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THE JAPANESE LABOR MARKET AFTER THE OIL CRISIS: A Factual Report† (II)††

HARUO SHIMADA

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†† This is the last half of the paper. The first half was published in Vol. 14, No. 1 of this journal.

IV. TRENDS AND STRUCTURE OF UNEMPLOYMENT

IV.1. *Introduction*

During the adjustment process following the oil crisis, unemployment has increased substantially, nearly twice as much in terms of the number and the ratio to the total labor force as well. An anxiety is prevailing that the Japanese labor market inevitably will continue to have much higher unemployment in the future than ever before. Indeed there are reasons to suspect that proneness to and severity associated with unemployment are increasing because of the structural change in the labor market, if not the official rate of unemployment itself. At the minimum, the need for comprehensive policy programs to prevent unemployment is much greater than in the past when the phenomenal economic growth has virtually solved most of potential problems associated with unemployment.

IV.2. *Increased Unemployment*

While the pace of employment reductions was being accelerated during 1975, the incidence of unemployment has increased rapidly, too, on the other end of the labor maket. The rate of unemployment rose up to around 2 per cent, the level that has never been experienced ever since the end of the 1950s as seen in Table 11.

When we look more closely the monthly changes of unemployment, as presented in Table 12, the rate climbed above the level of 2 per cent after summer of 1975 and has stayed around that level persistently until recently. And no appreciable signs of recovery are as yet visible in this respect for the near future. It was under such circumstances that an anxiety of what might be called as "the era of high unemployment" has grown widely among the public and policy makers.

The level of 2 per cent is, however, still much lower relative to other nations. One might be curious to know why and how serious the Japanese are worried about the

TABLE 11. THE NUMBER OF PERSONS AND THE RATE OF UNEMPLOYMENT

Year	Number (thousand) persons	Rate (%)	Year	Number (thousand) persons	Rate (%)
1956	980	2.3	1966	650	1.3
1957	820	1.9	1967	630	1.3
1958	900	2.1	1968	590	1.2
1959	980	2.2	1969	570	1.1
1960	750	1.7	1970	590	1.2
1961	660	1.4	1971	640	1.2
1962	590	1.3	1972	730	1.4
1963	590	1.3	1973	670	1.3
1964	540	1.1	1974	740	1.4
1965	570	1.2	1975	1000	1.9

Source: Office of the Prime Minister, *Labor Force Survey*, various years.
Note: The numbers of unemployed are rounded at the unit of 10 thousands.

TABLE 12. MONTHLY RATES OF UNEMPLOYMENT

(in percentage)

	1974	1975	1976
January	1.22	1.67	2.04
February	1.24	1.71	2.02
March	1.26	1.75	2.02
April	1.27	1.79	2.03
May	1.28	1.82	2.05
June	1.30	1.87	2.06
July	1.34	1.91	2.06
August	1.40	1.96	2.05
September	1.47	2.01	2.03
October	1.53	2.05	2.01
November	1.59	2.06	1.99
December	1.64	2.05	

Source: Office of the Prime Minister, *Labor Force Survey*, various monthly issues.
Note: The Figures are adjusted for seasonal fluctuations.

problem of unemployment with such a prospect as 2 or at most 3 per cent. Yet, there are reasons to believe that this nominal rate of unemployment considerably understates the substantial importance of unemployment in the Japanese labor market and therefore the Japanese have to have a grave concern.

Several reasons are in order: (1) the after effect of the rapid expansion of demand during the last two decades of phenomenal economic growth, the pace that was much more than to offset the relatively rapid increase in labor supply. This after effect is, however, beginning to wither away with the slowing down of economic growth, (2) the official unemloyment statistics based on the labor force survey (not based on the data of registered insured workers) tends to underestimate than other countries the incidence of unemployment because of relatively loose definition of being employed and severe definition of being perfectly unemployed, (3) although employers are trying hard to get rid of them, there still remain a sizeable amount of labor force on the payroll who can not operate at their full capacity because of insufficient degree of capacity utilization of other productive facilities, (4) in stead of staying in the labor market as unemployed job seekers, a substantial number of secondary workers such as house wives disappeared from the labor market, and (5) the government took emergent actions to minimize unemployment; a conspicuous example of such policy measures is the subsidy (Koyō Chōsei Kyūfukin) to make up a half to two thirds of the wage bill for temporarily idle workers, which amounted, as will be explained more in detail later, to 66 billion yen from January 1975 up to October 1976 to stabilize employment of 3.4 million eligible employees. (6) the structure of labor market which can allow more room for workers in under-employment situation.

The fourth point may be elaborated partially by the data presented in Table 13.

We learn from the table that in 1974 and in 1975, non-labor force have increased substantially, and the size of increase was especially large among female population.

TABLE 13. RECENT CHANGES IN LABOR FORCE AND NON-LABOR FORCE BY SEX

(units: thousand persons)

	Males				Females			
	1974	Changes from 1973	1975	Changes from 1974	1974	Changes from 1973	1975	Changes from 1974
Population of Age 15 and Older	40,150	460	40,600	450	42,850	460	43,310	460
Labor Force	32,780	240	32,940	160	19,960	−490	19,830	−130
Employed	32,320	210	32,290	30	19,700	−510	19,490	−210
Self-Employed	6,560	−10	6,520	−40	2,960	−130	2,790	−170
Family Workers	1,300	−100	1,250	−50	5,000	−230	5,000	0
Employees	24,400	320	24,460	60	11,710	−150	11,660	−50
Unemployed	460	30	650	190	260	−10	340	80
Non-Labor Force	7,370	220	7,660	290	22,890	950	23,480	590

Source: Office of the Prime Minister, *Labor Force Survey*, 1974, 1975.

Particularly noteworthy is the fact that while the size of female population of productive age range was increasing, the size of labor force itself has decreased markedly for the first time within the quarter of a century. The female labor force has declined by 490 000 in 1974 and by 130 000 in 1975, suggesting the discouraged workers' effect being at work. The number of those female workers who dropped out of the labor market is equivalent to more than a half of the currently unemployed.

In other words, in spite of these institutional, structural and policy factors that all worked in favor of minimizing unemployment, it was unable to prevent the size of unemployment from growing nearly twice as large, as noted earlier, within a short period of time. Moreover, uncertain prospects for the future economic conditions would keep the employers' attitude for new recruitment very hesitant on the one hand, and may well lead on the other hand to a revived increase in under-employment or disguized unemployment among relatively disadvantaged groups of workers in the labor market. This would mean to aggravate the seriousness of the problem wothout necessarily increasing the explicit official rate of unemployment.

IV.3. *The Structure of Unemployment*

Indeed, the distribution of unemployment is quite uneven among different categories of workers; sex, age, occupation, region, industry etc.

The rate of unemployment is usually slightly lower for female labor force than for male counterpart, perhaps reflecting the fact that female labor force includes a

TABLE 14. UNEMPLOYMENT RATES BY AGE AND SEX

(in percentage)

	Males			Females		
	1970	1973	1975	1970	1973	1975
Age classes						
15–19	2.4	3.4	4.7	1.6	1.7	2.3
20–24	1.9	2.2	3.1	2.0	2.2	2.6
25–29	1.1	1.3	2.0	1.5	1.7	2.6
30–34	0.9	0.9	1.4	1.1	1.1	2.0
35–39	0.8	0.9	1.4	1.0	1.0	1.6
40–44	0.9	0.9	1.5	0.6	0.8	1.2
45–49	0.8	0.9	1.4	0.5	0.7	1.3
50–54	0.9	1.0	1.5	0.4	0.7	1.0
55–59	2.1	1.8	3.1	0.4	0.7	1.4
60–64	1.8	2.0	3.2	0.3	0.7	1.0
Average rate for year	1.2	1.3	2.0	1.1	1.2	1.7

Source: Office of the Prime Minister, *Labor Force Survey*, various years.

greater proportion of those who have only low commitment to the labor market than male labor force. In terms of spatial distribution, there exits a considerable degree of regional differentials as measured among 47 prefectures.

While unemployment data are insufficient to show occupational and industrial differentials, an examination of beneficiaries of employment insurance suggests that incidence of unemployment is highly concentrated among particular segments of workers such as daily employed workers and those in construction industry.

Of particular interest and importance is the distribution by age. The rate of unemployment has a two modal distribution by age; high for those younger than the middle 20s, low for prime age range and again high after the middle 50s as seen in Table 14.

High unemployment rates for young workers are closely related to their high turnover. This is partly a symptom of difficult adaptation of young workers to industrial disciplines of workshop. Many young workers quit jobs in many of manufacturing industries where working conditions are not attractive especially with night-shifts as being monotonous, dirty, noisy etc. Low degree of commitment of young workers due to a failure in adaptation poses an annoying issue of labor management in Japanese industries, just like their Western counterparts.

To the extent, however, that the demand for them is very high, as will be seen in Table 24 later, this does not present a serious problem in terms of securing employment or minimizing unemployment for this group of workers. In contrast, high unemployment rates among the aged workers reflect a serious issue for labor market policies in Japan. Not only are the aged workers more apt to be unemployed, they tend to stay longer as being unemployed once they lose their jobs, as suggested by the data in Table 15.

TABLE 15. RATIOS OF UNEMPLOYED PERSONS CLASSIFIED BY THE LENGTH OF BEING UNEMPLOYED AND BY AGE

Age	Total age range	15–24	25–34	35–44	45–54	55 and older
Length of Being Unemployed						
Less than a week	5.6	8.6	5.3	0.0	11.1	0.0
A week to 1 month	28.1	40.0	21.1	25.0	33.3	16.7
1 to 3 months	29.2	25.7	36.8	41.7	22.2	16.7
3 to 6 months	16.9	11.4	15.8	25.0	33.3	25.0
More than 6 months	20.2	14.3	21.1	8.3	0.6	41.0
Total	100.0	100.0	100.0	100.0	100.0	100.0
The number of unemployed (in ten thousands)	94	38	19	13	10	13

Source: Office of the Prime Minister, *Special Survey Attached to Labor Force Survey*, March 1972.

When compared to the data of U.S., U.K. and West Germany, the age distribution of Japanese unemployment is quite different in this respect from the U.S. and German ones. In its outlook it appears to resemble, if multiplied by some scaling factor, that of U.K., but the current and prospective problems associated with poor conditions of aged workers in the Japanese labor market would not seem to be shared equally by the British counterpart.

In terms of employment security, regular workers in large firms, especially white-collar workers, had been relatively better protected than such categories of workers as aged workers in general, specifically, older than middle 50s, employees in small businesses, secondary labor force, family workers, and workers in casual jobs. But as mentioned earlier by the recent trend of the core labor force employment index (Fig. 2 and Table 10 of my article in Vol. 14 No. 1 of this journal), the new tendency is that side by side with the worsening of employment conditions of relatively disadvantaged workers, employment of regular workers in large firms too has begun to show some signs of deterioration. This might be interpreted as suggesting that the overall demand for labor has shrunk so much that the flexibility associated with the conventional cushion of disadvantaged groups was exhausted and now the basis of core labor force begins to be eroded. This new trend aggravates still further the anxiety of workers for the future.

IV.4. *Structural Changes in the Labor Market and Implications for Unemployment*

To evaluate appropriately the significance of current unemployment problem, it would be useful to put it in a long term perspective. Along with the rapid reduction in the proportion of agricultural labor force, the weight of family workers and self-employed in the labor force declined substantially. Analysts of labor market agree that during the first half of the 1960s the pool of sub-standard employment has been absorbed and largely disappeared from the labor market.

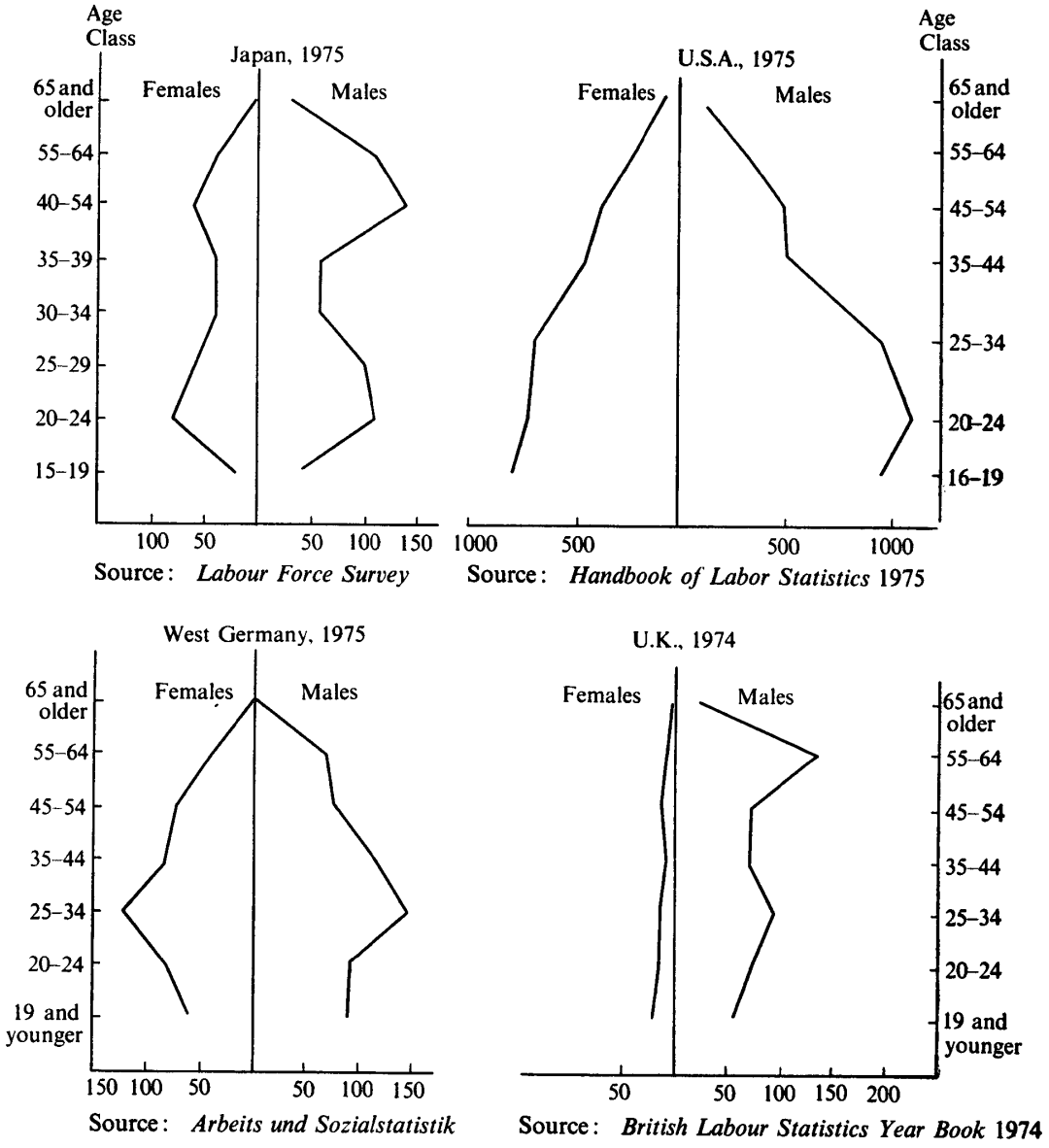

Figure 3. Distribution of Unemployment by Age Class: Four Country Comparison (horisontal axis in thousand persons)

Notes: (1) The data were edited by Eiko Shinozuka.
(2) The top two age classes for British females are 60 and older, and 55–59, respectively.

Professor Umemura found that while the secondary labor force had been reduced in number during the first half of the 1960s the trend began to be reversed since then as seen in Table 16.

This suggests that the mass of reserved labor force that had existed largely in the form of secondary labor force has diminished substantially in the process of rapid economic growth during the first half of the 1960s, and the further expansion of the economy in the latter half of the 1960s triggers new changes in the structure of

TABLE 16. DISTRIBUTION OF LABOR FORCE BY TYPE AND SECTOR

	Size of labor force (in millions)					Changes (in percentage)			
	1956	1959	1962	1965	1967	1956 to 1959	1959 to 1962	1962 to 1965	1965 to 1968
Primary labor force									
All industries	33.8	36.3	38.5	40.7	42.9	7.4	5.9	5.7	5.6
Agriculture	12.6	12.2	10.3	9.5	8.1	−2.5	−15.9	−7.6	−15.0
Non-agriculture	21.2	24.1	28.2	31.1	34.9	13.4	16.9	10.6	12.0
Secondary labor force									
All industries	6.0	4.8	4.2	4.0	6.1	−21.0	−12.5	−4.5	51.9
Agriculture	4.2	3.2	2.6	2.2	2.8	−23.5	−20.3	−14.4	26.3
Non-agriculture	1.8	1.6	1.6	1.8	3.3	−15.2	0.5	14.0	83.2

Source: Office of the Prime Minister, *Employment Status Survey*. Quoted from Umemura, M. (1973) pp.14–15.

Note: Since figures are rounded at the level of one-tenth of millions there involve considerable rounding errors.

peripheral labor force.[1] In other words, the Japanese labor market is interpreted to have reached finally the state of full employment by the end of the 1960s in its true sense after having wiped out the large reserve of disguized unemployment that had been regarded for a long time as a structural peculiarity of the Japanese labor market.

Since around 1970 the pace of an increase in regular employees has slowed down visibly while at the same time the rate of increase in money wages has grown remarkably, and participation of a new type of female labor force in part-time work who had had little commitment to labor market increased appreciably during this period.

Professor Nakamura pointed out that the importance of what might be called as potential labor force has increased markedly during this period, as listed in Table 17. This category of women (denoted as type D) are those who have currently no jobs and not searching for them actively while willing to accept the jobs if they are sufficiently attractive. This type is not counted as the labor force in its conventional definition, but in effect does play an important role both as a supplementary source of labor force in booming periods and as a cushion that disappears from the labor market in adverse economic conditions.

The point is that the consecutive and rapid industrial expansion has not only absorbed the conventional labor reserve in the agricultural sector but also almost all

[1] The secondary labor force as classified in Table 16 corresponds to those persons who replied to the questionaire of the *Employment Status Survey* such that they regard their work on a market job as their secondary activity. In most cases they regard their home work or school work as their primary activity.

TABLE 17. THE STRUCTURE OF FEMALE LABOR FORCE

Year	Female population age 15 and older (millions)	Ratio of gainfully employed (%)	(A) Primary labor force (%)	Peripheral labor force		
				(B) Secondary, with job (%)	(C) Secondary, without job (%)	(D) Potential labor force (%)
1956	31.4	49.6	32.3	17.3	6.0	7.2
1959	33.4	46.3	32.8	13.5	5.4	6.4
1962	34.8	45.9	34.8	11.3	4.4	7.0
1965	37.6	44.2	34.0	10.0	4.4	7.2
1968	39.5	47.5	33.4	14.1	6.2	10.2
1971	41.0	46.5	32.2	14.3	6.0	11.3
1974	42.8	44.0	30.7	13.2	6.4	11.7

Source: Computed from Office of the Prime Minister, *Employment Status Survey*, various years. Quoted from Nakamura, T. (1975)

Note: All the percentage figures imply the proportion of particular type of female labor force or potential labor force relative to the female population of age 15 and older.

mobilizeable labor force, and reached the stage where additional labor supplies had to be sought from the newly cultivated peripheral sources, i.e. the new type of urban housewives who had been least connected to the labor market, or to put it differently, the most marginal stratum of the secondary labor force.

To summarize the essence in short, the conditions of the Japanese labor market right before the oil crisis was such that virtually all the mobilizeable labor force was being mobilized and hardly any further sources of safety bulbs were remaining.

Although the current labor market is still equipped with some degree of flexibility as demonstrated by the aforementioned disappearance of massive female "discouraged" workers, the structure attained by the early 1970s implies that the market flexibility is much more limited compared to that enjoyed during the 1950s or the pre-high-growth period. The rapid industrialization and the accompanying structural changes in the labor market have prepared the ground in which a drop in labor demand would cause more explicity and more seriously than ever before social problems associated with the helpless and isolated unemployed. While luckily the official unemployment rate itself has been kept so far around the level not seriously more than 2 per cent thanks to flexible adjustments as well as efforts of employers, workers and the government, the conditions are basically quite vulnerable and dangers always exist that unemployment incidence can grow abruptly. And to the extent that the cushions were largely exhausted, a further rise in unemployment, that would inevitably involve "core" labor force both for the firm and the household, would likely to give serious damages to industries as well as households.

IV.5. *Counter Unemployment Policies*

This suggests an important policy implication. That is, even though the official

rate of unemployment may look low, the importance attached to policies aimed at reducing and preventing unemployment is very high.

Indeed, perhaps because of having been used to the long-lasted spectacular economic growth, it seems that the Japanese labor market has been relatively poorly armed against unemployment than would be desirable. Neither employers or unions have prepared rules or funds to be mobilized once substantial layoffs become inevitable. The government has not been an exception, though it is now attempting to reorganize swiftly policy programs to combat unemployment.

In concluding this section, let me comment on some of the governmental policy efforts. The first major step in recent progress in this respect is the revision of the old unemployment law, that had been in effect since 1947, with substantial improvements and the new title, "Employment Insurance Law." The new law became effective as of April 1, 1975.

One of the improvements was to alleviate insurance premiums of aged workers as well as enriching insurance payments for them. This was to counteract against increasingly severer unemployment problems of aged workers that had been accelerated in recent years. Another major point, perhaps more substantial, was to raise the premium imposed on the employer by the amount equivalent to 3 permil of the payroll—prior to the revision, both the employer and employee bore 5 permil respectively—with a prescription of spending the increased fund for three purposes: improvement in employment, manpower development and training, and improvement in worker welfare programs. For each purpose was allocated the fund approximately equivalent to one permil of the aggregate payroll.

Being faced with the deteriorating employment one of the three intended programs, namely imporovement in employment, was quickly realized in the form of *Koyō Chōsei Kyūfukin* or Employment Adjustment Subsidy (henceforth called EAS). Indeed, under a special transitory treatment the EAS was made effective three months before the Employment Insurance Law formally came into effect.

The subsidy, aiming at minimizing unemployment incidence, was given to employers who had to layoff their employees temporarily because of the depressive economic conditions that are judged to be worse than certain prescribed criteria. The amount of subsidy is a half of wages paid to laid off workers in the case of large firms and two third in the case of small firms.[2] As the recession proceeded, the list of industries that were designated as eligible for the subsidy was enlarged and elaborated, and the subsidy was distributed as seen in Table 18. Since January 1975 till October 1976, the subsidy totalled some 66 billion yen and supposedly stabilized employment of 3.4 million employees.

The EAS was certainly an emergent measure and not well planned with a long-range perspective. While it is supposed to have attained some appreciable results, it has disturbed to some extent effective use of labor force because of its rigid criteria for eligibility. The second major step is an attempt to make up for these

[2] Note that the "layoff" in japan means that the worker stays at home while maintaining employment relationship with the employer intact and receiving about 90 per cent of the normal pay. The period of layoff lasts usually only for a few days and even in worst cases at most for a week or two.

TABLE 18. DISTRIBUTION OF EMPLOYMENT ADJUSTMENT SUBSIDY DURING 1975 JANUARY TO 1976 OCTOBER

	Total	Large firms	Small firms
The number of establishments	68,996	3,390	65,606
Eligible insured workers (1000s)	3,440	1,323	2,116
Mandays laid off (1000s)	28,979	10,934	18,045
Paid subsidy (million Yen)	65,727	23,985	41,742

Source: Unpublished data of the Ministry of Labour.

shortcomings and establish a more systematic scheme by the name of Koyō Antei Shikin or the Employment Stabilizing Fund. The fund can be used to assist not only the employers who laid off workers but also those who train employees, employ aged workers, and try to shift to new areas of industrial activity. The sources of the fund are secured by integrating the aforementioned increments in employment insurance premiums aiming at the three purposes. Currently, a proposal is being made to increase the premium still by the amount equivalent to one permil of the payroll to enrich the fund. The fund is expected to be effective from October 1977.

While the reorganization and enrichment of counter unemployment programs toward this direction is certainly appreciable and commendable, it would be desirable and necessary to operate them in close connection with macro economic policies of aggregate demand management in order to make them work really effectively. For one thing, the fund for this type of policy programs is not limitless especially when the economic recession lasts long and prevails widely. For another, these measures are essentially transitory until workers find their jobs with a recovery in aggregate demand.

APPENDIX TO SECTION IV

In note 1 to Section II, a brief mention was made to the report of Koyō Seisaku Chōsa Kenkyūkai (1975) which was disclosed in September 1975. The report was said to have suggested that the average annual growth rate of around 6 per cent for 10 years would be an adequate target to maintain full employment without causing excessive pressure for inflation in the labor market.

It would be useful to explain a little more about the results as well as methodology of the projections of the report here at the end of this section as supplementary information.

The assessment of labor supply is made by adding up the prospective numbers of labor force for different age and sex groups. Of particular interest are the behavior of such demographic groups as youth, middle-aged women, and old workers since these are the groups whose labor force participation rates are expected to change relatively substantially. To analyze the behavior of these groups, various factors

TABLE 19. LABOR FORCE PROJECTIONS BY AGE AND SEX

	Labor force (in 10 thousands)								
	1975			1980			1985		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Total	5260	3290	1970	5514	2456	2058	5748	3601	2147
15–19	169	86	83	159	79	80	157	76	81
20–24	640	343	297	542	293	249	542	294	248
25–29	733	508	225	631	440	191	553	389	164
30–44	1918	1244	674	2101	1354	747	2168	1391	777
45–54	1003	598	405	1184	726	458	1258	770	488
55–64	550	342	208	623	382	241	778	495	283
65 and older	247	169	78	274	182	92	292	186	106

	Labor force participation ratio (in percentage)								
	1975			1980			1985		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Total	62.5	80.9	45.4	62.2	80.5	45.0	61.4	79.3	44.6
15–19	21.2	21.2	21.3	19.3	18.8	19.9	17.8	16.8	18.8
20–24	70.2	74.8	65.4	68.3	72.7	63.8	66.0	70.2	61.7
25–29	68.7	96.0	41.8	69.5	96.5	42.3	70.0	97.0	42.2
30–44	74.8	97.6	52.3	75.2	97.8	53.0	75.9	98.2	54.0
45–54	76.8	96.0	59.2	78.0	96.5	59.9	78.3	96.9	60.2
55–64	61.9	86.0	42.4	62.2	86.5	43.1	63.9	86.8	43.7
65 and older	28.2	44.5	15.7	26.5	41.6	15.4	24.6	38.1	15.2

Source: Koyō Seisaku Kenkyūkai (Task Force on Employment Policies) (1975), pp. 44–45

were taken into consideration such as changes in age structure of population, rates of school enrollments, distribution of families by different employment status, and social security benefits. Part of the result of assessment is presented in Table 19.

The other side of the coin is the demand for labor. The expected demand for labor was assessed by first projecting the sectoral distribution of final demand, using an Input-Output table based on alternative rates of economic growth, and then estimating the demand for labor in each of industrial sectors using respecive elasticities of labor productivity to changes in production as a factor of modification. The summary result is shown in Table 20.

Table 21 summarizes the anticipated balance between the supply of and demand for labor under alternative rates of economic growth.

TABLE 20. PROJECTIONS OF EMPLOYMENT BY INDUSTRIAL SECTOR

(in ten thousands)

Annual rate of economic growth	5%		7%	
Target year	1980	1985	1980	1985
Industrial sector				
Agriculture, forestry, fishery	531	407	511	389
Mining	12	12	12	11
Manufacturing	1415	1464	1444	1518
Construction	485	488	491	500
Electricity, gas, Water-supply	35	37	36	38
Wholesale and Retailers	1183	1245	1207	1284
Banking, insurance, Real estate	184	207	193	224
Transportation, Communication	357	377	366	394
Services	1173	1315	1219	1399
Total	5384	5562	5486	5769

Source: The same as for Table 19.
Note: The "total" includes unclassifiable industries.

TABLE 21. PROJECTIONS FOR LABOR DEMAND-SUPPLY BALANCE

(in ten thousands)

		Labor force (Supply)	Employment (Demand)	Difference (Unemployment)
Assumed annual rates of economic growth				
1980	5%	5514	5348	166
	6%		5435	79
	7%		5486	28
1985	5%	5748	5562	186
	6%		5666	82
	7%		5769	−21

Source: The same as for Table 19.

V. AGING OF POPULATION, SLOWER ECONOMIC GROWTH, AND THE EMPLOYMENT SYSTEM

V.1. *Introduction*

It is expected that the age structure of Japanese population will change rapidly within a decade or two, that is, the proportion of aged population will increase rapidly while that of younger age classes will decrease. Under the course of moderate economic growth, which is anticipated by economic policy makers and

economists as mentioned earlier, there would arise many structural problems of employment within the firms or internal labor markets as well as outside or external labor markets. Above all, the question of how to provide satisfactory jobs to relatively aged groups of labor force and secure their employment bears the most serious implications for private and public employment policies.

V.2. *Aging of Population and the Structure of Labor Force*

Let us first examine the expected changes in age structure of population. Table 22 presents expected trends up to 1995 or some twenty years from now.
The table is divided in three segments: the top segment tells us the size of population expressed in terms of millions for different age groups for selected years, the second the changes in the size of these groups for alternative five year periods, and the bottom the proportion of each age group to the total population for the selected years. While all the data in the table indicate the same trend, the bottom segment perhaps exhibits the trend most visibly.

TABLE 22. CHANGES IN AGE STRUCTURE OF POPULATION

(million persons)

Age group	Total	0–14	15–19	20–29	30–39	40–54	55–64	65 and older
Size of population								
1970	104.67	25.15	9.17	19.88	16.71	18.16	8.21	7.40
1975	111.93	27.19	7.90	19.96	17.68	21.37	8.92	8.86
1980	117.56	28.23	8.26	16.94	20.03	23.64	10.03	10.44
1985	122.33	28.01	8.93	16.08	19.78	25.30	12.31	11.91
1990	126.28	26.48	9.91	17.11	16.80	27.77	14.29	13.91
1995	130.07	26.15	9.29	18.77	15.96	28.29	15.10	16.50
Changes in 5 years								
1970–75	7.26	2.04	−1.27	.80	.97	3.21	.71	1.46
1975–80	5.63	1.04	.36	−3.02	2.35	2.27	1.11	1.58
1980–85	4.77	−.22	.67	−.86	−.25	1.66	2.28	1.47
1985–90	3.90	−1.53	.98	1.03	−2.98	2.47	1.98	2.00
1990–95	3.79	−.33	−.62	1.66	−.84	.52	.81	2.59
Proportion (in percentage)								
1970	100.0	24.0	8.8	19.0	16.0	17.3	7.9	7.1
1975	100.0	24.3	7.1	17.8	15.8	19.1	8.0	7.9
1980	100.0	24.0	7.0	14.4	17.0	20.1	8.5	8.9
1985	100.0	22.9	7.3	13.2	16.2	20.7	10.1	9.7
1990	100.0	21.0	7.9	13.6	13.3	22.0	11.3	11.0
1995	100.0	20.1	7.1	14.4	13.2	21.7	11.6	12.7

Sources: Data of 1970 and 1975 were obtained from the Census of Population, and 1980 and thereafter are estimates made by Institute of Population Problems, Ministry of Welfare as of November 1976.
Quoted from Kaneko, Y. (1976), p. 7.

Three trends are notable: (1) age groups in their 40s and 50s will increase markedly during the coming decade, (2) then the gravity of an increase will shift to elder age groups of 50s and 60s in the next decade, and (3) the proportion of young age groups of high-teens and 20s will shrink for several years from now but will increase again during the subsequent decade. The expected changes such as these have been generated partly by a long-term declining trend of birth rates with some substantial swings such as pre-war high rates, interuption during the war, the "baby boom" following the war, remarkable reduction during the 1950s and so on, and in part of course by the substantially decreased mortality in the recent decades.

Although the age structure fluctuates somewhat cyclically, as seen in the Table 22, it is undeniable that in a long-run the aging of population proceeds more or less consecutively. And within relatively near future say, up to 1885, the most accute problem is the rapid expansion of middle aged groups of 40s and 50s in sharp contrast to the relative decline in the proportion of young age groups, particularly of 20s. As a natural consequence of this change, the age structure of labor force will also change significantly, although modified to some extent by a host of determinants of the rate of labor force participation.

The past and expected changes in the weight of aged groups to the total labor force are shown in Table 23. The data indicate that the proportion of a relatively aged group, age 45 through 64, will increase by 3 to 4 percentage points in ten years from 1975, while the age group of 35 through 44 will increase not even by 1 percentage point.

The pace of such a prospective aging of the labor force in Japan is by far faster than Western nations. According to a comparison made by the Ministry of Labour, the pace of aging as measured by changes in the proportion of age group of 45 through 64 to the total labor force that has taken place since 1970 and is expected to continue for the coming decade is roughly four times as fast as the past experiences

TABLE 23. CHANGES IN PROPORTION OF MIDDLE AND OLD AGED GROUPS TO THE TOTAL LABOR FORCE (AGE 15 TO 64)

(in percentage)

Age group	30–44	45–54	55–64
1965	36.9	15.4	11.2
1970	39.0	15.6	11.1
1975	39.9	19.1	11.0
1980	41.4	22.2	11.7
1985	40.7	22.5	14.5

Sources: Office of the Prime Minister, *Labour Force Survey*, various years.
Quoted from Rōdōshō (Ministry of Labour) (1976)

Note: Data for 1980 and 1985 are based on estimates of Koyō Seisaku Kenkyūkai (Employment Policy Study Group) (1975).

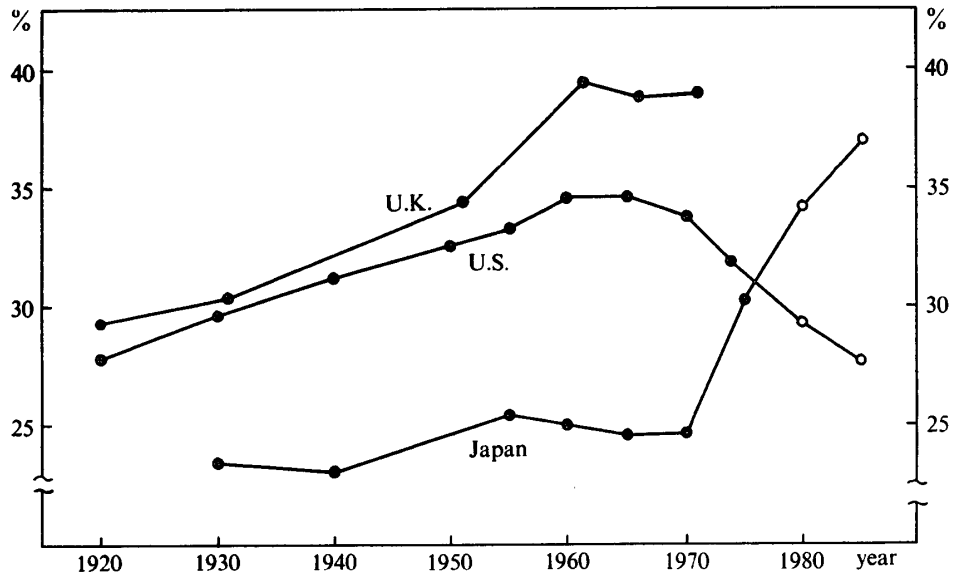

Figure 4. Changes in Proportion of Male Aged Group (Age 45–64) to the Total Male Labor Force of Age 15–64.

Sources: (1) Japanese data up to 1975 are taken from *Census of Population*, and data for 1980 and 1985 are from Koyō Seisaku Kenkyūkai (Employment Policy Study Group) (1975).
(2) The U.S. data up to 1970 are from Department of Commerce, *Census of Polulation*, and 1974 and thereafter are from *Manpower Report of the President*.
(3) British data up to 1966 are from Department of Employment, *British Labour Statistics, Historical Abstract 1886–1968*. The data of 1971 are from Bureau of Census, *Census 1971*.
Quoted from Rōdōshō (Ministry of Labour) (1976), p. 95.

Notes: (1) White points are estimates.
(2) American data are proportions of aged group to the workinge age population of 16–64 years old.
(3) Estimates for Japan are based on the scheme of *Labour Force Survey*.

of the United States and Great Britain.[1] That is, as we can see in Figure 4. that the equivalent change in the age structure of labor force, say a 10 percentage point increase of the proportion of that age group, which took about 40 years both in the U.S. and Great Britain, will be attained in Japan within 10 years between 1970 and 1980.

V.3. *Probable Consequences in the Labor Market—Increased Hardship for Aged Workers*

Why is aging of the labor force worried? What problems will it trigger and how?

To say conclusions first and in short, it is anticipated that the problems associated with employing aged workers, that are already quite difficult to handle, would be aggravated unless coventional employment systems will be reformed substantially.

To facilitate discussion, let me point to three of the major components of the conventional employment system that are relevant for our purposes. Note that what

[1] Rōdōshō (Ministry of Labour) 1976. For further details, see Figure 4 of this article.

I call here the system is in effedt a set of routinized practices of employment, and the model applies typically to large firms.

The practices include: (1) the firm recruits new supplies of labor force primarily from new school leavers and intra-firm job vacancies are filled mainly through internal promotion and reallocation of incumbent employees, (2) the wage system results in an intra-firm wage structure such that young workers receive normally much lower wages than elder counterparts, and (3) the worker retires from the formal occupational career within the firm sometime between age of 55 and 60 depending upon the particular compulsory retirement system adopted by the firm.

To the extent that such routines are practiced, companies are bound to compete vehemently to secure increasingly scarce supplies of fresh labor force just out of schools while ignoring an increasingly large reserve of aged workers. Table 24 presents a piece of evidence that Japanese firms have been stubbornly following this conventional routine of recruitment despite the substantial changes in the external labor market conditions.

What Table 24 shows is that there is a striking difference in the ratio of job openings to applicants between young and aged groups, and that this disparity has grown remarkably large during the period of last 15 years in which aggregate demand for labor has expanded rapidly under the phenomenal economic growth while new supplies of young labor force have become increasingly scarce. The observed ratios suggest that despite the gaps have developed increasingly large between demand and supply of both young and old labor force the Japanese firms have sticked to the conventional routine without adjusting thesmelves appropriately to the market forces. And this pattern of behavior seems to have intensified relative shortage of young labor sulplies in the job market while making employment conditions of aged workers even more vulnerable.

Moreover, under the current wage system, even though wage differentials by age have narrowed substantially during the last two decades as indicated by Table 25, employers still seem to believe that elderly workers are much more expensive than the young ones, and try to get rid of the older workers through the system of compulsory retirement.

As a result, older workers who have been pushed out of large firms would have to

TABLE 24. JOB OPENINGS/APPLICANTS RATIOS BY AGE

Age group	Total	Younger than 20	20–24	25–29	30–34	35–39	40–44	45–49	50–54	55–59	60–64	65 and older
Year												
1960	0.7	0.7	0.7	0.7	0.8	0.6	0.3			0.1		
1965	0.6	1.6	0.6	0.6	0.6	0.6	0.5			0.1		
1970	1.6	5.1	1.3	1.8	2.1	1.9	1.3			0.3		
1975	0.7	2.8	0.7	0.7	1.1	0.9	0.7	0.5	0.3	0.2	0.1	0.0

Source: Bureau of Employment Security, Ministry of Labour, *Report on Employment Service*, October, various years.

TABLE 25. CHANGES IN WAGE DIFFERENTIALS BY AGE: MANUFACTURING INDUSTRIES, MALE PRODUCTION WORKERS, REGULAR MONTHLY EARNINGS

(in percentage)

Age	1958	1967	1974
17 and younger	52.2	57.0	61.9
18–19	74.3	76.8	81.8
20–24	100.0	100.0	100.0
25–29	137.2	124.8	120.3
30–34	169.9	143.7	140.2
35–39	190.7	158.4	147.8
40–44	206.7	170.4	148.8
45–49			150.2
50–54	171.8	155.8	149.6
55–59			122.5
60–64		107.7	99.6
65 and older			87.5

Source: Ministry of Labour, *Basic Survey of Wage Structure*, various years.

TABLE 26. DISTRIBUTION OF AGED EMPLOYEES BY THE SIZE OF ESTABLISHMENT (NON-AGRICULTURAL MALE EMPLOYEES)

(in percentage)

Year	1965			1971		
Age group	40–54,	55–64,	65 and older	40–54,	55–64,	65 and older
Size of establishment						
1– 9 employees	9.5	14.7	22.5	11.5	16.7	24.9
10– 29	13.6	19.6	23.4	12.2	17.1	21.5
30– 99	13.3	18.1	19.1	13.1	19.2	19.8
100–299	8.3	10.4	8.7	9.3	11.6	10.1
300–999	7.4	6.7	4.9	7.6	8.0	5.9
1,000 and more	27.8	11.9	7.2	22.2	12.7	7.3
public sector	19.7	17.9	13.3	18.4	14.3	10.0
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: Office of the Prime Minister, *Basic Survey of Employment Structure* 1965, 1971.

either stay in the labor market searching for jobs in vain or get humble jobs with much inferior rewards and working conditions in re-employment programs of large firms or in small business. We have already seen in the previous section that the aged people are much more prone to unemployment than prime age workers, and once unemployed they tend to stay longer because of difficulties in finding jobs (Table 15). Many large firms recently offer re-employment programs for workers who need further employment after the compulsory retirement. But this option is not open to every worker who wants it, and even though he fortunately gets it it provides much

lower wages and usually only a short period of employment. Many aged workers therefore find jobs in very small firms, which have been employing aged workers in greater proportion than large firms in the past decades. Table 26 clearly suggests that small firms play the role of a labor pool for aged workers.

Labor unions, organized basically within individual enterprises mostly in large and only scantly in small firms, fight harshly to protect employment of member workers until they reach the age of compulsory retirement but beyond that age unions offer virtually no help.

Although public and private pension plans have been enriched remarkably recently, these social insurance plans are not yet matured enough and for the time being at least many aged people are left without much help. In addition, the rapid dissolution of compound families into nuclear families in the course of drastic urbanization during the last decades has parepared the ground in which hardship of aged people isolated from family ties grows serious.

Thus far, we have been reviewing the structure of the labor market and the conventional system of employment of large firms, which together operate rather disfavorably against aged workers even at times of favorable economic and demographic conditions. It is easy to see therefore that the rapid aging of population and slowing down of economic growth would aggravate these problems much more seriously in the near future unless some significant changes take place in the employment system.

V.4. *The Prospect of the Employment System: An Aspect of Private Employment Policies*

It is more or less evident from what we have seen so far that the conventional system of employment no longer works as effectively and consistently under the recent and anticipated changes in external conditions as it did in the 1950s and 1960s. Realizing this, may employers are attempting earnestly improvements and modifications in various aspects of the system. One could regard these efforts as private employment policies to cope with the anticipated difficulties.

Increasingly more people seem to think, perhaps wishfully, that the virtue of life-time employment will be maintained at least in large firms while the length-of-service reward system (or seniority wage system) would have to be modified. But there exists no concensus or clear indications to suggest what the suitable system in the future would be like. While impossible to give answers directly, let me discuss some of the issues relevant to this question.

To assess the viability of the employment system, one should bear in mind the importance of two external factors that were instrumental for the system to be established and become prevalent among many firms: (1) rapid economic growth and (2) the demographic structure in the 1950s. The norm and values associated with the system may be traced far back to late 19th century or even to pre-modern era, and a limited number of corporations may be found as early as around the World War I in which practices of long-term employment and the reward based on the length-of-service were emphasized. But the fact that the system has prevailed

widely at least among relatively larger firms throughout the entire labor market could not possibly be explained in the absence of the two factors.

Under the rapid economic growth, a typical firm was able to maintain easily the so-called "pyramid" type structure of work force consisting of a relatively small number of older workers and a greater number of younger ones because the firm had to recruit a greater number of new entrants every year. This in effect meant to secure employment for all the employees automatically until they reach the age of retirement.

The demographic structure in the 1950s which contained a large proportion of young population provided a rich source of labor supply for this type of employment system. As the demand for labor expanded rapidly in the industrial sector, a large amount of fresh and young labor force has been siphoned uninterruptedly from agricultural areas and from sectors of low productivity. The industrial firms were able to recruit them at a very low wage rate partly because of competitive pressure of ample supplies and partly because of workers' aspiration and expectation for the future increases in wages in return for the current low wage under the rapidly growing economy. The ideas of life-cycle subsistence wage to maintain family life and of the efficiency wage corresponding to the skill built within the firm through internal training may have been also partly responsible for the development of the length-of-service wage system.

At any rate the conventional employment system was quite reasonable and perhaps optimal under the external conditions prevailing in and around the 1950s when the system diffused widely to become a general model in Japanese industries.

Such being the case, it should be easy to see how seriously recent changes in external conditions erode the basis of the system. The aging of population, or to put it differently increasingly scarce supplies of young labor force is now driving up starting wages for young workers and consequently the entire wage bill as well so long as the firm sticks to the conventional system of employment and wages. In addition to this, the anticipated slow economic growth would make it impossible for the firm to maintain the pyramid type work force structure and to secure

TABLE 27. EDUCATIONAL ATTAINMENT OF NEW ENTRANTS TO LABOR MARKET
(IN THOUSANDS OF PERSONS, FIGURES IN PARENTHESES ARE PROPORTION IN PERCENTAGE)

Year	Total	Middle school	High school	College and Junior College
1970	1260(100.0)	270(21.6)	730(57.9)	260(20.4)
1975	960(100.0)	90(9.8)	540(55.9)	330(34.2)
1980	1080(100.0)	60(5.9)	580(53.5)	440(40.6)

Source: The Ministry of Education, *Basic Survey of Schools* and Estimates of Bureau of Employment Security of the Ministry of Labour.

Note: Middle school, High school, Junior College and College correspond to accumulated years of education of 9, 12, 14 and 16, respectively.

employment for all the employees especially older ones. Moreover, the relative increase of older employees, and also of those who have higher educational attainments within the firm makes it increasingly difficult to provide them with supervisory or higher positions in the organizational hierarchy which they believe they legitimately deserve. The failure to do so in return would cost the firm in the form of reduced morale, commitment and incentives.

In sum, with all these contradictions and defects increasingly obvious, the conventional system as a whole no longer works consistently under the new circumstances. The question is in what direction it would change.

There seems to exists two alternatives. One is that the firm adjust itself to the new external conditions through market forces; to modify the age-wage profile by lowering relatively the wage rate for the aged so that demand and supply for each of the age groups of labor force will balance. Incidentally this would inevitably make the labor market more mobile. However, this would also mean that the conventional system is almost completely dissolved.

The other alternative is to preserve essential nature of the system within a relatively limited segment of the labor market using the relatively disadvantaged segment of workers as a cushion. Although not ascertained by systematic research, casual observations of the behavior of large firms so far seem to suggest that they are more inclined to the latter alternative though not entirely denying some changes toward the former alternative.

Employment policies currently adopted more or less commonly by large firms are such that cutting down as much as possible peripheral employees such as temporary, seasonal, sub-contracted workers and also female workers, both part-time and full-time, limiting or reducing new recruits of both new school leavers and mid-way workers, sending employees to subsidiaries and try hard to secure employment of incumbent employees until the age of compulsory retirement. Large firms were enthusiastic in raising the age of compulsory retirement beyond 55 until

TABLE 28. DISTRIBUTION OF FIRMS CLASSIFIED BY THE AGE OF COMPULSORY RETIREMENT AND SIZE OF FIRM

(in percentage)

	Younger than 55	55	56	57	58	59	60
Size of firm in number of employees							
Total	0.3	47.3	3.1	6.9	5.7	0.2	36.5
5000 and more	—	39.2	14.4	14.4	11.6	1.7	18.8
1000 to 4999	—	44.9	14.1	14.4	6.7	0.3	19.6
300 to 999	—	45.2	8.1	13.7	10.0	0.5	22.4
100 to 299	0.5	50.3	6.1	7.4	6.9	0.1	28.6
30 to 99	0.3	46.5	0.9	5.7	4.7	0.1	41.6

Source: Ministry of Labour, *Survey on Employment Management*, 1975.

around 1973 for fear of labor shortage, but after the oil crisis their enthusiasm seems to have disappeared. Small firms have been consistently much less strict in forcing compulsory retirement on their employees. The distribution of compulsory retrirement ages by firm size is presented in Table 28.

To the extent that large firms pursue this kind of employment policies, the age structure of their employees will grow older rapidly. Indeed, the most pressing labor problem that large firms are now being faced is how to allocate supervisory or more rewarding positions equitably among increased number of eligible employees, and how to utilize aged employees effectively. To solve these questions many firms are attempting modifications of their organizational structure, reward system, and training systems. In my view, these modifications currently pursued are not to change the conventional system but rather reinforce it in order to make it survive the adverse changes in external conditions.

V.5. *Implications for Public Employment Policies*

If what I have described is indeed the case, implications for public policies are quite serious. That is, a mass of workers who are relatively disadvantageous in the labor market and could not secure employment in large firms would be left in the labor market without much protection. Such an outcome of the labor market is certainly not the equitable or desirable allocation of employment opportunities.

To counteract such dangers, the government recently put forth a piece of legislation by which to encourage and help employers to keep a greater proportion of older workers on their payroll. The legislation was a revision of "Special Law Aiming at Promoting Employment of Aged Workers," and the revision was made into effect since October 1976. The thrust of the revision is: (1) Setting the minimum target of 6 per cent as a proportion of employees of age 55 and older to the total employees of the firm that the employer is required to strive to accomplish, (2) promoting employment of aged workers to specially designated suitable jobs using the employment security office, and (3) requiring employers to report to the employment security office of their progress in employing older workers. To facilitate employment promotion of aged workers, financial and other aids were made available for employers who need them.

The government hopes through this legislation that private employers are encouraged to extend the age of compulsory retirement by a few or several years. But, as suggested in foregoing discussions, the prospect is not quite promising because employers still seem to believe that aged workers are more costly than younger ones.

For this kind of policy to become really effective, it seems necessary to foster a social concensus that employment security of aged persons should be given the highest priority among others. However, how to do it is unknown. Perhaps, the most powerful and reliable means to achieve the goal of the legislation would be to increase the aggregate demand and to re-organize the industrial structure so that fulfilling the required target, from the viewpoint of the firm, pays economically, too.

VI. CONCLUDING OBSERVATIONS

This paper reviewed some of the pressing issues that arose in several aspects of the Japanese labor market during the adjustment period following the oil crisis of late 1973.

As noted in Section II, the oil crisis appears to have exerted two distinct types of impacts: one which should be basically adjustable within a short-term and the other which symbolizes a turning point of long-term changes, namely the end of the rapid growth period.

While the immediate impacts were so drastic that the recovery from and adjustment to them has not been easy, handling of the long-term impacts is even more difficult because the structure and institutions in the labor market have been so much used to conditions that prevailed during the rapid growth period in the past that adjustments to new external conditions would not only take time but also inevitably involve changes in values of people concerned.

While on the one hand, the conventional employment system with its built-in flexibility still seems to be viable and robust, it is also true on the other hand that potentially serious problems are growing at various corners of the labor market.

Indeed, it is policy actions and programs that deserve systematic improvements most urgently to cope with these apparent and potential difficulties. Because of having been accustomed to the sustained rapid economic growth, it seems that only scant attentions have been paid so far to the possible cases of declining or stagnant demand, and therefore preparations relatively ignored. An effective integration of aggregative and structural or selective policy measures is imperative to realize full and equitable employment under the prospective new circumstances.

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