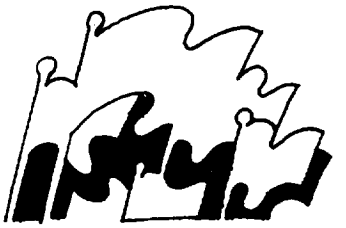
Foreign Labor Developments



Adjusted Japanese unemployment rate remains below 3 percent in 1987–88

CONSTANCE SORRENTINO

In addition to regular monthly labor force surveys, Japan conducts a special labor force survey each year to investigate, in more detail, the labor force status of the population. These special surveys allow for a more complete analysis of Japanese unemployment under U.S. concepts. Such analyses were presented in 1984 and 1987 articles in the *Review*, and this report updates the results to include data from the February 1987 and 1988 special surveys.[1]

Although the Bureau of Labor Statistics does not use the special survey results to adjust the overall Japanese unemployment rate to U.S. concepts, the Bureau continues to follow the surveys to better understand the results of the regular monthly surveys. The 1987 and 1988 special surveys continue to support the Bureau's contention that the Japanese unemployment rate is only slightly changed when U.S. concepts are applied. In addition, the BLS uses the special surveys for two other purposes: they allow calculation of (1) adjusted unemployment rates by sex; and (2) expanded unemployment measures which go beyond the conventional unemployment rate to cover persons involuntarily working part time and discouraged workers.

Adjustment to U.S. concepts

Several adjustments are made to the special surveys to bring them closer to U.S. concepts. After adjustment, some persons counted as unemployed in the surveys are excluded from the labor force, and some reported as not in the labor force are included among the unemployed. The magnitude of each of the adjustments is significant, but, on balance, they tend to cancel each other out, leaving the Japanese unemployment rate virtually unchanged. The adjustments are discussed in detail in the previous studies. Table 1, using the same format as the earlier analyses, shows the adjustments for February 1984 through February 1988.

In both 1987 and 1988, the adjustments to U.S. concepts result in a slightly lower unemployment rate than figures based on Japanese definitions. This was the same direction indicated by analyses of previous surveys for February. However, special surveys conducted in March 1977–80 led to a slight upward adjustment. As discussed in the previous articles, March is a highly unusual month for the Japanese labor market because it is the end of the Japanese fiscal year, when firms traditionally take on new workers, and also the end of the school year, when new graduates enter the labor market. Although February is also a month of higher than average unemployment, there is somewhat less seasonality associated with this month than with March.

The BLS comparative unemployment rates program regularly compiles unemployment rates adjusted to U.S. concepts for certain foreign countries. (See tables 45 and 46 in the "Current Labor Statistics" section of the *Review*.) For Japan, BLS does not attempt to make annual or quarterly adjustments based on the February and March special survey data. Instead, BLS accepts the published Japanese

Table 1. Adjustment of Japanese unemployment and labor force data to approximate U.S. concepts, February 1984–88

[Numbers in thousands]

Category	1984	1985	1986	1987	1988
Reported unemployed	1,710	1,640	1,640	1,860	1,730
Less inactive jobseekers	430	370	360	480	460
Plus jobseekers not in labor force who intended to start work immediately	130	130	120	120	140
Less those not available due to housework or school	10	10	10	10	10
Plus persons waiting to begin a new job within 1 month	1,340	1,130	1,300	1,380	1,380
Less students awaiting jobs after graduation	1,170	960	1,100	1,160	1,160
Adjusted unemployed	1,570	1,560	1,590	1,710	1,620
Reported labor force	57,240	57,990	58,400	58,770	59,640
Less family workers working less than 15 hours	560	520	500	550	570
Less inactive jobseekers	430	370	360	480	460
Plus unemployed classified "not in labor force"[1]	290	290	310	330	350
Adjusted labor force	56,540	57,390	57,850	58,070	58,960
Unemployment rates:					
Reported	3.0	2.8	2.8	3.2	2.9
Adjusted to U.S. concepts	2.8	2.7	2.7	2.9	2.7

[1] Net sum of jobseekers not in labor force and persons waiting to begin a new job (less students).

NOTE: Data are on a total labor force basis.

SOURCE: Management and Coordination Agency, Japanese Statistics Bureau, Report on the Special Survey of the Labour Force Survey, February 1984–88.

Constance Sorrentino is an economist in the Division of Foreign Labor Statistics, Bureau of Labor Statistics.

unemployment figures as closely comparable with U.S. concepts and makes some minor adjustments to the labor force figures. BLS adjusts the Japanese labor force figures to exclude unpaid family workers working less than 15 hours. For civilian unemployment rates, the National Defense Force is also excluded. These small adjustments to the denominator of the unemployment rate usually make no difference; on occasion they raise the annual average rate by 0.1 percentage point. (See table 2.)

Comparisons by sex

Although the overall Japanese unemployment rate is changed only slightly when the special survey data are adjusted to U.S. concepts, there is a more significant difference in the adjusted rates for men and women. The official Japanese data show virtually no difference in unemployment rates for men and women. However, according to the BLS adjustments, women have higher unemployment rates than men. (See table 3.)

Reasons for the wider male-female differential after adjustment are evident from the table. Women account for most of the unemployed originally classified as not in the labor force, while men account for most of the unemployed who did not actively seek work in the month of the survey.

An expanded unemployment concept

Japan's unemployment rates, both on the official basis and adjusted to U.S. concepts, are well below U.S. rates. Annual civilian U.S. jobless rates of 6.2 percent in 1987 and 5.5 percent in 1988 contrast with adjusted civilian Japanese rates of 3.0 percent and 2.8 percent in February of those years. Other Western nations (Canada, France, Italy, United Kingdom) had rates in the 8- to 11-percent range during the same years. (See the aforementioned tables 45 and 46 in "Current Labor Statistics.") Is the comparative efficiency of the Japanese labor market really 2 or 3 times greater than that of most Western nations? A strict comparison of unemployment rates would arrive at that misleading conclusion. However, a substantial part of Japan's labor underutilization falls in the realm of underemployment (workers on reduced hours) and discouragement, or labor force withdrawal. These forms of labor slack do not show up in the conventional unemployment rate, but they are part of the Bureau's U-1 to U-7 framework of alternative unemployment rates.[2]

Updating previous analyses, table 4 shows expanded unemployment measures which bring into consideration employed persons on part time for economic reasons (U-6) and discouraged workers (U-7). It was not possible to measure discouraged workers in Japan in exactly the same way as they are measured in the United States. Therefore, table 4 shows U-7 for Japan as a range rather than a precise rate. The lower rate of the range includes persons who seem to fall strictly within the U.S. concept of discouraged workers; the upper rate of the range includes some who might not be counted under the U.S. definition, but they would fall under a broader concept of labor underutilization. (See the appendix to the 1987 article for further discussion.)

Comparisons of the U-6 and U-7 rates in relation to the conventionally defined rate (U-5) show that the Japanese rates are increased to a greater degree than the U.S. conventional rates. In other words, there is a convergence in the "unemployment rates" for the two countries when the definition is broadened. In addition, the gap between each of the three rates for the United States and Japan has narrowed between 1984 and 1988, as overall labor market conditions improved in the United States, but not in Japan. The following tabulation, based on table 4, shows the ratio of the U.S. unemployment rate to the Japanese rate:

Rate	*1984*	*1985*	*1986*	*1987*	*1988*
U-5	2.7	2.7	2.5	2.1	2.0
U-6	2.1	2.0	1.9	1.7	1.7
U-7	1.1–1.4	.9–1.2	.9–1.2	.8–1.0	.8–1.0

Table 2. Japanese unemployment rates as published and adjusted to U.S. concepts, annual averages, 1984–1988

[In percent]

Year	As published[1]	Adjusted to U.S. concepts	
		Total labor force basis	Civilian labor force basis
1984	2.7	2.7	2.8
1985	2.6	2.6	2.6
1986	2.8	2.8	2.8
1987	2.8	2.9	2.9
1988	2.5	2.5	2.5

[1] Total labor force basis (includes National Defense Force).

Table 3. Adjustment of Japanese unemployment and labor force data to approximate U.S. concepts, for men and women, February 1987 and 1988

[Numbers in thousands]

Category	February 1987		February 1988	
	Men	Women	Men	Women
Reported unemployed	1,110	750	1,060	670
Less inactive jobseekers	330	150	310	160
Plus jobseekers not in labor force who intended to start work immediately	20	100	40	100
Less those not available due to housework or school	10	10	10	0
Plus persons waiting to begin new job within 1 month	680	700	650	720
Less students awaiting jobs after graduation	600	560	550	600
Adjusted unemployed	870	830	880	730
Reported labor force	35,700	23,070	36,110	23,530
Less family workers working less than 15 hours	50	500	50	530
Less inactive jobseekers	330	150	310	160
Plus unemployed classified "not in labor force"[1]	90	230	130	220
Adjusted labor force	35,410	22,650	35,880	23,060
Unemployment rates:				
Reported	3.1	3.3	2.9	2.8
Adjusted to U.S. concepts	2.5	3.7	2.5	3.2

[1] Net sum of jobseekers not in labor force and persons waiting to begin a new job (less students).

NOTE: Data are on a total labor force basis. Sums of the statistics for men and women may not exactly coincide with the totals on table 1 due to rounding.

SOURCE: Management and Coordination Agency, Japanese Statistics Bureau, Report on the Special Survey of the Labour Force Survey, February 1987 and February 1988.

Table 4. Expanded unemployment measures for the United States and Japan, 1984–88

[Numbers in thousands]

Category	United States					Japan				
	1984	1985	1986	1987	1988	Feb. 1984	Feb. 1985	Feb. 1986	Feb. 1987	Feb. 1988
Unemployed:										
Total, U.S. standard definition	8,538	8,312	8,237	7,425	6,701	1,570	1,560	1,590	1,710	1,620
Full-time jobseekers	7,057	6,793	6,708	5,979	5,357	[11]1,170	[11]1,130	[11]1,180	[11]1,250	[11]1,140
Part-time jobseekers	1,481	1,519	1,529	1,446	1,343	[1]400	[1]430	[1]410	[1]460	[1]480
Half	741	760	765	723	672	200	220	210	230	240
Part-time for economic reasons	5,744	5,590	5,588	5,401	5,206	2,180	2,240	2,350	2,330	2,050
Reduced hours	5,744	5,590	5,588	5,401	5,206	[2]1,900	[2]1,960	[2]2,060	[2]2,080	[2]1,870
Half	2,872	2,795	2,794	2,701	2,603	950	980	1,030	1,040	940
Zero hours	(3)	(3)	(3)	(3)	(3)	[4]280	[4]280	290	250	180
U–6 numerator[5]	10,669	10,348	10,267	9,403	8,632	2,600	2,610	2,710	2,770	2,500
Plus discouraged workers	1,283	1,204	1,121	1,026	954	—	—	—	—	—
Japan: Discouraged workers I[6]	—	—	—	—	—	1,830	2,240	2,340	2,410	2,260
Discouraged workers II[7]	—	—	—	—	—	3,250	4,020	4,190	4,380	4,090
U–7 numerator	11,952	11,552	11,388	10,429	9,586	—	—	—	—	—
Japan: I	—	—	—	—	—	4,430	4,850	5,050	5,180	4,760
Japan: II	—	—	—	—	—	5,850	6,630	6,900	7,150	6,590
Civilian labor force:										
Total, U.S. standard definition	113,544	115,461	117,834	119,865	121,669	56,300	57,150	57,620	57,830	58,720
Full-time labor force	97,632	99,178	101,085	102,631	104,017	49,880	50,330	51,030	51,030	51,200
Part-time labor force	15,912	16,283	16,750	17,234	17,651	6,420	6,820	6,590	6,800	7,520
Half	7,956	8,142	8,375	8,617	8,826	3,210	3,410	3,300	3,400	3,760
U–6 denominator[8]	105,588	107,319	109,459	111,248	112,843	53,090	53,740	54,320	54,430	54,960
U–7 denominator[9]	106,871	108,523	110,580	112,274	113,797	—	—	—	—	—
Japan: I	—	—	—	—	—	54,920	55,980	56,660	56,840	57,220
Japan: II	—	—	—	—	—	56,340	57,760	58,510	58,810	59,050
Unemployment rates (percent):										
U–5: U.S. standard definition (civilian basis)	7.5	7.2	7.0	6.2	5.5	2.8	2.7	2.8	3.0	2.8
U–6: Total full-time jobseekers plus one-half part-time jobseekers plus one-half total on part-time for economic reasons[10] as a percent of the civilian labor force less one-half of the part-time labor force	10.1	9.6	9.4	8.5	7.6	4.9	4.9	5.0	5.1	4.5
U–7: U–6 plus discouraged workers in numerator and denominator	11.2	10.6	10.3	9.3	8.4	[11]8.1–10.4	[11]8.7–11.5	[11]8.9–11.8	[11]9.1–12.2	[11]8.3–11.2

[1] Breakdown into full-time and part-time jobseekers partially estimated.

[2] Includes reported number of persons usually working part time who want more work plus reported number of persons on reduced (but not zero) hours due to slack work or other business reasons.

[3] Included in U.S. standard definition.

[4] Not reported—estimated as 18 percent of adjusted unemployed based upon February 1986 proportion.

[5] All full-time jobseekers plus one-half part-time jobseekers plus one-half on reduced hours for economic reasons plus all on zero hours for economic reasons.

[6] For Japan, all persons not in the labor force who reported that they desired a job but were not seeking work because there was no prospect of finding it, excluding the following two groups: (1) those who had sought work earlier in the month and were immediately available (reclassified by BLS as unemployed under U.S. concepts); and (2) persons who respond "no, or undecided" as to whether they could take up a job now. Discouraged workers I comes as close as possible to U.S. concepts.

[7] For Japan, this group may include some persons who would not be classified as discouraged under U.S. concepts. It includes the persons in discouraged workers I plus (1) persons who respond "no, or undecided" as to whether they could take up a job now, and (2) persons reported as unemployed in the Japanese survey, but who were not seeking work in the past month (reclassified by BLS as not in the labor force under U.S. concepts).

[8] Civilian labor force less one-half the part-time labor force.

[9] U–6 denominator plus discouraged workers.

[10] Japanese workers on "zero hours" are given full weight.

[11] Range reflects two different groups of discouraged workers (I and II).

NOTE: Data are on a civilian labor force basis.

Under the conventional definition of unemployment (U–5), the tabulation shows that the U.S. rate was 2.5 to 2.7 times the Japanese rate during 1984–86, but the differential narrowed to about 2 during 1987–88. Similarly, the differential between the expanded rates (U–6 and U–7) also narrowed, both down and across the tabulation. When the unemployment definition includes persons working part time for economic reasons (U–6), the U.S. rate declined from about twice the Japanese rate during 1984–86 to 1.7 times during 1987–88. An even broader definition of unemployment which encompasses discouraged workers (U–7) illustrates that the U.S. and Japanese rates converged to approximately the same level. At the high end of the Japanese U–7 range, the Japanese rate has surpassed the U.S. rate since 1985. However, it should be emphasized that the upper Japanese U–7 rate includes some persons who might not be classified as discouraged workers under U.S. definitions.

Expanding the unemployment concept to include other elements of labor slack draws the Japanese rate closer to U.S. levels. Explanations for any remaining differential lie in such factors as the composition of the labor force, levels of frictional unemployment, and economic growth rates. □

FOOTNOTES

[1] In the *Monthly Labor Review*, see Constance Sorrentino, "Japan's low unemployment: an in-depth analysis," March 1984, pp. 18–27; and "Japanese unemployment: BLS updates its analysis," June 1987, pp. 47–53.

[2] The U–1 to U–7 framework was introduced in Julius Shiskin, "Employment and unemployment: the doughnut or the hole?" *Monthly Labor Review*, February 1976; pp. 3–10. For an international comparison based on the U–1 to U–7 framework, see Constance Sorrentino, "The Uses of the European Community Labor Force Survey for International Unemployment Comparisons," paper prepared for the Statistical Office of the European Communities, October 1987. Copies are available upon request to the author at the Bureau of Labor Statistics.