# Early or Late Promotion/Screening?: Empirical Analysis of Career Ladders for Japanese White-Collar Workers Using Employees' List\*

#### Katsuhito Uehara

Hitotsubashi University

In this paper, a long-term selection process from joining to leaving General Trading Company A and the reality of in-house career are clarified by analyzing the promotion and personnel assignment (job rotation) with data of 2,933 college-educated male white-collar workers who joined the company from 1962 to 1977 based on its employees' lists.

Company A has adopted a late promotion pattern which is a human resource management characteristic of Japanese companies. As a result of minute analysis on assignment before occurring of the promotion (speed) disparity which had not been clarified yet, a significant disparity which can explain the order of promoting to manager, the time when initial differentiation in upgrading occurs within a group of workers who joined the company at the same time and the finally reached grade was detected in the first personnel transfer after the initial assignment. Even after occurring of promotion disparity, the work contents were significantly different at the same position depending on the order of promotion. In Company A, employees fight in a multilayered tournament shortly after joining the company and human resources may be allocated depending on individual employee's skill acquirement.

#### I. Introduction

The purpose of this paper is to clarify the reality of in-house career practices<sup>1</sup> of white-collar workers working for Japanese companies based on obtained 37 years of employees' list<sup>2</sup> of General Trading Company<sup>3</sup> A. Japanese companies' traditional promotion mechanisms have already been clarified. However, there are only a few studies making empirical analyses which correlate promotion with job assignment (job rotation) during the period from joining to leaving the company. Referring to Shaeffer (1972), Baker, Gibbs, and Holmstrom (1994), etc., this paper is beneficial in terms of finding new insights from above

<sup>\*</sup> I was given warm support from two former employees of Company A and the personnel department of Company A while I was writing this paper. An anonymous referee also gave me an appropriate comment. I would like to extend a special thank to them here. The writer takes full responsibility for contents of this paper.

<sup>&</sup>lt;sup>1</sup> Koike (1999) defined career as a long-term experienced job group and Morishima (2004) defined it as a process to increase an individual value as a business worker through various experiences and training. This paper also advances the discussion with these definitions in mind.

<sup>&</sup>lt;sup>2</sup> We were permitted to use the employees list subject to using anonymously and for academic study only.

<sup>&</sup>lt;sup>3</sup> According to ITOCHU Corporation Edition (1997), a general trading company is a wholesaler focusing on trading, deals in a variety of goods, its size of the business transaction is large; domestic, export, import and tripartite trades, and integrates them organically. In addition, it also defines that a general trading company has many domestic and overseas branches and overseas subsidiaries and develops its business worldwide.

perspectives.

The structure of this paper is as follows: the next section briefly surveys related literature on Japanese companies' promotion and job assignment and formulates a hypothesis. Section III explains the personnel system of targeted Company A and data to be used. Section IV analyzes the career based on employees' background. Based on these results, Section V verifies the hypothesis and finally presents the summary of this paper and challenges for the future.

### II. Literature Review and Hypothesis Formulation

#### 1. Literature Review

Although it is pointed out that studies on white-collar workers' career development are fewer than that of blue-collar workers, they have gradually been accumulated and discussed to this day. As a result, Characteristics of promotion management which are unique to Japanese companies such as "late promotion" and "late selection" compared with Western companies (e.g., Koike 1991), and "selection mechanism changing according to the career stage" (Imada and Hirata 1995; Takeuchi 1995) were found. Facing contradictory constraining factors, "selection/cultivation" and "motivation," the efficiency of the found promotion mechanisms and advantages and disadvantages have been discussed under Japanese employment practice.

The promotion plays a role as incentive and reward devices as well as a role in assigning people to jobs in which they contribute most to results and success for the organization (Milgrom and Roberts 1992). According to Prendergast (1992), since both information and decision-making are decentralized and authority is handed over to not only senior levels but also middle levels in many of Japanese companies, higher returns can be obtained when many employees experience company-specific training and master skills. In addition, since external labor market is not competitive, late promotion is suitable for Japanese companies. This system which selects personnel to be promoted to senior levels quite late after joining the company has the advantage of keeping an incentive for long-term upskilling for many employees and allowing a proper capability assessment with less arbitrariness of more than one supervisor. On the other hand, it is also pointed out that there is not much time for cultivating excellent personnel who will become executives in the future and it makes waste of training investment (e.g., Koike 1999).

The purpose of job assignment is to provide employees' opportunities of finding their adequacy, broaden their breadth of work experience, improve their skill and capacity, etc.

<sup>&</sup>lt;sup>4</sup> Takeuchi (1995) pointed out that a promotion pattern changes in the order of employees who joined the company at the same time being promoted at the same time, with time difference, by selection and by sorting. Imada and Hirata (1995) pointed out that it changes in the order of uniform seniority, promotion speed competition and tournament competition. Although their means of expression are different, both express a detailed aspect of late selection.

Table 1. Related Literature Focusing on White-Collar Workers' Job Assignment before
the Promotion Disparity Occurs and Subsequent Promotion

Related Literature	Analyzed company	Analyzed employees, analysis method, etc.	Time when initial differentiation in upgrading occurs, grade, position, etc.	Analysis results, etc.
Wakabayashi (1987)	A major department store	71 college-educated male employees who joined the company in 1972	7th yr of joining the company, 42 chiefs (59%)	Vertical exchange relationship with immediate supervisor for the first three years after joining the company (accessibility, understanding and flexibility) has a positive significant effect on the 13-year career.
Matsushige (1995)	An electronic manufacturer	292 college-educated male employees, Questionnaire survey	Around 10th yr of joining the company, chiefs	Before occurring of the promotion disparity, it is known who will be promoted by training, performance, graduating school, experienced departments, etc. 5th to 6th year's personnel transfer may have a positive/negative effect on the promotion.
Umezaki (1999)	Two major drug companies	Interview survey	15th yr of joining the company or later, team leaders	Although MRs are in charge of the same job for a long time after joining the company, jobs with different difficulty are allocated depending on the speed of skill development and they are orderly selected.
Matsushige (2000)	Processing and assembly companies	Mainly based on questionnaire survey	About 10th yr of joining the company, chiefs	Job assignment before occurring of the promotion disparity may have either positive or negative effect on promotion to manager. The personnel transfer is not only the factor to determine subsequent promotion.
Mineno (2000a,b)	Government -designated city	Senior official as of 1998	7th yr of joining the company, chiefs	Persons who were finally promoted to bureau manager are engaged in management departments of the city hall or each bureau after the second assignment.  Persons staying in middle or lower positions were engaged in general departments for a long time.
Matsuo (2002)	City A	85 college-educated white-collar employees who joined the company in the 1990s	9th yr of joining the company, chiefs (Grade 6)	Tournament competition from the first personnel transfer in the 3rd or 4th year after joining the city government. Due to experienced jobs during the first eight years and the position in the 11th year, the career range of early promotion to manager is narrow and biased towards management staff.

Studies on Japanese companies' job assignment have been conducted by mostly interview survey (e.g., Koike 1991; Koike and Inoki 2002). It has also been clarified that know-how of dealing with uncertainty such as changes and problems is constructed by job rotation from easy to difficult relevant jobs repeatedly mainly through On-the-Job Training (OJT).

Career of personnel working for companies is developed by close relationship between above promotion and job assignment (job rotation). Nevertheless, many of related literature analyzing Japanese companies' promotion mechanism pay much attention to when the disparity occurs but have less perspective of job assignment which is strongly related to skill development—and vice versa. One of contributing factors to be blind to reality may be that those have not been analyzed together nor making the connection between them.

According to related literature, it is necessary for promoting to senior positions to be selected early when initial differentiation in upgrading occurs within a group of workers who joined the company at the same time (hereinafter referred to as "cohort") (e.g., Hanada 1987; Abe 1995; Uehara 2003). However, such disparity after the time of primary selection appearance does not occur suddenly. According to the related literature<sup>5</sup> which analyzed the relationship between promotion and job assignment (job rotation) shown in Table 1, work-

<sup>&</sup>lt;sup>5</sup> In addition to this, Asanuma (1997) analyzed blue-collar workers.

ers' capability has been recognized shortly after joining the company. It is also occasionally pointed out that even before occurring of the promotion disparity, it becomes obvious as the disparity of job assignment and/or job grade. Yashiro (2002) calls it an "invisible fast track." In addition, disparities occur in capacity and skills depending on which jobs employees have (e.g., Yashiro 1997; Matsushige 2000). However, many of them analyzed the effect of job assignment at some point or the number of personnel transfers on the most recent promotion using only a few personal data. Although there are some studies on departments experienced by personnel who were promoted to the managerial level in listed companies (e.g., Kuwahara 1998; Human Ability Development Center, All Japan Federation of Management Organizations 1979), further analysis such as comparison with majority of personnel who were not able to be promoted to senior levels has not been carried out.

# 2. Hypothesis Formulation

Based on above related literature, the following working hypothesis is formulated in this paper:

[Hypothesis] Employees are selected before occurring of the promotion disparity and disparities occur in career.

So far, detailed analyses on the reality of competition after occurring of promotion disparity have been carried out. However, even though career is developed in a consistent movement from joining to leaving the company, there are few studies which analyzed career ladders including the long-term simultaneous promotion of cohort. Koike (2002) said that it is necessary to get a handle on individual improved skills in order to set a successful career to efficiently develop skills, and Matsushige (1995), etc. pointed out that there may be the disparity in job assignment before occurring of promotion disparity. However, there are few studies which made a detailed analysis of what disparity exists, when it occurs and what effect is it having on the order at the time when initial differentiation in upgrading occurs within a cohort and subsequent promotion using detailed personnel data and limiting to private companies. Therefore, the purpose of this paper is to clarify how promotion and job assignment are linked and jointly managed under the human resources management indicating one biaxial in-house career path of promotion and job assignment as time advances from joining to leaving the company using a great deal of personnel data.<sup>6</sup>

In order to analyze the promotion mechanism using individual data, a long-term observation is needed, and therefore, people who joined the company in 1960s and already retired the company are targeted in many of the related literature (e.g., Hanada 1987; Takeuchi 1995; Abe 1995; Nishiyama 1999). After that, even though the trend is shown in the questionnaire survey (Japan Institute of Labour 1993), etc., there are few studies which clarified the reality using data. In this paper, we will analyze how Company A's career structure has changed with the times using data of more than one cohort.

<sup>&</sup>lt;sup>6</sup> This framework conforms to Asanuma (1997) who analyzed blue-collar workers working for a major car company.

## III. Explanation of Company A's Personnel System and Data to Be Used

## 1. Outline of Company A's Personnel System

Before the analysis, Company A's personnel system is outlined on the basis of the interview survey on two former personnel department employees who actually established and operated the system and the current personnel manager.<sup>7</sup>

The grade system was introduced in Company A in the early 1970s. Reflecting on rapid increase in operating officers accompanied with increase in posts, the company made the grade as an only index indicating in-house positions and limited the number of persons to be promoted with fixed numbers of places by grade so that many employees cannot be remained at senior level. Table 2 shows the grade classification and the standard for length of service of employees and the rough correspondence between grade and position. College graduates start from Grade 3 and the time when initial differentiation in upgrading occurs within a cohort is the 15th year after joining the company when the promotion to Grade 7 (manager) begins. There is no remaining year required for the condition of promotion so employees can be promoted one year after if the standard for length of service is satisfied. Under Grade 10 (general manager), the age of retirement from the positions is 56 due to the age limit system for managerial personnel. There is no education-based discrimination or fast track to early cultivate personnel who will become executives in the future in the system. Even though the system was revised<sup>8</sup> several times such as shortening the period of simultaneous promotion of cohort after introducing, the foundation of the system had been maintained for about 30 years until the system revision in 2000.

Company A, as same as the trading company analyzed by Nakamura (1991), introduced a department system classified based on the merchandise they manage in the late 1960s and divided into about 10 groups such as machinery and fuel. While the first assignment group is decided by the personnel department, subsequent medium- to long-term personnel management is carried out by each group. This is different from typical Japanese companies where, as Jacoby (2005) has noted, personnel departments have the strong power to shuffle personnel for promotion and job assignment. In addition, since there is little per-

<sup>&</sup>lt;sup>7</sup> I interviewed former employees of the personnel department in November 2003 and July 2005 and current personnel manager in December 2003. The former employees of the personnel department kindly answered questions from me on the personnel system of Company A many times by email.

<sup>&</sup>lt;sup>8</sup> Since the grade system was introduced, Company A revised the system three times mainly for making the standard for length of service earlier. Particularly, it made the time of starting promotion to Grade 6 (deputy manager) and Grade 5 (assistant manager) which were previously simultaneous promotions of cohort one year earlier in 1985 and 1988 respectively. In addition, it changed the simultaneous promotion to Grade 6 to the time difference promotion among employees who joined the company at the same i.e., those are all promoted to Grade 6 within three years. To avoid any confusion, Table 1 shows the standard applied for analyzed employees only. Grades and positions in the table may be different from actual ones from the perspective of protecting their anonymity.

<sup>&</sup>lt;sup>9</sup> At first when introducing the system, it was divided into 9 groups; general affairs, accounting, fuel, metal, machinery, food, textile, chemistry and material.

Rough correspondence Minimum length of Grade Title Age service required between grade and position Executive Division director General manager President of overseas subsidiary Assistant CIO Councilor Domestic and foreign branch manager 26th year or Grade 10 General manager 47 age of 47 Deputy general 23rd year or Grade 9 44 -Leader manager age of 44 Assistant general Grade 8 40 -19th year manager Acting general Grade 7 Manager 36 -15th year manager Deputy Grade 6 33 -12th year CIO (Chief Information manager Officer) in charge of group Assistant Grade 5 9th year 30 manager Grade 4 Chief 26 -5th year Beginning class for Grade 3 22 college graduates Beginning class for Staff Grade 2 20 and 21 junior college graduates Beginning class for

Table 2. Comprehensive Work's Grade Classification and Standard for Length of Service and Rough Correspondence between Grade and Position

Source: Based on interview survey and obtained data.

18 and 19

Note: Administrative positions are Grade 6 or higher. The shaded region in the table shows the period of simultaneous promotion of cohort. The time when initial differentiation in upgrading occurs within a cohort is the 15th year after joining the company. Years in the column of "minimum length of service required" are based on college graduates. Add four years for high school graduates and two years for junior college graduates. The 5th year of high school graduates and 3rd year of junior college graduates apply to Grade 3. Leader roughly corresponds to manager in other companies.

high school graduates

sonnel transfer between groups and information of personnel and jobs is shared within one group, information cost, as Hirano (2006) said, can be reduced by fractionally accumulating such information.

Many of college graduates develop their career through job assignment within a department, between departments and between branches including overseas after the first assignment to either Tokyo, Osaka or Nagoya. Imano and Sato (2002) point out that in order

Grade 1

to avoid the event that bosses hang on to their good subordinates, each department head draws up a personnel transfer plan to carry out systematic job assignment every year as well as determining the standard working duration at one post in Company A since the 1970s.

#### 2. Explanation of Data to Be Used

The analysis of this paper is based on Company A's 37 years of employees' list from 1961 to 1997. Names of employees working for Company A and their grades are listed on it by work location and department. However, listed data are insufficient due to lack of individual attributes such as the year of joining the company, sex and academic background. Therefore, employees were categorized by such attributes for analysis.

In particular, the year of joining the company after 1962 was deduced from the year when their name appeared in employees list for the first time and the time of promotion to Grade 4 (chief) and Grade 5 (assistant manager). Gender could be assumed based on the different promotion systems adopted for males and females. Academic background was estimated on the basis of the disparity of the standard for length of service from joining the company to promoting to Grade 4 (chief). In addition, these were identified validly utilizing the "List of Company Employees" and available alumni lists of college graduates. 11 As a result, about 95% of the total number of new graduates whom Company A hired as indicated by the information in magazines for jobseekers<sup>12</sup> were estimated. In this paper, promotion and assignment are analyzed with data of 2,933 college-educated male white-collar workers who joined Company A from 1962 to 1977, worked for 15 years or longer and finally promoted to Grade 7 (manager) or higher position. The breakdown for their year of joining the company is shown in the lower level of horizontal axis, Figure 3. According to the job information magazine, about 60% of college graduates are from elite universities<sup>13</sup> and most of them are from liberal arts departments such as economics, commerce and foreign languages. Male high school graduates have not been hired since mid-1970s. While white-collar workers working for Japanese companies are analyzed in this paper, it is necessary to keep in mind that above bias exists.

#### IV. Empirical Analysis of Promotion and Job Assignment

In order to verify the working hypothesis, the analysis is carried out as follows:

(i) As a starting point for discussion, Company A's promotion mechanism is clarified.

<sup>&</sup>lt;sup>10</sup> However, the list in 1976 was not available. Therefore, the analysis was carried out based on 36 lists.

<sup>&</sup>lt;sup>11</sup> Alumni lists of the University of Tokyo, Hitotubashi University and Keio University which are available in public libraries were used.

<sup>&</sup>lt;sup>12</sup> Diamond Inc. "Diamond Inc.'s Employment Guidebook for College Graduates," etc.

<sup>&</sup>lt;sup>13</sup> Elite universities are seven former imperial universities, Hitotsubashi University, Kobe University, Tokyo Institute of Technology, Keio University and Waseda University; as same as Tachibanaki (1995).

The reality of competition for promotion of cohort after occurring of promotion disparity is clarified by using the "career tree" method. In addition, correlation between the order of promoting to Grade 7 (manager) and the finally reached grade and the possibility of consolation type of promotion are sought. Furthermore, the disparity of promotion patterns between cohorts classified by the year of joining the company is clarified through comparison.

- (ii) The possibility of horizontal personnel transfer disparity before occurring of the promotion disparity is sought. It is clarified by probit analysis that the personnel transfer patterns before occurring of the promotion disparity can explain the order of promoting to Grade 7 (manager), finally reached grade and the possibility of promotion to senior grade (Grade10 [general manager] or higher position) and which jobs affect the order of promoting to Grade 7 (manager) and which point of personnel transfer is important.
- (iii) The relationship between promotion and assignment from joining to leaving the company is clarified. 82 employees assigned to the accounting group are classified by finally reached grade and analyzed that when and what disparity is found in their work locations or departments. Considering of business category, the sales group should have been analyzed, since it creates, eliminates and consolidates sections very often, classification and indication of the analysis results would be very difficult. The accounting group was selected as the object of the analysis due to technical factors that there is no drastic organizational change for a long time, the same trend as the sales group is observed and wide career which is suitable for the analysis is developed there. In addition, there is a good merit that related literature on personnel assignment which analyzed employees assigned to the accounting department such as Koike and Inoki (2002) are occasionally found and can be compared with this analysis.

#### 1. Company A's Promotion Mechanism

We clarified Company A's promotion mechanism. An obtained latest employees list was issued in 1997. As of 1997, the period of joining the company of employees who were promoted to executives was from 1962 to 1966. There were 840 college-educated male employees who joined the company from 1962 to 1966, worked for the company for 25 years or longer and were promoted to Grade 7 (manager) or higher grade(s). Table 3 shows the distribution of grades of those 840 employees as of 1997. According to Table 3, percentages of employees who were promoted to Grade 8 (assistant general manager) or higher position, Grade 9 (deputy general manager) or higher position, Grade 10 (general manager) or higher position, councilor or higher position and executive are 94.8%, 75.8%, 36.9%,

<sup>&</sup>lt;sup>14</sup> Persons who retired from their executive posts before 1997 were counted as executives just before the retirement from the position. Persons who retired were counted as positions just before the retirement.

Table 3. Number of Analyzed Employees and Finally Reached Grade as of 1997 by Year of Joining the Company

	Finally reached grade							
Year of joining	Grade7	Grade8	Grade9	Grade10				
the company	Manager	Assistant general manager	Deputy general manager	General manager	Councilor	Executive	Total	
1962	10	37	69	45	19	9	189	
1963	9	23	49	25	24	6	136	
1964	6	33	77	40	18	10	184	
1965	7	29	67	31	21	3	158	
1966	12	37	65	35	21	3	173	
Total	44	159	327	176	103	31	840	
Ratio (%)	5.2	18.9	38.9	21.0	12.3	3.7	100.0	
Accumulated ratio (%)	100.0	94.8	75.8	36.9	16.0	3.7		

*Note*: Table 3 shows finally reached grade as of 1997 of 840 college-educated employees who joined the company from 1962 to 1966, worked for Company A for 25 years or longer and were promoted to managers or higher grades. Employees who retired their position before 1997 due to the age limit system for managerial personnel were counted as positions just before leaving their positions and other employees were counted as positions just before retirement.

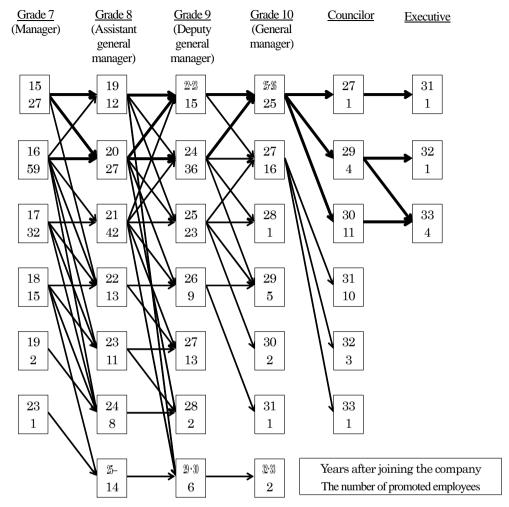
"Ratio (%)" in the table indicates the percentage of 840 employees by position. "Accumulated ratio (%)" is calculated from senior position (executive).

As for "councilor," for instance, 103 employees finally reached councilor among those who joined the company from 1962 to 1966 and account for 12.3% of 840 employees. "16.0%" of accumulated ratio indicates that those who were promoted to councilors or higher position (executive) account for 16.0 % of 840 employees (103 councilors + 31 executives = 134. 134/840 x 100 = 15.95).

Since employees who joined the company in 1965 or later are before the age limit for managerial personnel, they may be promoted to senior positions in 1998 or after. That is, this is not the distribution of finally reached grade. However, since the time when half of this cohort can no longer expect further promotion in the company is about 26 years and the length of service of those who joined the company in 1966 is 32 years as of 1997, we judged such chance is low and has an insignificant effect on the result, and added them to the analysis.

Besides 840 employees, there are four persons who stay in Grade 6 (deputy manager) among college-educated employees who joined the company from 1962 to 1966 and worked for 25 years or longer.

16.0% and 3.7% respectively, i.e., three fourth was promoted to Grade 9 (deputy general manager) or higher position and one third was promoted to Grade10 (general manager) or higher position. There are very few (four) employees who stayed at Grade 6 (deputy manager) and could not be promoted to Grade 7 (manager). The time when half of this cohort



Note: Figure 1 is a career tree showing the reality of promotion competition among those who joined the company at the same time using data of college-educated 136 employees who joined Company A in 1963, worked for 25 years or longer and finally reached manager or higher positions. In the figure, the upper numeric number in the box indicates years after the joining company and the lower numeric number indicates the number of promoted employees. Particularly, 27 out of 136 were promoted to managers in the 15th year after joining the company. Arrows pointing to the right indicate promotion routes of 27 employees to assistant general manager which is next grade. 27 were promoted to assistant general managers in the 19th, 20th or 22nd year after joining the company. Bold arrows indicate promotion tracks after manager of 6 employees who were promoted to executives.

Figure 1. Career Tree of 136 Employees Who Joined the Company in 1963

can no longer expect further promotion in the company calculated on the basis of data of object persons is about 26 years after joining the company, far later than the average of large Japanese companies, 22.30 years, surveyed by Japan Institute of Labour (1998).

#### (1) Competition for Promotion of Cohort

The reality of competition for promotion of cohort after occurring of promotion disparity is clarified. Figure 1 shows a career tree drawn based on the career data of 136 who joined the company in 1963<sup>15</sup> out of above 840 employees. According to this career tree, 27 employees (19.9%) were promoted to manager in the 15th year after joining the company by the primary selection. Within the subsequent three years, by the time the promotion to assistant general manager begins (by the 18th year after joining the company), almost all of them (133, 97.8%) were promoted. Therefore, there was no huge disparity of promotion speed at this time.

At the time of promoting to assistant general manager, the number of primarily-selected employees to be promoted decreased and the promotion disparity of cohort occurred. Even though the number of employees to be promoted increased at the time of promoting to deputy general manager and general manager again, the promotion disparity further widened due to increase in the number of employees to be promoted later and the number of employees who were not able to be promoted increased further gradually. Although secondarily-selected employees were promoted to general managers at the 27th year after joining the company, employees who were newly promoted to deputy general managers at that time or later were rarely promoted to general managers afterward. Such selection trend can be seen since the time of promoting to deputy general manager and it becomes more pronounced when they were promoted to higher positions. Since the 31st year after joining, the 6 employees (about 4.2% of all) have been promoted to executive as a result of keen promotion competition among them. Retracing in reverse order of the promotion career of 6 employees who were promoted to executives, shown in the figure as bold arrows, since they were promoted to managers, they were promoted by primary or secondary selection and all were promoted to general manager by primary selection.

## (2) Ranking of Promotion to Manager and Finally Reached Grade

The relationship between order of promotion to manager when the promotion disparity begins to occur among the cohort and finally reached grade are clarified. 840

<sup>&</sup>lt;sup>15</sup> 141 employees were estimated to have joined the company this year and the other four retired the company before the promotion to manager and one stayed at deputy manager. The oldest year of employment estimated from the employees' lists is 1962 and therefore data of those who joined the company in 1962 should normally be used for the illustration. However, the employees' list in 1976 is not available. 1976 is the 15th year after joining the company for those who joined in 1962 and the reality of the primary selection for promotion to manager which is essential for the illustration cannot be checked. Therefore, data of those who joined the company in 1963 was used for the analysis instead.

Table 4. The Order of Promotion to Manager and Finally Reached Grade as of 1997 of 840 College-Educated Male Employees Who Joined the Company from 1962 to 1966

Order of	Finally reached grade							
promotion	Grade7	Grade8	Grade9	Grade10				Ratio (%)
to manager	Manager	AGM	DGM	GM	Councilor	Executive	Total	(/0)
Primarily- or secondarily-	-selected							
Number of employees	4	46	180	132	90	31	483	
Ratio	0.8	9.5	37.3	27.3	18.6	6.4	100.0	57.5
Accumulated ratio	100	99.2	89.6	52.4	25.1	6.4	-	
Thirdly-selected or later								
Number of employees	40	113	147	44	13	0	357	
Ratio	11.2	31.7	41.2	12.3	3.6	0.0	100.0	42.5
Accumulated ratio	100	88.8	57.1	16.0	3.6	0.0	-	
Total number of employees	44	159	327	176	103	31	840	100.0
Ratio (%)	5.2	18.9	38.9	21.0	12.3	3.7	100.0	
Accumulated ratio (%)	100.0	94.8	75.8	36.9	16.0	3.7		

Note: Table 4 shows finally reached grade as of 1997 of 840 employees who joined the company from 1962 to 1966, worked for 25 years or longer and were promoted to managers or higher positions by the order of promotion to manager. As shown in the table, analyzed 840 employees are classified by the order of promotion to manager; those who were primarily or secondarily selected as managers in the 15th or 16th year after joining the company and those who were thirdly or later selected as managers in the 17th year after joining the company or later. "Ratio" on the left indicates the percentage of 840 employees and "accumulated ratio" is calculated from senior position (executive). "Ratio" on the right indicates the percentage of "primarily- or secondarily-selected" (57.5%) and "Thirdly-selected or later" (42.5%). For instance, 132 employees were promoted to general managers as of 1997 among "primarily- or secondarily-selected" managers and account for 27.3% of 483 "primarily- or secondarily-selected" managers. 253 employees including 132 were promoted to general managers or higher positions (executives or councilors) among them and account for 52.4% (31 executives [6.4%] + 90 councilors [18.6%] + 132 general managers [27.3%] = 253 [52.4%]).

Abbreviations: AGM (assistant general manager), DGM (deputy general manager), GM (general manager).

employees were classified by whether they were primarily- or secondarily-selected to Grade 7 (manager) or not based on the promotion patterns of executives and their finally reached grade are shown in Table 4. The breakdown is; primarily- or secondarily-selected 483, (57.5%) and thirdly-selected or later 357 (42.5%). This shows that the order at the time of promotion to manager have considerable effect on the subsequent promotion. Particularly, among primarily- or secondarily-selected employees, more than half of them (52.4%) were promoted to general manager and one out of four (25.1%) were promoted to executives or councilors. On the other hand, among thirdly-selected or later employees, nobody was promoted to executives, 13 (3.6%) were promoted to councilors, counting only 57 (16.0%) even including those who promoted to general manager.

Table 5. Order Changes between Positions of 840 College-Educated Male Employees Who Joined Company A from 1962 to 1966

# (1) Grade 7 (manager) → Grade 8 (assistant general manager)

		Promotion	Staying in			
		Primarily- or	Thirdly-selected	Grade 7	Total	
		secondarily-selected	or later	Grade /		
ů /	Primarily- or	192	287	4	483	
omotio Grade	secondarily-selected	39.8	59.4	0.8	57.5	
Promotion to Grade 7	Thirdly-selected	19	298	40	357	
P tc	or later	5.3	83.5	11.2	42.5	
	Total	211	585	44	840	
	Total	25.1	69.6	5.2	100	
Total percentage of primarily- or secondarily-selected → Thirdly-selected or later and Thirdly-selected or later → primarily- or secondarily-selected						

# (2) Grade 8 (assistant general manager) → Grade 9 (deputy general manager)

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		Promotion	to Grade 9	Staying in		
		Primarily- or	Thirdly-selected	Grade 8	Total	
		secondarily-selected	or later	01400		
5	Primarily- or	171	38	2	211	
omotion Grade 8	secondarily-selected	81.0		0.9	26.5	
Promotion Grade 8	Thirdly-selected	103 325		157	585	
Pro	or later	17.6 55.6		26.8	73.5	
	Total	274	363	159	796	
	Total	34.4	45.6	20.0	100	
Total percentage of primarily- or secondarily-selected → Thirdly-selected or later and Thirdly-selected or later → primarily- or secondarily-selected						

# (3) Grade 9 (deputy general manager) → Grade 10 (general manager)

(3) Grade 7 (deputy general manager) Grade 10 (general manager)								
		Promotion	to Grade 10	Staying in				
		Primarily- or	Thirdly-selected	Grade 9	Total			
		secondarily-selected	or later					
to	Primarily- or	197	32	45	274			
tion de 9 secon	secondarily-selected	71.9		16.4	43.0			
Promotion Grade 9	Thirdly-selected or later	36 45		282	363			
Pro		9.9	12.4	77.7	57.0			
	Total	233	77	327	637			
Total		36.6	12.1	51.3	100			
Total percentage of primarily- or secondarily-selected → Thirdly-selected or later and Thirdly-selected or later → primarily- or secondarily-selected								
'	or later and Infraly-self	ected or tater $\rightarrow$ prima	irity- or secondarity-se	eiectea				

#### (3) Riversal in Promotion Competition

Given thirdly-selected or later employees become primarily- or secondarily-selected ones when promoting to upper positions as consolation type of promotion, the inversion phenomena of the order of promotion between positions for 840 employees are shown in Table 5. The table shows that consolation type of promotion is seen until (3) deputy general manager  $\rightarrow$  general manager. Even though the percentage of consolation match winner at (2) assistant general manager  $\rightarrow$  deputy general manager is high (17.6%) due to reaction of decrease in the number of primarily- or secondarily-selected employees at the time of promotion to assistant general manager, other time points are all less than 10% and therefore such phenomena are generally seldom.

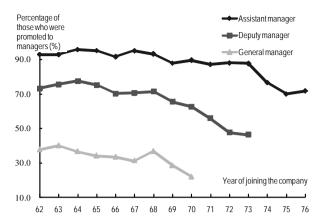
#### (4) Trend of Promotion Mechanism

How has Company A's promotion mechanism changed accompanied with slow down of company scale expansion, hiring freeze of male high school graduates, etc.? Figure 2 shows the trend of percentage of employees being promoted to manager or higher grade among employees who joined the company from 1962 to 1976 putting the year of joining the company as horizontal axis. This tells that the percentage of employees being promoted is gradually lower as the year of employment is later. Among generations being promoted in the mid-1990s, the percentage of employees being promoted to any position is about 20% lower than that of employees who joined the company in 1962. Details are analyzed focusing on the times of promotion to manager and assistant general manager.

Figure 3 shows the trend of year when the employees were promoted to Grade 7 (manager). In this figure, thirdly-selected or later employees are subdivided into two categories; before promotion to assistant general manager (17th or 18th year after joining the company) and after promotion to assistant general manager (19th year after joining the company or later). It shows that the proportion of primarily- or secondarily-selected employees firstly becomes lower than that of thirdly-selected or later employees among employees who joined the company in 1966, and the proportion of primarily- or secondarily-selected employees consistently decreases until those who joined the company in the early 1970s. The lowest proportion is among employees who joined the company in 1971, lower than 30%. On the other hand, the maximum proportion of employees who were promoted in 19th year or later after joining the company is 20%. Therefore, the period required for promotion to manager was prolonged and when the last employee was promoted to manager, the first employee was promoted to assistant general manager, i.e., the promotion disparity clearly occurred of cohort at this point. After that, the proportion of primarily- or secondarily-selected employees slightly increased again and the proportion of employees

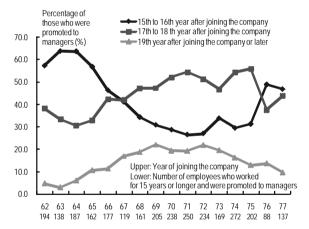
<sup>&</sup>lt;sup>16</sup> Company A's performance consistently increased before the 1973 oil shock and is fluctuating depending on Japanese economic trend since the oil shock.

There is no drastic change in the promotions of persons being promoted to manager, persons staying at deputy manager and persons who retired before the promotion to manager of cohort.



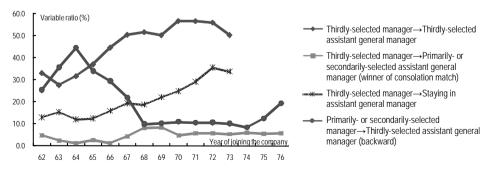
*Note*: The figure is based on data on employees' lists. The right edge of each curve shows a year of joining the company when promotion to such grade would end.

Figure 2. Promotion Ratio by Year of Joining the Company



Note: Same as Figure 2.

Figure 3. Trend of Year of Promotion to Manager by Year of Joining the Company



Note: Same as Figure 2.

Figure 4. Order Changes When Being Promoted to Assistant General Manager

who were promoted in 19th year or later after joining the company became lower. Although peculiar cases are seen among employees who joined the company in 1973 and 1976, this may be due to the small number of employees who joined the company at the same time.

Figure 4 shows the trend of changes in the order at the time of promotion to assistant general manager. As shown in Figure 3, even though the proportion of thirdly-selected or later employees increased, there was no drastic change in the proportion of consolation match winner at the time of promotion to assistant general manager (always lower than 10%), it leads to increased proportion of employees who were promoted to assistant general manager in the third selection or later and who subsequently, stayed in assistant general manager. On the other hand, the proportion of employees who were promoted to manager by primary or secondary selection but were promoted to assistant general manager in the third selection or later shows the similar trend as lowered proportion of employees who were promoted to manager by primary and secondary selection shown in Figure 3. That is, as the existing foundation which maintained slow selection changed, the period of time required for promotion to manager when initial differentiation in upgrading occurs within a cohort was prolonged and delayed, the period of promotion of cohort in a small time difference was shortened and the subsequent order change was small. The selection became earlier than before in general.

# 2. Statistical Analysis on Assignment before Occurring of the Promotion Disparity and Subsequent Promotion

Based on the analysis result of IV. 1, a statistical analysis is carried out to clarify whether 14-year job assignment difference before occurring of the promotion disparity can explain the order of promotion to manager, finally reached grade and promotion to senior grade or not. Given a total length of service in 11 work locations such as Tokyo, Osaka/Nagoya and other domestic local branches, domestic temporary transfer (*shukko*), 18 overseas subsidiaries (United States, major countries 19 and others), overseas temporary transfer and others (full-time working for labor union, overseas for language study and overseas for business study) (Tokyo-based) as job assignment difference, a probit analysis is carried out adding dummy variables such as the number of relocation, affiliation group, the year of joining the company and graduating school to explanatory variables.

<sup>&</sup>lt;sup>18</sup> Transfer is to move to other firms which are within the same corporate group or which have had long-term transactions with the core firm in which workers were hired. However, it is a procedure under which the core firm remains in charge of the workers' employment after they have moved, even though they rarely come back to the core firm.

<sup>&</sup>lt;sup>19</sup> Major countries here are the following five countries; the United Kingdom, Germany, France, Australia and Canada. This was determined on the basis of trading volume and the number of assigned employees described in the company history, etc.

## (1) Order of Promotion to Manager

A probit analysis was carried out using data of 858 employees who joined the company from 1962 to 1966, worked for 15 years or longer and were promoted to managers or higher grades with the order of promotion to manager (primarily- or secondarily-selected employees are 1, thirdly-selected or later ones are 0) as an explained variable. Table 6 (1) shows a significant result that all overseas assignment including temporary transfer and full-time working for labor union had a positive effect on early promotion to manager but assignment to Osaka/Nagoya and other domestic local branches had a negative effect on it at the 1 to 5% level. It also shows a significant result in a dummy variable of graduating school.

#### (2) Promotion to Senior Grades

A probit analysis was carried out for 840 employees who worked for 25 years or longer using above explanatory variables with promotion to councilor or higher grade and to general manager or higher grade (employees being promoted are 1, not being promoted are 0) as an explained variable. An ordered probit analysis was also carried out for them with the finally reached grade as an explained variable (see Table 6 [2] to [4]). The result was, even though significant levels vary slightly, almost same as that of Table 6 (1). In particular, it showed a significant result in any work experiences in the United States and other major countries at the 1% level.

#### (3) Significant Work Experience for Promotion to Manager

We analyzed when and which work experience has a significant effect on the period of promotion to manager by dividing a total length of service of each workplace during 14 years after joining the company which was used for explanatory variables into four grades at the time of simultaneous promotion of cohort. A probit analysis was carried out with the order of promotion to manager (primarily- or secondarily-selected 1, thirdly-selected or later 0) as an explained variable using data of 2,933 employees who worked for 15 years or longer and were promoted to managers or higher grades as of 1997 among employees who joined the company from 1962 to 1977.

The employees were divided into three by the year of joining the company (i) 1962 to 1966 where employees were previously analyzed using the "career tree" method, etc., (ii) 1967 to 1972 where the proportion of primarily- or secondarily-selected managers consistently decreased and (iii) 1973 to 1977 where there was some improvement in the situation. As for working in overseas subsidiaries and domestic branches including Osaka and Nagoya which showed a significant result in Table 6 (1), a cross term was used to observe a generation gap. Then only explanatory variables which lead a significant result were extracted and shown in Table 6 (5). According to the table, work experience in the United States at the level of chief (5th to 8th year after joining the company) and studying business abroad after being promoted to chief firstly had a significant positive effect on the early promotion to

Table 6. Regression Analysis Results with Total Length of Service during 14 Years after Joining the Company by Work Location as an Explanatory Variable

	(1)	(2)	(3)	(4)
Employees who joined the company	Order of	Councilor or	General	Finally
from 1962 to 1966	promotion	higher	manager or	reached
Explained variables: Right columns	to manager	over_8	higher	grade
Constant term	+	***	***	
Osaka/Nagoya	***	_	_	_
Domestic local branches	-***	_	_	***
Domestic temporary transfer	_	+	_	+
Overseas temporary transfer	+**	+	+	+**
U.S. subsidiaries	+***	+***	+***	+***
Subsidiaries in major countries	+***	+***	+***	+***
Subsidiaries in other overseas countries	+***	+*	+**	+***
Full-time union	+**	+*	+***	+***
Overseas for language study	+	+	+	+
Overseas for business study	+	+*	+**	+**
Number of assignments	_	+	_	_
Graduating school dummy				
University of Tokyo	+***	+***	+***	+***
Hitotsubashi University	+**	+*	+***	+***
Keio University	+***	+***	+***	+***
Year of joining the company dummy				
1963	+	+**	+	+
1964	+	+	+	+
1965	_	+	_	_
1966	***	<u> </u>	<u> </u>	_*
Sample size	858	840	840	840
Log likelihood	-494.3	-316.3	-491.2	-1202
Pseudo R2	0.1565	0.1423	0.1127	0.0737

Note: Table 6 shows significant variables and results of probit analysis (order probit analysis for [4] and [6]) to clarify whether total length of service during 14 years after joining the company before occurring of the promotion disparity by work location can explain the order of promotion to manager and finally reached grade or not.

Explanatory variables for (1) to (5) are: total length of service (Tokyo-based) during 14 years after joining the company in each work location (Osaka/Nagoya, domestic local branches, domestic temporary transfer, U.S. subsidiaries, subsidiaries in major countries, subsidiaries in

<sup>(1)</sup> is for 858 employees who joined the company from 1962 to 1966, worked for 15 years or longer and finally reached manager or higher grade. (2) to (4) are for 840 employees who worked for 25 years or longer and finally reached manager or higher grade.

(5) Total length of service before occurring of the promotion disparity by grade and work location

Explained variable: Order of			Cross term	
promotion to manager	1962-77	1962-1966	1967-1972	1973-1977
Grade 4 (chief, 5th-8th year after joining the	company)			
Domestic local branches		-0.011	-0.013	-0.073 *
Other foreign countries		0.0936 ***	0.0138	0.0317
Subsidiaries in major countries		0.0609	0.0282	0.1543 *
U.S. subsidiaries		0.0970 **	0.1122 ***	0.2419 **
Overseas for business study	0.3680 ***			
Grade 5 (assistant manager, 9th-11th year)				
Osaka/Nagoya		-0.050	-0.061 *	-0.005
Other foreign countries		0.0184	0.0572 **	0.0350
Subsidiaries in major countries		-0.024	0.1045 ***	0.0204
U.S. subsidiaries		0.0254	0.0974 ***	0.0603
Overseas for business study	0.1988 **			
Grade 6 (deputy manager, 12th-14th year)				
Other foreign countries		$0.0454\ ^{\ast}$	0.0006	-0.030
Subsidiaries in major countries		0.1569 ***	0.0940 ***	0.0328
U.S. subsidiaries		0.1643 ***	0.1091 ***	0.0543 *
Overseas for language study				
Overseas for business study	0.1698 **			
Full-time union	0.6066 ***			
Number of personnel transfers	-0.031 ***			
Sample size	2927			
Log likelihood	-1637.22			
Pseudo R2	0.1674			

other overseas counties, overseas temporary transfer, full-time union, overseas for language study and overseas for business study), number of assignments, year of joining the company dummy (base: those who joined the company in 1962), affiliation group dummy and graduating school (University of Tokyo, Hitotsubashi University and Keio University) dummy. "Major countries" here mean the United Kingdom, Germany, France, Australia and Canada, and "other countries" mean all foreign countries other than the United States and major countries.

As for explained variables, (1) was analyzed with primarily- or secondarily-selected managers as 1 and thirdly-selected or later ones as 0. (2) and (3) were analyzed with promotion to the grade as 1 and not promotion to the grade as 0. (4) was analyzed with finally reached grade as of 1997.

# Table 6 (*Continued*)

(6) Analysis with personnel transfer patterns by year of joining the company as an explanatory variable

	1962-	Cross term			
Explained variable: Order of promotion to manager	1977	1962-	1967-	1973	
		1966	1972	1977	
First assignment	ale ale ale				
Osaka/Nagoya	- ***				
Domestic local branches	- ***				
Domestic temporary transfer	_ **				
2nd year after joining the company					
Tokyo→Osaka/Nagoya			**	**	
Tokyo→U.S. subsidiaries				+**	
3rd year after joining the company					
Tokyo→Domestic local branches			**		
Domestic local branches→Tokyo	+*				
4th year after joining the company					
Tokyo→Osaka/Nagoya		_*		$+^*$	
Tokyo→Domestic local branches				**	
Tokyo→Other overseas countries		+*	+**	+**	
Osaka/Nagoya→Tokyo	+***				
5th year after joining the company					
Tokyo→Osaka/Nagoya		**	***	***	
Tokyo→Domestic local branches			**		
Tokyo→Overseas for language study	_*				
Tokyo→Other overseas countries		+**			
Tokyo→Subsidiaries in major countries				+*	
Tokyo→U.S. subsidiaries				+**	
Osaka/Nagoya→Domestic local branches	***				
U.S. subsidiaries→Tokyo	*				
6th year after joining the company					
Tokyo→Osaka/Nagoya			*	***	
Tokyo→Domestic local branches				**	
Tokyo→Overseas for business study					
Tokyo→Other overseas countries				+*	
Tokyo→U.S. subsidiaries		+**	+***		
Osaka/Nagoya→Other overseas countries	+*	'	'		
Domestic temporary transfer→Tokyo	+*				
Other overseas countries→Tokyo	**				
7th year after joining the company					
Tokyo→Osaka/Nagoya		*	*		
Tokyo→Domestic local branches		***	***		
Tokyo→U.S. subsidiaries			⊥*		
Osaka/Nagoya→Domestic local branches	***				

#### Table 6 (*Continued*)

8th year after joining the company				
Tokyo→Osaka/Nagoya	_	**	***	
Tokyo→Domestic local branches				*
Tokyo→Overseas for business study	+**			
Tokyo→Subsidiaries in major countries			+*	
Tokyo→U.S. subsidiaries	+	**	+*	+**
Sample size	2933			
Log likelihood	-2722.58			
Pseudo R2	0.1436			

Note (continued): (5) and (6) were analyzed with data of 2,933 employees who worked for 15 years or longer and finally reached managers or higher grades with the order of promotion to manager as an explained variable as same as (1). However, analyzed employees were divided into three categories (1962 to 1966, 1967 to 1972 and 1973 to 1977), and 14 years after joining the company were divided into four grades shown in Table 2. Cross terms were used for the explanatory variable on work location where significant results were obtained in (1) in order to observe a generation gap. (6) was analyzed to clarify when and which personnel transfer pattern has a significant effect on early promotion to manager (primarily- or secondarily-selected) and shows only results of personnel transfers in which significant results were obtained by the 8th year after joining the company. In tables, \* indicates significant level: \*\*\* is at the 1% level, \*\* at the 5% level and \* at the 10% level.

manager regardless of the year of joining the company. Other significant effects were; other overseas work experience (positive) among employees who joined the company from 1962 to 1966, and work experience in major countries (positive) and domestic local branches (negative) among employees who joined the company from 1973 to 1977. Significant results were also shown in full-time union experience (positive) and the number of job assignment (negative).

## (4) When Personnel Transfer is Significant

In addition, an order probit analysis was carried out to clarify when and which personnel transfer is significant for promotion to manager adding the first assigned workplace to the explanatory variables with the order of promotion to manager as an explained variable. A cross term was also used as an explanatory variable in the similar purpose and way of Table 6 (5). Then a personnel transfer pattern which showed a significant result during eight years after joining the company before promotion to assistant manager is shown in Table 6 (6). It was observed since the beginning when employees have staff (1st to 4th year after joining the company), the younger the generation, the earlier it was shown, and the number of significant personnel transfer patterns is increasing. Regardless of generation, many assignments of "Tokyo  $\rightarrow$  Osaka/Nagoya" and "Tokyo  $\rightarrow$  domestic branch" showed a negative significant effect and that of "Tokyo  $\rightarrow$  US" and "Tokyo  $\rightarrow$  other overseas" showed a positive significant effect since 2nd year after joining the company. As for first assigned department, every workplace showed a negative significant effect on promotion to

manager compared with Tokyo. However, the personnel transfer from the workplace in which employees have staff to Tokyo had a positive significant effect on early promotion to manager.

## 3. Career Disparity in the Accounting Group

More concrete relationship between promotion and assignment from joining to leaving the company will be clarified here. 82 employees who were assigned to the accounting group were divided by finally reached grade to analyze when and what difference can be seen at the experienced workplaces and departments.

Figure 5 shows 82 employees<sup>20</sup> who joined the company from 1962 to 1966, were assigned to the accounting group, worked for 25 years or longer and finally reached to manager or higher positions divided by finally reached grade and workplaces and departments and divisions experienced until 1997 counted by period and post. The accounting group consists of five departments; budget, finance, sales accounting, audit and information system. According to the former employees of the personnel department, except specialized audit and information system departments, employees evenly experienced three departments; budget, finance and sales accounting by job rotation within the accounting group. 82 employees' ratio of finally reached grade<sup>21</sup> and ratio of the order of promotion to manager (primarily- or secondarily-selected: 48 [58.5%] and thirdly-selected or later: 34 [41.5%]) nearly agree with that of whole company shown in Table 4. The first assigned department was either Tokyo, Osaka or Nagoya and its breakdown is; sales accounting department in charge of accounting for each sales group in Tokyo (38, 46.3%), finance department in Tokyo (19, 23.2%), Osaka/Nagoya (16, 19.5%) and budget departments in Tokyo (9, 11.0%). The work experience in the sales accounting department at entry-level is considered to be beneficial to know the business of general trading company through the job despite of not belonging to the sales group and is an experience of learning the basics as Koike (1991) described. Employees who joined the company earlier than 82 employees and were promoted to executives were often engaged in budget and finance departments for a long time. On the other hand, most high school graduates worked in the sales accounting or domestic local branches; it shows which jobs are more important. While skills are developed through OJT, since the second assignment, their career seems to be different depending on the order of promotion to manager.

Many of employees who were finally promoted to "executives/councilor" were firstly and secondly assigned to sales accounting and finance/budget departments and thirdly

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<sup>&</sup>lt;sup>20</sup> There are persons who are involved in information system and audit in the accounting group besides 82 employees. However, they are consistently involved in the same work since they joined the company and their personnel transfer pattern is different from that of 82. Therefore, they were removed from the analysis.

<sup>&</sup>lt;sup>21</sup> The ratio was calculated by dividing the number of employees in the far left row of Figure 5 by 82.

	Workplace				of simulta			tial differe			
				1st Assign.	2nd Assign.	3rd Assign.	Leader	AGM	GM		
			U.S.		1	3	1	1	1		
	Overseas	M	ajor counties			1		1			
	Over	Ot	her countries								
ors		Ter	mporary trasfer				1		1		
Councilors		Headquarters	Attached to HQ		) X						
Co		Headqı	Audit		/\				1		
and		эt	Budget	2 —	-2		1	2	1		
Executives	0	Budget	Accounting		X				1		
ecut	Tokyo	В	Taxation					1	1		
10 Ey		;e	Finance/fund	1	3	3	3	<b>→</b> 3	3		
_		Finance	Exchange	1		1	3				
		正	Int'l finance				1	1	1		
				Sal	es accounting	5	2	1	1	2	<b>→</b> 6
		Osa	ka/Nagoya	1					1		
	Don	Domestic local branches									
	Dom	estic 1	temporary transfer					2	3		

10 "primarily- or secondarily-selected" managers, 0 "thirdly-selected or later" managers

		W	orkplace		of simulta			After initial differentiation in upgrading occurs		
		•••	ompiaco	1st Assign.	2nd Assign.	3rd Assign.	Leader	AGM	GM	
			U.S.			4	1	2		
	Overseas	M	ajor counties			4		3		
	Over	Ot	her countries			3	4	4	1	
	)	Tei	mporary trasfer			N .		4	1	
ers	Tokyo	Headquarters	Attached to HQ		/					
General Managers		Headq	Audit					4		
M Me		∍t	Budget		1					
enera		Budget	Accounting	2	1		1		1	
19 Ge		ш	Taxation		/ N	1	1	1		
7		ė	Finance/fund	4	2	1	1			
		Finance	Exchange	2	4	X	2			
		证	Int'l finance		<b>\\</b> 1/	2	4	3	2	
		Sal	es accounting	6	7	2	8	3	3	
		Osa	ka/Nagoya	5	4	1			3	
	Don	nesti	c local branches						2	
	Dom	omestic temporary transfer				1	1	1	9	

13 "primarily- or secondarily-selected" managers , 6 "thirdly-selected or later" managers

Figure 5. Career Development of 82 Employees Who Joined the Company from 1962 to 1966 and Were Assigned to the Accounting Group

		W	orkplace		of simulta		After initial differentiation in upgrading occurs		
			op.aoo	1st Assign.	2nd Assign.	3rd Assign.	15th yr -	Leader	AGM
			U.S.			3	4		
	seas	M	ajor counties			2	3	1	1
	Overseas	Ot	her countries			4	3	5	3
(A)	)	Ter	mporary trasfer		1	2	2	2	3
20 Deputy General Managers (A		Headquarters	Attached to HQ						
Jane	Tokyo	Headqu	Audit		1 V			1	2
eral l		эt	Budget		l N	1			
3ene		Budget	Accounting	2	1	1	1		
uty (		В	Taxation	\/		$/\!\!/$			
Dep		e e	Finance/fund	3		1			
20		Finance	Exchange	3	4	3		2	
		H	Int'l finance	$ \rangle$		$\langle 1 \rangle$		1	
		Sal	es accounting	12	9	<u> 2</u>	5	15	9
		Osa	ka/Nagoya	,	3 /		1		
	Don	nestic	local branches		1			1	
	Dom	estic t	temporary transfer				1	1	14

20 "primarily- or secondarily-selected" managers

		W	orkplace		of simulta		After initial differentiation in upgrading occurs		
		•	ompiaco	1st Assign.	2nd Assign.	3rd Assign.	15th yr -	Leader	AGM
			U.S.		1	1	2		
	seas	M	ajor counties			1	2		
	Overseas	Ot	her countries				2	5	
(B)		Tei	mporary trasfer				1		
agers		arters	Attached to HQ						
10 Deputy General Managers		Headquarters	Audit					1	
ıal I		, t	Budget	1					
3ene		Budget	Accounting	1		/1			
uty (	Tokyo	В	Taxation	$\mathbb{N}$		X/			
Dep	-	ø.	Finance/fund	2	. 1	//			
10		Finance	Exchange	1	\ //			2	
		ΙĪ	Int'l finance	1	\ //	2	1		
		Sal	es accounting	3	15	2	2	7	2
		Osa	ka/Nagoya	2	4	2	2	3	
	Don	nesti	local branches					1	
	Dom	omestic temporary transfer							9

10 "thirdly-selected or later" managers

Figure 5. (Continued)

		W	orkplace		of simulta otion of a			After initial differentiati in upgrading occurs		
				1st Assign.	2nd Assign.	3rd Assign.	15th yr -	Leader	AGM	
			U.S.			1	1			
	Overseas	M	ajor counties			2	1			
	Over	Ot	her countries		1		8			
		Ter	mporary trasfer					1		
jers		Headquarters	Attached to HQ							
anaç	0	Headq	Audit							
15 Assistant Managers		Budget	Budget	1	l X	1				
sista			Accounting	\		2	1	1		
5 Ass	Tokyo		Taxation			$/\!\!/$				
1,5		;e	Finance/fund				1	1		
		Finance	Exchange	1	1	2		1		
		Fi	Int'l finance					1		
		Sal	es accounting	9	6	3	3	7		
		Osal	ka/Nagoya	4	6	2	2	6		
	Don	nestic	local branches				1	5		
	Dom	estic 1	temporary transfer					14		

	Workplace				of simulta			entiation occurs	
		•	op.aoo	1st Assign.	2nd Assign.	3rd Assign.	15th yr -	Leader	AGM
	"		U.S.						
	Overseas	M	ajor counties						
	Over	Ot	her countries				2		
		Ter	mporary trasfer			1			
		Headquarters	Attached to HQ				1		
ers	Tokyo	Headq	Audit						
8 Managers		#	Budget		1		1		
з Ма		Budget	Accounting		/			1	
8		а	Taxation		/ /				
		ĕ	Finance/fund						
		Finance	Exchange	1					
		证	Int'l finance	$\rangle$					
		Sal	es accounting	3	2	1	2	3	
		Osa	ka/Nagoya	4	4	5	2	3	
	Don	nestic	local branches			1	4	4	
	Dom	estic 1	temporary transfer					6	

1 "primarily- or secondarily-selected" manager , 7 "thirdly-selected or later" managers

Figure 5. (Continued)

Note: Figure 5 shows workplaces (departments in case of Tokyo) of 82 employees who were assigned to the accounting group among 840 college-educated employees who joined Company A from 1962 to 1966 and worked for 25 years or longer and finally reached to manager or higher grades by finally reached grade, workplaces and period.

The rows of the table show workplaces (departments) and the number of employees who finally reached such grade. Since quite a number of deputy general managers (30 employees) were analyzed, they were divided into "primarily- or secondarily-selected" (A) and "thirdly-selected or later" (B) depending on when being promoted to manager.

The period of service shown in the colums of the table was divided into the time of simultaneous promotion of cohort who joined the company at the same time (during 14 years after joining the company) and after initial differentiation in upgrading occurs within a cohort (15th year after joining the company or later). Since personnel transfers occur about 1.8 times during 14 years after joining the company, i.e., employees experience about 2.8 workplaces, three workplaces of 82 employees were categorized as "first assignment (1st Assign.)," "second assignment (2nd Assign.)" and "third assignment (3rd Assign.)"

Since some were transferred three times or more, three workplaces of long length of service were extracted and put in the order of experience for them. To clarify personnel job rotations of each person, boxes were connected by straight lines.

After occurring of promotion disparity, the table shows all workplaces where employees were engaged in for two years or longer as "leader," "acting general manager (AGM)," and "general manager (GM)" shown in Table 2. That is, when one experienced more than one workplace as a general manager, those were all counted. For employees who finally reached deputy general managers or lower grades, a column of experienced department before becoming a leader in the 15th year after joining the company or later (15th yr -) was created. As for employees who finally reached general managers, assistant general managers and managers, "primarily- or secondarily-selected" and "thirdly-selected or later" are mixed in the order of promotion to manager. Therefore, in order to distinguish them, dark-shaded boxes indicate minority ("thirdly-selected or later" for general manager and "primarily- or secondarily-selected" for assistant general manager) only, light-shaded boxes indicate mixed parts and boxes with no shade indicates majority only.

assigned to overseas. There are some employees who worked in finance and budget departments for a long time since the first assignment. There are few persons assigned to overseas after occurring of the promotion disparity and many of them became leaders within the finance department in Tokyo. As personnel transfer patterns of employees being promoted to executives shown by heavy arrows in the figure, employees who were leaders and continuously became deputy general managers and general managers in the same departments finally reached executives. Employees who became deputy general managers but could not be promoted to general managers there became general managers in the different departments and went on loan to other domestic companies. There was no employee who experienced Osaka/Nagoya or other domestic local branches after the second assignment except one who was transferred as a general manager.

As for "general manager," the tendency of job assignment before occurring of the promotion disparity is similar to that of "executive/councilor." However, after the promotion to manager, they often became leaders in the sales accounting department. Although some became leaders in budget and finance departments, those were transferred to overseas subsidiaries or the sales accounting department to be deputy general managers and became

general managers there. There were also many employees who became general managers in Osaka/Nagoya and other domestic branches. Even if the finally reached grade is the same, assigned departments are likely to be different depending on the order of promotion to manager. There are few thirdly-selected or later managers who experienced overseas assignment during the time of simultaneous promotion of cohort, and many of them experienced it in "others (i.e., counties other than the US and major countries)" after occurring of the promotion disparity. After that, they became leaders within the sales accounting department and were transferred to the audit department which monitors the operation of the sales accounting department. There was no thirdly-selected or later manager who became a general manager in Company A. They went on loan to other domestic companies as executives, etc. There was no primarily- or secondarily-selected manager who was assigned to the audit department.

As for "deputy general manager," the tendency of job assignment differs depending on whether they were primarily- or secondarily-selected managers or not. From the perspective of personnel transfer patterns during the time of simultaneous promotion among the cohort and the proportion of those who experienced overseas assignment, "deputy general manager A" who was primarily- or secondarily-selected as a manager is similar to above mentioned employee being promoted to senior position, and "deputy general manager B" who was thirdly-selected or later as a manager is similar to below mentioned employee staying at lower grade. As for "deputy general manager A," the proportion of employees who experienced overseas assignment after occurring of the promotion disparity is higher than that of ones being promoted to senior positions. After that, many of them became leaders or acting leaders in the sales accounting department or overseas subsidiaries and went on loan to other domestic companies.

As for "deputy general manager B," on the other hand, most of all continuously experienced the sales accounting or Osaka/Nagoya branch even at the second assignment, and at the third assignment they are in charge of budget or finance which employees being promoted to senior positions and primarily- or secondarily-selected managers were engaged in at the second assignment. Many of them experienced overseas assignment in "others" in the 15th year after joining the company or later. That is, they are likely to be engaged one period (one assignment) later than others after the second assignment. Compared with "deputy general manager A," there are few persons who became leaders overseas, many of them became leaders in the sales accounting or Osaka/Nagoya branch and went on loan to other domestic companies without becoming acting leaders.

The tendency of "deputy general manager B" is also seen in "assistant general manager" and rather greater. Some of them never experienced overseas assignment until leaving the company. Even though some experienced budget and finance at the second assignment and assignment to U.S at the third assignment, many of them are in a shaded region of the figure, i.e., primarily- or secondarily-selected managers.

As for "manager," there are extremely few persons who experienced budget, finance

or overseas assignment after the second assignment. Many of them were transferred to the sales accounting department, Osaka/Nagoya and domestic local branches repeatedly and developed careers in a narrow field, domestic sales accounting, for a long time. Many of them also became leaders there but the time of becoming leaders was late and the period was short.

#### V. Discussions

The hypothesis is verified on the basis of summarized analysis results.

#### 1. Summary of Analysis Results

In IV. 1, Company A's promotion mechanism was analyzed using the "career tree" method (Figure 1) etc. As a result, as same as Japanese companies analyzed by related literature, there was a tendency of late promotion by judging from the time when initial differentiation in upgrading occurs within a cohort in the 15th year after joining the company, more than 70% of employees being promoted to deputy general managers among those analyzed (Table 3) and continued changes in the order until the time of promotion to general manager. On the other hand, the consolation type of promotion was seldom and the order of promotion to manager at the time when initial differentiation in upgrading occurs within a cohort had a significant effect on finally reached grade (Table 4).

In IV. 2, based on the results of IV. 1, the possibility of job assignment disparity before occurring of the promotion disparity was statistically verified (Table 6). As a result, overseas work experience after the second assignment had a positive significant effect and work experience in domestic branches including Osaka and Nagoya has a negative significant effect on the order of promotion to manager and senior positions. The time of showing significant results became earlier among younger generations in which the time of promotion tends to be late.

In IV. 3 (Figure 5), findings obtained by IV. 2 were minutely clarified using personnel data from joining to leaving the company of 82 employees who were assigned to the accounting group. As a result, there was a disparity in experienced departments and the time of experience depending on the order of promotion to manager after the second assignment. In addition, after occurring of promotion disparity, the work contents were significantly different at the same grade depending on the order of promotion.

#### 2. Interpretation of Analysis Results

As a result of the analysis on career from two perspectives, promotion and assignment, unlike discussions of Koike (1991) and others, Company A showed a tendency of "early selection and late promotion" such as job assignment disparity of cohort since the time of no difference in their grade. However, the term "early selection" here is different from fast track which has been introduced by part of Western companies. The de facto selection was

gradually carried out since the early period after joining the company and employees to be promoted to senior positions such as executives were strictly selected at the time of occurring of promotion disparity. This would agree with the result that if employees are not primarily- or secondarily-selected at the time of occurring of the promotion disparity, they cannot be promoted to senior positions as obtained by many of related literature which only analyzed a promotion mechanism after occurring of the promotion disparity. Particularly, there is a possibility that career was developed depending on the order of promotion to manager which can be assumed as a proxy variable of acquired skills since the time of no disparity in the grade and took the form of difference in assignment. If so, the promotion after the time when initial differentiation in upgrading occurs within a cohort would be based on a long-term performance since shortly after joining the company. Furthermore, even if finally reached grade is the same, since there was a significant disparity in assigned departments due to the difference of the order of promotion to manager, there is a possibility that the career at the time of simultaneous promotion of cohort also influences it even after occurring of the promotion of disparity.

Even though a late promotion mechanism which supports Prendergast (1992) described in II. 1 was shown, there is a possibility that there was a job allocation disparity from the early period and human resources were allocated depending on their ability. Such reality would be able to be explained using a job competition model of Thurow (1975). As shown in Figure 5, the OJT contents after the secondary selection differ depending on the level of skills obtained in the first assigned department where they experienced the basic works such as sales accounting. Those who reached a certain level of skills conduct more difficult business step by step to acquire advanced skills. Those who could not reach a certain level or failed to be selected from the limited numbers of being promoted to next level are in charge of the same level of work as that of the first assignment until they reach there or are included in the limited numbers. This continues even after the second assignment and those who reached a required level of skills through OJT before occurring of the promotion disparity are promoted to managers.

It can be explained with the same model even after occurring of the promotion disparity. However, the selection method changes from loser discrimination before occurring of the promotion disparity to shakedown. It becomes a tournament competition aimed at promotion to senior position among those who obtained advanced skills early and among those who lagged behind in promotion to manager. Losers were transferred to departments including domestic temporary transfer to other companies where their obtained skills can be utilized after the competition. Although it was the same to develop wide-range expertise, the main area and range of work was different depending on acquired skills. Those who took a long time to acquire skills are engaged in the department in which the responsibility and importance of the job are rather less than that of those who acquired skills earlier. Those who could not acquire a certain level of skills despite of taking time to acquire skills through OJT such as those staying at manager level never experienced overseas assignment

even after occurring of the promotion disparity, were engaged in the same level of work as the first assignment and built their expertise changing workplaces.

The disparity of job assignment from early stage would alleviate a problem that "there is not much time for cultivating excellent personnel who will become executives in the future and it makes waste of training investment" which was considered as a disadvantage of "late selection." There is also concern that "late selection" makes excellent personnel difficult to maintain the incentive at the time of simultaneous promotion of cohort, but if they can recognize that future promotion is based on a long-term performance since they joined the company, such concern would be alleviated. On the other hand, a disadvantage of early selection, particularly morale slump of employees who are not early selected would be pointed out. However, as shown in Figure 5, it can be estimated that a long-term hierarchically-structured tournament competition, not one-shot deal, rarefies it. As Lazear and Rosen (1981) discussed, it can also be considered that more employees' efforts are improved by bringing those who have the similar skill into competition. It is also considered, as Koike (2002) described, that an efficient skill development was carried out by knowing their improved skills.

It is said that skills for jobs and values of human resources are provided by the career path and vocational capability development is provided by the level of assigned jobs (e.g., Koike 1999). From this aspect, sufficient opportunity for vocational capability development which is one of the purpose of job assignment is not provided to thirdly-selected or later managers. Therefore, employees who stand out too late have a disadvantage. Even though overseas assignment is not only the experience to make great improvements (Kanai 2002), sufficient opportunities for training and to demonstrate their abilities are not provided unlike primarily- or secondarily-selected managers. In addition, it would be pointed out that the tendency of decreased chance of being promoted to senior positions which can be seen among younger generation and declining proportion of employees who are promoted early when initial differentiation in upgrading occurs within a cohort and decreased variations of the consequent order of promotion may make incentive of improving skills difficult to maintain. Such problems are beyond all reason for companies in which a wide variety of human resources development is essential to maintain their competitiveness today, and this would be one of reasons to accelerate today's personnel-system reform.

#### VI. Conclusion

This paper clarified the reality of in-house career path consisting of two axes; promotion and assignment of white-collar workers based on the obtained employees' lists of General Trading Company A. As a result of detailed analysis on assignment before occurring of the promotion disparity which had not been clarified yet while the slow promotion was adopted, an aspect of job competition model was shown from the early period and it pointed out the possibility of human resource allocation depending on their ability utilizing a

screening function of job assignment.

This paper analyzed a general trading company which falls under the category of traditional conservative firm as Hanada (1987) described and has a different career development method from Japanese companies in other industries. If the results are different from common belief, one of the reasons may be low asymmetric cost of personnel information, as Hirano (2006) described, accompanied with Company A's personnel management by group classified by products. However, since the analysis results indicate a similar tendency to that of related literature which analyzed companies in other industries shown in Table 1, it can also be considered that a dominant common belief, "Japanese companies are always 'late promotion,' 'late screening'" was elaborated by focusing on the assignment before occurring of the promotion disparity. In regard to this point, further analysis with widened scope based on detailed data and discussions including pros and cons of today's personnel system reform are required.

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