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Title	The Forefront of the Labor Market in Indonesia : A Case Analysis of Jakarta Metropolitan Area
Author(s)	Miyamoto, Kensuke
Citation	Economic journal of Hokkaido University, 33, 1-35
Issue Date	2004-07
Doc URL	https://hdl.handle.net/2115/5387
Type	departmental bulletin paper
File Information	EJHU_v33_p1-35.pdf



The Forefront of the Labor Market in Indonesia: A Case Analysis of Jakarta Metropolitan Area

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In a previous article (Miyamoto: 2003), I attempted the case study of Japanese firms' labor market in the Metropolitan Area (JABOTABEK) of Indonesia, with the basis of my survey conducted in 1995. In the latter half of 1990s, the development of Metropolitan Area has been rapidly extended to the eastern provinces such as Bekasi and Karawang. The Japanese firms which still remain as the leading actors of FDI, have also shifted the locations to the Metropolitan eastern provinces. Therefore, in order to trace the labor market's trend in the latter half of 1990s, my new survey in the three major industrial complexes of Bekasi district was conducted in 2000. This article examines the characteristics of Japanese firms' labor markets in the development forefront of Metropolitan suburbs.

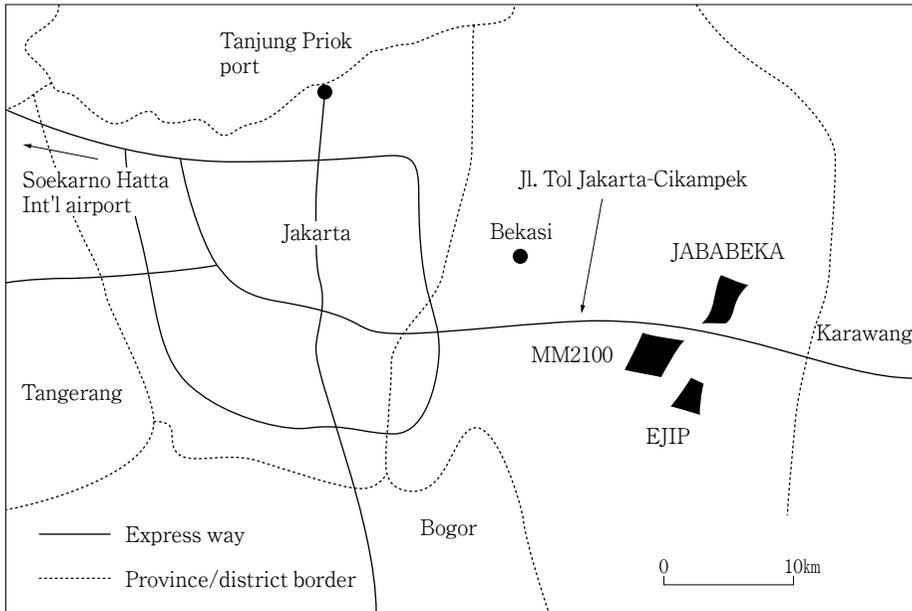
JEL Classification Numbers: J21, N35

Key Words: Internal Labor Market, Industrial Complex, Japanese Management and Production System, Unstable Employment

1. Preface

In my previous publication, "Development and Labor...Indonesia under the Suharto Administration," (Miyamoto: 2001) I attempted to identify the Indonesian labor market through an analysis of its overall structural perspective. The goal of that attempt was to figure out the characteristics of the multi-layered structure of the urban labor market and its hierarchically organized work forces by the analysis of the actual condition of the respective labor market component. These labor markets consist namely of those attached to the foreign, mainly Japanese firms, those that adhere to local large-scale firms and SMEs, and those that cater for the densely accumulated miscellaneous jobs in the urban area. Therefore, by analyzing the characteristics of each of these labor market components respectively, I attempted to offer an overall picture of the stratified labor market of Indonesia. The subjects I used for the analysis of the respective labor markets are as follows: the internal labor market structure, correlation between the workers educational backgrounds, the skill level and work post, the labor market's degree of openness and systemiza-

Figure 1 . Industrial Complexes in Bekasi



tion, the division of labor by sex and the age groups, market evaluation by the stability of employment, and the labor forces' mobility among industries as well as among labor markets.

My previous publication was particularly concerned with the Japanese firms' labor markets. It was elaborated on the result of the survey I conducted in 1995 on those firms established in industrial complexes in Jakarta and the industrial areas in the Metropolitan suburbs such as Kabupaten (K.) Tangerang and K. Bogor. They were firms that had come in with the dawn of this country's industrialization (Miyamoto: 2001, Chapter 1) (Note 1). On the basis of my previous publication and in order to trace the labor market's trend during the latter half of 1990s, I would like to take up again the cases surveyed in the three major industrial complexes, namely MM 2100, EIJP and JABA-BEKA in Bekasi. The survey was conducted in August 2000. I designate them as the themes of my analysis on the status of the Metropolitan development and the changes in the labor market in year 2000. Since all three of these industrial complexes accommodate a large number of Japanese firms, I extracted one company from each location for the subject of my research (Figure 1). Hereafter, I would like to attempt a case study based on the survey on the actual conditions, upon the overall view of the *status quo* of the JABOTA-BEK (Metropolitan Area) development and the changes in the industrial structure, and the comparison of labor forces in the Bekasi district. In attempting to do so, I would also like to pay attention to the comparison with 1995 survey.

As in my earlier report, the theory of Labor Markets is utilized in a broad sense. At the same time, the subjects that should fall within the scope of Industrial Relations, the Labor Process and Wages in the narrow sense of Labor Economics are also taken up for study as long as they are directly related to the labor market. As to the latest trend of domestic/foreign research regarding the Indonesian labor market, I would like readers to refer to my previous publication for a detailed study.

2. Industrial Structure and Composition of Labor Forces in Bekasi District

The development of the Jakarta Metropolitan area first started in the industrial zones within Jakarta City (Pulogadung Industrial Complex as its core) in the early 1970s. Then, in 1980s, it was extended to Tangerang district which is in the west and to Bogor district which is to the south of the Metropolitan area, while further development proceeded in 1990s, towards the eastern districts of Bekasi and Karawang. In the latter half of the 1990s, Jakarta and Tangerang districts faced difficulty in carrying out further spatial development while in Bogor a problem concerning environmental conservation for water resources became apparent, which led to control in development. Today, the direction of the development of the Metropolitan area is that the central functions such as finance, information and administrative management falls to Jakarta. Together with this, the neighboring eastern province is in the phase of developing an industrial complex that incorporates the export processing zone and its necessary infrastructure, and the housing quarters for the workers (Miyamoto, 1999). The central government also positively encourages the development of both Bekasi and Karawang districts, while it has also formulated policy measures to implement the development of the Industrial infrastructure such as the networking of highways connecting the industrial complexes, airports and harbors, and the electricity. At the same time, the central government strongly encourages that new direct foreign investment and domestic investment by local financial combine groups (conglomerates) be made in such industrial complexes.

I would first of all like to confirm the points made in the previous paragraph by providing the statistical data concerning Bekasi district. Table 1 is the summary of demographic trends in JABOTABEK. Between 1980 and 1998 (the time period from which the latest data was obtained at the time of writing this report), there were some notable facts in terms of distribution ratio. They appeared as relative decrease of population in Jakarta, stagnation of growth in Bogor, increase in Bekasi and Tangerang, especially Bekasi, which had a remarkably high rate of increase. The increase in the latter two areas

Table 1 . Population trends in JABOTABEK (1980~1998)

(Unit: 1000 persons)

	1980		1990		1998		1980~1998, rate of increase (%)
		%		%		%	
DKI Jakarta	6,503	54.6	8,259	48.2	9,489	43.9	1.46
K.Bogor	2,741	23.0	4,008	23.4	5,013	23.2	1.83
K.Tangerang	1,529	12.8	2,765	16.1	4,006	18.5	2.62
K.Bekasi	1,143	9.6	2,104	12.3	3,094	14.3	2.71
Total	11,916	100.0	17,136	100.0	21,602	100.0	1.81

Source: BPS [1999], Badan Pusat Statistik Propinsi Jawa Barat [1998].

Note: Population of DKI Jakarta in 1980 is the estimated figure given by the Central Statistic Bureau.

Table 2 . Labor population of K.Bekasi by industry

	1993		1998		1993~1998, additional labor
	Labor population	%	Labor population	%	
Agriculture	148,490	17.9	52,176	5.6	-96,314
Mining	17,372	2.1	9,411	1.0	-7,961
Manufacturing	149,402	18.0	286,143	30.5	136,741
Electric, Gas, Water	6,392	0.8	14,952	1.6	8,560
Construction	38,046	4.6	41,226	4.4	3,180
Commerce	204,638	24.6	209,151	22.3	4,513
Transportation	75,726	9.1	126,645	13.5	50,919
Finance	9,542	1.1	16,194	1.7	6,652
Service	178,018	21.4	180,189	19.2	2,171
Others	3,976	0.5	1,863	0.2	-2,113
Total	831,602	100.0	937,950	100.0	106,348

Source: Badan Pusat Statistik Propinsi Jawa Barat [1998].

can be attributed to the shift of highly educated work forces from Jakarta to its suburbs, the migration of new employees from the rural areas, and a boom in the construction of new houses. Table 2 describes the labor population change in Bekasi by industries. What stands out are the drastic decrease in the agricultural sector as well as the rapid increase in the manufacturing and transportation sectors. As to the distribution ratio, the biggest labor population absorber was the manufacturing sector. Since Bekasi district has been developed as a suburban industrial area, it is considered that the commercial and service sectors have been concentrated in Jakarta. As to the demand for additional labor in the past five years, the manufacturing sector has absorbed 137,000 people into its work force, which resulted in setting in motion a drastic decrease in the agricultural sector. The district itself enjoyed the addition of approximately 110,000 people into the labor force, while the manufacturing

Table 3 . Labor forces in manufacturing industry in K.Bekasi by types of business

Types of products	No. of business	Labor population	%
Foodstuffs, Beverages & Tabaccos	62	10,626	5.1
Textiles & Leathers	119	71,717	34.6
Wood Products	59	9,455	4.6
Paper, Paper Products and Printing	36	6,040	2.9
Chemical & Chemical Products	133	25,784	12.4
Non-metal Mineral Products	30	10,727	5.2
Metal Goods & Machinery	235	52,864	25.5
Basic Metal & Others	36	20,133	9.7
Total	710	207,346	100.0

Source: Badan Pusat Statistik Kabupaten Bekasi [1998].

Badan Pusat Statistik Kotamadya Bekasi [1998].

sector tops the rank of industries contributing to the labor market demand. The data of the Statistical Agency does not provide a basis for identifying whether the demand for this additional labor force was met from within the district or by an inflow from outside. This point will be mentioned again in the analysis of survey data on firms. Next, Table 3 shows the labor components by the types of businesses in the manufacturing sector. After the textile and the leather industries, which have always been traditionally prominent industries, the metal and the machinery are the ones on which greatest emphasis has been laid. Although table does not show the chronological changes since the resources are limited, there is no doubt, thanks to the government's efforts to prepare measures to attract more high-tech related industries to the Bekasi Industrial complexes, of the growth in the machine industry centering on the electric and electronic sectors.

From the available yet fragmented data referred to in the previous paragraph, it seems certain that during the 1990s there had been a drastic industrial shift in Bekasi. This change in the industrial structure is summarized as the combination of the decline of the agricultural population and its shift to industries such as manufacturing. Even among the manufacturing industries, what was distinctive was the structural change of the labor-intensive sector, from the textile and leather to the high-tech related electric and electronic sectors. A particular change has also been observed in the qualitative components of the labor market that support such a shift of the industrial structure. Table 4 shows the composition groupings of labor by educational background. The graduates of high school or higher academic institution are locally regarded as products of a high educational background. In 1992 those who held such a title accounted for 27.8% (200,000 people) of the total labor force; the

Table 4 . Composition of labor forces in K.Bekasi by educational background

(Unit: 1000 people)

	1992		1998	
		%		%
Not-attending school	65	9.0	51	5.2
Elementary school without completion	146	20.2	153	15.7
Elementary school graduate	220	30.5	235	24.2
Junior high school graduate	90	12.5	166	17.1
High school graduate	155	21.5	305	31.1
Junior college graduate	30	4.2	34	3.4
University graduate	15	2.1	29	3.0
Total	721	100.0	973	100.0

Source: Badan Pusat Statistik Propinsi Jawa Barat [1998],

Badan Pusat Statistik Kabupaten Bekasi [1998],

Badan Pusat Statistik Kotamadya Bekasi [1998].

Note: The total labor population in 1998 is not consistent with that in Table 2, for its conformity with the original date.

data obtained in 1998, which was the latest available source (at the time of writing this report), showed 37.5% (368,000 people), meaning that this group had increased by 10% in terms of its component ratio. In the Bekasi industrial complexes, those who play the vital leading roles in the advancement of industries are the foreign affiliated firms such as the Japanese multinational corporations, and they demand a workforce with high educational background in the fields of production, clerical, technological and management work. The workers in the Japanese firms, which will be taken up as a topic later, are also the graduates of high school or higher academic institutions. The employment structure of these firms is noteworthy, and I might add that although the labor force with high educational background has been expanding as well as creating a greater demand for a labor force with a higher educational record, the continuance of an oversupply of labor and the increasingly serious instability of employment caused by Asian economic crisis does not necessarily guarantee stable employment at all times for those with a higher educational background. According to the 1998 labor statistics for Bekasi, the number of the unemployed (job seekers) was 193,000 (17.1%) against the total number of the employed: 938,000. In this situation, the problem concerning the unemployed holders of high educational credentials is particularly serious. As I mentioned in my previous publication, what is observed in the Indonesian labor market are the thick layers of unstable labor forces who are at the risk of potential unemployment because of the extreme oversupply of labor and the lack of jobs that meet one's educational qualifications (Miyamoto 2001). The

instability of employment triggered by the Asian economic crisis is observed not only among laborers with a poor educational background and skills, but also laborers with high educational achievements. An example of such will be introduced later.

3. Advancement of Japanese Firms and the Bekasi Industrial Complex

3.1 Foreign direct investment and Japanese firms

Looking back over the history of the developmental industrialization of Indonesia, what appear to be its characteristics are the repeated political conflicts between the nationalistic-militants revolting internally during the Su-

Table 5 . Major deregulation measures

June 1883	Interest rate by national banks was liberalized, ceiling for loans was moderated.
April 1985	Entrustment of customs duties to private sector was liberalized.
September 1985	Interest rate of loans for the promotion of joint ventures' exportation was lowered, operation of 11 foreign banks in local cities was authorized.
May 1986	Preferential policy was given to the exporting industries (measures: the reimbursement system of import customs, designation of bonded areas, authorization of foreign capital for joint ventures up to 95%)
December 1987	Regulation concerning the time period for the ratio of local capitalization by foreign affiliates to be 51% was moderated (10 yrs→15 yrs), regulation identifying "exporting companies" was moderated (the former criterion of "85% of total export" was lowered to "65%")
October 1988	Establishment and operation of branch offices of foreign banks and private banks was approved
November 1988	Joint foreign capital in the distribution and shipping industries was approved
December 1988	Deregulation of stock market and insurance business
May 1990	Non-tariff barrier was reduced, control over importation of industrial goods was deregulated, control over major exporting goods was abolished.
June 1994	100% foreign capital companies were authorized, foreign affiliates' duty of naturalization was abolished, regulation over foreign affiliates' minimum investment was abolished, control over foreign affiliates' field of business was greatly modified (they are now able to advance in industries such as ports and harbors, shipping, airline, nuclear power generation, drinking water, mass media, and so on)

Source: Asia Keizai Kenkyujo (Institute of Asian Economy) [1985-1995], "Asahi newspaper" June 3, 1994, "Nihon Keizai Shinbun (newspaper)" July 5, 1994.

harto military regime of those days and the civil technocrats who had studied in the USA. The former were those whose philosophy was based on economic nationalism and who also enjoyed being in advantageous posts while the income derived from resources such as oil was steady. The latter, who had notions of the neoclassic market theory for their backbone, took the leadership in formulating policy measures at times of recession. The conflicts between these two streams subtly affected the policy decisions of foreign capital, according to then economic fluctuations.

Nevertheless, the role of foreign capital in the developmental industrialization of Indonesia has been, on the whole, consistently substantial. It has been so even through times of import-substitution industrialization (late 1960-early 1980) and during the major shift to the export-oriented industrialization strategy (a time of total deregulation of finance and investment, and the strategic promotion of export manufacturing industries in and after the mid 1980s). Table 5 is the simple chronology of important deregulation measures concerning finance and foreign capital in and after 1983. There were two epoch-making events during this period, namely the deregulation of foreign banks in 1988 and authorization of 100% foreign affiliates in 1994 by which their businesses were greatly diversified. These events stimulated the trend of further deregulation and acted as the momentum for real competition with neighboring countries to attract foreign capital for the promotion of export manufacturing industry. I would now like to refer to the nation-wide trend of domestic/foreign investment, and about Japanese multinational corporations who are the key players of foreign direct investment, while offering an outline of the industrial complex in Bekasi district.

First, Table 6 shows the 10 top-ranked countries that have invested (based on the number of authorized applications), by the accumulated figures. It was not until the 1990s that Asian NIEs appeared in the higher ranks for their increased investment, but other than this, Japan has been in the first place ever since the enactment of the Foreign Capital Law in 1967. In terms of investment ratio by country by the accumulated sum of investment as of the first half of 2000, Japan accounts for 18.5%. One noteworthy fact is that the rapidly increasing investment from Asian NIEs brings a threat to Japan. For example, when we take a look at the trends in investment by Asian NIEs and Japan by the annual sum of investment (based on the number of authorized applications) in and after 1993, Singapore is the top investor (17.9%) followed by Japan (9.6%) in 1993. In 1994, the top investor was again Singapore (23.1%), 2nd Hong Kong (22.1%), 3rd Taiwan (9.1%), 5th South Korea (6.8%); and Japan was in 6th place (5.7%) (Japan was in the 1st place in 1996 and 1999, while the UK took that position in 1995, 1997 and 1998. Source:

Table 6 . Top 10 foreign investing countries in Indonesia (By total between 1967 and the first half of 2000, by authorization base)

	No. of project	Sum of investment (in US 1 mil.)	Component Ratio (%)
1 Japan	1,173	42,233	18.5
2 The U.K.	380	34,444	15.1
3 Singapore	1,077	21,110	9.3
4 Hong Kong	403	19,248	8.5
5 Taiwan	804	16,970	7.5
6 USA	394	15,819	7.0
7 Holland	264	12,445	5.5
8 South Korea	902	10,702	4.7
9 Australia	430	10,102	4.4
10 Germany	192	9,846	4.3
Total investment	8,318	227,767	100.0

Source: Menteri Negara Penanaman Modal dan Pembinaan BUMN [2000].

Table 7 . Ranking of investment in Indonesia by provinces (and special district) (by total between 1967 and the the first half of 2000, by authorized applications)

Domestic investment				Foreign investment			
	No. of project	Sum of investment (1 bil. rupiah)	%		No. of project	Sum of investment (1 bil. rupiah)	%
1 West Java	3,421	220,632	27.4	1 West Java	2,629	64,587	28.4
2 West Sumatra	137	90,402	11.2	2 Jakarta	2,684	34,705	15.2
3 Jakarta	1,836	71,233	8.9	3 East Java	624	30,492	13.4
4 East Java	1,255	69,428	8.6	4 Riau	599	24,748	10.9
5 Riau	467	61,484	7.6	5 Central Java	265	13,886	6.1
6 Central Java	757	36,850	4.6	6 North Sumatra	200	9,971	4.4
7 Jambi	88	28,582	3.6	7 South Sulawesi	60	7,373	3.2
8 Irian Jaya	87	24,946	3.1	8 East Kalimantan	89	6,429	2.8
9 East Kalimantan	281	24,288	3.0	9 Irian Jaya	56	6,001	2.6
10 South Sulawesi	263	20,896	2.6	10 South Sumatra	61	5,148	2.3
Total investment	11,052	804,846	100.0	Total investment	8,318	227,767	100.0

Source: Menteri Negara Penanaman Modal dan Pembinaan BUMN [2000].

Menteri Negara Penanaman Modal dan Pembinaan BUMN : 2000). These investment trends express some aspects of strengthened relations among Asian countries/regions that have been brought about by the current phase of the new international division of labor mentioned earlier. In other words, the status of Japan as a major foreign investor has been greatly undermined and now at risk, while Asian countries have plunged into the fierce competition

characteristic of these days.

Secondly, I would like to point out to which locations/areas the foreign and domestic investments have been made. Table 7 reveals heavy concentration of investment in the development centers such as Jakarta Metropolitan Area (described as Jakarta and Western Java in the same table), Surabaya City Area (East Java), and Batam island, which is the production hub of the Growth Triangle (Miyamoto : 2001 Ch. 4, for Surabaya City Area, Ch. 5 for Batam Island Development:) These three areas are the favorite areas of foreign investments; Jakarta and West Java only enjoy 43.6% of total foreign investment. In other words, the majority of the foreign investment has been made in the metropolitan areas (The rest go to Bandung, the capital city of West Java Province). Such metropolitan functions have been systematically diversified by the support from foreign investment.

The local subsidiaries of the Japanese multinational corporations still remain strong leading actors in direct foreign investment in spite of the catch-ups made by the NIEs, and they have the tendency to heavily invest in the manufacturing sectors in the Metropolitan area. The preference of Japanese corporations to invest in the manufacturing sector is in contrast to European-American capital that prioritizes its investment in natural resources such as oil and natural gas. Table 8 shows the trend of Japanese corporation in the types of businesses and their locations. As I explain in the note to Table 8, since the source of information from which this table was made was limited, I would like to reiterate that this table shows only the general figures. Nevertheless, it shows that there was a great shift of leading industries in 1990s. One characteristics in the trend was the shift from the textile (formerly the biggest industry in terms of labor absorption in the labor-intensive sector until the 1980s) to the chemical and automobile industries, both of which have shown steady growth. In addition, the electronics industry has also been enjoying rapid growth in recent years. As to the locations of such industries, what have been observed is the shift from the Bekasi district within the Metropolitan Area to the Karawan district, as well as a concentration of such locations in Batam Island in the Growth Triangle. It has been estimated that in the 1990s, the total number of Japanese corporations in the whole country increased by 2.5 to 3 times. In terms of the numbers of local laborers employed, these came to approximately 86,000 in 1990 and increased to approximately 230,000 (210,000 in the manufacturing industry) in 1999 (Jetro-Jakarta Center: 1990, Toyo Keizai Shinposha: 2000).

According to the official data obtained from the Central Statistics Bureau as to the classification of manufacturing companies by size and numbers, there are 28,793 large to medium size corporations with 20 employees or more (ac-

Table 8 . Composition of Japanese companies in Indonesia by types of business and location

Types of business	1990: No. of local		1999: No. of local		Location	1990: No. of local		1999: No. of local	
	corporation	%	corporation	%		corporation	%	corporation	%
Agriculture,forestry,Fishery	8	2.8	7	1.0	Jakarta	109	49.8	314	47.8
Mining	5	1.7	5	0.7	West Java				
Construction	24	8.3	51	7.6	Tangerang	24	11.0	21	3.2
Manufacturing					Bogor	10	4.6	14	2.1
Food	8	2.8	20	3.0	Bekasi	6	2.7	135	20.5
Textile	24	8.3	54	8.0	Karawang	1	0.5	40	6.1
Wood/textile	9	3.1	12	1.8	Purwakarta	2	1.0	14	2.1
Chemical	34	11.8	63	9.4	Bandung	8	3.7	19	2.9
Steel	8	2.8	20	3.0	Others	8	3.7	11	1.7
Metal	12	4.2	26	3.9	Central Java	9	4.1	24	3.7
Machinery	12	4.2	30	4.5	East Java	20	9.1	20	3.0
Electronics	17	5.9	93	13.8	Sumatra				
Transportation machinery	11	3.8	10	1.5	Batam	1	0.5	34	5.2
Automobile	27	9.3	67	10.0	Others	3	1.4	5	0.8
Others	30	10.4	80	11.9	Kalimantan	3	1.4	3	0.5
Commerce	12	4.2	35	5.2	Sulawesi	5	2.3	1	0.2
Finance/insurance	29	10.0	32	4.8	Maluku	5	2.3	—	—
Real estate	4	1.4	18	2.7	Bali	1	0.5	2	0.3
Transport	4	1.4	19	2.8	Irian Jaya	4	1.8	—	—
Service	7	2.4	25	3.7	Total	219	100	657	100
Others	4	1.4	6	0.9					
Total	289	100	673	100					

Source: Data of 1990 was obtained from JETRO-Jakarta center [1990], and 1999 from TOYO KEIZAI SHIM-POSHA [2000].

Note: These data reflect the results of a survey of 60-70% of all Japanese companies.

As to location, the shown figures are based on the only ascertained responses. Also, in a cases where the head office (in the Jakarta business district) and the plant (in suburban Jakarta or a local industrial zone) are apart, the plant's location was taken from the 1990 JETRO data. However, in the 1999 TOYO KEIZAI data, the address of the head office was the only information obtained, which was thus the subject to be compiled.

counting for 1.0% of the total number of manufacturing corporations) holding 4.21 million of labor heads (accounting for 41.3% of the total working population.) (The rest consist of the number of small scale corporations with 5-19 employees: 230,000 (8.3%), with 1.92 million labor heads, accounting for 18.8%. The number of home manufacturing units with up to 4 working heads is 2.5 million. [90.7%] and the number of working heads in this sector is approximately 4.08 million [39.9%]. The data for more detailed classification is not officially available. BPS: 1996, BPS: 1998) We can therefore summarize that the number of manufacturing companies among the Japanese firms ac-

Table 9 . The outline of the 3 industrial complexes in K.Bekasi (As of March, 2000)

	MM2100	EJIP	JABABEKA
Management body	PT.Megalopolis Manunggal Industrial Development	PT.East Jakarta Industrial Town	PT.Kawasan Industrial Jababeka
Composition of capital	Japanese trading firm: 45% Local firm: 55%	Japanese trading firm and bank: 60% local firm: 40%	Collaborative funding by the 21 local business bodies
The planned development area	800ha	320ha	3000ha
The Area developed for industrial use	355ha	230ha	500ha
The first year of corporate's operation	1990	1991	1991
Total No. of corporates located within	82	63	310
No.of Japanese corporates within total	55	60	35
Main types of business subject to attraction	Electronics, machinery	Electric, electronics, furniture, light industries	Electronics, assembly parts, furniture

Source: The present writer's survey (August, 2000).

counts for only 1.6% of the total number of large-to-medium scale corporations, while the labor heads in this sector, estimated to be 210,000, account for only 5.0% of the total number of its working heads. However, when talking about the qualitative formation of labor forces by the large-scale foreign corporations that apply the pulling force of this country's developmental industrialization, we should pay attention to the fact that the Japanese firms hire hundreds to thousands of employees, all of them, with high educational background.

3.2 The industrial complex in Bekasi district

As Table 8 shows, what was remarkable in the trend of location and the number of the local subsidiaries of Japanese firms was the contrast between Jakarta, whose component ratio has shrunk, and the Bekasi district, which has enjoyed a great increase in the number of such premises. This is the result of the diversification of the metropolitan/urban functions and companies' preference in investing in the eastern areas, where the Japanese firms are still the leading factor. I would like to summarize the profiles of the major industrial complexes in the Bekasi district based on my own field survey.

Table 9 shows the outline of the three major industrial complexes in Bekasi district. As a result of the deregulation that came into effect in 1989 (President's proclamation No. 53 of October 27th, 1989), private firms in Indonesia were enabled to operate their own industrial complexes. Together with the wide-range deregulation enacted in 1994 (as in the table 5), the foreign companies were also encouraged to establish their new businesses in the industrial complexes, which actually brought about an outstanding concentration of foreign affiliated companies in the industrial complexes (including the

zones for export processing). All the three industrial complexes that appear in Table 9 are private-initiated industrial complexes located along the Jakarta-Cikampek Express Way, which is also connected to the Sukarno-Hatta International Airport and the Tanjung Priok port; its infrastructural development has been taking place rapidly. The types of business preferred and encouraged in these complexes are the export-oriented industries, mainly those related to high-tech and electronics. On a company's decision to establish itself in these complexes, various privileges of tax exemption are given.

The industrial complex MM 2100 is operated by a management company named PT. Megalopolis Manunggal Industrial Development, which was established in 1990 by the joint capital of a Japanese company (Marubeni Corp. 45%) and one of their local business groups (55%). The total planned development area is to be 800 ha, and so far the already developed industrial area comes to 355 ha, 77 ha for the export processing zone (the area outside the export processing zone is eligible for acquisition by EPTE), while the number of firms located in this complex is 82, 55 of them Japanese. The types of companies/businesses subject to invitation to this complex are the electric, electronic and machinery (The figures concerning their achievements are valid as of March 2000. The same applies to the latter two complexes). Secondly, the EJIP (PT. East Jakarta Industrial Park) is another industrial complex, 60% of whose capital was funded by Japanese trading firms and banks (mainly the Sumitomo Corporation) and 40% by an affiliated local business group company; it started the operations in 1991. The total planned development area is 320 ha, and so far 230 ha have been developed for industrial use (eligible for acquisition of EPTE). 60 out of 63 companies located within the area are Japanese firms, and the types of companies and businesses encouraged to establish in this complex are the electric, electronic, furniture and other light industries. Thirdly, the JABABEKA (whose official name is actually Cikarang Industrial Estate but the locals use the common name JABABEKA-possibly a made-up name out of the underlined parts of Jawa Barat Bekasi) is managed by a business body created by the joint capital of a local corporation group (PT. Kawasan Industri Jababeka). Its total planned development area is 3000 ha, and so far 500 ha have been developed for industrial use (eligible for acquisition of EPTE); its operation started in 1991. The number of companies established within the area is 310, 35 of them Japanese. (There are also a number of local companies as well as Korean and Taiwanese ones.) The main types of companies/businesses preferred in this estate are the electric, electronic, assembly parts and furniture.

In short, the growth of the two former industrial complexes in Bekasi district has been initiated by the leadership of Japanese firms and banks, while

the majority of their tenants are the local subsidiaries of the Japanese firms. The last has been supported by local capital but the development scale is large and the majority of the planned area remains undeveloped; but they foresee the future establishment of Japanese companies in this estate. At this point, I would like to study the characteristics of the labor market created by the Japanese multinational corporations who are also the drivers of foreign capitalization and the key players.

4. The Labor Market of the Japanese Corporations in Bekasi Province

4.1 Three firms subject to the research

Table 10 shows the profiles of the three Japanese firms that were selected as the subject of the survey conducted in August 2000. All of them are electric and electronic manufacturers who fall within the category of the most prioritized/preferred type of business in the industrial complexes in Bekasi. Firm A in MM 2100 and firm B in EJIP are large home electric appliances manufacturers, firm C is a manufacturer of parts to home electric appliances, located in JABABEKA. They share a common characteristic strategy: the comprehensive shifting of their production and export hubs to Southeast Asia, while the headquarters functions and the manufacturing process of products with high-added value requiring advanced technologies remain in Japan.

Firm A, which was the first company settled in the complex, started its business in MM 2100 in 1991. The ratio of investment made by the Japanese side was 95% (at the time of settling in MM 2100, 100% capitalization by a for-

Table 10. The outline of the 3 Japanese firms in K.Bekasi

	Firm A	Firm B	Firm C
Types of business	Electric/Electronics	Electric/Electronics	Electric/Electronics
Year of establishment	1991	1996	1995
Location of plant	MM2100	EJIP	JABABEKA
Capital (1999, U \$)	29,700,000	15,600,000	25,000,000
Capital ratio			
Japan	95%	100%	100%
Indonesia	5%	—	—
Main products	Base of VCR component CD-ROM drive	TV with built-in VCR	Parts of TV tube Precision glass
Sales (1999, U \$)	198,000,000	1,720,000,000	38,000,000
No.of laborers	6,238	776	121
No.of questionnaire retrieved	47	50	63

Source: The present writer's survey (August, 2000).

eign company was not authorized; the condition of joint management still remained), and their main product is a TV set with a built-in VCR which has been fully exported to North America. In addition, a CD-ROM drive was also manufactured only for the purpose of export. The ratio of local parts procurement is 35%, with the supply from the local Japanese parts manufacturer. The rest is procured by the local subsidiaries of Southeast Asian companies (in Malaysia and Thailand) and directly from Japan.

Corporation B settled in the complex in 1996. Thanks to the deregulation of 1994, Japan is the sole investor of its capital, and their main product is a small color TV. 92% of production is exported (imported parts are exempted from taxation in case the volume of domestic sales within the country of manufacturing is within 25% of their total production). The major export partners are Japan (54%), the Middle-East (13%), and in the case of export to Japan it goes along with the basic strategy of re-importing. Parts required for manufacturing are supplied from the local subsidiaries in Southeast Asia (in Thailand and Vietnam besides Indonesia) through their local subsidiary in Singapore, where they have their Southeast Asia headquarters.

Corporation C in JABABEKA is an independent high tech parts manufacturer that does not belong to any particular corporation group. Its advancement in Asia was realized at the time of the shift of large Japanese electric appliance manufacturers into other parts of Asia (with bases in Malaysia, Indonesia and China). It appeared in JABABEKA in 1996 with 100% Japanese capital (joint capital of the Japanese parent company and a large trade firm), specializing in manufacturing of precision glass for a TV tube, and 80% of their products are supplied to local Japanese and Korean manufacturers.

The three firms that are the subject of this survey are the local subsidiaries of Japanese multinational corporations that are settled in the industrial complexes and are designated as the developmental frontline within the metropolitan area; and they share common factors in their management policies that are in conformity with Indonesia's developmental strategies. What I would like to study here is how the labor markets of the Japanese multinational corporations have been developing in such newly emerging industrial complexes. In doing so, I would like, at times, to refer for comparison to the result of the survey conducted on 10 companies in JABOTABEK in 1995, while discussing the aspects of the constitution of the internal labor market, the wages differentials, employment and job-change, the stability of Japanese management style and its production system, the problem of supply sources for laborers and the issue of temporary workers that is a typical example of the effect on the workers in the Japanese firms as a consequence of the Asian economic crisis.

Table 11. Composition of workers by job classification in the 3 Japanese firms in K.Bekasi

	Firm A				Firm B				Firm C			
	Japanese	Indonesian		Total	Japanese	Indonesian		Total	Japanese	Indonesian		Total
		Male	Female			Male	Female			Male	Female	
Director	4	1	—	5	2	—	—	2	2	—	—	2
Technical advisor	—	—	—	—	—	—	—	—	—	2	—	2
Manager	18	4	—	22	6	17	1	24	—	6	5	11
Supervisor	—	223	—	223	—	60	20	80	—	5	—	5
Worker	—	808	1,328	2,136	—	127	283	410	—	100	—	100
Temporary worker	—	850	3,002	3,852	—	91	169	260	—	51	1	52
Total	22	1,886	4,330	6,238	8	295	473	776	2	164	6	172

Source: The present writer's survey (August, 2000).

4.2 Divisional constitution of the internal labor market

Table 11 shows the composition of labor by job classification. First, in order to illustrate the comparisons among all the corporations, I decided to reorganize the table into 6 job classifications. Japanese staff occupy the upper three managerial and executive positions. In firm A, a locally employed person holds the director's post, but he is a figurehead investor and does not practice management. Consequently, the manager (a managerial post, average age 32, average length of service 4.9 years) is the highest class of post a locally employed person can fill. I define the employees categorized as workers or in the higher posts as full time regular employees (permanent workers, average age 23, average length of service 3.4 years), but all three corporations engage a number of temporary workers (average age 21, average length of service 6 months). The position of temporary workers will be considered later.

Table 12 shows the composition of the laborers according to educational background. The qualification of graduate of high school or a higher academic institution applies not only for full-time regular workers but also for the temporary ones. Yet, while comparison with the results of the 1995 survey show that the component ratio of the graduate of high school or equivalent is becoming larger, the ratio of graduates of junior college or higher academic institutions in the office, technical and management sections is not so large. I would imagine one great characteristic of the industrial complexes that the workforce consists mainly of workers in charge of the production line.

One notable characteristic commonly observed in all three companies in relation to the job classification established in Table 11 is that the labor forces are constituted divisionally by the difference of educational background. According to the explanation provided by Japanese staff, the classification of educational backgrounds at the time of new employment and the ranges and the

Table 12. Composition of labor forces in the 3 Japanese firms in K.Bekasi by educational background

Final educational background	Firm A	Firm B	Firm C	Total	%	Note: Result of 1995 survey on 10 corporates in JABOTABEK(%)
Elementary school without completion	—	—	—	—	—	0.2
Elementary school graduate	—	—	—	—	—	2.8
Junior high school graduate (general course)	—	—	—	—	—	5.6
Junior high school graduate (vocational course)	—	—	—	—	—	1.4
Senior high school graduate (general course)	4,784	693	25	5,502	78.1	25.3
Senior high school graduate (vocational course)	1,197	—	33	1,230	17.5	37.7
Junior college/vocational school graduate	140	40	5	185	2.6	12.6
University graduate	95	35	—	130	1.8	14.3
Total	6,216	768	63	7,047	100.0	100

Source: The present writer's survey (August 2000).

course of promotional ladders set for persons of each educational background are more or less the same across the companies. For example, a high school graduate is principally assigned an on-site job in the production line (a simple worker), and according to the assessment of his performance, he will be promoted to the upper posts that are set for the worker class employees. In this case, the highest post he could attain is usually up the post of “supervisor” working at the production site (average age 30, average length of serve 5.2 years). There are some exceptional cases of promotion outside and beyond the different classifications, which are very few and are hardly expected by the worker class employees.

On the other hand, the full time employees who graduated from junior college, college or university are initially employed as junior supervisors, and they are expected to attain promotion through hands-on experiences in sections such as office work, marketing and sales, or in technical work at the production site. In particular, the distinguished personnel who are university graduates are supposed to receive not only in-house training but also training in Japan, and are they expected to be executive trainees. In this way, even among the employees with high educational background, there are different entrances and the scope of one's walk of life is clearly differentiated between blue-collar and white-collar. As to the criteria of one's performance for evaluation for promotion, the three firms share such items as age, work history, the length of service of the worker subject to the evaluation; but more important are one's achievements in work quota, the degree of skills acquired, attitude towards work and so forth, all of which principally evaluate the worker's adaptability and disposition to work. In short, a worker's promotion (and the

concurrent pay raise) is determined by the assessment of his or her performance based on the merit system that applies to the job classification concerned, with the assumption of promotion within the same line of work. On this point, the merit system mentioned here is a limited one. The labor market has been formed by segmented job classifications paired with the merit system evaluation. This is a factor common to the results of the 1995 survey, so there has not been a great change in the last five years.

As to the division of labor by sex, the ratio of male employees is larger in the higher job posts (junior management and higher), while that of the workers' and temporary workers' classes consists mostly of young female employees. (This is a tendency observed in firms A and B; firm C employs very few female workers for the heavy manual labor in the production line). I can summarize by saying that there is a certain division of labor by sex between the upper and lower job positions and, in this sense, women are bound to suffer discrimination at the time of joining the company. However, within the same job class in production labor, there is scarcely any difference in the nature of jobs between male and female workers (except for heavy manual labor), and there is no discriminatory treatment as between male and female in wage standards, promotion and pay raises.

4.3 Working hours and wage difference

The regular work hours for the day-time shift are 7 hours (Monday through Thursday), and 6 hours on Friday (when a two-hour lunch break for mass prayers for Muslims is arranged); usually, there are 2 hours of overtime work on each weekday, but workers have no choice as to whether or not they do them. Although each company sets three work shifts for their 24 hours of operation, they tend to adjust the work shifts flexibly according to the move of the market by rearranging the shift hours, shortening work hours or deciding to work on Sundays and national holidays. (Firm A's work shift hours are, for example, ① 6 : 50 – 15 : 30, ② 15 : 50 – 23 : 35, ③ 23 : 35 – 6 : 50). Since the survey was being conducted during the aftereffects of the Asian economic crisis, I found no cases of extremely extended work hours; rather, work hours tended to be shortened. However, work shifts are rotated regularly (basically once a week) and workers are obliged to follow the changes as well as to adjust their private life cycles accordingly.

Workers receive wages according to the minutely classified rank in the job classification to which they belong. The wage consist of a basic salary for their regular work, an allowance for their work outside regular hours on weekdays, Saturdays and Sundays, a commuting allowance, a perfect attendance allowance, bonuses (a holiday allowance for the celebration of Lebaran after Ramad-

Table 13. Wage standard by job classification (Average monthly basic salary)
(unit: rupiah)

	Firm A	Firm B	Firm C
Japanese staff			
Director	40,000,000	n.a.	n.a.
Manager	30,000,000	n.a.	n.a.
Local staff			
Director	9,200,000	—	—
Manager	2,400,000	3,000,000	5,000,000
Supervisor	1,400,000	1,000,000	1,500,000
Worker	725,000	375,000	500,000
Temporary worker	287,500	320,000	350,000

Source: The present writer's survey (August, 2000).

han, the month of fasting). Table 13 shows the average wages (monthly basic salary) of each job classification. Taking firm A, for example, we see that the locally employed full time worker (in the production line) receives 725,000 rupiah (the exchange rate at the time of survey: 1 yen = 78 rupiah), the locally hired director class employee receives 12.7 times (9,200,000 rupiah) that of production line worker, Japanese staff in the Manager class receives 41 times, and Japanese staff in the Director class receives 55 times that of a production line worker. The temporary workers get the legal minimum wage of 287,500 rupiah (revised in April 2000) and they are not entitled to any promotion. The wage differentials seen in firm A are similarly observed in other foreign corporations. The survey of the three firms was not able to collect data in more detail regarding the wage differences among the same job classification and between job classification. The 1995 survey reveals that larger companies tend to have more complicated job classifications, more detailed posts within the same classification and corresponding wage differentials, which result in larger differentials of wages between job classifications as well as inside the same work class. (Table 13 shows only the average salary of each work class, and does not provide accurate data regarding wage differentials within the same work class.)

The reason for the existing wage differentials is the wage policy commonly seen amongst the foreign affiliates. In the case of Japanese firms, they have the policy of hiring new employees of the worker class at the legal minimum wage while the wages of the Japanese staff dispatched from Japan are to maintain the same salary level as when working in Japan. Consequently, differential between the minimum wage earner and the maximum wage earner becomes extreme. Between these two extremes, the wage systems for the lo-

cally hired workers are systematically organized. From the management's point of view, the adoption of great wage differentials are regarded as incentives for the locally hired workers, who are provided with opportunities for in-house training and workshops to learn the new skills, which will enable them to pursue promotion to higher posts with higher salaries. However, since the full adoption of the Japanese management and production system is extremely difficult (which is to be explained later), the existing wage differentials can not be said to be necessarily successful, especially in stabilizing work forces (especially stabilization of the well paid workers in higher job classes) for the idea of promotion equals the expectation of a pay raise.

Under the existing wage system, even the locally hired employees are entitled to receive considerably higher salaries than other local workers as long as they are in the managerial posts. On the whole, however, the basic salary for the workers in the production line, who form the majority of the locally hired employees, is kept to almost the same standard as the legal minimum wage for a manufacturing site. To sum up, in the strata of a salary system with large differentials, there is a thick layer of low-paid work. That is why the labor cost from the view of Japanese firms' management can maintain considerably lower wages compared with those paid in Japan. In terms of an international comparison of labor costs, the average wage for a worker on a production line in Indonesia is approximately one fifteenth to one twentieth of what a Japanese worker in Japan receives. It therefore goes without saying that the Japanese firms settled in Indonesia fully enjoy the merit of a labor market that combines human resources with a high educational standard with low labor costs.

4.4 Entrance to a company and job-change

Table 14 shows the classification of the source of job offer information on a new employee's entrance to the company (sample research, the number of valid responses: 156. This sample survey was conducted on the workers in the production line who belong to the worker class). Both firms A and B used the job offer services provided by the Local Labor Bureau of Bekasi district for the recruitment of new employees, and they are both eager to hire job seekers who are registered at the Local Labor Bureau. According to the staff of both firms, most of the Japanese companies settled in MM 2100 and EJIP adopt this policy in finding new labor. On the other hand, firm C is not in contact with the Local Labor Bureau; Instead, the worker class employees are hired through personal connections, and the university graduate class employees mostly responded to the situation-vacant advertisement in newspapers. During the survey in 1995, a personal connection was the most common means of securing

Table 14. The source of job offer information available to new employees in 3 Japanese firms in K. Bekasi (survey by samples)

	Firm A	Firm B	Firm C	Total	%	Note: Result of 1995 survey on 10 corporates in JABOTABEK (%)
Information from relatives	8	2	18	28	17.9	32.0
Information from friends	10	4	32	46	29.5	37.2
newspaper job offer	5	0	12	17	10.9	16.2
Employment security office	20	39	0	59	37.8	6.9
school job offer	2	0	0	2	1.3	7.2
Others	1	2	1	4	2.6	0.5
Total	46	47	63	156	100	100

Source: The present writer's survey (August, 2000).

employees, as firm C depended hardly at all on the services of Local Labor Bureau (public employment security offices). If the hiring policy of firm A and B is adopted extensively, the labor market will become larger and its openness and systematization will advance. This point requires some follow-up research.

Hiring new labor takes place according to the number of vacant positions, which means that there is no custom of recruiting a large number of new graduates at the beginning of a new fiscal year. Labor is overpoweringly in surplus. The three firms subject to this survey usually receive job applications several tens to over a hundred times the number of vacancies. The process of employment is as follows: First the employers draw up a short list based on the applicants' documents, have them proceed to the written examination (a test of general knowledge is emphasized for high school graduates and a language examination for university graduates) and then to an oral examination. Either way, since the 1995 survey there has been a strong buyer's market in terms of hiring labor.

Table 15, on the other hand, indicates that amongst a sample of workers (sample research, the number of valid responses: 158), approximately half of them have had the experience of job-change. Yet from the figures in the same table, it could be said that in Indonesia, where job-hopping is quite frequently observed, the rate of labor stability in the Japanese firms is relatively high. The 1995 survey noted the same tendency. Table 15 is the summary of data obtained from the worker class employees. Although the number of job-changes in the different job classifications is not clearly indicated because of the limited source of information, Japanese personnel concerned with workers' job change in firm A observed that the workers at the production line tended to be stable, whereas it was among the office or managerial classes with high educational background that job-changes are often seen. Firms B and C observe a

Table 15. History of job-change by laborers in the 3 Japanese firms in Bekasi
(survey by samples)

	Firm A	Firm B	Firm C	Total	%	Note: Result of 1995 survey on 10 corporates in JABOTABEK (%)
Never	34	31	13	78	49.4	51.0
Once	8	8	17	33	20.9	25.6
Twice	4	4	13	21	13.3	15.1
Three times	0	2	15	17	10.8	6.0
Four times	1	2	4	7	4.4	1.4
Five times or more	0	1	1	2	1.3	1.0
Total	47	48	63	158	100	100

Source: The present writer's survey (August, 2000).

similar tendency (A staff member of firm B said that a large number of their employees in the managerial posts were headhunted by NIEs based companies). No data concerning the ratio of people leaving their job was compiled by any of these three firms (the rough estimate of monthly average rate of workers leaving their jobs was calculated to be approximately 3 ~ 5 % of the total labor heads), but the point made by the firm personnel should be considered as significant. The reasons behind the high stability rate of full time employees at the production line are as follows. Firstly, their status is guaranteed by the government's regulations regarding conclusion to the labor agreement as well as their being entitled to worker's compensation insurance, medical insurance coverage for the worker and his family, allowances for overtime work and commuting, living, managerial position and retirement. Compared to the employees of SMEs or workers engaged in miscellaneous urban industries that do not provide such coverage, it is relatively secure work. Secondly, as mentioned earlier, job shortage among the labor force with high educational background is very serious, and it is not easy for those who have once been employed by a foreign affiliate to transfer to another company with better conditions (See Note 3). Yet, in contrast, the high rate of job-change among the employees in technical or engineering sections can be attributed to the fact that there is a labor shortage amongst the class of people who hold high educational records as well as having advanced skills (This is an area where a labor shortage is observed among the general surplus of labor.).

5. Stability of Japanese Management and Its Production System

As the composition of work posts and the wage system mentioned in the previous section indicates, the Japanese firms in Indonesia adopt the seniority system for the ordering of the company, the substantial characteristic of Japa-

nese management. Each company puts great emphasis on the training of prospective managers among the locally hired. Such personnel are given intensive training in the know-how of Japanese management as well as opportunities for training overseas. They are also given the responsibility of managing the subordinate workers and the authority to evaluate their performances for promotion. Nevertheless, a number of Japanese staff pointed out that it is the high rate of job-change amongst managers which result in the poor stability of Japanese style management. In short, the introduction of the seniority system for the maintenance of the working order has not necessarily been successful. To figure out the reason for this difficulty, I require to carry out more minute researches on the local workers' work ethics or values regarding work, but, for the time being, I would like to touch on the following point. There is the big contrast in the stability of the management system according to the workers' classes within the same company, between, that is, the high school graduate class employees and those holding engineering and managerial posts. The labor force consisting of the former is in surplus and the employee are stable. On the other hand, there is a chronic shortage of labor among the engineering and managerial classes together with the office and technical workers classes, which can be attributed to the high rate of job-change. This imbalance hinders in-house work management and prevents the seniority system from being stable.

What is the Japanese style production system, which is said to be unique to Japanese companies? Workers' skill acquisition is usually carried out through OJT by each company and companies also add opportunities for various short-term training (Off-JT) inside the company. Another attempt to achieve quality control is realized through the adoption of the QC circle. However, as far as I understands from the observation of production sites, it appears that there is no work custom that enables or encourages workers to acquire skills voluntarily; Instead, what was impressive was the strict labor management at the production site. Although the Japanese staff are supposed to guide the Indonesian workers for collective improvement of activities at the production site, the problem is simply a matter of formality. Workers take part in such activities because they think participation in them is a part of their work (a quota) to fulfill rather than for promoting positive voluntary attitudes. The Japanese production system itself, although I would again need to carry out more detailed research before I could be assertive about its tendencies, has not been stable, attributing this simply to lack of enthusiasm among both executives and workers, especially among the locally hired workers, who are supposed to fulfill their duties such as to exercise the manual accurately and achieve the given quota. Any voluntary activities of their own to promote their

creativity are not realized, nor does the working environment highly evaluate workers with multi-skills (flexibility workers arrangement). What is often seen inside the manufacturing plants are the achievement graphs and reports of the high-reward winners for the purpose of promoting competition among work groups to achieve quotas.

What is highly appreciated at the production site thus seems to be full of conduct of the merit system based on the accurate exercise of the manual. From the company's view point, the occupational class that could adopt the Japanese management and the production systems would be the university graduate office and technical employees in the managerial posts, but this class of staff is not loyal to the company, as we have seen. Rather they constitute the class that has quite high mobility since there is a constant shortage of technical and engineering staff. The Japanese staff in all the firms subject to this research were rather negative or passive about the full introduction of the Japanese management and production system or about taking it as the main policy direction of company management.

6. The Supply Base of Labor Forces

Table 16 is the summary of the composition of the labor forces by their hometown. The biggest group comes from West Java province (31.5%), in which Bekasi district is located. This trend has been the same since the 1995 survey on JABOTABEK when the result showed that the majority of workers were from Central to West Java. The data provided by the firms show only the number of workers by their home provinces. Therefore, for the more detailed

Table 16. Composition of laborers in Japanese firms in Bekasi by hometown

	Firm A	Firm B	Total	%	Note: Result of 1995 survey on 10 corporates in JABOTABEK (%)
Jakarta	620	77	697	10.0	17.3
West Java	1,896	307	2,203	31.5	32.9
Central Java	1,240	177	1,417	20.3	29.3
East Java	1,240	153	1,393	19.9	8.4
Sumatra	620	53	673	9.6	10.6
Kalimantan	300	—	300	4.3	0.5
Sulawesi	300	1	301	4.3	0.5
Others	—	—	—	—	0.7
Total	6,216	768	6,984	100.0	100

Source: The present writer's survey (August, 2000).

Note: The data concerning laborers' hometown supplied by firm A are approximate figures except those of West Java.

analysis, I conducted a sample survey of the workers from West Java. The total number of samples from all three firms was 160, and, among them, the number of workers from West Java was 53 (33.1%), including 31 workers from Bekasi district (consisting of 58.5% of workers from West Java). In short, approximately 60% of workers from West Java come from the Bekasi district, the home of all these firms. Those who live in West Java but outside the Bekasi district find it almost impossible to commute and are obliged to follow the same work/living style as those who come from remote provinces. (The majority of workers from the remote provinces rent an apartment in Bekasi district with several others and commute to work by mini bus or the company's pickup bus.)

The majority of workers come from Central and West Java because, (1) West Java is the area that incorporates the metropolitan area and the home of the firms ; (2) a well developed transport network has realized easier commuting for those who live outside the Metropolitan area within Central and West Java ; (3) because of the concentration of population, the number of people with high educational background is also in surplus, especially among the young who are strongly inclined to find a job in the Metropolitan Industrial Zones which houses large enterprises such as foreign affiliates. The imbalance seen in the distribution of workers' hometowns is not therefore necessarily caused by any differential of educational standard among regions. It is, rather, because of the spatial range and mobility of the Metropolitan area within which the better-educated workers find it easy to travel, which means that these are the matters of population scale and geographic considerations.

At this point, I should like to introduce T. McGee, who is well known for his study on cities in South East Asia. He has pointed out that one of the characteristics of urbanization and development of mega cities of Southeast Asia is what has been termed the *desa=kota* style. This is the first stage of urbanization during which industrialization takes place in an area that is surrounded by labor-intensive rice farms, when the industrial sector absorbs the surplus labor forces from the surrounding farming areas. Consequently, while the urbanization of mega-city progresses, the agricultural and non-agricultural sectors coexist. (McGee: 1991, 1995) As far as Bekasi, as a part of JABOTABEK is concerned, however, the *desa=kota* type supply of labor is only partial, the labor forces coming not only from Java but from all over the country. This tendency illustrates the fact that the labor markets for the Japanese firms=large corporations have a certain extensiveness and openness of area from which labor is drawn. At the same time, however, we cannot overlook the fact that there is still high dependency on personal relations (interpersonal network) in the recruitment of labor. Even in the labor market that requires workers with

Table 17. The previous work site of the laboreres in the 3 Japanese firms in Bekasi
(survey by samples)

	Firm A	Firm B	Firm C	Total	%	Note: Result of 1995 survey on 10 corporates in JABOTABEK (%)
Jakarta	3	4	24	31	34.8	57.8
West Java	11	14	27	52	58.4	29.1
Bekasi	9	14	20	43	48.3	—
Tangerang	1		4	5	5.6	—
Bogor	—	—	1	1	1.1	—
Bandung	—	—	2	2	2.2	—
Others	1	—	—	1	1.1	—
Central Java	1	2	—	3	3.4	5.5
East Java	1	—	—	1	1.1	3.5
Sumatra	—	2	—	2	2.2	3.0
Kalimantan	—	—	—	—	—	0.5
Sulawesi	—	—	—	—	—	0.5
Others	—	—	—	—	—	—
Total	16	22	51	89	100	100

Source: The present writer's survey (August, 2000).

high educational background, such as foreign (Japanese) firms (consisting of layers of the workforce situated high in the labor market stratum), we observe the extensive recruitment of workers through relatives or relations living in the local community, which prevents the development of a labor market that enables workers the chance of free and voluntary job selection. On this point, we cannot overlook the challenges still remaining in this country, one of which is to create a formally open and systemized labor market.

I would next like to take a look at Table 17, to note the trend in employees' change of work site in relation to their former work site. (Sample research, the number of valid responses: 89). What the table indicates is that most of the workers with the experience of job-changes have a work history in Bekasi district, where they still work today, or in the Jakarta Metropolitan area. It thus goes without saying that not only the locals but also the workers who are originally from remote areas who have once moved to the Metropolitan area may have changed jobs. The results of the 1995 survey show the same characteristics.

Table 18 shows the previous types of job held by the workers with job-change experience. The majority of them were engaged in factory work (80.3%) and in cases where they have had repeated job changes in the metropolitan area, they tend to find another job as a factory worker. The character-

Table 18. The previous job of laborers in the 3 Japanese firms in Bekasi.

(survey by samples)

	Firm A	Firm B	Firm C	Total	%	Note: Result of 1995 survey on 10 corporates in JABOTABEK (%)
Farm management	—	—	—	—	—	—
Agricultural laborer	1	—	—	1	1.5	0.5
Factory worker	7	14	32	53	80.3	53.4
Office worker	1	1	3	5	7.6	23.6
Craftsman	—	—	—	—	—	2.6
Merchant	—	—	—	—	—	4.2
Self-employed	3	1	2	6	9.1	8.9
Public servant (administrative post)	—	—	—	—	—	3.1
Serviceperson	—	—	—	—	—	—
Teacher	—	—	1	1	1.5	3.7
Total	12	16	38	66	100	100

Source: The present writer's survey (August, 2000).

istics of work experiences in the suburban industrial complexes have been extracted by making a comparison with the 1995 research result. Since the 1995 survey was conducted mainly in the Capital City of Jakarta, the results contained a considerable number of answers from workers with the experience of office work. Even so, the suburban industrial complexes that specialize in production employ labor forces that include fewer workers with clerical experiences. The general tendency is for the metropolitan industrial complexes to draw their main work forces from people from the remote areas who have already settled in the Metropolitan area and have accumulated the skills required for factory work through job change. This could be regarded as a typical career building pattern for the workers concerned.

Table 19 summarizes the composition of the occupation of the households which workers come from, to illustrate the supply of labor by workers' classes (determined by the worker's parents occupation. Sample survey. The number of valid responses: 145). The first remarkable factor is that the number of workers from the households of public servants (administrative jobs) is as many as those from the farming household. Moreover, if the population in military service and education were to be added to this category of public servants (the interpretation of "public servants" in a broad sense), it would account for 26.2% of all households. As is widely recognized, public servants are important jobs for persons with a high academic background. According to the data compiled by the Central Statistic Bureau, the public servants' educational background in 1998 shows that 85.9% of the total number of public ser-

Table 19. Composition of the occupation of the household from which the laborers come in the 3 Japanese firms in Bekasi (survey by samples)

	Firm A	Firm B	Firm C	Total	%	Note: Result of 1995 survey on 10 corporates in JABOTABEK (%)
Farm Management	8	10	10	28	19.3	20.1
Agricultural laborer	1	2	7	10	6.9	2.9
Factory worker	4	3	1	8	5.5	2.1
Office worker	—	1	3	4	2.8	6.5
Craftsman	—	—	—	—	—	0.3
Merchant	8	5	6	19	13.1	8.9
Self-employed	2	10	6	18	12.4	9.4
Public servant (administrative post)	9	8	11	28	19.3	22.1
Serviceperson	4	1	4	9	6.2	12.2
Teacher	—	—	1	1	0.7	3.6
unempolyed	5	—	11	16	11.0	11.2
Others	—	4	—	4	2.8	0.8
Total	41	44	60	145	100	100

Source: The present writer's survey (August, 2000).

vants (4.01 million of them across the country - 2.53 million male and 1.48 million female) were the graduates of high school or the higher academic institutions (BPS: 1999). What we can interpret from this is that the majority of labor coming from the public servants' households join and form the higher stratum of the labor market such as that drawn on by Japanese firms. This trend was also confirmed by the 1995 survey result. It has been over a quarter of a century since Indonesia started its industrialization, and the households forming the higher stratum of labor forces of the country have already started reproducing a new generation of households that add a certain significance to the composition of the labor forces. An important point to notice is that the number of employees from the households of factory or office work is not as many as that from public servants. This point clearly indicates great difference in the former jobs the aforementioned workers with job-change experience have. We can attribute this tendency to the strong implementation of the former administrative policy which was to increase and expand the number of public servants' jobs to build a stronger administrative foundation (public servants under the Suharto regime were obligated to join the ruling party Golkar), as well as the strong inclination towards stable jobs among the population with a high educational background (Note 4). This tendency in choice of occupation affected the employment of the population with high educational backgrounds among the current workers' parents' generation. However this

may be, the labor forces employed by the Japanese firms are drawn from households with high educational background, and in this sense the reproduction of worker's households is worth paying attention to. This is the first feature to be noted.

Secondly, a considerable body of the labor force is still drawn from farming households or those who are engaged in agriculture, or commerce or business of a non-capitalized kind. This indicates that the migration of labor from the rural areas is still continuing while the self-employed classes also continue to shift to other types of jobs with the change of generations. The status of the labor supplies among the agricultural and other self-employed classes was not traceable because of the insufficient number of the sample, but, according to the 1995 survey result, there was a clear indication that the middle and upper classes of rural households in Java were the main sources of labor destined to supply the high class labor market in the Metropolitan areas.

7. Unstable Employment Situation for the Temporary Workers

What I would like to highlight in the results of this survey is that since the economic crisis all the Japanese firms concerned eagerly utilize temporary workers as an employment measure. In firm A, among 6,216 locally hired workers, 3,852 (62%) are temporary workers called KWT (Karyawan Waktu Tertentu), 78% of whom are female. (KWT is a term widely used in the Bekasi Industrial complexes to refer to temporary workers. In other districts of the metropolitan area, the temporary workers are also called Harian or Kuli). The KWT working for firm A are employed on a one-year contract (directly with the company concerned, not by way of dispatch from a temping office) and they are entitled to renew their contract only once, meaning that they can work for no more than two consecutive years. Until 1996, firm A had the policy of offering a full-time post to KWT workers with excellent performances but since this policy was abolished after the economic crisis, KWT workers have no chance to win regular employee's status. In short, following the experience of having to minimize production at times of crisis, KWT has been used to adjust the demand of labor forces. Wages for KWT workers are set at the legal minimum wage in Bekasi district (287,500 rupiah at the time of this survey) and no pay raise is made during the contract period. On the other hand, the temporary workers working for firm B are called Kontrak, and are dispatched from local temping companies. They are outside-firm workers, not transferred from SME contractors. Among all the locally hired workers, 260 of them (34%) are Kontrak. As they are outside-firm workers, their working conditions are determined by the temping companies, but the principles of their employment on the basis of a one-year contract with a single renewal of a one-year contract at

the legal minimum wage is the same as those of firm A. In both firms A and B, the temporary workers and outside-firm workers work in the production line together with the full time workers. Their activities are no different from those of the regular workers, apart from special work clothes and caps, but they are in an extremely disadvantaged situation, especially in terms of low wages and a work contract with a limited term. Firm C utilizes Kontrak workers supplied by the contracted temping companies, and it accounts for 31% (52 heads) of 170 locally hired staff. In firm C, Kontrak workers are engaged mainly in the transportation of products inside the factory and miscellaneous tasks, so their jobs are clearly differentiated from those of full-time workers. As they are outside-firm workers, the terms of contract and working conditions are not the concern of the company management, but, generally speaking, these fix a limited time of labor with the legal minimum wage.

These temporary and outside-firm workers also require a high educational background equivalent to that of a graduate of high school or higher institutions, which is also a requirement that applies to the full time workers. This means that these temporary workers also belong to the higher strata of the Indonesian labor market structure. Since the Asian economic crisis, the surplus of labor and the issue of unstable employment has been a serious issue, and this makes it difficult for those with advanced educational training to find a job that matches their qualifications. Many of them are inclined to find a temporary job in the lower class job market for miscellaneous jobs (Note 5) simply to earn enough to maintain their lives, while waiting for a chance to join the higher job market. The work classes constantly exposed to the unstable employment conditions were drastically enlarged by the Asian Economic crisis. (No accurate figures can be obtained, but it has been said that approximately 15 to 20 million out of the 90 million working population of Indonesia lost their jobs.) The temporary or outside-firm workers must be categorized among the classes experiencing unstable employment conditions (most of them are potentially unemployed). The large number of work classes composed of people with high educational backgrounds who always live in fear of unemployment shows the seriousness of the problem in the job market.

8. Summarization

I have sought to explain the characteristics of the labor markets drawn on by Japanese firms in the Bekasi Industrial complex, based on the results obtained from the survey conducted in August 2000. All the firms subject to this survey were typically export-oriented firms which emerged after comprehensive deregulation, and they function as the export base not only for the purpose of re-exportation to Japan but also to the third countries. They also

adopt the new management strategy among the Japanese firms in the area of local procurement of parts. As to the composition of the in-house labor force, the qualitative and quantitative composition of labor forces, the stability of Japanese management and production systems, and the supply base of labor share to some extent the same factors as those revealed by the survey conducted on 10 Japanese firms in 1995. One characteristic that was different about the firms subject to the survey in hand was that they highly utilize the temporary or the outside-firm workers as a buffer of labor demand, in response to the effects of the Asian economic crisis, and these classes now form one component of the in-house labor market. To put this in another way, it indicates that there is an increase in the classes of unstable employees, consisting mostly of young female temporary workers who are employed for short terms on a minimum wage. In Indonesia, where the problem of labor surplus is serious, workers are cornered into taking unstable jobs to secure their lives, while this trend creates a rather one-sided advantageous labor markets for the companies.

9. Conclusion

This report sets as its subject the labor market drawn on by the Japanese firms located in the Bekasi Industrial Complexes in the metropolitan area of Indonesia. This labor market consists of those with high educational background, the highest layer of all the labor strata of this country. Beneath the labor market employed by the foreign affiliates, there is a dense accumulation of labor markets utilized by locally capitalized large firms and SMEs, as well as the labor forces for urban miscellaneous jobs. Thus, the labor market taken up as the subject in this report should be situated within the structure of the country's whole labor market. I would therefore like to make some follow-up observations about the Japanese firms' labor market and those situated beneath it. The summary of the labor market situation for Japanese firms is as follows : There was a clear division between the production workers who form the work force filled by high school graduates, and the labor force for the clerical, technical and managerial staff formed by graduates of junior college, technical colleges and higher academic institutions. Skill acquisition and promotion take place within clearly divided job classifications and the wage differentials are evident between the occupational classes. Besides, a certain division of labor by sex was observed within some job classes together with the hierarchically organized internal market structure. While the adoption of the Japanese management and production system has its limitations, what is stable as a means of management is the clarification of job description by manual for each work class and the evaluation of one's work performance based on the

merit system for the purpose of promotion within the job classification one belongs to. (This is a limited merit system, as promotion takes place only within the work class to which one belongs.) Regarding the source of the labor supply, although the majority of the labor forces come from farming or self-employed households, the ratio of the work force coming from the household of public servants with a high educational background is almost on a par. It has been over a quarter of a century since Indonesia's post-war industrialization really began, and the main component of the labor forces at the upper end of the labor market are coming from the households of workers. However, despite the progress in extending the range and openness in the demand for labor forces, the labor market has not been formally systemized, as there still is a strong tendency for employment to depend on personal connections or on the introduction of community members.

Another noteworthy characteristic is the utilization of temporary or outside-firm workers, whose employment situation is rather unstable, while making inroads into the upper class labor market. The firms subject to this survey have responded to the Asian economic crisis by positively utilizing temporary workers to make them the buffer of the labor demand, a trait which has been showing remarkable prominence. Despite the presence of the higher-education oriented labor force in the urban areas, the industrial sector has not been capable of absorbing such labor, and consequently the portion of those joining the upper class labor market is limited to small number. This fact has facilitated the formation of hierarchically composed in-house labor markets as well as the retention of the unstable conditions of employment among workers in the lower class labor market.

The lower class labor market is the thick accumulation of work forces drawn only by the locally capitalized large manufacturers, SMEs and the miscellaneous in the urban areas, and incorporates the labor force by order of its academic qualifications and the acquisition level of its skills. My previous publication (2001) explains details of this market, but I would like to extract some of its points.

In the traditional locally capitalized labor intensive sectors (textiles, sewing, shoe making, foodstuffs and general goods), the main labor forces are formed by young female workers with little education, less skills, coming from rural and remote areas. Since they are the workers who form the very bottom layer of the labor market pyramid of the in-house management system of division of labor and wage differentials by sexes, they are therefore given activities different from those of the male workers. Similarly, the labor market for the locally capitalized SMEs is the one formed by workers with low educational background and little skills, capable only of simple labor. The SMEs who

maintain their manufacturing business by contracting with wholesalers and large companies are prone to adopt the multi-layered relations based on the scale of the companies they have contracts with. The smaller the company is, the worse their working conditions are. The workers of SMEs as well as the young female workers are exposed to employment situation such as a low wage standard below the legal minimum wage, no pay raise, insufficient and incomplete work regulations, long hours of labor, short work contracts, unsystematic labor and lack of employment securities: A large unstable working class in today's urban labor market is formulated. Another unstable working class in Indonesia labor market is engaged in miscellaneous urban jobs. (A definition of the miscellaneous jobs is provided in Note 5.) The labor forces of these working classes are made up of persons from lower/miscellaneous jobs in rural areas, and consist of people with low educational background and less skills. What emerges from this is picture of a hierarchically organized pyramid of labor forces based by the different educational backgrounds, acquired skills and stability of employment.

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Notes

- (1) In the 1995 survey on JABOTABEK, I selected 10 companies for the subject of the survey. 7 of them were in Jakarta, 2 in Tangerang and 1 in Bogor. In terms of types of industries, there were 3 automobile, 3 textile, 2 metal, 1 chemical and 1 home electric appliances. All of them launched their businesses in the relatively early stage of Indonesia's industrialization, and all are large-scale foreign corporations that have been taking industrial leadership over the last 20 years. The average number of workers in each of the 10 companies was 1,665, and the total number of workers subject to this survey was 440 from the 10 companies.
- (2) Besides the three industrial complexes described in this report, other development focal points include the Korean Hyundai industrial complex and Lippo City, regarded as a model case of a suburban mini-town. It is a development project initiated by the local Chinese combine, Lippo group; they have a centralized management system for middle to upper class residential districts, schools, hospitals, parks and shopping malls within the site.
- (3) As to the labor unions, firms A and B are affiliated with the Indonesia Metal Labor Union (SPMI: Serikat Pekerja Metal Indonesia). The ratio of workers joining this labor union is 100% among full-time workers in firm A and 76% in firm B. Each firm's management regularly holds negotiations with the union over the work regulations, revision of salary and so forth, and they maintain that they are on good terms with the labor unions. SPMI is an organization that emerged after the collapse of the Suharto regime (May 1998), which triggered liberalization of labor unions organization. Ever since, this union has been prominent in the electric, steel, ship building and air craft industries, although information on their action policy, organizational structure and the number of members has not yet been confirmed.
- (4) The 1990s are defined as the time when deregulation and privatization were fully promoted, which in turn

brought about an expansion of wage differentials between the public and the private sectors, resulting in the tendency among the highly educated population to leave their jobs in governmental service (Tempo, 6 February, 1993).

- (5) As to the labor market for the SMEs and miscellaneous urban businesses, the reference is to chapters 2 and 6 of my previous publications (Miyamoto 2001). The following is the summary of this;

The stratified structure of labor markets is clearly seen in those adopted by the SMEs and miscellaneous urban businesses. Some foreign SMEs (what was remarkable among Japanese firms in the 1990s were the SMEs' mass advancement towards Asian markets, of both the large corporation group's subcontractors and independent companies that were among the industries facing structural recession) require their new employees to have more or less similar qualifications to those required by the large firms of their new recruits, and consequently the SMEs are also creating a labor market formed by a population with a high educational background. On the other hand, in the labor market of locally established SMEs, the labor markets are composed of populations with low educational background, less skills and capability only of simple labor. The SMEs that manage their business by manufacturing items contracted with large wholesalers and companies have hierarchical relations among themselves according to the scale of their business. The lower class small businesses operate more disadvantageous working conditions. Since the workers of SMEs are exposed to incompleteness and irregularity of employment as well as low income, the majority of them thus form part of the unstable working classes in the labor market.

The miscellaneous urban businesses are also typical of the labor market entered by workers in the unstable working classes. (Street stalls, peddlers, rickshaw pullers, motorbike taxi drivers, minibus drivers, house maids, waste material collectors, day laborers at construction sites and so on.) The characteristics of these miscellaneous urban labors are as follows: the source of their labor supply is mainly the lower working classes or the miscellaneous work classes of rural areas, and they form the labor market consisting of people with low educational background and capability only of simple labor. Since their employment greatly depends on the personal network based on the rural community they come from, change of job even to another urban miscellaneous job is not easy and the market is rather closed. At the same time, the overall labor market is structured by differences of educational standard and the capability by one's skills so that their chances of moving to the upper labor market are extremely unlikely.

References

- McGee, T.G. (1991), "The Emergence of Desakota Regions in Asia: Expanding a Hypothesis" in *The Extended Metropolis: Settlement Transition in Asia* ed. By N.Ginsburg, B.Koppel and T.G.McGee, University of Hawaii Press.
- McGee, T.G. (1995), "Metrofitting the Emerging Mega-Urban Regions of ASEAM: An Overview" in *The Mega-Urban Regions of Southeast Asia*, ed. by T.G.McGee and Ira M.Robinson, UBC Press.
- MIYAMOTO, Kensuke (ed.) (1999), *Ajia no Daitoshi (Great cities of Asia) [2]* Jakarta, Nihon Hyouron Sha.
- MIYAMOTO, Kensuke (2001) *Kaihatu to Roudou---Suharto Taisei ka no Indonesia (Development and labor---Indonesia under Suharto regime)*, Nihon Hyouron Sha.
- MIYAMOTO, Kensuke (2003), "The Labor Market and Japanese Firms in the Metropolitan Area of Indonesia," Discussion Paper Series A : No. 2003-115, Graduate School of Economics and Business Administration,

tion, Hokkaido University, September, 2003.

Reference material

Badan Koordinasi Penanaman Modal (BKPM) (1997), *Statistik Investasi, S/D 30 Juni*.

Badan Pusat Statistik Propinsi Jawa Barat (1998), *Jawa Barat dalam Angka 1998*.

Badan Pusat Statistik Kabupaten Bekasi (1998), *Kabupaten Bekasi dalam Angka 1998*.

Badan Pusat Statistik Kotamadya Bekasi (1998), *Kotamadya Bekasi dalam Angka 1998*.

Biro Pusat Statistik

BPS (1996), *Sensus Ekonomi 1996*.

BPS (1998), *Statistik Indonesia 1998*.

BPS (1999), *Statistik Indonesia 1999*.

JETRO-Jakarta Center (1990), *List of Japanese Investment Projects in Indonesia 1990*.

Menteri Negara Penanaman Modal dan Pembinaan BUMN (2000), *Statistik Investasi S/D 30 Juni 2000*.

Asia Keizai Kenkyuujyo (1985-1995), *Ajia Doukou Nenpou (Annual report on Asian trend) Version 1985-1995*.

Toyo Keizai Shinposha (2000), *Kaigai Shinnshutu Kigyousouran 2000 (Companies advancing overseas 2000)*,

Touyou Keizai Shinnpou Sha.