

Facts about Japanese Wages

By Ken'ichi Sado

Wage level

The average monthly wages earned by Japanese workers in 1991 totaled ¥385,000 (\$2,960 at the rate of ¥130/\$), of which ¥282,000 was contractual cash earnings paid regularly every month and ¥103,000 was special cash earnings. Summer and winter bonuses constitute a large part of special cash earnings. One of the features of wages in Japan is that the amount of total cash earnings of employees varies from month to month (Table 1).

The average wages of regular workers in 1991 registered an increase of 3.6% (statistical sampling differs from that used for Table 1) over the year before. When the year-to-year increase in wages is observed over a long time period, the growth rate was high until 1974, immediately after the first oil crisis, and it had remained low since the middle of the 1970s. Reflecting the fact that the labor market has become tight in the past several years, the growth rate has become somewhat bigger again, but it is considerably smaller than it was around 1970 (Fig. 1).

One of the leading standards for measuring a wage increase's impact on the nation's economy is the relationship between the wage rise and the rise in labor productivity. In this regard, such a relationship during the era of high economic growth centering on the early 1970s differs greatly from that observed today, with the labor supply-demand balance being tight in both cases. In the era of high economic growth, wage increases exceeded the rise in labor productivity. Recently, however, wage increases have been within the range of the rise in labor productivity (Fig. 1).

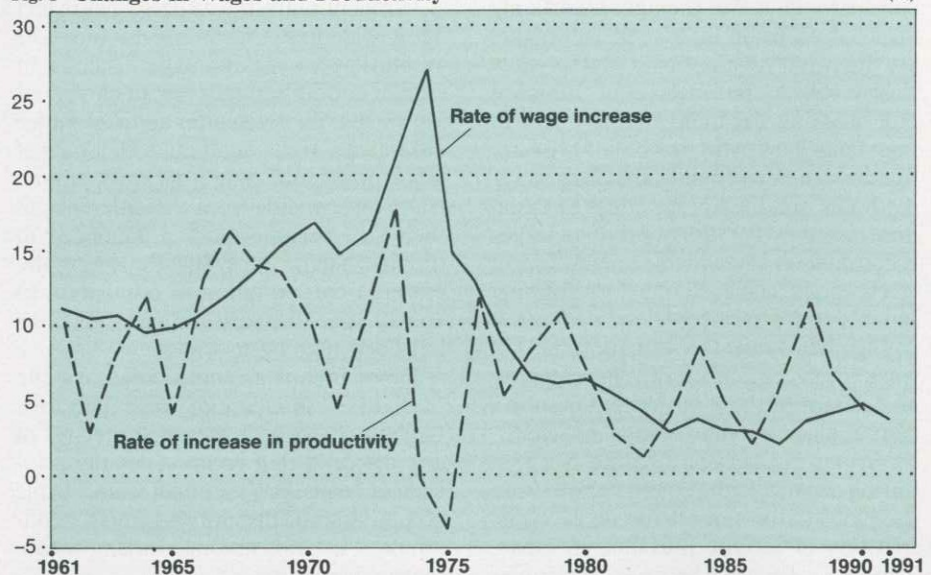
The difference in the relationship between wage increases and labor productivity rise appears most clearly in prices. This is considered to be one of the important factors behind the recent stable prices despite the tightening of the labor market. As a result, real wages, despite

Table 1 Monthly Cash Earnings of Regular Workers (1991) (¥)

	Total cash earnings	Contractual cash earnings	Special cash earnings
1990 average	370,169	271,496	98,673
1991 average	384,787	281,943	102,844
Jan. 1991	296,369	274,179	22,190
Feb.	282,306	277,862	4,444
Mar.	311,984	277,191	34,793
Apr.	290,097	282,427	7,670
May	288,757	280,354	8,403
June	553,795	284,888	268,907
July	502,569	284,071	218,498
Aug.	331,030	281,750	49,280
Sept.	287,928	282,932	4,996
Oct.	288,891	284,375	4,516
Nov.	305,220	286,266	18,954
Dec.	867,158	286,473	580,685

Note: Figures are those concerned with regular workers in businesses employing more than 30 regular workers.
Source: Monthly Labor Survey, Ministry of Labor

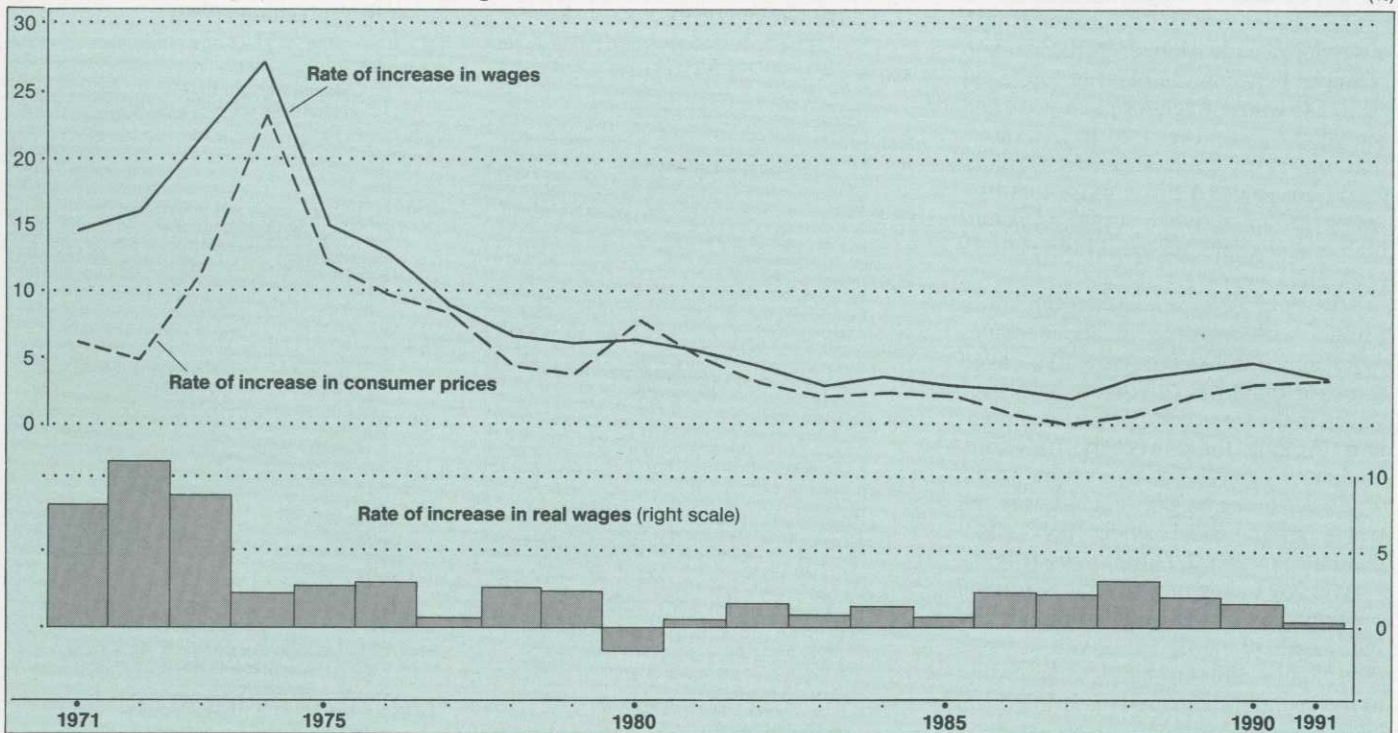
Fig. 1 Changes in Wages and Productivity (%)



Sources: Monthly Labor Survey, Ministry of Labor
Index of Productivity, Japan Productivity Center

Fig. 2 Changes in Wages, Prices and Real Wages

(%)



Sources: Monthly Labor Survey, Ministry of Labor
Consumer Price Index, Bureau of Statistics

Table 2 Regular Workers' Monthly Cash Earnings by Industry (1991)

	Total cash earnings (¥)		Growth of employment (1981 to 1991) (%)
		Growth rate (1981 to 1991) (%)	
Average of industries surveyed	384,787	(3.4)	(1.8)
Mining	417,826	(3.5)	(-6.0)
Construction	424,579	(4.7)	(1.0)
Manufacturing	368,011	(3.7)	(1.2)
Electricity/Gas/Water supply	542,425	(4.0)	(0.0)
Transportation/Telecommunications	422,216	(3.5)	(0.2)
Wholesale/Retail	323,083	(3.0)	(2.9)
Financial/Insurance	491,745	(3.5)	(0.5)
Real estate	454,264	(4.6)	(4.9)
Services	395,470	(2.9)	(3.4)

Note: Growth rates are in annual terms.
Source: Monthly Labor Survey, Ministry of Labor

sluggish growth in nominal wages, have risen steadily these years (Fig. 2).

Wage structure

The wage level differs naturally from industry to industry, and is affected by various factors. Among the industries, the wholesale/retail industry (restaurants, bars and fast-food outlets are included in this sector in Japan), which has seen a rapid increase in employment, has a comparatively low wage level. This can be explained by the large percentage of part-time workers in this industry. Similarly in the service industry, where the number of employees has been increasing at an even faster pace than in the wholesale/retail industry, the wage level is by no means high, neither is the growth rate. This is due to the fact that young people account for a large percentage of the industry's work force, and the large number of new recruits depresses the rate of wage increases (Table 2).

The Japanese wage structure clearly

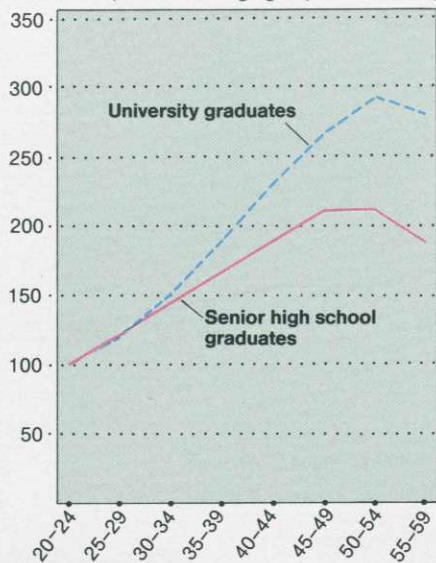
shows a trend for wages to increase as workers become older and as their length of service becomes longer. A comparison of wages between the older group (aged 50 to 54) whose wages are at a peak and the young group (aged 20 to 24) shows that university graduates of the older group are paid 3.0 times more than the young group is, while wages of senior high school graduates are 2.1 times more (Fig. 3).

This tendency for wages to go up in parallel with advance in age becomes more conspicuous in the case of so-called standard employees—workers who have stayed in the same company after graduation. Among these workers, university graduates receive, in their peak years, wages 3.2 times bigger than wages of the young group, while senior high school graduates receive 2.9 times more (Fig. 4).

Average wages of all workers serving continuously in the same company and the wages of newly employed workers often follow different patterns according to the economic circumstances. A typical example can be found in the starting wages of new graduates. Reflecting the recent tight labor supply, the growth rate in the starting wages of new recruits fresh out of school has been bigger than that in overall wages.

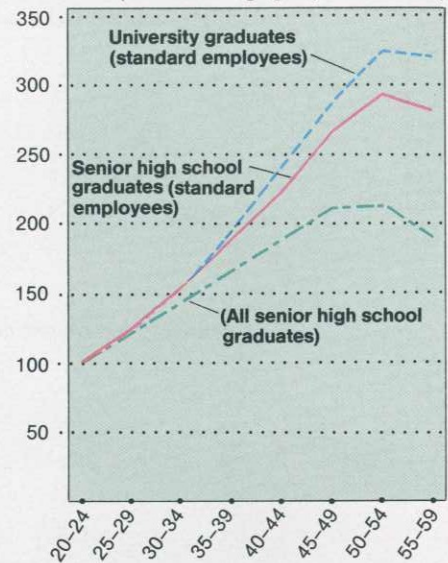
It should be noted that in Japan there is only a small difference in starting wage levels according to academic background. In 1990, for example, the starting wages of male university graduates was ¥169,900 (\$1,300), while senior high

Fig. 3 Male Workers' Wages by Age Group (1990)
(the 20 to 24 age group taken as 100)



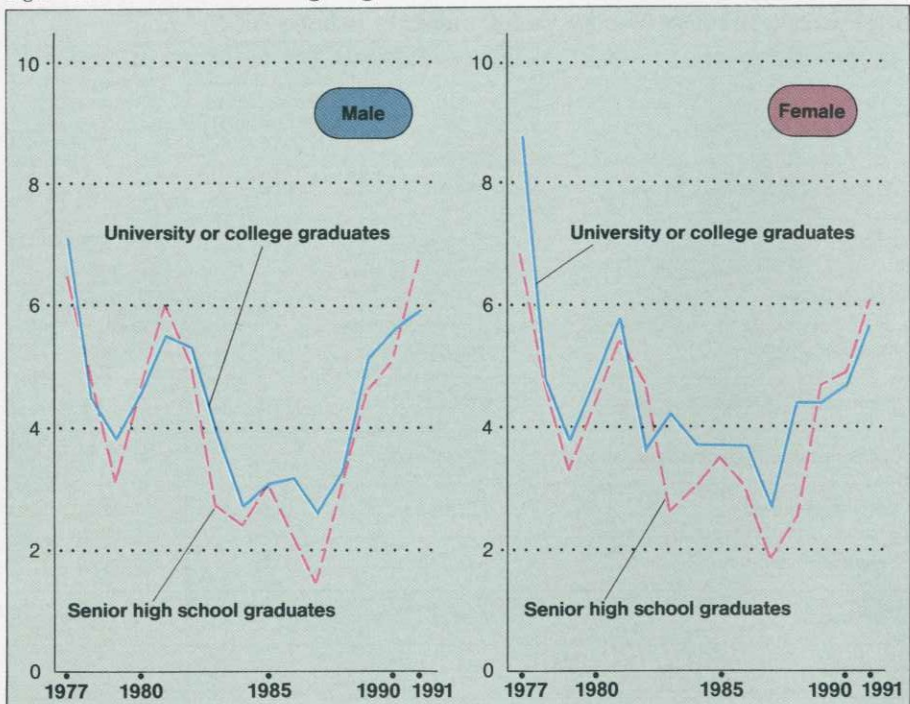
Note: Wages here refer to monthly contractual cash earnings of regular workers in businesses employing 10 or more regular workers. Overtime allowances are excluded.
Source: Basic Survey on Wage Structure, Ministry of Labor

Fig. 4 Standard Male Employees' Wages by Age Group (1990)
(the 20 to 24 age group taken as 100)



Note: "Standard employees" refer to workers who join a company on graduation and stay in the same company thereafter.
Source: Basic Survey on Wage Structure, Ministry of Labor

Fig. 5 Growth Rate of Starting Wages for New Graduates (%)



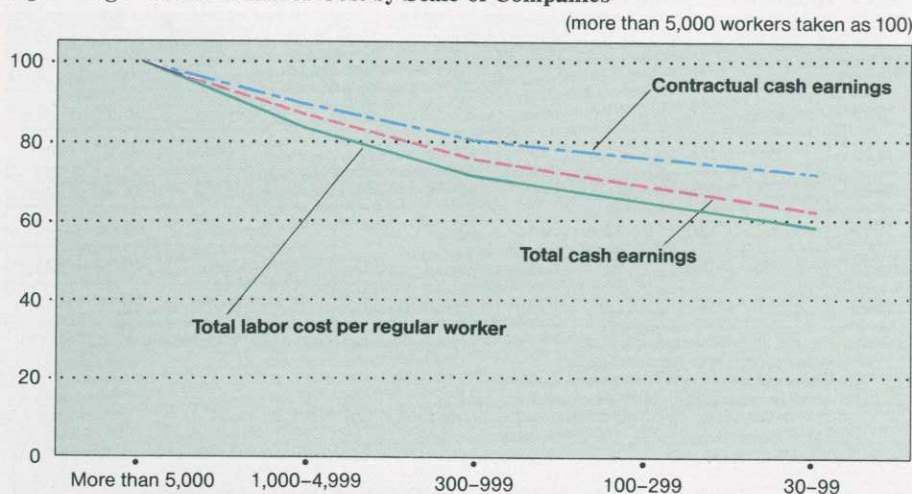
Source: Basic Survey on Wage Structure, Ministry of Labor

Table 3 Difference in Wages by Scale of Companies
(more than 1,000 workers taken as 100)

Scale of businesses	1989	1990
More than 1,000 workers	100	100
100 - 999	84	85
10 - 99	78	79

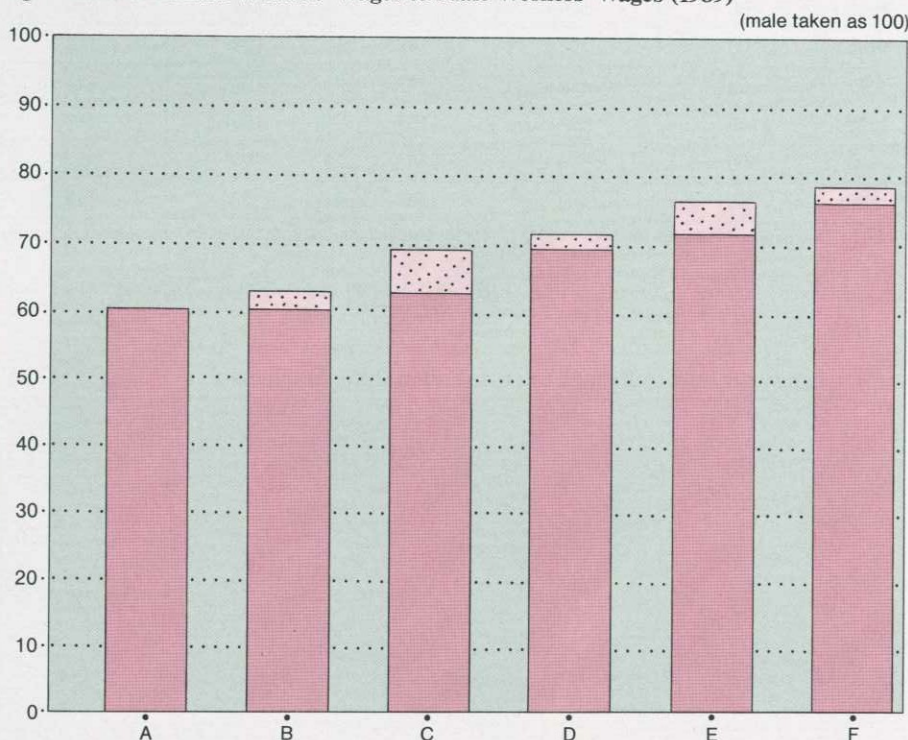
Source: Basic Survey on Wage Structure, Ministry of Labor

Fig. 6 Wages and Total Labor Cost by Scale of Companies



Source: General Survey on Wages and Working Hours System, Ministry of Labor

Fig. 7 Ratio of Female Workers' Wages to Male Workers' Wages (1989)



Notes: 1. A shows ratio of female workers' wages to male workers' based on publicly announced figures. B to F show ratios calculated after having adjusted labor factors of female workers to make them same as those of male workers.

B; Age structure was adjusted.

C; In addition to B, academic background was adjusted.

D; In addition to C, scale of companies was adjusted.

E; In addition to D, length of service was adjusted.

F; In addition to E, job classification was adjusted.

2. The degree to which the disparity between wages of male and female workers is narrowed at each stage of adjustment is shown by the dotted section.

Source: Analysis on Labor Economy 1990, Ministry of Labor

school graduates at about the same age of 20 to 24 were paid ¥171,600 (\$1,320). In other words, university education and the on-the-job experience gained by senior high school graduates are evaluated at about the same level (Fig. 5).

Wage gaps between companies according to their size and between men and women are often argued as a disparity. Reflecting the recent tightening of the labor supply-demand balance, small and medium-sized enterprises pay greater consideration to recruiting workers, with the result that the wage difference with larger companies began to shrink in 1990. This trend is believed to have been continuing up to today (Table 3).

The disparity in wages according to the size of companies is more noticeable in terms of total cash earnings of workers, including special cash earnings, than when looked at only on a contractual cash earnings basis. The disparity becomes even bigger when it is measured by the total labor cost, which includes retirement allowances and statutory welfare expenses in addition to wages (Fig. 6).

When talking about disparity, especially between male and female workers, it is worth remembering that wages are influenced by differences such as the age composition of workers and length of service. The average wages of female workers as of 1989 were only 60.2% of those of male workers, largely because women tend to have a shorter length of service than men. However, if some adjusting factors are included one by one, the average wages of female workers get closer to those of male workers, up to about 80% (see column F in Fig. 7).

International comparison of wages

Interest is mounting in the comparative wage levels of Japan and other countries. The wage levels of production line workers of some industrial countries are compared below.

In this kind of comparison, attention must be paid in selecting (1) the wage base, and (2) the method of converting wages paid in different currencies into a

common unit. So far, wages calculated on a formula adopted in Japan have been compared on a monthly or weekly basis, with conversion made according to foreign exchange rates. This method of comparison pushed the Japanese wage level relatively higher in line with the yen's sharp appreciation, up above the wage levels in most industrial countries.

Now it is pointed out that this method is not necessarily appropriate, for one thing because Japanese work longer hours than people in other countries, and adjustment should be made for this fact. In terms of wages per working hour, the former West Germany ranks much higher than Japan (Table 4).

It is often argued that the foreign exchange rate should not be used to convert wage levels of various countries for comparison, and the comparison should instead reflect the volume of goods that the wages can buy. In recent years, wages have often been compared by using the purchasing power parity estimated by the OECD. A comparison on this basis of average per-hour wages in 1990 showed that if Japanese wages were 100, American wages would be 144 and those in the former West Germany 147. These figures, calculated on various premises, show that fluctuations of foreign exchange rates do not necessarily result in a rise in the purchasing power of wages (Table 5).

Distribution ratio

Two observations have often been made recently about the Japanese distribution ratio. One is that the Japanese distribution ratio is low compared with those of other countries. The second is that it is declining over the longer term. The distribution ratio is an indicator that is difficult to compare whether between countries or in terms of time. This difficulty is illustrated below.

The indicator that is most commonly employed is the ratio of employed workers' income to the national income. The trend of this indicator is shown by the line ① in Fig. 8. But this indicator differs from what is generally understood as the distribution ratio, or "the ratio of

Table 4 International Comparison of Wages in Manufacturing Industries

	Japan (yen)	U.S. (dollar)	Former West Germany (mark)	Britain (pound)	France (franc)
1985	1,315 (100)	10.27 (186)	21.79 (134)	4.45 (105)	54.23 (109)
1986	1,360 (100)	10.48 (130)	22.60 (129)	4.75 (86)	56.50 (101)
1987	1,374 (100)	10.67 (112)	23.58 (138)	5.07 (87)	58.09 (102)
1988	1,391 (100)	10.97 (101)	24.66 (129)	5.45 (89)	60.06 (93)
1989	1,478 (100)	11.28 (105)	25.69 (128)	5.90 (90)	62.46 (91)
1990	1,555 (100)	11.66 (109)	27.00 (156)	6.46 (107)	65.15 (111)

Notes: 1. Figures show wage per actual working hour for production workers in manufacturing industries. Wages for males and females are combined.

2. Figures in parentheses are against a base of 100 for Japan.

Sources: *Monthly Labor Survey*, Ministry of Labor for Japan; *Employer Cost for Employee Compensation*, Department of Labor for U.S.; *Labor Costs 1978, '81, '84, '88*, EC for others.

Table 5 International Comparison of Wages in Terms of Purchasing Power

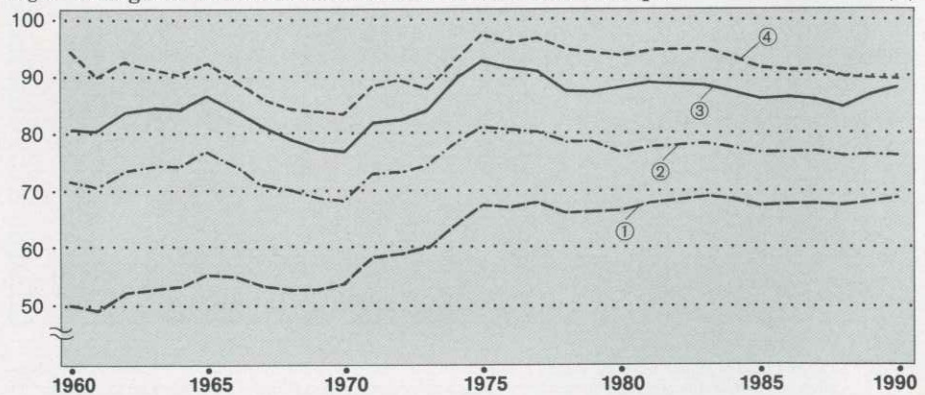
	Japan	U.S.	Former West Germany	Britain	France
1985	100	170	141	125	120
1986	100	166	142	125	118
1987	100	162	147	127	117
1988	100	159	151	130	117
1989	100	150	147	125	113
1990	100	144	147	123	111

Notes: 1. Comparison is of wage per actual working hour for production workers in manufacturing industries. Figures for male and female workers are combined.

2. Figures are against a base of 100 for Japan.

Sources: *Monthly Labor Survey*, Ministry of Labor; *Report on Prices 1991*, Economic Planning Agency; *Purchasing Power Parities and Real Expenditure 1985*, OECD

Fig. 8 Changes in Indices Related to Distribution Ratio in Japan (%)



Notes: Figures indicate the following: ① $\frac{\text{Income of employed workers}}{\text{National income}}$
 ② $\frac{\text{National income} - \text{Private business income}}{\text{Income of employed workers}}$
 ③ $\frac{\text{Income of employed workers} + \text{Corporate business income}}{\text{Income of employed workers}}$
 ④ $\frac{\text{Income of employed workers}/\text{Number of employed workers}}{\text{National income}/\text{Number of all workers}}$

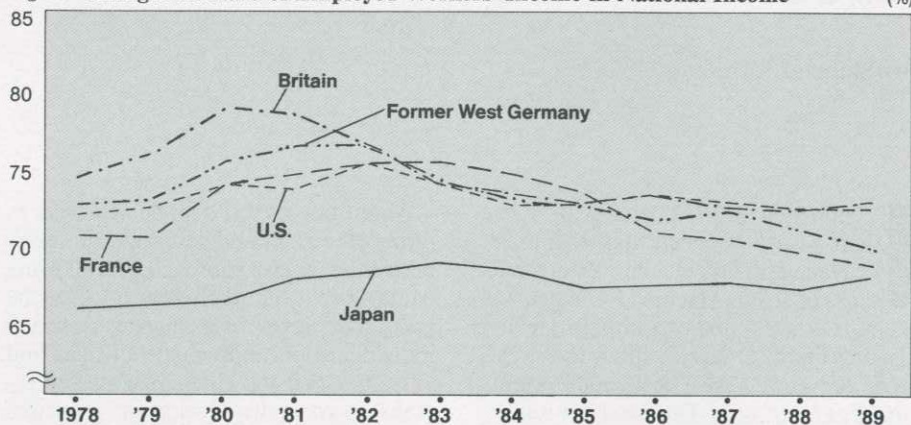
Source: *Labor Force Survey*, Economic Planning Agency

workers' profit in the distribution of profit between labor and the management." The main point is that the national income includes income earned by private businesses such as farmers. Because the distribution ratio is affected by changes in the ratio of private businesses and the difference in such ratios between countries, the influence of these factors should be excluded before a comparison is made.

The lines ②, ③ and ④ in Fig. 8 show indicators that have been adjusted in order to eliminate such problems. Because each adjustment has both merits and defects, a definitive method cannot be laid down. This is why a plural number of adjusted indicators are used here. Comparison of the original indicator with the adjusted indicators shows that the gentle upward trend of the original indicator cannot be observed in the adjusted ones. This is because of the declining trend in the number of private businesses (and a consequent increase in the proportion of employed workers) in the Japanese labor structure. The adjusted indicators are not affected by this structural change, whereas the influence of the structural change is reflected in the unadjusted original indicator.

There is much room for discussion as to how to interpret the trend of the adjusted indicators and how to evaluate the current level of the distribution ratio.

Fig. 10 Changes in Ratio of Employed Workers' Income in National Income (%)



Source: Comparative Economic and Financial Statistics, Bank of Japan

If 1975 is taken as the starting point, a declining tendency is observed. That year was amid the serious economic recession following the first oil crisis, and was immediately after a large wage increase of nearly 30% in the previous year. It is, therefore, not appropriate to regard the year 1975 as a standard year. It should be noted that different conclusions can be drawn from the trend of the distribution ratio depending on the year adopted as the starting year.

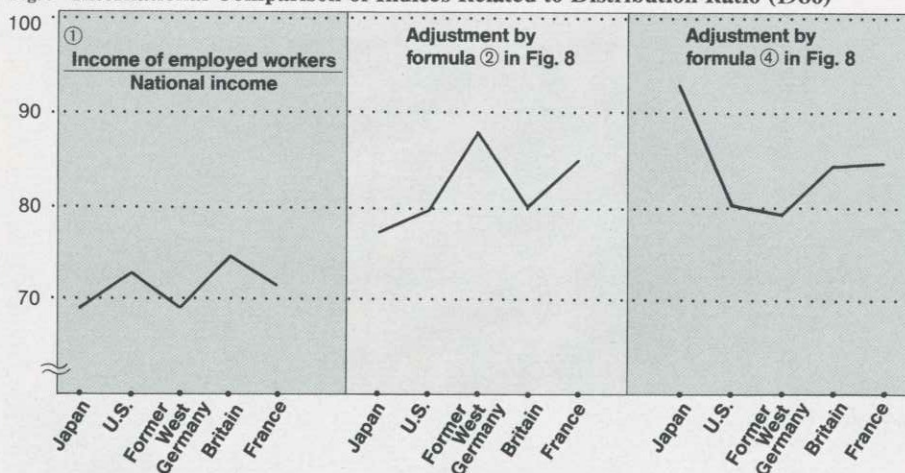
In making an international comparison, more careful consideration should be given to the effects of adjustments. Fig. 9 shows the distribution ratios of some industrial countries including Japan in terms of the unadjusted indicator and of the adjusted indicators. Depend-

ing on the adjustment formula employed, a significant difference appears in the indices. One background reason for this difference is seen in the case of the former West Germany.

Unlike in Japan, many of the big German enterprises which employ many workers are run by private proprietors. This is a factor that could lead to overestimating the adjustment formula ②, which excludes income earned by private businesses from the national income. In the case of the former West Germany, the degree of this overestimation is so high that it could possibly affect a comparison of the former West Germany's distribution ratio with those of other countries.

Fig. 10 shows an international comparison of distribution ratios which are not adjusted. In countries other than Japan, the employment situation causes changes in the number of employed workers, which in turn affects the distribution ratio. Though direct comparison of unadjusted indicators involves various problems, the figure shows that generally speaking the Japanese distribution ratio is low, but it is noteworthy that the disparity between those of Japan and the other countries is contracting. As is evident from the above, a comparison of the distribution ratios must be made on certain premises, and it must be borne in mind during any discussion that each comparison has both merits and demerits.

Fig. 9 International Comparison of Indices Related to Distribution Ratio (1986)



Note: Calculated on the latest year's figures available for each country.

Sources: Analysis of Labor Economy, Ministry of Labor (Basic data: Comparative Economic and Financial Statistics, Bank of Japan)

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