Institutional Embeddedness in Japanese Labor Markets

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Recent sociological arguments about labor markets have emphasized the embeddedness of labor market transactions in social relations (Granovetter 1985; Granovetter and Swedberg 1992). One such transaction is the matching of people to jobs. An extensive literature addresses the question of whether the social status and income of the jobs people enter is affected by who helped them find those jobs. Sociologists have paid particular attention to whether the type of social tie ("strong" or "weak") between a job-searcher and a contact person affects the sort of job a person obtains (Boxman, DeGraaf, and Flap 1991; Lin, Ensel, and Vaughn 1981; Lin 1990; Marsden and Hurlbert 1988).

Despite the utility of this sociological emphasis on how an individual's interpersonal context affects his or her job search, the approach has serious limitations. First, perhaps reflecting the individualistic legacy of early status attainment research in the United States, social institutions are not much in evidence in the sociological job-search literature. This spawns two unfortunate consequences. For one thing, little attention is paid to how individuals get jobs through the institutions, such as schools, labor unions, and apprenticeship programs, with which they are affiliated. As we will argue in this chapter, ties between employers and these types of institutions deserve to be placed in theoretical juxtaposition with the social ties between individuals. Moreover, the converse of individual job-search strategies—employers' recruitment strategies—are too often overlooked in sociological studies. If job-movers' actions are affected by their interpersonal and institutional contexts, then certainly employers' actions are as well. The interests and resources of both job-seekers and employers must be taken into account theoretically because individuals are matched into jobs (Granovetter 1981).

The second limitation of the sociological emphasis on labor market outcomes for an individual who does or does not use interpersonal ties to find a job is that the use of such ties is not typically seen as a variable that is dependent on cultural and historical circumstances. In this chapter, we argue for a broader research agenda that asks the macrosociological question of what gives rise to an environment where interpersonal ties predominate over institutional ties, or vice versa. Alternatively, one might ask what determines an environment in which either of these ties predominates over a more atomistic job market in which people search on their own without the benefit of ties. What kind of embeddedness is dominant for which individuals and in what kinds of labor markets? How and why does the prevalence of one type of embeddedness in an economy wane in favor of another type?

It is unfortunate that there has been so little research focusing on variations in
types of embeddedness over time or across different cultural contexts, for such an effort promises to be of considerable theoretical and practical importance. Answers to such questions as we have posed can facilitate the understanding of the implications of various types of embeddedness for social inequality, particularly among ascriptive groups such as those demarcated by socioeconomic background, ethnicity, or gender. There are also implications for our assessment of how efficiently or inefficiently labor is allocated among employers in a given society.

In this chapter, we limit ourselves to the labor market for youth who are standing at the brink of leaving one institutional setting—school—to enter another—the labor market. Recent educational debates in the United States have raised the issue of whether cooperation between high schools and employers can facilitate the transition to work and thereby lower youth unemployment and job turnover rates (Rosenbaum and Kariya 1989a, 1989b). While these debates have not phrased the issue in such terms, this is a prime example of what we here term "institutional embeddedness." Understanding the circumstances under which institutional ties between schools and firms can be fostered and maintained, and understanding who benefits and who loses, is important for both theoretical and policy reasons.

We first specify several ideal-typical job-search patterns and then generate some initial hypotheses about where and when they may predominate. Then we turn to an analysis of a specific cultural setting. While we recognize that a more complete treatment of the subject would involve comparative research on labor markets over time and across cultures, such an empirical endeavor is beyond the scope of a single chapter. We have chosen instead to look at the case of one country: Japan.

Japan is a particularly important case because it exhibits a high degree of embeddedness of various types of markets in social and institutional relations (Dore 1983, 1986, 1987; Gerlach 1992; Murakami and Rohlen 1992). The labor market is no exception. Job-search processes in some labor markets in Japan (notably the labor market for new graduates) exhibit a high degree of institutional embeddedness, which makes the choice of Japanese society particularly relevant for our purpose of bringing institutions back into the analysis of job-search processes. Labor economists and sociologists have carried out extensive analyses of Japanese labor markets and of aspects of Japan's so-called permanent employment system, and they frequently mention the traditional preference of large firms in particular for hiring graduates straight out of school (Clark 1979; Cole 1979; Dore 1976; Inui 1993; Koike 1984, 1987a). But there has been little analysis of how the recruitment of new graduates occurs and how schools and firms coordinate their placement and recruitment activities to create an orderly and highly embedded youth labor market.

We use cohort data to look at embeddedness patterns for different Japanese youth labor markets (university graduates and high school graduates) both at present and historically. We then turn to historical and contemporary qualitative data to explore in more detail how and why what we term institutional embeddedness and its successor, semi-institutional embeddedness, has evolved. This gives rise to some concluding thoughts on the stability or fragility of institutional embeddedness.

**TYPES OF EMBEDDEDNESS AND THEIR OCCURRENCE**

One can think of three ideal-typical job-search (or labor recruitment) patterns:

**Atomistic Job Search**

In this case, individual buyers and sellers (employers and job applicants) conduct their search based on information provided in the market at large. This includes newspaper advertisements and other mechanisms of distributing and acquiring information about job opportunities that do not involve an intermediary, whether a person or an organization. Individuals apply directly to employers, sending out their résumés or making "cold calls." As Granovetter and others have shown, this is a highly refined conception of job searching, even in the United States where one might expect greater atomism than in many other countries.

**Social Embeddedness, or Job Search Through Interpersonal Ties**

Here, the transaction between individual buyers and sellers of labor is mediated by a third party (an individual). The intermediary may provide information about available jobs or an introduction to his or her employer. There are two variants of social embeddedness, strong and weak ties, that is, friends or kin, and "friends of friends," respectively (Granovetter 1973, 1995). When the individual's match with an employer is contingent on either a strong or a weak tie it is said to be socially embedded. In other words, "who you know" is important.

**Institutional Embeddedness, or Job Search Through Institutional Ties**

Here, individual buyers and sellers are introduced through organizations to which they belong. This type of embeddedness diverges from the social embeddedness in that it is not "who you know" but "how you know who you know." The individual's job match is contingent upon his or her being part of a particular organization (a labor union or an apprenticeship program, for example), therefore the reputation of that organization as a supplier of good-quality labor is important. In the case of Japan, for new graduates initially entering the labor market, the institution of the school often plays an important role. For instance, linkages between high schools and employers in Japan are salient for workbound graduates; if a school has links with local employers, it can recommend or in effect "sponsor" students looking for their first full-time jobs (Rosenbaum and Kariya 1989a, 1989b; Rosenbaum et al. 1990).

Both social and institutional embeddedness involve an intermediary between the job seeker and the employer. In the case of social embeddedness, the intermediary is a person who knows or is connected to both the searcher and the employer. In the case of institutional embeddedness, the job seeker belongs to an organization that has a tie with an employer. We use the term "institutional ties" rather than "organizational ties" because we mean to signify ties between
two different types of social institutions, between schools and firms, for example, or between labor unions and firms, or apprenticeship programs and firms. Within the category of "school" as an institution, different schools may be called different organizations, just as within the category of "firm," different businesses are called different organizations. But our concern here is with the flow of individuals (job-seekers) between different types of social institutions with different purposes. Our fundamental question is: Under what circumstances are social embeddedness or institutional embeddedness likely to predominate as a recruitment pattern?

Employers' and Schools' Interests

Let us first consider the demand side of the labor market. Both social and institutional embeddedness increase the information available to employers about job candidates above and beyond what individuals themselves offer in an "atomistic" job market, where individuals reply directly to job advertisements without using an intermediary (Arrow 1973; Granovetter 1995; Rees 1966). It is therefore easy to see why embeddedness per se would be useful to employers. Information should be particularly valuable to employers who: a) are going to make sizable investments in employees (by paying high starting wages or by placing them in firm-internal labor markets, starting them out at low initial wages and offering on-the-job training and job security), and/or b) are entrusting employees with valuable information or materials. Such employers should be more motivated to pay attention to signals than employers who are hiring workers for unskilled or low-skilled jobs, or for jobs in which there is little necessity for trust and few opportunities for serious and costly malfeasance. The latter type of employer should be less concerned about carefully screening employees since the costs incurred by a hiring mistake are lower than for the former type of employer.

We can hypothesize, then, that employers who are hiring for high-skill or high-trust jobs can benefit from the information or informal guarantee provided by an intermediary, whether through social or institutional embeddedness. (See the paper by Frank in this volume for a discussion of highly leveraged jobs in advanced capitalist economies.) Of course, employers at the other end of the spectrum who are hiring for unskilled or low-skilled jobs with short or nonexistent promotional ladders can also benefit from as much information as they can get about potential employees. But because their investment in employees is not very high, we can hypothesize that they will be less willing to incur the transaction costs, if any, of establishing a relationship with a school (as a supplier of labor) and will therefore rely more on recommendations derived from personal ties (for example, from friends or kin of a current employee) than on ties with schools or vocational programs.

In terms of labor supply, why should friends, family, or institutions such as schools get involved in trying to help people find jobs? Individuals may have a variety of motives, ranging from the altruistic to the more instrumental tit for tat. But why should educational institutions care where their students land jobs? Obviouosly, some schools do not; their reputation does not rest on it. If a school principally bases its reputation on the somewhat intangible offer of a "good education," it is unlikely that it will seek either a formal or informal commitment from firms to hire its graduates, who will be left to their own devices in the labor market. But whenever a school bases its reputation at least in part on its ability to place graduates in good jobs, we should be more likely to see the emergence of explicit or implicit agreements to engage in labor market transactions with specific firms. The reputational factor will be strongest for schools that must actively recruit applicants, that is, in settings where potential students and their parents can weigh the advantages of choosing one school over another. As we discuss later, this condition is met by Japanese high schools and universities.

The impetus for institutional ties could come from the employer side as well, with school placement officers cooperating with the employers to the degree that they see such cooperation reflecting well on their own reputations or that of their school. But the thrust of our argument about institutional embeddedness is that both sides—employers and schools—must gain more than they lose from such arrangements in order for them to persist. For employers, the main currency is quality of labor; for schools, the main currency is reputation. To the extent that neither of these matters, we should expect to see little evidence of institutional ties between schools and firms.

We can summarize our hypotheses about labor market variation in the prevalence of atomistic labor transactions, social embeddedness, and institutional embeddedness as follows: 1) Social embeddedness will be more common in most labor markets than atomistic labor transactions. This is so because on the labor-supply side there are various reasons for individuals to try to help each other, and on the labor-demand side employers can gain extra information and save on screening costs by following up on personal introductions. 2) Institutional embeddedness will be more common in contexts where employers seek high-quality labor in which they will make a significant future investment and where schools' reputations are based on placing graduates into good jobs. It will be less common in contexts where these conditions are not met. In those contexts, social embeddedness will be more common.

Ideology and Legitimacy: The Public's Interest in Meritocracy

The previously stated hypotheses are based on the perceived interests of schools and employers; to get this far, a rational action perspective is sufficient theoretically. But this does not mean that theoretical considerations concerning ideology and legitimacy play no role. Employers' and schools' interests are not the only ones that matter in job-search and recruitment processes; the public's interest is also a factor. Here, the contributions of the new institutionalist perspective on organizations come into play as well, for issues of legitimacy are central (Meyer and Rowan 1977). In countries that are democratic and have a strong meritocratic ideology, complaints about social embeddedness and institutional embeddedness are likely to arise. Nepotism is the most obvious form of social embeddedness, but institutional embeddedness may also be visible and perceived as unfair if schools openly admit students on criteria that are considered non-meritocratic—on the basis of nepotism, social class, ability to pay, and so forth. In such cases, connections between schools and employers may be seen as reinforcing social inequalities that are reproduced by the nature of school admissions requirements. Of course, for non-meritocratic criteria to be criticized they must indeed be highly visible to the public and there must be a dominant ideology of
meritocracy in the society. Where social or institutional embeddedness is evident to members of society who have no presence in powerful social networks, and where popular and political pressure can be brought to construct legal rules or informal norms to monitor particularism in recruitment, then social and institutional embeddedness are at risk of becoming extinct.

As an example, the near-eradication of social embeddedness in the form of "old-boy" networks has occurred in some professional and elite labor markets in the United States. These labor markets arguably changed as a result of the legal environment, including affirmative action rules, equal employment opportunity guidelines, and requirements that jobs be widely posted and advertised. Successful sanctions against such old-boy networks may lead to one of two outcomes: a more atomistic labor market or institutional embeddedness that is perceived to be meritocratic.

Institutional embeddedness, such as an implicit contract between schools and employers, is subject to much less criticism than social ties if school entrance requirements are meritocratic (or are at least judged by the public to be so). Therefore, institutional embeddedness is likely to be more acceptable than social embeddedness in a social and political environment where meritocratic standards are highly valued, and where such standards are institutionalized in school entrance requirements. But empirically, we can still predict that institutional embeddedness is quite rare because of the necessary alignment of schools' and employers' interests that is required to support it.

To summarize, social and political pressures for meritocracy lead to the following predictions about temporal change in embeddedness patterns in a given society: 3) To the extent that a) social and institutional embeddedness patterns are visible to nonbeneficiaries of them and b) an ideology of meritocracy is so strong that attempts to monitor these forms of particularism receive legal or normative support, they will tend to decline over time (with the caveat in proposition 4, below). The decline of social embeddedness should be particularly evident at the higher, "elite" end of the labor market (again, if it is visible to nonparticipants) where the potential rewards at stake (such as social status and salary) are high and are visibly contested. 4) Institutional embeddedness will be perceived as less onerous by the public to the extent that schools are considered to be meritocratic in their admissions standards. In this case, institutional embeddedness may persist and even increase (ceteris paribus) at the high end of the labor market, where employers strongly desire the information provided by embeddedness.

We now turn to the Japanese case to test the predictions we have drawn. Japan provides a good setting in which to explore embeddedness patterns because previous research has shown that many types of transactions tend to be highly embedded in the Japanese context (Dore 1983, 1986, 1987; Gerlach 1992; Murakami and Rohlen 1992; Sako 1991, 1992). The use of intermediaries is common, and Japan is considered by many scholars to be a strong instance of a "network society," in which there are more extensive ties of obligation among individuals and among organizations than in most Western societies. It is therefore a rich environment for testing predictions about what gives rise to different types of embeddedness. Moreover, by examining whether there are variations among different labor markets in Japan, we can begin to separate out the driving forces of culture and structure. In other words, in response to our arguments about embeddedness based on the interests of employers, schools, and the public, one might counter that cultural values are a more important determinant of embeddedness patterns. For instance, a simple counterargument could be framed to the effect that American society has a combination of atomistic and social embeddedness patterns because of its emphasis on individualism, and Japanese society has a combination of social and institutional embeddedness patterns because of its collectivistic emphasis. This predicted contrast springs to mind quite naturally from the "nibunjinron" (or "Japanese uniqueness") literature (see Nakan 1980). If culture supersedes structure as the dominant explanation, then the variations among different types of labor markets within Japan should be minimal.

We approach the analysis of the embeddedness of job-search and recruitment processes in Japan employing three methodologies. First, we use data on the educational and work histories of a large sample of Japanese men aged twenty-five to sixty-nine to test our predictions of how graduates were recruited into different types of jobs as they left school. Second, we use historical materials on the development of the educational system and the labor market in twentieth-century Japan to examine how job-search/recruitment patterns have changed over time. Third, we use qualitative data to consider recent changes in the recruitment of university graduates. The latter two strategies allow us to consider the importance of meritocracy and school reputation, both of which are impossible to study through analysis of individual-level survey data.

EMBEDDEDNESS IN JAPANESE LABOR MARKETS: AN EXAMINATION WITH COHORT DATA

To look at historical changes in embeddedness patterns as well as differences across labor markets we use data from the "1981 Survey on Occupational Mobility and History" conducted by the Japan Institute of Labor. The survey asked 4,255 Japanese males aged twenty-five to sixty-nine about their work history, including how they found their first job out of school. This question was worded, "Through what path did you enter your first workplace?" We report on the 3,244 men who specified the job-search method that was successful, excluding those who were self-employed in their first job (the latter were not asked by the survey to specify their job-search method). We define social embeddedness as finding one's first job through family, friends, or acquaintances. Institutional embeddedness is equivalent to finding one's first job through an introduction from one's school. We classify other routes (such as using an employment agency or responding to an advertisement) as nonembedded or atomistic modes of job search because they involve neither social nor institutional ties.

We use the respondents' educational attainment as a proxy for high-quality labor. A second indicator of the high end of the job market is the size of the firm. Large Japanese firms are more able financially than small firms to offer "permanent employment" to a select number of male high school and university graduates, placing them in entry-level jobs in internal labor markets and investing heavily in them through on-the-job training and job rotation (Brinton 1991, 1993; Clark 1979; Cole 1979; Koike 1984, 1987a, 1987b). Because these generally have been considered by graduates to be the most desirable jobs in the economy, high schools and universities that are able to place a high percentage of their graduates into large firms can use this as a successful advertising strategy to lure talented prospective students into applying to them. This creates a self-
reinforcing cycle in which good students apply to those schools that are able to place their graduates in the "best" jobs. This phenomenon is not unlike what happens with elite universities in the United States (again, see Frank in this volume). But for reasons we examine in the historical section of this chapter, this tendency is much more exaggerated in Japan.

**Variation in Embeddedness Across Time**

Figure 8.1 shows the distribution of successful job search methods for nine cohorts of Japanese male school-leavers (irrespective of level of schooling). Members of the oldest cohort, born between 1912 and 1916, entered the labor market in the late 1920s and early 1930s. Members of the youngest cohort entered the labor market forty-five years later. As predicted by our first hypothesis, for every cohort social embeddedness is more common than the atomistic (nonembedded) pattern. In fact, the proportion of graduates who found their first job through neither social nor institutional ties is amazingly low and stable across the nine cohorts, ranging only from 15 percent to 19 percent. This shows how consistently uncommon atomistic job search patterns have been and continue to be in Japan.

Institutional embeddedness has become more prevalent over time, while social embeddedness has declined, the latter having been the method used by 67 per-

![Figure 8.1 Job Search Method by Cohort](image)

The use of institutional ties increased over time for graduates at all levels of schooling, but this was not as pronounced for graduates with university degrees as we predicted it would be. Here again, our historical examination of higher education later in the paper will elucidate why this is the case.

**Variations in Embeddedness Across Labor Markets**

We hypothesized that with all other factors held constant, social embeddedness will be more prevalent than an atomistic job-search pattern because the informa-

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<tr>
<th>Educational Level</th>
<th>Compulsory</th>
<th>High School</th>
<th>University</th>
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<tbody>
<tr>
<td></td>
<td>S</td>
<td>I</td>
<td>NE</td>
</tr>
<tr>
<td>1912-1926</td>
<td>71.5</td>
<td>10.5</td>
<td>18.0</td>
</tr>
<tr>
<td>(N=651)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1927-1941</td>
<td>64.2</td>
<td>22.7</td>
<td>13.3</td>
</tr>
<tr>
<td>(N=1,229)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1942-1956</td>
<td>46.8</td>
<td>42.1</td>
<td>11.2</td>
</tr>
<tr>
<td>(N=1,412)</td>
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</tbody>
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Note: S = Social; I = Institutional; NE = Nonembedded.
tion provided by social embeddedness helps employers in their hiring decisions. We also hypothesized that in labor markets where employers need high-quality or highly trustworthy employees to fill starting positions in internal labor market, and/or schools base their reputation partly on how well they place their graduates into jobs, the prevalence of institutional embeddedness will be high.

Figure 8.2 shows that during the forty-five-year period covered by our data, male educational attainment rose rapidly in Japan. Whereas only 2 percent of the oldest cohort attained a four-year university degree, 34 percent of the youngest cohort did so. Figure 8.3 illustrates the strong relationship between educational attainment and type of job-search method in the sample. The least-educated workers (elementary and junior high school graduates) are more likely than high school and university graduates to have gotten their first job through social ties, whereas the use of institutional ties is more common in the latter two groups than among the least-educated. Supporting our hypothesis about employer demands and school reputation, both high school and university graduates are more likely to be hired through institutional means (recruitment from their school by the firm) than through social ties. (Note that Japanese high schools and universities require applications from potential students, meaning that school reputation is important for schools at these levels but not at the mandatory elementary and junior high school levels.)

Figure 8.2 Educational Attainment by Cohort

To look more closely at the significance of the relationship between educational level and the use of institutional ties, controlling for the cohort composition of the sample, we employ multinomial logit methods and compare the effects of the independent variables on the probability of individuals finding their first job through institutional (school) versus social ties, and the probability of using atomistic methods (nonembeddedness) versus social ties (table 8.2). The results are similar whether we use education as an ordinal variable or as a series of dummy variables. We opted for the latter so that we could also test for interactions between cohorts and educational levels.

Even when cohort and education are entered simultaneously into the equation, both exert a statistically significant positive effect on the probability of Japanese men getting their first job through institutional versus social ties. Men born earlier in the century were significantly less likely than men born more recently to have used school ties rather than social ties when they entered the labor market. Compared to high school graduates (the reference category), elementary and junior high school graduates are significantly less likely to have used school ties than social ties, and university graduates are significantly more likely to have done so, although there is not as strong a contrast between the latter as between graduates at the lower levels of schooling and high school graduates.

The comparison of determinants of nonembeddedness versus social ties shows that cohort is not a strong factor, but that education is. Elementary and junior high school graduates are significantly less likely than high school graduates to have used atomistic methods rather than social ties, and university graduates are
Table 8.2 Determinants of New Graduates' Job-Search Methods

<table>
<thead>
<tr>
<th>Institution Versus Social Ties</th>
<th>Unstructured Versus Social Ties</th>
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</thead>
<tbody>
<tr>
<td><strong>Constant</strong></td>
<td>4.771***</td>
</tr>
<tr>
<td></td>
<td>.790</td>
</tr>
<tr>
<td><strong>Logged age</strong></td>
<td>- 1.281***</td>
</tr>
<tr>
<td></td>
<td>.218</td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td></td>
</tr>
<tr>
<td>Elementary</td>
<td>- 1.064***</td>
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<tr>
<td></td>
<td>.164</td>
</tr>
<tr>
<td>Junior high</td>
<td>- .627***</td>
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<tr>
<td></td>
<td>.106</td>
</tr>
<tr>
<td>High school</td>
<td></td>
</tr>
<tr>
<td>University</td>
<td>3.649*</td>
</tr>
<tr>
<td></td>
<td>1.715</td>
</tr>
<tr>
<td>Maximum likelihood $\chi^2$ = 6185.88</td>
<td></td>
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<tr>
<td>df = 3188</td>
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*Statistically significant at the .05 level.
**Statistically significant at the .01 level.
***Statistically significant at the .001 level.

not statistically distinct from high school graduates. Tests for interaction effects (not shown here) between cohort and education also indicate that recent university graduates are significantly more likely than earlier graduates to use institutional rather than social ties. (As seen in table 8.1, 8 percent more university graduates in the earliest cohort used institutional ties than social ties, compared to a spread of 16 percentage points in the most recent cohort.)

Table 8.3 shows the relationship between entry into a large firm (logged firm size) and job-search methods, controlling for cohort and education. As we predicted, institutional ties are the most likely way in which graduates enter large firms; employers who are going to invest significantly in the "lifetime employment" of workers appear the most apt to recruit in this fashion. Social ties are the least likely channel into large firms, with nonembedded or atomistic channels falling between the two.

In sum, our hypothesis concerning the greater general prevalence of embedded over nonembedded, atomistic methods of job search is accurate. Moreover, successive cohorts have become ever more likely to use institutional rather than social ties. Institutional ties are more prevalent at the high school and university levels than at lower educational levels, where social ties remain the most important. Institutional channels are also the most prevalent mode of entry for school-leavers into large firms.

But a number of puzzles also are raised by the findings from these individual-level data. Perhaps the most interesting are those that concern higher education. This level shows less change than we predicted in our hypotheses. Even though more university graduates report institutional ties as their path into a first job rather than social ties or atomistic search patterns, their use of institutional ties has gone up only slightly over time, and their use of social ties has shown only a slight decline (table 8.1). While the use of institutional ties was considerably more prevalent for university than other graduates in early cohorts, the gaps in

### A HISTORICAL VIEW OF INSTITUTIONAL EMBEDDEDNESS IN JAPANESE LABOR MARKETS

#### Early Industrialization

Institutional embeddedness developed at the upper end of the educational system during the period of Japan's early industrialization. The establishment of compulsory universal education through the elementary level dates back to 1872, four years after the Meiji Restoration abolished the hereditary status system. The university system was initiated with the establishment of the Imperial University in 1886 (from the former Tokyo University, set up in 1877). The university had an entrance examination, but its graduates were exempt from taking the government examination to become bureaucrats, so that institutional embeddedness characterized the government's recruitment of its graduates. According to the "Examination Regulations for Probationary Officers and Apprentices" enacted in 1887, "graduates of the Faculties of Law and Letters, and those earlier schools which had been merged into the Imperial University were allowed to join the government on a probationary basis without the exam" (Amano 1990). This
strong institutional embeddedness was eventually criticized by newly developing private colleges, and the regulations were changed to stipulate that Imperial University graduates were exempt from the "preliminary" parts of the government examination but were required to take the main part. But Tokyo University graduates have continued to be the most heavily recruited into the government, a fact documented in numerous studies by Japanese and Western scholars (see, for example, Azumi 1969; Ishida 1993; James and Benjamin 1988; Koh 1991).

The educational ladder leading to Tokyo Imperial was clearly established by the early twentieth century, with school-specific entrance exams at each level above the compulsory elementary level. Quality differentiation among schools at the same horizontal level developed and crystallized because of the sorting of students by these school-specific entrance exams. James and Benjamin (1988, 15), in describing the system encountered by reformers during the postwar occupation, noted that “the chief characteristic of these high schools and universities was that they were selective, career-oriented in conception, and highly differentiated into different tracks and different curricula.”

In sum, the school system was the result of educational reforms that began in the late nineteenth century and that institutionalized an ideology of merit-based selection for specialized schools geared to particular parts of the labor market. The utilitarian view that an educational credential from a specific school provides a ticket to a job with a good employer appears to have been firmly established early in the twentieth century. Scholars generally agree that Japanese educational expansion and the competition to enter prestigious schools, especially at the university level, has historically been closely tied to the development of the labor market and the demand for qualified workers (Brinton 1993; James and Benjamin 1988; Nakata and Mosk 1987). That is, the public has been keenly aware that the probability of getting a “good job” increases if one gains admission to a top university.

Institutional embeddedness appears not only to have characterized the recruitment relationship between Tokyo Imperial University and the civil service in the early twentieth century but to have developed between other universities and the private sector and to have existed at the secondary vocational level as well. With the growth of private industry, relationships between universities and employers began to be established by the end of the century’s second decade. From 1917 on, many firms and banks adopted “regular hiring practices” (teiki satyō) for college graduates, meaning that employers hired new graduates on a regularly scheduled, yearly basis (Ozaki 1980). Based on these hiring practices, colleges began recommending graduates to employers and relationships between employers and colleges became closer. Connections between vocational secondary schools and local employers also developed, with vocational schools feeding graduates to certain employers in local labor markets on a regular basis.

Postwar Japan

Post–World War II educational reforms consolidated the Japanese school system into a 6–3–3–4 pattern in the American mold, with compulsory education extending through the junior high school level. It was originally intended that high schools would be comprehensive and provide both vocational and academic tracks, but in practice high schools have become highly differentiated to the point where each school district has several high schools and each school represents a particular track, accepting students of a specified academic ranking (Rohlen 1984). This is a significant departure from the American system. Reputational factors are highly significant in such an “educational marketplace,” where high schools essentially compete for student applicants, who are admitted or rejected on the basis of their junior high school grades and their score on the standardized prefectural high school entrance examination.

Recent research indicates that the recruitment of Japanese high school graduates into the labor market is typified by institutional embeddedness (Rosenbaum and Kariya 1989a). Some high schools and employers create and maintain long-term relationships that involve the school’s recommendation of job candidates to specific employers and the employers’ probable acceptance of these candidates. In this implicitly contractual situation, schools essentially pay for part of employers’ hiring costs by screening and choosing applicants, and these employers provide a market for the school’s top graduates. Labor allocation and job matching is therefore accomplished in a manner different from either the “pure” atomized market mechanism of individual job search or the highly socially embedded mechanism of introductions through friends or “friends of friends.” Job turnover and unemployment rates among Japanese youth are low relative to the rates in most industrialized nations, suggesting the efficiency of these job-matching processes (Rosenbaum and Kariya 1989a).

More research is required to understand the nature and extensiveness of the institutional relationships between Japanese high schools and employers and the origins of this pattern. The newly established general high schools in the postwar period that had a large number of workbound students appear to have adopted the prewar vocational school practice of providing placement services to help students find jobs and to have developed their own placement offices. Moreover, the Ministry of Labor encouraged the strong involvement by junior high schools and high schools in job placement, both as a means of efficient labor allocation and as a way of protecting teenagers from exploitation by labor brokers, which had been a common problem in industrializing Japan in the early part of the twentieth century. Many schools also developed ties with particular employers; Rosenbaum and Kariya (1989a) report that nearly one-half of all graduating workbound seniors in their sample of high schools in the early 1980s took jobs with “contract employers,” employers with whom their schools had an implicit contract to supply good graduates every year. Higher-ranked schools show a larger percentage of their graduates employed by contract employers than lower-ranked ones. This is consistent with our supposition of a relationship between school reputation and the use of institutional ties. The increased use of institutional ties by recent cohorts of Japanese high school graduates (as shown in table 8.1) is consistent with the fact that to our knowledge, the Japanese public has not voiced criticism of high school–employer linkages. The high school application procedure is highly structured in Japan, with third-year junior high school students taking practice tests and receiving extensive guidance as to which high school to apply to (LeTendre 1996). The public’s belief in the meritocratic nature
of high school admissions practices appears to be high. But public evaluation of university-firm connections is somewhat different, and the recent history of firms’ recruitment practices among university graduates sheds light on why institutional embeddedness has shown only a moderate historical increase there.

Institutional Embeddedness in the Labor Market for University Graduates

Throughout most of the postwar period up until the late 1970s, Japanese universities were heavily involved in selecting and recommending their graduates to employers. Most large Japanese companies formally restricted the "port of entry" into white-collar positions—the assumed stepping-stones to future managerial positions—to graduates from a handful of elite universities. They did this by sending job application forms only to their preferred institutions and requiring those institutions to recommend particular graduating seniors. Job-seekers from other universities could not even apply to these large companies because the companies accepted only those application forms with certain universities' recommendations attached. This practice, called shitei kōei (system of reserved schools), was similar to the current practice Japanese employers follow in recruiting from high schools; it is truly institutional embeddedness. As Azumi (1969, 56) observed in a detailed study published in the late 1960s that looked at higher education and recruitment in Japan:

There is relatively little the Japanese applicant can do on his own in the recruitment process. Even when his university is designated by a desirable company, he himself is not automatically assured of consideration. It is the university that decides whether he deserves to be allowed to apply, for the student, in a sense, represents the university, and the university must make sure that he is a worthy representative.

A survey carried out by the Nihon Keieisha Dantai Renmei in 1957 found that 84 percent of firms recruited students by recommendations from a subset of universities. Of these, fully 90 percent relied on school placement office recommendations, either alone or in conjunction with recommendations from individual professors. A similar 1968 survey found that 62 percent of all firms reported hiring only from "restricted" universities; this figure climbed to 91 percent for firms with over 5,000 employees (Tokyo Shoko Kaigisho 1968, cited in Ogata 1975). And in a 1975 study, 35 percent of firms sampled from the first rank of companies listed on the Tokyo stock exchange used a "closed door" policy for managerial and clerical jobs for university graduates, and 47 percent did so for engineering and technical jobs (Keizai Doyukai 1975). As a student from a "second class" university reported in 1976: "I telephoned the personnel office of a firm I was interested in. But as soon as I told the person the name of my university, he hung up suddenly on me without listening to anything I had to say" (Nobi Nobi, January 1976: 19).

By the late 1970s, the "closed door" system of hiring university graduates came under harsh attack by Japanese social critics and the mass media. Some people felt that it was unfair for students to be "rejected at the front door" (monzen burai) and prevented from even applying for a job simply because they had attended less prestigious universities (Ogata 1975). Critics also charged that institutional embeddedness reinforced the "examination hell" (jiken jigoku) endured by Japanese high school students in their struggle to enter top universities. With top firms recruiting only from certain universities and refusing to cast a wider net, the pressure on male high school seniors to pass the exam to gain admittance to a top university was excruciating. Finally, the criticism arose that academic performance, as measured by university entrance exams, did not necessarily reflect the skills needed in the workplace. The charge that entrance examinations did not measure skills relevant to job productivity constitutes a challenge to the university admissions criteria, which is similar to the condition we mentioned in proposition 4 that could lead to sanctions against institutional embeddedness.

The Japanese Labor Ministry responded to these criticisms in 1979 by establishing the Supervising Committee on Recruitment to monitor school and employer compliance with the shibukou kyōtei (recruitment contract) put forward by the ministry in 1953 to govern recruitment practices. Members of this committee are drawn from large firms and are generally members of Nikkeiren, one of the main employers' associations in Japan. The shibukou kyōtei specifies a date before which in any given year employers are not allowed to make contact with graduating students seeking a job. It is a gentlemen's agreement that does not involve legal sanctions for offenders, but both companies and universities promise not to begin recruitment activities prior to the agreed-upon date. It was established to level the playing field for recruitment. (See Roth and Xing 1994 for a discussion of such agreements in American labor markets.) The supervising committee established in the late 1970s threatened firms with a normative sanction—to announce their names in public if they violated the shibukou kyōtei by initiating recruitment activities too early.

Firms responded to the criticisms by accepting applications from students from any university after the mandated date marking the start of the recruitment season. An analysis of reports from graduates of one private university in Tokyo (which we later refer to as University D) about their job-hunting experiences suggests that universities had indeed become less formally involved in the recruitment process by the early 1980s (Kariya et al. 1993). In 1975, about one-third of the graduates mentioned the necessity or importance of a recommendation from the university, but the percentage dropped to zero by 1980 and then fluctuated between zero and 5 percent through 1990. Thus, as reflected in the students' own reports, school recommendations no longer play an important role in acquiring a first job.

Based on this brief historical review, we can say that the labor market for university graduates in Japan is a case where institutional embeddedness has been subjected to sanctions and has given way to a more atomistic recruitment pattern. The transparent answer would seem to be yes, which would mean that public criticism and government-promoted sanctions brought an end to a seemingly deeply embedded recruitment pattern. But as was demonstrated earlier, institutionally-based recruitment remains more prevalent than other types of labor recruitment at the university level and has even increased slightly over the mid- to late twentieth century. At the same time, university graduates' use of
social ties to get their first job has decreased only slightly. What is going on? Why have these patterns persisted and why has there not been a shift toward the more positively sanctioned atomistic recruitment pattern? What happened once firms’ explicit closed-door policy apparently succumbed to their critics? Did universities continue to send their graduates to certain firms? If so, how did this occur?

Patterns of Hiring University Graduates, 1975 to 1990

To see whether there was indeed continuity in employers’ recruitment of graduates from certain universities even after sanctions against explicit institutional ties were introduced, we used published information from the annual “Survey on Entry into Firms from Universities and Colleges” (Daigakubetsu shakaihukuri) conducted by the private research organization Recruit, to construct a data set that enabled us to trace the placement of university graduates over the years 1975 to 1990. We selected four prestigious private universities and two national universities (the latter are by definition prestigious) in the Tokyo metropolitan area, and traced the placement of their alumni who had majored in business-related fields (economics, business, and management) for the sixteen-year period beginning in 1975. Having restricted the labor-supplying institutions to a manageable number, we restricted the demand-side to companies in the financial sector (banks, securities, and securities firms), where a high proportion of business-related majors are hired each year. We then counted the number of graduates from the selected universities hired each year by every company in the financial sector. We also identified several firms as being particularly sought after by alumni and considered them separately.

To measure the continuity of recruitment by financial institutions from our 1975 sample, we constructed five measures for each university: 1) the average number of graduates hired per firm; 2) the average number of graduates hired per firm in the continuous set (excluding those from “discontinuous” firms); 3) the average number of graduates hired in the continuous set; 4) the average number of graduates hired in the subsample of firms that hire at least one graduate from that university for more than half of the sixteen years under study ( “continuous firms”); 5) the average number of graduates hired in the subsample of highly desirable firms that qualify as continuous ones; and 6) the average number of graduates hired in the subsample of highly desirable firms that qualify as continuous ones. These were measured for each university in the continuous set (excluding those from “discontinuous” firms).

Our results show that in nearly every year during the 1975 to 1990 period the average number of graduates from a given university hired by a continuous firm was greater than the average number of hires per firm across all firms or the average number per discontinuous firm. (The lowest figure was for discontinuous firms.) In other words, employers who hire year after year from a university are hiring larger numbers of its graduates than are other employers. There is therefore considerable continuity in the recruiting relationship between particular prestigious universities and employers. Moreover, the difference between the number of graduates hired yearly from each university by continuous and discontinuous firms did not decline in the 1980s, as we would have expected following the demise of the restrictive closed-door policy. The number of students hired from continuous firms appears to have declined at the end of the 1970s and then recovered by the early to mid-1980s.

If firms’ recruitment of students from particular Japanese universities had become a “one-shot transaction” and neither universities nor firms cared whether firms were repeatedly hiring from the same universities, it is unlikely (though not impossible) that we would have observed a significant difference between the behavior of continuos and discontinuous firms, nor a difference between these firms within the most desirable subset. Since the prestige rankings of the six universities are very close, it is difficult to explain the observed university-firm pairings solely on the basis of the greater desirability of one university’s graduates over another. Given that explicit institutional ties declined, what mechanisms produced the patterns we found?

Obviously, the mere numbers of graduates hired by particular firms cannot give us information about the mechanisms behind the phenomenon. There is continuity over time, but this could conceivably be produced by any of the job-search/recruitment patterns discussed in this chapter: atomistic, social, or institutional tie. Yet the cohort data examined earlier demonstrates that the use of social ties by university graduates has declined only slightly, while the use of institutional ties has shown a slight increase. We turn now to the qualitative evidence that suggests that a hybrid pattern somewhere between social and institutional embeddedness has emerged. While we cannot definitively prove that this explains the cohort job-search patterns among university graduates, it is highly consistent with them, as well as with our theoretical arguments concerning the increased negative sanctions on university-employer relationships.

Alumni-Student Relations as Semi-Institutional Networks: Qualitative Evidence

In response to the criticism against the closed-door policy of hiring graduates only from certain universities, Japanese universities and employers appear to have devised an alternative that functions like the system of mandatory and exclusive university recommendation letters. We designate this reversion of an institutional embeddedness pattern in new garb as a “semi-institutional” pattern.

Our qualitative evidence consists of university graduates’ reports of their initial job-search experiences. These reports were collected each year by the placement offices of our six sampled universities. What the reports show is that alumni-student relations have taken on new significance since the late 1970s and have created bridges between universities and employers. Information from the student placement office at University D, for example, indicates that the proportion of graduates who discussed in their job-search reports the necessity of a school recommendation decreased from 35 percent in 1975 to zero in 1980 (figure 8.4). Instead, students in the late 1970s and early 1980s increasingly mention the importance of contacts with alumni. In 1975, about 40 percent of graduates referred to their relations with alumni in their reports, but this number had increased to over 60 percent by 1980 and reached a remarkable 80 percent in 1981.

Documents from university placement offices also indicate that in the early 1980s visits to alumni became an integral part of students’ job-hunting activities. It is not unusual, of course, for alumni to convey information about jobs and firms to current students. In many countries, alumni networks play a role in transmitting information about jobs and/or job-seekers (Dina 1988) and may
have some influence on hiring decisions.44 Old-boy networks exist not only in Japan but in the United States, the United Kingdom, and other industrial societies. But while old-boy networks are viewed negatively and are often hidden from view in the United States, Japanese universities are actively involved in maintaining and publicizing such networks. University placement offices keep lists of the current positions, firms, addresses, and phone numbers of alumni for the use of job-seeking seniors. Thus, while meeting alumni is partly informal, it has a semi-institutional aspect because university placement offices are actively involved. As a male graduate from University D reported in the early 1980s, "In September, the placement office becomes crowded with seniors who struggle to get a list of alumni in order to make contact with them."

Firms are also actively involved in using alumni-student relations for recruitment. With the establishment of the Supervising Committee on Recruitment in 1979, it became risky for companies' personnel offices to formally approach university students before the set date. In order to get around this restriction, companies began to use employees who were alumni of certain universities as contact persons for job-seeking seniors from those universities. In this way, both universities and employers distorted the intention of the shibukoku kyōtei by shifting to a recruitment style that was superficially based on personal networks but was in essence semi-institutional, involving young alumni as informal recruitment agents for the firm.45

A distinctive feature of the Japanese use of alumni in job-search and recruitment is that many large firms choose young employees with less than ten years of work experience in the firm to act as rikuruuta (recruiters). While these employees are not personnel officers per se, they are expected to make contact with job-seeking seniors from their universities. This differs from an old-boy network in that these young alumni derive their power from the company rather than from their own personal prestige or status. It is this characteristic, plus the university placement office's involvement, that leads us to think of this system as semi-institutional embeddedness rather than as social (personal) embeddedness, for it represents an active attempt by schools and firms to remain informally linked to each other. According to a survey of about one thousand Japanese university seniors, 76 percent of the alumni students met during their 1993 job search had five or fewer years of experience in their firms (Kariya et al. 1994). Seventy-two percent of the survey respondents met at least one alumnus during their job search; on average, each student met 11.2 alumni. Among students whose meeting with an alumnus led to a job offer, about 30 percent reported that the meeting seemed to be the first stage of screening, and over 70 percent said that they talked "extensively" about jobs at that meeting.

Young informal recruiters are generally required to report their impressions or evaluations of job-seekers to their firm's personnel office, and some firms actually give them authority to screen candidates. Graduates frequently mention this alumnus role in the selection process: One 1980 male graduate said, "I was told by a personnel officer in a company to meet some of the younger employees, so I did. Afterwards, I realized that they evaluated me and reported it to the personnel office." Another male graduate that year reported, "Visiting alumni was somehow advantageous. One of the young alumni I met turned out to be an interviewer during my job interview at the company." According to a 1981 male graduate, "It is not unusual that a rikuruuta's evaluation leads to hiring." And a 1983 male graduate advised, "You should visit OBs [old boys].46 Those visits will qualify you to go forward to official job interviews.

Meetings between young employees and job-seeking students are usually initiated by students' phone calls, but in the case of top-ranking universities, alumni visit the campus to initiate contact. Students meet alumni whom they have not met before but whose names they may have seen in the university's placement office list. In general, meetings occur outside the firm, in a coffee shop or restaurant. According to our analyses of graduates' reports, alumni sometimes give hints about hiring practices to students and provide information about their firms' shortcomings and problems. Thus, alumni play an informal role that personnel offices are unlikely to do.

In sum, alumni-student relationships in the Japanese university case can be termed "semi-institutional" because university alumni are explicitly acting as agents for their firms. This activity is formalized to the extent that universities actively maintain alumni lists and that these alumni come to campus to meet students. Yet it is an informal process, one imbued with ambiguity in the sense that it is not always clear to students what role these alumni play in screening prospective employees or in making hiring decisions and in the sense that alumni may occasionally offer a frank assessment of their companies' problems to potential applicants. We believe that the subtle changes in the job-search patterns at the university level that we observed in the individual-level data—a gradual increase in institutional embeddedness and only a slight decrease in social embeddedness—reflect the complexity of the underlying shifts over time between explicit, formal institutional methods of recruitment and less formal, semi-institutional ones.
CONCLUSION

In this chapter, we have raised the macrosociological question of why patterns of job-search embeddedness may vary across labor markets and across time. We specified institutional embeddedness (ties between institutions, such as between schools and firms) in addition to the often-analyzed social embeddedness (ties between individuals) and the identified atomic labor market. Referrals received by employers from social ties or institutions are useful in making hiring decisions because they provide additional information about job applicants. But such ties can also be publicly criticized if they are perceived to lead to decisions that unfairly privilege some applicants over others. We argue that this criticism is most likely to occur at the upper end of the labor market, where particularism matters most in terms of unfairly allocating prestige and income to those who are “well-connected.” For this reason, there are counterpressures that affect social and institutional embeddedness. While their benefit to employers suggests that they will be a dominant feature of labor markets, their susceptibility to attack by proponents of fairness suggests that they will decline over time. Complicating the picture, institutional embeddedness requires that both participating institutions benefit from an arrangement or it will cease to exist. In the case of the labor market for entry-level graduates, the employer’s supply-side counterpart is the school. We argue that institutional ties between schools and employers are only feasible when school reputation depends heavily on the successful placement of its graduates and when employers are hiring for jobs for which they need all the help they can get in screening for good applicants. Otherwise, schools and employers presumably have little incentive to cooperate with each other, either in an aboveboard (institutional) or other (what we have called a semi-institutional) fashion.

Japanese society served as the setting for testing our hypotheses. We looked at the micro level—graduates’ job-search patterns—and the macro historical level—the development of the secondary and higher educational system and its relationship to employers. A range of data sources indicate that institutional embeddedness is important at both the high school and university levels in Japan; educational institutions at these levels have established and maintained relationships with specific employers, and substantial proportions of graduates report that they found their first job through a school introduction. We argue that these institutional connections are beneficial to Japanese employers. Entrance examinations to high schools and universities mean that the student population is differentiated across schools, and schools therefore perform a significant screening function for employers. Early on in the development of the Japanese higher educational system, schools established their reputation based on where they placed their students in the job market. Institutional embeddedness thereby benefits schools as well, as it ensures that they can consistently send their graduates to certain employers.

At the high school level, institutional embeddedness developed and has been maintained throughout the postwar period, whereas institutional embeddedness has a longer history in the upper end of the labor market—the market for university graduates—and has recently given way to what we term a semi-institutional pattern. Institutional embeddedness is highly visible and may be open to criticism if people question the fairness of school entrance requirements or the relationship between what is learned at a specific school and the skills necessary in the workplace. That is, it is open to criticism if people perceive that it is functioning mainly as a mechanism of elite reproduction, in the manner of social embeddedness. We note that while institutional embeddedness has been criticized at the university level in Japan, it has not received such criticism at the high school level. It is probable that social attacks are less likely here because it does not involve the elite segment of the labor market.

We find two implications of our analysis sobering. First, what is curious about efforts at the reform of institutional embeddedness is that so long as repeated recruitment from a school by an employer continues to benefit both parties, it is doubtful that the recruitment relationship will be eradicated. The Japanese university case suggests that it will simply go underground. Once a sanctioning mechanism against restrictive recruitment was established, it was relatively easy for universities and employers to begin to use alumni–student relationships more systematically than previously. This semi-institutional embeddedness continues to provide benefits (in the form of information to employers and reputation to schools) while at the same time being partially hidden from public view. This may be well and good if the admissions requirements to universities are truly meritocratic, so that the semi-institutional ties are not excluding otherwise talented students who for some reason could not enter top universities. Unfortunately, there is considerable scholarly evidence for Japan as well as for the United States that the distribution of students’ socioeconomic backgrounds at elite universities is skewed to the right (Ishida 1993; Kingston and Lewis 1989). Thus, the efficiency of institutional and semi-institutional ties for schools and employers needs to be evaluated in the context of how—and which—students are admitted into the school side of school-employer cooperative arrangements.

Second, we argue that whatever the merits and demerits of institutional embeddedness, it is likely to be common only under certain conditions. Schools and firms need to have substantial and overlapping incentives in order for institutional embeddedness to emerge. One of the strong incentives for a school is that the labor market access afforded its graduates by ties with firms enhances its reputation. Institutional embeddedness at the upper end of the labor market can also easily become subject to public criticism as a form of particularism. These aspects of institutional embeddedness bear witness to its complexity and fragility, and merit serious consideration in the United States as scholars and policymakers examine Japanese and European models of forging school-employer linkages.

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NOTES

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1. Except in the case of self-employment, of course.
2. Roos and Reskin (1984), for example, discuss a range of recruitment practices that implicitly discriminate against women.
3. Koya Azumi's study (1969) is an exception to this and is discussed later in this chapter.
4. We use the terms social embeddedness, social ties, and interpersonal ties interchangeably throughout this chapter. We also use the terms institutional embeddedness and institutional ties interchangeably.
5. The extent to which mutual ties of obligation exist between Japanese schools and employers is an empirical question that deserves much more attention than we can give in this chapter. For present we assume that such ties of obligation do exist, although we recognize that their strength varies from case to case. This is explored in greater detail in Brinton (forthcoming).
6. We do not go into the issue of start-up costs or continuing transaction costs entailed by school-employer recruitment relationships. As with the ties of obligation mentioned in note 5, we assume that there are some costs but that they will vary across empirical cases of school-employer dyads. Qualitative treatment of twenty urban Japanese public high schools can be found in Brinton (forthcoming).
7. The name changed to Tokyo Imperial University in 1897 to distinguish it from Kyoto Imperial University which was established in that year. "Imperial" was dropped from the names of both universities after World War II.
8. See Brinton (forthcoming) for a discussion of the postwar legal context governing labor advertising and recruitment as well as the historical involvement by the Ministry of Labor in the allocation of new graduates to jobs.
9. However, Japanese teachers in the job placement and guidance section of urban public general high schools interviewed by Brinton state that the most important factor affecting a school's reputation is the percentage of students entering university, not the job destination of its work-bound students. The reputation of vocational high schools is based more strongly on job placements for graduates (Brinton 1997).
10. A similar practice is followed by some prestigious firms in South Korea. Brinton thanks Yong-Hak Kim for pointing this out to her.
12. These reports from graduating students were collected yearly by the placement office of this university.
13. Both male and female graduates' placements are included in the published data, with no segregation by sex.
14. We measured prestige or quality on the basis of published hensachi, a standardized score for indicating the difficulty of a university's entrance examination.
15. We focused on these graduates in order to control for field of specialization. Business-related majors are a large group, making up close to half of all humanities and social science majors who enter the labor market each year.
16. These include the six government banks, the thirteen large city banks, and seven large trust banks. The large city banks have branches nationwide and are more prestigious than local banks. Of these twenty-six government, city, and trust banks, twelve were among the "top one hundred" firms selected as the most desirable job destination by humanities and business majors (Recruit Research 1991). The others (especially the government banks) are also considered to be very prestigious workplaces by virtue of their nationwide scope.

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