



# Some Aspects of Recent Wage Movements and Tendencies in Various Countries

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*The object of this article is to examine certain important aspects of recent wage movements and tendencies in various countries and to review the chief relevant economic factors which have been operating. An attempt is made to distinguish those wage relationships which are now comparatively stable after the economic upheaval of recent years from those which are still in a state of disequilibrium. This distinction provides the essential basis for a sound wage policy in the early future.*

**A**MONG the factors which have affected movements of money wages and real wages during recent years the most important in many countries has been variation in currency values. The influence of such variation on wages is especially considered in this article. In recent years every kind of monetary policy has been in operation in one country or another and in certain of them the changes have been particularly violent. But the period of rapidly fluctuating currency values appears now to be giving place to one of relative stabilisation. The present time is, therefore, particularly appropriate for a general survey of the effects of monetary changes on wage levels. Conclusions drawn from a study of recent changes may be of interest not only with regard to the present situation, but also in throwing light on the effects of more gradual changes in purchasing power on levels of real wages, effects which, in normal times, tend to escape observation through being spread out over a long period. Other factors considered include the after-effects of war-time dislocations on the development of different industries.

The countries covered by the survey are limited to those for which adequate statistical data are available. But countries are included representative of recent conditions under each type of currency policy — inflation, deflation, and stabilisation. Both

belligerent and neutral countries are also included. The field covered is, therefore, sufficiently wide to permit a number of general conclusions to be drawn.

### MONEY WAGES AND REAL WAGES<sup>1</sup>

With a view to an examination of the general levels of money wages and real wages in the different countries, table I below has been compiled showing the nominal weekly wages of adult male workers before the war and from 1920 to 1927, together with the ratios of wages in each post-war year to the pre-war levels.<sup>2</sup> Index numbers of the cost of living are given for corresponding dates and these have been used for the calculation of index numbers showing the relations between real wages before and after the war. In considering these figures it should be borne in mind that they have been compiled, as is indicated in a note at the end of the article, according to different methods in the various countries. However, they are adequate for the purpose of a broad survey of general wage movements to which attention is here directed. Special aspects, such as the relation between the wage movements of skilled and unskilled workers, of men and women, and of workers in different industries, are examined in later sections.

#### *The Crisis of 1920-1921*

The figures given in table I show that in Denmark, Norway, Sweden, Great Britain, and the United States money wages and the cost of living reached a peak in 1920. Real wages reached a high point in the United States in the same year, and in Denmark, Norway, Sweden, and Great Britain in 1921. In France, as far as can be ascertained from the information available, the movements of money and real wages resembled those in the four last named countries, a peak of real wages being reached in 1921.

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<sup>1</sup> The International Labour Office has already published several studies which give surveys of money wages and real wages in a number of countries, together with tentative conclusions regarding similar movements in different countries. Cf. INTERNATIONAL LABOUR OFFICE: *Wage Changes in Various Countries* (Studies and Reports, Series D, No. 2, No. 10, and No. 16), covering the years 1914-1921, 1914-1922, and 1914-1925 respectively. Index numbers showing the relative levels of real wages in the capital cities of various countries are published regularly in the *International Labour Review*.

<sup>2</sup> In countries where unemployment has been severe, average weekly earnings over a whole year would be less than the figures shown in the table.

TABLE I. COMPARISON OF CHANGES IN THE AVERAGE NOMINAL WEEKLY WAGES OF ADULT MALE WORKERS IN VARIOUS COUNTRIES WITH CHANGES IN THE COST OF LIVING<sup>1</sup>

Date	Denmark				Norway <sup>2</sup>				Sweden			
	Money wages		Cost-of-living index	Real wage index	Money wages		Cost-of-living index	Real wage index	Money wages		Cost-of-living index	Real wage index
	Amount	Index			Amount	Index			Amount	Index		
Pre-war	Kr. 29.70	100	100	100	Kr. 30.67	100	100	100	Kr. 23.87	100	100	100
1920	104.12	351	264	133	104.95	342	307	111	69.37	291	269	108
1921	89.28	301	212	142	102.73	335	288	116	64.67	271	247	111
1922	74.88	252	198	127	79.43	259	242	107	49.42	207	198	105
1923	72.96	246	209	118	76.68	250	231	108	47.73	200	178	112
1924	77.76	262	221	119	83.91	274	259	106	49.87	209	173	121
1925	80.16	270	194	139	88.07	287	241	119	50.98	214	176	122
1926	68.16	229	181	127	78.72	257	220	117	52.06	218	172	127
1927	67.20	226	176	128	—	—	—	—	—	—	—	—

Date	Great Britain			Germany <sup>3</sup>						
	Money wage index	Cost-of-living index	Real wage index	Money wages				Cost-of-living index	Real wage index	
				Amount		Index			Skilled workers	Unskilled workers
				Skilled workers	Unskilled workers	Skilled workers	Unskilled workers			
Pre-war	100	100	100	Mks. 35.33	Mks. 23.52	100	100	100	100	100
1920	170-180	265	102-106	—	—	—	—	—	—	—
1921	210-215	192	109-112	—	—	—	—	—	—	—
1922	170-175	178	96-98	4,981	4,459	14098	18958	22070 <sup>4</sup>	64	86
				R. Mks. 28.81	R. Mks. 24.27	82	103	142.2	58	72
1923	165-170	177	93-96	36.52	27.69	103	118	135.4	76	87
1924	170-175	180	94-97	45.98	33.92	130	144	141.2	92	102
1925	175	175	100	46.36	34.44	131	146	144.3	91	101
1926	175	175	100	49.21	36.84	139	157	150.2	93	105
1927	170-175	167	102-105							

Date	France			United States			Australia		
	Money wages		Cost-of-living index	Money wages		Cost-of-living index	Money wages		Cost-of-living index
	Amount	Index		Amount	Index		Amount	Index	
Pre-war	Frs. 47.94	100	100	\$ 13.30	100	100	s. d. 55 1	100	100
1920	—	—	—	31.04	233	200.4	89 10	163	161
1921	168.72	352	338	24.08	181	174.3	94 6	172	138
1922	—	—	—	26.35	198	169.5	91 6	166	140
1923	—	—	—	29.10	219	173.2	96 3	175	150
1924	184.92	386	377	28.65	215	172.5	94 3	171	147
1925	200.22	418	421	29.63	223	177.9	96 9	176	154
1926	248.76	519	545	29.44	221	176	99 4	180	155
1927	—	—	—	29.90 <sup>5</sup>	225	173	99 7	181	154

<sup>1</sup> Sources and notes are given at the end of the article. Increases in hourly rates since 1914 have been greater than those of weekly rates owing to reductions in hours of labour.

<sup>2</sup> The workers covered are mainly in skilled sheltered occupations.

<sup>3</sup> A number of women workers are included in the averages.

<sup>4</sup> Old series based on paper mark prices and not comparable as regards method of compilation with later figures.

<sup>5</sup> Estimated.

The movement in Australia was also similar, a high point in money wages, cost of living, and real wages being reached in 1921. In all these countries there was subsequently a decline from the high levels reached in 1920-1921, the fall varying considerably both in severity and in duration in the different countries. The situation in Germany was exceptional and is treated separately below.

The general explanation of these movements is too well known to demand lengthy consideration here. In most countries there was a marked rise in prices accompanied by a general industrial boom during the latter part of 1919 and in 1920. Money wages also rose but lagged somewhat behind the cost of living. Then the collapse began, first in the United States in the middle of 1920 and somewhat later in European countries and Australia. Prices fell, unemployment increased, and money wages also fell. The fall in money wages, however, lagged behind prices, with the consequence that the real wages of workers who were fully employed rose to a peak which, as has been seen, was reached generally in 1921. Then money wages declined more rapidly than the cost of living, with the consequence that real wages fell from the high point which had been attained shortly after the termination of the boom. The subsequent movements differ considerably according to the special situation in each country and demand separate treatment by countries or groups of countries.

### *Subsequent Movements*

*United States.* The United States made an early recovery from the depression of 1921. This recovery was favoured by the fact that the United States was on the gold standard and has been free from the depressing effects of deflation, with a view to a return to that standard, which have been experienced in several other countries. The large volume of gold in the country facilitated easy credit, while the enormous extent of the home market, unhampered by tariff barriers, was an asset of the first importance. Under the stimulus of these favourable circumstances, an unparalleled industrial revolution has taken place. Referring to recent developments, the United States Secretary of Labour, Mr. James J. Davis, in a speech delivered at the Cleveland Industrial Exposition, Cleveland, Ohio, on 6 August 1927, said: "In the past six years especially, our progress in the lavish use of power and in harnessing that power to high-speed productive machinery has

been tremendous. Nothing like it has ever been seen on earth."<sup>1</sup> In the course of the same speech he referred to data recently compiled by the United States Bureau of Labour Statistics, which show that, in eleven important industries, production per worker per hour has increased since 1914 by 68 per cent.<sup>2</sup> The greater part of this increase has taken place since 1921. Even allowing for the probability that the rate of increase would be lower in a number of other industries and in agriculture, it is not surprising that real wages, as shown in table I above, speedily recovered from the slump of 1921 and are now generally about 25 to 30 per cent. higher than before the war.<sup>3</sup> And this improvement has, up to the present, been secured without serious unemployment, although a certain amount of temporary displacement of labour has been inevitable owing to the extensive development of automatic power-driven machinery. The maintenance of a high level of employment and of high real wages in the United States has been facilitated by the restriction of immigration.

*Australia.* In Australia, as in the United States, the increase in real wages shown in table I above appears to have been due largely to an increase in *per capita* productivity.<sup>4</sup> It is true that the high real wages of 1921 and 1922 were the result chiefly of the time lag in adjusting money wages to falling prices, and were accompanied by a volume of unemployment appreciably higher than was normally experienced before the war. More recently productivity has increased steadily and during the latter part of 1926 and in 1927 unemployment has fallen practically to the pre-war level.

*Great Britain and the Scandinavian Countries.* The situation

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<sup>1</sup> *Monthly Labour Review*, Sept. 1927, p. 32.

<sup>2</sup> The figure of 68 per cent. is an unweighted average of the percentage increases in the eleven industries. The indexes of labour productivity in the separate industries are given in the *Monthly Labour Review*, Jan. 1927, pp. 35-49. An index of the productivity of railroad labour published in the *Monthly Labour Review*, March 1927, pp. 1-8, showed an increase of about 60 per cent. between 1914 and 1926. Other data indicating the remarkable increase in productivity in the United States during recent years are given in the *Monthly Labour Review*, May 1927, p. 16, and June 1927, p. 52.

<sup>3</sup> The National Bureau of Economic Research has recently made an estimate according to which the average *per capita* income in the United States in 1926 had a purchasing power about 38 per cent. higher than the 1913 average. (*Monthly Labour Review*, April 1927, pp. 77-79.)

<sup>4</sup> Statistics of changes in total and *per capita* productivity during the years 1910-1911 to 1924-1925 are given in *The National Dividend*, by Jas. T. SUTCLIFFE. These show productivity per head in 1922-1924 to have been 6 to 7 per cent., and in 1924-1925 about 19 per cent., above that in 1913-1914. Variations in the harvests have a specially important influence in Australia on total and *per capita* productivity.

in the various European countries has differed considerably during recent years from that in the United States and Australia. Great Britain, Sweden, Denmark, and Norway may be reviewed first and, since they possess a number of features in common, may be treated together. It is necessary first to examine changes in currency values, as they have greatly affected both industrial activity and real wages. In each of these countries financial policy has been directed with a view to a return to the gold standard. This was reached first in Sweden, where already in 1923 the value of the crown was only 1 per cent. below its par value. In Denmark the movement towards the gold standard was begun about the middle of 1924 and was spread over two years; by the middle of 1926 parity with the dollar had been practically restored. In Norway the improvement in the value of the crown was begun in the autumn of 1924, but, as its depreciation had been greater than in Denmark, restoration was spread over a longer period. By the autumn of 1927, however, the Norwegian crown had almost recovered its gold parity with the dollar. Great Britain was within about 10 to 12 per cent. of the gold standard during the summer of 1924, but the appreciation necessary to restore gold parity between sterling and the dollar was effected gradually over a period of more than twelve months. The movements of the currency values and also the accompanying movements of wholesale prices in these countries for the years 1923 to 1927 are shown in table II.

TABLE II. COST OF DOLLAR AS PERCENTAGE OF ITS COST AT PAR AND INDEX NUMBERS OF WHOLESALE PRICES IN GREAT BRITAIN, SWEDEN, DENMARK, AND NORWAY, 1923-1927<sup>1</sup>  
(Base : 1914 = 100)

Date	Great Britain		Sweden		Denmark		Norway	
	Cost of dollar per cent. of its cost at par	Wholesale price index (Board of Trade)	Cost of dollar per cent. of its cost at par	Wholesale price index	Cost of dollar per cent. of its cost at par	Wholesale price index	Cost of dollar per cent. of its cost at par	Wholesale price index
1923 June	105.5	159.5	100.9	164	149.2	—	161.4	230
Dec.	111.6	163.6	101.7	160	150.4	—	179.5	244
1924 June	112.7	162.6	100.9	158	159.7	—	198.2	262
Dec.	103.6	170.1	99.4	168	152.0	—	177.8	279
1925 June	100.1	157.6	100.1	161	140.2	223	157.5	260
Dec.	100.3	153.2	100.0	156	107.8	176	131.9	220
1926 June	100.0	146.9	99.9	150	101.2	157	121.2	194
Dec.	100.3	146.1	100.3	150	100.6	158	105.9	184
1927 June	100.2	141.8	100.0	146	100.3	152	103.5 <sup>2</sup>	166

<sup>1</sup> Data from LEAGUE OF NATIONS : *Monthly Bulletin of Statistics*.

<sup>2</sup> Further appreciation took place in the autumn of 1927, the percentage in September being 101.5

Monetary appreciation and the accompanying fall in prices has had a generally depressing effect on industrial activity.<sup>1</sup> Also there has been a time lag in the adjustment of the cost of living to wholesale prices, and a time lag in adjusting wage rates to changes in the cost of living. The result has been that real wages have been relatively high, while there has been serious industrial depression and a large volume of unemployment. In Denmark, Norway, and Sweden the real wages of workers fully employed have been about 10 to 25 per cent. higher during the last three or four years than before the war.<sup>2</sup> In Great Britain the index numbers given above show real wage rates in 1925, 1926 and 1927 to be at about the same level as or slightly higher than in 1914. Dr. Bowley and Sir Josiah Stamp, however, have estimated that the rise in average earnings is appreciably higher than the rise in rates. They claim that "there is definite evidence that in some of the greater industries earnings have increased much more rapidly than piece or time rates, and also there has been some change over from time to piece rates". They are also of opinion that there had been a "shifting in the relative importance of occupations in the ten years (1914-1924), which on the whole has been towards the better paid occupations and industries, and has therefore raised the average".<sup>3</sup> The estimate of real full-time weekly earnings which they gave for 1924 was about 11 per cent. above the pre-war level.<sup>4</sup> Assuming that the same ratio to full-time weekly rates has been subsequently maintained, real full-time earnings at the end of September 1927 would have been about 119 (1914 = 100), compared with the figure of 102-105 for full-time weekly rates given in table I.

If the higher figure just quoted for Great Britain be accepted, it appears that during recent years both in that country and in the Scandinavian countries real wages for full employment have been distinctly higher than before the war. The increases have been roughly similar to those in the United States and Australia.

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<sup>1</sup> The direct effect must have been less in Sweden during recent years than in Denmark, Norway, and Great Britain, as the Swedish crown has been stable since 1923.

<sup>2</sup> An interesting article indicating the same conclusion for Denmark was published in *Socialt Tidskrift*, July-Aug. 1927: "Arbeydsönnen i Industrien m. v. i Danmark 1914-1928", by H. Höst.

<sup>3</sup> Dr. A. L. BOWLEY and Sir Josiah STAMP: *The National Income 1924*, p. 31. Oxford, 1927.

<sup>4</sup> Professor Pigou is inclined to agree with this estimate. Cf. A. C. PIGOU: *The Economic Position of Great Britain*, pp. 15 and 16; Royal Economic Society Memorandum No. 1, July 1927.

The significant difference is, however, that in the United States and Australia the increase in wages is based on an increase in productivity and has been accompanied by little unemployment. In the four European countries, on the contrary, unemployment has been exceptionally severe. This has been due not only to deflation at home but to inflation and disturbed political conditions abroad. There is also a serious lack of balance between the various industries owing to the over-development of certain industries during the war. To these factors should be added the increase in tariff barriers and the development of a tendency in various countries to manufacture at home goods which were previously imported. Great Britain, particularly, has suffered from the operation of these factors, while the cumulative effect of all the various factors mentioned has been to prolong the depression and to render it much more acute.

*France.*<sup>1</sup> The general economic situation in France during recent years has differed considerably from that in the group of countries just reviewed, and the movement of real wages has been different. The chief factor affecting wages in practically all European countries has been variation in the value of the currency unit, but whereas the general movement in Great Britain and the Scandinavian countries has been one of monetary appreciation, in France until the summer of 1926 the franc was falling in value. There were, however, short periods of appreciation and of temporary stability. Also following the marked rise in the value of the franc which took place in the autumn of 1926 the value of the currency has been practically stable.

The depreciation of the franc resulted in a rising price level which provided a stimulus to business activity. Consequently employment was good and money wages rose. The rise in money wages was, however, less rapid than the rise in the cost of living. Real wages were, therefore, generally low, especially after a period of currency depreciation.

The data given in table I showed the index of real wages in Paris in October 1924 to be 102, in comparison with 100 before the war. In October 1925 and October 1926, however, the index had fallen to 99 and 95 respectively. The relatively high figure in October 1924 was due to a fall in prices following currency appre-

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<sup>1</sup> So far as can be ascertained from the information available, the movements of real wages in Belgium and Italy have been somewhat similar to those described in this section for France.



ciation in the spring. The lower real wage figure in October 1925 was due to the fall in the value of the franc during that year and to the time lag in adjusting money wages to the change in the cost of living. The accelerated depreciation of the franc until the late summer of 1926 resulted in a further decline in real wages by October of that year. The currency appreciation which took place in the autumn of 1926 and the subsequent stabilisation altered the general economic situation. Prices fell and unemployment increased, especially during the early months of 1927. Data are not yet available to show the effect on real wages.

*Germany.*<sup>1</sup> The main factors affecting real wages in Germany during recent years have been monetary inflation leading to the collapse at the end of 1923 and monetary stability throughout the subsequent reconstruction period. During the greater part of the inflation period, which culminated at the end of 1923, a general stimulus was given to industry. So rapid, however, was the accompanying rise in the cost of living that, especially in the autumn of 1923, despite increases in money wages once a week or even more frequently, real wages fell seriously below the pre-war standard. The fall was particularly severe in the case of skilled workers. Unemployment was exceptionally low during most of the inflationary period. In the autumn of 1923, however, the rate of monetary depreciation was so much accelerated that economic conditions became chaotic and an unemployment crisis developed with the monetary collapse.

After the currency was stabilised at the end of 1923 real wages rose steadily during the next two years. By the end of 1925 the wage rates of unskilled workers were approximately equivalent to those before the war; the standard of skilled workers was, however, still below that in 1914. The end of 1925 and the year 1926 saw severe industrial and commercial dislocation, partly, no doubt, the delayed after-effects of the collapse in 1923. There was a large volume of unemployment and the improvement in real wages was arrested, the level at the end of 1926 being approximately the same as that a year earlier. The spring and summer of 1927 saw a general improvement of business activity, and unemployment

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<sup>1</sup> So far as can be ascertained from the data available, the main features of the real wage movements in several other Central European countries during recent years have been similar to those in Germany, namely, decline during the period leading to financial collapse, and improvement during the subsequent period of monetary stabilisation.

diminished to comparatively small proportions. This resulted in a resumption of the rise in real wages.

### WAGES OF SKILLED AND UNSKILLED WORKERS

Since 1914 there have been in many countries noteworthy changes in the ratios between the wages of skilled and unskilled workers. These changes are illustrated by table III, which gives figures for Denmark, Great Britain, Germany, the United States, Australia, and New Zealand. The wage data are taken from, or calculated from, statistics given in official publications, in all cases except the United States, for which figures compiled by the National Industrial Conference Board have been used. The third column for each country shows the ratio of the unskilled workers' wage at each date to the skilled workers' wage (= 100).

The figures given in table III show that generally, during the period from 1914 to 1920 or 1921, a marked rise took place, in each of the countries covered, in the ratio between the unskilled and the skilled wage. The diminution of the margin of difference between the two groups was most marked in Germany, where currency inflation and the rise in the cost of living were greatest; so considerable were the changes in wage relationships that in various industries during the years 1922-1923 unskilled workers received wages only 10 to 15 per cent. below those of skilled workers, compared with 40 per cent. below in pre-war years. The change of ratio was smallest in New Zealand, where already before the war the margin between skilled and unskilled workers was exceptionally narrow and where the subsequent rise in the cost of living was relatively small.

With the fall in prices which took place in most countries during 1921 a tendency manifested itself in the direction of a return to the pre-war ratios. In Germany a similar movement began after the currency stabilisation at the end of 1923. The tendency was only slight in Denmark and Australia, but was strongly marked in the other countries. The movements towards the pre-war ratio were, however, arrested about 1924, and data for the last three years give evidence of the establishment of a new and higher ratio, rather than of a return to the position of 1914. Only in New Zealand, where, as already noted, the pre-war ratio was exceptionally high, has the relationship which existed before the war been practically restored.

TABLE III. COMPARISON OF AVERAGE WAGES OF SKILLED AND UNSKILLED MALE WORKERS IN VARIOUS COUNTRIES, PRE-WAR AND 1920-1927<sup>1</sup>

Date	Denmark			Great Britain			Germany		
	Skilled hourly earnings	Unskilled hourly earnings	Ratio <sup>2</sup>	Skilled weekly rates	Unskilled weekly rates	Ratio <sup>2</sup>	Skilled hourly rates	Unskilled hourly rates	Ratio <sup>2</sup>
Pre-war	Öre 61.3	Öre 45.5	74.2	s. d. 39 8	s. d. 23 11	60.3	Pf. 67.3	Pf. 40.2	59.7
1920	242	197	81.4	98 1	74 5	75.9	—	—	—
1921	205	169	82.4	85 10	63 6	74.0	—	—	—
1922	174	141	81.0	68 2	48 5	71.0	Mks. 547	Mks. 473	86.5
1923	171	136	79.5	65 7	46 7	71.3	5,425	4,526	85.3
1924	182	146	80.2	69 1	47 6	68.8	Rpf. 78.4	Rpf. 54.9	70.0
1925	187	150	80.2	69 2	47 11	69.3	94.1	65.8	69.9
1926	160	127	79.4	—	—	—	94.9	66.7	70.3
1927	157	126	80.3	69 11 <sup>3</sup> / <sub>4</sub>	49 0 <sup>1</sup> / <sub>2</sub>	70.1	101.6	73.6	72.4

  

Date	United States			Australia (Melbourne)			New Zealand		
	Skilled hourly earnings	Unskilled hourly earnings	Ratio <sup>2</sup>	Skilled minimum weekly rates	Unskilled minimum weekly rates	Ratio <sup>2</sup>	Skilled minimum weekly rates	Unskilled minimum weekly rates	Ratio <sup>2</sup>
Pre-war	Cents 28.0	Cents 20.3	72.5	s. d. 64 0 <sup>1</sup> / <sub>4</sub>	s. d. 46 10	70.6	s. d. 60 4 <sup>1</sup> / <sub>2</sub>	s. d. 51 1 <sup>1</sup> / <sub>2</sub>	84.7
1920	69.2	54.8	79.2	98 1 <sup>1</sup> / <sub>2</sub>	80 6 <sup>1</sup> / <sub>2</sub>	82.1	79 7 <sup>3</sup> / <sub>4</sub>	68 2 <sup>1</sup> / <sub>4</sub>	85.6
1921	59.4	44.6	75.1	104 5	86 4	82.7	93 5 <sup>1</sup> / <sub>2</sub>	83 10 <sup>3</sup> / <sub>4</sub>	89.7
1922	56.2	40.8	72.6	102 5 <sup>1</sup> / <sub>2</sub>	83 4 <sup>1</sup> / <sub>2</sub>	81.4	100 8	87 0 <sup>1</sup> / <sub>2</sub>	86.5
1923	61.6	45.1	73.2	107 3	84 9	79.0	94 10 <sup>1</sup> / <sub>4</sub>	80 4 <sup>3</sup> / <sub>4</sub>	84.8
1924	63.8	47.2	74.0	105 8 <sup>1</sup> / <sub>2</sub>	86 10 <sup>1</sup> / <sub>2</sub>	82.2	96 5	80 10 <sup>1</sup> / <sub>2</sub>	83.9
1925	64.1	46.9	73.2	108 0 <sup>3</sup> / <sub>4</sub>	88 6	81.9	97 11 <sup>1</sup> / <sub>4</sub>	83 0 <sup>1</sup> / <sub>2</sub>	85.3
1926	67.7	47.7	73.7	110 9	91 5	82.5	101 7	86 7 <sup>1</sup> / <sub>2</sub>	85.3
1927	65.2	48.9	75.0	—	—	—	—	—	—

<sup>1</sup> Sources and notes are given at the end of the article.<sup>2</sup> Skilled wage at each date = 100.

One of the causes of the rise in the ratio during the period 1914 to 1920-1921 was the granting of equal cost-of-living bonuses to skilled and unskilled workers alike. This, of course, altered the wage ratio in favour of the unskilled worker. There was also an increase in the demand for unskilled labour, while to some extent a "watering" of skill took place by the admission to the skilled ranks of workers less qualified than those who formerly secured entrance.

The movement during the years 1922-1924 towards a return to the pre-war ratios was no doubt due in part to the withdrawal of cost-of-living bonuses when prices fell. The fact that this movement has been arrested in several countries, and that the last two

or three years show no tendency for a restoration of the pre-war ratios, suggests the possibility of a permanent change of ratio. This will follow in so far as there is now a relatively greater demand for unskilled labour as a consequence of changes in methods of production. No doubt in a number of countries an increase in specialisation of process and the extension of mass production have led to a higher demand for labour capable of performing a few simple operations, and to a decline in the demand for workers with all-round skill.<sup>1</sup> A second factor which would tend to make the change of ratio permanent would be a lessening of the difference in efficiency between skilled and unskilled workers. The "watering" of skill referred to above would tend in this direction, as would also an improvement in the efficiency of unskilled workers as a consequence of their higher real wages.<sup>2</sup> These factors, the operation of which would lead to a change in ratio within any country, are also the main causes of differences in the ratios in the different countries.

#### WAGES OF MEN AND WOMEN

The general increase in women's wages since 1914 has been proportionately greater than that of men's wages. Consequently the ratio of women's to men's wages is now higher than before the war. This change is illustrated by table IV. Figures are given for those countries for which wage statistics covering representative industries are classified separately according to sex. The relative improvement in women's wages is partly the result of the general tendency since 1914 for the wages of unskilled, low-paid workers to rise to a proportionately greater extent than those of skilled, highly-paid workers. It is also, no doubt, partly due to an increase in the opportunities for industrial employment open to women. There is no marked tendency towards a restoration of the pre-war ratios.

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<sup>1</sup> A striking instance was mentioned by Mr. James J. Davis, United States Secretary of Labour, in the speech to which reference has already been made earlier in this article. He stated that in the glass industry in the case of one type of bottle automatic machinery produces forty-one times as much per worker as the old hand process, and the machine production requires no skilled glass blowers. He added that the glass industry was only one of many industries that has been revolutionised in this manner. (*Monthly Labour Review*, Sept. 1927, p. 32.)

<sup>2</sup> Professor Pigou suggests this as a factor which may be operating in Great Britain, saying, "Maybe, too, the average so-called unskilled worker has, as an indirect consequence of the better wages he is receiving, become physically more efficient, thus embodying, so to speak, more units of labour in his person." (A. C. PIGOU: *The Economic Position of Great Britain*, p. 18.)

TABLE IV. COMPARISON OF MEN'S AND WOMEN'S AVERAGE WAGES  
PER HOUR IN VARIOUS COUNTRIES,  
PRE-WAR AND 1920-1927<sup>1</sup>

Date	Denmark			Norway (Oslo)			Sweden		
	Men's wage	Women's wage	Ratio <sup>2</sup>	Men's wage	Women's wage	Ratio <sup>2</sup>	Men's wage	Women's Wage	Ratio <sup>2</sup>
	Öre	Öre		Öre	Öre		Öre	Öre	
Pre-war	55.0	29.6	53.8	53.1	29.9	56.3	45	24	53.3
1920	219	131	59.8	214	137	64.0	165	98	59.4
1921	186	104	55.9	210	135	65.7	163	96	58.9
1922	156	90	57.7	163	108	66.3	117	71	60.7
1923	152	87	57.2	157	104	66.9	112	69	61.6
1924	162	93	57.4	171	109	63.8	114	70	61.4
1925	167	97	58.1	181	116	64.1	118	71	60.2
1926	142	84	59.2	161	101	62.7	119	72	60.5
1927	140	85	60.7	—	—	—	—	—	—

  

Date	France			United States			Australia		
	Men's wage	Women's wage	Ratio <sup>2</sup>	Men's wage	Women's wage	Ratio <sup>2</sup>	Men's wage	Women's wage	Ratio <sup>2</sup>
	Frs.	Frs.		Cents	Cents		s. d.	s. d.	
Pre-war	0.46	0.23	50	26.0	15.4	59.2	1 2	6 <sup>3</sup> / <sub>4</sub>	48.2
1920	—	—	—	65.4	42.1	64.4	1 11	11 <sup>1</sup> / <sub>2</sub>	50.0
1921	2.31	1.17	50.6	55.6	36.8	66.2	2 0 <sup>3</sup> / <sub>4</sub>	1 0 <sup>3</sup> / <sub>4</sub>	51.5
1922	—	—	—	52.2	35.5	68.0	2 0	1 0 <sup>1</sup> / <sub>2</sub>	52.1
1923	—	—	—	57.6	38.8	67.4	2 0 <sup>3</sup> / <sub>4</sub>	1 1	52.5
1924	2.62	1.38	52.7	59.9	39.1	65.3	2 0 <sup>3</sup> / <sub>4</sub>	1 1	52.5
1925	2.79	1.51	54.1	60.1	38.9	64.7	2 1 <sup>1</sup> / <sub>2</sub>	1 1 <sup>1</sup> / <sub>4</sub>	52.0
1926	3.22	1.86	57.8	60.8	39.8	65.5	2 2 <sup>1</sup> / <sub>2</sub>	1 1 <sup>3</sup> / <sub>4</sub>	51.9
1927	—	—	—	61.5 <sup>3</sup>	39.9	64.9	2 2 <sup>1</sup> / <sub>2</sub>	1 2	52.8

<sup>1</sup> The figures are average rates in Norway, Australia, and France, and average earnings in other countries. The dates or periods covered are as follows: Norway: pre-war, April 1914, post-war, summer 1920, Sept. 1921, Nov. 1922, Oct. 1924, Oct. 1925, July 1926; Australia: pre-war, 30 April 1914; post-war, 31 Dec. of each year except 1927, 31 March; Denmark: pre-war, 1914; post-war years, fourth quarter except 1927, second quarter; France: pre-war, 1911; post-war, October of each year except 1921, February; Sweden: pre-war, 1913; post-war, yearly averages; United States: pre-war, July 1914; post-war, yearly averages, except for 1920 and 1922, second half-year, and 1927, July.

<sup>2</sup> Men's wage at each date = 100.

<sup>3</sup> Estimated.

## RELATION BETWEEN WAGES IN DIFFERENT INDUSTRIES

Industrial changes during the war and currency movements in the post-war period have resulted in important changes in the relation between wages in different industries. These have been most marked in countries where a policy of currency deflation has

been adopted. In the present section attention is directed almost entirely to the altered situation in this group of countries.

Currency deflation, generally adopted with the object of a return to the gold standard, has been accompanied by business depression affecting practically all industries. The main causes of the depression have been the general fall in prices and the dearness of money which have accompanied deflation. All industries have not, however, been affected alike. The depression has been more serious in the case of exporting industries and of those subject to foreign competition on the home market than in the case of sheltered home market industries. Since prices abroad are determined by international competition, the exporter will receive only the same amount of foreign currency for a given commodity after deflation as before. On converting this amount into his own currency he receives fewer units, the rate of exchange having been adjusted immediately on deflation to the change in the value of his currency. But prices at home and especially wage rates are adjusted more slowly. Consequently his costs of production are relatively higher than those of foreign producers and his competitive power is therefore weakened. Producers who are subject to foreign competition on the home market are also placed at a disadvantage by deflation. During the lag in prices foreign competitors receive a higher price in terms of their own currency although their costs of production remain unchanged. They are therefore in an advantageous position in their competition with the home producers.

The sheltered home market industries are in a relatively more favourable position. It is true that they experience the depressing effects of the falling price level and dearer money. But they are free from the necessity of competing under disadvantageous conditions with foreign producers. Also the relatively higher costs of production resulting from the time lag in adjusting wages to the new value of the currency unit are partly offset by the increase in the purchasing power of wages. The net result of the various factors operating is that the sheltered industries are less seriously affected by deflation than the unsheltered. This situation is of course a "short-period" one, and continues only during the time necessary for the adjustment of prices and costs to the new value of the currency unit. The process of adjustment may, however, spread over a considerable period.

The difficult position of the unsheltered home market and exporting industries is aggravated if, during the period of deflation and adjustment, other countries adopt a policy of inflation. These

countries have as a result of inflation a differential competitive advantage both on their home market and abroad. In recent years unsheltered industries, especially in Great Britain, Sweden, Norway, and Denmark, have suffered from the consequences both of deflation at home and of inflation abroad.

A further factor has added to the difficulties of the unsheltered industries. To a large extent these were the industries of abnormal development during the war years. Even apart from deflation at home and inflation abroad these industries would have experienced serious depression and unemployment during the inevitably prolonged transition to a peace-time basis.

The combined effect of the above factors has been that in the countries affected unemployment in unsheltered industries has remained for several years at a much higher level than in sheltered industries. The extent to which the difference still prevails may

TABLE V. PERCENTAGES OF INSURED PERSONS RECORDED AS UNEMPLOYED IN GREAT BRITAIN AND NORTHERN IRELAND AT 20 JUNE 1927 IN VARIOUS SHELTERED AND UNSHELTERED INDUSTRIES<sup>1</sup>

Sheltered industries	Per-centage unemployed	Unsheltered industries	Per-centage unemployed
Brick, tile, etc., making	5.2	Coal mining	19.0
Tailoring	3.1	Chemicals manufacture	6.4
Bread, biscuit, cake, etc., making	6.0	Pig iron manufacture (blast furnaces)	12.7
Printing, publishing, and bookbinding	4.6	Steel melting and iron puddling furnaces, iron and steel rolling mills and forges	16.8
Building	6.9	General engineering	9.4
Gas, water, and electricity supply industries	4.5	Electrical engineering	4.7
Railway service	4.2	Construction and repair of motor, vehicles, cycles, and aircraft	5.7
Distributive trades	4.7	Shipbuilding and ship repairing	22.9
Commerce, banking, insurance, and finance	2.2	Cotton textiles	7.0
National Government services	5.3	Woollen and worsted	9.4
Local Government services	6.6	Boot, shoe, slipper, and clog trades	6.5
Hotel, boarding-house, and club service	6.0	Leather, tanning, currying, and dressing	7.4
Professional services	2.4	Shipping service	14.8
Laundries, dyeing and cleaning	3.3	Canal, river, dock, and harbour service	24.2

<sup>1</sup> The figures are taken from the *Ministry of Labour Gazette*, July 1927. The classification adopted for the purposes of the present article is somewhat arbitrary, as certain trades may be in an intermediate position. Thus, for example, the repair side of the motor vehicle, cycle, and aircraft industry is largely sheltered. In one sense canal, river, dock, and harbour service is sheltered, but as it is largely dependent in Great Britain and Northern Ireland on the volume of foreign trade it is here classified as unsheltered.

be illustrated by table V above showing the percentage of unemployment in various sheltered and unsheltered industries in Great Britain and Northern Ireland in June 1927. The figures indicate the combined effects of the general factors mentioned above, together with the influence of special factors affecting the British industrial situation.

As a result of differences such as those shown in table V, workers in unsheltered industries have been in a weak bargaining position, and their wages have generally fallen much below those in sheltered industries. The relation between the weekly rates of wages of adult male workers in certain sheltered and unsheltered trades in Great Britain is indicated by table VI. The statistics given are for various skilled occupations in which pre-war rates were fairly similar. Owing to the war demand the unsheltered industries had the advantage during war years. Already in 1920, however, they were in a weak position and rates had fallen below those in sheltered trades. Their situation became still worse during the subsequent years of depression and stagnation.

TABLE VI. WEEKLY RATES OF WAGES IN VARIOUS SHELTERED AND UNSHELTERED OCCUPATIONS IN GREAT BRITAIN<sup>1</sup>

Occupation	Weekly rate					Index (July 1927 = 100)			
	July 1914	31 Dec. 1917	31 Dec. 1920	31 Dec. 19 25	30 Sept. 1927	31 Dec. 1917	31 Dec. 1920	31 Dec. 1925	30 Sept. 1927
<i>Sheltered :</i>	s. d.	s. d.	s. d.	s. d.	s. d.				
Bricklayers	40 7 53	1 100 10	73 8 74	1	131	248	182	182	
Hand compositors (book and job)	35 7 47	2 93 3	73 10 73	10	133	261	207	207	
Cabinet makers	39 5 53	11 101 3	74 6 72	9	137	257	189	184	
Electrical installation wiremen	39 4 67	3 104 9	75 10 75	3	171	266	193	193	
<i>Unsheltered :</i>									
Fitters and turners	38 11 67	4 89 7	56 6 58	1	173	230	145	149	
Ironmoulders	41 8 70	2 93 6	60 0 61	8	168	224	144	148	
Shipwrights	41 4 69	4 91 3	55 7 55	7	168	221	134	134	

<sup>1</sup> The figures are taken from the *Report of the Ministry of Labour for the Year 1925* and from the *Ministry of Labour Gazette*, Oct. 1927.

The abnormal wage relations resulting mainly from the over-development of certain industries during the war years and from the effects of subsequent currency deflation may be further illustrated by the wage statistics tabulated in table VII for Sweden. The figures given are the average hourly earnings of all adult male workers, both skilled and unskilled, in the respective industrial



branches. It will be observed that already before the war, earnings in the sheltered industries were, in most cases, higher than in the unsheltered industries. The relative differences between the two groups have, however, been much increased by the dislocations of the war and post-war years.

TABLE VII. AVERAGE HOURLY EARNINGS IN VARIOUS SHELTERED AND UNSHELTERED INDUSTRIES IN SWEDEN<sup>1</sup>

Branch of industry	Average hourly earnings				Index (1913 = 100)		
	1913	1921	1925	1926	1921	1925	1926
	Öre	Öre	Öre	Öre			
<i>Sheltered :</i>							
Building							
General building	55	230	164	159	418	298	289
Painting and glazing	64	217	197	161	339	308	252
Printing	66	185	146	152	280	221	230
Baking	49	191	146	145	390	298	296
Brewing, etc.	52	197	149	149	379	287	287
Tailoring	51	176	145	143	345	284	280
Power, light, and water	48	188	139	131	392	290	273
Railway transport	38	151	114	121	397	300	318
<i>Unsheltered :</i>							
Metal mining	63	206	141	152	327	224	241
Coal mining	48	177	95	95	369	198	198
Iron, steel, and copper works	41	120	100	100	293	244	244
Engineering	47	167	118	119	355	251	253
Electrical engineering	43	173	126	129	402	293	300
Quarrying and stone working	29	110	84	89	379	290	307
Glass making	45	147	96	94	327	213	209
Paper making	39	137	101	105	351	259	269
Wood pulp	43	145	104	109	337	242	253
Textile spinning and weaving	35	123	92	91	351	263	260

<sup>1</sup> The table is compiled from data published in *Sociala Meddelanden*. The figures include overtime earnings, value of payments in kind, etc.

In commenting on the situation in Sweden represented by the figures in table VII, Professor Cassel, in his Memorandum on *Recent Monopolistic Tendencies in Industry and Trade*, indicates (pages 32-33) that in his view a principal cause of the difference between wages in the sheltered industries and in those exposed to international competition is monopolistic action by labour organisations.<sup>1</sup>

<sup>1</sup> Memorandum submitted to the Preparatory Committee for the International Economic Conference, Geneva, 1927.

For the purpose of examining what foundation there may be for this belief, it is necessary to distinguish two different types of action which may be taken by workers' organisations. The first type is deliberate regulation of the supply of labour in given industries by restricting the number of entrants. By such action a trade union is in a position to increase wages in its own industry, while, the supply of labour for other industries being increased, other unions are in a weaker bargaining position. It is, no doubt, true that in certain countries a few unions have pursued this policy of restriction. Where unions in sheltered industries have done so, their action has tended to increase the difference between wages in sheltered and unsheltered trades. But there is no evidence to show that such action, operating through a diminution in the mobility of labour, has had more than a minor influence on the present situation in deflationist countries. It should also be pointed out that although certain unions may have carried too far the policy of restricting the number of entrants, there is a strong case for a reasonable amount of regulation in some industries. Trade unions in industries which are subject to specially wide fluctuations in activity have learned from bitter experience the necessity for regulating the supply of workers with a view to greater stability of employment.

The second type of action which workers' organisations may take, is to endeavour to secure the highest wages that are possible according to the circumstances of each industry. Professor Cassel appears to consider that organised labour is to be condemned because it has thus "concentrated upon endeavouring to make the most out of every given situation in the labour market".<sup>1</sup> But to concentrate in this way is merely to adopt the usual methods by which, under the present system, all prices, including the price of labour, are determined, namely, by the interaction of demand and supply. Organised capital has equally concentrated upon endeavouring to make the most out of every given situation. Clearly it is not to be concluded, because wages in the sheltered industries are considerably higher than in those directly exposed to foreign competition, that action by workers' organisations is the primary cause of the difference.<sup>2</sup> As already indicated, the

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<sup>1</sup> Memorandum, p. 8.

<sup>2</sup> In Sweden, owing to the exceptional strength of the trade unions, the influence of these organisations, within the limits of their effective action, has no doubt been greater than in certain other countries. It should be remembered, however, that the workers in various industries exposed to foreign competition are as strongly

principal causes are abnormal expansion of certain industries during the war and the consequences of currency changes during recent years.

It is probable that a reduction of wages in sheltered industries would cause a reduction in unemployment. There would be an increase in the demand for labour in the sheltered industries if wages were lower. The unsheltered industries would also benefit, in so far as their costs of production were affected by the reduction of costs in the sheltered industries. Assuming a diminution in wages in sheltered trades to be desirable, the difficulty would be, however, to find a satisfactory means of effecting this diminution. Wages in these industries are relatively high because the economic conditions are relatively favourable. At present, wages in different industries are to a large extent fixed by agreement between organisations of employers and of workers in each industry. If conditions in one industry are more favourable than those in another, a difference in wages is likely to arise. The differences between wages in sheltered and unsheltered industries have developed in this way, with the unsatisfactory consequence that there is considerable inequality in the remuneration of workers of equal skill. The only satisfactory method of avoiding such differences would be the introduction of greater co-ordination into the system of wage regulation.

Increasing attention is being given by workers' organisations to the need for greater co-ordination in the regulation of wages. Thus the British Trades Union Congress (Edinburgh, 1927) gave to its General Council authority to deal with general policy on a much wider basis than hitherto and to co-ordinate and unify the interests and aims of the unions. Also at the Ninth Congress of the Swedish Confederation of Trade Unions (Stockholm, 1926) the argument was put forward that the wage policy of the Confederation should pay more attention to the demands for assistance of the lowest paid groups of workers, especially those engaged in export industries, in such a way that the wage policy of the more favoured workers should not be conducted at the expense of the real wage standard of the rest.

The establishment of greater co-ordination in the wage system and in the principles which might be adopted has been discussed

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organised as those in the sheltered industries, but their strength has been largely unavailing on account of the economic difficulties with which these industries have been faced.

at some length by Mr. Bellerby in recent numbers of the *Review*.<sup>1</sup> For a satisfactory system of wage regulation, Mr. Bellerby considers it essential that certain general principles should be accepted and a central institution set up to ensure the due consideration of these principles in all wage negotiations. Such a system would provide a means for securing a reasonable adjustment between wages in different industries. But although it is probable that the future will see the development of a more co-ordinated and centralised system of wage regulation, progress in this direction will be slow. One cannot look to a more co-ordinated system as a practicable remedy for the present disequilibrium between sheltered and unsheltered wages.

The general conclusions of this section are therefore that the disequilibrium between wages in sheltered and unsheltered industries is due to differences in economic conditions and not to trade union policy. The disequilibrium would have developed to almost the same extent even if there had been no labour organisations. In the absence of a co-ordinated system of wage regulation, the restoration of a more normal relation between sheltered and unsheltered wages will be effected only after a considerable period of money stabilisation. A transference of workers from unsheltered to sheltered industries is also necessary. There are evidences that such transference is steadily proceeding. The mobility of labour is not, however, very rapid and there will probably be an interval of several years before a normal balance is restored.

#### RELATION BETWEEN WAGES AND UNEMPLOYMENT

It has been already indicated that during recent years in inflationist countries real wages have been relatively low owing to the time lag in adjusting wage rates to the rising cost of living. Also there has been little unemployment, in consequence of the stimulus to production given by the rise in the price level and the differential advantage on the foreign market, owing to relatively low costs, including wages. In the United States, with a stable currency, the developments of recent years have resulted in important increases in *per capita* productivity and in real wages, while, at the same time, there has been little unemployment. The position in Australia has been somewhat similar.

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<sup>1</sup> *International Labour Review*, July, Aug., and Sept. 1927: "The Evolution of a Wage-Adjustment System", by J. R. BELLERBY.

In deflationist countries, on the other hand, relatively high real wages have been accompanied by unemployment on an unparalleled scale. Under normal conditions a large volume of unemployment may be regarded as an indication that the general level of wage rates is too high and that a lowering of rates would facilitate recovery of industrial prosperity. The argument is frequently advanced in deflationist countries that further reductions of wage rates in recent years would have led to a return of business prosperity.<sup>1</sup> It is evident, however, that the economic conditions of these countries have been very different from those which prevail during an ordinary cyclical depression of trade. It is no doubt true that further reductions of wages in Great Britain, Denmark, Sweden, and Norway would have resulted in some diminution of the volume of unemployment. But it is unlikely that practicable wage reductions would have led to a return of business prosperity. The restoration of prosperity depended more on the removal of political tension in Europe, and on the stabilisation of currencies both at home and in inflationist countries abroad, than on further wage reductions. The workers appear generally to have acted on the assumption that, in the abnormal conditions prevailing, reductions in wages would not have led to commensurate improvements in employment. They have therefore preferred to maintain wages, even at the cost of additional unemployment, in the hope that a restoration of more stable economic conditions would enable these wages to be paid without unemployment remaining excessive.<sup>2</sup>

Other factors must be considered. It was shown above that in deflationist countries there has been wide disparity between wages in sheltered industries and in those exposed to foreign competition. Here it may be repeated that in most of the sheltered industries depression and unemployment have been comparatively slight and wages have been maintained without much difficulty at a relatively high level. In the unsheltered industries, particularly those dependent on foreign markets, depression and unemployment have been so serious and prolonged, and wages have fallen to so low a level, that attempts at further reductions would provoke

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<sup>1</sup> The case for wage reduction is strongly argued by Professor Cassel in his Memorandum to which reference has already been made. It is also discussed by Professor Pigou in an article on "Wage Policy and Unemployment" published in the *Economic Journal* of the British Royal Economic Society, Sept. 1927, pp. 355-368.

<sup>2</sup> This policy has been facilitated by the payment of unemployment insurance benefits.

the most obstinate resistance. The protracted and disastrous coal mining stoppage in Great Britain during 1926 is an indication of the temper of both employers and workers in an industry which has suffered from exceptionally severe depression.<sup>1</sup>

Another factor is the influence of the "doctrine of high wages". This doctrine has been widely accepted during recent years in the United States, where economic conditions have been specially favourable to its application.<sup>2</sup> It has emphasised the fact that low wages encourage waste in the use of labour. High wages, on the other hand, act as a stimulus to the manufacturer to improve his organisation in order that labour productivity shall be high. In a depression wage reductions should be the last rather than the first resort. Nor are the effects of wage reductions on industrial relations to be overlooked. The maintenance of wages ensures better relations, while the higher purchasing power of the worker is an important element in the demand for commodities. These features of the doctrine of high wages have not been without influence on wage policy in certain European countries during recent years.

As already shown, the net result of the various factors has been that, partly as a result of time lag in adjustment and partly in consequence of deliberate policy, wages for full-time employment in Great Britain and the Scandinavian countries have remained relatively high. Clearly it would be uneconomic under stable conditions to maintain wage rates at a level which would imply a volume of unemployment at all commensurate with that which has been experienced in recent years. Now that all these countries are on or near the gold standard and that a policy of monetary stability is being practised in other European countries, the conditions are more favourable for a recovery of business prosperity than at any period since the slump of 1921.<sup>3</sup> This should enable a large proportion of the unemployed to be absorbed

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<sup>1</sup> Average real shift earnings in this industry for the period from 1922 to 1927 (excluding the stoppage May-Dec. 1926) have been only about 91 in relation to 100 in June 1914.

<sup>2</sup> Cf. INTERNATIONAL LABOUR OFFICE: *Industrial Relations in the United States*, by H. B. BUTLER, C.B., Deputy-Director of the International Labour Office. Studies and Reports, Series A (Industrial Relations), No. 27. Geneva, 1927.

<sup>3</sup> The Federation of British Industries in its quarterly trade forecast issued recently states that the outlook for 1928, so far as British trade at any rate is concerned, is brighter than it has been at almost any period since the conclusion of the war.

into industry without the necessity for reductions in rates of wages.<sup>1</sup> The extent to which this absorption takes place must be a chief factor in determining wage policy in the early future.

### SUMMARY AND CONCLUSIONS

The above review of general wage movements and tendencies has indicated that, even allowing for the reduction in hours of labour since 1914, labour productivity per head in certain countries is definitely higher than before the war. This is especially true of the United States. In European countries the unstable monetary and political conditions and the tariff restrictions of recent years have artificially diverted industrial and commercial developments from their natural channels. The deflationist countries have suffered severe depression, and their relatively high wages for full-time work have been largely counterbalanced by an exceptionally large volume of unemployment. In countries where inflation has been practised industrial and commercial activity has been stimulated and there has been little unemployment; money wages, however, have not kept pace with the rise in the cost of living.

The year 1927 has been one of greater stability in Europe and the continuance of this stability will permit of a steady restoration of equilibrium in wage and price relations. These are not likely to return to the pre-war ratios. The increases in productivity witnessed during recent years in the United States indicate the probability of real wages above the pre-war level also in other countries. It is true that European economic conditions are not so favourable as those in the United States, but there is every reason to believe that to some extent at least Europe will benefit from industrial changes on the lines of those in the United States. Economic *rapprochement* and the reduction of tariff barriers as foreshadowed by the World Economic Conference of 1927 will facilitate the permanent improvement of real wage standards. Recent tendencies in a number of countries indicate that unskilled male workers and women especially have secured, and are likely to maintain, definitely higher wage standards than before the war.

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<sup>1</sup> The position is exceptional in Norway as a result of the currency appreciation of autumn 1927.

## SOURCES AND NOTES

## Sources

The sources of the wage and cost-of-living data used in this article are :

*Statistiske Efterretninger*, published by the Danish Statistical Department.

*Sociala Meddelanden*, published by the Swedish Social Board.

*Eighteenth Abstract of Labour Statistics of the United Kingdom*.

*Ministry of Labour Gazette*, published by the British Ministry of Labour.

*Bulletin de la Statistique Générale de la France*.

*Wirtschaft und Statistik*, published by the German Statistical Office.

*Wages in the United States*, published by the National Industrial Conference Board.

*Monthly Labour Review*, published by the United States Bureau of Labour Statistics.

*Quarterly Summary of Australian Statistics*, and *Annual Labour Reports*, published by the Australian Commonwealth Bureau of Census and Statistics.

*The New Zealand Official Year-Book*.

*Lønninger and Statistiske Meddelelser*, published by the Norwegian Central Statistical Office.

## Notes on Table I

*Denmark.* The wage figures are average earnings of male workers in Copenhagen and the Provinces. The figures published in the original sources are hourly earnings; these have been multiplied by 54 for the pre-war year and by 48 for post-war years. The pre-war figure is for 1914; for post-war years the data are for the fourth quarter of each year, except 1927, second quarter. The cost-of-living index numbers are based on 1914. The post-war figures are in each case for January of the year following that for which they are tabulated, except 1927, July.

*Norway.* The wage figures are average rates of male workers in eight occupations in ten of the chief towns; the occupations included are mainly skilled in sheltered industries. The dates are pre-war 1914, post-war summer of 1920, September 1921, November 1922, November 1923, October 1924, October 1925 and July 1926. The cost-of-living indexes are for corresponding dates.

*Sweden.* The wage figures are average annual earnings divided by 52. The pre-war figure is for 1913. The cost-of-living index numbers are based on July 1914; the post-war indexes are averages for each year.

*Great Britain.* The wage figures are index numbers of average rates of wages in July 1914 and on 31 December in each post-war year, except 1927, 30 September. The cost-of-living data are based on July 1914; the post-war figures are in each case for 1 January of the year following that for which they are tabulated, except 1927, 1 October.

*France.* The wage figures are unweighted arithmetic averages of the average wages of male workers in 20 to 23 different occupations in Paris, mainly skilled. The figures published in the original sources are daily wages; these have been multiplied by six. The dates are 1911, February 1921, and October in other years. The cost-of-living data are for 1914, first quarter of 1921, and fourth quarter in other years.

*Germany.* The wage figures are generally rates fixed by collective agreements, although, for certain of the industries covered, the pre-war figures are earnings. A few more industries are covered by the pre-war figures and those for 1925, 1926, and 1927 than for other years. The pre-war figure is for 1913, and the post-war figures for October 1922 and December in other years. The cost-of-living data are based on 1913-1914 = 100. The post-war indexes are for October 1922 and 1927 and December in other years.



*United States.* The wage figures are average earnings of skilled and unskilled adult male workers in 25 industries, compiled by the National Industrial Conference Board. The pre-war figure is for July 1914; the post-war data are for the fourth quarter of each year, except 1927, June. The cost-of-living data are pre-war 1913, post-war December of each year, except 1927, June.

*Australia.* The wage figures are weighted average rates, pre-war 30 April 1914 and post-war 31 December of each year. The cost-of-living data cover food, groceries, and house rent only. They are averages for thirty towns, five in each State of the Commonwealth. The base figure is for the second quarter of 1914 and the post-war figures are for the fourth quarter of each year.

### Note on Table III

The figures are average wages taken from official sources in all cases except the United States, for which the National Industrial Conference Board Statistics have been used. For Denmark, Germany, and the United States the figures cover the most important industries. In the case of Germany, the number of industries covered by the figures for 1913 and 1924 onwards is greater than those for 1922-1923. For Great Britain the comparison is between skilled building, engineering, and shipbuilding workers, railway engine drivers, electrical installation wiremen, hand compositors (book and job) and cabinet makers, on the one hand, and unskilled workers in engineering and shipbuilding, railway porters and permanent-way labourers, and labourers under local authorities, on the other. The Australian figures cover twenty skilled and twenty unskilled occupations in different industries. The dates or periods covered are : Denmark, pre-war 1914, post-war fourth quarter of each year, except 1927, second quarter; Germany, pre-war 1913, post-war January 1923 (given for 1922), June 1923, December 1924, 1925, and 1926, and October 1927. Great Britain, pre-war July 1914, post-war 31 December of each year, except 1927, 30 September; United States, pre-war July 1914, post-war average for year, except 1920 and 1922, for which averages for second half-year are given, and 1927 (July); Australia, pre-war 30 September 1914, post-war 31 December of each year; New Zealand, pre-war 31 March 1914, post-war 31 March of each year.