ambiguous.

I now proceed to discuss the determinants of the ratio of committee members; its estimated function then takes the following form:

$$COMRAT_{it} = \alpha_0 + \alpha_1 NATIO_i + \alpha_2 NPAS_i + \alpha_3 PGDP_{it} + \omega_{it},$$

As discussed previously, the ratio of committee members is higher in national law schools and the renowned private universities i compared with the others, and therefore the sign of *NATIO* and *NPAS* would be positive. *PGDP* is included to control for economic factors. Alternative specification incorporates prestigious law school dummies instead of *NATIO* and *NPAS* to examine how and to what extent prestigious law schools dominate. The data is censored since there are a number of samples where *COMRAT* is 0, leading to an estimation bias. The Tobit estimation allows me to subdue this bias. Hence, OLS as well as Tobit estimations are employed.

IV. RESULTS

A. Pass rate

Table 5 sets out the results of pass rate estimations using aggregated data from 2006 and 2007. As mentioned in Section II, the first full-scale examination was held in 2007 since applicants in 2006 was restricted to students who completed the two years special course. Therefore, features of the 2006 examination were different from those in 2007. With the aim of comparing the 2006 and 2007 results, Tables 6 and 7 present the results of 2006 and 2007, respectively. Columns (1), (3), and (5) present the results of OLS estimations and those of (2), (4), and (6) provide Heckman estimations, respectively.

Looking at table 5 reveals that the coefficients of *TUIT* and *RIVAL* become negative and therefore have significantly negative effects on the pass rate in all specifications, which is in line with my prediction. The elasticity of the pass rate with respect to *TUIT* ranges between - 0.43 and - 0.76, implying that the pass rate falls to between 0.43 and 0.76 % when tuition rises by 1 %. The signs of *COMRAT* are positive and are statistically significant at the 1 % level in all estimations. Its coefficient values take 0.06 and 0.07, meaning that the pass rate rises between 0.06

and 0.07 when the ratio of committee members increases by 1 %. It follows from this that professors who are also committee members make a contribution to the pass rate. Consistent with the anticipation, the coefficients of *NPAS* and *PGDP* take significantly positive signs in all estimations. I derived the argument from the results of *NPAS* that the dominance in the old bar examination in the past years was maintained in the new examination. Does this dominance come from the "brand" as discussed in the prior section? To follow this up, I look at the results of the prestigious university dummies. As presented in columns (3) and (4), after controlling for the committee member effect presented, I find it surprising that the prestigious national law schools dummies such as *TOKYO, KYOTO,* and *HITOT* are not statistically significant, despite taking positive signs, whereas those of prestigious private ones such as *WASE, KEIO*, and *CHUO* take significantly positive signs. Furthermore, the coefficients of the national universities dummies, approximately 0.15, are smaller than private ones, which range between 0.20 and 0.28[17]. It is recognized that the University of Tokyo is the most prestigious university in Japan (Ramseyer and Rasmusen 2007). These lead me to argue that, contrary to anticipation, the "brand" effect does not make a contribution to the pass rate. As shown in columns (5) and (6), the results when the committee member effect is not controlled for shows that not only private but also national prestigious dummies take significantly positive signs. Further, the coefficient values of private school dummies in columns (5) and (6) are larger than those in (3) and (4), meaning that committee member leverage the advantage of private ones. Considering this together with Table 3(b), I interpret these results as suggesting that the advantage of national prestigious universities stems only from the high ratio of committee members while that of private ones come from committee members as well as the educational quality.

I now turn to more closely examine Tables 6 and 7. These two tables tell me that variables, with the exception of *TUIT*, *NPAS,* and some prestigious school dummies, are hardly statistically significant although all signs of the coefficients are the same as in Table 5. This might presumably be because most of the applicants in 2006 had experienced the old bar examination and so learned at preparatory schools in advance (Ida and Yatsu 2006). Therefore their success largely depended on the education gained at preparatory schools, rather than on law schools where they learnt for only for two years. Turning to Table 7, the results are similar to those in Table 5 in terms of the coefficient signs and statistical significance. Comparing Tables 6 and 7, it is

[17] After controlling for various factors, the pass rate of the private prestigious law schools is higher by 20% to 28% that of non-prestigious law schools.

remarkable that the values of *COMRAT* raging between 0.11 and 0.13 are approximately 10 times larger than those in Table 6, implying that the ratio of committee members hardly affected the pass rate in 2006 but played a substantial role in raising it in 2007. It is also interesting to observe that *KEIO* and *CHUO* become statistically significant in Table 7, even though they are insignificant in Table 6. I interpret this as supporting the conjecture that raising the competitive pressure induced professors to offer distortional educational courses such as "teaching to the test" along with more effective education[18].

I now proceed to subject the findings from the data concerning the effect of committee members on the pass rate to more careful scrutiny. As stated earlier, committee members are divided into those specializing in compulsory common subjects and those in selective subjects. The former are expected to have a larger effect on the pass rate since all students are obliged to take these subjects. *CCOMRAT* and *SCOMRAT* stand for the ratio of members from the compulsory common subjects and from the selective ones, respectively. Table 8 presents the results of estimations, in which *CCOMRAT* and *SCOMRAT* are incorporated in the function instead of *COMRAT.* I focus on *CCOMRAT* and *SCOMRAT*. Columns (1)-(4) indicate the results of aggregated data from 2006 and 2007 and reveal that all coefficients of *CCOMRAT* are significantly positive whereas those of *SCOMRAT* are insignificant despite being positive. What is more, the coefficient values of *CCOMRAT* are twice that of *CCOMRAT.* As expected previously, it is evident that members from the compulsory common subjects have a greater effect on the pass rate than those from the selective subjects. Columns (5)-(8) indicate the results from 2006 and tell me that, contrary to my anticipation, the coefficients of *CCOMRAT* become negative whereas those of *SCOMRAT* continue to be positive. It follows from this that *CCOMRAT* and *SCOMRAT* hardly affect the pass rate, which is in line with results of Table 6. I see from columns (9)-(12), showing the results of 2007, that all coefficients of *CCOMRAT* are positive and significant at the 1 %, whereas those of *SCOMRAT* are insignificant despite being positive. I found it surprising that the magnitudes of *CCOMRAT*, which take between 0.09 and 0.10, are from 3 to 10 times larger than for *SCOMRAT.* In new bar examination, examinees select one of the selective subjects while they are obliged to take all 7 common subjects and hence the effect of common subjects is expected to have a 7 times larger one than a selective subject. This expectation is considered to be in line with the estimation results in 2007.

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[18] It also seems plausible that it might take three years at least for distortions as well as the educational quality to raise the pass rate.

Thus it is evident that the inclusion of committee members from the common subjects has a far larger effect than inclusion of members specializing in a selective subject.

B. Ratio of committee members

Table 9 sets out the results of the ratio of committee members. In line with Table 3(a), the coefficients of *NATIO, NPAS,* and *PGDP* take positive signs and are almost statistically significant at the 1 % level, suggesting that national and renowned law schools located in an urban area have great advantages for employing a committee members as a professor. Turning to the prestigious law school dummies, all their coefficients are positive. I see from column (4), presenting the aggregated results of 2006 and 2007, that the ratios of committee members from national prestigious law schools are 14-22% higher than for those from non prestigious law schools, while those from private one are 8-11% higher. On closer examination, the results of 2006 and 2007 as separately exhibited in columns (5) and (6) reveal that national prestigious schools such as *TOKYO, KYOTO,* and *HITOT* are mostly statistically significant, whereas those of private schools are insignificant. What is more, the values of the national schools are larger than those of the private ones. In 2006, the committee members ratios of Tokyo University, Kyoto University and Hitotsubashi University were 12%, 14%, and 15%, respectively, higher than for non-prestigious universities, while in 2007 the figures were 15%, 28 % and 24 %, respectively. It follows from this that the advantage gained by national schools became more obvious in 2007 than it was n 2006.

Taking into account Table 3(b), and Tables 8 and 9 jointly, it needs to be emphasized that as far as the regression results of 2007 are concerned, committee members are concentrated in the renowned law schools, which, in turn, affects their pass rate. In particular, in the case of the national prestigious law schools, they did not offer quality education aimed at passing but could record high pass rates mainly because a number of the committee members also acted as professors at their law school. Nevertheless, it can be pointed out that in national universities, professors are inclined to teach students to avoid 'teaching to the test' since they consider such quasi-preparatory school teaching method to be improper in law school education, even though there is ever increasing competitive pressure on law schools. This tendency is more pronounced for a prestigious university such as Tokyo and Kyoto Universities, leading to a lower pass rate than anticipated in advance (Ishiwatari 2006). If this is the case, the professor committee members are less likely to inform their students

about the content of the examination. The results of estimations, however, are obviously contradictory to this. In my interpretation, the area in which a professor has sufficient knowledge to appropriately set questions and can give a full and particular account is limited and narrow. Necessarily, professors are inclined to set questions for the bar examination within their particular specialized area and so will also focus on it during the law school lectures even if they do not have an incentive to deliberately pass on confidential information. Inevitably, the question they set turns out to be profoundly related to their law school syllabus, leading to an increase in the likelihood that the questions for the new bar examination are in accordance with the matter that students intensively studied. As a result, professor committee members facilitate a form of cheating, perhaps without intention; though this can be seen as an outcome of the current system of selecting committee members.

C. Discussion

As mentioned previously, compared with private university law schools, national universities are less likely to offer distortional education such as lecture on the know-how and techniques required to pass the examination (Ishiwsatari 2006). This is presumably because national universities did not confront the possibility so that lecturers might not have been aware of any crisis. Nevertheless, the recent condition of national universities has been drastically changed since they all became independent administrative corporations[19].

According to Nishida, a professor of Okayama University law school, in a non-urban national university, the numbers of law schools and students are high so that graduates who cannot be legal professionals might be created; thus he expects that at least one-third of the current law schools will close within the next ten years (Nishida 2005). Necessarily, national law schools will be induced to improve their educational quality and systems in order to raise the pass rate since whether a law school survives might depend upon their pass rate for the new bar examination. Eventually, not only private but also national law schools professors seem to have shared the similar opinion about the improvement of the education system. The market for law school education will become competitive, resulting in an efficient outcome even if this is contrary to the principle of law schools[20]. Further, this

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[19] The change was based upon the National University Corporation Law on 1 April. 2004.

[20] The Japan Law Foundation, which is one of organs certifying and evaluating law schools, did not confirm that Aichi University law school fitted the requirements; this was the first time for such a decision, on March 26, 2008. This was mainly because

outcome is not considered to be undesirable from an economics point of view of and a betrayal of trust in the examination system as a matter of fairness. The true nature of the problem is that the method of selecting committee members favors the prestigious law schools, thereby hindering law schools from competing fairly. Accordingly, non-prestigious law schools will exit one after another, which would eventually mean that the law school market becomes an oligopoly since only prestigious law schools will be able to survive in such a market. What is more, the fairness of the new bar examination will essentially be lost. In short, not only the benefits stemming from a competitive mechanism but also the fairness of the examination itself will be lost; all of which can be viewed as outcomes resulting from the inclusion of law school professors as committee members.

It is appropriate to call on the Justice Ministry to not appoint committee members from the ranks of professors and to prohibit committee members from lecturing in law schools. In accordance with this, a plan to reduce the number of professors appointed as committee members has been announced (Asahi Newspaper 2007c). This scheme has, however, failed to be reflected in the actual conditions. As shown in Table 1the ratio of professors to total committee members actually increased by approximately 10 % in 2008.

V. CONCLUDING REMARKS

The inauguration of the new bar examination has been designed to bring about benefits to modern Japanese society by providing for larger number of lawyers with specialized legal careers based on a wide rage of backgrounds. This was in response to highly specialized and complicated circumstances in Japan and to movements towards globalization. New law schools are anticipated to focus on legal qualification through a 'process' of legal education; therefore, differing from the previous system, which in effect just evaluated an applicants' skill to pass the examination. Nevertheless, a situation that was contrary to the original purpose of the new system was realized after its introduction. A proliferation of new law schools increased the competitive pressure on professors to raise the law school's pass rate for the purpose of enabling the law school to survive' resulting in the professors been given an incentive to cheat. Consequently, a scandal occurred in 2007 in which a professor offered his students prepared answers and explained points similar to those he knew would appear in the

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this law school offered lectures that strongly focusing on the examination (http://www.jlf.or.jp/work/dai3sha/aichi_report2007.pdf).

examination. I considered that such a scandal was caused by the shortcomings of the new system; therefore, I attempted to investigate how and to what extent the new system hampered the desired market for new law schools.

After controlling for various factors, the major findings through OLS and Heckman Estimations are as follows:

(1)Elasticity of the pass rate with respect to the ratio of committee members is positive. The elasticity for 2007 was more significant and larger than that for 2006. More precisely, committee members specializing in the common subjects have a larger and more significant affect on the pass rate than those specializing in a selective subject.

(2) National as well as private prestigious law schools realized high pass rates. The high rates of national prestigious law schools are mainly thanks to the high ratio of professor committee members, while the rate of private schools is partly due to the ratio.

(3) As a whole, the ratio of committee members of national prestigious law schools are 14-22% higher than that for non prestigious law schools, while those of private one are 8-11% higher at most.

Considering al the estimation results together, I feel it appropriate to remark that the prestigious universities enjoy the benefits of a high ratio of committee members since professor committee members can take advantage of their information about the examination when there is an incentive to 'teach to the test' . In short, the method by which committee members are selected contributes to raising the pass rates of prestigious law schools, leading to impeding the market for law schools and to reducing the likelihood that non-prestigious law schools will survive. The reason why such an undesired outcome can take place is that professors belonging to the committee are apt to cheat under the strong competitive pressure compared with the system governing the previous bar examination. This mechanism is tied to the claim in that high-powered incentive schemes are likely to induce behavior distortions (Jacob and Levitt, 2003). The outcome will be unchanged even if professors do not have an incentive to cheat. Professors will usually carry out the research in a somewhat specialized field, rather than a comprehensive one;, something that is reflected in the numerous academic journal in the field of economics[21]. Thus, the field in which a professor is specialized and in which they are able give a full and particular lecture, is thus limited and specific. Inevitably contents of lectures might be associated with a

[21] In the case of economics, Econ Lit, a well-known data-base of the field of economics, contains approximately 1,400 journals(http://www.econlit.org/journal_list.html).

question set by the professor for the examination. This can be seen in that professors give lectures profoundly related to the content of examination they have set even they have no intention of cheating.

To make market function well and also to prevent professors from cheating as well as bringing back fairness to the new bar examination, the Ministry of Justice should at least not appoint professors from law schools as committee members.

The present remarkable low birth rate in Japan has decreased the demand for education facilities; however, the number of universities continues to increase, leading to substantial competitive pressure within the educational industry. A number of universities have faced difficulties and will not survive as a result of the increasing competitive pressure. Some universities seem to have established a new law school as a part of their promotion programs. A future direction for this study will be to explore how and to what extent the new bar examination system has an affect on the survival of the new law schools through the impediments placed on the law school market.

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TABLE 1

Ratio of professors of committee members (%)

	Common subject	Selective subject	Total
2006	30.9	25.0	28.0
2007	20.5	25.0	21.7
2008	28.2	37.5	31.3

Source: Ministry of Justice (2005, 2006, 2007).

TABLE 2

Comparison of successful candidates (2006 and 2007)

(a) Comparison of successful candidate numbers and the pass rate between law schools with and without committee members

	Committee	Non-committee	t-value
Number of successful candidates	54.1	8.5	8.42**
	(39)	(87)	
The pass rate (%)	46.6	31.6	4.28**
	(39)	(87)	

(b) Comparison of successful candidate numbers and the pass rate between prestigious and other universities.

	Prestigious	Other	t-value
Number of successful candidates	109.4	13.5	15.1**
	(12)	(114)	
The pass rate (%)	63.0	33.5	5.58**
	(12)	(114)	

Source: Ministry of Justice (2005, 2006, 2007). Nikkei Career Magazine (2006, 2007).
Note: Values in parentheses are number of observations. ** means that difference is significant at the 1 % level.

TABLE 3

Comparison of numbers of committee members

(a) Comparison of numbers of committee members between national and private law schools

	National	Private	t-value
All sample	1.47	0.47	3.32**
	(46)	(102)	
Sample restricted to law schools with committee members	3.57	2.18	1.97*
	(19)	(22)	

(b) Comparison of numbers of committee members between Prestigious and other universities.

	Prestigious	Other	t-value
All sample	5.5	0.3	15.9**
	(12)	(114)	
Sample restricted to law schools with committee members	5.5	1.72	6.91**
	(12)	(114)	

Source: Ministry of Justice (2005, 2006, 2007).

Notes: Values in parentheses are number of observations. ** means that difference is significant at the 1 % level.

TABLE 4

Descriptive statistics

Variables	Definition	Mean	Standard deviation	Min	Max
PASRAT	Pass rate (%)	36	19	0	100
TUIT	Tuition (Thousands Yens)	1,445	381	945	3000
COMRAT	Ratio of committee members to professors (%)	2.2	4.4	0	22.8
CCOMRAT	Ratio of committee members of compulsory common subjects to professors (%)	0.6	1.9	0	10.7
SCOMRAT	Ratio of committee members of selective subjects to professors (%)	1.5	3.2	0	17.1
RIVAL	Number of other law schools belonging to the same prefecture	7.4	8.0	0	20
TOKYO	Tokyo University Dummy	0.01	0.11	0	1
KYOTO	Kyoto University Dummy	0.01	0.11	0	1
HITOT	Hitotsubashi University Dummy	0.01	0.11	0	1
WASE	Waseda University Dummy	0.01	0.11	0	1
KEIO	Keio University Dummy	0.01	0.11	0	1
CHUO	Chuo University Dummy	0.01	0.11	0	1
NATIO	National university dummy	0.31	0.46	0	1
NPAS	Aggregated number of successful applicants of old bar examination from 2000 to 2005.	82	201	0	1104
PGDP	Per capita GDP of the prefecture to which law school belongs (Thousands Yens)	3,315	700	2,048	4,333

TABLE 5

Determinants of pass rate (2006 and 2007)

Variables	(1)OLS	(2)HECK	(3)OLS	(4)HECK	(5)OLS	(6)HECK
TUIT	-0.43*	-0.43*	-0.67**	-0.67**	-0.76**	-0.76**
	(-2.26)	(-2.29)	(-3.91)	(-4.02)	(-4.39)	(-4.45)
COMRAT	0.06**	0.05**	0.07**	0.06**		
	(2.35)	(2.38)	(2.58)	(2.69)		
RIVAL	-0.25*	-0.23*	-0.27*	-0.25**	-0.25*	-0.23*
	(-2.10)	(-2.19)	(-2.24)	(-2.36)	(-2.02)	(-2.14)
TOKYO			0.14	0.14	0.23*	0.23*
			(1.19)	(1.25)	(1.99)	(2.09)
KYOTO			0.12	0.12	0.27**	0.26**
			(1.04)	(1.09)	(2.42)	(2.52)
HITOT			0.16	0.16	0.31**	0.31**
			(1.30)	(1.37)	(2.75)	(2.88)
WASE			0.20*	0.20*	0.25*	0.25**
			(1.82)	(1.92)	(2.23)	(2.34)
KEIO			0.28**	0.28**	0.35**	0.35**
			(2.50)	(2.63)	(3.17)	(3.31)
CHUO			0.25*	0.25**	0.29**	0.29**
			(2.30)	(2.42)	(2.60)	(2.72)
NATIO	0.06	0.06				
	(1.53)	(1.58)				
NPAS	0.06**	0.05**				
	(3.09)	(3.19)				
PGDP	1.32**	1.30**	1.28*	1.26**	1.29*	1.27**
	(3.75)	(2.50)	(2.32)	(2.44)	(2.28)	(2.40)
Censored Observations		16		16		16
Number of Observations	126	142	126	142	126	142

Notes: Values are elasticity is evaluated at the sample means and its t-statistics is calculated by delta method. Numbers in parentheses are t-value. ** and * means statistically significant at the 1 % and 5% level, respectively.

TABLE 6

Determinants of pass rate (2006)

Variables	(1)OLS	(2)HECK	(3)OLS	(4)HECK	(5)OLS	(6)HECK
TUIT	-0.47	-0.53	-0.78**	-0.83**	-0.80**	-0.85**
	(-1.40)	(-1.54)	(-2.48)	(-2.61)	(-2.61)	(-2.69)
COMRAT	0.02	0.01	0.01	0.01		
	(0.55)	(0.53)	(0.37)	(0.41)		
RIVAL	-0.28	-0.24	-0.32	-0.29	-0.31	-0.28
	(-1.26)	(-1.28)	(-1.43)	(-1.55)	(-1.41)	(-1.51)
TOKYO			0.20	0.19	0.24	0.24
			(0.84)	(0.92)	(1.17)	(1.28)
KYOTO			0.19	0.19	0.23	0.23
			(0.87)	(0.97)	(1.15)	(1.27)
HITOT			0.31	0.30	0.36*	0.36*
			(1.19)	(1.31)	(1.77)	(1.94)
WASE			0.27	0.27	0.28	0.28
			(1.37)	(1.52)	(1.41)	(1.55)
KEIO			0.31	0.31	0.33*	0.33*
			(1.45)	(1.61)	(1.68)	(1.85)
CHUO			0.29	0.29	0.29	0.29
			(1.42)	(1.58)	(1.47)	(1.62)
NATIO	0.10	0.11				
	(1.30)	(1.52)				
NPAS	0.06*	0.06*				
	(1.97)	(2.09)				
PGDP	1.36	1.45	1.39	1.39	1.40	1.40
	(1.47)	(1.63)	(1.44)	(1.59)	(1.47)	(1.60)
Censored Observations		10		10		10
Number of Observations	58	68	58	68	58	68

Notes: Values are elasticity is evaluated at the sample means and its t-statistics is calculated by delta method. Numbers in parentheses are t-value. ** and * means statistically significant at the 1 % and 5% level, respectively.

TABLE 7

Determinants of pass rate (2007)

Variables	(1)OLS	(2)HECK	(3)OLS	(4)HECK	(5)OLS	(6)HECK
TUIT	-0.44*	-0.44*	-0.58**	-0.58**	-0.74**	-0.74**
	(-2.11)	(-2.30)	(-3.19)	(-3.53)	(-3.70)	(-4.11)
COMRAT	0.11**	0.10**	0.13**	0.13**		
	(3.46)	(3.29)	(3.90)	(4.15)		
RIVAL	-0.21	-0.19*	-0.21	-0.20*	-0.18	-0.18
	(-1.64)	(-1.78)	(-1.63)	(-1.82)	(-1.27)	(-1.49)
TOKYO			0.09	0.09	0.20	0.20*
			(0.79)	(0.86)	(1.62)	(1.73)
KYOTO			0.03	0.03	0.30**	0.30**
			(0.26)	(0.29)	(2.46)	(2.60)
HITOT			0.02	0.02	0.25*	0.25*
			(0.18)	(0.21)	(2.01)	(2.14)
WASE			0.10	0.10	0.21*	0.21*
			(0.91)	(1.00)	(1.73)	(1.86)
KEIO			0.26*	0.26**	0.37**	0.37**
			(2.26)	(2.48)	(2.99)	(3.22)
CHUO			0.22*	0.22*	0.29*	0.29**
			(1.92)	(2.11)	(2.33)	(2.52)
NATIO	0.02	0.02				
	(0.53)	(0.62)				
NPAS	0.05*	0.04**				
	(2.25)	(2.43)				
PGDP	1.19*	1.16*	1.14*	1.13*	1.14*	1.14*
	(2.00)	(2.12)	(1.90)	(2.10)	(2.28)	(1.91)
Censored Observations		6		6		6
Number of Observations	68	74	68	74	68	74

Notes: Values are elasticity is evaluated at the sample means and its t-statistics is calculated by delta method. Numbers in parentheses are t-value. ** and * means statistically significant at the 1 % and 5% level, respectively.

TABLE 8

Determinants of pass rate (2006 and 2007)

Variables	(1)OLS 2006-07	(2)HECK 2006-07	(3)OLS 2006-07	(4)HECK 2006-07	(5)OLS 2006	(6)HECK 2006	(7)OLS 2006	(8)HECK 2006	(9)OLS 2007	(10)HECK 2007	(11)OLS 2007	(12)HECK 2007
TUIT	-0.43*	-0.42*	-0.67**	-0.67**	-0.44	-0.49	-0.78**	-0.82**	-0.45*	-0.45*	-0.58**	-0.58**
	(-2.20)	(-2.24)	(-3.89)	(-4.02)	(-1.28)	(-1.43)	(-2.45)	(-2.60)	(-2.13)	(-2.34)	(-3.16)	(-3.53)
CCOMRAT	0.04*	0.03**	0.04**	0.04*	-0.007	-0.006	-0.004	-0.004	0.10**	0.09**	0.10**	0.10**
	(1.66)	(1.67)	(2.03)	(2.13)	(-0.21)	(-0.21)	(-0.12)	(-0.13)	(2.96)	(2.84)	(3.23)	(3.48)
SCOMRAT	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.03	0.02
	(1.34)	(1.39)	(1.15)	(1.21)	(0.84)	(0.82)	(0.59)	(0.66)	(0.90)	(0.94)	(1.04)	(1.15)
RIVAL	-0.26*	-0.24*	-0.27*	-0.25**	-0.29	-0.26	-0.33	-0.30	-0.19	-0.18*	-0.20	-0.19*
	(-2.10)	(-2.20)	(-2.21)	(-2.34)	(-1.32)	(-1.35)	(-1.47)	(-1.61)	(-1.49)	(-1.65)	(-1.56)	(-1.75)
TOKYO			0.13	0.13			0.21	0.21			0.09	0.09
			(1.14)	(1.20)			(0.89)	(0.99)			(0.77)	(0.84)
KYOTO			0.12	0.12			0.22	0.22			0.03	0.03
			(1.03)	(1.09)			(0.97)	(1.09)			(0.27)	(0.30)
HITOT			0.15	0.15			0.28	0.28			0.03	0.03
			(1.09)	(1.16)			(1.07)	(1.19)			(0.20)	(0.22)
WASE			0.20*	0.20*			0.28	0.28			0.10	0.10
			(1.82)	(1.92)			(1.39)	(1.56)			(0.90)	(1.00)
KEIO			0.28**	0.28**			0.34	0.34*			0.26*	0.26**
			(2.48)	(2.62)			(1.51)	(1.70)			(2.24)	(2.47)
CHUO			0.25*	0.25**			0.31	0.31*			0.21*	0.22*
			(2.27)	(2.40)			(1.48)	(1.66)			(1.85)	(2.05)
NATIO	0.06	0.06			0.10	0.12			0.02	0.02		
	(1.52)	(1.58)			(1.35)	(1.58)			(0.53)	(0.62)		
NPAS	0.06**	0.05**			0.07*	0.06*			0.05*	0.04**		
	(3.08)	(3.20)			(2.07)	(2.20)			(2.25)	(2.41)		
PGDP	1.33**	1.31**	1.28*	1.27**	1.39	1.48*	1.43	1.42	1.16*	1.14*	1.13*	1.12*
	(2.44)	(2.51)	(2.31)	(2.44)	(1.49)	(1.67)	(1.46)	(1.63)	(1.92)	(2.07)	(1.85)	(2.06)
Censored Observations		16		16		10		10		6		6
Number of Observations	126	142	126	142	58	68	58	68	68	74	68	74

Notes: Values are elasticity is evaluated at the sample means and its t-statistics is calculated by delta method. Numbers in parentheses are t-value.

** and * means statistically significant at the 1 % and 5% level, respectively.

TABLE 9

Determinants of ratio of committee members

Variables	(1)TOBIT 2006-07	(2) TOBIT 2006	(3) TOBIT 2007	(4) TOBIT 2006-07	(5) TOBIT 2006	(6) TOBIT 2007
NATIO	0.09**	0.08**	0.10**			
	(4.27)	(2.98)	(3.23)			
NPAS	$1.51*10^{4}$**	$0.95*10^{4}$**	$2.00*10^{4}$**			
	(4.09)	(3.46)	(3.41)			
PGDP	5.72**	6.21**	4.68*	2.96*	3.37*	1.99
	(3.63)	(3.20)	(2.09)	(2.11)	(2.27)	(0.95)
TOKYO				0.14**	0.12*	0.15
				(2.49)	(2.26)	(1.60)
KYOTO				0.22**	0.14**	0.28**
				(3.82)	(2.55)	(3.00)
HITOT				0.20**	0.15**	0.24**
				(3.47)	(2.80)	(2.51)
WASE				0.10*	0.04	0.14
				(1.67)	(0.77)	(1.46)
KEIO				0.11*	0.08	0.13
				(1.98)	(1.53)	(1.40)
CHUO				0.08	0.04	0.10
				(1.35)	(0.79)	(1.05)
Censored Observations	102	52	50	102	52	50
Number of Observations	142	68	74	142	68	74

Notes: Numbers in parentheses are t-value. ** and * means statistically significant at the 1 % and 5% level, respectively.