

## **A comparative study of unemployment & unstable employment indicators in Great Britain and Japan using micro-data.**

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This paper shows our analysis of comparison of unemployment & unstable employment indicators (called "UUEI" hereinafter) in Great Britain and Japan, using micro-data of Great Britain for the period from 1991 to 2002. We investigated and examined the basic framework of relevant indicators and the comparability of the indicators, and carried out a comparative analysis of UUEI in both countries, based on the framework of the study of visible unemployment indicators, invisible unemployment indicators and unstable employment indicators in Japan. Contrasting aspects exist in UUEI between both countries, partly because of the difference in the conditions in the period of comparison between both countries. The employment structure of Japan is in the process of changing to that of the USA and Europe. However, the gap between the sexes has remained a major factor for the backwardness of the unemployment & unstable employment structure in Japan such as invisibility of unemployment, the high weight of discouraged female workers, etc.

**Keyword:** unemployment, unstable employment, working hour, employment structure, Labour Force Survey  
sex discrimination in employment, micro-data,

### **Introduction**

This paper shows an analysis of comparison of UUEI in Great Britain and Japan, using micro-data of Great Britain as part of the study results of the SARs Data Study Group. The basic viewpoint and issue is that we need to investigate and examine the basic framework of relevant indicators and the comparability of the indicators, and carry out a comparative analysis of UUEI and employment

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structure indicators in both countries, and clarify their relative special characteristics with the use of Labour Force Survey (called "LFS" hereinafter) and Labour force Survey Special Survey(called "LFSSP") of Japan , Quarterly Labour Force Survey(called"QLFS" hereinafter) of Great Britain, Quarterly Labour Force Survey Micro-data(called "QLFSMD" hereinafter) and Micro-census in 1991 on the basis of the framework of the study of UUEI in Japan - visible unemployment indicators, invisible unemployment indicators and unstable employment indicators.

The conventional research results concerning comparative studies on the employment structure between both countries, with the use of Census Micro-data of Great Britain (Samples of Anonymised Records, SARs) are joint researches [Iwai, H., Fujioka, M., Yoshinaga, K., and Sugihashi, Y., (2002)] of the SARs Data Study Group. And those are analysis of the employment structure by two divisions by industry and occupation between both countries by Fuchimoto [Fuchimoto (2003)] of this Group.

In consideration of the results of these studies, we have, in this paper, carried out comparison of UUEI (by sexes and age) on the basis of UUEI framework in Japan, using QLFSMD of Great Britain. In addition, we have analyzed indicators by industry for each of the two divisions in respect of workers working less than 35 hours in both countries, using the Census Micro-data (SARs Data) in 1991. And then we examined the features of the employment structure for each of the two divisions in respect of short-time workers who contribute to the formation of the unemployment & unstable employment structure.

The period of comparison between both countries in this paper is from 1992 to 2002, partly because the Detailed Labour Force Survey (QLFS) started in 1992. The unemployment rate of Japan had been in the range from 2% to less than 4% up until the 1980s, and "Why is the unemployment rate of Japan low?" had been a subject in international debates. However, in the 1990s after the bubble burst, the economy entered into a long-term sluggish period, and the unemployment rate of Japan showed a rapid increase. The unemployment structure of Japan has since shown aspects similar to those of the USA and Europe, as seen in a sharp increase in the unemploy-

ment rate of young people. Great Britain saw times of a high unemployment rate for the period from 1970s to 1980s, but faced a favourable economic condition after entering into the 1990s. The unemployment rate peaked out in 1993, since when the rate has continued to fall. Some have pointed out that this means the bubble economy. There is a difference in historical conditions of the period of comparison, and the states of the unemployment & unstable employment in both countries show contrasting aspects. It is therefore necessary to allow for the difference in these social conditions in the analysis of the indicators.

This paper consists of the following:

1. Comparison of UUEI in both countries (General analysis)
2. Comparison of UUEI in both countries using QLFSMD
3. Comparison of unstable employment indicators in both countries using Census micro-data (SARs).

The main contributors of this paper are Iwai (to 1), Murakami (to 2 and 3). Iwai contributed to Introduction and Conclusion, adjustment and supervision of the whole of the paper. The computation work of micro-data of Great Britain was carried out mainly by Murakami. Yuka Nakayama a student in the seminar of economic statistics provided cooperation in making tables of LFSSP of Japan, for which we thank you.

## **1. Comparison of UUEI in Great Britain and Japan (General analysis)**

### **1-1 The framework and relevant indicators for the comparison of UUEI in Great Britain and Japan**

#### **1-1-1 The framework and indicators for the comparison between Great Britain and Japan**

The framework and indicators which are the standards for comparison of UUEI in both countries are based on the indicator system on the basis of LFSSP in Japan. Tables for (1) visible unemployment indicators, (2) invisible unemployment indicators (not labour force desiring jobs but currently not seeking employment) (3) unstable

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employment (short-time workers) indicators and unstable employees (by employment forms) indicators were prepared on the basis of LFSSP in Japan for the period from 1992 to 2002 as shown in Table 1-1-1 (Japan). The reason for the start in 1992 is that detailed research of LFS in Great Britain started as QLFS in the same year. (Iwai examined AUI and UUEI in Japan and their results in Iwai(1999) (2000)).

Indicators of visible unemployed persons (official unemployed persons) are classified into unemployed persons by period of unemployment and unemployed persons by reason of the involuntary unemployed person losing job (redundancy and company bankruptcy, slump of business, etc.). Indicators of invisible unemployment in respect of persons who are at least 15 years old that are not in the labour force but want jobs are classified into those of persons who want jobs and are seeking work, and out of them, the persons who want jobs but are not seeking are classified into discouraged workers and those who can work. Discouraged workers are prescribed as persons who did not seek work because jobs did not appear to have been available. Unstable employment indicators consist of short time workers indicators and unstable employment (employees) indicators by the form of employment. Unstable employment is mainly relating to employees. Small self-employed persons comprising the majority of self-employed persons experience repeated bankruptcy, closure and opening of business, and they are in an unstable employment form, and are close to labourers. It is therefore necessary to examine including self-employed persons. Short-time worker indicators consist of part-time worker indicators (part-time workers by status in work and employment form in Table 1-3 (Japan) fall under these part-time workers) on the basis of responses (respondents themselves recognize that they are part-time workers in terms of their employment contracts with their companies) of the persons who are the subject of surveys in the Labour Force Survey and less than 35 hours in the reference week worker indicators (less than 35 hours in the reference week workers in the same Table) on the basis of classification marks by number of working hours. Less than 35 hours in the reference week workers are classified firstly by mark [of whether or not it is a main job], and the division of main jobs is

**Table1-1-1 UUEI in Japan (Summarized table)**

(%)

	1992		1993		1994		1995		1996		1997		1998		1999		2000		2001		2002	
	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F
Visible unemployment indicator	2.1	2.1	2.4	2.5	2.9	3.1	3.0	3.0	3.3	3.3	3.4	3.4	3.6	3.4	4.6	4.5	4.6	4.4	4.7	4.5	5.4	5.1
Unemployed person seeking work within a month	1.5	1.6	1.7	1.9	2.2	2.5	2.3	2.1	2.6	1.6	2.7	2.9	2.8	2.8	3.7	3.8	2.0	2.6	3.7	3.7	4.0	4.0
Long unemployed person less than 6 months	1.3	1.5	1.6	1.9	1.3	1.4	1.8	2.1	1.4	1.5	2.0	2.4	1.5	1.6	2.6	2.8	2.5	2.8	2.5	2.9	2.7	3.0
Long unemployed person 6 month to less than 1 year	0.4	0.0	0.4	0.4	0.4	0.3	0.6	0.6	0.4	0.3	0.7	0.6	0.5	0.4	1.0	1.0	1.0	0.9	0.9	0.8	0.9	0.9
long unemployed person more than 1 year	0.3	0.2	0.4	0.2	0.3	0.2	0.5	0.3	0.4	0.2	0.7	0.4	0.4	0.2	1.0	0.7	1.2	0.7	1.2	0.8	1.6	1.1
Unemployed person seeking main jobs	1.6	1.3	1.8	1.5	2.2	1.7	2.4	1.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Involuntary unemployed person losing job	0.4	0.3	0.7	0.4	0.8	0.7	0.9	0.6	0.9	0.6	0.9	0.7	1.1	0.7	1.5	1.0	1.5	0.9	1.3	0.8	2.3	1.5
Unemployed person for the head of household	0.6	0.1	0.7	0.1	0.8	0.1	0.9	0.2	1.0	0.3	0.9	0.2	1.0	0.3	1.3	0.3	0.8	-	1.4	0.3	1.5	0.4
Unemployed person for household members	1.1	1.6	1.3	2.1	1.7	2.6	1.6	2.4	1.9	2.6	1.9	2.7	2.0	2.7	2.6	3.6	-	-	2.6	3.7	-	-
Invisible unemployment indicator(not labour force)																						
Person waiting to report a new job within a month	2.3	2.9	2.2	2.7	2.0	1.3	1.8	2.1	1.6	2.1	1.7	2.1	1.5	1.9	-	-	-	-	-	-	-	-
.....After graduation	2.0	2.5	1.9	2.3	1.7	0.9	1.4	1.5	1.2	1.5	1.3	1.4	1.2	1.3	-	-	-	-	-	-	-	-
Person who desire job	14.7	28.5	15.1	29.1	14.8	28.4	13.7	25.8	14.1	26.8	14.3	26.8	14.5	26.9	15.3	28.5	15.1	28.6	14.5	26.7	7.9	14.6
.....available for work	1.3	2.4	1.4	2.6	1.7	3.0	1.9	3.2	2.0	3.6	2.3	4.0	2.6	4.5	3.0	5.2	3.0	5.0	2.8	4.6	1.7	3.0
discouraged workers	4.9	9.8	5.2	10.6	6.1	12.0	5.8	11.4	5.9	12.0	5.9	11.7	6.0	11.7	6.5	12.6	-	-	6.2	11.7	3.1	5.6
.....available for work	0.9	1.6	1.0	1.8	1.2	2.3	1.4	2.4	1.5	2.7	1.6	-	1.9	-	-	-	-	-	-	-	-	-
Unstable employed person indicator(short-time workers)																						
Part-time worker less than 35 hours a week	19.7	32.7	20.2	33.2	19.7	34.2	21.0	35.7	20.5	34.1	21.2	35.5	22.6	37.3	23.1	37.9	22.6	38.0	23.7	39.3	23.3	38.4
.....Part-time worker engaged mainly in work	7.0	7.8	7.8	9.2	8.1	9.7	8.4	10.6	8.3	9.9	9.0	11.6	9.8	12.0	10.1	12.5	9.4	-	9.8	12.6	11.8	14.1
.....Part-time worker wishing to change job	2.1	3.5	2.1	3.7	2.3	3.9	2.3	4.2	2.3	4.0	2.5	4.4	2.7	4.6	3.0	5.1	2.8	4.8	3.1	5.3	4.0	6.5
Unstable employees																						
Temporary employees	5.6	9.7	6.0	10.4	6.0	10.6	5.6	10.1	5.5	9.5	6.1	10.3	6.3	11.2	6.7	11.7	7.0	11.8	7.7	13.1	9.8	16.4
.....Temporary employees mainly in work	2.4	3.5	2.6	3.7	2.6	4.0	2.5	3.9	2.5	3.6	2.9	4.1	2.9	4.2	3.2	4.8	3.4	-	3.6	5.3	4.9	6.8
Dally employees	2.4	3.3	2.4	3.2	2.4	3.3	2.6	3.8	2.6	3.6	2.7	3.8	2.7	3.8	2.8	4.0	2.6	3.6	2.6	2.4	4.6	1.8
.....Temporary employees mainly in work	1.4	1.1	1.4	1.2	1.3	1.2	1.4	1.5	1.4	1.3	1.5	1.4	1.6	1.4	1.6	1.5	1.4	-	1.4	1.2	1.0	0.9
Peiceworkers	1.2	2.9	1.0	2.3	1.0	2.4	1.1	2.6	0.8	1.8	0.8	1.7	0.8	1.8	0.7	1.6	0.7	1.6	0.6	1.3	0.4	0.9
.....Temporary employees mainly in work	0.1	0.2	0.1	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	-	0.1	0.1	0.0	0.1
Employees of small size company(less than 30 employees)	25.6	27.5	24.9	27.0	25.3	27.2	25.6	27.8	26.0	27.9	26.1	28.3	26.0	27.9	25.8	27.5	25.9	-	26.0	27.9	26.5	28.1
.....Eemployees mainly in work	20.1	16.3	19.8	16.7	20.3	17.0	20.7	17.9	21.0	17.6	21.0	18.1	20.9	17.7	20.7	17.2	2.8	-	20.5	17.2	21.4	17.7
Unstable employed person indicator(employees)																						
Total employees	76.0	71.3	76.9	72.2	77.3	73.2	77.5	73.8	78.0	74.5	78.4	75.8	78.6	76.4	77.8	75.4	77.8	75.8	79.1	77.9	79.8	79.5
employees(excl.executive of company)	70.4	68.3	71.3	69.1	71.9	70.3	71.7	70.5	72.2	71.2	72.7	72.5	73.1	73.3	72.5	72.5	73.0	74.0	75.2	73.9	75.9	
• • Part-time workers	11.7	23.6	12.0	23.9	12.0	24.4	12.4	25.0	13.0	25.7	13.8	27.1	14.5	28.6	15.1	29.7	15.9	30.7	17.1	32.3	15.7	30.2
• • Dispatched workers	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.5	0.9	0.7	1.2	0.6	6.2
• • Others(contract employees,etc.)	2.6	2.5	2.8	2.5	2.6	2.6	2.6	2.6	2.6	2.6	3.0	3.1	2.8	2.8	3.0	3.1	2.4	2.3	2.4	2.5	5.3	5.2
• • Regular staff	56.0	42.3	56.5	42.6	57.3	43.4	56.7	42.9	56.6	42.8	55.9	42.4	55.9	41.9	54.4	39.7	9.3	39.1	53.9	39.2	52.2	38.5
Labour force	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

(note) T-Total, F-Female  
(source) LFSSP (February)

deemed to be a form of involuntary part-timers. Secondly, less than 35 hours in the reference week workers (whether or not they are seeking to change the job) are identified, and part-time work by persons seeking to change the job is deemed to be another form of involuntary part-time work. However, the picture of the part-time work by short-time workers represents only a certain part of part-time works, because the number of part-timers who are working for as long a time as that of full-time employees has increased, although they are part-time workers in their employment contracts. Unstable employees indicators are represented as indicators of temporary employees, daily employees, and workers at home [whether or not their work is a main job] by form of employment, and an indicator of unstable employment as a main job shows a form of involuntary unstable employment.

(2) Table 1-1-2 UUEI in Great Britain (Summarized Table) shows QLFS in Great Britain compared and adjusted on the basis of the basic framework of unemployment & unstable employment in the above LFSSP in Japan for the same period. Actual unemployment indicators are classified into unemployed persons by period of unemployment and involuntarily unemployed persons who are unemployed persons seeking a full time job for a job seeking period of the 4 past weeks (there is no fixed period of job seeking in Japan). With regard to invisible unemployment indicators, and in particular to not labour force who are at least 16 years old, persons who want jobs and are seeking work in the past four weeks are differentiated on the basis of an economically inactive reason, and furthermore, indicators of persons who want jobs but are not seeking work are classified into indicators of discouraged workers, long-term sick/disabled persons, persons looking after family/home, students, and others. Discouraged workers are prescribed as peoples whose reason for not seeking work was that they believed no jobs were available, and are not limited to people with availability to start work in the next 2 weeks.

**Table 1-1-2 UUEI in Great Britain (Summarized table)**

(%)

	1992		1993		1994		1995		1996		1997		1998		1999		2000		2001		2002		2003	
	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F
Visible unemployed person																								
Unemployed person	9.9	7.5	10.4	7.9	9.8	7.5	8.8	7.0	8.4	6.5	7.2	5.9	6.3	5.5	6.1	5.3	5.5	4.8	4.7	4.2	5.1	4.4	4.8	4.1
Duration of unemployment																								
....less than 3 months	4.4	4.0	4.0	3.6	3.8	3.7	3.6	3.7	3.7	3.6	3.4	3.4	3.4	3.6	3.5	3.4	3.1	3.1	2.7	2.7	3.1	3.0	3.0	2.8
...6 to less than 1 year..	2.0	1.5	2.0	1.6	1.6	1.3	1.4	1.2	1.4	1.1	1.1	0.9	0.9	0.7	0.9	0.8	0.8	0.8	0.8	0.7	0.8	0.6	0.7	0.6
...1 year or more	3.5	2.1	4.4	2.6	4.4	2.5	3.8	2.2	3.2	1.7	2.7	1.6	2.0	1.3	1.7	1.1	1.5	0.9	1.3	0.8	1.2	0.7	1.1	0.7
Involuntary unemployd person *	8.2	4.9	8.6	5.1	7.9	4.7	6.9	4.0	6.5	3.7	5.5	3.3	4.7	3.0	4.4	2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Invisible unemployed person (not labour force)																								
Person who want jobs	7.4	11.2	7.5	11.0	7.9	11.3	8.0	11.4	8.1	11.2	8.3	11.3	8.3	11.0	7.9	10.6	8.0	0.0	7.6	0.0	7.7	0.0	7.2	9.2
....Available for work	3.0	4.6	3.0	4.5	3.2	4.8	3.2	4.8	3.1	4.4	2.7	4.0	2.5	3.6	2.3	3.2	2.2	3.1	2.0	2.8	2.1	2.7	1.9	2.6
Person who want jobs but are not seeking work																								
...Discouraged workers.	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1
...Long term sick/disable person	1.2	1.1	1.4	1.2	1.8	1.4	1.8	1.6	2.0	1.7	2.4	2.1	2.6	2.2	2.6	2.2	2.6	2.3	2.5	2.2	2.6	2.2	2.3	2.0
....Persons looking after family/home	2.7	5.8	2.6	5.6	2.8	5.9	2.7	5.8	2.7	5.6	2.6	5.3	2.6	5.2	2.3	4.7	2.2	4.5	2.2	4.3	2.1	4.2	1.9	3.7
....Student	0.7	0.8	0.7	0.8	0.8	0.9	0.8	0.9	0.9	1.0	0.9	1.0	0.9	0.9	0.8	0.9	0.9	1.0	0.9	1.0	1.0	1.0	0.9	1.0
....Others	1.4	1.8	1.2	1.6	1.3	1.7	1.4	1.8	1.4	1.8	1.4	1.8	1.3	1.6	1.3	1.6	1.3	1.6	1.1	1.3	1.2	1.4	1.2	1.4
Unstable employed person																								
A. Part-time/Full-time employed person																								
Part-time employed person	21.0	40.4	21.2	40.7	11.4	41.2	12.6	41.1	22.9	41.9	23.2	42.0	23.2	42.1	23.3	41.9	24.0	42.4	24.2	42.5	24.2	42.1	24.8	42.5
... Employees	17.9	36.1	18.2	36.4	18.7	36.9	19.0	37.0	19.9	37.9	20.2	38.5	20.3	38.0	20.4	38.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
....Self-employed person	1.9	2.9	2.0	3.0	2.1	3.2	2.2	3.2	2.3	3.2	2.4	3.4	2.5	3.5	2.4	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Employed person engaging secondary work	3.4	4.3	3.6	4.6	4.0	5.1	4.5	5.9	4.5	5.9	4.4	5.5	4.1	5.2	4.4	5.7	4.1	5.3	4.1	5.4	3.9	5.1	3.9	5.1
Full-time employed person	69.2	52.1	67.9	51.5	68.4	51.2	69.3	51.9	69.4	51.6	70.2	52.1	70.5	52.4	70.6	52.8	70.5	52.8	71.0	53.3	70.6	53.5	70.3	53.3
B. Part-time/self-employed person	19.9	39.2	20.2	39.5	20.9	40.2	21.2	40.2	22.1	41.2	22.6	41.2	22.7	41.5	22.7	41.3	23.5	41.7	23.7	41.9	23.8	41.5	24.4	42.0
....Those not seeking full-time job	15.1	32.2	15.0	31.9	15.2	32.0	15.3	32.0	15.9	32.7	16.1	32.5	16.2	32.9	16.5	33.1	17.1	33.4	17.3	33.6	17.4	33.5	17.8	33.8
....Those who cannot find full-time job	2.2	3.6	2.8	4.3	2.9	4.5	2.9	4.3	2.8	4.0	2.8	3.9	2.6	3.6	2.3	3.1	2.2	3.0	2.1	2.9	1.9	2.6	1.9	2.4
....Student (in school)	2.2	2.9	2.1	2.9	2.4	3.1	2.6	3.4	3.1	3.8	3.3	4.3	3.4	4.3	3.4	4.4	3.7	4.6	3.7	4.7	3.9	4.7	4.0	0.5
....Those who are ill and injured	0.3	0.5	0.3	0.4	0.3	0.4	0.3	0.5	0.3	0.4	0.3	0.4	0.4	0.5	0.4	0.6	0.4	0.6	0.5	0.7	0.5	0.6	0.5	0.6
C. Part-time employed persons	19.9	39.1	20.2	39.4	20.9	40.1	21.2	40.1	22.1	41.1	22.6	41.2	22.7	42	22.8	41.3	23.5	0.0	23.7	0.0	23.8	0.0	24.3	42.0
....Those who cannot find a permanent job	2.2	3.6	2.8	4.3	2.9	4.6	2.9	4.4	2.8	4.1	2.8	4.0	2.7	3.7	2.4	3.2	2.2	0.0	2.1	0.0	1.9	0.0	1.9	2.4
D. Temporary employees	4.5	6.0	4.7	6.0	5.2	6.6	5.7	6.9	5.8	7.2	6.2	7.5	6.0	7.5	5.9	6.9	5.9	0.0	5.9	0.0	5.4	0.0	5.1	6.1
....Those who cannot find a permanent job	1.6	1.8	2.0	2.2	2.2	2.5	2.5	2.6	2.4	2.6	2.4	2.5	2.2	2.3	2.1	2.1	1.8	0.0	1.6	0.0	1.4	0.0	1.4	1.3
Labour force	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

(note) \*Unemployed person seeking full-time job, T-Total, F-Female  
(Source) QLFS (Spring)

Short-time workers of unstable employment indicators are classified into (A) full-timers, part-timers (the total of employees and self-employed persons), and workers having secondary work (second jobs, which are prescribed as work in addition to the full-time and the part-time job), based on the responses of the subject persons of the surveys (not by the working hours). (B) Indicators of part-timers (including self-employed persons) are classified into indicators of ① those not seeking a full-time job, ② those who cannot find a full-time job, ③ students (in school), and ④ those who are ill and injured. People who are working part-time and cannot find a full-time job are involuntary part-timers by definition. In connection with this, (C) as one of the indicators of involuntary part-timers, which is peculiar to Great Britain, part-timers who cannot find a permanent job are represented. (D) Temporary employees who cannot find a permanent job are also represented. This indicator is also one of the indicators of involuntary part-timers, which is peculiar to Great Britain.

LFS in Japan do not have questions on the reasons for being part-timers shown in the above, only the reasons for being a main job or not, or reasons for wishing to change a job or not are provided as questions. A detailed mark for that is not shown in QLFS in Great Britain, either. In this paper, we prepared a cross table (a time series table of every other year) by sex and age in respect of unemployment & unstable employment. In this preparation, we used QLF-SMD in Great Britain as a trial calculation for detailed tables (by sexes and age) for comparison between both countries in respect of UUEI, on the basis of the LFSSP in Japan as seen in Table 1-3 (Japan) and Table 1-4 (Great Britain), and by prescribing short-time workers as employees working for less than 35 hours in the reference week [wishing to change jobs or not (part-timers)] and deeming short-time workers wanting a job or not to be one of the indicators of involuntary part-timers. The classification mark indicates the basis of 30 hours in Great Britain, but we used 35 hours, which is the basis in Japan for the comparison between both countries.

### **1-1-2 Relevant survey materials for comparison between Great Britain and Japan**

The main employment & unemployment statistics in Japan are



for LFS and LFSSP, which are on the current actual status in the reference week in the survey, and Employment Status Survey (ESS), which is on the usual status. The formers are time series statistics, and the latter is structural statistics. With regard to surveys relating to the labour force, LFS on the employment status for the last one week in every month and LFSSP (carried out in every February) which supplements the understanding of structural aspects of the employment status have been carried out. Revision of LFS was made in April 2002 for understanding the detailed employment and unemployment states, because unemployment & unstable employment had deepened due to a prolonged slump, and the LFSSP started to be published on a quarterly basis, and LFS Annual Report (results of details) started to be issued as a new publication.

Unemployment statistics in Great Britain since the establishment of the Unemployment Insurance Act (in 1911) consist of registered statistics of Claimant Accounts, CC, and the recent LFS, but the LFS is used for international comparison [Iwai,H(2003)(2004)]. The LFS had been carried out every year as part of the EC Labour Force Survey for the period from 1983 to 1991, but since 1992, the QLFS has been annually carried out and published. The QLFS had been published on a quarterly basis as a Labour Force Survey quarterly supplement of the Office for National Statistics until recent years, but at present, it is not compiled as a publication, but is shown on the web site of the ONS. In addition, time series data of the QLFS has been issued as a publication of the ONS as the Labour Force Survey Historical Supplement (called "LFSHI" hereinafter) at a regular interval, but it is now shown in the web site of the ONS on an irregular basis (Refer details of the LFS in Great Britain to the Labour Force Survey User Guide (Vols. 1 to 10) of the ONS). In this paper, the spring quarter figures (March to May) are used as figures in the QLFS in Great Britain, as the LFSSP in Japan is conducted in February every year.

In Great Britain, the results of the QLFS have been shown since 1992 on the web site of the UK Data Archive as Quarterly Labour Force Micro-data ( "QLFSMD" ). This includes data by year before 1992), and it is possible to use the data if one submits a research plan to the manager of the UK Data Archive and undertakes proce-

dures for approval (Spring data is also used for the QLFSMD). Furthermore, the Population Census in 1991 was published in Great Britain as census micro-data (Samples of Anonymised Records, SARs). In this paper, we used SARs data to clarify structural features of unstable employment, although it is used only for 1991, together with the use of QLFSMD.

### **1-2 General features in comparison of UUEI between Great Britain and Japan**

Recently in studies of UUEI the significance and limitation of visible unemployment indicators and official unemployment rates have been pointed out, and alternative unemployment indicators (called "AUI" hereinafter) are considered to be a subject to study. The Statistical Bureau of the OECD computed and published a supplementary measure as an AUI and as a U type measure, which is shown in Table 1-2. This is for the purpose of prescribing and estimating ① unemployment, ② discouraged workers, and ③ involuntary part-timers, as AUI, and making the total of each ratio to the labour force a supplementary measure of labour market slag. In each country, there is a major difference in the discouraged worker ratio and the involuntary part-time worker ratio between males and females. It can be seen from the total indicators in Japan that discouraged female worker ratios are extremely high at 6.0% and 4.0%, although the absolute figures are not so large due to the unemployment rate in Japan being low. Because the unemployment rate stood at more than 10% in the both periods, the total indicators in Great Britain were large. The discouraged workers indicators were low in both males and females, but involuntary part-time indicators were relatively high in the total numbers. The female indicators were especially high.

AUI, which are internationally debated, especially involuntary part-time indicators and discouraged worker indicators, which are supplementary measures of the OECD, are the concepts and indicators deeply relating to the unemployment & unstable employment of females. International comparison of AUI is the international comparison of various forms of unemployment & unstable employment, and at the same time has a special significance in the international

**Table 1-2 Supplementary measure (OECD, Seven major)**

(%)

Unemployment rate (1)			Supplementary measure					
			Discouraged workers (2) (% of labor force)		Involuntary part-timer (3) (% of labor force)		BLS U7 type measure (1)+(2)+(3)	
Year	1983	1993	1983	1993	1983	1993	1983	1993
France	8.0	11.4	..	0.2	..	4.8	..	14.0
Men	6.1	9.7	..	0.1	..	2.3	..	10.9
Women	10.5	13.5	..	0.3	..	7.8	..	17.7
Germany	6.9	7.7	..	..	0.9	1.5	7.4	8.5
Men	5.9	6.5	..	..	0.3	1.0	6.0	7.0
Women	8.5	9.4	..	..	1.9	2.3	9.5	10.5
Italy	8.4	10.2	1.1	2.6	2.0	2.3	10.4	13.6
Men	5.5	6.8	0.1	0.9	1.3	1.6	6.3	8.5
Women	14.0	15.8	3.0	5.4	3.3	3.3	18.2	21.9
Japan	2.7	2.6	3.2	2.2	2.1	1.9	6.8	5.7
Men	2.6	2.5	1.1	0.9	1.2	1.1	4.3	3.9
Women	2.8	2.8	6.2	4.0	3.4	3.0	10.4	8.1
Spain	20.8	22.4	0.8	0.2	2.0	1.0	22.4	23.1
Men	17.2	18.7	0.2	0.1	1.1	0.6	17.9	19.1
Women	28.3	28.8	2.0	0.4	3.7	1.8	31.5	30.0
United Kingdom	11.2	10.3	1.3	0.6	1.9	3.2	13.3	12.5
Men	12.1	12.5	1.3	0.5	1.0	2.2	13.8	14.0
Women	9.9	7.6	1.2	0.7	3.3	4.5	12.5	10.5
United States	9.8	6.9	1.5	0.9	5.7	5.0	13.9	10.2
Men	10.1	7.2	1.1	0.8	4.8	4.4	13.4	10.1
Women	9.3	6.6	2.0	1.0	6.9	5.7	14.6	10.4

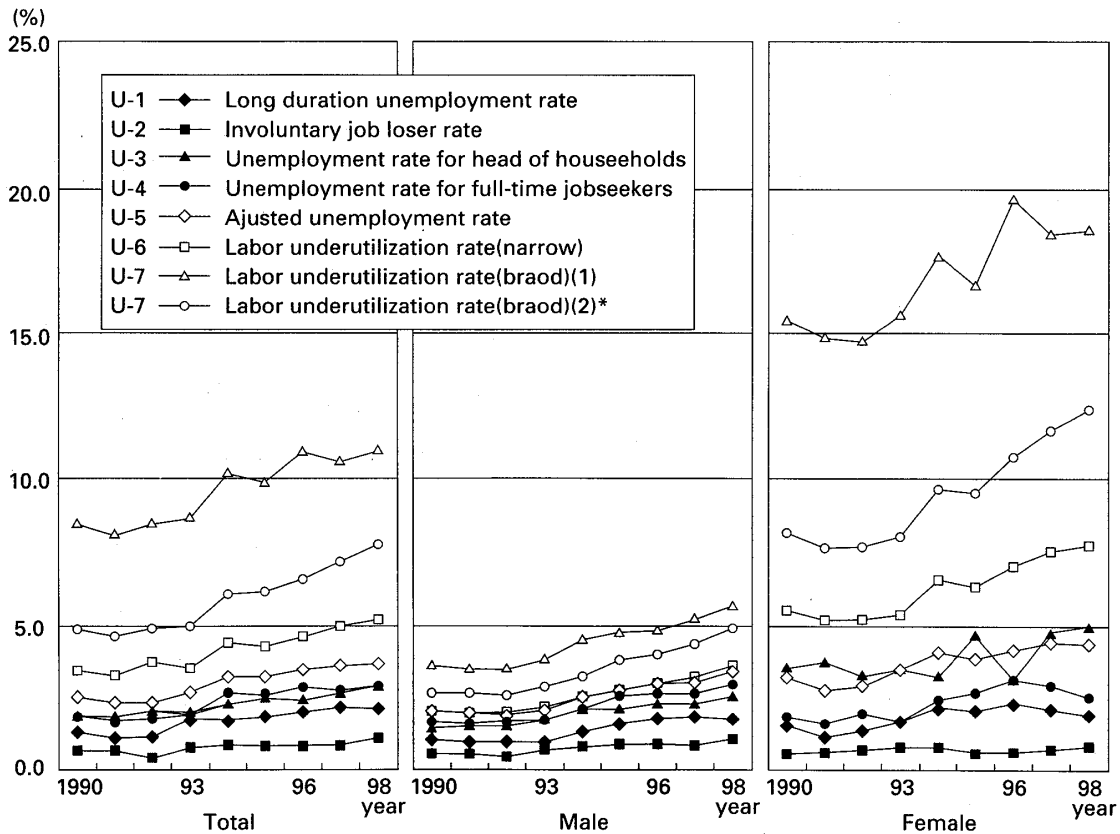
(source)OECD, *Employment Outlook*, July 1995, Table 2.18(extracts), pp.76-77.

comparison of female employment. The feature of AUI in Japan lies in the size of the persons not in the labour force who desire a job by whether or not seeking job (the majority being female), and the feature is that an especially large number of discouraged workers exists among females.

Iwai carried out a survey on the international trend of studies on AUI and examined U indicators (Fuchimoto Calculation.Fuchimoto, C.(2000)) as AUI in Japan in Iwai (2000). In figure1-1, it was indicated that the difference between U7 and U6 pertaining to females was especially large, as a result of the expansion of the difference in U indicators between males and females due to a rise in the official unemployment rates of Japan, because of the collapse of the bubble economy and the long-term sluggish period from 1992 to 1998.

The comparison of UUEI between both countries was carried out for the period from 1992 to 2002 on the basis of the above framework and indicators. This was a period of the bubble burst and a long-term slump in Japan, but in Great Britain, this was a period

**Fig.1-1 Chart of U indicators (on a basis of labor force) in Japan**



(note) \*Discouraged workers who are available for work  
 (source) Iwai (2000) Fig.1 P.88

where the economy shifted from a period of a high unemployment rate which had continued from the 1970s to the 1980s to a period of favourable economic conditions. This was a contrasting period in terms of the economic condition for both countries and this viewpoint must be allowed for in the comparison of indicators. We had a general view of the features of unemployment & unstable employment indicators in Table 1-1, Table 1-2 (Summarized Table), UUEI in Table 1-3 (Table by age) and Table 1-4 (Table by age) in both countries and their results.

(1) The unemployment rate in Japan has been low in the range from 2% to less than 4% for the period from the high growth period to the low growth period that is up until the 1980s, and "Why is the unemployment rate low in Japan?" had been a subject of international discussion. The unemployment structure in Japan had been supported by the employment practice that unemployed persons are not revealed in the labour market and special characteristics of the labour market. That had been supported by the life employment system and the seniority system, the features of which are the two tier structure of the economy, the gap in various labour conditions, the circulation and stay within the industry, corporations with a surplus labour force (internal labour market), and non-existence of lay-off systems. Since the bubble burst, international globalization, saving of labour (rationalization and redundancy), the prolonged slump, visibility of unemployment (a remarkable rise in publicly announced unemployment rates, the unemployment rate in 2002 being 5.4%) have been seen, and the number of people in unstable employment in the forms of unofficially employed part-timers, temporary employees, workers wishing to change the job, and so forth showed increases. In addition, the number of people wanting a job out of the not labour force increased (especially the number of females increased, the rate of females being 26.7% in 2001), the discouraged workers stratum, which is a form of not job seeking, expanded (the gap between both genders is large, and the rate of females is over 10%).

(2) Great Britain saw times of high unemployment (the unemployment rate being from 12% to less than 14%) for the period from the 1970s to 1980s, and under the rationalization policies of the

Table 1-3-1 UUEI in Japan (Total : %)

		Visible unemployment indicator (in labour force)					Invisible unemployment indicator (not in labour force)				Discouraged worker
		Unemployment					Populatio -n not in labour force	Desire to work			
		Total	Over 6 and up to 12 months	Over 12 months	Involuntarily unemployment	Voluntarily unemployment		Total	Can take up immediately	No or not decided	
	15 to 24	5.4	1.0	0.6	0.6	2.4	125.7	29.3	2.5	18.6	7.6
1	25 to 34	3.7	0.7	0.5	0.7	2.0	27.8	15.4	1.0	8.8	5.2
9	35 to 44	2.3	0.3	0.4	0.7	0.7	22.9	12.7	1.3	5.9	6.3
9	45 to 54	1.6	0.3	0.4	0.5	0.7	21.1	9.0	1.4	3.9	4.6
4	55 to 64	3.9	0.9	0.7	2.2	0.5	56.4	15.5	2.6	7.4	8.1
	Over 65	2.0	0.2	0.7	0.7	0.2	323.1	18.4	3.2	10.3	9.3
	15 to 24	7.0	1.1	1.1	0.6	3.1	113.1	30.8	4.5	21.7	7.7
1	25 to 34	4.1	0.6	0.8	0.8	2.1	24.4	13.2	1.5	9.4	4.3
9	35 to 44	2.5	0.4	0.5	0.8	1.1	22.1	12.6	1.6	8.3	6.3
9	45 to 54	2.2	0.4	0.5	0.9	0.8	20.0	8.2	2.0	4.3	4.3
8	55 to 64	4.7	1.3	1.2	2.8	0.6	51.0	13.8	3.7	7.2	7.4
	Over 65	1.9	0.2	0.6	0.8	0.2	323.3	18.4	4.9	10.3	10.3
	15 to 24	10.0	1.6	2.0	1.7	3.3	121.1	20.1	3.5	13.1	7.8
2	25 to 34	6.5	1.0	1.8	2.0	2.9	23.3	8.3	1.0	6.1	1.7
0	35 to 44	4.1	0.8	1.3	1.7	1.5	22.2	7.8	1.2	5.1	2.9
0	45 to 54	4.0	0.8	1.3	2.2	1.1	20.1	4.4	1.3	2.1	2.3
2	55 to 64	5.9	1.1	1.9	4.3	0.7	52.4	5.4	2.1	2.2	3.1
	Over 65	2.2	0.4	1.2	1.2	0.2	378.1	6.9	3.0	2.6	4.0
		Unstable employment indicator 1			Unstable employment indicator 2			Populatio -n in labour force	Employee		
		Employed worker			Temporary employees	Daily employees	Piecewor kers at home				
		Total	Wishing to have additional job or to change the job	Not wishing to have additional job or to change the job							
	15 to 24	20.2	6.7	11.6	10.7	3.1	0.0	100.0	94.6		
1	25 to 34	14.6	3.8	9.2	4.1	1.4	0.7	100.0	96.3		
9	35 to 44	20.7	4.8	13.9	5.7	2.5	1.3	100.0	97.7		
9	45 to 54	19.6	3.5	14.2	5.4	2.2	1.2	100.0	98.4		
4	55 to 64	24.6	4.4	19.9	6.1	3.1	1.4	100.0	96.1		
	Over 65	48.9	2.0	44.0	6.9	2.7	2.5	100.0	98.0		
	15 to 24	25.8	9.3	14.7	13.8	4.6	0.0	100.0	93.0		
1	25 to 34	14.9	4.3	9.2	4.8	1.7	0.5	100.0	95.9		
9	35 to 44	21.7	5.4	14.2	5.6	2.5	0.8	100.0	97.5		
9	45 to 54	21.1	3.4	15.6	5.3	2.6	0.9	100.0	97.8		
8	55 to 64	23.8	2.5	18.9	5.7	3.1	1.1	100.0	95.3		
	Over 65	44.9	1.6	40.0	5.6	3.3	2.1	100.0	98.1		
	15 to 24	28.8	8.3	20.3	20.1	3.5	0.0	100.0	90.0		
2	25 to 34	15.1	3.7	11.4	7.2	1.2	0.3	100.0	93.5		
0	35 to 44	21.5	4.5	16.9	7.9	1.4	0.4	100.0	95.9		
0	45 to 54	22.5	3.4	19.0	7.6	1.5	0.4	100.0	96.0		
2	55 to 64	26.1	2.8	23.2	8.4	1.9	0.8	100.0	94.1		
	Over 65	42.7	1.8	40.7	8.1	2.0	1.0	100.0	97.8		

(Source) LFSSP

**Table 1-3-2 UUEI in Japan (Female: %)**

		Visible unemployment indicator (in labour force)					Invisible unemployment indicator (not in labour force)				
		Unemployment					Populatio -n not in labour force	Desire to work			Discouraged worker
		Total	Over 6 and up to 12 months	Over 12 months	Involuntarily unemployment	Voluntarily unemployment		Total	Can take up immediately	No or not decided	
1	15 to 24	5.4	0.7	0.5	0.7	2.5	126.6	33.7	2.7	21.4	8.6
1	25 to 34	5.0	1.0	0.4	0.6	2.7	69.2	39.3	2.5	22.6	13.2
9	35 to 44	2.8	0.3	0.3	0.7	0.7	53.4	29.9	3.1	13.8	15.0
9	45 to 54	1.7	0.3	0.3	0.0	0.0	47.7	20.3	3.3	8.7	10.9
4	55 to 64	2.8	0.8	0.6	1.1	0.8	118.8	30.1	4.8	15.4	16.0
	Over 65	1.3	0.0	0.0	0.0	0.7	583.9	22.8	2.0	15.4	9.4
1	15 to 24	6.5	1.0	1.0	0.5	3.3	114.8	32.8	4.5	23.0	8.8
1	25 to 34	5.0	0.7	0.5	0.7	2.8	57.8	32.0	3.4	23.1	10.7
9	35 to 44	2.9	0.4	0.2	0.6	1.1	52.5	30.5	3.8	20.5	15.3
9	45 to 54	2.2	0.4	0.4	0.6	0.9	44.0	18.2	4.7	9.3	10.0
8	55 to 64	2.7	1.0	0.7	1.4	0.5	104.3	26.3	6.5	14.3	14.5
	Over 65	0.6	0.0	0.0	0.0	0.0	563.0	21.5	4.4	13.3	10.5
2	15 to 24	8.7	1.2	1.8	1.2	3.0	123.1	21.9	3.9	14.1	8.1
0	25 to 34	7.3	1.1	1.5	1.9	3.4	51.5	18.6	2.1	13.9	3.7
0	35 to 44	4.6	1.0	1.0	1.3	1.7	51.4	18.5	2.9	11.9	7.1
0	45 to 54	3.6	0.8	0.8	1.5	1.1	43.2	9.2	2.9	4.2	5.1
2	55 to 64	3.8	0.7	1.0	1.9	0.7	102.6	9.3	3.8	3.8	6.0
	Over 65	1.1	0.0	0.6	0.6	0.0	673.3	8.5	3.4	3.4	4.5
		Unstable employment indicator 1			Unstable employment Indicator 2			Populatio -n in labour force	Employee		
		Employed worker		Temporary employees	Daily employees	Piecwor kers at home					
		Total	Wishing to have additional job or to change the job				Not wishing to have additional job or to change the job				
1	15 to 24	21.9	7.6	12.3	11.3	2.7	0.0	100.0	94.6		
1	25 to 34	28.9	6.9	19.0	9.2	2.3	1.9	100.0	95.0		
9	35 to 44	42.0	9.7	28.2	12.6	4.3	3.1	100.0	97.2		
9	45 to 54	37.4	6.2	27.6	12.0	3.6	2.9	100.0	98.3		
4	55 to 64	37.1	2.8	31.7	9.6	3.7	3.1	100.0	97.2		
	Over 65	56.4	2.0	51.0	6.7	2.7	5.4	100.0	98.7		
1	15 to 24	29.5	10.8	16.0	15.5	4.8	0.0	100.0	93.5		
1	25 to 34	28.1	7.3	17.8	9.4	2.5	1.2	100.0	94.0		
9	35 to 44	44.8	10.9	29.7	12.8	4.4	1.9	100.0	96.7		
9	45 to 54	39.5	6.3	29.9	11.3	4.2	2.0	100.0	97.5		
8	55 to 64	37.7	3.6	30.4	9.4	4.1	2.7	100.0	97.1		
	Over 65	52.5	1.1	47.0	5.5	2.2	4.4	100.0	99.4		
2	15 to 24	32.3	9.0	23.1	21.9	3.0	0.0	100.0	91.6		
2	25 to 34	26.9	6.3	20.4	12.6	1.5	0.6	100.0	92.6		
0	35 to 44	50.9	9.2	33.8	16.8	2.5	1.0	100.0	95.4		
0	45 to 54	42.0	6.3	35.5	15.6	2.3	0.9	100.0	96.4		
2	55 to 64	42.5	4.1	38.4	13.6	2.6	2.1	100.0	95.5		
	Over 65	52.8	1.1	51.1	7.4	2.3	2.3	100.0	98.9		

(Source) LFSSP

Table1-4-1 UUEI in Great Britain (Total : %)

		Visible unemployment indicator ( in labour force )					Invisible unemployment indicator (not in labour force)					
		Unemployment					Population not in labour force	Desire to work			Discouraged worker	
		Total	Over 6 and up to 12 months	Over 12 months	Involuntarily unemployment	Voluntarily unemployment		Total	Can take up immediately	No or not decided		
1994	16 to 24	16.0	3.6	5.1	6.2	3.0	62.3	9.1	6.1	3.0	1.0	
	25 to 34	9.8	1.6	4.5	4.2	3.3	21.5	7.2	3.8	3.3	0.7	
	35 to 44	7.5	1.1	3.8	2.9	2.3	18.3	5.9	3.2	2.8	1.0	
	45 to 54	6.9	1.2	3.5	2.2	1.9	21.5	3.8	2.2	1.5	1.2	
	55 to 64	8.9	1.2	5.5	2.8	1.8	94.0	2.1	1.6	0.5	4.2	
	Over 65	3.3	0.4	2.2	0.7	1.7	1862.6	0.5	0.5	0.0	7.6	
1998	16 to 24	12.3	2.2	2.1	5.3	2.3	64.5	9.8	6.5	3.3	0.9	
	25 to 34	6.2	0.9	2.0	3.2	1.9	20.3	8.0	4.3	3.7	0.7	
	35 to 44	4.5	0.7	1.7	2.3	1.3	18.7	6.2	3.3	2.9	0.7	
	45 to 54	3.9	0.5	1.8	2.1	1.0	23.1	4.5	2.5	2.0	1.0	
	55 to 64	5.3	0.7	2.9	3.0	1.4	96.0	2.1	1.4	0.7	3.1	
	Over 65	2.6	0.2	1.5	1.5	0.7	1800.5	0.5	0.4	0.1	7.1	
2002	16 to 24	11.0	2.2	1.2	4.3	2.0	67.5	8.8	5.7	3.0	0.8	
	25 to 34	5.0	0.8	1.2	2.5	1.7	20.0	7.5	3.3	4.1	0.5	
	35 to 44	3.8	0.5	1.1	2.0	1.0	17.8	5.4	2.6	2.8	0.6	
	45 to 54	3.4	0.5	1.0	1.8	0.9	21.2	4.1	1.9	2.2	0.7	
	55 to 64	3.4	0.3	1.4	1.9	1.0	83.0	1.7	1.1	0.6	1.8	
	Over 65	2.8	0.2	0.9	0.7	1.5	1679.3	0.2	0.2	0.0	3.6	
		Unstable employment indicator 1			Unstable employment Indicator 2		Population in labour force	Employee				
		Employed worker (1-34 hours in last week)		B. Part-timer (could not find a permanent job)	B. Temporary worker (could not find a permanent job)							
		Total	Wishing to have additional job or to change the job	Not wishing to have additional job or to change the job								
1994	16 to 24	9.9	1.5	8.4	3.1	3.3	100.0	84.0				
	25 to 34	10.6	1.1	9.5	1.2	2.2	100.0	90.2				
	35 to 44	11.3	0.8	10.5	1.0	2.1	100.0	92.5				
	45 to 54	10.3	0.5	9.7	0.8	1.6	100.0	93.1				
	55 to 64	8.5	0.3	8.2	0.6	1.2	100.0	91.1				
	Over 65	5.0	0.0	5.0	0.0	0.5	100.0	96.7				
1998	16 to 24	11.1	1.5	9.6	3.3	3.2	100.0	87.7				
	25 to 34	10.7	1.0	9.7	1.1	2.1	100.0	93.8				
	35 to 44	11.7	0.9	10.8	1.1	2.0	100.0	95.5				
	45 to 54	11.8	0.7	11.1	0.7	2.0	100.0	96.1				
	55 to 64	9.3	0.3	9.0	0.5	1.3	100.0	94.7				
	Over 65	5.7	0.0	5.7	0.2	0.3	100.0	97.4				
2002	16 to 24	11.2	1.3	9.9	2.8	2.5	100.0	89.0				
	25 to 34	9.7	0.9	8.9	0.8	1.6	100.0	95.0				
	35 to 44	12.2	0.8	11.4	0.7	1.1	100.0	96.2				
	45 to 54	10.4	0.6	9.8	0.6	1.2	100.0	96.6				
	55 to 64	10.1	0.1	10.0	0.3	1.0	100.0	96.6				
	Over 65	4.7	0.1	4.6	0.2	0.3	100.0	97.2				

(Source) QLFSMD



**Table1-4-2 UUEI in Great Britain (Female : %)**

		Visible unemployment indicator ( in labour force )					Invisible unemployment indicator (not in labour force)				
		Unemployment					Population not in labour force	Desire to work			Discouraged worker
		Total	Over 6 and up to 12 months	Over 12 months	Involuntarily unemployment	Voluntarily unemployment		Total	Can take up immediately	No or not decided	
1994	16 to 24	12.6	2.9	3.0	4.3	2.8	73.1	9.9	6.3	3.6	1.1
	25 to 34	7.8	1.4	2.6	2.3	3.7	40.6	6.7	3.3	3.4	0.7
	35 to 44	6.0	1.2	2.2	1.7	1.3	33.8	3.7	2.2	1.5	1.6
	45 to 54	4.9	0.9	2.0	1.7	1.3	33.8	3.7	2.2	1.5	1.6
	55 to 64	5.2	0.8	2.8	1.6	1.3	149.3	1.5	1.2	0.3	4.3
	Over 65	3.0	0.4	1.9	0.9	1.3	2961.3	0.6	0.6	0.0	0.0
1998	16 to 24	10.4	1.5	1.5	3.6	2.5	73.4	10.4	6.5	4.0	0.9
	25 to 34	5.8	0.9	1.2	2.1	2.5	35.8	6.9	3.5	3.4	0.9
	35 to 44	4.4	0.6	1.3	1.8	1.5	30.7	6.0	3.5	2.5	1.1
	45 to 54	3.1	0.4	1.2	1.4	0.9	32.8	4.5	2.3	2.2	1.3
	55 to 64	3.1	0.4	1.4	1.6	0.8	150.6	1.6	0.9	0.7	3.7
	Over 65	1.8	0.0	1.1	0.7	0.7	2812.2	0.0	0.0	0.0	0.0
2002	16 to 24	9.0	1.4	0.8	2.9	2.1	75.0	8.6	5.4	3.2	0.8
	25 to 34	4.9	0.7	0.9	2.0	2.0	33.3	7.1	3.0	4.1	0.5
	35 to 44	3.5	0.4	0.7	1.5	1.1	28.4	5.1	2.5	2.6	0.8
	45 to 54	2.9	0.5	0.7	1.3	0.9	29.7	4.2	1.8	2.4	0.9
	55 to 64	2.2	0.2	0.6	1.2	0.7	121.3	1.3	0.7	0.7	2.0
	Over 65	1.8	0.2	0.4	0.2	1.3	2531.3	0.4	0.4	0.0	0.0
Unstable employment indicator 1				Unstable employment Indicator 2		Population in labour force	Employee				
Employed worker (1-34 hours in last week)			B. Part-timer (could not find a permanent job)	B. Temporary worker (could not find a permanent job)							
	Total	Wishing to have additional job or to change the job			Not wishing to have additional job or to change the job						
1994	16 to 24	11.9	2.0	9.9	3.7	3.3	100.0	87.4			
	25 to 34	15.2	1.3	13.9	1.3	2.6	100.0	92.2			
	35 to 44	17.0	1.1	15.9	1.3	2.5	100.0	94.0			
	45 to 54	16.0	0.8	15.2	1.0	1.8	100.0	95.1			
	55 to 64	13.4	0.4	13.0	0.4	1.1	100.0	94.8			
	Over 65	6.1	0.0	6.1	0.0	0.6	100.0	97.0			
1998	16 to 24	11.9	1.4	10.5	3.6	3.0	100.0	89.6			
	25 to 34	14.9	1.1	13.8	1.2	2.3	100.0	94.2			
	35 to 44	17.7	1.4	16.4	1.4	2.5	100.0	95.6			
	45 to 54	17.8	0.9	16.9	.8	2.2	100.0	96.9			
	55 to 64	14.8	0.3	14.5	0.5	1.0	100.0	96.9			
	Over 65	9.0	0.0	9.0	0.0	0.0	100.0	98.2			
2002	16 to 24	12.7	1.2	11.5	2.9	2.4	100.0	91.0			
	25 to 34	13.4	1.1	12.4	0.7	1.5	100.0	95.1			
	35 to 44	18.6	1.1	17.6	0.9	1.3	100.0	96.5			
	45 to 54	15.8	0.9	15.0	0.8	1.3	100.0	97.1			
	55 to 64	16.2	0.2	16.0	0.3	0.6	100.0	97.8			
	Over 65	6.4	0.2	6.2	0.2	0.0	100.0	98.2			

(Source) QLFSMD

Thatcher administration, criticism of increase in unemployment and unemployment statistics, and especially the unemployment insurance policy, revision of administrative procedures (change in receipt conditions of unemployment benefits of insured workers) and the reflection of the subjects of the claimant registration statistics had been actively debated. After entering the 1990s, the unemployment rate declined and was recorded at 4.8 in 2003. The current economic state is considered to be worrying like a bubble economy. According to the materials of the Economic Outlook of the OECD, the labour force ratio and employment rate of females in Great Britain have been high since early times, and the part-time worker rate of females has ranked high among the EU countries. As is seen in supplementary unemployment (OECD) in Table 1-2, in Great Britain, the visibility of unemployment became obvious, and indicators of invisible unemployment such as discouraged workers stood at low levels, the number of involuntary part-timers is relatively small, and the gender gap of alternative unemployment indicators is not extreme. However, for the sluggish period from 1984 to 1987, the economically inactive rate of females was 30% compared to the rate of males being less than 20%, and invisible unemployment indicators and involuntary part-timers were also virtually static. An original analysis needs to be made on how the unemployment structure (visible and invisible indicators) and the unstable employment structure in Great Britain changed. Great Britain entered into an unprecedented favourable economic period after the World War II in the 1990s. It is therefore necessary to allow for the characteristics of the unemployment & unstable employment structure in the period of prosperity.

(3) The following features can be seen in the examination of visible unemployment indicators and invisible unemployment indicators by age in respect of unemployment & unstable employment in both countries (Refer the following Section for the comparison of unstable employment indicators between both countries ).

1) Visible unemployment and unstable indicators in Japan show that the general unemployment rate increased from 2.1% in 1992 to 5.4% in 2002, and the unemployment rate in the youth group (15-24 years old) rose from 4.3% in 1992 to 10% in 2002, which is about twice the general unemployment rate. This indicates that the unem-

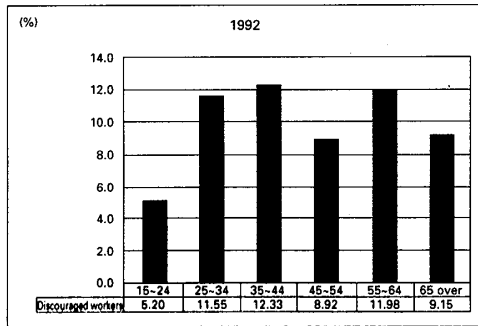
ployment structure has been changing to that of the USA and Europe. In addition, the unemployment rate of middle and upper aged people, and especially those of 55 to 65 years old, is especially high. According to the unemployment rate by period, the unemployment rate for less than six months shows a greater increase, but the unemployment rate for a long period of more than one year also increased, which means that the unemployment situation is grave. The youth unemployment rate started to show the highest rate in the indicators for less than one year and the indicators for a long period of more than one year, being the highest among people of any age. This indicates that the unemployment issue of the youth group is a grave problem. The unemployment rate of involuntary unemployment due to personnel arrangement, redundancy, etc. increased to 2.3% (2.8% for males) in 2003, showing an increase in people of all the age, but the weight of middle and upper aged people of 55 to 65 years old is the greatest. The visible unemployment indicators in Great Britain show that the general unemployment rate remarkably declined from 10.4% in 1993 to 4.8% in 2003, but with regard to the rates by age, the unemployment rate in the youth group remained high at 11% in 2002, and the feature is that the unemployment rate of middle and upper aged people (especially 45-65 years old) was relatively high. With regard to unemployment rates by period, when the unemployment rate was 10% in 1993, the unemployment rate for less than three months was 4%, and the unemployment rate for a long period of more than one year was 4.4% (5.8% for males). These indicators started to fall in line with a decline in the unemployment rates, but the unemployment rate for a long time for males was high, especially in the youth group. The unemployment rate for a long time in the youth stratum was top in 2003. The involuntary unemployment rate (unemployment rate seeking full-time work) peculiar to the Labour Force Survey (LFS) in Great Britain shows 4.4% (5.7% for males) compared to 5.5% of the general unemployment rate in 1999. The involuntary unemployment rate declined in the group of middle and upper aged people, but that in the youth group stood at 4.3% (2002).

2) The invisible unemployment indicators show that the ratio of people wanting a job in the not labour force, especially females, is

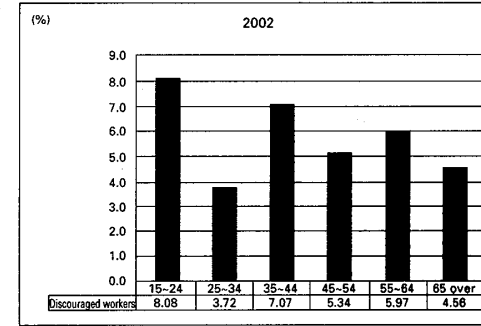
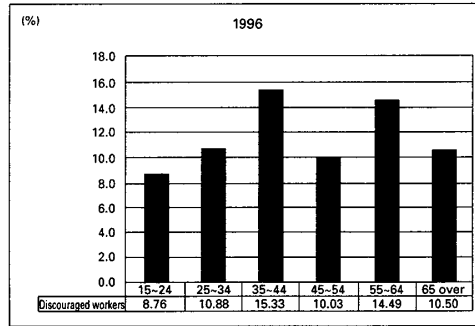
high. The discouraged worker ratio in Japan is abnormally high for an advanced country and the vast majority of them are females, as seen in the international comparison of AUI mentioned above. The ratio of females wanting a job even in the long-term slump period was between 28% and less than 29%, and the rate of female discouraged workers exceeded 10%. The gap between males and females among discouraged workers is great, and the vast majority of them are females. On the other hand, people wanting a job and discouraged workers show a low rate similar to that in other European nations except Italy, as seen in the international comparison of AUI. It is necessary to examine the definitions and reasons for not-seeking work for comparison of discouraged workers in Great Britain and Japan. Discouraged workers are defined in nearly the same prescription contents in both countries as mentioned in Section 1, but in Japan, as reasons for wanting a job and not seeking work, the marks for reasons for not seeking work comprise ① no prospect of finding a job (discouraged workers), ② owing to house keeping or child care, ③ for poor condition of health, and ④ other not seeking work reasons, and the majority of them are discouraged workers. In Great Britain, as seen in Table 1-3, which is a table of the summary (Great Britain), the ratio of people saying that the reason is looking after family/home, and especially that of females is high (in the case of females in 2003, the ratio of the reason being looking after family/home is 3.7% compared to the rate of discouraged workers being 0.1%) compared to the ratio of discouraged workers. We consider it necessary to carry out an original analysis of the relationship between the labour market and homework and females engaged in homework in respect of females out of the non-labour force in Great Britain.

Distinguishing features are seen in female discouraged workers by age, as seen in the table (Table 1-3, Table1-4) of comparison of discouraged works by age and age between both countries and Figure 1-2. In the case of discouraged workers in Great Britain, the youth and the upper age group show a high rate, and especially the weight of the latter is very high. Female discouraged workers in Japan have a large weight in the youth group in the ranges from 24 to 34 years of age and from 35 to 44 years of age, and the weight of

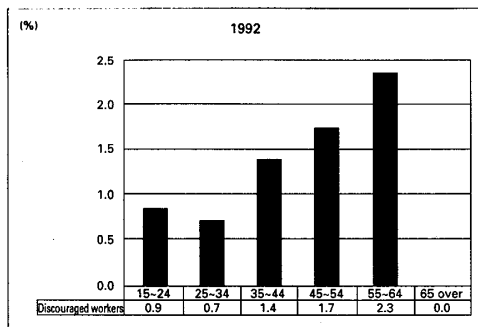
Discouraged workers Female (Japan)



(source) Table1-1-1, Table1-3-1, Table1-3-2



Discouraged workers Female (Great Britain)



(source) Table1-1-2, Table1-4-1, Table1-4-2

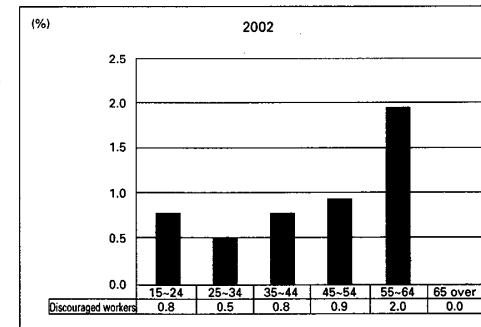
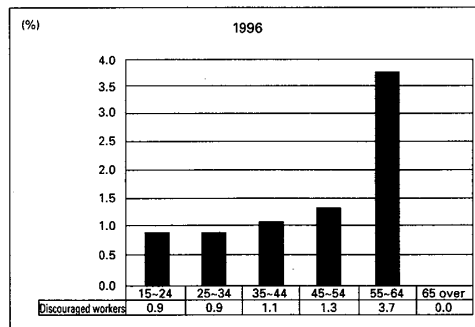


Figure1-2 Discouraged workers (by age)

the latter is especially large. Furthermore, the ratio of the youth group has gradually risen, and exceeded 8% in 2002. In contrast with Great Britain, the fact that the weight of female discouraged workers in the age group of 35 to 44 years old in Japan is high is considered a reflection of the M-shaped employment distribution, which shows a gap against females between the sexes. This reflects the actual situation of female discouraged workers that females get married and retire in the latter half of their 20s, and start to want a job again in the latter half of their 30s, but no suitable jobs are available, and they inevitably don't seek work.

## **2. Comparison of UUEI in Great Britain and Japan - Use of QLFSMD -**

### **2-1 The scale and structure of unstable workers**

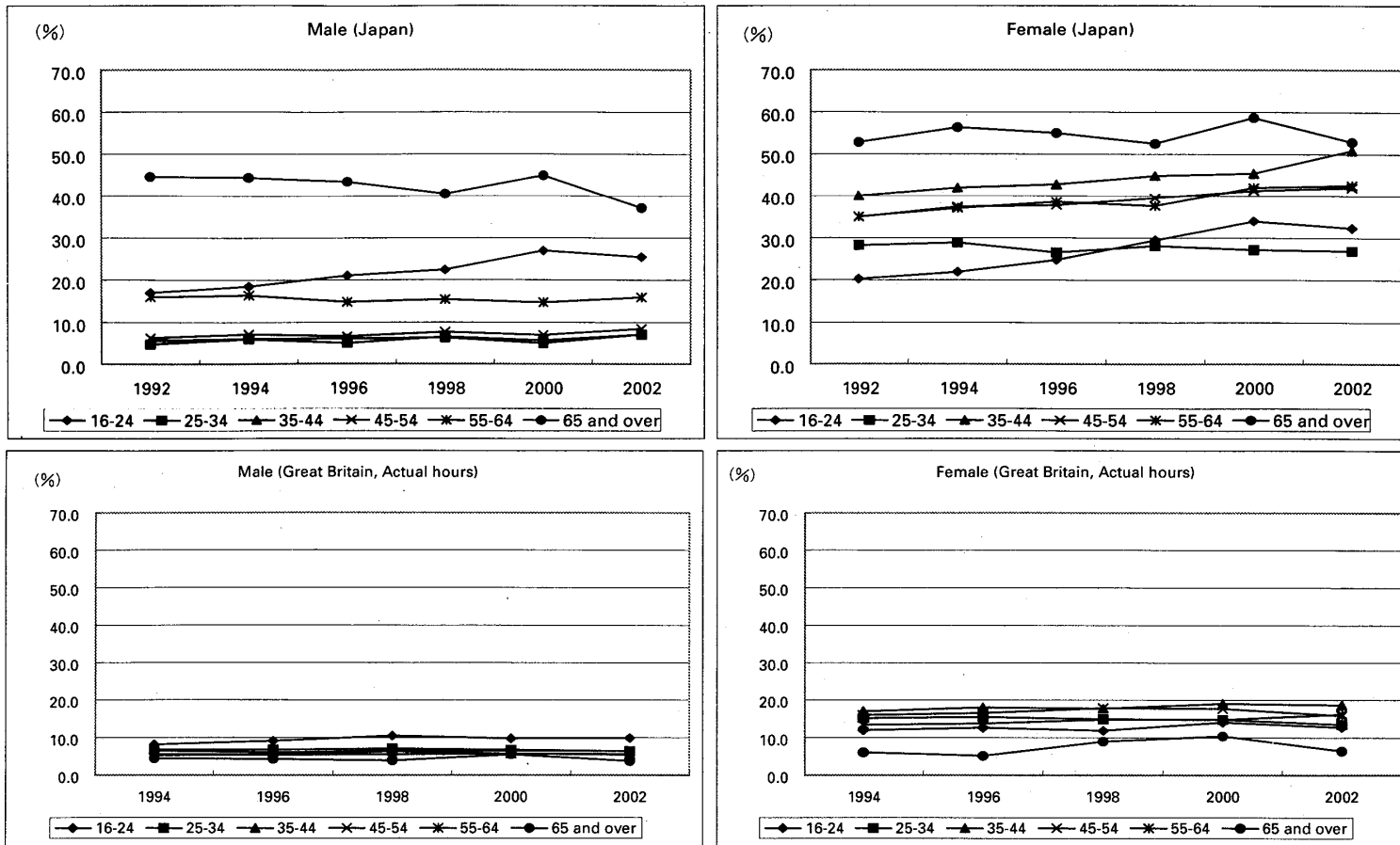
In this chapter, we will compare unemployment & unstable employment in Great Britain with that in Japan, using QLFSMD.

As stated above, the ratios of part-timers and less than 35 hours workers to the labour force are the main indicators comprising unstable employment indicators. However, where international comparison is made using these indicators, care must be taken. For example, in the LFS in both countries, if the persons who are the subject of the survey answer that they are part-timers themselves, they are classified as part-timers. However, the statistical standard of the part-time working hours in Great Britain is less than 30 hours in the reference week. Compared to this, the statistical standard in Japan is 35 hours in the reference week. In addition, there are cases where the number of actual working hours exceeds the statistical standard of the working hours in their own countries, even if they are part-timers in their employment contracts. With regard to discouraged workers examined in the preceding chapter, there is a problem of what data should be included for the purpose of international comparison. Discouraged workers are persons not in labour force who desire to work, and attribute the reason for not seeking work to that "No jobs appear to be available." The numbers of discouraged workers in Great Britain in Table 1-4 are the numbers estimated from variables called NOLOOK in QLFSMD. NOLOOK comprises 8 variables, which are (1) Waiting results application, ET assessment, (2) Student, (3) Looking after family or home, (4)

Temporarily sick or injured, (5) Long-term sick or disabled, (6) Believes no job available, (7) Not yet started looking, and (8) Any other reason. Discouraged workers are counted only in variable (6) in Great Britain, out of the above variables. They are totalized as other reasons except for (1), (2), (3), (5) and (6). For example, the variable (7) may be "not yet started looking" as "no jobs appears available." For these reasons, the total numbers of (4), (6) and (7) out of the not labour force are used for discouraged workers in Table 1-4.<sup>1)</sup> In this way, there are difficulties in the international comparison of unemployment & unstable employment. Allowing for these difficulties, we will compare the scale and structure of unstable workers in both countries. Figure 2-1 shows part-timers by sex and age in both countries composed with the data in Tables 1-3 and 1-4.

Since the statistical standard of part-time work is different between both countries, Figure 2-1 shows the scale and structure of part-timers in both countries using the statistical standard of part-time working hours of Japan. There is a major difference in the scales of part-timers between both countries. The part-time workers, ratio (called "PTWR" here inafter) of young people has been increasing in both sexes in Japan. The ratio of part-timers in people 35-44 years old shows a major difference between males and females. The male PTWR of over 65 years old is low. The female PTWRs of the middle and upper age group are high next to people over 65 years old. In addition, the female PTWRs of the middle and the upper age group have increased.

The PTWR of young people has also increased in Great Britain. There is no difference from Japan in that the female PTWR of the upper age group is high. However, the PTWR of the upper age group in Great Britain is low unlike that in Japan. The PTWR comprising the main part of the unstable employment indicators is high in females in both middle and upper age group, both in both countries. In addition, the PTWR of the young people has increased in recent years.<sup>2)</sup>



**Figure 2-1 Trend of part-timers by sex and age in Great Britain and Japan**

(Source) Japan: LFSSP  
Great Britain: QLFSMD



## **2-2 Comparison of involuntary part-timers between Great Britain and Japan**

We have seen the trend of the whole picture of unstable employment in both countries in terms of PTWRs. We will further examine the comparison of involuntary part-time work between both countries. Part-timers who have found it necessary to work part-time against their will are prescribed as involuntary part-timers. In this section, we will take up indices by sex and age concerning involuntary part-time work from Tables 1-3 and 1-4, and compare them between both countries; provided, however, that the prescript of part-time and the prescript of the reasons for working part-time must agree with each other in both countries in order to compare involuntary part-time works between both countries.

The Data relating to ① people who normally work full-time but are working part-time because of recession, ② people who normally work part-time but are working for a shorter number of hours in the same job, and ③ part-timers who cannot find a full-time job are necessary to analyze the involuntary part-time work.<sup>3)</sup> In addition, data classified by sex and age is also necessary to compare unstable employment between both countries. However, there is no data in the LFSSP in Japan, which contains these three groups. The data available is only that of "engaged mainly in work" and "engaged while attending school or keeping house or doing some other activity" in respect of temporary employees and daily employees. On the other hand, there is data of part-timers and temporary workers who "could not find a permanent job" in the LFS in Great Britain. However, the LFS in Great Britain does not show data by age.

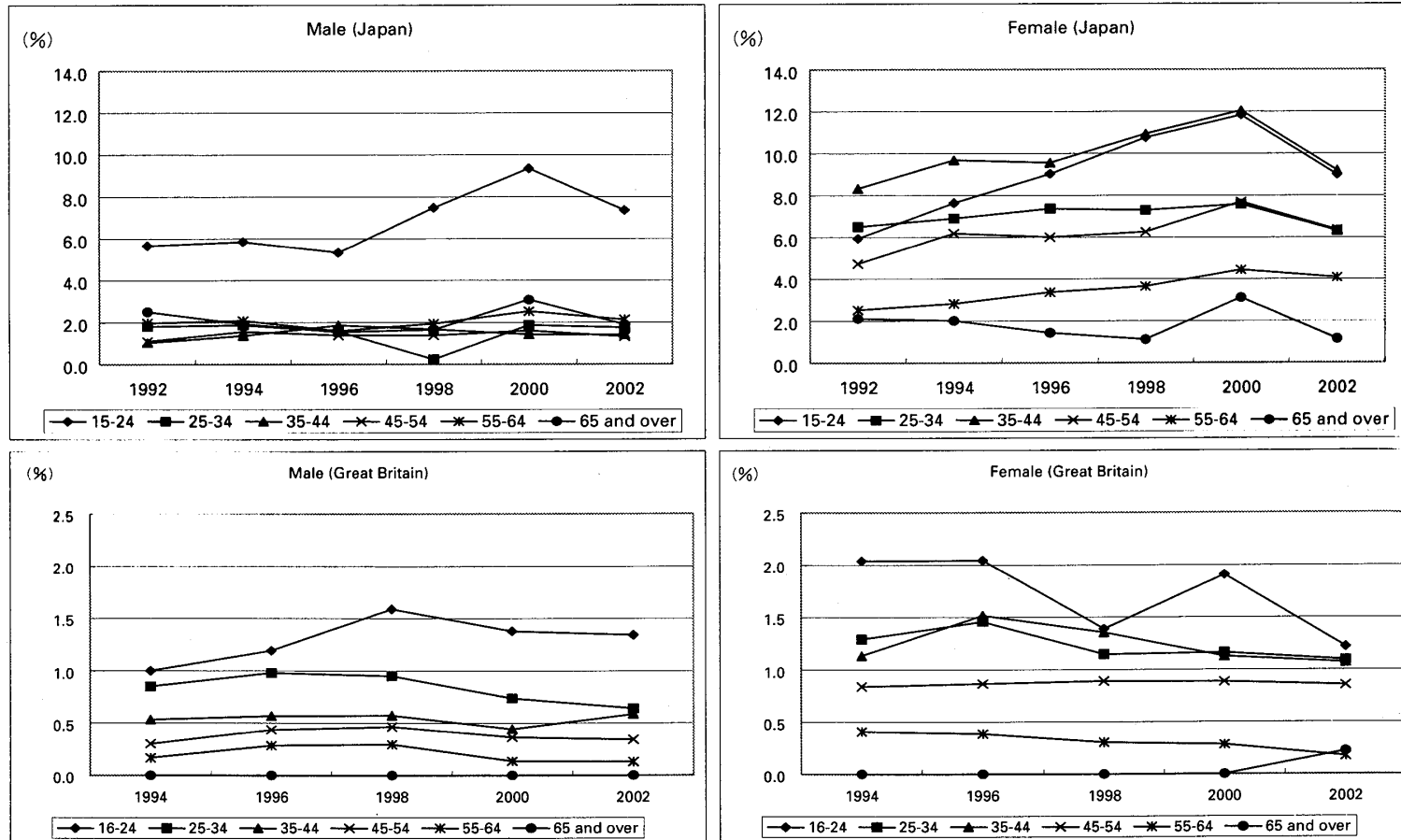
There is no data for workers working less than 35 hours in the reference week who wish to have an additional job or to change the job in the LFS in Great Britain. It is difficult to compare the tabularized data between both countries by making adjustments. We have therefore made tabulation of the QLFSMD in Great Britain on the statistical standard of Japan. The ONS (1999) shows the explanation of variables incorporated in the micro-data. Persons who analyze the QLFSMD need to confirm whether necessary variables exist. They are naturally required for analysis, but there are variables that are not recorded in the QLFSMD. With regard to variables that are not

recorded, it is necessary to combine recorded variables and the tabulation must be made using them. In order to tabularize the numbers of workers working less than 35 hours in the reference week who wish to have an additional job or to change the job, one need to extract variables of workers, working hours and wishing to have an additional job or to change the job from the variables in the QLFSMD. In more detail, we classified into whether or not work indicates economic activities, INECACA, and into whether or not the working hours in the reference week exceeds 35 hours by the variable indicating the number of working hours, TOTAC02 (actual hours including overtime), and into whether workers wish to have an additional job or to change the job by the variable, ADDJOB (looking for a new or additional job). With regard, other indicators in Table 1-4, tabularization is made in the same method in the above, where no variables are available.<sup>4)</sup>

We made an estimation of workers working less than 35 hours in the reference week who wish to have an additional job or to change the job from the QLFSMD. We will make comparison in workers working less than 35 hours (who wish to have an additional job or to change the job) between both countries. Figure 2-2 shows the graph showing the trend of the ratios of workers less than 35 hours (who wish to have an additional job or to change the job) to the labour force in both countries on a biannual basis.

As can be seen from Figure 2-2, in the case of Great Britain, the ratios have been in a declining trend, supported by the favourable economic condition in recent years, but the problem of unstable employment centers on the young people. In addition, it can be confirmed from Figure 2-2 that the problem of unstable employment in Japan is centering on the young people as that in Great Britain. As the divisions of the scale in the Figure shows, the ratios of workers wishing to have an additional job or to change the job are overwhelmingly higher in Japan than those in Great Britain. In addition, the ratios of females in middle and upper age group in Japan are overwhelmingly higher than those of males and females in Great Britain and males in Japan.<sup>5)</sup>

It can be seen from the Figures and Tables shown above that the problem of unstable employment in both countries is centering on



**Figure 2-2 Trend of workers under 35 hours in the reference week who wish to have an additional job or to change the job**  
 (Source) Japan: LFSSP  
 Great Britain: QLFSMD

the young people. However, unstable employment indicators in the female middle and upper age group show overwhelmingly higher than the indicators of the young people that are becoming high. The results of the analysis show that the labour force of the female middle and upper age group is not fully used in Japan.

### **3. Comparison of unstable employment indicators between Great Britain and Japan- Use of SARs**

In this chapter, we will compare the structure of unstable employment in Japan with that in Great Britain using SARs. The LFS is a survey, which takes a picture of the state of employment and unemployment of the population in one reference week, and there is a limitation to understanding the usual state or the whole structure.

We will use unstable employment indicators, which can be taken in censuses, in order to clarify the structural characteristics of unstable employment in both countries. We will make the cross tabulation by sex and workers by industry which are rearranged into the two sectors (the goods sector and the service sector). By so doing, distributions by the two divisions in respect of the employment structure by sex and unstable workers by sex will be clarified.<sup>6)</sup>

In this chapter, short-time workers whose number of usual working hours is less than 35 hours are prescribed as unstable workers, and the indicators of unstable workers shall be used for our analysis. The reason is that SARs data has no variables for reasons for working part-time or for a short-time work.

SARs contain part-time work as one of the variables of Economic Activities. However, this variable is for a part-time work so-called in the workplace. It is a part-time worker in an employment contract where 30 hours in the reference week is the upper limit of the working hours, and the usual number of working hours is not known. In addition, it is necessary to rearrange data from Great Britain on the statistical standard of 35 working hours to compare unstable employment using the tabularized data in Japan. There is no data, which corresponds to the items of reasons for working part-time and reasons for working as short-time workers in SARs and in *Japanese Population Census*. In the *Population Census*, questionnaires on the usual working hours started to be made in the survey in 2000

**Table 3-1 Working hours by industry (Japan:%)**

		I Goods sector									II Service sector							
		Total	Agriculture and forestry	Fisheries	Mining	Construction	Manufacturing	Electricity, gas, heat, and water supply	Transport and communications	Total	Industry(1)	Finance and insurance	Real estate	Service	Personal service	Business service	Government	
Total	Under 15 hours	2.2	1.1	1.0	1.1	0.0	1.7	0.9	0.8	0.9	3.3	2.9	0.7	5.4	4.2	2.9	2.4	0.6
	15-21 hours	2.8	1.9	1.9	1.4	0.0	2.9	1.8	0.8	0.9	3.8	4.6	2.6	3.4	3.7	3.7	3.8	0.6
	22-34 hours	6.9	6.8	6.7	3.9	3.5	8.6	7.0	2.3	3.7	8.0	9.7	7.1	7.3	7.3	8.6	7.9	3.0
	35-42 hours	21.8	22.9	11.3	8.5	19.3	18.7	27.0	48.5	23.5	21.7	17.2	38.5	21.9	21.0	11.9	26.5	42.6
	43-45 hours	13.8	13.9	6.8	6.2	14.0	12.7	16.1	23.0	14.0	13.9	10.2	17.1	11.5	15.9	7.2	15.5	23.5
	46-48 hours	17.0	20.8	9.6	11.3	38.6	28.3	21.7	13.1	18.1	13.9	14.5	10.8	12.8	14.2	14.6	14.9	11.9
	49-59 hours	16.6	10.9	15.6	12.7	17.5	22.2	3.1	7.8	19.7	15.3	17.5	14.8	12.7	14.1	19.0	13.5	9.4
60 hours and over	10.0	8.4	11.6	16.3	5.3	8.8	6.0	2.5	13.9	11.6	17.0	6.0	8.6	8.2	19.5	5.9	5.3	
Male	Under 15 hours	0.6	0.3	0.4	0.6	0.0	0.3	0.2	0.3	0.4	0.8	0.7	0.2	1.8	1.1	0.4	0.6	0.2
	15-21 hours	0.6	0.4	0.7	0.8	0.0	0.4	0.3	0.0	0.7	0.8	0.8	0.3	1.2	0.8	0.6	0.8	0.2
	22-34 hours	1.6	1.6	3.0	2.5	1.8	1.7	1.2	1.5	1.6	1.7	1.5	0.9	2.5	1.9	1.4	2.0	1.5
	35-42 hours	12.1	14.0	6.2	5.9	15.8	10.2	15.8	41.9	18.3	10.5	7.2	15.0	12.4	9.9	3.9	14.8	33.6
	43-45 hours	8.7	9.9	3.7	4.5	12.3	9.2	11.1	20.7	11.9	7.7	5.6	8.8	7.5	8.1	3.1	10.1	18.9
	46-48 hours	11.9	11.1	5.6	8.7	33.3	3.4	14.3	12.6	15.7	7.8	8.4	6.0	9.1	7.0	6.1	10.2	9.9
	49-59 hours	12.5	15.4	9.4	10.7	17.5	20.3	14.6	7.1	18.3	10.0	12.0	11.1	9.9	8.2	9.0	10.4	8.6
60 hours and over	7.8	7.3	7.2	14.6	5.3	8.3	5.3	2.5	13.6	8.3	11.9	4.9	6.9	5.8	10.9	5.2	5.1	
Female	Under 15 hours	1.6	0.5	0.6	0.6	0.0	0.6	0.5	0.5	0.5	2.5	2.2	1.2	3.7	3.1	2.5	1.8	0.4
	15-21 hours	2.2	0.9	1.2	0.6	0.0	0.7	1.0	0.8	0.9	3.1	3.8	3.5	2.2	2.9	3.1	2.9	0.3
	22-34 hours	5.3	2.5	3.7	1.4	0.0	1.9	2.9	1.0	0.8	5.0	8.1	7.3	4.6	2.1	7.2	5.9	1.5
	35-42 hours	9.7	3.8	5.2	2.5	3.5	3.8	3.0	6.6	5.2	10.9	10.1	17.1	9.5	11.1	8.0	11.7	9.0
	43-45 hours	5.1	1.8	3.1	1.7	1.8	2.2	1.3	2.5	2.1	6.3	4.5	7.9	4.0	8.0	4.2	5.0	4.6
	46-48 hours	5.7	2.4	4.0	2.5	5.3	3.3	1.7	0.8	2.3	6.3	6.0	7.1	3.7	7.1	8.5	4.8	2.0
	49-59 hours	4.1	1.7	6.2	1.7	1.8	1.5	0.8	0.3	1.3	5.3	5.5	4.6	2.8	5.9	10.0	3.1	0.8
60 hours and over	2.3	0.8	4.4	1.4	0.0	0.3	0.1	0.0	0.4	3.3	5.1	1.1	1.8	2.4	8.6	0.7	0.2	
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
Male (total)	59.0	68.0	51.7	73.5	86.0	82.8	61.4	87.4	83.8	51.1	50.2	48.0	58.7	48.2	37.9	57.7	79.7	
Female (total)	41.0	32.0	48.3	26.5	14.0	17.2	38.6	12.6	16.1	48.9	49.9	52.0	41.5	51.8	62.1	42.3	20.2	
Under 35 hours (total)	11.9	9.7	9.6	6.5	3.5	13.2	9.7	3.8	5.5	15.1	17.2	10.3	16.1	15.1	15.3	14.1	4.2	
Over 35 hours (total)	79.3	76.9	54.9	54.9	94.7	90.7	73.9	94.9	89.1	76.5	76.4	87.3	67.5	73.4	72.3	76.3	92.6	
Under 35 hours (Male)	2.8	2.3	4.1	3.9	1.8	2.3	1.7	1.8	2.7	3.2	3.0	1.4	5.5	3.8	2.5	3.4	2.0	
Over 35 hours (Male)	53.0	57.7	31.9	44.5	84.2	51.4	61.1	84.8	77.9	44.3	45.1	45.8	45.8	39.0	33.0	50.7	76.1	
Under 35 hours (Female)	9.1	3.9	5.5	2.5	0.0	3.2	4.3	2.3	2.2	10.6	14.1	12.0	10.6	8.1	12.8	10.6	2.2	
Over 35 hours (Female)	26.9	10.5	22.9	9.9	12.3	11.1	6.9	10.1	11.2	32.0	31.2	37.7	21.8	34.6	39.3	25.3	16.5	

Note:

- (1) Industry is consisted of wholesale, retail trade and eating and drinking places.
- (2) In Manufacturing, fix-it is contained.
- (3) These are the values based on the total number of workers in each industry = 100.

(Source) The 1992 Employment Status Survey

Table 3-2 Working hours by industry (Great Britain:%)

		I Goods sector							II Service sector								
		Total	Total	Indus-try <sup>(1)</sup>	Indus-try <sup>(2)</sup>	Manufac-turing(e xtract)	Electricity, gas, heat, and water supply	Transport and commu-nications	Total	Indus-try <sup>(3)</sup>	Finance and insur-ance	Real estate	Business service	Personal service	Medical service	Educa-tion service	Government
Total	Under 15 hours	6.5	2.2	4.2	1.7	1.7	0.7	4.0	9.7	13.2	3.1	7.4	4.5	15.7	8.0	14.9	4.0
	15-21 hours	8.0	3.5	3.8	3.0	3.5	3.0	5.3	11.4	13.4	5.7	7.2	6.6	12.1	17.2	11.2	6.4
	22-34 hours	8.4	4.4	6.6	4.0	4.6	1.8	5.6	11.4	10.1	4.7	6.4	6.4	11.9	18.0	22.4	5.1
	35-42 hours	60.4	71.7	39.4	75.1	77.5	89.9	63.9	52.0	43.8	75.7	59.5	61.9	39.8	48.3	37.5	73.2
	43-45 hours	3.3	4.0	3.5	4.1	3.0	1.2	4.2	2.8	3.4	3.0	5.0	3.6	3.7	1.0	2.9	1.7
	46-48 hours	1.4	1.6	1.8	1.6	1.4	0.3	1.8	1.3	1.8	0.6	1.7	1.4	1.8	0.6	0.7	1.2
	49-59 hours	4.4	4.9	9.8	4.7	3.6	0.9	5.4	4.0	5.0	3.5	6.1	5.8	4.5	1.4	4.3	1.9
	60 hours and over miss	4.0	4.2	23.4	2.9	2.1	0.2	5.2	3.8	5.9	1.5	3.6	5.9	4.6	2.4	2.1	1.5
Male	Under 15 hours	0.9	0.5	1.5	0.4	0.4	0.1	0.9	1.2	2.2	0.3	1.0	0.8	1.5	0.3	1.1	0.6
	15-21 hours	0.7	0.6	1.3	0.4	0.4	0.1	1.0	0.9	1.2	0.2	1.1	0.9	1.3	0.5	0.8	0.6
	22-34 hours	1.5	1.2	2.5	1.0	1.0	0.2	1.8	1.7	1.4	1.2	1.4	1.7	1.7	0.8	5.8	0.9
	35-42 hours	37.9	54.7	33.0	57.6	55.3	71.6	46.6	25.4	23.0	33.8	30.3	35.1	15.3	15.3	17.3	43.3
	43-45 hours	2.7	3.7	3.1	3.8	2.7	1.1	3.6	1.9	2.6	2.3	3.2	2.6	1.5	0.5	1.6	1.5
	46-48 hours	1.1	1.4	1.5	1.4	1.3	0.3	1.5	0.9	1.3	0.6	1.2	1.2	0.7	0.2	0.4	1.1
	49-59 hours	3.7	4.6	8.8	4.5	3.3	0.8	4.8	3.0	4.0	3.0	5.1	4.9	2.3	0.9	2.3	1.6
	60 hours and over miss	3.3	3.8	20.3	2.8	1.9	0.2	4.7	2.9	4.4	1.3	2.8	5.3	2.6	1.6	1.3	1.4
Female	Under 15 hours	2.1	2.7	5.7	2.4	1.8	1.5	3.3	1.7	1.6	1.1	1.7	2.0	0.7	1.5	3.3	
	15-21 hours	5.6	1.7	2.8	1.3	1.4	0.5	3.1	8.5	11.0	2.8	6.3	3.7	14.2	7.7	13.7	3.4
	22-34 hours	7.3	2.9	2.5	2.6	3.1	3.0	4.2	10.5	12.2	5.5	6.1	5.7	10.8	16.7	10.5	5.9
	35-42 hours	6.9	3.1	4.1	2.9	3.6	1.6	3.8	9.7	8.7	3.5	5.0	4.7	10.3	17.2	16.6	4.2
	43-45 hours	22.5	17.1	6.4	17.6	22.3	18.2	17.3	26.6	20.8	41.9	29.2	26.8	24.5	33.0	20.1	29.9
	46-48 hours	0.6	0.3	0.4	0.3	0.3	0.1	0.6	0.9	0.8	0.7	1.8	1.0	2.2	0.6	1.3	0.3
	49-59 hours	0.3	0.22	0.3	0.1	0.1	0.1	0.3	0.4	0.5	0.1	0.5	0.2	1.0	0.3	0.3	0.1
	60 hours and over miss	0.7	0.3	1.0	0.2	0.3	0.1	0.6	1.0	1.0	0.4	1.0	0.9	2.3	0.5	2.0	0.3
Total	60 hours and over miss	0.7	0.3	3.1	0.1	0.1	0.0	0.5	0.9	1.5	0.2	0.8	0.6	2.0	0.8	0.8	0.1
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	Male (total)	54.0	73.2	77.7	74.3	68.0	75.9	68.2	39.7	41.7	43.9	47.9	54.4	28.8	20.7	32.0	54.3
	Female (total)	46.0	26.8	22.3	25.7	32.0	24.1	31.8	60.3	58.3	56.1	52.1	45.6	71.2	79.3	68.0	45.7
	Under 35 hours (total) <sup>(4)</sup>	22.9	10.1	14.7	8.6	9.8	5.5	14.9	32.4	36.7	13.6	21.0	17.5	39.7	43.2	48.5	15.5
	Over 35 hours (total) <sup>(4)</sup>	73.5	86.4	77.9	88.3	87.6	92.4	80.4	63.9	59.9	84.3	76.0	78.5	54.4	53.7	47.4	79.6
	Under 35 hours (Male)	3.2	2.4	5.3	1.9	1.7	0.4	3.7	3.8	4.8	1.7	3.5	3.4	4.5	1.6	7.6	2.0
	Over 35 hours (Male) <sup>(4)</sup>	48.7	68.2	66.7	70.0	64.5	74.0	61.2	34.1	35.3	41.1	42.7	49.1	22.3	18.5	22.9	48.9
	Under 35 hours (Female)	19.7	7.7	9.4	6.8	8.1	5.1	11.1	28.6	31.9	11.8	17.5	14.1	35.2	41.7	40.8	13.5
	Over 35 hours (Female) <sup>(4)</sup>	24.8	18.2	11.2	18.3	23.1	18.5	19.3	29.7	24.6	43.2	33.3	29.5	32.1	35.2	24.6	30.7

Note:

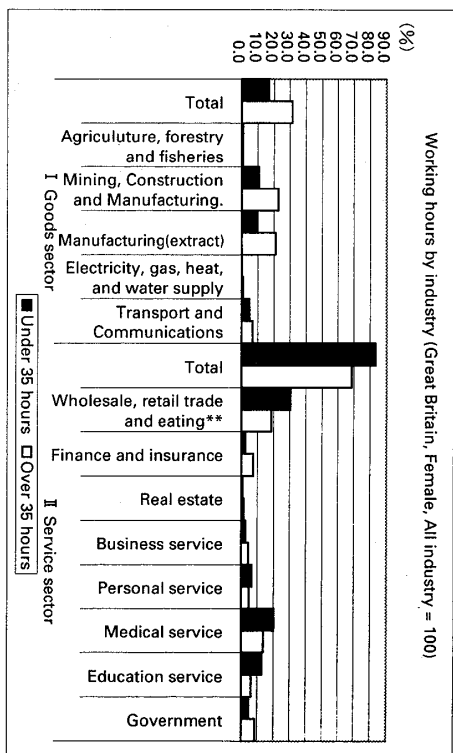
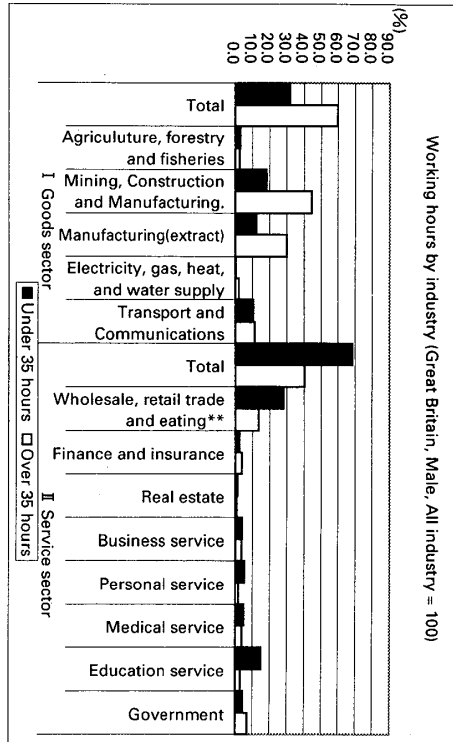
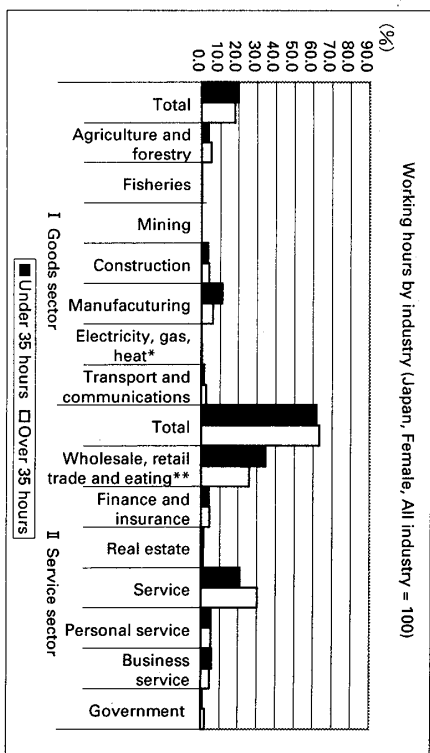
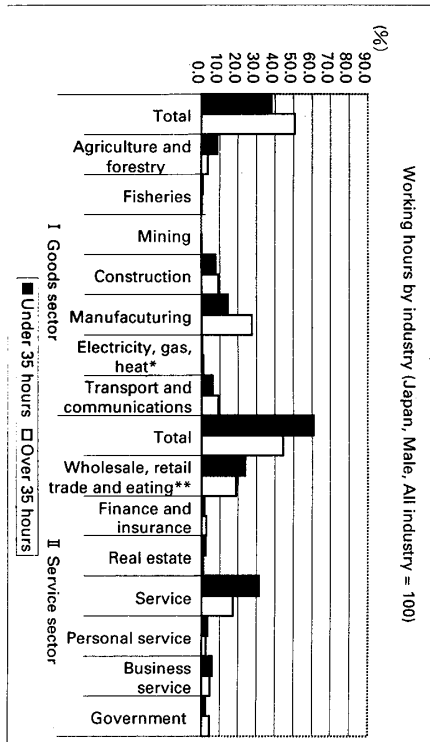
- (1) Industry is consisted of agriculture, forestry and fisheries.
- (2) Industry is consisted of Mining, Construction and Manufacturing.
- (3) Industry is consisted of Wholesale, retail trade and eating and drinking places.
- (4) Missing value is not included
- (5) These are the values based on the total number of workers in each industry = 100.

(Source) SARs data.

onwards.<sup>7)</sup> Because SARs is a survey for the year 1991, it is impossible to compare it with the *2000 Population Census*. To make a strict comparison between Great Britain and Japan, it is necessary to use SARs and the *Population Census*. We have therefore decided to use the *ESS* for 1992 instead of the *Population Census* for 1990. The reason is that the *ESS* is data, which takes unstable employment in Japan from a structural aspect, and data, which takes the usual state of labourers by working hours. Tables 3-1 and 3-2 are compiled by crossing the working hours and the rearranged industrial data of SARs and *ESS* by the two divisions. Table 3-2 shows the figures in the SARs rearranged on the basis of the same number of working hours used in the *ESS*. In addition, with regard to the industrial classification, rearrangement has been made on the basis of the statistical standard of industrial classification proposed by Iwai (1988).

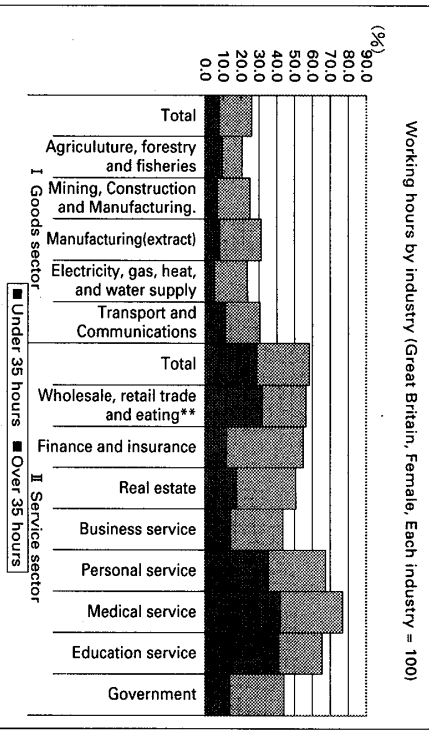
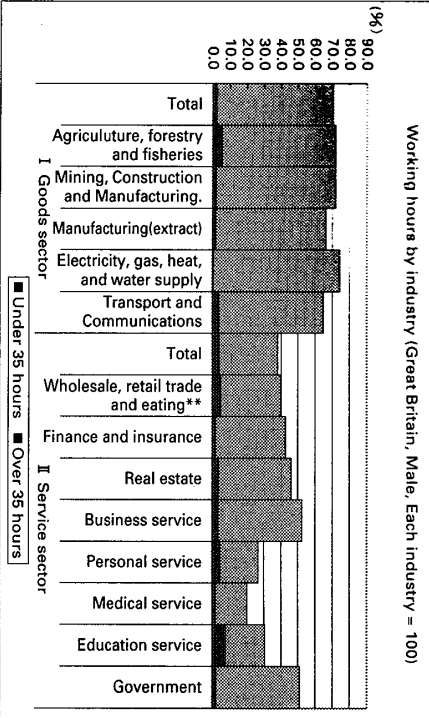
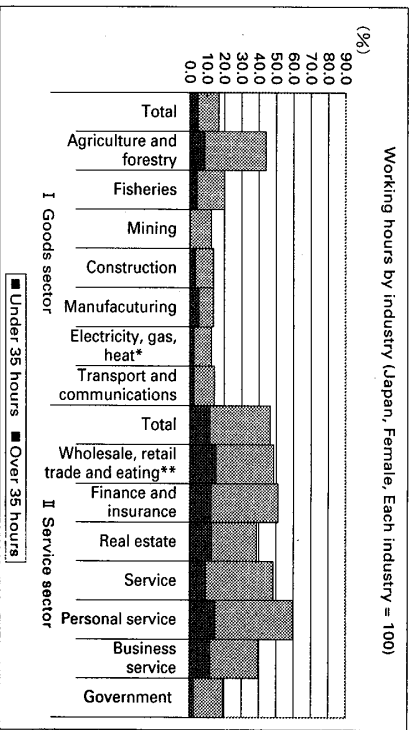
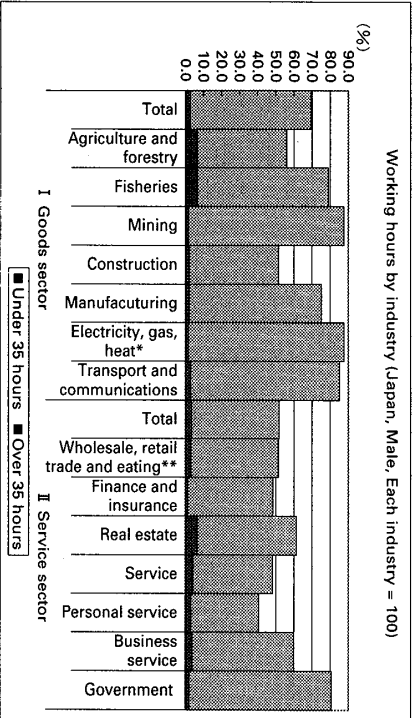
Figure 3-1 shows graphs of unstable workers by industry taken from the data in Tables 3-1 and 3-2. Figure 3-1 shows the total numbers of workers, which are the numbers excluding the number of workers (workers working more than 35 hours, workers for working less than 35 hours) of each industry. Figure 3-2 shows the total numbers of workers by industry, which excludes the number of workers of each industry.

It can be seen that the ratios of male long-time workers belonging to the goods sector and female short-time workers belonging to the service sector are high in Great Britain compared to Japan. However, with regard to those belonging to the goods sector, both males and females work for a long time. The industries, which push up the ratios of female short-time workers, are wholesale, retail, medical treatment, health, cleaning and welfare. On the other hand, the majority of all industries are workers working more than 35 hours in Japan, and its structure is that not so many females center on short-time work in the service sector as in Great Britain.



**Figure 3-1 Workers by industry (Total of workers in all industries=100, Japan, Great Britain, males and females)**  
 (Note)\*Electricity, gas, heat and water supply  
 \*\*Wholesale, retail trade and eating and drinking places  
 (Source) Japan: 1992 Employment Status Survey  
 Great Britain: SARs data





**Figures 3-2 Workers by industry (Total of workers in all industries=100, Japan, Great Britain, males and females)**

(Note)\*Electricity, gas, heat and water supply  
 \*\*Wholesale, retail trade and eating and drinking places  
 (Source) Japan: 1992 Employment Status Survey  
 Great Britain: SARs data

The structure that female short-time workers center on the service sector is the same in both countries. The feature of the structure in Great Britain in 1991 was that males and females working for a long time centered on the manufacturing industry and the female short-time workers center on the fields of medical treatment and education. The majority of all industries in Japan are workers working more than 35 hours, and the weight of the short-time workers in the service sector is not as high as that in Great Britain. The number of female workers working over 35 hours is greater than that less than 35 hours in the service sector as well. In addition, as can be seen from Figures 3-1 and 3-2, another different point needing attention is that the gap between the ratios of female workers and those of male workers is large.

### **Conclusion**

We examined the features of UUEI by sex and age in both countries, especially using QLSFMD in Great Britain. Japan was in a period of the bubble burst and a long-time slump, and unemployment rates largely increased. The unemployment structure was rapidly changing to that of the USA and Europe (a sharp rise in the unemployment rates in the youth group). Involuntary unemployment due to redundancy and long-term unemployment, which is visible indicator unemployment, increased, and discouraged female workers out of the not labour force, which is an invisible unemployment indicator, also increased. Female part-time work, which is an unstable employment indicator, and especially involuntary part-time work, increased. In Great Britain, the unemployment rate declined in the favourable economic condition, and the weight of invisible unemployment indicators also fell. The gap between the sexes was also relatively small. However, in Japan, according to indicators by sex and age, and in particular to discouraged worker and involuntary part-time worker indicators, the ratios of female middle and upper age groups are extremely high, and a gap between the genders in work seems to be a reflection of a female M-shaped curve. The weight of the youth group in respect of indicators of discouraged workers, involuntary part-time workers, etc. increased in both countries. It has been clarified that the problem of unemployment &

unstable employment in the youth group has become greater, together with the conventional problem of the middle and upper age group.

In the structural comparison of unstable employment in both countries, using the micro-census of 1991, there was a tendency in both countries that the number of short-time workers increased and especially that the weight of females in the service sector rose. The structural feature in Great Britain is that the weight of short-time workers in the service sector and the weight of the long-time workers in the goods sector are high. The weight of female short-time workers in the service sector in Japan is not so high as that in Great Britain, and it has been clarified that the weight of female workers working more than 35 hours in Japan is quite high. It is necessary to carry out further analysis concerning the change in the structure of employment which prescribes unemployment & unstable employment.

As above, contrasting aspects were seen in UUEI in both countries, partly because of the difference in conditions in the period for comparison between both countries. The employment structure in Japan is changing to that in the USA and Europe, but the remaining gender gap in the employment structure contributes as a major factor to the backwardness of the unemployment & unstable employment structure in Japan such as the invisibility of unemployment and the high weight of female discouraged workers. The future issue is to deepen studies of the historical and social prescript of the unemployment & unstable employment structure in both countries, which is behind the quantitative features of the UUEI in both countries.

## Notes

- 1) It is possible to compose indicators by combining various variables in the case of micro-data. However, the greater the number of variables is adopted, the more difficult the sufficient numbers is produced for reliable estimates.
- 2) We compared another PTWR(so-called in the workplace).The result was that the ratio in Great Britain was about same as the PTWR on the basis of actual working hours in Japan. It is possible to interpret that part-timers in their employment contracts in Great Britain work for a long time, and part-timers in their employment contracts in Japan do not work for a long time. However, it is necessary to allow for various factors to interpret the results such as the system in Great Britain and Japan and the scope of their application. The relationship between the resultant indicators and the systems in Great Britain and Japan is a future issue.
- 3) See, Iwai, H. (2000) p.65.
- 4) See ONS (1999). Where there are different definitions of the same item, as in the cases of the definition in Great Britain and that in ILO, the variable prepared in each definition is available.
- 5) See ONS (1999), pp.63-65. Figures 2-1 do not show data for 1992 in the QLFSMD. The reason is that surveys were carried out on the "reason for not having sought work" on the population of up to 59 years of age in the LFS for the period from the first quarter to the fourth quarter of 1992.
- 6) See Iwai, H., Fujioka, M., Yoshinaga, K. and Sugihashi, Y. (2001) and Fuchimoto, C. (2003) and Iwai, H. (1999).
- 7) See the Statistical Bureau of the Ministry of Public Management, Home Affairs, Posts and Telecommunications (2002).

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