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Elite Education and Social Capital: The Case of South Korea

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Graduation from an elite university bestows advantages in the labor market, but it is not known whether these advantages accrue from a university's prestige or from graduates' social background, ability, or different types of social capital. This study used original data on male university graduates in South Korea to explore the relationships among university prestige, human capital, social background, and students' access to social capital through their university (institutional social capital) and their families and friends (private social capital). The study found that private social capital does not tend to lead to the best jobs. Rather, the probability of being matched with a top employer is higher through direct application and is enhanced at prestigious universities through the schools' provision of introductions to employers. The close relationships among family background, human capital, and university prestige mean that a highly select group of South Korean men acquire the best jobs.

The importance of educational credentials for individuals' labor market success is one of the bestestablished facts of sociology and labor economics. But the reasons why education matters so much are not fully understood. In economics, human capital theorists initially focused on education's role as a measure of potential productivity, but labor economists of various theoretical persuasions have also argued that education may serve mainly as a mechanism through which employers screen job applicants (Arrow 1973; Blaug 1985; Spence 1973). In sociology, much debate has revolved around how higher education at elite institutions contributes to or reflects individuals' human capital, social capital, and cultural capital; another area of debate has been how employers subsequently weigh these different types of capital (see, for example, Bourdieu and Passeron 1979; Collins 1979).

The educational systems of East Asia are ideal for studying who enters elite universities and why graduation from these schools contributes to success in the labor market. In these highly competitive, hierarchically structured higher education systems, intense competition has been fueled by the widespread popular belief that a degree from a prestigious university sets one on the track of upward mobility through the status, class, and income structures.1 The case of South Korea is particularly striking in this regard. In South Korea, rapid economic growth in the past few decades has been accompanied by increased attendance at institutions of higher education at a rate that has exceeded the rates even of other Asian nations. In the mid-1960s, only 12 percent of the men and 4 percent of the women aged 18-21 were enrolled in higher education in South Korea; by 1993, these rates had increased to 57 percent and 35 percent, respectively.2

With about one-fourth of South Korea's 43.4 million people concentrated in Seoul, along with most of the nation's prestigious universities and headquarters of large firms, it is widely believed that an undergraduate degree from an elite university is the minimum require-

ment for a white-collar job in a top firm. Is this perception correct? Does graduation from a prestigious university truly generate advantages in the labor market? If so, how much of this advantage is attributable to graduates' characteristics, such as academic ability and social background, and how much is attributable to the distinct opportunities at elite universities, not only to enhance the quality of one's human capital but to gain access to other resources, such as social networks? These are the questions we addressed in our study.

We tested our predictions using an original survey (the Survey on Employment Experiences of University Graduates), conducted in Seoul in 1992. This data set provided extensive information on the social background, educational history, and early work experiences of approximately 1,000 South Korean university graduates, which allowed us to examine the relationships among university prestige, human capital, social capital, social background, and graduates' placement in the labor market. We focused particularly on whether universities bestow an advantage on individuals by providing social capital that helps them gain access to desirable jobs. Although a roughly equal number of male and female university graduates were surveyed, this article is restricted to the findings on the male graduates, since the South Korean labor market operates differently enough for men and women that discussing the findings for both groups would have greatly expanded the scope of this article.3

It bears mention that our data are unique, in that few surveys on East Asia have inquired about the universities that individuals attended, let alone graduates' use of familial or friendship ties, professors, or school placement offices to gain entrance to top firms. The failure to investigate these factors has been due, in part, to the considerable sensitivity surrounding the issue of the determinants and consequences of attending prestigious universities in these societies, perhaps even more so than in the United States. Admission to top universities and colleges is based principally, if not entirely, on performance on standardized examinations, and a strong meritocratic ideology prevails. If it was clearly demonstrated and widely known that students from higher socioeconomic strata are overrepresented at top-ranked universities and that these graduates subsequently gain access to the "best" jobs in the economy, then the ideology of meritocracy would be threatened. We explored these issues by examining the relationship between socioeconomic background, attendance at elite universities, and employment.

In this article, we first review the general research on the effects of elite education in the labor market. Then we turn to the particular characteristics of the South Korean setting to suggest how these effects may be amplified in this context.

REVIEW OF THE LITERATURE

In the United States, studies have examined the distinct effects of social background and attendance at elite institutions on labor market outcomes. Individuals from privileged social backgrounds are more likely to attend elite universities, but the prestige or "quality" of universities also has distinct effects on graduates' earnings (James, Alsalam, Conaty, and To 1989; Kingston and Smart 1990; Solomon 1975; Trusheim and Crouse 1981) and on status attainment, particularly in professional occupations (Karabel and McClelland 1987; Tinto 1980; Useem and Karabel 1986). Useem and Karabel argued that the patterns of career advancement among the American business elite reflect the advantages of both upper-class origin and educational credentials from prestigious universities, or "social capital" and "scholastic capital," respectively.

Although studies of the United States have generally indicated the significance of various measures of university quality, the emphasis on prestige itself relative to family background and other academic characteristics has varied across studies. For instance, James et al. (1989) found that the effect of university prestige is relatively small compared with the effects of family background and academic experiences, such as grade-

point average (GPA), choice of major, and number of mathematics credits. Trusheim and Crouse (1981) also showed that university selectivity (measured by average scores on the Scholastic Achievement Test), rather than university prestige, has a distinct effect on earnings. But Kingston and Smart (1990) and Solomon (1975) suggested that there is a substantial effect of university prestige on earnings net of other personal attributes. Kingston and Smart pointed out that the characteristics of the samples of many studies have led to the underrepresentation of highly selective elite institutions (such as the Ivy League schools) and thereby have produced a downward bias in the prestige effect. This bias makes it difficult to evaluate the distinct advantages generated by attendance at the top U.S. institutions. As we discuss in the Data and Methods section, our sampling strategy in South Korea was designed to obviate this bias.

To our knowledge, no empirical study has examined the relationship between university prestige and career or earnings patterns in South Korea. But Ishida's (1993) study on Japan has some relevance for understanding the South Korean case. Ishida found that contrary to popular belief among scholars and the public alike, the effect of social origin on higher educational attainment is greater in Japan than in either the United States or Great Britain. At the same time, university prestige has a strong positive effect on current income and occupational prestige, even after social background characteristics are controlled.

Moreover, graduates of top universities are vastly overrepresented in Japan's corporate and governmental elite. Whereas Useem and Karabel (1986, cited in Ishida 1993:158) found that graduates of the top five U.S. undergraduate institutions made up about 17 percent of their sample of 2,729 corporate managers and directors, Ishida reported that in 1985, slightly over 50 percent of all presidents of the most profitable private Japanese firms were graduates of the top five Japanese universities. Ishida (p. 160) stated: "The ranking of Japanese universities does differentiate socioeconomic outcomes of university graduates, but the most dramatic impact

of stratification in Japanese higher education appears to be on elite formation." Although Ishida did not have access to comparable data on university prestige for the samples of American and Japanese men he analyzed in his study, his findings, together with those of U.S. researchers, suggest that university prestige probably plays a more important role in income and status attainment in Japan than in the United States.

Several studies on the transition from school to work in Japan have illustrated the ways in which Japanese schools provide not only credentials but critical introductions in the job-search process. Most Japanese work-bound high school seniors use their schools' placement offices in looking for jobs, and longstanding ties between schools and employers constitute an important mechanism whereby students get jobs (Rosenbaum and Kariya 1989). Similarly, ties between Japanese university placement offices and employers were an important mechanism of job placement until the late 1970s, after which a more implicit practice via alumni ties-a "semiinstitutional network"-became an effective job-search channel (Brinton and Kariya in press). Such institutional or semi-institutional networks at the university level appear to be the most prevalent in Japan for graduates from prestigious universities.

In sum, quantitative data from Japan demonstrate the importance of education at elite universities for success in the labor market, and qualitative studies have shown how attendance at a specific school can provide access to ties between employers and professors, university friends, and alumni; such ties often lead to information about jobs or introductions to employers. We regard access to such ties as social capital, in the tradition of Coleman (1988:S98), who defined social capital as a resource available to a social actor that "inheres in the structure of relations between actors and among actors." We turn now to South Korea, where for reasons we will demonstrate, a university's prestige and the social capital it generates may play an even greater role in income and social status attainment.4

THE SOUTH KOREAN CASE

The Republic of Korea was established in 1948, following independence from Japanese colonial rule in 1945 and U.S. occupation from 1945 to 1948. At that time, nearly 80 percent of the South Korean population was illiterate because of limited public access to formal schooling. With the establishment of the present 6-3-3-4 educational system (elementary school, junior and senior high school, and university), enrollment at each level of schooling increased rapidly, reaching 90 percent for primary school in the early 1960s and similar levels for junior high school in 1980 and senior high school in 1990. Although enrollment in higher education has also increased continuously since 1945, the pattern of growth reflects several phases of expansion and contraction based on the government's enrollment-quota policies. The most explosive growth in higher education has occurred since the late 1970s (Cheng 1993; Choi 1989).5

The rapid growth in educational attainment among South Koreans has occurred in the context of rapid change in social and economic circumstances. Before Japanese colonial rule (beginning in 1910), Korean society maintained a rigid stratification system in which the top of the social hierarchy was dominated by Confucian literati (yangban), who had political and economic privileges along with hereditary social status. This traditional stratification system was severely undermined by the social change brought about by the Japanese colonial government, the land reform after independence, and the destruction wrought by the Korean War. As a result, a relatively fluid mobility structure was generated in the postwar period (Hong 1980; Koo 1985; M. Lee 1982). During the period immediately following independence in 1945, numerous high-level positions in the government and the private sector that had been dominated by the Japanese during the colonial period became available to South Koreans, especially those who attained advanced levels of schooling.

As South Korea began to develop economically in the 1960s, further opportunities in the private sector emerged for people with higher education. The growth of white-collar occupations demanded a highly educated labor force. As Table 1 shows, rapid economic growth in South Korea from 1965 to 1990 brought about a fundamental transformation in the occupational structure. In 1965, 57 percent of South Koreans were engaged in agricultural work, while less than 10 percent were in professional, managerial, or clerical occupations. By 1990, employment in the agricultural sector had dropped to only 21 percent, whereas employment in professional, managerial, and clerical occupations had risen to 25 percent. The growing proportion of people with advanced educational credentials who occupy managerial, administrative, and clerical positions in the private sector, bureaucratic positions in the government, and other professional-technical positions constitutes what some have called the "new middle class" in South Korean society (Koo 1985; Koo and Hong 1980).

Particularly significant in the largescale process of social and economic change has been the extent to which educational attainment has come to play an important role in the achievement of occupational status and high income. Many empirical studies by South Korean

Table 1. Changes in the Occupational Distribution of the South Korean Labor Force: 1965-90

Occupational Category	1965	1975	1985	1990
Professional-technical-		The state of the s	***************************************	
administrative-managerial	3.7	4.1	7.3	9.6
Clerical	4.3	6.7	11.6	15.4
Sales	10.7	10.5	15.5	14.0
Service	5.3	6.5	10.8	8.8
Production	19.2	23.0	30.3	31.6
Agriculture-fishery	56.8	49.2	24.6	20.7

Source: Korea Economic Planning Board (1965, 1975, 1985, 1990).

sociologists and economists have found that educational attainment is the most critical determinant of occupational status and earnings (see, for example, Cha 1992; K. Kim 1983; S. Kim 1983; Koo and Hong 1980; F. Park and S. Park 1984). The economic benefits associated with higher education can be illustrated by differential earnings by educational levels: From 1975 to 1987, the earnings of four-year university graduates were about 2.2 times greater than those of high school graduates and 1.7 times greater than those of junior college graduates; since then, educational differentials have declined somewhat (National Statistical Office 1994).

Such visible economic benefits of higher education, especially of four-year university education, are one reason why South Koreans advance to higher education. As a 1994 survey indicated, the desire for higher education is widespread among the public; 86 percent of the parents surveyed desired at least a four-year university education for their sons and 75 percent wanted it for their daughters-figures that outpace even Japan (National Statistical Office 1994). Moreover, the majority of students and parents in different social classes believe that they or their children can actually advance to the university level (Hong and Koo 1993).

The high premium attached to fouryear university education, especially for men, is closely related to the industrialization process in which large manufacturing companies competed during the 1970s to recruit a highly capable group of managerial personnel from among a relatively small group of university graduates (Amsden 1989; C. Kim 1992; S. Park 1982). Until the late 1970s, graduates of four-year universities had lucrative employment opportunities in the private sector. But the explosive growth of enrollments in higher education in the early 1980s began to generate a serious employment problem for university graduates. The proportion of graduates who had not obtained jobs by the time of graduation (excluding students who went on to graduate study or entered military service) increased substantially throughout the 1980s, rising from 27.1 percent in 1980 to 49.4 percent in 1988 (Choi 1989). The increased competition among university graduates in the labor market appears to have led to an even greater emphasis on university prestige in firms' recruitment strategies.

The critical role that prestige plays is reflected in sharply different outcomes by university ranking; for example, 30 percent of all 1988 four-year university graduates in Seoul, compared to only 10-17 percent of the graduates of the top three universities in Seoul, did not have jobs by the time of graduation (Choi 1989). Similarly, of 26,000 new employees hired by the top 50 South Korean corporations in 1988, about 34 percent came from the top six universities in Seoul (Monthly Recruit, 1989). But graduates of these six universities constituted only 15 percent of all university graduates in that year. Therefore, their recruitment rate into top firms was over twice as great as their representation in the cohort of graduates.

The South Korean higher education system is indeed characterized by the clear hierarchical ranking of schools (K. Kim 1983; S. Kim 1986). Whereas the overall system of higher education includes four-year colleges and universities, two-year junior colleges, teachers' colleges, and various other types of colleges, about 75 percent of the total enrollment in higher education is concentrated in four-year colleges and universities. In contrast to the American system, students in South Korea apply to a specific department in a specific university, thereby choosing their major field of study at the time of entrance. To receive their degrees, students must complete a certain number of credits by taking courses required for all students, courses offered in their major fields, and other courses of their choice. It is rarely possible to change their major fields, although students may choose a secondary field of study during their university years.

The prestige rankings of four-year institutions have emerged from the fact that admission is based largely on one's score on a standardized entrance examination; that is, the prestige of each

school is reflected by the average minimum score achieved by its applicants.⁶ (The minimum scores may vary across departments in the same university.) Graduation from a highly prestigious university is thus a good measure of individuals' academic ability or the quality of human capital.

No systematic studies have examined the career or earnings patterns of graduates of South Korean universities with different levels of prestige. But many studies have argued that "academic cliquism," based on educational credentials from a particular university, has become a major type of social stratification in South Korean society (Han 1983; J. Lee 1991). In other words, besides the economic advantages associated with higher education, school background is a basis of informal social groupings that serve as an important source of social capital among South Koreans. S. Kim's (1992) study of the formation of personal networks among South Koreans found that alumni ties and family ties are the most frequent common denominators of personal networks. Other studies that have considered the managerial characteristics of chaebol (large business groups) have emphasized the importance of both school ties and common regional origin in the recruitment and promotion of individuals to top managerial positions (Biggart 1990; C. Kim 1992). As H. Lee (1989:156) noted, family, regional, and school ties

work not only in power group formation at the top levels, but also in the formation of informal relations, groups, and cliques at all levels throughout the South Korean organization. *Hahk-yun* (school tie) is a particularly strong factor in informal relationships, giving common identity and a feeling of belonging.

Furthermore, the hierarchical structure of the university system in South Korea, particularly the prestige rankings reflecting the different quality of human capital, suggests that the benefits bestowed by attending a prestigious institution may be cumulative. That is, those who have developed the human capital necessary to enter a prestigious university may accrue additional benefits in

the form of university-specific social capital—access to job placement offices, professors, alumni, and classmates. The stratified nature of the higher education system implies that the usefulness or effectiveness of this social capital may vary by the specific institution attended. Not only is the available information about employers likely to differ according to the prestige of each school, but so, too, is the ability of university friends or alumni to influence employment decisions.

The idea that relationships among people can constitute useful resources has been widely used by researchers who have examined the role of informal personal ties in the processes of job search or occupational status attainment in the United States and other Western industrial nations (De Graaf and Flap 1988; Granovetter 1995; Lin, Ensel, and Vaughn 1981). In this line of research, social capital or social resources usually refers to the extensiveness of personal ties through which information about jobs can be diffused (the "strength of weak ties" argument) or the characteristics of the contact person who has the potential to influence the types of jobs attained. Although we also use the term social capital in the job-search context to signify the personal or social networks that can provide information or influence, we argue that it is important to delineate the social structural origin of such social capital. As is illustrated in the Japanese case and as is likely in South Korea, an educational institution can generate social capital for its students. We term such social resources or ties that can be acquired only through an individual's attendance at a particular university institutional social capital to distinguish it from the social ties represented by nonuniversity friends or by family members, which we call *private* social capital. Has the dense network of social ties (especially in Seoul), small geographic size, and extremely rapid and concentrated economic growth and expansion of opportunity led to a greater role for private or for institutional social capital in the early careers of the South Korean male elite? Or has it led, on the other hand, to the opening of less "particularistic" recruitment channels?

The role of private and institutional forms of social capital in the job-search process is intimately linked to the specific recruitment practices of firms. There is some evidence that South Korean firms' recruitment practices tend to be different for university-educated men than for others who are entering the labor market. Some studies have reported that while men and women with less than a university education tend to be hired through informal channels, such as employee referrals or personal referrals (private social capital), male university graduates tend to be hired through recommendations from their schools (institutional social capital) or through the open-recruitment system (gongchae), which combines written tests and interviews (Chang 1989; C. Kim 1992; H. Lee 1984). We examine these processes and their implications for early career outcomes.

HYPOTHESES

On the basis of the nature of the South Korean higher education system and labor market, as well as previous sociological research, we generated the following hypotheses:

Characteristics of university graduates. Despite the examination-based university admissions system, male students from elite social backgrounds will be overrepresented at the highest ranked, most prestigious universities versus the second- and third-ranked universities. Graduates' human capital will be linearly associated with the rank of their universities.

Job-search channels. The effective jobsearch channel used by graduates will vary by university prestige. Graduates of the most prestigious universities will be the most likely to use effectively institutional social capital, rather than private social capital, to obtain jobs. Prestigious universities are better able to help their graduates obtain jobs through such mechanisms as providing introductions to employers or inviting employers to their campuses who are eager to recruit graduates from the best schools. The effective use of formal application procedures will not vary significantly among graduates of universities of different ranks.

Human capital will be related to the effective use of institutional social capital, since school placement offices, professors, and alumni will be more apt to help the most able students. Social background will be unrelated to the job search method men report to be the most effective.

Employment outcome. Graduates of top universities will be more likely than others to enter large firms. The linear relationship between firm size and the earnings of high-skilled South Korean men (F. Park and S. Park 1984) led us to consider the size of the firm at which graduates start as an appropriate indicator of a "good" job for a male university graduate. Given the dominance of chaebol in the South Korean economy, entrance to a large firm at the point of university graduation is an important channel for wage increases and promotion, as well as for building connections that may later lead to entrepreneurial opportunities (C. Lee 1994).

We predicted that male university graduates' use of institutional social capital will be the most likely route to being hired by large firms and will be particularly strong among graduates of top universities because the "legitimacy" or status of placement offices, professors, and alumni will be greatest at these universities. We also predicted that the use of direct application by male university graduates will be related to entry to large firms, since many large firms in South Korea use gongchae, or recruitment through direct applications. Human capital will be associated with entrance to a large firm even when university prestige is controlled. Social background will not be directly related to graduates' labor market outcome (size of firm), but will be indirectly related through its effect on university prestige.

DATA AND METHODS

The sampling of male graduates in the 1992 Survey on Employment Experiences of University Graduates involved

the random selection of respondents from the alumni directories of 10 universities distributed among the three distinct rankings of university prestige. We sampled graduates from the early 1980s and collected family background, education, and work histories up to the survey date. The universities from which we sampled are all in Seoul, which has a high proportion of all South Korean universities. (Of the total number of students graduating from universities in 1982, the base graduation year for our sample, slightly over half were in universities located in Seoul.) The four South Korean universities that are universally regarded as the most prestigious are in Seoul, and we included three of them in our sample. We investigated only those respondents who entered the labor market with a bachelor's degree, thus excluding men whose first job followed graduate school.7 The result was a sample of 397 men.8

We assigned respondents a ranking of 1, 2, or 3 based on the prestige group to which their universities belong. We attempted to measure separately the ability (or general human capital) they demonstrated to enter their particular departments in their universities.9 The precise examination score for each individual at the time of university entrance is not available, but the estimated minimum score for each department in each university is published every year. The latter is the score on the mandatory standardized national entrance examination; hence, the departmental score indicates the level of difficulty and the degree of competition in entering that department. In the multivariate analyses that follow, we measured human capital by subtracting the average of these scores in each university prestige group from the individual's department score. Thus, we judged an individual with a positive value to have greater human capital than the average student graduating from a university with the same prestige rank, and one with a negative value to have less human capital. In this way, we attempted to measure university prestige and individual human capital and to estimate their separate effects. We considered university ranking to be an institutional variable measuring the potential value-added effect of prestige that supplements the effect of individuals' human capital.

We measured social background by father's education, using a dummy variable indicating at least university education versus less than a university education. We also conducted the analyses that follow using father's occupational status (administrative-managerial-professional versus other), with no significant differences in results. (The correlation between education and occupational status for fathers is .50.)

Job-search channels. The survey asked the respondents to specify both the job-search method they mainly used and the one that was the most effective; our analysis focused on the latter. The respondents were offered a list of 31 possible methods, which we categorized as institutional social capital (placement office, firms' recruitment on campus, professors, friends at one's university, friends or acquaintances who previously graduated from one's university), private social capital (immediate family members, other relatives, and friends and acquaintances from nonuniversity contexts), and direct application to employ-

Employment outcome. We used firm size as an indicator of entrance to a promising first job. Because our sample consisted only of university graduates, neither the occupational category of the first job nor the starting salary varied enough across individuals to be analytically meaningful. For instance, fully 61 percent of the men in our sample entered the labor market in a white-collar office job; 20 percent were in a professional, technical, or administrative position; and 12 percent were in educationrelated professions. Thus, over 90 percent of the respondents were in high-skill jobs. But studies of the income distribution in South Korea have found a positive association between the size of firms and employees' income levels, especially for individuals in professional and administrative-managerial positions (C. Nam 1991: F. Park and S. Park 1984). The income levels used in these studies represent the average monthly earnings

of all workers, broken down by major occupational groups and sex. When the earnings of men in firms of over 500 employees are set at 100, the ratio of earnings for male professional-technical workers in companies with 10–29, 30–99, and 100–299 employees are 80.4 percent, 87.6 percent, and 93.4 percent, respectively. The comparable ratios for male administrative-managerial workers are 59.1 percent, 71 percent, and 79.1 percent (Park and Park).¹⁰

We present the descriptive results first and then examine the relationship between the effective job-search channel and human capital, university prestige, and social background in a multinomial logit model. The logged firm size of the first job was regressed on these variables using ordinary least-squares regression. We used regression techniques as a way of examining the relationships between variables when others are controlled; we do not purport to claim a strict causal order. The relationship between the effective job-search channel and firm size, if it exists, can be argued to occur as the combined result of graduates' search strategies and employers' recruitment strategies. Thus, it shows how certain graduates are matched with certain employers.

RESULTS AND DISCUSSION Descriptive Results

Characteristics of university graduates. Table 2 presents the social background and human capital characteristics of the respondents, the job-search method they reported as having been the most effective, and the mean sizes of the firms they entered on graduating. It also includes differences by prestige ranking of the universities attended and shows the results of t-tests for differences in means between graduates of first- and second-ranked universities and between graduates of second- and third-ranked universities.

The proportion of university graduates whose fathers had at least a university degree increased with university rank, from 22 percent for graduates of third-ranked institutions to 34 percent for graduates of the top-ranked institutions. The difference between graduates of first- and second-ranked universities is statistically significant (p < .05). Given that less than 10 percent of the South Korean male population in this parental generation were university educated, these figures demonstrate the close association between young men's educational attainment and their fathers'. It is

Table 2. South Korean Male University Graduates' Characteristics, Effective Job-Search Method, and First Job

	University Prestige Ranking			t-test for Difference in Means	
	First $(n = 128)$	Second $(n = 137)$	Third $(n = 132)$	First versus Second	Second versus Third
Graduates' Characteristics Father's education					
University or more	34.4	22.6	22.0	t = 2.13*	t = .13
Less than university	65.6	77.4	78.0		
Human capital Examination score (average minimum) SD	283.03 (13.98)	250.77 (15.22)	236.78 (10.47)	t=17.93**	t=8.75**
Most Effective Job-Search Method			, ,		
Institutional social capital	57.0	49.6	43.2	t = 1.20	t = 1.06
Private social capital	20.3	23.4	32.6	t = .60	t = 1.69*
Direct formal application	22.7	27.0	24.2	t = .82	t = .52
First Job					
Mean size of firm (employees)	1,050.04 (605.42)	987.85 (600.67)	886.55 (651.48)	t= .84	t = 1.33

^{*} p < .05, ** p < .01.

not surprising that the minimum examination score for admission to a department also varies significantly by university prestige. T-tests showed that the differences between first- and secondranked and between second- and thirdranked university graduates are statistically significant. Thus, it is clear that the graduates of top universities tended to come from higher social backgrounds than did those of other universities and tended to have greater human capital or general ability, as measured by the entrance examination. (The correlation between university rank and examination score for the sample is .80.)

Job-search channels. Graduates of all three university ranks reported that institutional social capital was their most effective job-search channel. However, graduates of the most prestigious universities were the most likely to report that institutional social capital was the most effective (57 percent), and graduates of the least-prestigious universities were the least likely to do so (43 percent). But contrary to our prediction, the differences in the use of institutional social capital among university ranks are not statistically significant.

Graduates who did not use institutional social capital were more or less evenly distributed between those who used private social capital and those who applied directly to firms. The reliance on private social capital is inversely related to university prestige, with only 20 percent of the graduates of prestigious universities citing it as the most effective compared to 23 percent of graduates of second-ranked schools and 33 percent of graduates of the least prestigious schools; here, a t-test indicated that the difference between graduates of second- and third-ranked universities is statistically significant. The proportion of university graduates who got their jobs through direct application (gongchae) is equivalent across university ranks. In sum, then, it was only in the use of private social capital that a significant difference emerged between university ranks, and it was graduates of the least prestigious universities who were the most likely to have gotten their jobs through what can be considered the most particularistic route.

Employment outcome. The mean size of the firms that graduates of the top universities entered was 1,050 employees, compared to 988 and 887 for graduates of second- and third-ranked universities, respectively. These differences are not statistically significant, perhaps because our focus on men with bachelor's degrees is likely to lead to a more conservative estimate of the direct relationship between university prestige and the size of firms, given that a higher proportion of men from top-ranked universities than others went on to graduate education.

Multivariate Analyses

Job-search channels. Table 3 presents the results of a multinomial logit analysis of the relationship between the effective job-search channel and other variables. We used private social capital as the base category for effective job-search channel and assessed how the relationship between university rank, human capital, and social background (father's higher education) to the use of institutional capital or formal direct application, on the one hand, differs from the relationship to the use of private social capital, on the other hand.

The table shows that once other variables were controlled, graduates of topor second-ranked universities were significantly more likely to say that institutional social capital was effective, rather than private social capital. The test for a difference in the coefficients for top- and second-ranked university graduates indicated that there was no significant difference between them in the use of institutional social capital. Individuals with greater human capital were also significantly more apt to use institutional rather than private social capital. This finding is consistent with the supposition that such individuals are more likely to be "sponsored" by their universities into jobs. When we controlled for the level of human capital, we found that individuals from higher social backgrounds were no more likely to use private connections than institutional

Table 3. Determinants of South Korean Male University Graduates' Effective Job-Search Method^a

	Institutional versus Private Social Capital	Direct Formal Application versus Private Social Capital
Constant	.179	314
	(.221)	(.252)
University Prestige	, ,	` ,
Тор	.749**	.422
	(.309)	(.360)
Second	.647**	.529
	(.310)	(.353)
Third	` <u> </u>	` _ ′
Human Capital Measure	.019**	.009
•	(.009)	(.011)
Father's Education	()	(**)
University or more	094	158
	(.283)	(.329)
Less than university	` <u> </u>	` _ ^
Maximum likelihood	814	1.76
df	392	

^a All significance tests are one tailed; * p < .05, ** p < .01. Standard errors are in parentheses.

connections. (The results were similar when we substituted father's professional-administrative occupational status for higher educational background.) So the graduates with a higher social background were not significantly more likely to cite family or friendship "connections" over institutional social capital as the route through which they entered their jobs.

None of the variables distinguished between the use of direct formal application and private social capital or direct formal application and institutional social capital (significance tests not reported here). Therefore, the greatest contrast was between the determinants of the use of institutional social capital versus private social capital, with graduates of high-prestige universities and with the greatest human capital tending to use institutional social capital.

Employment outcome. Table 4 shows how the size of firm for the first job is related to the characteristics of male university graduates. The dependent variable is logged firm size. Model 1 indicates that once other variables were controlled, individuals from both the top- and the second-ranked universities were more likely than others to enter large firms. Human capital was also significantly related to recruitment into

a large firm. As expected, the effect of social background was insignificant once other variables were controlled. Men

Table 4. Determinants of South Korean Male University Graduates' Employment Outcome: Logged Firm Size (First Job)^a

Determinants	Model 1	Model 2
Constant	5.818**	5.851**
	(.161)	(.164)
University Prestige		
Top	.347**	.214
r	(.167)	(.232)
Second	`.443 * *	.537**
	(.169)	(.171)
Third	` _ ´	` _ ′
Human Capital Measure	.017**	.026**
	(.005)	(.006)
Father's Education	,	(, , , , ,
University or more	.068	.062
•	(.153)	(.151)
Less than university		· - ·
Effective Job-Search Method		
Institutional social capital	.110	097
	(.164)	(.185)
Direct formal application	`.512 [*] *	`.498**
••	(.189)	(.187)
Private social capital	` - ′	` — ´
Institutional SC*top		
university	_	.626**
		(.285)
Human capital*top	_	026**
university		(.010)
Adjusted R ²	.051	.070

^a All significance tests are one tailed; * p < .05, ** p < .01. Standard errors are in parentheses.

who applied directly to employers were the most likely to have entered large firms, whereas there was no significant difference in this regard between individuals who used private or institutional social capital.

We explored the fate of graduates of top universities more fully in Model 2, where we added interaction terms between elite university graduation and human capital, on the one hand, and elite university graduation and institutional social capital, on the other hand. The results show that institutional social capital was of the greatest benefit and additional human capital was of the least benefit to men who graduated from top universities. This finding suggests that the sponsorship of one's university counts most if the university is a topranked one, whereas having more human capital than the average individual at one's university helps significantly more if the university is ranked second or third, rather than first. The latter finding makes sense when one considers the extremely high average level of human capital at top universities, which makes the individual's extra edge insignificant. (We also tested for interaction effects with second-ranked universities, but they were not statistically significant.)

To test further for the effect of family background and personal connections, we ran a third model (not shown) that included the interaction between father's education and private social capital on entrance to a large firm. If this effect was found to be significant, it would have indicated that men who used private social capital and had highly educated fathers had an advantage over others. We found no evidence of such an effect, however, which supports the conclusion from the other analyses that family background does not play a direct role in the employment outcome of male South Korean university graduates.

CONCLUSION

South Korean society is characterized by a tremendous degree of competition for entrance to prestigious universities, competition premised on the belief that affiliation with a prestigious university has a strong effect on the success of one's work life and on social status. Our analyses focused on how university prestige generates advantages for entry into the labor market—both in the use of what we term institutional social capital in the job-search process and for subsequent entrance to a large firm. By using measures of university prestige, male graduates' human capital, and social background, along with these graduates' use of private social capital, institutional social capital, or formal job-search channels, we endeavored to analyze the extent to which the "prestige" effect of an elite university is mediated by human and social capital.

In accordance with the meritocratic ideology of the higher education system, our measure of human capital—examination score—and university prestige are highly correlated. At the same time, however, men whose fathers were university graduates were significantly more likely to attend universities with the highest prestige. The positive association between family socioeconomic status and the attainment of elite education that has been found in Japan (Ishida 1993) and in the United States (see, for example, Hearn 1991) seems to be present in South Korea as well.

Nonetheless, social background does not directly influence the further accumulation of resources from educationwhat we term institutional social capital-once male South Korean students enter universities. When we controlled for other characteristics, we found that students from top- and second-ranked universities were more likely than others to rely on institutional social capital (the help of the placement office, professors, or friends and alumni of their own universities), rather than private social capital, such as family connections, in obtaining their first jobs. Students with a high level of human capital compared to their counterparts were more likely to do so as well. Those from high social backgrounds did not use private social capital more than direct formal application procedures or institutional social capital. Moreover, private social capital did not seem to link male university graduates to jobs in large firms.

Unlike our hypothesis, the use of institutional social capital as opposed to private social capital did not necessarily lead to entry to large firms. Rather, men who applied directly to employers were the most likely to enter large firms, indicating that the system of gongchae used by large South Korean firms is the most common channel. While university prestige, human capital, and direct formal application are all positively related to placement in a large firm, institutional sponsorship provides the extra boost to graduates from the most prestigious universities. This finding indicates the importance of institutional social capital at elite institutions; individuals at lower-ranked institutions who reported that institutional social capital was effective did not enter large firms at the same rate as did those at top universities. Therefore, we could say that the quality of social capital to which one has access by attending a university differs substantially according to the university's prestige. For students at second- or third-ranked universities, it is extra human capital that increases their probability of obtaining jobs in large firms.

Our overall conclusions regarding the relationship among social background, elite education, human capital, jobsearch channel, and employment outcome are consistent with most of our hypotheses, but some of our findings indicate a somewhat more complex picture than we expected. There is no doubt that university prestige and human capital are highly correlated in South Korea; that is the function that the entranceexamination system plays, and it appears to play it well. Nevertheless, high social background is also correlated with attendance at the most elite universities. Still, the access of high-status individuals to large firms does not seem to occur through the mechanism of introductions by private connections or through the direct influence of social background. Being hired by large firms is related instead to formal application procedures, and students at the highestprestige universities are distinct in their successful use of institutional social capital to enter such jobs.

Returning to the questions posed at the beginning of this article, we conclude that attendance at an elite university has an important effect on the early labor market destination of South Korean men above and beyond the fact that it reflects their human capital. Some of this effect is due to what we call university-specific or institutional social capital. Our analysis showed that family background plays a role only insofar as it is related to attending such universities.

Is meritocracy a myth? It does not appear to be so in the processes leading from university attendance to the labor market in South Korea. But researchers need to probe further why the sons of elite men are overrepresented in universities—especially at the most elite universities. Researchers also need to explore the development of these graduates' careers over the life cycle to see how they are shaped by the factors we have considered, by new private social capital they may acquire, and by the institutional social capital generated in their workplaces.

NOTES

- 1. The strength of this belief cannot be overemphasized. As testimony to it, up to 40 percent of each year's entering class at the most prestigious Japanese and South Korean universities are ronin or jaesu-saeng (Brinton and Lee 1990), students who failed the university entrance examination and subsequently studied one or more extra years before passing it. The majority of these students are male, which attests both to a strong gender bias in parents' willingness to finance additional years of study and to parents' and sons' beliefs that the price is worth paying to gain entrance to the college of one's choice (Brinton 1993).
- 2. The 1990s enrollment rates, especially for South Korean men, are striking when compared with those of other countries. For example, the enrollment rates for men and women, respectively, in selected industrial countries were 66 percent and 83 percent in the United States (1990), 38 percent and 41 percent in Japan (1993), 41 percent and 51 percent in France (1992), and 37 percent and

38 percent in Great Britain (1992) (UNESCO 1995). Note that these rates include all types of higher education, including junior colleges and teachers' colleges.

3. Many jobs in the white-collar sector—those for which a university education is appropriate—are explicitly closed to women. In an analysis of job advertisements in 1989 in one of the major national-circulation newspapers in South Korea, J. Nam (1991:60) reported:

It is surprising that about 65 percent of the sampled establishments advertise available jobs with some statements about gender preference, even though such practices are outlawed by the Equal Opportunity Act passed in 1986. Of the gender-specific job advertisements, an overwhelming majority are exclusively directed at male workers.

Jobs advertised exclusively for women are less likely to request a college education and are much more likely than job advertisements directed only to men to mention marital status, an upper age limit for applicants, and a pleasant appearance. Thus, there are limitations to the jobs to which women may apply and strong indications that the hiring criteria are different for women than for men.

- 4. Although the concept of cultural capital also has received attention in recent sociological research on education, we do not include it in this article, except as it is reflected by social background.
- 5. The South Korean educational system is highly centralized and the expansion of higher education at both public and private institutions has been closely guided by government-set enrollment-quota policies. The main periods of expansion of higher education can be typified as follows: the noninterference policy of 1945–60, the restricted-expansion policy of 1961–72, the partial-expansion policy of 1973–80, the rapid-expansion policy of 1981–85, and the partial-expansion policy since 1985 (Cheng 1993; Choi 1989).
- 6. The admissions process for higher education in South Korea has undergone several changes over the years in accordance with the government's enrollment-quota policy for higher education. During the period 1968–80, the admissions process was based on two-stage entrance examinations: the nationwide preliminary test that determined one's eligibility to apply to a university and the university-specific entrance test given by the school of one's choice. In 1980, as a way of widening access to higher education, the preliminary

entrance examination was changed to a standardized entrance examination and the school-specific entrance examination was abolished. But since 1985, there have been recurring changes in the nature and format of this standardized test. Throughout, the scores on the preliminary test (or, in a later period, the standardized test) have been a decisive factor in defining the university-choice set for university applicants.

- 7. Of the total sample of 468 men, about 13 percent started work only after they completed their graduate education. This group was excluded from our analyses. Overall, 23.5 percent of the men in the sample had obtained either master's or doctoral degrees by the time of the survey.
- 8. Since we analyzed labor market outcome in terms of the size of firms, we included only paid employees. Thus, we excluded seven men who reported being self-employed.
- 9. An alternative measure of general ability may be the GPA. However, we strived to measure human capital across all individuals, regardless of the university they attended. GPA is not a good measure for this purpose because it is specific to the context of particular universities.
- 10. Chung (1991) reported that the earnings differential for firms of different sizes became even wider in the late 1980s, increasing particularly for production workers as a result of the large-scale labor movement in 1987 but increasing for white-collar workers as well. Chung also indicated that the returns to education increased for both groups in large firms more than in small firms.

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