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REPORT VI (a)

International Labour Conference

THIRTY-FIRST SESSION
SAN FRANCISCO, 1948

WAGES

(a) General Report

Sixth Item on the Agenda

GENEVA
International Labour Office
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GENERAL REPORT

INTRODUCTION

The present general report on wages forms the first of the three parts of the item "wages" which the Governing Body decided, at its 101st Session (Geneva, March 1947), to place on the agenda of the 31st Session of the International Labour Conference (San Francisco, June 1948). In the case of the other two parts of this item — the fair wages clause in public contracts and the protection of wages — the usual double-discussion procedure will be followed, and the Conference, after a first discussion in 1948, will be able to adopt in 1949 a Convention or Recommendation, if it judges such action appropriate.

The subject covered by the present report, on the other hand, has been placed on the agenda not with a view to the adoption this year of a Convention or Recommendation, or as the first step in a double-discussion procedure, but in order to enable the Conference to consider the whole field of wages policy in relation to economic and social policy in general. The Conference will thus have an opportunity of formulating a programme for future action by the International Labour Organisation in this important field, and of indicating in particular which aspects of wages policy it may wish to consider in greater detail at future sessions.

The present report is designed to provide a basis for this general discussion and for the formulation of a future programme. The first eleven of its twelve chapters discuss in succession the nature of wages and the objectives of wage policy ; systems of wage payment ; methods of wage determination ; the general level of wages ; relative wages in different occupations and industries ; wages and employment ; wages and the price level ; international aspects of wage policy ; and wage guarantees (three chapters). The final chapter summarises briefly the action already taken by the Organisation in the field of wages and refers to a number of topics which the Conference may wish to consider in framing a programme for the future.

Two memoranda on minimum income security which were adopted by the Iron and Steel Committee and the Metal Trades

Committee at their second sessions in 1947, and which the Governing Body decided (at its 103rd Session, in December 1947) should be transmitted to the Conference for its information, together with the relevant extracts from the Committees' proceedings, are reproduced in Appendices III and IV. Six other appendices contain information supplementary to the chapters on wage guarantees ; the texts of the Minimum Wage-Fixing Machinery Convention and Recommendation of 1928 ; and Part II : Wages, of the Wages, Hours of Work and Manning (Sea) Convention, 1946.

Attention may be drawn finally to a resolution on the principle of equal pay for equal work for men and women workers which was adopted by the Economic and Social Council of the United Nations on 10 March 1948 and which invites the International Labour Organisation " to proceed as rapidly as possible with the further consideration of this subject and to report to the Council on the action which it has taken ". This resolution, which was transmitted to the Director-General of the International Labour Office by the Secretary-General of the United Nations on 21 April 1948, is reproduced in this report. The memorandum by the World Federation of Trade Unions on " The Principle of Equal Pay for Equal Work for Men and Women Workers : Declaration of Principles on the Earnings of Female Labour ", to which the Council's resolution refers, is reproduced in Appendix VIII.

CHAPTER I

NATURE OF WAGES AND OBJECTIVES OF WAGE POLICY

At the present time problems of wage policy are of great concern to labour, management and Governments alike; to labour, because the pressure of rising prices is encroaching on hardly-won living standards; to management, because the demand for higher wages and better working conditions creates price, market and production problems; and to Governments, because in most countries it is upon their shoulders that the burden finally falls of finding a solution for major problems of wage policy, of imposing a temporary if uneasy peace on the contending parties, or of winning some measure of justice for all sections of the community out of the conflict of opinions, desires and demands.

Inflation caused by the Second World War has had far-reaching effects on the economic and social structure of many countries, and is still a great menace. Other dislocations in national economies consequent on the war have also to be contended with. However, it should be remembered that not all present-day economic difficulties can be attributed to the war. In the field of wage policy in particular the kind of problems which existed in the inter-war period, but were in part suspended or obscured by other issues during the war, are again acute; the determination of what constitutes a just reward for labour has at all times been difficult; there are in addition, at the present time, new wage problems brought about by the achievement of full employment in some countries and the scarcity of labour in certain key industries in others.

Objectives of Wage Policy

In any consideration of these problems and of the measures which might be taken to deal with them it is useful to distinguish the main characteristics of wages and to bear in mind the close relationship which must exist between the wage policy of any society and its general economic and social

objectives. The second of these topics will be considered briefly in the following paragraphs, and the nature and economic functions of wages will be discussed later in the present chapter.

One of the chief objectives of any society is the achievement of maximum economic welfare. Ideally this requires first, that the national income shall be maximised, secondly, that the national income shall be divided equally among all the members of the economy [1], and thirdly, that the national income shall be stable, in the sense of being free from violent fluctuations.

However, the achievement of one of these conditions may prevent the full realisation of another, human society being what it is. For example, if the national income were distributed equally among all members of the community irrespective of their contribution to that income, many incentives for effort would be removed, and the maximum which could be produced with existing quantities of resources would not be attained. Again, stabilisation of the national income might be pushed to the point where economic progress would be slowed down or halted and the maximum possible national income would not be achieved. Some balancing of the three conditions, or a middle course, is therefore required. In general, it may be said that in any given society economic welfare will be maximised if the highest and most stable standard of living possible for each section of the community is attained in the form which the particular society desires. To secure this result it will be necessary to achieve: (1) the full employment and optimum allocation of all resources; (2) the highest degree of economic stability consistent with an optimum rate of economic progress; and (3) maximum income security for all sections of the community.

[1] This second condition involves the controversial assumption that all members of the economy are capable of enjoying equal satisfaction from the consumption of the same quantity of goods and services. For a careful analysis based on this assumption and leading to the conclusion that, given time, economic welfare would be maximised by the equalisation of incomes, see A. C. PIGOU: *The Economics of Welfare*, 2nd edition (London, 1924), pp. 79-80. Many contemporary writers on welfare economics do not admit inter-personal comparisons of utility and would therefore hold this second condition to be invalid. For recent statements of this general view see Abba P. LERNER: *The Economics of Control* (New York, 1944) and M. W. REDER: *Studies in the Theory of Welfare Economics* (New York, 1947). The correctness or otherwise of the view taken above on this issue does not, it is believed, affect the validity of the criteria or objectives listed at the end of the next paragraph of the text. It would have a more important bearing on certain parts of Chapter VI, but in this case also the soundness of the general conclusions reached, as guides for public policy, would appear to be unaffected.

The attainment of these three conditions must therefore rank among the major objectives of wage policy as of other aspects of economic and social policy. These goals have been stated in the Declaration of Philadelphia as :

> full employment and the raising of standards of living ;
> the employment of workers in the occupations in which they can have the satisfaction of giving the fullest measure of their skill and attainments and make their greatest contribution to the common well-being ;
> policies in regard to wages and earnings, hours and other conditions of work calculated to ensure a just share of the fruits of progress to all, and a minimum living wage to all employed and in need of such protection.[1]

The formulation of a wage policy appropriate to the attainment of these objectives involves the consideration of four main types of problems : (1) problems of wage determination and payment ; (2) problems of wage levels ; (3) problems of wage structure ; and (4) problems of wage security.

Under the first of these headings consideration must be given to the advantages and disadvantages of different forms and methods of wage payment, including time rates, piece rate and other incentive systems, non-monetary elements in remuneration, profit-sharing, and the various possible combinations of such methods. The methods by which the amount or level of wages is determined—whether under individual or collective bargaining or under some type of authoritative regulation—must also be considered. These topics are discussed in Chapters II and III below.[2] The second and third headings cover the whole range of problems involved in the determination of what general level of wages, and what levels of relative wages in different industries and occupations, are most likely to promote the general objectives of economic and social policy. The general level of wages is discussed in Chapter IV and relative wages in Chapter V. The next three chapters deal with certain major problems which are related both to the general level of

[1] The Constitution of the International Labour Organisation as amended by the Constitution of the International Labour Organisation Instrument of Amendment, 1946, Annex : Declaration concerning the Aims and Purposes of the International Labour Organisation, Part III, paragraphs *(a)*, *(b)* and *(d)*.

[2] The special problem of the measures to be taken to ensure that workers actually receive the wages to which they are entitled under the terms of their contract of employment is not considered in the present report, since it is discussed in detail in Report VI *(c)* (1) : *Wages : (c) Protection of Wages*, submitted by the International Labour Office to the present session of the International Labour Conference.

wages and to relative wages in different industries and occupations. Chapter VI analyses the relation of wages to employment, with reference mainly to conditions in which the chief concern of policy is the achievement or the maintenance of full employment. Chapter VII, on wages and the price level, deals mainly with the contrasting situation, characteristic of the war and post-war transition periods, in which full employment exists and the major problem is the danger of inflation. Chapter VIII examines certain of the specifically international aspects of wage policy, which arise out of the trading and other economic relations between countries with different levels of wages. The fourth group of problems—those of wage security, with special reference to wage guarantees—are discussed in Chapters IX to XI.

In the final chapter an account is given of the main action of the International Labour Organisation to date in the field of wages and some suggestions are offered as to the possible lines along which this action might be developed during the next few years.

By way of introduction to the more specific analysis in succeeding chapters, the nature and the economic functions of wages are briefly discussed below.

Nature of Wages

The definition of " wages " is not so easy as it might appear at first sight. To the worker wages are income, while to the employer they are a cost. A satisfactory definition must therefore cover both these aspects. It must not however be so broad as to include all income received by a wage-earner, for some elements in his income—such as unemployment compensation and family allowances—are not wages, though they may be financed largely out of contributions drawn directly or indirectly from wages. Nor can the term " wages " be limited to monetary remuneration, since such items as transport or working clothes, when provided by the employer free of cost, must be counted as being part of wages. Similarly, to define " wages " as the cost of the labour used in producing a certain quantity of goods would be incorrect. The costs of clerical and supervisory labour, like the cost of the services performed by management, are not generally regarded by economists as wages ; some economists, however, consider that such costs are fundamentally wages because clerks, supervisors and managers

do not own the product on which they labour.[1] On the other hand, if a wage-earner receives a share in profits or earns production bonuses, remuneration from such sources may be regarded as forming part of his wages, since it is not received in virtue of any capital invested in his employer's business.[2]

The period for which labour is paid sets one limit to the range of payments which are commonly regarded as " wages ". If a worker is paid by the year he is considered to be in receipt of a salary, not wages. If he is paid by the hour or day or at piece rates, he is regarded as being in receipt of wages. If he is paid by the month he is usually looked upon as being a salaried employee rather than a wage-earner.

Certain kinds of income and certain costs of production must therefore be excluded from any definition of wages. For the purpose of most of the present discussion, wages may be defined as the remuneration paid by an employer for the services of a worker who is engaged by the hour, day, week or fortnight.[3] This remuneration may include payment in kind as well as in cash ; it may be based on time rates, payment by results, or some combination of these ; and it may also include a share in profits. However, merely to define what is meant by " wages " does not end the matter, for the nature of wages cannot be fully understood without some consideration of the economic functions of wages.

[1] Cf. P. H. DOUGLAS : *The Theory of Wages* (New York, 1934), pp. 9-11.

[2] In some profit-sharing schemes, however, workers are allotted marketable shares or bonds. Earnings from such shares or bonds would not be included in any definition of " wages ".

[3] Cf. the following definition by the British Ministry of Labour and National Service : " the payment made to workers for placing their skill and energy at the disposal of an employer, the method of use of that skill and energy being at the employer's discretion and the amount of the payment being in accordance with terms stipulated in a contract of service " (*Industrial Relations Handbook*, London, 1944, p. 172). Cf. also Professor Gide's definition of wages as " the price of labour hired and employed by an entrepreneur " (Charles GIDE : *Principes d'Economie politique* (26th edition, Paris, 1931), p. 511), and the following definition by Professor Dickinson : " the lower and most numerous payments by employers to hired workers, most of whom do manual work and are paid hourly, piece or bonus rates, and are subject to layoffs on short notice—and now usually receive higher rates of pay for overtime " (Z. C. DICKINSON : *Collective Wage Determination : Problems and Principles in Bargaining, Arbitration, and Legislation*, New York, 1941, p. 10). The same author defines " salaries " as " the higher rates of payment to hired workers, most of whom do " white collar " or non-manual work of some sort (some of it supervisory), and receive longer notice of layoff or discharge than do wage-earners " ; but he points out that there is considerable variation in the use of both terms and that thus in practice " wages shade into salaries " (*ibid.*, pp. 10-11).

Economic Functions of Wages

Wages have two main economic functions. As income they serve to distribute the greater part of the product of industry among the members of the economy. As cost they influence the proportions in which the resources of the economy are allocated among the different avenues of production.

Wages and Distribution of National Income

The national income is distributed among the four factors of production, land, labour, capital and enterprise, in the form of rent [1], wages, interest and profits respectively. The actual share of the national income received by a particular individual may, of course, include more than one of these different forms of income. For example, the earnings of a working factory owner may consist, from the point of view of economic analysis, of rent, wages, interest and profit. A small business man's income, similarly, is usually made up of wages and profit, although he may not ordinarily describe any part of his earnings as " wages ". Even a worker who has only his labour to sell may receive rent (in the technical economic sense of that term) as part of his income, although he too may not be aware that part of his wage is really in the nature of an economic rent. However, in the conditions which generally prevail in most economies, the great majority of workers receive substantially the whole of their share of the national income in the form of wages. In some countries workers receive an additional share of the national income in the form of social security benefits.

The returns for one of the elements in production cannot be considered apart from the returns for the other elements. Changes in labour's share of the national income do not affect workers only ; the incomes of other sections of the community are affected also. Even if the only immediate effect of a change in wages in a particular sector of the economy were to alter

[1] The term " rent " is here used in its technical economic sense. Economic rent is the surplus earned by a particular unit of a factor of production over and above the minimum earnings necessary to induce it to do its work. A unit of a factor of production can earn a rent if it is more efficient than the least efficient unit employed, or if the supply of the factor is scarce in relation to the demand for it. Thus, an efficient worker on piece rates may earn an efficiency rent. Similarly, in conditions of full employment, or when labour is in short supply, as is the case in many countries at present, wage rates may include an element of scarcity rent.

the reward of enterprise (profits) in that sector, it would not be long before the effects of such a change would be felt in all sectors of the economy (including that part of the economy in which the change originated).[1]

Wages and Allocation of Economic Resources

Changes in the returns for the various elements in production affect the proportions in which these elements are allocated among different industries. Thus, the wage received by a worker or group of workers in a particular industry helps to determine just what proportion of the total labour force is likely to be available for employment in that industry. Since it constitutes at the same time an element in the industry's cost of production, it also helps to determine the quantity of labour, and with it the quantity of capital and other factors, that will be demanded by the industry.

The general nature of the relation between changes in relative wages in different industries and the supply of labour offering in those industries is well known. If the wages offered in industry A rise in relation to those offered in industry B—as a result, for example, of an increased demand for the products of industry A—workers will tend to move from industry B to industry A.

However, the movement of labour from industry B to industry A may, in fact, not take place if the costs of movement from industry B to industry A exceed the extra pay which would be received in industry A. Further, in the short run, it may not be possible for workers to move from the one industry to another at all, because quite different skills may be required in industry A from those needed in industry B, and it may be impossible or take considerable time for them to acquire the new skills. In the long run, however, the supply of labour offering in industry A will be adapted to the requirements of that industry, because more workers will join and fewer will leave the industry owing to the higher wages being offered in it than in industry B.

[1] As Marshall says, " it is necessary to face the difficulty of regarding the various elements of an economic problem—not as determining one another in a chain of causation, A determining B, B determining C, and so on—but as all virtually determining one another! " See A. Marshall: *Principles of Economics*, 8th edition (London, 1930), Preface, p. ix; cf. P. H. Douglas: *op. cit.*, p. 8.

If, however, a movement of labour from industry B to industry A actually takes place, the consequent decrease in the labour supply of industry B will cause wages to rise in that industry. As a result, the movement of workers out of industry B will be checked, and some workers may be attracted back to it. These adjustments will continue until a new equilibrium position between the wages and the supply of labour offering in the two industries is reached.

A rise in wages in industry B will raise that industry's labour costs. These costs may become so high that it will pay industry B to install more machines instead of paying the higher wages necessary to attract workers back to it from industry A. Thus, changes in the relative levels of wages in different industries can affect not only the quantities of labour employed in those industries, but also the quantities of the other factors of production as well.

In actual practice, of course, there is not a single wage rate for all workers in a particular plant or industry, but a variety of different rates for different categories of workers. Indeed, in some industries, such as the steel industry, the wage structure is very complex. It is necessary to pay workers with different skills at different rates, since if all workers in an industry were paid at the same rate there would be insufficient incentive to acquire special skills. In addition, some industries recognise differences in workers' efficiency and output by the payment of piece rates or production bonuses.

There is an important relation between such differences in wage rates or earnings and the level of efficiency in any industry. If productivity is to be maximised, the relations between the wages of different groups of workers must be such as to encourage efficiency and to attract to each occupation and grade of skill the number of workers required for the most efficient organisation of the productive process. If this condition is not met, productivity will be lower and costs of production higher than they should be. If productivity in any one industry is not merely lower than it should be, but lower relatively than in other industries, the price of its product will tend to be higher, sales and output less, and the industry's demand both for labour and for other elements in production less than they would be if productivity were higher. The accuracy with which the structure of wage rates and earnings in any industry is adjusted to the demand for and the supply of different types of labour, and the degree of success it achieves

in evoking effort, may thus have far-reaching effects both on the rewards of labour and other factors of production in the industry concerned, and on the quantities of those factors which the industry will be able to secure in competition with other industries.

CHAPTER II

SYSTEMS OF WAGE PAYMENT

A great variety of different systems of wage payment has been developed in different industries and in different countries. All of these systems may, however, be regarded as variants or combinations of two fundamental principles : payment by time and payment by results. The systems based on payment by results may be classified in turn in two main groups : straight piece work and bonus systems.

The following pages discuss briefly the chief characteristics of time rates and of the main types of systems based on payment by results.[1] This discussion is followed by brief accounts of profit-sharing and of the contract system. Neither of these is a system of wage payment in the ordinary sense of that term, but profit-sharing is of interest in this connection as a method of supplementing wages, and the contract system as a method of remunerating certain groups of workers whose position is in many respects analogous to that of wage-earners.

Payment by Time

Under the time system each worker is paid a predetermined sum for each hour, day or week he is engaged in tasks specified by his employer, irrespective of the amount of work he does in the time. The system is thus one under which the responsibility for the rate of work or level of output rests in the first instance with the employer, and the gain or loss resulting from

[1] For more detailed analyses of the various systems of wage payment reference may be made to the sources listed in succeeding footnotes and to such works as the following : NATIONAL METAL TRADES ASSOCIATION (of the United States) : *Methods of Wage Payment*, 2nd edition (Chicago, 1928) ; NATIONAL INDUSTRIAL CONFERENCE BOARD : *Financial Incentives* (New York, 1935) ; A. PERREN : *Les primes sur salaires dans les entreprises industrielles* (Neuchatel and Paris, 1933) ; Z. C. DICKINSON : *Compensating Industrial Effort : A Scientific Study of Work and Wages* (New York, 1937) ; C. W. LYTLE : *Wage Incentive Methods : Their Selection, Installation and Operation* (New York, revised edition, 1942) ; U.K., MINISTRY OF LABOUR AND NATIONAL SERVICE : *Industrial Relations Handbook* (London, H.M. Stationery Office, 1944) ; INSTITUT DE SCIENCE ÉCONOMIQUE APPLIQUÉE : *Salaire et Rendement* (Paris, 1947).

any change in the productivity of the worker is likewise assigned to the employer.

This system is the one most commonly used in nearly all countries. Workers have generally favoured it as being conducive to solidarity among them, providing greater security of earnings than any other system, involving no undue pressure to "speed up", and carrying no threat to wage standards won by collective bargaining. Many employers, however, are opposed to the system on the ground that it fails to encourage efficient workers to give of their best and favours instead a uniform pace which may be that set by the slowest worker. This objection, it may be noted, does not apply in those industries in which the pace is set not by the individual worker but by an assembly line ; in such circumstances there is little opportunity for the worker to vary his output in accordance with his ability. Moreover, there are many occupations in which it is impractical to measure output in any standard unit. In such cases payment by time is the only feasible system. Clerical and supervisory workers, for example, are generally paid at time rates.

Time rates in the ordinary sense are sometimes supplemented by guarantees of a minimum daily, weekly, monthly or annual rate. The guarantee corresponds to the ordinary time rate for a specified number of hours', days' or weeks' work and becomes operative if the time during which the worker is actually employed falls short of the time guaranteed. Because of the widespread interest in such guarantees at the present time they are discussed in detail below in Chapters IX to XI.

Payment by Results

Under payment by results the worker is paid a wage which bears some fairly direct and continuous relation to his output or performance, or to the average output of the group of workers to which he belongs. The relation may be a simple one, as in straight piece work, or it may be capable of expression only in a complex formula, as in the case of certain bonus systems. It may assign to the worker the whole direct gain or loss resulting from changes in his productivity, or it may share such gain or loss between worker and employer in any of a wide range of different proportions. The system may include a guaranteed minimum wage, thus assuring the worker that whatever his

the "speed-up" or other forms of exploitation.[1] In certain others, such as the metal and engineering trades, the attitude of both workers and employers has varied in different countries; in the United Kingdom, for example, piece rates and other systems of payment by results are much more widely used in these industries than in the United States.[2] In yet another group, including in particular the building trades, the workers have generally been opposed to systems of this kind.[3] However, where proper safeguards are applied in the operation of systems of payment by results, the traditional attitude of opposition to such systems adopted by the workers in certain industries has been modified. For example, in the United States, the United Electrical, Radio and Machine Workers Union states that "Those in the United Electrical Workers who are most experienced at protecting workers under incentive systems testify that no reason exists to fear incentives, provided the union polices them and maintains all the U.E. safeguards".[4] Similarly in the United Kingdom it has been reported that "The opposition of the unions to the individualistic character of payment by results has been modified by experience as it has been found that this system need not undermine trade union organisation. Indeed, negotiations by trade unions play an important part in the formulation of safeguards in respect of the application of the principle."[5] The kinds of safeguards that have been found appropriate in this connection are considered further below, at the end of the section of this Chapter which deals with payment by results.

[1] In cotton-spinning, for example, where output and the intensity of the work vary according to the number of spindles the worker has to attend to, and the speed at which the machinery runs (conditions over which the individual worker has no control) piece work remuneration appears to offer the only guarantee that the worker will be automatically compensated for the increased effort required by any increase in the number of spindles or in the speed of the machinery. Cf. S. and B. WEBB: *Industrial Democracy* (London, 1926) pp. 288-289.

[2] For an interesting analysis of workers' experience with, and attitudes to, systems of payment by results in various industries in the United States, reference may be made to VAN DUSEN KENNEDY: *op. cit.*

[3] In the United Kingdom, however, payment by results was adopted in the building trades during the war; and under the terms of a general settlement reached by the employers' and workers' organisations in the building industry in October 1947 the employer and the operatives on each building site are free to adopt this system of payment if they choose to do so.

[4] UNITED ELECTRICAL, RADIO AND MACHINE WORKERS OF AMERICA: *op. cit.*, p. 98. The initials U.E. refer to the name of the union.

[5] U.K., MINISTRY OF LABOUR AND NATIONAL SERVICE: *Industrial Relations Handbook, op. cit.*, p. 176.

Since the war, systems of payment by results have, for various reasons, been introduced in some countries as part of their national wage policy. For example, in Belgium, representatives of the employers and workers in the metal trades concluded an agreement on 24 December 1947 which provided that subject to certain conditions male and female workers in the metal trades are to be paid a production bonus up to 5 per cent. of their wages.[1] In Denmark, 60 per cent. of the workers in the textile industry are paid by results. Of these workers about 14 per cent. are paid a bonus for production above a certain level of output in addition to an hourly wage. The remaining 46 per cent. are on straight piece work. In Norway, Sweden and Switzerland the principal method of payment in this industry is by straight piece work. A bonus system is operated in some branches of the industry in Norway and Sweden.[2]

In certain other European countries, including Czechoslovakia, Hungary and Poland, where it has been necessary to increase production greatly, the national wage policy has, with the concurrence of the trade unions, been based on systems of payment by results. For example, in Hungary, the nation-wide collective agreement concluded on 29 September 1947 between the National Association of Manufacturers and the National Association of Hungarian Free Trade Unions provided that incentive payments begin after 80 per cent. of standard production is reached. For every 1 per cent. increase in output between 80 and 100 per cent. of standard production the worker is entitled to a 1 per cent. increase in his wages. For every 1 per cent. increase in output over 100 per cent. of standard production the worker is entitled to a 1.25 per cent. increase in his wages.[3]

[1] Communication from I.L.O. Correspondent, Belgium-Luxembourg, December 1947.

[2] INTERNATIONAL FEDERATION OF TEXTILE WORKERS' ASSOCIATIONS : *Questionnaire sent out by The International Federation of Textile Workers' Association, Manchester, and Answers submitted by Affiliated Organisations* (Manchester, 1947) (mimeographed), Section 16, pp. 1-2.

[3] Communication from I.L.O. Correspondent, Budapest, October 1947. This scheme is similar to the Emerson efficiency scheme described below (see pp. 26-27). According to a recent statement by the Chief of the Economic and Statistical Service of the Trade Union Council, the piece work rates are to be revised in accordance with new norms of production, as it has been found that the former norms were inexact, in many cases being below true average production. The new piece rates are to be based on the output of the different plants in September and October 1947 (communication from I.L.O. Correspondent, Budapest, February 1948).

Even in certain industries where the nature of the operations makes the application of bonus schemes difficult, such schemes have been introduced in some countries. For example, in April 1946 the Tata Iron and Steel Company, Ltd., of Bombay, India, introduced a new wage system consisting of three main elements: a basic wage, based on a scientific point rating system; a bonus for good attendance; and a performance bonus which for average performance ranges between 50 and 60 per cent. of the basic wage and may rise to much higher figures. *Per capita* output forms an element in the performance bonus formula. In addition, a profit-sharing bonus is also payable to employees.[1]

In the United Kingdom, a system of payment by results was introduced in the building and civil engineering industries during the war and was applied from July 1941 to March 1947, when it ceased to operate on the withdrawal of the Essential Work (Building and Civil Engineering) Order, 1941.[2] Later in 1947, agreed terms of settlement, covering among other matters the introduction of an incentive system of bonus payments, were accepted by the National Joint Council for the Building Industry. The settlement, which came into effect from the beginning of the pay week next following 16 November 1947, provides that any employer may, in respect of work on a particular site, job, shop or factory, initiate an incentive system of bonus payments proportionate to the results achieved in performing a definite task, allotted either to an individual worker or to a gang of workers or to a team comprising all the men working on that site, on the basis of giving a worker of average ability and capacity a reasonable opportunity to achieve on such work earnings 20 per cent. higher than those yielded by the normal prescribed rate. After the appropriate target and bonus payments have been fixed, the bonus earnings of the individual worker are dependent entirely on the results achieved, and thus may prove to be more or less than the 20 per cent. level. These arrangements

[1] *The Indian Labour Gazette*, December 1946, pp. 237-238.

[2] Cf. *The Ministry of Labour Gazette*, December 1947, p. 408. For an account of the provisions of this system see MINISTRY OF WORKS: *Memorandum on Payment by Results including Schedules of Trade Operations for which Bonus Rates have been fixed* (London, H.M. Stationery Office, 1944). For a report on the operation of the scheme see MINISTRY OF WORKS: *Payment by Results in Building and Civil Engineering during the War* (London, H.M. Stationery Office, 1947).

are regarded as experimental, and subject to review at the end of two years. [1]

Interest in incentive systems as a means of increasing production and avoiding, in part, the inflationary effects of demands for higher wages in conditions of full employment and scarcity of labour has also increased in many countries since the war. For example, the New Zealand Minister of Labour announced recently that incentive payment schemes operating in New Zealand are to be surveyed by the Department of Labour to ascertain the views of employers and trade unions.[2]

The differences in the extent to which payment by results is used in different industries are illustrated by the summary given in tables I and II below of the results of recent enquiries which covered manufacturing industries and the principal non-manufacturing industries in the United Kingdom and certain manufacturing and non-manufacturing industries in the United States.

Twenty-six per cent. of the $5^3/_4$ million workers covered by the United Kingdom enquiry were paid by results. In the various industry groups the proportion ranged from zero in public utility services and 2 per cent. in transport and in building to 43 per cent. in textiles and 46 per cent. in metal, engineering and shipbuilding. Within the last-named group six of the twenty-one separate industries listed paid between 52 and 54 per cent. of their workers by results. In most of the industries covered by the enquiry the proportion of women paid by results was substantially higher than the proportion of men so paid ; in several cases, including electrical engineering, electrical apparatus, cotton and hosiery, it was 60 per cent. or more. As compared with the position in October 1938, however, there was a marked drop (from 46 to 38 per cent.) in the proportion of women paid by results, though there was an increase (from 18 to 23 per cent.) in the proportion of men so paid.

About 30 per cent. of the plant workers in the manufacturing industries in the United States studied by the United States Bureau of Labor Statistics in 1945 and 1946 were paid on an incentive basis. Altogether fifty-six manufacturing

[1] Cf. *The Ministry of Labour Gazette*, November 1947, p. 360.

[2] *The Southern Cross* (Wellington, N.Z.), 24 January 1948, p. 1.

TABLE I. PERCENTAGES OF WORKERS IN CERTAIN INDUSTRIES IN THE UNITED KINGDOM WHO IN APRIL 1947 WERE PAID WHOLLY OR PARTLY UNDER ANY SYSTEM OF PAYMENT BY RESULTS [1]

Industry group	Men (21 years of age and over)	Youths and boys (under 21 years of age)	Women (18 years of age and over)	Girls (under 18 years of age)	All workers
Iron, stone, etc., mining and quarrying	28	7	[2]	[2]	27
Treatment of non-metalliferous mine and quarry products	16	11	23	[2]	17
Brick, pottery and glass	32	23	44	33	34
Chemical, paint, oil, etc.	8	6	15	14	10
Metal, engineering and shipbuilding	46	38	52	46	46
Textiles	27	13	58	44	43
Leather, fur, etc.	34	17	23	20	30
Clothing	27	14	36	29	32
Food, drink and tobacco	6	5	19	16	11
Woodworking	18	10	22	18	17
Paper, printing, stationery, etc.	4	1	20	14	9
Building, contracting, etc.	2	0	7	[2]	2
Miscellaneous manufacturing industries	35	25	42	34	37
Transport, storage, etc. (excluding railways)	2	0	2	[2]	2
Public utility services	1	0	0	0	0
Government industrial establishments [3]	10	8	21	10	11
All the above	23	18	38	31	26

[1] *The Ministry of Labour Gazette*, October 1947, p. 325. The figures relate to the last pay week in April 1947 and are calculated on the basis of the total number employed in each industry.
[2] The numbers returned were insufficient to provide a satisfactory basis for general averages.
[3] Excluding wage-earners in Admiralty establishments.

industries covering 34,000 establishments with about 5.5 million workers, and eight non-manufacturing industries covering 21,000 establishments with about 1.5 million employees, were surveyed.[1] In the manufacturing industries studied, incentive payments were most common in the clothing industry, in which 65 per cent. of the workers were paid on an incentive basis, and least common in the chemical industry, in which only 7 per cent. of the workers were so paid. In the non-manufacturing industries studied, the proportion of the workers paid on an incentive basis ranged from 37 per cent. in automobile

[1] *Monthly Labor Review*, November 1947, p. 535, "Incentive Pay in American Industry".

TABLE II. EXTENT AND TYPE OF INCENTIVE PLANS FOR PLANT WORKERS IN CERTAIN MANUFACTURING AND NON-MANUFACTURING INDUSTRY GROUPS IN THE UNITED STATES, 1945-1946

Item	Manufacturing					Non-manufacturing					
	Total plants studied [1]	Clothing	Chemicals	Metal working	Textiles	Automobile repair shops	Bituminous coal (underground)	Clothing stores	Department stores	Limited price variety stores	Power laundries
Percentage of all employees studied paid on an incentive basis	30	65	7	25	39	37	22	34	28	3	14
Percentage of establishments:											
With incentive systems for plant workers.	34	85	6	17	70	58	61	72	64	6	14
Predominantly piece rate.	29	82	2	11	67	51	60	15	9	[2]	10
Individual	28	81	2	10	66	51	58	15	9	[2]	8
Group	1	1	[2]	1	1	[2]	2	[2]	—	—	2
Predominantly bonus	5	3	4	6	3	7	1	57	55	6	4
Individual	3	2	2	4	2	7	1	56	55	6	3
Group	2	1	2	2	1	[2]	—	1	[2]	[2]	1
With no incentive system.	66	15	94	83	30	42	39	28	36	94	86
Information not available	[2]	—	—	[2]	[2]	—	—	[2]	—	[2]	[2]
All establishments studied	100	100	100	100	100	100	100	100	100	100	100
Number of establishments studied	15,636	2,261	999	6,647	1,448	1,399	492	759	355	1,441	1,621

Source: Monthly Labor Review, November 1947, p. 536, " Incentive Pay in American Industry "

[1] Includes other manufacturing industries not shown separately.

[2] Less than 0.5 per cent.

repair shops to 3 per cent. in limited price variety stores. Payments were predominantly by individual piece rate in all the establishments surveyed, with the exception of clothing and department stores, in which the individual bonus system applied to most workers who were paid on an incentive basis. Group piece work or bonus systems were not common in either manufacturing or non-manufacturing industries.

Straight Piece Work System

The simplest and most widely used of the various systems of payment by results is the straight piece work system, under which each worker is paid a predetermined sum for each unit ("piece") of output irrespective of the time taken to produce it. The rate of payment may be fixed in terms of the output of the individual worker or in terms of the average output of the group of workers to which he belongs.

Under this system the more a man produces, the more he earns; and the additional earnings are exactly proportionate to the extra output. The whole of the direct gain or loss resulting from changes in the worker's output is thus assigned to him (leaving to the employer the responsibility for gains or losses in overhead costs per unit of output). Frequently, however, the exact proportionality of the system is modified in one respect — a guaranteed minimum wage is set (usually at a level well below the expected average earnings of the piece workers in normal conditions) in order to safeguard the worker against unduly low earnings due to causes beyond his control.

Bonus Systems

Under the various bonus systems each worker is paid according to his output but not exactly in proportion to it. In some systems the rate of payment per unit of output falls when the worker's output rises beyond a certain level. In others the rate of payment per unit increases as the worker's output rises. In the more complicated systems, the rate of payment per unit of output may rise through certain ranges of output and then decline. In a few systems the rate of payment does not change continuously as output increases, but changes by steps as certain specified levels of output are reached by the worker. Most bonus systems either guarantee to each worker a certain minimum daily payment or, by providing for payment at straight piece rates up to certain specified levels of output, make it possible for all workers to earn at least a certain minimum wage.

As has already been noted, payment by time assigns to the employer all the gain or loss resulting from changes in worker productivity, while payment by piece work assigns all the gain or loss from such changes to the worker. Under the various bonus systems the gain or loss is shared in varying proportions between the employer and the worker.

In most of these systems the rates are fixed in such a way that labour cost per unit declines as output rises, and it is mainly in order to secure such reductions in costs that these systems have been devised. The fact that the rate of payment per unit declines as output rises also means that the consequences to the employer of an initial error in rate setting are less serious than under straight piece work. This is a point of some importance, in view of the fact that any reduction in a piece rate is apt to be regarded as unfair. Errors in fixing such rates are however inevitable and may have serious results. "If the rates are fixed too low in the first place, discontent is likely to arise because the relative earnings of piece workers and time workers do not differ enough to remunerate the former for their greater exertions; while if they are fixed at a level which raises the wage cost of output, the employer will be faced with the alternative of either reducing the rate subsequently or else dismissing some of his men." [1] Moreover, the market price of the product may decline; indeed, if as a result of the introduction of incentive payments in a particular industry output rises sharply, there is a considerable probability that such a price decline will occur. In such circumstances rate reductions may be inevitable. With a bonus system under which labour costs per unit of output decline as output rises, the need for such reductions will not, however, develop so soon as under straight piece work, and it may often be avoided altogether.

It is, moreover, a characteristic of bonus systems that they are based on specified standards of performance, and the need to specify such standards provides a powerful stimulus to the adoption of systematic methods of job analysis, work measurement and rate setting. For this reason, as well as because of the premium they place upon efficient work, bonus systems are often referred to as "efficiency wage systems". With the adoption of systematic methods of rate setting, including time and motion studies, the risk of serious error in fixing rates for new jobs is much reduced.

As a rule, the standards of work performance associated with bonus systems are set, whether by rule of thumb or by systematic job study techniques, at levels designed to enable all, or almost all, workers to earn some bonus, and at the same

[1] Maurice DOBB: *Wages, op. cit.*, pp. 59-60.

time to provide a stimulus to effort. When a bonus system is first introduced the objective, therefore, is usually to enable workers to earn, with reasonable effort, more than they had previously earned under time or straight piece work and at the same time to bring about some reduction in production costs.

The various types of bonus systems have been classified in different ways. The present report distinguishes two main groups: *(a)* premium bonus systems, which give a bonus for savings in the time required to perform a certain operation; and *(b)* task bonus systems, which give a bonus to workers who attain a certain standard of efficiency. Examples of these types are described below. In each case the description is in terms of the individual worker, but it should be remembered that these and other systems of payment by results may be applied either on an individual or on a group basis. In the latter case the remuneration of the individual depends on the average or total performance of the group to which he belongs. In some cases an individual bonus system is applied in certain departments of an undertaking and a group system in others, in order to place all workers on a comparable basis even if the individual output of some of them cannot be measured.[1]

Finally, examples are given of "safeguard" clauses in collective agreements which have been found desirable in various cases where bonus systems are in use.

Premium Bonus Systems

The Halsey and Halsey-Weir Systems.

Under the Halsey and Halsey-Weir systems a standard time is allowed for the completion of a certain piece of work or job. If the work is done in exactly this time, the worker will be paid a wage equal to the hourly or daily rate for this amount of time. If the work is done in less time, the worker will be paid at the ordinary rate for the time taken and will receive in addition a percentage of the time saved as a bonus. The bonus amounts to one-third of the time saved at the ordinary hourly rate in the case of the Halsey system, and one-half in the case of the Halsey-Weir system. Thus under the Halsey system the wage equals time taken plus one-third time saved; and under

[1] For discussions of the special problems connected with group bonus schemes see C. W. LYTLE: *op. cit.*, Chap. 16; and Z. C. DICKINSON: *Compensating Industrial Effort* (New York, 1937), Chap. 14.

the Halsey-Weir system the wage equals time taken plus half time saved. For example, if the hourly wage rate is six money units and the standard time for a job is ten hours, a worker who does it in seven hours will receive a payment of 42 money units plus *(a)* in the case of the Halsey system, a bonus payment for one hour at the ordinary hourly rate for the three hours saved (six money units) or a total of 48 money units for seven hours' work (6.9 money units per hour) ; or *(b)* in the case of the Halsey-Weir system, a bonus payment for one-and-a-half hours at the ordinary hourly rate for the three hours saved (nine money units), or a total of 51 money units (7.3 money units per hour).

The Rowan System.

Under the Rowan system a standard time is also allowed for the completion of a certain job, and a bonus is similarly paid for any time saved. The bonus takes the form of a percentage which is added to the worker's ordinary hourly rate. This percentage is equal to the proportion which the time saved forms of the standard time. For example, if a worker's performance and ordinary hourly rate are the same as in the illustration given in the preceding paragraph, the bonus percentage will be 30 per cent., since the standard time is ten hours and the time saved is three hours. The worker will be paid for the time taken to do the job (seven hours) at his ordinary hourly rate (six money units) plus 30 per cent. The rate at which he will be paid is thus 7.8 money units per hour ; and his total pay will be 54.6 money units.

Under the Halsey, Halsey-Weir and Rowan systems, the worker will, in the circumstances detailed above, be paid at hourly rates of 6.9, 7.3 and 7.8 money units respectively. The Halsey system appears to be the least, and the Rowan scheme the most liberal of the three schemes. However, it should be noted that while a worker can never double his earnings under the Rowan system, earnings will be doubled, for example, under the Halsey-Weir system when the time saved reaches two-thirds. The Rowan system is thus more liberal than the other two systems in the early stages of speeding-up, but not so liberal in the later stages.[1]

[1] Cf. C. W. LYTLE : *op. cit.*, pp. 202-210 and 257-265 ; Maurice DOBB : *op. cit.*, pp. 61-62 ; and *Industrial Relations Handbook*, *op. cit.*, pp. 179-180.

Task Bonus Systems

The task bonus systems are similar to the premium bonus systems in that both types set a certain standard or "task" on the basis of which the bonus payments, if any, are calculated. The standards set by the task bonus systems are, however, determined by scientific evaluation of what the average worker should be able to do in a certain time. Further, under a task bonus system a substantial bonus is payable to workers who reach a certain standard of efficiency.

The Taylor Differential Piece Work System.

Under the Taylor differential piece work system, a worker who reaches or exceeds the standard day's output as determined by scientific methods is paid at a higher piece rate than workers who fail to reach the standard. Further, this higher rate is increased with each increase in the worker's output.

The Gantt System.

Under the Gantt system the "task" is set very high, often as much as double normal output, but the bonus which is paid for reaching the "task" is correspondingly high, for example, 50 per cent. of the ordinary hourly rate. The workers who do not reach the "task" get only a guaranteed minimum wage.

The Emerson Efficiency System.

The Emerson efficiency system is similar to the Gantt scheme, but the "task" is not set so high, being designed for the average worker. The bonus is also smaller, but increases gradually as the worker reaches the "task". Thus, a worker who reaches the "task" is regarded as being 100 per cent. efficient. The bonuses begin at 66 per cent. efficency and a small bonus is paid for increases in efficiency from 67 per cent. upwards, until at 90 per cent. efficiency the bonus is 10 per cent. of the ordinary hourly rate. For every 1 per cent. increase in efficiency beyond 90 per cent. 1 per cent. is added to the bonus, until at 100 per cent. efficiency a bonus of 20 per cent. of the ordinary hourly rate is earned.

It can be seen that these three systems reward the efficient and penalise the inefficient worker. The penalty is generally least in the case of the Emerson efficiency system unless a worker's efficiency is very low, in which case the Taylor system

is most severe, because under this system the worker is paid by piece rate for all levels of output.[1] Legislation in many countries, however, ensures that a worker on piece rates is paid a certain minimum hourly or daily wage.

Safeguards

Certain safeguards have been shown by experience to be desirable in order to ensure that systems of payment by results may operate in an equitable manner. A recent study of incentive wage provisions in collective agreements in the United States notes the following principal safeguards:

(1) participation [of the trade union concerned] in rate setting either by joint negotiation of new rates before they are put into effect, or by appeal through the regular grievance procedure if incentive rates are found to be unsatisfactory; (2) guaranteed minimum rates and maintenance of a normal incentive differential above the base rate; (3) guarantee of earnings when a worker's output is reduced through no fault of his own, such as machine breakdown, transfers at the request of management, work on unrated operations; (4) assurance that rates will not be cut unless changed conditions warrant such adjustment; and (5) provision for computing extra pay on a daily basis so that poor days do not reduce extra pay earned on days when the workers exceed the standard.[2]

The following are examples of collective agreement provisions covering these points:

(1) *Union participation in establishing or changing incentive rates.* Piecework prices shall be settled by the price committee and each employer in the association, in conferences which are to take place outside of the regular working hours of the shop, and at such times as are agreed upon by the committee and the employer; such piecework prices so fixed and agreed upon shall be reduced to writing, and copies of such writing shall be delivered to each party and to the office of the union and shall be final and binding upon both; whenever piecework prices cannot be agreed upon by the committee and the employer, such dispute, in the first instance, shall be referred to a representative of the union and the association; if such representatives fail to agree, the matter shall be referred within forty-eight (48) hours to the impartial chairman who shall have the right to take such evidence and order such tests to be made,

[1] Cf. C. W. Lytle: *op. cit.*, pp. 111-120, 179-193 and 271-276; Maurice Dobb: *op. cit.*, pp. 63-64; and *Industrial Relations Handbook*, *op. cit.*, pp. 177-179.

[2] U.S. Department of Labor, Bureau of Labor Statistics, Industrial Relations Branch: *Incentive Wage Provisions* (preliminary draft, mimeographed) (Washington, D.C., April 1947), p. 4. Cf. U.K., Ministry of Labour and National Service: *Industrial Relations Handbook*, *op. cit.*, pp. 175-176.

procure such data, and take such other steps as in his discretion may be necessary in order to reach a just and fair conclusion as to such dispute, and the decision then made by the impartial chairman shall be binding upon all parties hereto ; pending determination of such dispute, however, all garments shall be put in production with the understanding that the piecework price thereon shall be settled and fixed before the next ensuing pay day ; workers shall not be required to make garments if not settled as stipulated above. [1]

(2) *Guaranteed minimum earnings.* The union and the company have agreed that all job classifications shall carry minimum weekly full time, full job rates of pay mounting to 100 per cent. of the present base rates of pay. Each individual employee working at piece rates shall be guaranteed weekly earnings equal to this minimum weekly rate. The guarantee of minimum earnings to this minimum weekly rate. The guarantee of minimum earnings to piece rate workers shall not apply to learners or handicapped employees and this clause shall not preclude the exception of substandard operatives upon agreement between the company and the union. [2]

(3) *Guaranteed earnings under special conditions.* In addition to the daily guarantee, incentive workers are paid their guaranteed hourly rate in the following instances : (i) lack of sufficient stock or breakdown ; (ii) unrated operations or operations under development ; (iii) during the establishment of production standards ; (iv) call in pay ; (v) visit to first aid room or to company doctor during regular working hours ; (vi) actual time lost due to grievance or negotiation meetings. [3]

(4) *Protection against rate cutting.* The company will continue to establish incentive rates on all production and maintenance jobs where it has been the practice to provide incentive earnings for employees. Once an incentive rate has been established as fair, after a fair trial period under normal operating conditions, there shall be no reduction in such rate during the term of this agreement, unless there is sufficient change in the operation to substantially change job duties or requirements. [4]

(5) *Period for computing earnings.* When a piece worker has finished a job, his earnings therefrom shall not be used to build up subsequent jobs on which he fails to make guaranteed base rate. [5]

In addition to such safeguards relating specifically to wages, collective agreements covering systems of payment by results may contain safeguard provisions relating to the methods to be followed in the time and motion studies on the basis of which standards of work performance are established.

[1] U.S. DEPARTMENT OF LABOR, BUREAU OF LABOR STATISTICS, Industrial Relations Branch : *Incentive Wage Provisions* (preliminary draft, mimeographed) (Washington, D.C., April 1947), p. 11.

[2] *Ibid.*, p. 27.

[3] *Ibid.*, p. 35.

[4] *Ibid.*, p. 23.

[5] *Ibid.*, p. 43.

Profit-Sharing

Profit-sharing is a method of industrial remuneration under which an employer undertakes to pay his employees a share in the net profits of the enterprise, in addition to their regular wages. Thus defined, profit-sharing does not include bonuses or gratuities given at the discretion of the employer. A brief reference to these and to certain types of bonuses required by law in certain countries is made, however, at the end of this section.

Profit-sharing as a form of financial incentive in industry dates back at least to 1820 in France, to the 1860's in England, and to 1869 in the United States.[1] It has been tried in a wide range of industries, but in most countries the number of schemes started has been small in comparison with the total number of firms engaged in industry as a whole. In most countries, arrangements to share profits are a matter for voluntary agreement between employers and employees, but in Venezuela [2], Brazil [3], and certain other countries profit-sharing is required by law.

Genuine profit-sharing has three fundamental elements : (1) the amount to be distributed among participants depends principally on the earnings or net profits of the undertaking concerned ; (2) the proportion of profits to be distributed in this way is determined in advance ; and (3) the benefits of the plan are extended to a substantial proportion, usually at least one-third, of the ordinary wage-earning or salary-earning employees.

In introducing profit-sharing schemes, employers have had in mind a variety of objectives, including the promotion of industrial efficiency and the stabilisation of the working force ; the elimination of labour unrest and strikes ; the elimination of waste in the use of materials and equipment ; the improvement of administration and supervision ; publicity for the firm ; and the realisation of some measure of social justice for the workers.

[1] Cf. B. W. STEWART and W. J. COUPER : *Profit-Sharing and Stock Ownership for Wage Earners and Executives* (New York, Industrial Relations Counselors Inc., 1945), p. 5.

[2] Labour Code Act, 1936, as amended 1945, Chapter II, Division II (I.L.O. : *Legislative Series*, 1945, Ven. 1).

[3] Provision is made for compulsory profit-sharing in the new Constitution of the United States of Brazil promulgated on 18 September 1946. See *International Labour Review*, Vol. LV, Nos. 3-4, March-April 1947, p. 283.

Profit-sharing usually takes one or more of the following forms : (1) cash payments are made to eligible workers at the end of specific periods ; or (2) participation is deferred by placing the profits which are to be divided in a savings account, provident fund or annuity fund for the benefit of the eligible workers ; or (3) payment is made by the allotment of shares of stock to eligible workers. The third form is sometimes described as " labour co-partnership ".

Sharing profits by means of cash payments is the most common of the three methods. Profit-sharing by this method accounts for about two-thirds of the plans introduced in the United Kingdom, and a large percentage of those in the United States.

Deferred participation has been prominent in France. In some establishments it takes the form of placing the bonus in an account on which the employee may draw at any time on short notice. More often, however, the amount is placed to the worker's credit in a provident or superannuation fund and cannot ordinarily be withdrawn while the worker remains in the employ of the company. Frequently each worker's bonus is retained partly or wholly for investment in the enterprise, bearing interest of from 3 to 6 per cent. The accumulations are usually payable to the employee upon his reaching a certain age after a stated period of service or in the event of a serious emergency such as a protracted illness. Usually workers who leave the employ of the company, go out on strike, or are dishonourably discharged, do not participate in the benefits, although in some plans any employee who leaves on account of ill health or for some other good reason receives a part of the amount standing to his credit.

The third type of profit-sharing provides for the issue of stock to employees, in some instances without any payment by the employee, in recognition of superior service for a specified term. A number of plans provide for the issue of stock to employees at a price below the market rate, payments being made in instalments. In some schemes, employees holding shares are given a cumulative preferred dividend. In others, the workers are given certificates from which they receive dividends without holding regular shares. These certificates are not marketable in the same way as shares held by ordinary investors. Where shares are issued free or on favourable terms, there is ordinarily a maximum limit to the number of

such shares set aside for this purpose. The number of shares which each worker is allowed to possess varies greatly, but usually bears some relation to the earnings of the individual concerned. The transfer of shares, except to fellow employees, is usually prohibited, but companies generally agree to purchase such shares in the event of the owner's death or separation from employment. Shares purchased by employees do not always carry voting rights, but when employees hold a considerable amount of stock they are often granted representation on boards of directors.[1]

The amount of the profits distributed among employees, usually in proportion to their annual earnings exclusive of overtime, generally consists of a certain percentage of the net profits for the preceding year, although in some cases the apportionment is made on the basis of the net profits for each quarter or half year. A deduction is sometimes made for time lost through illness, while a reduced bonus is usually paid to employees whose earnings are below a certain level or who have a service record which does not reach the required standard. In the United Kingdom the amount of profits distributed by the various profit-sharing schemes has ranged from 5 to 50 per cent. of the net profits, while in the United States the amount has averaged about 12 per cent. of annual wages.[2]

In addition to profit-sharing as defined above, there are many cases in which employers pay miscellaneous bonuses or gratuities to their workers in addition to regular wages. Some firms, for example, set aside in prosperous years a certain sum or a certain proportion of profits for distribution among their employees. The distinguishing characteristic of such payments is that they are paid at the discretion of the employer and are not determined by any contractual relation or subject to collective bargaining.

In some cases, however, the rules governing the amount and distribution of the bonus are announced in advance and are adhered to over long periods, and workers come to count on such payments as a recognised part of the "net advantages"

[1] Cf. B. W. STEWART and W. J. COUPER: *op. cit.*, Chapters II and V.

[2] Cf. G. S. WATKINS and P. A. DODD: *Labor Problems* (New York, 1940), pp. 758-774. For surveys of recent developments in profit-sharing in the United States, see U.S. BUREAU OF INTERNAL REVENUE: *Prevalence of Profit-Sharing and Pensions Schemes as at 30 June 1947* (Washington, D.C., 1947); and *Business Week*, 8 November 1947, pp. 100-104, "Profit-Sharing Up".

of working for the undertaking concerned. A bonus may be paid, for example, each week, month or year to all workers in a plant or firm in proportion to their earnings and to total output or to the price of the product. In such circumstances the practical effect of the scheme may be similar to that of genuine profit-sharing. One of the best known of these schemes is the Lincoln incentive system, under which workers are paid by piece work, but receive a bonus at the end of each year; the total amount distributed as bonuses is the sum which is left after taxes, dividends and reserves have been deducted from the profits for the year.[1]

Finally, it may be noted that in some countries it is customary to grant employees a Christmas bonus, which is usually a sum equal to a certain percentage of the regular wage, salary or earnings of each employee during the year. For example, in the United States approximately one-third of the manufacturing and two-fifths of the non-manufacturing organisations studied by the Bureau of Labor Statistics in 1945 and 1946 paid their workers Christmas bonuses.[2] In some other countries all firms are compelled by law to pay a Christmas bonus to their employees. For example, in Argentina each worker must be paid a Christmas bonus amounting to one-twelfth of his yearly earnings.[3] In Bolivia, a Decree issued by the Council of Ministers on 2 October 1947 stated, *inter alia,* that commercial and industrial undertakings which made net profits during the years 1945 and 1946 are under an obligation to pay annual bonuses to their salaried and wage-earning employees on the basis of one month's salary to the salaried employees and fifteen days' wages to the wage-earners, in accordance with the Act of 22 November 1945 and the General Labour Act and rules issued thereunder.[4]

[1] Cf. James F. LINCOLN: *Lincoln's Incentive System* (New York, 1946); *Hauts salaires, bas prix de revient: Une expérience américaine réussie* (Paris 1948); *The Industrial Relations Forum of the Conference of Economic Groups* (Tulsa, Oklahoma), December 1947, pp. 3-4, "Incentive Management"; and *Partners*, January 1948, "There must be Incentives", by J.F. LINCOLN (Chicago, 1948).

[2] Cf. *Monthly Labor Review*, October 1947, pp. 451-452.

[3] Legislative Decree No. 33302/45 of 20 December 1945 (*Boletín Oficial*, No. 15373, 31 December 1945) given force of law by Act No. 12921 of 31 December 1946 (*Boletín Oficial*, 27 June 1947). Cf. *International Labour Review*, Vol. LIII, Nos. 3-4, March-April 1946, p. 247.

[4] Communication from the I.L.O. Correspondent in La Paz, October 1947.

Contracting and Sub-Contracting

Under the contract system, individual workers or groups of workers contract to do a certain amount of work for a certain price. Since the contract in question is not a contract of service, and the relationship involved is not one of employer and employee, the price agreed upon is not, strictly speaking, a wage and the contract system is not a system of wage payment. It is, however, mentioned briefly at this point because of its importance in certain trades, the fact that the position of the workers involved is in many respects analogous to that of wage-earners, and the fact that historically the contract system has often proved the forerunner of systems of wage payment by results.

Contracting and sub-contracting are common in the garment manufacturing industry, where home workers perform certain operations upon partly manufactured garments, or even make complete garments for a sum agreed upon in the contract or sub-contract. Generally speaking, the majority of those engaged in such work are women, although sometimes whole families, including children, take part in it. As is well known, the system is one which lends itself readily to "sweating" and exploitation, and one of the earliest objectives of factory and minimum wage legislation was to eliminate such exploitation. This was also one of the main purposes of the Convention and Recommendation concerning minimum wage-fixing machinery adopted by the International Labour Conference in 1928.[1] In many countries, as a result, home workers and others engaged under systems of contracting and sub-contracting are given some measure of protection.[2] Further action of this kind would, however, appear to be desirable, especially where, as in many Asian countries, larger numbers of people are engaged in home work than in industrial establishments.[3]

A special form of contracting, known as the group or

[1] For the texts of this Convention and Recommendation see Appendices V and VI of the present report. Cf. also INTERNATIONAL LABOUR OFFICE: *The International Labour Code* (Montreal, I.L.O., 1941), p. 47, notes.

[2] Cf. INTERNATIONAL LABOUR OFFICE: *The Law and Women's Work* (Geneva, I.L.O., 1939), pp. 374-375, 380-381, and Chapter III, Appendix; and *The Minimum Wage: An International Survey* (Geneva, I.L.O., 1939), pp. 51-57, 67-71, 91-93 and 180-182.

[3] Cf. *The Economic Background of Social Policy including Problems of Industrialisation*, Report IV, Preparatory Asian Regional Conference of the International Labour Organisation (New Delhi, I.L.O., 1947), pp. 56-63.

co-operative contract system, is found in certain industries, notably the construction industry, in some countries. The main features of this system as it operates in New Zealand have been described as follows :

> The method of payment and of organising work known as co-operative contracting . . . is chiefly used where groups of workmen are employed in the construction of such public works as roads, railways and hydro-electric schemes, though it is also found on a small scale in the mining industries, in the sawmilling industry for extracting timber from the bush, and in a few instances in the meat-freezing industry. The method is one of payment according to the output of a group, but, unlike a group piece wage, each contract is negotiated separately, no standard piece rate being possible on most of the work to which it applies. Moreover, it is distinguished from other forms of collective payment by results, because the discipline of the group is left entirely to the members of it. They select their own leader who negotiates the contract, decide who shall belong to the group, and share the collective payment among themselves in what manner they please. The organisation of the work also is left to the group. The employer provides the necessary tools and equipment and a detailed plan or specification of the work, but he does not supervise the workmen, apart from seeing that the work is carried out according to specification.[1]

The group or co-operative contract system appears to have worked well at least in certain cases. The number of industries to which it can be applied is, however, limited. A further difficulty is that in certain types of work it is not easy to control the quality of the work performed.

Conclusions

While it is not the purpose of the present report to make recommendations, certain of the conclusions which emerge from the foregoing brief survey of systems of wage payment may be briefly noted.

No one system of wage payment can be regarded as being the best for all conditions. Each has its own particular advantages and disadvantages. In some cases a combination of two or more of the systems described above may give the greatest satisfaction to both employers and employees.

[1] A. E. C. HARE : *Industrial Relations in New Zealand* (London, 1946), pp. 123-124. Cf. *International Labour Review*, Vol. LI, No. 2, February 1945, pp. 167-190, " Co-operative Contracting in New Zealand ", by A. E. C. HARE ; and NEW ZEALAND WATERFRONT CONTROL COMMISSION : *Annual Report and Accounts for Period 1 April 1941 to 31 March 1945* (Wellington, 1945), pp. 4-5, 16, 20-74. This report contains interesting detailed statistical information on the results of the co-operative contract system in the waterfront stevedoring industry in New Zealand.

Whichever system is adopted, it is important that it should be applied in such a manner that the worker will be able to calculate his own wages. Simplicity is important for both employer and employee. In the case of payment by results certain special safeguards are generally desirable. When any new system is introduced, or a major change is made in an existing system, its successful application will be greatly facilitated if care is taken in advance to ensure that it is fully understood by both management and workers.

Finally, it may be suggested that in the selection of systems of wage payment, as in other aspects of wage policy, consideration should be given to their relation to the general objectives of wage policy discussed in Chapter I above.

CHAPTER III

FACTORS IN WAGE DETERMINATION

In the conditions of the modern economy, wages are fixed in three main ways: by individual bargaining; by collective bargaining; or by authoritative regulation. In many countries individual bargaining, collective bargaining and authoritative wage-fixing are all to be found in operation in different industries or occupations. For example, in the United Kingdom in July 1946 the wages of 61 per cent. of all insured workers were set by voluntary collective bargaining (including the Whitley system of national joint industrial councils), about 30 per cent. by wages councils or wages boards, which are statutory wage-fixing bodies, and the remainder by individual bargaining.[1]

At different stages in the development of economic thought various theories have been advanced to account for the wage levels which prevail in different industries under different conditions of bargaining and wage-fixing. The main elements in these theories may be summarised as follows:

Subsistence theory. Wages are determined by the cost of providing subsistence for the workers.

[1] Cf. *Planning*, Vol. XIV, No. 272, 3 October 1947, pp. 101-119, "The Framework of Collective Bargaining". The wages of 4,665,000 workers, or 31 per cent. of all insured workers, in the United Kingdom in July 1946 were determined by voluntary collective bargaining between the employers' and workers' organisations of six key industries, namely, coal, iron and steel, engineering and shipbuilding, building and civil engineering, cotton, and railways. A further 30 per cent., *i.e.*, 4,500,000 workers, were in industries covered by the voluntary Whitley system of national joint industrial councils. These industries included the brick, wool and worsted, hosiery, boot and shoe, printing, pottery, dock, chemical and shipping industries, national and local government services, and certain branches of retail distribution. These 4,500,000 workers had their wages determined either by voluntary collective bargaining independently of the national joint industrial councils (as in the case of the boot and shoe, printing, and pottery industries) or by the use of the machinery of these councils for the negotiation of voluntary wage agreements. Cf. U.K., MINISTRY OF LABOUR AND NATIONAL SERVICE: *Industrial Relations Handbook* (London, H.M. Stationery Office, 1944), Sections II, III, VIII and XII; and J. H. RICHARDSON: *Industrial Relations in Great Britain* (Geneva, I.L.O., 1938), Chap. IV. For an account of the Whitley system, see MINISTRY OF LABOUR AND NATIONAL SERVICE: *op. cit.*, pp. 28-106; and J. H. RICHARDSON: *op. cit.*, pp. 132-141. For a complete list of industries in the United Kingdom which had national joint industrial councils in 1944, see MINISTRY OF LABOUR AND NATIONAL SERVICE: *op. cit.*, pp. 204-231.

Wage fund theory. After rent and raw materials are paid for, a definite amount remains for labour. The total wage fund and the number of workers determine the average worker's share in the form of wages.

Residual claimant theory. Wages represent the amount of value created in production that remains after payment has been made to all productive factors other than labour.

Standard of living theory. Wages are determined by the standard of living of the wage-earners.

Demand and supply theory. Wages depend upon the demand and supply of labour.

Marginal productivity theory. A refinement of the demand and supply theory ; wages are determined by the value of the net product of the marginal unit of labour employed.

Bargaining theory. Wages are determined by the relative bargaining power of workers or trade unions and employers.[1]

Most economists now confine their explanation of the determination of wages in a modern free labour market to a combination of the marginal productivity theory and the bargaining theory. Even where the labour market is not free and the wage rates for different occupations are fixed by wage boards or other wage-fixing authorities, the marginal productivity theory helps to explain the limits within which it is practicable for such authorities to fix particular wage rates.

In the following pages the determination of wages by individual bargaining, by collective bargaining and by authoritative regulation is briefly analysed in terms of the marginal productivity and bargaining theories.

Determination of Wages by Individual Bargaining

When wages are determined by individual bargaining each individual worker bargains separately with his employer. The way in which wages are determined by such bargaining can be understood more clearly on the alternative assumptions of the existence of the two extreme conditions of perfect competition

[1] Cf. Maurice DOBB : *Wages* (London, 3rd edition, 1947) ; Paul H. DOUGLAS : *The Theory of Wages* (New York, 1934) ; Edmund WHITTAKER : *A History of Economic Ideas* (New York, 1940), pp. 571-607 ; and J. E. WALTERS : *Personnel Relations* (New York, 1945).

and monopsony in the labour market.[1] It is also assumed for the purposes of this part of the discussion that perfect competition prevails in the markets for the products of industry, and that every worker in a given category is of equal skill and efficiency.

Determination under Conditions of Perfect Competition

Perfect competition prevails in a market (1) when there is no artificial restriction upon the movement of factors of production from occupation to occupation in search of the highest reward ; and (2) when no single unit of control — *i.e.*, no single individual or company which is deciding to buy or to sell something — can by its own action appreciably affect the price of the thing bought or sold.

The first condition implies that there are no artificial restrictions preventing labour from moving from a low paid to a highly paid occupation, or preventing owners of capital and land from lending these factors to those producers who offer the highest rate of interest or rent, or preventing producers of raw materials from selling their products to those who offer the highest price for them, or preventing new producers from setting up a firm in any industry in which abnormally high profits are to be obtained. . . .

The second condition requires that the three following conditions must be satisfied : *(a)* there must be a large number of independent sellers ; *(b)* there must be a large number of independent buyers ; and *(c)* the market for the commodity must be perfect in the sense that every buyer must buy from the seller who is offering the lowest price and every seller must sell to the buyer who is offering the highest prices.[2]

The condition that there must be a large number of independent sellers is satisfied as far as a labour market is concerned when there is individual bargaining. Such a situation is typical of the labour market for a few industries of all countries and for most industries of some countries. The other conditions,

[1] The meaning of the term " perfect competition " is explained above. " Monopsony " is a term having the same meaning in the field of buying as monopoly has in the field of selling. A monopsonist is a single buyer. Thus monopsony exists in a labour market when there is a single buyer for the labour offering in the market.

Perfect competition does not exist in real life, but an assumption of the existence of this condition facilitates and clarifies the somewhat arid discussion of the theories of wage determination. Monopsony may exist in real life in certain circumstances, as is explained below. For a full theoretical explanation of the problems raised in the next few pages see Joan Robinson : *The Economics of Imperfect Competition* (London, 1933), especially Books VIII and IX.

[2] J. E. Meade : *An Introduction to Economic Analysis and Policy* (Oxford, 1936), pp. 96 and 126.

(b) and *(c)* above, do not generally exist in the labour market in real life, but it is convenient for purposes of theoretical exposition to begin by assuming that they do.

On the assumption that perfect competition exists in the labour market and in the product market, and that every worker of a given category is of equal skill and efficiency, it can be stated as a preliminary proposition that every worker in that category will receive a wage equal to the value of the marginal product of that type of labour.[1] Some explanation of this proposition is desirable in order that its implications may be clearly understood.

The marginal product of labour in any industry is the amount by which the output would be increased if one more man (or one more man-hour of labour) was employed while the quantities of the other factors of production employed in the industry remained constant. The value of the marginal product of labour is the price at which the marginal product can be sold in the market. Under conditions of perfect competition in the labour market an employer will continue to employ more and more men (or more and more man-hours of labour) until the value of the product of the last man (or last man-hour of labour) he employs (the marginal product) is equal to the wage [2] he must pay in order to obtain the services of this man. The employer has to pay the market wage, because under conditions of perfect competition there are many independent employers all bidding against one another for the services of labour, and no one employer can influence the size of the wage by his own actions.

If wages are raised in industry A to a level that is higher than those in industry B, workers will tend to move into industry A. Now the marginal product of labour in industry A will fall as men move into this industry from industry B, if the quantities of the other factors of production employed in the

[1] This proposition has to be modified in certain respects, as will be seen shortly. The effects of the removal of the assumption that perfect competition exists in the market for the product of labour are examined below.

[2] In technical language, an employer will continue to employ more men (or more man-hours of labour) until the value of the product of the last man (or man-hour) he employs is equal to the marginal or additional cost of employing the last man (or man-hour). If competition in the labour market is perfect, the marginal cost of labour is always equal to the wage rate, which remains the same no matter how many men the employer may engage. (Cf. table III, below.)

industry remain constant.[1] Further, under conditions of perfect competition in the product market the price which can be obtained in the market for each unit of the output of industry A will fall as output increases. For both these reasons, therefore, the value of the marginal product of industry A will continue to fall as men move into the industry from industry B until the value of the marginal product of labour in both industries is the same, that is, until the wages in each industry are the same.

Similar reasoning can be applied to the whole labour market of an economy and to the other factors of production. Thus, it can be shown that each factor will be substituted for the other until the value of the marginal products of all the factors (including labour) is the same throughout the economy, irrespective of the quantity of each factor which is employed.[2]

At this point, a simplification in the analysis must be removed. So far it has been assumed that the quantities of the other factors of production remain constant while the quantity of labour increases. This is a simplification, as in real life the quantities of other factors of production will generally be increased if the quantity of one factor is increased, though this may not be true in the short run. To allow for this fact, the term "marginal net product of labour" should be substituted for the term "marginal product of labour" which has been used so far. The "value of the marginal net product of labour" may be defined as being the value of the amount by which output would be increased by employing one more man (or man-hour) with the appropriate addition of the other factors of production, less the addition to the cost of the other factors caused by increasing the quantities of the other factors.[3]

The preliminary proposition set out above[4] may therefore be restated as follows: under conditions of perfect competition

[1] That this is so can be seen from the fact that the output per man is less if three men have the use of two shovels than if the two men can use the two shovels.

[2] In the interests of brevity, the above analysis has left out of account the costs of movement of labour and other factors of production from one industry to another. The general conclusion reached holds good also, however, if account is taken of the fact that a factor of production will move from one industry to another only if the value of its marginal product in the one industry exceeds the value of its marginal product in the other by more than the cost of movement. For a discussion of this point reference may be made to J. E. MEADE: *op. cit.*, pp. 112-118.

[3] Cf. Joan ROBINSON: *op. cit.*, pp. 238-241.

[4] See p. 29 above.

in the labour market and in the market for the products of industry, and irrespective of the number employed, every worker will receive a wage equal to the value of the marginal net product of his labour.

Determination under Conditions of Monopsony

As was explained above [1], monopsony prevails in a labour market when there is a single buyer for all the labour offering. In the discussion which follows it is assumed that perfect competition prevails as far as the sellers of labour [2] (the workers) are concerned, and that monopsony exists as far as the purchase of labour is concerned. It is assumed further that all workers are of equal skill and efficiency, and that perfect competition prevails in the product market.[3]

If there is just one buyer for all the labour in the market, it is obvious that he can exert a considerable influence over the level of employment in the industry and thus over the price of labour. For example, if the total available supply of labour in a particular labour market is 500 men and a monopsonist (*e.g.*, an employers' association acting on behalf of a number of firms) decides to employ only 250 men, the services of the 250 men can be obtained at a wage rate less than would have to be paid for the services of 500 men, because 500 men bargaining individually will be competing against one another for only 250 jobs.

The possible consequence of the monopsonist's ability to alter the employment in his industry and the price of the labour he employs are illustrated by the following table. The figures, of course, are purely hypothetical and do not necessarily bear any relationship to the position in any particular case.[4]

[1] See footnote 1, p. 38 above.

[2] The case where some degree of monopoly power is also exercised by the sellers of labour is dealt with later in this chapter.

[3] This case is presented for illustrative purposes; in reality, a monopsony position in the labour market is often accompanied by monopoly rather than perfect competition in the product market. However, an employer may have a monopsony position in a local labour market and sell his product in competition with other producers in a national or international market.

[4] In order to avoid unduly complicating the illustration, it is assumed that the quantity of other factors of production in use remains the same whatever number of workers is employed; columns 3 and 5 therefore show the marginal product rather than the marginal net product.

TABLE III. WAGES PAID BY A SINGLE FIRM UNDER CONDITIONS OF PERFECT COMPETITION IN THE PRODUCT MARKET AND OF *(a)* PERFECT COMPETITION AND *(b)* MONOPSONY IN THE LABOUR MARKET [1]

Under	Employment	Output	Marginal product [2]	Price of product	Value of marginal product	Wage rate (supply price of labour)	Total wages paid	Marginal wage cost [3]
	1	2	3	4	5	6	7	8
	19	1,157	—	1	—	33	627	—
(b) Monopsony	20	1,212	55	1	55	34	680	53
	21	1,265	53	1	53	35	735	55
	22	1,316	51	1	51	36	792	57
	23	1,365	49	1	49	37	851	59
	24	1,412	47	1	47	38	912	61
	25	1,457	45	1	45	39	975	63
	26	1,500	43	1	43	40	1,040	65
(a) Perfect competition	27	1,541	41	1	41	41	1,107	67
	28	1,580	39	1	39	42	1,176	69

[1] In order to avoid unduly complicating this illustration it is assumed that no additional units of the other factors of production are employed as more men are hired.

[2] The marginal product is the extra output which can be obtained by employing an additional man. For example, if 25 men are employed, the marginal product may be found by subtracting the output for 24 men from the output for 25 men (column 2 in the above table). This is equal to 45 units (column 3). The value of the marginal product (column 5) can be found by multiplying the marginal product by its market price. In the table, the market price of the product (column 4) is constant because it is assumed that perfect competition prevails in the market for the product.

[3] The marginal wage cost is the extra cost of employing an additional man. For example, if 25 men are employed, the marginal wage cost may be found by subtracting the cost of employing 24 men (*i.e.*, the total wages paid) from the cost of employing 25 men (column 7). The marginal wage cost of employing the 25th man is thus equal to 64 money units (column 8).

Under perfect competition, the wage rate paid by any firm is independent of the number of workers it hires, since by definition each firm employs only an insignificant fraction of the industry total. Consequently the marginal wage cost to any one firm is always equal to the prevailing market wage, for the given volume of employment in the industry as a whole. Accordingly, it would pay any one firm to hire another worker, up to the point where the supply price of labour is equal to the value of the marginal product. This point will be reached for all firms in the industry when 27 men are employed. No firm would hire the 28th man, because the supply price (42 money

units) would then exceed the value of his marginal product (39 money units). Thus, under perfect competition 27 men will be hired, each at a wage of 41 money units, and the total wage bill will be 1,107 money units. The wage rate will be equal to the value of the marginal product of labour.

Under monopsony, however, the employer will employ more men only so long as the cost of employing an extra man (marginal wage cost) is less than the value of his marginal product. Since in this case the wage rate paid by the single firm will increase with each increase in the number employed by it, the marginal wage cost, instead of the supply price of labour, will be compared with the value of marginal product. The point at which the marginal wage cost equals or exceeds the value of the marginal product will be reached at a lower level of employment than the point where supply price equals or exceeds the value of marginal product. In the example given in the table, 20 men will be employed at a wage rate of 34 money units (see column 6) since the marginal wage cost of 53 money units (see column 8) is less than the value of the marginal product (of the 20th man), which is 55 money units (see column 5). The wage rate paid is substantially below the value of the marginal product of labour. On the other hand, 21 men would not be employed at a wage rate of 35 money units, because the marginal wage cost of employing the 21st man would be 55 money units, which is greater than the value of his marginal product, which is 53 money units.

Monopsony conditions may be created in the labour market, even when there are several employers operating in it, if they all bargain as a unit, for example, through an employers' association. The results with regard to wages and employment will then be the same as if all firms were united under a single management. The association will set a wage equal to the supply of labour for the level of employment at which marginal wage cost to the association of firms as a unit is equal to the value of the marginal product, or, more generally, the value of the marginal net product, of labour, and each firm in the association will then employ labour at that wage rate, up to the point where the wage rate is equal to the value of the marginal product of the labour in the firm concerned.

In general, it can be stated that under conditions of monopsony in the labour market and perfect competition in the market for the products of labour, and with each worker bargaining as an individual, each employed worker will receive a wage which

will always be less than the value of the marginal net product of his labour.

Determination under Actual Market Conditions

It will be recalled that two of the conditions for perfect competition are that *(a)* there must be a large number of independent sellers ; and *(b)* there must be a large number of independent buyers.[1] In real life there may sometimes be in a particular labour market a large number of independent sellers of labour (unorganised workers), but there will not usually be a large number or independent buyers of labour (employers), so that it can be stated that perfect competition in a labour market is seldom found. Another reason why this is true is that the perfect mobility of labour which was assumed earlier does not exist. Various obstacles to the movement of workers make it difficult for them to obtain the value of their marginal net productivity by shifting from one job to another. Where perfect competition does not prevail, " monopolistic competition " or " imperfect competition " (which includes the case of monopsony) are said to exist. It can be shown by reasoning similar to that of the preceding section that the proposition stated in the last paragraph is true for all conditions of imperfect competition as well as for the particular condition of imperfect competition known as monopsony. Thus, where workers bargain as individuals they will always receive a wage rate which is less than the value of the marginal net product of their labour, unless perfect competition prevails among their employers. The wage rate is at its lowest under monopsony, but increases as competition becomes less imperfect until the maximum wage rate which is payable under conditions of perfect competition is reached.

So far it has been assumed that perfect competition exists in the market for the products of labour. Similar reasoning to that of the preceding pages would show that labour receives less than the value of its marginal net product if imperfect competition prevails in the market for the products of an industry whether perfect competition of imperfect competition (including the extreme case of monopsony) exists in the labour market.[2]

[1] See p. 38 above.

[2] For the moment, the effects on wage rates of the exercise of bargaining by strongly organised trade unions are ignored. Such effects are discussed later).

Now, since imperfect competition is generally the rule in real life in both the labour market and the market for the products of labour, it can be stated as a general conclusion that most workers who bargain as individuals will usually receive a wage less than the value of the marginal net product of their labour.

Before proceeding, in the next section, with an analysis of the determination of wages by collective bargaining, it should be noted that the exposition so far has been in terms of the marginal productivity theory, the assumptions of which may perhaps be thought to be unrealistic. The theory assumes that employers know, or at least act as if they knew, the size of the marginal net product of their workers, and that they actually balance the cost of the marginal net product against what they can get for it in the open market and employ or do not employ an extra man accordingly. It assumes further that business men are aware of, or at least act as if they were aware of, the nature of the demand for the products of their industry. Whether many business men do in fact succeed in obtaining exact information concerning the nature of the demand for their products and the size of the marginal net product of their workers, and act on the basis of such information, is at least doubtful.[1] But it seems probable that a sufficient proportion of them develop, partly through the use of modern systems of cost accounting, but more often by trial and error in the experience of producing and selling in competition with others, production practices and other rules of action which yield much the same results as if they acted on the basis of a more exact knowledge. It seems reasonable therefore to conclude that the marginal productivity theory does explain the way in which wages tend to be determined under conditions of individual bargaining.

Determination of Wages by Collective Bargaining

The preceding pages discussed what happens when workers all bargain individually, that is, when they make no attempt to modify the competition of the labour market by combining together in trade unions for the purpose of collective bargaining and thus exercising some degree of monopoly power. These conditions exist in a few occupations in most modern economies

[1] Cf. R. F. HARROD: "Price and Cost in Entrepreneurs' Policy", in *Oxford Economic Papers*, May 1939, p. 4; and E. R. WALKER: *From Economic Theory to Policy* (Chicago, 1943), p. 74.

and in a large proportion of occupations in less developed economies, but in the case of a steadily increasing proportion of occupations workers do avail themselves of the advantages of trade union organisation, and wages are fixed by the process of collective bargaining. Moreover, the wage rates fixed in this way influence the results of individual bargaining in other occupations.

An examination must, therefore, be made of the situation known as bilateral monopoly, which exists in a labour market when both the buyers and sellers of labour are strongly organised and consequently possess and exercise considerable bargaining power. Such an examination can be more conveniently conducted in terms of the bargaining theory than the marginal productivity theory [1] which has been used so far in the analysis of the problem of wage determination.

According to the bargaining theory, both the employers and the workers place a valuation on the price of labour. The employers' initial offer will generally be a minimum and the workers' initial demand a maximum. The actual wage rate which is embodied in a contract will depend upon the relative bargaining strength and skill of the employers and the workers. If the employers are the stronger party, they may be able to keep the wage rate down or to reduce it to the rate that would prevail under conditions of monopsony in the labour market. If on the other hand the workers are the stronger party, they may be able to secure a wage rate which approximates to the value of the marginal net product of their labour. In other words, the workers, by the exercise of their bargaining power, may be able to obtain a wage rate as high as that which would prevail if perfect competition existed in the labour market.

There is even a possibility that in certain circumstances a strongly organised trade union may be able to secure and to maintain for some time a wage rate above the value of the marginal net product of labour in the industry concerned. The circumstances in which this may occur can be best understood after considering what is likely to happen in the normal case. If as a result of collective bargaining wages in a particular industry are raised above the value of the marginal net product,

[1] The marginal productivity theory can, of course, be applied to conditions of bilateral monopoly, but the exposition is too involved for the purposes of this report. Cf. *The Quarterly Journal of Economics*, August 1947, pp. 503-532, " Prices and Wages under Bilateral Monopoly ", by Wm. FELLNER.

the entrepreneur may be expected to try to avoid a lowering of his profits by raising the price of the product in order to cover the increase in his labour costs. The effect of such a rise in the price of the product (other things being equal) will be that the quantity demanded will fall to an extent depending upon the size of the price increase and the degree of elasticity of demand for the product.[1] If, as is commonly the case, unit costs rise as output falls, the decline in sales will reduce profits. The immediate effect of raising wages in a particular industry above the value of the marginal net product of labour is thus likely to be some rise in the price of the product and some decline in profits. The cost of the wage increase will therefore be borne in part by consumers in general and in part by the employer. Whether the workers in the industry concerned will gain on balance is at least doubtful. Workers in other industries may take steps to bring their wages into line with those of the workers in the industry concerned, and in the process to bring about a rise in the price of their products and a decline in the purchasing power of wages in general.[2] Alternatively, they may move into the industry in question in order to take advantage of the higher wages ; in so doing they will increase the supply of labour in that industry in relation to the demand for it, thus weakening the relative bargaining power of workers in the industry and undermining their ability to maintain the higher wage. Moreover, so long as the differential wage increase persists, it will tend to reduce employment in the industry concerned : " when forces other than marginal productivity fix the initial wage, the marginal productivity would tend to determine the number who would be employed at these wages ".[3] At the same time the decline in the profits of the industry will discourage new investment in it and will thus tend to reduce still further the numbers it will be able to employ.

Ordinarily, therefore, the benefits obtained by raising wages above the value of the marginal net product are likely to prove

[1] Exceptions to this general rule are to be found in the case of some durable commodities such as steel and automobiles, the demand for which is not a function of price (for moderate price changes) but of the general level of business activity.

[2] Whether this will occur will of course depend on the nature of the general monetary, fiscal and other economic policies being followed in the country concerned. For fuller discussion of the relation between the general level of wages and the general level of employment and of prices, reference may be made to Chapters VI and VII below.

[3] P. H. DOUGLAS : *op. cit.*, p. 66.

short-lived and illusory. In certain circumstances, however, they may be substantial. If, for example, a wage increase stimulates the employer to improve the efficiency of his organisation to such an extent as to raise the value of the marginal net product to the level of the new wage rate, there need be no rise in prices or fall in profits; and the only threat to the workers' gain will come from the gradual influx of labour from other industries. Again, if the industry has a large stock of durable fixed capital or of raw material (such as mineral deposits), the effect of reduced profits on new investment may take a long time to make itself felt, and a strong trade union may be able for a considerable period to secure for its members, at the expense of the owners of capital, a wage higher than the value of the marginal net product. Cases of this kind are, however, exceptions to the general rule. For the great majority of industries at any time, and for the economy as a whole in the long run, the value of the marginal net product would appear to constitute the upper limit to wages.

It would be a gross over-simplification of the process of collective bargaining to assume that the sole objective of the trade union in any negotiation will be to maximise wage rates, or earnings, or that the sole objective of the employer will be to keep these to a minimum. The functions, interests and objectives of a trade union are much broader than those of a monopolistic seller of labour governed solely by the pecuniary calculus [1]; and the factors influencing the policy of the employer may be similarly complex. The course and results of collective bargaining will accordingly be influenced by a wide range of considerations. Among these, ideas of equity and justice are likely to be of special importance. These ideas "provide the substance of equitable comparisons and they govern the administration of consolidated bargaining structures. These are the strongest equalising tendencies in wage determination." [2]

Thus the wage rates actually fixed by collective bargaining may or may not be equal to the values of the marginal net product in the occupations concerned. In practice however it would seem probable that in many strongly organised occupa-

[1] Cf. *American Economic Review*, September 1947, "The Trade-Union as a Wage-Fixing Institution", by Arthur M. Ross; J. T. DUNLOP: *Wage Determination under Trade Unions* (New York, 1944); and Sumner H. SLICHTER: *Union Policies and Industrial Management* (Washington, 1941) and *The Challenge of Industrial Relations* (Ithaca, 1947).

[2] Cf. *Idem*, December 1947, p. 822, "The Dynamics of Wage Determination under Collective Bargaining", by Arthur M. Ross.

tions the wage rates thus fixed do correspond fairly closely to the value of the marginal net product of labour; and there is definite evidence that "real hourly earnings have advanced more sharply in highly organised industries than in less unionised industries".[1]

Determination with Voluntary Conciliation or Arbitration

Voluntary conciliation or arbitration is resorted to in some countries when employers and workers find it difficult or impossible to agree by collective bargaining on wage rates and other conditions of employment. The introduction of a conciliator may facilitate agreement and may lead to the fixing of wage rates somewhat different from those which would otherwise have been agreed upon, but it does change the essential character of the process. The wages will still be fixed by agreement and will reflect the relative bargaining power and skill of the parties.

Arbitration, on the other hand, introduces an important new element. The essence of it is that the parties undertake to let someone other than themselves fix the wage rates, and to accept his decision as final. The wage rates thus fixed may differ in some degree from what the parties themselves might eventually have agreed upon, and may or may not be equal to the marginal net product of labour in the occupation concerned. In general, however, the rates fixed by an experienced and well-informed arbitrator are not likely to differ greatly from those which might be expected to result from skilled collective bargaining or an actual trial of strength between the parties. The arbitration will as a rule take into account, in addition to the bargaining strength of the parties, such factors as the prevailing wage in other occupations and industries, the cost of living, the ability to pay of the industry or employer concerned, changes in the productivity of the workers, the cost of living, and the arbitrator's conception of the public or national interest. A recent

[1] *The Quarterly Journal of Economics*, February 1948, p. 284, "The Influence of Unionism upon Earnings", by Arthur M. Ross. This conclusion, which was found to hold good "in periods of stable or declining union membership as well as periods of rapid organisation", was reached on the basis of a detailed analysis of movements in real hourly earnings in various industries in the United States between 1890 and 1926 and over the period 1933-1945.

account based on experience in the United States has summarised as follows the part played by these different considerations :

(1) The prevailing wage argument is an ethical one whose appeal to the sense of justice is very frequently effective. Although leadership advances must be achieved by other means, it provides a convenient medium for the dissemination of benefits from industry to industry, within one industry, or within a single plant. Where the principle makes likely an award which lies somewhere between the amounts demanded and offered, the parties may well profit by directing their arguments to the achievement of job evaluations most favorable to their positions.

(2) The cost-of-living factor serves principally to highlight the necessity for wage adjustments ; these may be measured by other criteria, although in certain instances the change in the cost of living itself may provide the measure. When cost-of-living and prevailing wage equities coexist, the latter will usually determine the amount of the adjustment.

(3) "Ability to pay" is most often advanced as a defense to an otherwise justified increase but is seldom effective except against an increase above prevailing rates. Where it is advanced, however, uncertainty as to the future may serve to moderate an award. Small competitors in particular, the exigencies of whose operations can most readily be made apparent, may obtain some relief by setting forth inability to pay. Conversely, ability to pay may support some increase above prevailing rates on the part of a large wage-leader.

(4) Productivity and the national interest provide make-weight arguments which are seldom specifically relied upon in the awards. [1]

Since the first duty of the arbitrator will, however, be to make an award which will be sufficiently acceptable to both sides to be workable, he will be bound to give special weight to their relative strength and to their needs and desires. "He has to remember not to depart so far from a possible compromise, consistent with the respective power and desires of the parties, that one or the other of them will be likely next time to prefer open hostility to peaceful settlement. He has also to remember that a decision is useless if it cannot be enforced, and that the power and ability of the respective parties to administer a decision successfully is an integral part of the decision itself." [2] The arbitrator is thus bound to take into account the relative economic power of the opposing parties and to fix wage rates which correspond fairly closely to these underlying realities.

[1] Cf. *Columbia Law Review*, September 1947, pp. 1040-1041, "Factors Relied on by Arbitrators in Determining Wage Rates".

[2] George SOULE : *Wage Arbitration, Selected Cases, 1920-1924* (New York, 1928), pp. 6-7. Cf. Z. C. DICKINSON : *Collective Wage Determination, op. cit.*, pp. 453-455.

Determination of Wages by Authoritative Regulation

Authoritative regulation of wages [1] takes many forms. The wage rates may be fixed directly by legislation or by orders or regulations promulgated by an agency of Government under the authority of a Statute. They may be fixed by a wage board or other industrial tribunal consisting of representatives of employers, of workers and of the Government or the public. Or they may be fixed by a process of compulsory conciliation and arbitration which comes into operation when the parties directly concerned fail to agree among themselves.

Authoritative regulation is the usual method by which all wage rates are fixed in certain countries, including Argentina, Hungary, Mexico and Venezuela. In Canada, the United Kingdom and the United States, on the other hand, authoritative regulation is used only to fix minimum wage rates and only in the case of certain categories of workers. During the war, wage regulation was resorted to as a wartime measure in these countries and in a number of others, including Belgium, France and the Netherlands. In New Zealand for more than half a century, and in Australia for almost as long, minimum wage rates have been fixed for a large proportion of all industrial workers by courts of arbitration or other industrial tribunals. [2]

The position of a statutory wage-fixing authority is of course different in several respects from that of an arbitrator chosen freely by the parties to a dispute, and the wage rates it will fix may differ appreciably from those which would have been set

[1] By "wage regulation" is meant the fixing of legally enforceable rates of wages by some authority other than the employers and workers or organisations of employers and workers directly concerned. Cf. *The Minimum Wage: An International Survey*, International Labour Office, Studies and Reports, Series D, No. 22 (Geneva, 1939), p. 2.

[2] Some information on recent experience with wage regulation in certain countries is given below in Chapter VII. For fuller information reference may be made to *The Minimum Wage: An International Survey*, *op. cit.*, and Z. Clark DICKINSON: *Collective Wage Determination* (New York, 1941), Chaps. 17 and 18. For up-to-date information, reference should be made also to the various issues of the *International Labour Review*, to the *Legislative Series* published from time to time by the International Labour Office, and to the *Summary of Annual Reports under Article 22 of the Constitution of the International Labour Organisation* (published annually), which contains information on methods of wage regulation furnished to the International Labour Office by countries which have ratified the Minimum Wage-Fixing Machinery Convention, 1928 (No. 26). The last-mentioned publication also gives information annually as to the number of countries which have ratified this Convention. For the text of the Convention see Appendix V of the present report.

by such an arbitrator and still more from those which would have resulted from the free play of market forces or from collective bargaining. In framing his decision a private arbitrator must have special regard to the need to make it sufficiently acceptable to both parties to induce them, on the occasion of their next negotiations, to have recourse again to arbitration rather than to the weapon of the strike or lockout. A statutory authority, while it could not prudently disregard this consideration, will be less influenced by it, since the possession of compulsory jurisdiction will make the authority less dependent on the good will of both parties. In another respect, however, a statutory authority may enjoy less freedom than a private arbitrator. It may be obliged by law to base its decisions on specified principles. Even if there is no such formal obligation, the position may not in practice be very different. "A permanent tribunal responsible for maintaining industrial peace must... be reasonably consistent in its decisions. If no rules are prescribed, it must invent them ; and it must follow its own precedents. Any other course would lead to chaos and would defeat the very purpose for which it is established." [1] In its choice of principles the authority will be bound to take into account, in addition to the underlying factors of the market situation which have been discussed in the foregoing pages, more general considerations of equity and of public policy. [2] It will take into account, for example, the relation of wages in any one occupation

[1] *Economica*, August 1938, p. 316, "Conflicts of Principle in Wage Regulation in New Zealand", by E. J. RICHES. This article analyses the practice of the New Zealand Arbitration Court from 1895 to 1937, during most of which time it had no statutory guidance, and was subject to no restriction, as to the considerations it should take into account or the principles it should follow in regulating wages. In practice, however, the judges of the Court "felt it incumbent on them to give some explanation of the reasons for their awards, and from successive explanations it is possible to trace the gradual development of a more or less coherent system of wage principles. The policy adopted may be broadly summarised as an attempt to fix minimum rates of wages that would be uniform within each single grade of work, appropriately differentiated for work of different grades, adequate to provide a living wage, within the capacity of industry to pay, fair as compared with the shares of total product received by other factors of production, and stable over fairly long periods." (*Idem*, pp. 316-317.)

[2] For fuller accounts of the principles followed by wage-fixing authorities reference may be made to INTERNATIONAL LABOUR OFFICE : *The Minimum Wage: an International Survey* (Geneva, I.L.O., 1939) ; to the sources cited therein ; and to E. M. BURNS : *Wages and the State: a Comparative Study of the Problems of State Wage Regulation* (London, 1926) ; and Z. C. DICKINSON : *Collective Wage Determination* (New York, 1941), Chaps. 17 and 18.

or industry to those in others.[1] When changes occur in the cost of living it is likely to make some allowance for them; and it may even provide for the automatic adjustment of wage rates to such changes.[2] It is likely to be influenced by current views as to what constitutes a fair or just wage and by such demands as one for a "living wage" adequate to meet "the normal needs of the average employee regarded as a human being living in a civilised community"[3], or for a "social justice wage" giving the worker a greater share in the national income[4], or for a guaranteed weekly, monthly or annual wage.[5] Having regard to the importance now attached in all countries to the maintenance of full employment, the wage-fixing authority will also be bound to give great weight to the possible repercussions of its decisions on the level of employment, both in particular occupations and industries and in the economy as a whole. Finally, since one of the objectives of any wage-fixing authority must be to secure the willing acceptance of its decisions, including not merely the avoidance of strikes or lockouts but the absence of such dissatisfaction as would prejudice output, the authority will be bound to take into account not merely the desires but also, in some degree at least, the relative bargaining strength of the parties concerned.

It is partly in order to promote the acceptance of their decisions that wage-fixing authorities are in some cases required by law to state the reasons for such decisions; and the same purpose has led industrial tribunals in other cases to follow a similar course. The resulting statements, or "reasoned judgments",

[1] Cf. *Economic Record*, Vol. XIII, No. 25, December 1937, pp. 224-239, "The Fair Wage Principle in New Zealand: its Application and a Possible Extension", by E. J. RICHES.

[2] In Australia, for example, the basic wage rates (as distinct from margins for skill and other factors) fixed by the Commonwealth Court of Conciliation and Arbitration and by other industrial tribunals are subject to automatic adjustment at specified intervals in accordance with movements in an official index of the cost of living. For similar adjustments in wage rates fixed by collective agreements see, for example, *Monthly Labor Review*, November 1946, pp. 733-743, "Adjustment of Wages to Changes in the Cost of Living"; and *The Ministry of Labour Gazette*, April 1947, pp. 116-117.

[3] This was the definition of a "living wage" given by Mr. Justice Higgins of the Australian Commonwealth Arbitration Court in the famous "Harvester" case of 1907. Cf. *Commonwealth Arbitration Reports*, Vol. II, pp. 1-19; and H. B. HIGGINS: *A New Province for Law and Order* (London, 1922), pp. 4-6.

[4] Cf. J. T. DUNLOP: *Wage Determination under Trade Unions* (New York, 1944), pp. 52-54.

[5] Cf. Chapters IX to XI below and Appendices III and IV.

throw much light on the considerations which have influenced their decisions and consequently on the factors which determine wage rates under conditions of authoritative regulation. These statements do not, however, tell the whole story. Wage-fixing authorities do not always find it expedient to reveal the relative importance they have attached to different considerations, or even to specify all the considerations they have taken into account. When, as often happens, different principles which they have laid down on earlier occasions would lead to conflicting conclusions, it does not follow that they will make any reference to that fact.

> It is the function of an industrial tribunal to settle disputes, not to create them.
>
> Though its decisions have the force of law, that does not make it any the less desirable that they should be willingly accepted by the greatest possible number of the parties concerned. If such acceptance can be facilitated by a demonstration that established principles have been respected there is a strong inducement to emphasise the degree of conformity and to minimise any departure which may have been found necessary. [1]

In general, therefore, while one of the main objectives of a wage-fixing authority is likely to be to ensure that workers will receive a wage equal to the marginal net product of their labour — that is, the wage they would receive if perfect competition existed in both labour and product markets — it is to be expected that in practice any such authority will take into account a variety of other considerations. Much will depend accordingly on the views of the members of the authority, on the general social and political climate in which it operates, including in particular the degree of industrial organisation, and on economic conditions in the occupations and industries concerned. It is consequently not possible to sum up in any simple generalisation the factors which will determine wages under conditions of authoritative regulation.

Conclusions

The principal conclusions arrived at in the foregoing analysis may be summarised as follows :

1. In conditions of perfect competition in the markets for

[1] *Economica*, August 1938, p. 331, "Conflicts of Principle in Wage Regulation in New Zealand ", by E. J. RICHES.

labour and for goods each worker would receive a wage equal to the value of the marginal net product of his labour.

2. Since in the world as it is the markets both for labour and for goods are in general characterised by imperfect competition, most workers who bargain as individuals will usually receive a wage less than the marginal net product of their labour.

3. Wage rates fixed by collective bargaining may or may not be equal to the values of the marginal net product of labour in the occupations or industries concerned. If the workers are the stronger party they may be able to secure wage rates approximating to (or even, in certain cases, exceeding) this value. On the other hand, if the employers are the stronger party the wage rates fixed may be appreciably below this level. In practice it would seem probable that in many strongly organised occupations the wage rates fixed by collective bargaining do approximate closely to the value of the marginal net product of labour ; and there is evidence that real hourly earnings have advanced more in highly organised than in less unionised industries.

4. Wage rates fixed by authoritative regulation may or may not be equal to the value of the marginal net product of labour in the occupation or industry concerned. In making its decisions a wage-fixing authority may take into account general considerations of equity and public policy in addition to the underlying factors of the market situation ; and the wage rates fixed will therefore be influenced by the views of the authority itself, and by the general social and political climate in which it operates, including in particular the degree of industrial organisation, as well as by economic conditions in the occupations and industries concerned.

These conclusions, it should be noted, are conclusions concerning what is likely to happen, not what ought to be. They help to explain, but do not justify, the wage rates that may exist in any given set of circumstances. The fact, for example, that wage rates fixed by individual bargaining are generally less than the value of the marginal net product of labour does not mean that these are the wage rates which the workers concerned ought to receive. This latter question is one which raises issues of ethics and of general social policy as well as of economics. Similarly, the share of the national income which any particular

worker or group of workers ought to receive is in part also a question of ethics and of general social policy. It is, however, more than this : as will be seen in the next chapter, economic considerations impose a limit to the extent to which it is possible to apply a course of action which on other grounds may seem desirable.

CHAPTER IV

THE GENERAL LEVEL OF WAGES

Three main determinants of wages were distinguished in the preceding chapter: the value of the marginal net product of labour, the degree of competition in the markets for the products of industry, and the relative bargaining power of workers and employers. The value of the marginal net product was found in general to set an upper limit; but in any given industry or occupation wages may not reach this level if imperfect competition exists in the product market, or if the bargaining strength of the workers is less than that of their employers. Thus workers may not in fact receive that "just share of the fruits of progress" to which the Declaration of Philadelphia recognises they are entitled.

The efforts of organised labour to secure through collective bargaining higher wages and an increasing share in the product of industry [1] have thus a rational basis in theoretical analysis as well as in practical experience. There appears, it is true, to be no way in which collective bargaining can protect the worker from the depressing effects on wages of imperfect competition in the product market; when such imperfect competition prevails, any attempt to raise wages up to the value of the marginal net product will tend to reduce employment in the industry concerned. "The only remedy" in these circumstances, it has been pointed out, "is to control prices in such a way as to obtain the competitive output from the monopolist".[2] To the extent, however, that the relative bargaining power of employers and workers determines the level at which wages are fixed, there is scope for improving the position of the workers through trade union activity, even though, with imperfect competition in the product market, such activity may be powerless to secure for the workers the full value of their marginal net product.

[1] Cf. Clinton S. GOLDEN and Harold J. RUTTENBERG: *The Dynamics of Industrial Democracy* (New York and London, 1942), pp. 151-158; and *The Southern Economic Journal*, April 1948, pp. 420-432, "The Income Goals of Unionism", by Charles E. LINDBLOM.

[2] Joan ROBINSON: *The Economics of Imperfect Competition*, *op. cit.*, p. 284.

Labour's Share of National Income

In many countries the strength of trade union organisation has been gradually increasing, and in some the raising of wages, or at least of the wages of certain groups of workers, has been one of the objectives of national policy. Unless other factors also have changed, these developments should have been reflected in the proportions of the product of industry and of national income received by the workers concerned, and may also have been reflected in the proportion received by all workers taken together. It is of interest therefore to enquire what change, if any, has occurred in these proportions.

Before examining such statistical information as is available on this subject, however, it is necessary to note that the proportion of national income received by the workers may be affected by a variety of factors in addition to those already mentioned. Some of these factors may bring about changes in the proportion from one year to another, while others may have more lasting effects.

Factors with Long-Term Effects on Labour's Share

In the long run the proportion of the national income received by labour will tend to be affected in particular by secular changes in (1) the relative bargaining power of employers and workers ; (2) the degree of imperfection of competition in the product market ; (3) the ratio of capital to labour ; (4) managerial or technical efficiency ; (5) the proportion of skilled to unskilled labour ; (6) the relative numbers of workers employed in different industries ; (7) the number of workers in relation to working proprietors or small entrepreneurs ; (8) the prices of raw materials and goods (products of mining and agriculture) in relation to wages. The influence of each of these factors is discussed in the following paragraphs.

The first two of these factors have been referred to briefly above. If the bargaining power of employers in relation to that of workers increases, or if competition in the product market becomes more imperfect, employers will be able to increase their profits and to reduce wages or resist an increase in wages. In this event, the proportion of the national income or product of

industry received by workers will decline. If, on the other hand, there is an increase in the bargaining power of workers in relation to that of employers, such as took place in the United States in the 1930's, the workers will secure higher wages —although, as will be seen later, there is a limit to the extent to which this can be done—and so will increase their proportion of the national income or product of industry.

An increase in the supply of capital equipment in relation to the supply of labour will increase the marginal productivity of labour and reduce the marginal productivity of capital. Whether the proportion of the national income received by labour will be affected will depend upon a number of factors, such as the degree of imperfection of competition in the product market and in the labour market.

An increase in managerial efficiency, or an increase in technical efficiency resulting, for example, from a new invention, will result in greater productivity, lower costs per unit of output and, unless prices are reduced proportionately, higher profits or higher wages or both. In practice, the proportion of the national income received by labour has probably not been greatly affected by increases in managerial and technical efficiency, because the benefits of such increases have generally been shared among profit-receivers, labour and consumers.

An increase in the proportion of skilled to unskilled labour where substantial wage differentials exist between the two groups may result in an increase in the proportion of the national income received by labour. In practice, however, although the proportion of skilled to unskilled workers has tended to increase in recent years, the wage differentials between these groups have tended to narrow. Labour's share of the national income has therefore probably not been affected to any significant degree by this factor.

The relative contributions of labour and of other factors to the product of industry, and consequently the share of the product received by labour, vary as between different industries. In an industry where capital investment, for example, is large in relation to the numbers employed, wages will represent a smaller share of total product, of value added to or of income originating in the industry, than they will in an industry in which capital investment is relatively small, even though wage rates and net income per worker may be the same in both cases. Any change in the proportion of workers employed in different

industries may thus affect the average share of total product received by labour.[1]

An increase in the number of working proprietors or small entrepreneurs in relation to the number of workers will cause a decrease in the proportion of the national income received by labour and *vice versa*.[2] In most countries this factor has probably not been of great importance in recent years, because the ratio of working proprietors and small entrepreneurs to workers has not changed to any great extent.[3]

An increase in raw material and food prices in relation to wages will tend to decrease the proportion of the national income received by labour, because the proportion received, for example, by farmers will increase. Such an increase in raw material and food prices in relation to wages took place during and after the recent war.

There is of course no reason to expect that the various factors referred to above will operate in the same direction at any particular time. A change in one may be offset by a contrary change in another. Moreover, as has been noted, the effects on labour's share of changes in certain of these factors are in any case difficult to predict. It is therefore scarcely possible to generalise as to the probable combined effect of changes in all the factors taken together.

[1] In the United States in 1937, for example, labour's share of the product of agriculture was 13 per cent. as compared with 87 per cent. in mining. A shift of labour from agriculture to mining would, therefore, increase labour's share of the national income. Cf. Z. C. DICKINSON : *Collective Wage Determination* (New York, 1941), pp. 177-179.

[2] It has been held that " the distribution of the product of industry between labour and capital used to be envisaged by many economists, with their attention concentrated upon the capital resources of large-scale industry on the one hand and an impoverished proletariat on the other, as a struggle between non-competiting groups (if some perversion of the latter phrase may be permitted). The worker could not become a capitalist, nor the capitalist a worker ; the distribution of the product between them was held by many to be indeterminate, or settled only by relative bargaining powers. Now that we envisage a large and increasing proportion of the national product representing the ouput of service industries and of small-scale manufacture, different considerations arise. The wage-earner, under certain circumstances at any rate, has an opportunity of engaging in enterprise of his own. Alternatively, if wages appear high relative to the earnings of enterprise, the small entrepreneur will cheerfully abandon his business and undertake wage work. Under these circumstances, the distribution of the product will in the long run be determined by the extent of these movements into and out of the field of enterprise." See *Economic News* (Brisbane), June-July 1947, p. 1, " The Distribution of the Product of Industry ".

[3] Cf. Colin CLARK : *The Conditions of Economic Progress* (London, 1940), pp. 206-209 ; and *Monthly Labor Review*, August 1947, pp. 139-147, " Recent Occupational Trends in the United States ".

Factors with Short-Term Effects on Labour's Share

In the short run also, the proportion of the national income or of the product of industry received by labour may be influenced by the various factors mentioned above if they move in such a way as to bring about a sudden and fairly substantial change in the size of workers' earnings, the profits of entrepreneurs, or the share of agriculture. Most short-term fluctuations in this proportion, however, are likely to be due to changes in the size of workers' earnings brought about directly by movements in wage rates, by fluctuations in overtime worked, by the introduction of successful incentive wage schemes, or by changes in the proportion of workers employed or unemployed.

In normal times, widespread changes in wage rates are likely to have a greater and more immediate influence on the proportion of the national income or product of industry received by labour than any of the other factors, long-term or short-term, for the following reasons :

(1) While increased overtime and the successful operation of wage incentive systems will tend to increase workers' earnings, they may not raise labour's share of the national income, or may raise it only slightly, since overtime is generally only worked when business is good and profits are increasing, and successful incentive wage systems also generally result in higher profits for the employers besides increased earnings for the workers. Consequently, the increased earnings of workers from overtime and incentive pay may be offset to a considerable extent by higher profits received by entrepreneurs.

(2) An increase in the proportion of workers employed means that business conditions are improving and, therefore, that profits are rising. The increased earnings of labour will therefore be balanced to a greater or less extent by rising profits. During a depression, profits fall more rapidly than the numbers employed (or the earnings of workers) but during a boom profits rise more rapidly than the numbers employed (or workers' earnings). Consequently, except during a depression or a boom—that is, in " normal " years—it is to be expected that changes in the number of workers employed will have little effect on the size of labour's share of the national income or product of industry, because profits will be changing in about the same proportion as total workers' earnings.

In normal times, therefore, as distinct from the depth of a depression or the height of a boom, the factor most likely to bring about changes in labour's share of the national income or of the product of industry is a substantial and general change in wage rates. To the extent that this factor is effective, it should be possible to trace its influence by an examination of available statistical data. It is therefore of interest to enquire whether substantial movements in wage rates have in fact brought about corresponding changes in labour's share of national income or of the product of industry. If such changes have actually taken place, have they proved permanent ? If not, why not ?

Estimates of the percentages of national income, or of value added in manufacturing in general and in certain industries, which are received by workers as salaries and wages in various countries are brought together in tables IV-VI below.[1]

The main conclusion suggested by table IV is that the proportion of the national income accruing to labour seems to have remained remarkably constant except in the abnormal conditions of depression years.[2] Moreover, this percentage seems to vary within much the same range—for the most part between 55 and 65 per cent.—in countries in similar stages of economic development. Further, it is important to note that, in normal times, the range of variation for individual countries is not large and that, even with the extremely favourable sellers' market for labour which prevailed during the recent war, and with considerable overtime and steady employment to boost earnings, the percentage of the national income received by labour remained practically unaltered in all the countries for which data are given in the tables. If anything there was a tendency, in some countries, for labour's share to fall during these years, owing to the increased profits received by entrepreneurs and the greater proportionate increases in farm incomes.

The figures in the table for the United States are especially interesting, partly because they cover a longer period than those

[1] For a further discussion of movements in labour's share of the national income during the war and post-war transition periods, see Chapter VII.

[2] Similar results to those set out in table IV have been obtained by other writers, using data for other periods and for other countries. Cf. M. KALECKI : *Essays in the Theory of Economic Fluctuations* (New York, 1939), pp. 14-18 ; Colin CLARK : *The Conditions of Economic Progress* (London, 1940), pp. 407-416 ; and Z. C. DICKINSON : *Collective Wage Determination, op. cit.*, pp. 180-182.

TABLE IV. PERCENTAGE OF NATIONAL INCOME ACCRUING TO LABOUR AS SALARIES AND WAGES IN CERTAIN COUNTRIES, 1929-1947 [1]

Year	Australia	Canada	New Zealand	United Kingdom	United States
1929	—	—	—	—	57.1
1930	—	—	—	—	61.2
1931	—	—	63.7	—	66.0
1932	—	—	64.2	—	72.9
1933	—	—	60.3	—	72.8
1934	—	—	61.6	—	68.9
1935	—	—	58.2	—	64.3
1936	—	—	54.5	—	62.4
1937	—	—	56.9	—	62.5
1938	54.0	62.2	58.9	61.5	63.6
1939	52.4	60.5	56.3	60.7	63.0
1940	54.2	57.9	57.1	59.4	60.9
1941	55.6	57.7	57.4	59.2	58.8
1942	55.3	55.3	58.5	59.0	59.3
1943	54.0	58.6	60.2	59.1	59.2
1944	56.0	57.1	58.1	60.3	59.6
1945	56.0	57.1	56.6	60.4	59.4
1946	—	55.4	—	62.3	60.6
1947	—	56.7	—	62.3	59.8

Source: The percentages were calculated from data given in the following officia publications:

AUSTRALIA: *National Income Estimates*, 1938-1939 to 1945-1946 (Canberra, Commonwealth Government Printer, 1946).

CANADA: *Canadian Statistical Review*, February 1948, p. 7.

NEW ZEALAND: Census and Statistics Department: *Pocket Compendium of New Zealand Statistics, 1946*, p. 170; and *Monthly Abstract of Statistics*, November-December 1947, p. 43.

UNITED KINGDOM: *National Income and Expenditure of the United Kingdom, 1938-46*, and *idem*, 1947, Cmd. 7099 and 7371 (London, H.M. Stationery Office, 1947 and 1948), p. 18 and p. 14.

UNITED STATES: United States Department of Commerce, Bureau of Foreign and Domestic Commerce: *National Income and Product Statistics of the United States, 1929-46*, Supplement to the *Survey of Current Business*, July 1947, p. 19; and *Survey of Current Business*, February 1948, p. 10.

[1] The figures given in the above table are not comparable horizontally for the following reasons:

(1) The term "national income" as used here is national income at factor cost (which includes domestic income and net income from abroad) except in the case of New Zealand, whose income data consist of aggregate private incomes which are not strictly comparable with the national income data given for the other countries. (For the differences between the different concepts of "national income" see United Nations Economic and Social Council document E/CN.3/WSC/5, 28 August 1947, p. 7.) To make the national income data of Australia, New Zealand and the United Kingdom comparable internationally with those of Canada and the United States, certain adjustments are necessary. Thus, in the case of Australia and the United Kingdom it is necessary to add employers' contributions to social insurance, and also for Australia, net income from abroad. In the case of New Zealand, certain other adjustments are necessary (see *Ibid.*, pp. 35 and 38).

(2) In calculating the percentages given in the table, military pay and allowances were excluded, except in the case of New Zealand.

(3) In the case of Canada only, the data for salaries and wages included supplementary labour income such as employers' contributions to the unemployment insurance scheme.

(4) The figures for Australia relate to years ending 30 June.

(5) The figures for New Zealand relate to years ending 31 March.

for other countries, and partly because during the period the Government's "New Deal" policy as expressed in the National Industrial Recovery Act, 1933 [1], was directed towards increasing wage rates as a means of overcoming the depression of the early 'thirties. Moreover, according to a study made in 1935 by the Brookings Institution, one of the most marked changes brought about by this Act was that the effective strength of the trade unions was greatly increased; "in March 1933 it was being seriously debated whether or not all trade unions were on their 'thirties. Moreover, according to a study made in 1935 by the twenty months later, the trade unions are on the upward grade again in numbers, resources, self-assertiveness, and are clamoring for co-equal status with management in the developing scheme of industrial self-government." [2] The legal protection given the trade unions by the National Labor Relations Act, 1935, enabled them to become stronger still during the rest of the period covered by table IV. New national unions were formed in industries such as steel, and existing unions gained many new members. Thus, whereas there were less than three million trade unionists in 1933, the number grew to 8.5 million in 1940 and to about 14 million in 1946.[3]

Quite substantial increases in wage rates resulted from the application of the principles of the "New Deal" policy and from the exercise by the trade unions of their greatly enhanced bargaining power. Thus, average hourly earnings of workers in industry, which had been 56.6 cents in 1929—a boom year—fell to 44.2 cents in 1933, but rose to 55.2 cents in 1935, to 72.9 cents in 1941, and to 122.1 cents in 1947.[4] In these same years labour's share of the national income was 57.1 per cent., 72.8 per cent., 64.3 per cent., 58.8 per cent. and 59.8 per cent. respectively. The percentages of workers who were unemployed in the United States in the same years were 3.1 per cent., 25.2 per cent., 19.9 per cent., 9.9 per cent. and 3.6 per cent. respectively.[5] It will be noticed that there is a fairly high positive correlation between changes in labour's share of the

[1] For an account of the "New Deal" policy see Chapter VII.

[2] LYON, HOMAN, LORWIN, TERBORGH, DEARING, and MARSHALL: *National Recovery Administration, an Analysis and Appraisal* (Washington, D.C., 1935), p. 488.

[3] Cf. Florence PETERSON: *Survey of Labor Economics* (New York, 1947), pp. 489-500.

[4] Cf. *International Labour Review*, Vol. LVII, No. 5, May 1948, p. 542.

[5] Cf. Chapter IX.

national income and the percentage of unemployment. Consequently, only years which have about the same percentage of unemployment should be compared. Such years in this case are 1929 and 1947, when these percentages were 3.1 and 3.6 respectively. Between these two dates the average hourly earnings of workers in industry more than doubled, rising from 56.6 cents to 122.1 cents, but labour's share of the national income increased only from 57.1 per cent. to 59.8 per cent.—a change which cannot be regarded as significant when allowance is made for the margin of error inherent in the basic data. It is a striking fact that labour's share of the national income was not markedly higher in 1946 than in 1929, despite the fact that the New Deal policy [1], the greatly increased strength of the trade unions and increased overtime earnings had the effect of increasing money average hourly earnings by 116 per cent. and real average hourly earnings by 66 per cent.[2]

Tables V and VI are concerned with labour's share not of the national income, but of the product of certain industries. Table V shows the percentage which labour in New Zealand received of the value added in all manufacturing industries during the years 1920 to 1943. Table VI gives similar data for certain individual industries in the United States during the period 1937 to 1946.

The data given in table V are especially interesting because of the introduction in New Zealand, in 1936, by a Labour Government, of a deliberate policy of raising the general level of wages.[3] Apparently as a result of this policy, which raised wages some 20.7 per cent. from 1935 to 1937 and a further 6.2 per cent. from 1937 to 1939, the percentage of real value added in manufacturing received by labour as salaries and wages rose from 50 per cent. in 1935 to 59 per cent. in 1939, and the percentage received as wages rose from 66.1 per cent. in 1935 to 72.8 per cent. in

[1] The National Industrial Recovery Act itself, according to the Brookings Institution study " did not materially change the position of income between labour and property as compared with what it would otherwise have been at like levels of productive activity " (*op. cit.*, p. 868).

[2] Cf. *International Labour Review*, Vol. LVII, No. 5, May 1948, p. 542.

[3] For details of this wage policy and its effects on wage rates see NEW ZEALAND CENSUS AND STATISTICS DEPARTMENT: *The New Zealand Official Year Book, 1945* (Wellington, 1945), p. 525. Cf. also " The Restoration of Compulsory Arbitration in New Zealand ", by E. J. RICHES; *ibid.*, March 1944, " Stabilisation Policy in New Zealand ", by H. BELSHAW; and *International Labour Review*, December 1936. *Ibid.*, March-April 1946, " Wage Stabilisation in New Zealand ", by A. R. LOW.

1939. By 1943, however, despite the operation of a successful price stabilisation policy [1] and a further rise in wage rates of 14.6 per cent. between 1939 and 1943 (a total rise of 47 per cent.

TABLE V. PERCENTAGE OF ADDED VALUE IN NEW ZEALAND MANUFACTURING INDUSTRY ACCRUING TO LABOUR AS *(a)* SALARIES AND WAGES, AND *(b)* WAGES, 1920-1943

Year	Salaries and wages as a percentage of added value [1]	Wages as a percentage of added value [2]
1920	52	—
1921	55	—
1922	51	—
1923	49	—
1924	50	—
1925	50	—
1926	55	66.5
1927	55	66.8
1928	54	68.1
1929	54	68.2
1930	54	69.3
1931	55	73.2
1932	54	73.9
1933	53	72.8
1934	50	66.2
1935	50	66.1
1936	51	66.1
1937	54	69.2
1938	57	70.7
1939	59	72.8
1940	58	70.0
1941	—	68.9
1942	—	68.2
1943	—	66.8

Sources: Col. 1 : *The Economic Record*, June 1945, p. 62, " Professor Douglas' Production Function ", by J. WILLIAMS. Col. 2 : A. E. C. HARE : *Report on Industrial Relations in New Zealand* (London, 1946), p. 109.

[1] In calculating the figures given in this column, salaries and wages are expressed as a percentage of added value (value of output minus cost of materials, fuel and power) adjusted for changes in the New Zealand wholesale price index of " locally produced goods ".

[2] In calculating the figures given in this column, wages only are expressed as a percentage of added value (value of output minus salaries, cost of materials and other expenses).

Note: The different methods of calculating the percentage account for the differences in the figures obtained for the same years. The relative percentage changes from year to year are, however, approximately the same for both series.

[1] The success of New Zealand's price stabilisation policy may be measured by the fact that the cost of living rose only 14.2 per cent. from August 1939 to June 1946. This increase was lower than the increases experienced by 21 other countries for which cost-of-living data were compiled by the United States Bureau of Labor Statistics (see *Monthly Labor Review*, January 1947, pp. 38-50).

from 1935 to 1943), the percentage of value added in manufacturing received by labour as wages had fallen to 66.8 per cent., or approximately the same proportion as in 1926 and 1935, before the implementation of the wage policy.

TABLE VI. PERCENTAGE OF NET VALUE ADDED IN CERTAIN INDUSTRIES IN THE UNITED STATES ACCRUING TO LABOUR AS SALARIES AND WAGES, 1937-1946 [1]

Year	Fisheries	Contract construction	Textile-mill products	Iron and steel and their products	Machinery (except electrical)	Retail trade and automobile services
1937	60.5	68.3	79.1	80.9	76.1	66.6
1938	59.0	65.3	92.6	87.7	76.8	65.3
1939	60.0	68.8	92.8	79.2	74.6	65.1
1940	62.2	66.0	80.1	71.1	61.5	62.4
1941	57.2	66.1	78.5	62.5	60.6	66.0
1942	56.8	69.9	67.9	65.1	66.6	56.9
1943	57.9	70.0	68.0	72.1	70.3	52.1
1944	58.4	70.0	70.1	75.1	72.2	51.7
1945	58.6	69.6	70.6	79.2	76.3	52.2
1946	58.7	69.8	67.5	79.9	86.8	56.5

Source: The percentages for each industry were calculated from data given in the following official publication: United States Department of Commerce, Bureau of Foreign and Domestic Commerce: *National Income and Product Statistics of the United States, 1929-46*; Supplement to the *Survey of Current Business*, July 1947, pp. 26-27.

[1] " Net value added " is here the sum of the factor costs incurred by the industry in production. Hence, it is the net value added to production by the industry, measured as factor costs. In the business sector of the economy, except Government enterprises, it it equal to the excess of the market value of the industry's product and the subsidies it receives over the sum of the following costs: purchases of goods and services from other enterprises, indirect business tax and non-tax liability, business transfer payments, and capital consumption charges. In the Government and personal sectors of the economy, which do not produce for sale, and also in Government enterprises, this value added in production (as measured in the present series) can be described only as factor costs incurred. " Net value added " is a more accurate concept of value added than that used by the Bureau of the Census in compiling the Census of Manufactures. " Value added by manufacture " was obtained in the 1939 Census of Manufactures by deducting from the value of products only " the cost of materials, supplies, containers, fuel, purchased electric energy, and contract work ".

As might be expected, the proportion of the product received by labour shows greater short-term fluctuations in certain industries than in industry as a whole. Of the six industries in the United States covered by table VI, two—fishing and contract construction—showed little movement in this proportion over the ten years 1937 to 1946. In the textile, iron and steel, and machinery industries, however, substantial short-term variations occurred. As a result of the fall in profits which occurred during the depression of the late 1930's, the percentages of net value added received by labour in the textile and iron and steel industries rose sharply in 1938 and 1939. The rapid recovery in profits in the early years of the war led to a fall

in the percentages during these years. In more recent years, increased overtime earnings during the war and pressure by trade unions for higher wages after the war have gradually forced up the percentage in many industries, but as a rule only, it should be noted, to the pre-war level. This movement has taken place more slowly in some industries, such as retail trade and the textile industry, than in others.[1]

As other investigations have shown [2], there is a close relationship between the absolute amount of annual earnings per worker in any industry and the product (in terms of value added, or national income originating in the industry) per worker. Industries which make the highest contribution per worker to the national income generally pay the highest annual wage, and increases in the net income originated by an industry tend to be reflected in increases in annual earnings per worker. There has in fact been a high degree of constancy in the size of labour's share.

The general conclusions suggested by the statistics examined in the foregoing pages may now be briefly summarised. During the periods covered, substantial increases occurred in money wage rates and in earnings ; but although labour's share of value added increased temporarily in certain industries, there was little change, as between comparable years, in labour's share of national income or of the total product of industry. It would appear therefore that wage increases alone have little if any lasting effect on the size of labour's share. Though theoretical analysis suggests that, in the absence of completely offsetting changes in other factors, an improvement in trade union organisation and bargaining power should lead to an increase in labour's share, the statistics do not reveal any lasting increase. While the statistics are no doubt subject to an appreciable margin of error, it would seem a reasonable inference that any effects which improved trade union organisation might have

[1] Average weekly earnings in the textile industry and in retail trade were still among the lowest of such earnings in any industry in the United States in 1946, despite increases in wage rates of 80.4 per cent. from January 1941 to October 1946 for textile workers, and of 54 per cent. from January 1941 to August 1946 for workers in retail trade. Thus, average weekly earnings in August 1946 were $ 34.81 in the cotton manufacturing industry and $ 33.17 in retail trade, as against $ 44.90 for all manufacturing industry (Cf. *Monthly Labor Review*, July 1946, p. 10, and March 1947, p. 371 ; and *Business Week*, 9 November 1946, p. 88).

[2] Cf. *The Conference Board Business Record*, September 1947, pp. 259-261, " Wages and National Income ".

had on the size of labour's share must have been offset by changes in other factors.

The subject is clearly one which requires much fuller investigation than has been possible in this report; but on the basis both of theoretical analysis and of such statistical information as is at present available there would seem to be

TABLE VII. INDEX NUMBERS OF REAL WAGES [1] IN CERTAIN COUNTRIES 1929-1946

Base 1937 = 100

Year	Argentina	Australia	Bulgaria	Canada	Czechoslovakia	Denmark	France	New Zealand	Sweden	Switzerland	United Kingdom	United States
1929	96	95	69	85	98	99	—	82	92	94	91	76
1931	96	100	78	93	107	112	75	85	102	102	99	78
1933	102	99	84	94	110	110	80	90	99	110	101	79
1934	103	98	84	—	109	107	83	89	99	109	101	—
1935	105	98	90	96	105	103	87	87	100	108	101	92
1936	99	98	93	96	104	101	92	94	100	104	101	92
1937	100	100	100	100	100	100	100	100	100	100	100	100
1938	100	105	103	102	98	104	97	102	103	102	102	102
1939	103	104	104	103	100[2]	105	91	100	107	102	101	105
1940	103	103	106	103	104	93	74	99	103	96	97	109
1941	103	104	98	106	102	87	68	99	96	90	97	114
1942	106	103	84	110	101	87	66	100	96	90	104	121
1943	108	106	74	118	103	92	59	100	99	93	109	128
1944	—	107	88	121	102	97	80	101	100	97	113	134
1945	—	108	98	120	107	103	100	109	105	103	117	131
1946	—	109	100	131	99	115	59	113	113	115	127	128
1947	—	—	—	—	106	—	—	—	—	—	—	126

Source: International Labour Review, Vol. LVI, No. 2, August 1947, pp. 214-220; and Vol. LVII, Nos. 1-2, January-February 1948, pp. 134-140.

[1] The figures given in the table are based on the average hourly wage rates or earnings of men and women in the following industries in particular countries:

Industries: Bulgaria, Czechoslovakia, and the United States.
Metals and industries: France.
Mines, industries and transport: Australia, Canada, New Zealand (with the addition of agriculture and commerce), Sweden (with the addition of commerce), and the United Kingdom (with the addition of agriculture and local authorities).
Industries, transport and commerce: Argentina (with the addition of services) and Sweden.

The figures were based on average hourly earnings except in the following cases where average hourly wage rates were used: Australia, Canada, Czechoslovakia, France, New Zealand and the United Kingdom. The figures are not comparable horizontally.

[2] New series.

little doubt that workers have a much better prospect of improving their incomes and living standards through increases in productivity, combined with full employment, than through any increase in labour's share of national income or of the product of industry.

Real Wages and Productivity

There has in fact been a fairly steady rise in real wages despite the constancy of labour's share in national income. Table VII above shows the changes which have taken place since 1929 in the real hourly wage rates or earnings of both men and women in industry in twelve countries for which statistics are available.

In all these countries real wages have risen since 1929. To analyse in detail the relative importance of the different factors responsible for these increases would be a task beyond the capacity of the present report, but there seems no reason to doubt that the major factor in every case has been a corresponding increase in productivity. The differences in the degree of improvement in different countries may also be assumed to have been due principally to different average rates of increase in productivity, while the temporary setbacks which occurred in certain countries before and after the war were presumably due in some cases to the reductions in productivity brought about by wartime destruction of physical production facilities and disruption of the whole complex fabric of economic organisation, and in others partly to this factor and partly to the effects of prolonged and substantial inflation. Other factors, however, may have had some influence on the relative rates of increase in real wages—for example, changes in the industrial structure of different economies and differences as between different countries in the degree of competition in product markets and in the relative bargaining power of employers and workers.

Some indications of the rate of growth in productivity during recent periods are given by the estimates shown in table VIII of the rate of growth per year in real product per man-hour in nineteen countries. The calculations, made by the Queensland Bureau of Industry, were based on the national incomes of the different countries, the money of each country being recalculated in terms of its real purchasing power in international units, defined as the quantity of goods and services exchangeable for one dollar in the United States over the period 1925-1934. In certain cases, when there was a definite and persisting indication of a change in the rate of growth, the trends were computed separately for different periods.[1]

[1] QUEENSLAND BUREAU OF INDUSTRY : *Economic News* (Brisbane), Vol. 15, Nos. 4-6, April-June 1946, pp. 2-3. Cf. Colin CLARK : *The Conditions of Economic Progress* (London, 1940), pp. 29-41.

TABLE VIII. REAL PRODUCT PER MAN-HOUR IN 19 COUNTRIES: RATES OF GROWTH PER ANNUM

Country	Years	Percentage
Australia	1886 - 1913-14	1.2
	1913-14 - 1927-28	1.7
	1927-28 - 1938-39	0.6
Belgium	1913 - 1939	1.9
Canada	1903 - 1928	0.5
	1928 - 1939	1.2
Denmark	1913 - 1933	0.8
Finland	1913 - 1930	2.1
	1930 - 1938	3.3
France	1830 - 1905	1.6
	1905 - 1938	0.7
Germany	1890 - 1935	1.0
	1935 - 1939	8.4
Great Britain	1860 - 1945	1.3
Hungary	1913 - 1930	0.9
	1930 - 1939	0.0
Ireland	1883 - 1926	2.1
	1926 - 1939	1.0
Italy	1914 - 1928	1.1
	1928 - 1939	2.2
Japan	1908 - 1922	7.9
	1922 - 1937	4.3
Netherlands	1913 - 1939	1.1
New Zealand	1901 - 1943	1.3
Norway	1891 - 1930	2.0
	1930 - 1939	4.3
Poland	1913 - 1929	±1.5
Sweden	1881 - 1939	2.0
Switzerland	1890 - 1929	2.2
	1929 - 1938	0.2
United States	1850 - 1941	1.6

Source: QUEENSLAND BUREAU OF INDUSTRY: *Economic News* (Brisbane), Vol. 15, Nos. 4-6, April-June 1946, p. 3.

While the estimates are subject to a number of reservations and the validity of some of them is open to doubt [1], they may be regarded in general as giving a broad indication of the trend of real product per man-hour in the countries concerned. In most cases, as is shown in detailed diagrams published in the same source, the trend is uniformly, or at least generally, upward, though occasionally there appears to be a definite acceleration or deceleration of the rate of growth.

These estimates relate to entire countries. As between different sectors of an economy, and still more as between

[1] In particular, those for Germany, 1935-1939, and for Poland. In the case of the former, for example, the results obtained depend in large measure on the particular exchange rate chosen for the purposes of the computation —a choice in which there is evidently the possibility of a wide margin of error.

different industries, marked variations in the rate of increase in productivity may occur. In manufacturing industries as a group in the United States, for example, output per man-hour rose at an average rate of between 3 and 3.5 per cent. per year over the period 1909-1939, the total gain over this period being slightly over 160 per cent. The differences in the record for different industries may be illustrated by the figures for 1919-1939, when productivity rose 180 per cent. in the automobile industry, 200 per cent. in petroleum refining, and more than 300 per cent. in industrial chemicals, as compared with an average of 125 per cent. in manufacturing as a whole. Relatively small gains were recorded in the older industries where manufacturing techniques had become stabilised. During the war, rapid advances were made in man-hour output in war industries, but in other industries progress was patchy, declines being noted in some.[1]

[1] Cf. *Monthly Labor Review*, December 1946, pp. 893-917, "Productivity Changes since 1939". This study also gives data showing changes in productivity from 1909-1939 (see pp. 894-896). For estimates of movements in productivity in other countries, reference may be made to the following: Colin CLARK: *The Conditions of Economic Progress, op. cit.*, Chapters 7-9; *Bulletin of the Oxford University Institute of Statistics*, July 1946, pp. 211-216, "Note on the Productivity of Labour: Its Concept and Measurement", by T. BARNA; *Monthly Labor Review*, June 1938, pp. 1386-1390, "Labour Costs in the Coal Industry in Various Countries"; *idem*, March 1937, pp. 589-607, "Productivity in the Belgian Coal Mining Industry, by Margaret SCHŒNFELD; L. ROSTAS: *Productivity, Prices and Distribution in Selected British Industries* (London, 1947); *Bulletin of the Oxford University Institute of Statistics*, October 1947, "Some Comparisons of Pre-War and Post-War Productivity", by P. D. HENDERSON; COMMONWEALTH OF AUSTRALIA BUREAU OF CENSUS AND STATISTICS: *Manufacturing Industries 1944-45* (Canberra, 1946); and *Etudes et conjoncture: Union française*, October 1946, pp. 15-56, and November 1946, pp. 107-129, "Comparaison de l'évolution industrielle et agricole de 1938 à 1945 en France et en divers pays". For international comparisons see L. H. BEAN: *International Industrialization and Per Capita Income* (Studies in Income and Wealth, Vol. 8, Part V (New York, 1946)); Ewan CLAGUE: *International Comparisons of Wages, Labor Cost, and Productivity, with Special Reference to Strategic and Critical Minerals*, Statement of the Commissioner of Labor Statistics before the National Resources Economic Subcommittee of the Senate Committee on Public Lands (mimeographed) (Washington, 13 June 1947); International Labour Organisation, Coal Mines Committee, 2nd session, Geneva, 1947, Report II: *Utilisation of the Resources of the Coal Mining Industry* (Geneva, I.L.O., 1947), p. 125; UNITED STATES WAR PRODUCTION BOARD: *A Tabulation of Production per Employee and per Man-hour in U.S., Canada, U.K., U.S.S.R., Germany and Japan* (mimeographed) (Washington, June 1945), p. 24; *The Economic Journal*, June-September 1945, p. 206, "Efficiency and Organisation of the British Coal Industry", by A. BEACHAM; UNITED KINGDOM BOARD OF TRADE: *Working Party Reports: Boots and Shoes* (London, H.M. Stationery Office, 1946), p. 21; *Cotton* (1946), pp. 66-67, and Appendix IV, p. 268; *Furniture* (1946), Appendix A; *Heavy Clothing* (1947); *Linoleum and Felt Base* (1947); and *Wool* (1947). UNITED KINGDOM MINISTRY OF PRODUCTION: *Reports of the Cotton Textile Mission to the United States, March-April 1944* (London, 1944).

The different rates of increase in productivity in different industries create a problem for wage policy. Where a greater increase in productivity occurs in one industry than in others, should the full benefit of that increase be absorbed in higher wages and profits in the industry concerned, or should it be passed on to consumers in the form of lower prices for the products of the industry and thus be diffused throughout the whole economy ?

Each course offers its own advantages and disadvantages. If the full benefit is absorbed by the industry concerned, the incentive to management and workers to raise their productivity still further will be at a maximum, and so also will be the inducement to labour and capital elsewhere in the economy to move into that industry. Both total output and productivity per head will, therefore, tend to rise still further. The widening of wage differentials may, however, strain the wage structure of the economy as a whole, and high profits may lead to over-investment in the industry. In the course of time both wage and profit differentials will tend to narrow again, as labour and capital, attracted by exceptional returns, flow out of other industries and into the industry in which productivity has risen. The process of adjustment may, however, be slow and imperfect, and it may be a long time before workers in other industries derive any benefit from it. If, on the other hand, the industry in which productivity has risen most passes on all or most of the benefit to consumers in the form of lower prices, this lag will be avoided ; but the incentive to workers and management to raise productivity may prove inadequate to call forth their best efforts, and there may be little inducement for labour and other factors of production to move from other sectors of the economy into the industry in which they can be most productive. As a result, the community as a whole may in the long run be less well off than it could be if these incentives were stronger.

In practice, what has usually happened and what is perhaps most desirable in the interests of the community [1] is some combination of the two types of adjustment. In the United States, for example, it has been found that

> over long periods of time the gains of productivity have been shared primarily in two main ways — rising levels of wages and salaries and lower prices or improved quality. The wage and salary

[1] Cf. Sumner H. SLICHTER : *Basic Criteria used in Wage Negotiations* (Chicago, 1947), pp. 41-47.

level on the average seems to have risen during the past century just about as fast as the rise in productivity. The price level has remained relatively constant, with price declines in those areas in which productivity has increased most rapidly, and with price rises where productivity has been increasing less rapidly.[1]

Thus, while the output per man-hour in the United States as a whole was about six times as great in 1940 as in 1840, the index of wholesale prices was only about 10 per cent. higher. But the index has an upward bias, so that the actual level of prices in 1940 was probably somewhat below the level in 1840. Since average hourly earnings in 1940 in the economy as a whole with the exception of agriculture were nearly eight times as high as in 1840, it is apparent that the adjustment to the increase in productivity took the form of a rise in incomes and in spending rather than a fall in prices.[2] As was noted above, there is evidence that in other countries similar adjustments have taken place. As a result there has been a fairly close correlation in most countries between overall increases in productivity, average money earnings and the general level of real wages.

The correspondence is, of course, by no means exact. Not all of the benefits of increased productivity are taken out in the form of higher wages, increases in non-wage incomes, or lower prices. Part may be enjoyed in the form of shorter hours of work, holidays with pay and increased leisure. Some part of the increase in non-wage incomes, moreover, may go to wage-earners in the form of social services. There has in fact been a continuing trend in practically all countries toward shorter hours and increased social services. In Australia, for example, where full-time average weekly real wages rose 23 per cent. from 1911 to 1943, average weekly hours of work fell from 49 to 43.6, annual and statutory holidays on full pay were instituted, working conditions were considerably improved, and transfers of income to wage-earners through social services are estimated to have raised total incomes of wage-earners substantially more than is indicated by the 23 per cent. rise in real wages mentioned above.[3]

[1] Statement by Professor J. T. Dunlop quoted in National Industrial Conference Board Economic Forum, Press Release of 21 July 1947. Cf. John T. DUNLOP : " American Wage Determination: The Trend and its Significance ", in *Wage Determination and the Economics of Liberalism*, addresses by various authors (Washington, 1947), p. 36.

[2] Cf. Summer H. SLICHTER : *The Challenge of Industrial Relations* (Ithaca, New York, 1947), pp. 88-89.

[3] Cf. AUSTRALIA, COMMONWEALTH BUREAU OF CENSUS AND STATISTICS : *Labour Report, 1944* (Canberra, 1946), pp. 62 and 66; and INSTITUTE OF PUBLIC AFFAIRS : *Profit, Income and Living Standards* (Melbourne, 1946), pp. 23 and 32.

According to one estimate covering a number of countries over the period 1885 to 1937, roughly one-tenth, on the average, of the total increase in productivity was taken out in the form of shorter hours. [1]

Wage Policy in Conditions of Full Employment

Apart from productivity, the main determinant of the level of average real earnings (as distinct from wage rates per hour or per day) is the level of employment. The methods which should be adopted in order to maintain full employment do not form part of the subject matter of the present report. The relation of the general level of wages to the level of employment is however an important aspect of wage policy and is examined in some detail in Chapter VI below. As is there shown, the relation is one of great complexity, and neither theoretical analysis nor such records as are available of actual experience provide the basis for any exact forecast of the probable effect of changes in the wage level on the level of employment. On general grounds, however, there would appear to be a presumption that, given appropriate fiscal, monetary and price policies and a willingness to accept the consequences of such policies, any level of wage rates, or at least any level within a wide range, may be compatible with the general objective of full employment without inflation; but it is important to bear in mind the qualification at the beginning of this statement. The fiscal, monetary and other measures which would be required in order to maintain full employment without inflation in the face of any major change in the general level of wages might well be of so drastic and far-reaching a character as to be unacceptable to the community concerned.

In practice, therefore, there would appear to be fairly definite though not easily identifiable limits beyond which movements in the general level of wages would seriously threaten the maintenance of full employment without inflation, at least in any economy in which substantial reliance is placed on private investment and in which it is desired to preserve the freedom of the individual to offer or withhold his services.

The percentage of the national income or output of industry

[1] QUEENSLAND BUREAU OF INDUSTRY : *Economic News*, April-June 1946, pp. 3, 5 and 7.

received by labour affects the amount of employment mainly through its influence on the ratio of consumption to savings. If the percentage of the national income accruing to labour increases, for example, because of a rise in the general wage level, while the total national income remains the same, the proportion of the national income consumed will rise and the amount saved will fall. This is because people with lower incomes have a greater " propensity to consume " [1] than people with higher incomes. Consumption may be so increased and the amount of savings so decreased that the amount of savings available for investment would be insufficient for the amount of investment that entrepreneurs anticipate will now prove profitable, and an inflationary situation may develop which would nullify the initial gains of labour. If, on the other hand, labour holds its gains and profits are squeezed, private investment may fall below the volume of savings forthcoming at full employment, and unemployment will result. Conversely, if labour's share of the national income is decreased beyond a certain point, full employment will be threatened by lack of profitable markets for final products, because of inadequate purchasing power in the hands of labour, and the tendency for profit-earners to save a large share of their incomes. It is apparent, therefore, that labour's share in the national income can vary only within certain limits without aggravating the problem of maintaining full employment without inflation by fiscal, monetary and other means.

The problem of what wages policy should be adopted in conditions of full employment, in order to ensure to workers the full value of their services and to contribute to the maintenance of full employment without inflation, is of special concern to workers, both because of their direct stake in the results of the policy adopted and because, in conditions of full employment such as exist in many countries at the present time, a strongly organised trade union movement may be in a position to exert a determining influence on wage policy. Some of the problems involved, together with suggestions for their solution, have been stated as follows by Lord Beveridge :

[1] The " propensity to consume " of a person or class of persons has been defined by Beveridge to indicate " the proportion of his or their total income which that person or class may be expected to spend on consumption. . . . The smaller the income, whether of a person or community, the larger is the propensity to consume ". Cf. W. H. BEVERIDGE : *Full Employment in a Free Society* (London, 1944), pp. 407-408.

The problem of how wages should be determined under conditions of full employment is . . . important . . . and difficult. . . . Making the labour market generally a seller's market rather than a buyer's market will increase permanently and markedly the bargaining strength of labour. In so far as this leads to labour, as a whole, gaining a larger share of the total product of industry, it leads to a desirable result. But, given the sectional structure of trade unionism, that is not the only possible result. Particular wage demands which exceed what employers are able to pay with their existing prices, and which force a raising of prices, may bring gains to the workers of the industry concerned, but they will do so at the expense of all other workers, whose real wages fall owing to the rise in prices. The other workers will naturally try to restore the position, by putting forward demands of their own. There is a real danger that sectional wage bargaining, pursued without regard to its effects upon prices, may lead to a vicious spiral of inflation, with money wages chasing prices and without any gain in real wages for the working class as a whole.

It is necessary to face this possibility. Irresponsible sectional wage bargaining may lead to inflationary developments which bestow no benefits upon the working class ; which spell expropriation for the old-age pensioner and the small rentier ; and which endanger the very policy of full employment, whose maintenance is a vital common interest of all wage-earners. . . . There is no inherent mechanism in our present system which can with certainty prevent competitive sectional bargaining for wages from setting up a vicious spiral of rising prices under full employment.

Two suggestions may be made for dealing with this problem. First, the central organizations of labour . . . should devote their attention to the problem of achieving a unified wage policy which ensures that the demands of individual unions will be judged with reference to the economic situation as a whole. If prices are kept stable . . . rising productivity will make possible a continuous, if not spectacular, rise of money wages, even if the share of the total product that goes to the wage-earner remains no higher than at present. If that share can be increased, wages may rise still more ; such a development is desirable from the economic as well as from the moral point of view. But the attempt to bring it about must be a co-ordinated attempt ; it must not be a blind groping and pressing by numerous groups, each of which sees only its own sectional interest and tries to exploit its particular strategic advantages, and none of which attempts to judge the position of the whole economy. . . .

The second suggestion relates to arbitration. In the new conditions of full employment, wages ought to be determined by reason, in the light of all the facts and with some regard to general equities and not simply by the bargaining power of particular groups of men. This suggests, not that there should be continuance in peace of the compulsory arbitration which has been accepted in war, but that collective bargains in each industry should in general include a clause for arbitration by an agreed arbitrator, in default of agreement between the parties. . . .

So long as freedom of collective bargaining is maintained, the primary responsibility of preventing a full employment policy from coming to grief in a vicious spiral of wages and prices will rest on those who conduct the bargaining on behalf of labour. The more explicitly that responsibility is stated, the greater can be the confi-

dence that it will be accepted. But both the State and the managers of business have their part to play. The part of the State lies in the adoption of a definite policy of stable prices . . . it is unreasonable to expect from trade unions a reasonable wage policy, unless there is a reasonable price policy, just as much as it is impossible to have a price policy without a wage policy. The part of business managers lies in accepting the need for making available to others than themselves full information as to the financial condition of industry. Wages ought to be determined by reason, not by the methods of strike and lockout. Ordeal by battle has for centuries been rejected as a means of settling legal disputes between citizens. Strikes and lockouts, though they cannot in a free society be forbidden by law, are anachronisms as indefensible as ordeal by battle. They should give place to reason, but reason cannot work in practical affairs without facts. The correlative to acceptance by trade unions of an arbitration clause in all collective bargains would be acceptance by employers in all important industries of standardised accounting practice and their readiness to put all facts as to profits, costs and margins unreservedly at the disposal of the arbitrator and an expert staff for criticism. [1]

The problems involved in framing wage policies appropriate to conditions of full employment have for some time past been under serious consideration by Governments, management and labour in many countries. For example, the Prime Minister of Australia, in the course of a statement made on 8 October 1947 on the subject of amendments to the National Security (Economic Organisation) Regulations, said that

under present circumstances it is more than ever necessary to keep a close watch on domestic price levels, and employers cannot be permitted complete freedom to offer sectional increases in pay at the expense of consumers, in the hope of bidding labour away from other industries. To avoid this danger—which is most pronounced in monopolistic and semi-monopolistic industries—the new regulation will require that, except in special cases, the award rates (of the industrial authorities) shall be maximum as well as minimum rates. Variations will be allowed where they result from the operation of a bonus, piece-work or other system of payment by results at present in force. New systems of this kind may be introduced provided they have been approved by an industrial authority and that they relate the rate of remuneration to the output or production of an employee or group of employees. [2]

[1] W. H. BEVERIDGE : *Full Employment in a Free Society*, *op. cit.*, pp. 198-201. Cf. *The American Economic Review*, September 1947, pp. 552-565, " Cost Functions and Full Employment ", by A. H. HANSEN ; *The Economic Journal*, December 1947, pp. 438-455, " Wage Policy in Full Employment ", by H. W. SINGER ; and *The Canadian Journal of Economics and Political Science*, February 1948, pp. 46-61, " The Theoretical Problems of a National Wage-Price Policy ", by M. W. REDER.

[2] Press Release (Canberra, Australia), 8 October 1947, communicated to the I.L.O. Cf. COMMONWEALTH OF AUSTRALIA : *National Security (Economic Organisation) Regulations*, as amended by Statutory Rules, 1947, No. 145, made under the Defence (Transitional Provisions) Act, 1946.

The problem as it presents itself in the United Kingdom was summarised in a White Paper, *Statement on Personal Incomes, Costs and Prices,* presented to the House of Commons on 4 February 1948 by the Prime Minister [1], and in subsequent comments on this statement. Emphasising the danger of inflation, the statement pointed out that " when it comes to a race between rising prices and personal incomes, prices will always rise in the long run, so that conditions become progressively worse for the holders of all personal incomes but particularly for wage-earners. It is essential, therefore, that there should be no further general increase in the level of incomes without at least a corresponding increase in the volume of production. " The customary relationships between personal income — including wages and salaries — in different occupations, according to the statement, had no necessary relevance to modern conditions, and they must, where necessary, be adapted to conform to the national interest. Relative income levels must be such as to encourage the movement of labour to those industries where it was most needed. The statement continued :

The Government accordingly feel bound to set out the following general considerations as a guide to all those whose deliberations and actions contribute to the settlement of the amount of personal incomes, from whatever source.

(a) It is not desirable for the Government to interfere directly with the income of individuals otherwise than by taxation. To go further would mean that the Government would be forced itself to assess and regulate all personal incomes according to some scale which would have to be determined. This would be an incursion by the Government into what has hitherto been regarded as a field of free contract between individuals and organisations.

(b) In the view of the Government it is essential that there should be the strictest adherence to the terms of collective agreements. One of the main advantages of a system of collective bargaining is that it tends to ensure that wage and salary movements take place in an orderly manner and with due regard to the general as distinct from the individual interest. Departure from the agreed conditions by individual employers, whether public authorities or private concerns, will inevitably constitute a grave danger to the stability of the system of collective bargaining, and may well lead to competitive bargaining, and thus to general but unjustifiable increases in wages and salaries and to serious inflation. The value of the system of collective bargaining and the justification for its maintenance at the present time rest upon the assumption that the terms of collective agreements will be observed loyally by all employers and workers, and the Government cannot stress too highly the importance which they attach to this principle.

(c) In present conditions, and until more goods and services

[1] Cmd. 7321.

are available for the home market, there is no justification for any *general* increase of individual money incomes. Such an increase will merely raise costs of production, without making more goods available, and so can only have an inflationary effect. Unless accompanied by a substantial increase in production, it would drive up prices and charges, adversely affect pensioners, children and other recipients of social services benefits, increase the money cost of our exports and so reduce their saleability, and by black market pressure make it almost impossible to operate the controls necessary in view of the continuing scarcity of supplies and man-power.

(d) It does not follow that it would be right to stabilise all incomes as they stand today. There may well be cases in which increases in wages or salaries would be justified from a national point of view, for example, where it is essential in the national interest to man up a particular undermanned industry and it is clear that only an increase in wages will attract the necessary labour. It does, however, follow that each claim for an increase in wages or salaries must be considered on its national merits and not on the basis of maintaining a former relativity between different occupations and industries.

It will be observed from these principles that there is no justification at the present time for any rise in incomes from profits, rent, or other like sources and that rises in wages or salaries should only be asked for and agreed upon in the exceptional cases mentioned above. On the other hand, if at some future time there should be a marked rise in the cost of living the level of those personal incomes which as a result became inadequate would need reconsideration.

The General Council of the Trades Union Congress endorsed the principles of the White Paper " on condition that the Government pursues vigorously and firmly a policy designed not only to stabilise but to reduce profits and prices " and to the extent that those principles

(1) recognise the necessity of retaining unimpaired the system of collective bargaining and free negotiation ;

(2) admit the justification for claims for increased wages where those claims are based on the fact of increased output ;

(3) admit the necessity of adjusting the wages of workers whose incomes are below a reasonable standard of subsistence ;

(4) affirm that it is in the national interest to establish standards of wages and conditions in undermanned essential industries in order to attract sufficient man-power ; and

(5) recognise the need to safeguard those wage differentials which are an essential element in the wages structure of many important industries and are required to sustain those standards of craftsmanship, training, and experience that contribute directly to industrial efficiency and higher productivity. [1]

The complex nature of the problems involved in reconciling the claims of different groups, the need to attract additional

[1] *The Manchester Guardian*, 19 Feb. 1948, p. 5.

labour to essential industries, and the requirements for maintaining full employment without inflation, is well exemplified by the statements quoted in the preceding pages. While it has not been possible to attempt any comprehensive analysis of these problems in the present report, certain aspects of them are discussed in Chapters VI and VII below, and brief references are made in Chapter V to the problem of wage differentials in favour of essential work.

Because of the complexity of the issues involved, and because of the vital importance of achieving solutions which are both just and workable, it is clearly desirable that these problems should be the subject of continuing investigation, and it is important that they should be given the fullest consideration by Governments, employers and workers.

CHAPTER V

RELATIVE WAGES IN DIFFERENT OCCUPATIONS AND INDUSTRIES

The attainment of maximum economic and social welfare in any country requires not only the achievement of an optimum wage level together with maximum stability of employment and earnings but also that the relative wages in different occupations and industries shall be such as will *(a)* cause labour to be allocated among the different occupations, industries and geographic areas in the economy in such a manner as to maximise the national product ; *(b)* enable full employment of the resources of the economy to be attained ; and *(c)* facilitate the most desirable rate of economic progress. The present chapter discusses briefly (1) the extent and nature of differentials in wage rates and earnings ; (2) the causes of these differentials ; and (3) some of the current problems associated with wage differentials.

Extent and Nature of Wage Differentials

The extent and nature of differentials in wage rates and earnings in the economy as a whole, between occupations and between geographic areas in an economy, may be illustrated by a few examples.

The spread of wage rates and of earnings is of course greatest for the economy as a whole. In Soviet Russia, for example, the earnings of wage-earners and salaried workers in industry for the month of October 1934 ranged from less than 50 roubles to more than 1,420 roubles. Of the total number of wage-earners 3.6 per cent. received less than 50 roubles, while 1.7 per cent. received more than 420 roubles, or over eight times as much ; 2.2 per cent. of the wage-earners and salaried workers received more than 500 roubles, some even being paid in excess of 1,420 roubles. [1]

[1] Abram BERGSON : *The Structure of Soviet Wages* (Cambridge, Mass., 1944), p. 228.

Differentials between Occupations

The most familiar type of differential is that which occurs between occupations, and in particular between occupations involving different degrees of skill. Thus, hourly wage rates in Peru in October 1943 were 0.90 soles for bakers and 0.44 soles for building labourers. In Denmark, in the same month, hourly earnings were 2.98 kroner for bricklayers and masons and 1.85 kroner for horse drivers. In the printing trade in Caracas, Venezuela, in October 1943, compositors received hourly rates of 2.5 bolivares ; machine minders, 1.5 bolivares ; bookbinders, 0.75 bolivares ; and unskilled workmen, 0.5 bolivares. [1]

Even within a single occupation, and in the same region, there are often substantial variations in the rates of wages actually paid and in earnings. In the United States, in 1946, for example, investigations by the National War Labor Board indicated that even in a local labour market the highest rate in an area was usually at least 50 per cent., and frequently 100 per cent., above the lowest rate for workers classified under the same job title. [2]

Differentials between Geographic Areas

The earnings of workers in the same occupation vary from region to region in the same country. Thus, in the United States, a study of the hosiery industry in January 1946 showed that average hourly earnings of full-fashioned hosiery operatives in the Middle Atlantic States were 11 per cent. above the national level of 97 cents, and in the Southern States 9 per cent. below that level. In Philadelphia men workers averaged $1.42 per hour against $1.03 per hour in Statesville. Similar differences existed for women workers. Wage differentials in the industry were also noticed between communities and plants of different sizes. Thus, on a national basis, the hourly earnings of men averaged $1.26 in towns of under 25,000 population ; $1.68 in cities of over 100,000 population, and $1.41 in cities of intermediate size. Single unit knitters averaged $1.60 in the

[1] International Labour Office : *Year Book of Labour Statistics, 1943-44* (Montreal, 1945), p. 167.

[2] *The American Economic Review*, June 1946, p. 336, " Wage Differences in Local Labor Markets ", by L. G. Reynolds.

largest mills, $1.40 in mills with 8 to 50 workers, and only $1.35 in the intermediate size group.[1]

Similar differences exist in other countries. For example, the hourly rates or earnings in October 1943 of iron moulders in Mexico were 0.84 pesos in Monterey and 0.51 pesos in Puebla ; in Sweden, they were 1.20 kronor in Malmö and 1.34 kronor in Stockholm ; in Canada, they were $0.69-0.97 in Montreal and $1.00 in Vancouver.[2]

Regional differentials of this kind may arise as a result of any one or more of a great many factors affecting the demand for or the supply of labour in different regions, as a result of differences in the cost of living, or as a result of differences in the degree of competition in the markets for labour or for goods, and in particular in the relative bargaining power of workers and employers in different regions.[3]

Factors Responsible for Wage Differentials

It was assumed in Chapter III, in discussing the factors which determined wages, that all workers were of equal skill and efficiency. Such an assumption, of course, is unrealistic. Workers do differ in skill and efficiency. After allowance has been made for the costs of movement from one job to another, such differences should be reflected exactly in differences in wage rates under conditions of perfect competition in the labour market and in the markets for the products of industry ; or of perfect competition in the labour market and the same degree of imperfection of competition throughout the markets for the products of industry ; or of the same degree of imperfection of competition throughout the labour market ; or of the same degree of imperfection of competition throughout the labour market and also throughout the markets for the products of industry. However, as was seen in Chapter III above, perfect competition does not normally prevail in either the labour market or the product markets of a modern economy. Further, it is

[1] *Monthly Labor Review*, December 1946, pp. 955-958, "Wage Structure of the Hosiery Industry, January 1946 ".

[2] INTERNATIONAL LABOUR OFFICE : *Year Book of Labour Statistics, 1943-44* (Montreal, 1945), pp. 164-169.

[3] For an analysis of the influence of some of these factors, see Carrie GLASSER : *Wage Differentials : The Case of the Unskilled* (New York, 1940), Chapter VIII.

unlikely that the same degree of imperfection of competition will be found throughout the labour market or the product markets. Consequently it will be found that workers of the same skill and efficiency are frequently paid at different rates and earn different amounts even in the same occupation and the same industry. Such differences in wage rates and earnings may be caused by ignorance on the part of either employers or employees as to prevailing wage rates, by the influence of customary ideas as to what rates should be or by the effect of inertia and other obstacles to the movement of workers from lower-paid to higher-paid jobs.[1] Wage differentials can also be brought about by other factors, some of which are noted below.

Differentials Due to Different Systems of Payment

The two basic systems of wage payment are by time or by piece rate. Time payments are by the hour, day, week, month or year, although the most usual are hourly, daily or weekly payments. Piece rate payments are made in terms of units of output. As was noted in Chapter II, numerous variations and combinations of these two basic systems are used, the object generally being to provide workers with an incentive to increase their output. Thus, workers may receive a daily wage, but may be paid in addition a bonus or premium for production in excess of a given amount. Again, hourly or daily rates for each worker or groups of workers may be set according to their performance. Profit-sharing may cause a further variation in the earnings of workers, but the amount of profits earned during a period and allotted to workers does not bear a direct relationship to each worker's output, as is the case with a piece rate. If different systems of remuneration are used in an industry, workers in different plants in the industry may receive a different monetary reward for the performance of the same quantity of work.

It is customary in some industries to pay wages partly in kind. Such payments, which sometimes represent a substantial part of the total remuneration, are a further source of wage differentials. Farm workers, for example, are frequently

[1] Cf. Z. Clark Dickinson: *Collective Wage Determination, op. cit.*, pp. 67-69, 491, 554 and 582; Carrie Glasser: *Wage Differentials, op. cit.*, Chapter VI; *Review of Economic Statistics*, August 1946, pp. 152-159, "Wage Diversity and its Theoretical Implications", by Richard A. Lester; and Edmund Whittaker: *op. cit.*, pp. 597-604.

TABLE IX. TYPES OF ADDITIONS TO OR DEDUCTIONS FROM EMPLOYEES' WAGES IN INDUSTRY IN THE UNITED STATES (RESULTS OF SAMPLE ENQUIRY)

Type of addition or deduction	Industry					
	Lumber	Mining (Alaska)	Oil	Railway	Textile	All others
Number of companies	19	—	3	—	89	17 [1]
Board	4	— [2]	—	— [3]	6	—
Company stores	8	—	—	—	39	—
Electricity and water	—	—	—	— [4]	23	—
Fuel	4	—	3	— [4]	20	—
Housing and rent	6	—	—	— [4]	77	2
Insurance	3	—	—	—	33	16
Laundry	—	—	—	—	1	—
Loans and advances	5	—	—	—	17	3
Lodging	2	—	—	— [3]	1	—
Medical, dental and hospital services	3	—	—	—	14	—
Miscellaneous	4 [5]	—	—	—	13 [6]	1 [7]

Source: Communication to the I.L.O. dated 6 December 1946, of the results of a sample search in November 1946 of the files of the Wage and Hour and Public Contracts Division of the United States Department of Labor. The sample surveyed did not include agriculture. (For an account of the extent of perquisites in agriculture in the United States, reference may be made to *Monthly Labor Review*, August 1947, p. 193.)

[1] Includes shipbuilding (3 plants), radiator manufacturers (3 plants), insulation products manufacturing (1 plant), office machines manufacturing (1 plant), furniture manufacturing (1 plant), road construction (1 firm), tobacco products manufacturing (1 plant), wholesale food (1 firm), rubber products manufacturing (1 plant), glass manufacturing (1 plant), coal (2 firms) and insurance (1 firm).

[2] It is a general practice among Alaskan mining concerns to make deductions from their employees' wages for meals.

[3] It is a general practice among railway companies to make deductions from the wages of their dining car employees for meals and lodging.

[4] Railroad maintenance-of-way employees are frequently supplied with housing, fuel and electricity.

[5] Tools, ice, mechanical water coolers, milk.

[6] Eyeglasses, Christmas savings, uniforms, contributions, employees' savings, cemetery plots, club dues.

[7] Clothing.

provided with board and lodging. Seamen also receive a substantial part of their remuneration in kind. For example, it has been estimated that, in 1943, licensed officers, radio operators and supervisory personnel on United States deep sea and Great Lakes vessels received food and lodging to the value of $48 a month, while other personnel received food and lodging to the value of $36 a month. [1]

[1] Hearings before House Committee on Merchant Marine and Fisheries, 78th Congress, 1st Session, 24-29 June 1943, p. 303.

Some companies provide all or some of their workers with free or cheap transport, housing, laundry, fuel, electricity and water, tools, uniforms or recreation facilities. However, deductions are often made from the wages of the workers concerned for the provision of these services. Sometimes a company allows its employees to purchase, at a discount, products it has for sale. Some employers make payments to provide their employees with accident, life and unemployment insurance or with a pension on retirement. Again, technical education and union dues are sometimes paid by the employer.

The table above gives some indication of the relative frequency of certain types of additions to or deductions from wages in various industries in the United States in the years immediately prior to 1944.

Differentials Due to Payments for Overtime, etc.

Differences between the earnings of workers in the same occupation or industry arise not only from differences in wage rates but also from differences in such matters as overtime rates, shift differentials, the procedure for discharge, lay-off or transfer and the application of specific rules affecting seniority and promotion. [1]

Provision is usually made in collective agreements for premium rates for overtime and for night shifts. During the war increased overtime and the working of night shifts in industries producing or handling war materials led to considerable increases in earnings in these industries as compared with earnings in other parts of the economy. In peace time, overtime rates and shift differentials may also lead to differences in workers' earnings in different industries. Thus, in the United States in 1946, shift differentials commonly ranged from 5 to 12.5 per cent. over the regular rate. Sometimes instead of, but generally in addition to, these differentials, workers received other advantages such as a reduction of the regular working period from eight hours to seven hours or extra rest and lunch periods. [2]

Differences in the remuneration of workers in different

[1] Cf. *Cost Behaviour and Price Policy* (New York, National Bureau of Economic Research, 1943), pp. 118-119; J. T. Dunlop: *op. cit.*, pp. 15-19; and Summer H. Slichter: *Union Policies and Industrial Management* (Washington, D.C., 1941), Chapters I-VI.

[2] *Monthly Labor Review*, October 1947, pp. 419-430, "Premium Pay Provisions in Selected Union Agreements".

industries also occur as a result of payments for vacations, statutory holidays and sick leave. In some countries these are determined by legislation, but in others they are fixed by collective bargaining. In recent years such payments have been extended in many countries. Not only has an increased number of workers enjoyed paid holidays, but the length of the holiday period has been extended. [1]

Provision is frequently made in legislation and in collective agreements for compensation for dismissal or lay-off, the actual value of payments for which varies from country to country and from industry to industry. Up to September 1939, forty countries had adopted dismissal notice or compensation legislation for salaried employees or for wage-earners. [2] For example, in Argentina, agricultural workers who are dismissed without lawful cause are entitled to compensation equal to half a month's wages for each year of employment or fraction of a year exceeding six months. [3] Union agreements in the United States show differences in the amounts of compensation payable even in the same industry. Thus, in the newspaper industry the main provisions of the contract negotiated with one New York paper by the American Newspaper Guild allow severance pay amounting to two weeks for each year of service, with no maximum, calculated on the average basic salary during the previous twenty-six weeks. A similar contract with another New York paper allows severance pay of two weeks after six months' service and approximately one week for each additional six months up to twenty-three years, with a maximum of fifty-two weeks, calculated on the average earnings for the previous three months. [4]

Differentials Due to Sex

Different rates of pay for men and women are common in Government service, in the professions, in industry and in agriculture in many countries.

[1] For further information on this point see International Labour Conference, 27th Session, Montreal, 1945 : *Director's Report*, pp. 74-80 (Montreal, I.L.O., 1945).

[2] Everett D. Hawkins : *Dismissal Compensation and the War Economy* (Washington, January 1942), p. 37. See also Chapter IX.

[3] Agricultural Worker's Code, 1944, Decree No. 28, 169/44, dated 17 Oct. 1944 (International Labour Office : *Legislative Series*, 1944, Arg. 3).

[4] American Newspaper Guild : *Wages and Conditions in American Newspaper Guild Contracts*, 10 June 1946 (New York, June 1946), pp. 100-101.

The amount of the differentials between men's and women's wages varies not only from country to country but also from one field of activity to another. These differences correspond, to a great extent, to the differences in the type of work done. Women predominate in many of the lower paid industries and occupations and men in those which are more highly paid. Within the same occupation, however, and where there is no appreciable difference in quality or quantity of output, women's wages are frequently lower than those of men. In the teaching profession, for instance, such countries as Denmark, France, Sweden and some States of the U.S.A.[1] provide for the same remuneration for both sexes, but in others the wage differential may be 10 to 20 per cent., as in England (1946)[2], 25 per cent., as in Western Australia, of 14 per cent., as in Queensland (Australia).[3]

In the civil service, according to an unpublished survey made by the I.L.O. in 1945 which covered thirty-eight countries, there were twenty-seven countries which applied a single scale of salaries according to which men and women in the same grade were paid at the same rate ; eight countries in which equal pay for equal work was the general rule, with certain exceptions ; and three in which the general rule was a double scale of rates according to sex, although there might be exceptional cases in which " equal pay for equal work " was applied. Equal pay for men and women civil servants does not preclude a difference in the average salary which is received by the male and female staff. The average salary of women civil servants is lower in all countries than that of men civil servants, owing to the fact that more women than men are to be found in the lowest grades of the service. This is due not only to the fact that the upper grades of the public services are perhaps less accessible to women, but also to the greater number of women in the service belonging to the younger age classes.

In industry, differences between men's and women's wages still persist, although in recent years these differences have been reduced. In the United Kingdom, the average weekly earnings of adult women were 53 per cent. of those of adult men in

[1] *The Law and Women's Work*, I.L.O., Studies and Reports, Series I, No. 4 (Geneva, 1939), Chapter XI.

[2] *Royal Commission on Equal Pay, 1944-1946 : Report* (London, H.M. Stationery Office, October 1946, Cmd. 6937).

[3] *The Law and Women's Work, op. cit.*

January 1945, as compared with 47 per cent. in October 1938.[1] In Australia, before the war, the basic wage for women in industry was fixed at from 50 to 54 per cent. of the basic wage for men.[2] A rise to 75 per cent. took place in vital industries in New South Wales during the war.[3] The policy followed by the Women's Employment Board[4], established in 1942 to regulate the conditions of employment of women workers, was reflected in a decline of the average differential between men's and women's wage rates. From 1939 to September 1947, the average hourly wage rates of women workers in Australia rose 57 per cent. as compared with an increase of 42 per cent. in the rates for men.

In France, the differentials applied to women wage-earners on 1 April 1946 amounted to about 15 per cent. After the enforcement of the Order of 30 July 1946 establishing wage equality, the differential was reduced to 7.9 per cent. in April 1947, while, during that period, women's wages rose by 43 per cent. as compared with 34 per cent. for men's wages.[5]

The position in a few other countries may be briefly noted. Thus, in 1946, women's hourly earnings were 65 per cent. of those of men in Sweden, 72 per cent. in Bulgaria, and 61 per cent. of those of skilled men workers and 70 per cent. of those of unskilled men workers in Denmark.[6]

Differentials Due to Differences in Relative Bargaining Power of Employers and Workers

As was noted in Chapter III, one of the factors which determine the level of wages in any given industry or occupation is the relative bargaining power of employers and workers. Where relative bargaining power differs in different industries, occupations and areas, differentials in the wages for similar jobs are bound to arise. It does not of course follow that organised workers will always receive more than unorganised workers, or that strongly organised workers will enjoy a differential over

[1] *Royal Commission on Equal Pay, 1944-1946: Report, op. cit.*, p. 48.

[2] *The Law and Women's Work, op. cit.*, p. 392.

[3] *New South Wales Industrial Gazette*, 30 September 1945, p. 318.

[4] *International Labour Review*, Vol. XLVIII, No. 1, July 1943, p. 100; Vol. LII, No. 6, December 1945, pp. 632-642.

[5] *Idem*, Vol. LV, No. 6, June 1947, p. 554; *La Revue française du travail*, No. 19, October 1947, pp. 919 *et seqq.*

[6] *International Labour Review*, Vol. LVI, Nos 5-6, November-December 1947, pp. 634-638.

workers who are less strongly organised ; in any particular case the factor of bargaining power may be outweighed by other factors, such as the degree of competition in the product market or the differences in productivity per worker, or by any of a number of other factors which influence particular rates of wages. A survey of the industrial chemical industry in the United States in January 1946 showed, for example, that " the wage rates of union workers in the country at large exceeded those of non-union workers in seven out of every ten occupations studied ; the difference for comparable jobs averaged about 3 per cent." [1] In the electroplating industry, on the other hand, no marked difference between the rates received by organised and unorganised workers was shown by a study of the industry in January 1945. [2] As a general rule, however, differences in the degree of organisation of workers in different industries and occupations are likely to be reflected in relative wages.

Differentials under Wage Regulation

As was noted in Chapter III, the wage rates fixed by a wages board, arbitration court or other wage-fixing authority may differ from those which would develop in conditions of perfect competition and may differ also from those which would result from collective bargaining. Where minimum, standard or maximum wage rates are fixed by authoritative regulation, therefore, the pattern of wage differentials established will depend not only on market conditions but also on the views and policies of the wage-fixing authority. In general such an authority is likely to pursue, as one of its objectives, a fairly high degree of uniformity within any single occupation in a given area or region, and also within groups of occupations involving similar degrees of skill. Again, it is likely to set similar premium rates or margins in different industries and occupations under its jurisdiction for shift work, overtime, dangerous or dirty work, work involving prolonged absence from the worker's place of residence, occupations in which the worker is put to special expense for the purchase of tools or protective clothing, and so on. There is thus a tendency under any system

[1] *Monthly Labor Review*, November 1946, p. 748, " Wage Structure of the Industrial Chemical Industry, January 1946 ".

[2] *Idem*, May 1946, p. 773, " Wage Structure of the Electroplating and Polishing Industry, January 1945 ".

of authoritative wage regulation for the various types of wage differentials to be established or adjusted in accordance with certain principles, and for a greater degree of uniformity to exist among comparable cases than can ordinarily be expected to result from the free play of market forces. [1]

Some Problems Associated with Wage Differentials

To the extent that wage differentials reflect differences in the productivity of different types of labour, or of labour of the same type in different places, they have a sound justification (given the existing conditions of demand and supply for the types of labour concerned) and perform an important function—they serve to attract to different jobs the workers who have or can acquire the particular quality of skill, and are willing to perform the services, that are needed for the efficient performance of those jobs. They help to equalise the "net advantages" of employment in different occupations by rewarding with a higher wage workers who are prepared to devote time and effort to acquiring such specialised skill as that of a joiner or a fitter, or to face the hazards and discomforts associated with such occupations as mining or tunnelling. At the same time they ensure that workers of different degrees of skill and efficiency are rewarded in proportion to the value of their contributions to the wealth and welfare of the community.

In practice, however, as may be gathered from even the brief account of actual wage differentials given in the preceding pages, many of these differentials are due in part at least to factors which have little or no relation to the relative attractiveness or difficulty of different jobs, or to the relative skill or efficiency of different workers. Moreover, differentials, once established, tend to persist long after their economic basis has disappeared. The pattern of differentials which exists at any particular time or place is thus likely to be full of anomalies and to differ at many, if not always easily recognisable, points from anything which might be regarded as an ideal. Anomalies of this kind present some of the most difficult problems of wage policy. In the remaining paragraphs of this chapter three current examples of such anomalies are briefly discussed.

[1] Cf. for example, George ANDERSON: *Fixation of Wages in Australia* (Melbourne, 1929), and *Economic Record* (Melbourne), Vol. XIII, No. 25, December 1937, "The Fair Wage Principle in New Zealand: Its Application and a Possible Extension", by E. J. RICHES.

Margins for Essential Work

In most of the countries involved in the Second World War favourable differentials in wage rates, as well as high overtime earnings and shift bonuses, were used as inducements to attract workers into industries producing war supplies. In some cases the differentials in wage rates were established deliberately for this purpose; in others they were the result of the piece rates set for new operations in which, as the scale of war production expanded and improved techniques were introduced, the workers' output rose to unexpected levels. [1] With the post-war contraction of the industries concerned, differentials of this latter type have tended to disappear; but other war-created differentials have persisted. Some of these, it is true, represented a correction of earlier anomalies, and will serve a useful purpose in peacetime as in war; but others have outlived their usefulness and, instead of attracting workers into occupations in which their services are most needed, now have the opposite effect.

Wartime and post-war rationing and price controls have also led in certain cases to the emergence of wage differentials which attract labour away from essential industries. Shortages of essential consumers' goods have diverted expenditure to luxuries, the prices of which were subject to less strict control; and the producers of such goods, making high profits, have been able to offer high rates of wages and thus to attract workers whose services were needed urgently elsewhere.

If wage differentials could serve in wartime to attract labour to essential industries, and can succeed also in attracting workers to luxury trades, why, it may be asked, can a new set of differentials not be established that would induce workers to move into the avenues of employment that are considered most important for reconstruction and recovery? The answer is, in part, that the need for differentials of this kind has in fact been recognised [2], and that such differentials have been established

[1] Much the same thing happened during the war of 1914-1918. Cf. E. J. Riches: "Relative Wages in Wartime", in International Labour Office: *Studies in War Economics* (Montreal, I.L.O., 1941).

[2] Cf. the statement in a recent British White Paper that "There may well be cases in which increases in wages or salaries would be justified from a national point of view, for example, where it is essential in the national interest to man up a particular under-manned industry and it is clear that only an increase in wages will attract the necessary labour" (*Statement on Personal Incomes, Costs and Prices*, London, February 1948, Cmd. 7321).

in certain cases and have achieved a limited measure of success. Because of the dangers of a wage-price spiral in conditions of full employment, Governments have, however, been reluctant to place any great reliance upon such differentials. In some cases, of course, the major obstacle to transfers of labour on the scale desired is in any case one which no practicable wage differential could overcome: there may, for example, be a shortage of housing in the area in which more workers are needed. Other types of shortages also reduce the effectiveness of wage incentives; if the goods the worker wants are not available, a higher wage is not worth much. But even where a wage differential could exert a strong attraction, its effectiveness may be short-lived. Traditional relations between wages in different industries and occupations command strong allegiance. Though changes occur gradually over long periods of time, any sudden change is apt to be vigorously resisted. A sudden increase in wages in a particular industry is therefore likely, however good the reason for it, to provoke immediate demands for similar increases elsewhere. In conditions of full employment, and with the wartime apparatus of wage controls dismantled (as it has been in many countries), such demands are likely to succeed. To the extent that they do, the purpose of the special differential will be thwarted; and with wages rising throughout the economy prices too will rise, and workers as a group may find themselves no better off, though certain sections may gain at the expense of others.

Consequently, though a policy of setting new or higher differentials in favour of essential work may make some contribution towards solving the problem of under-manned industries, there appear to be fairly narrow limits to the extent to which it can be relied upon for this purpose in present circumstances. The scope for such a policy may, it is true, be greater in the case of piece-rate and bonus systems than in the case of time rates; and its effectiveness would of course be greatly increased if agreement could be reached among employers' and workers' organisations in all the industries concerned to adopt a policy of this kind as a deliberate part of a general wage policy.

Margins for Skill

For a variety of reasons there has been a narrowing of the differentials between skilled and unskilled wages in many

countries during the past decade. The main factor in the decline has been the tendency of authorities responsible for wage controls to limit wage increases as far as possible to flat rate adjustments designed to offset rising costs of living. Even where no such policy was deliberately followed, or where formal wage controls have been relaxed, the increasing importance which the cost-of-living factor in wage adjustments inevitably assumes in times of rising prices has tended to produce the same result. The existence of full employment, by increasing the competition among employers for labour and narrowing the differences in bargaining power between skilled and unskilled workers, has had a similar effect.

In New Zealand, for example, the proportion by which the Arbitration Court's standard minimum rate for skilled workers exceeded that for unskilled fell from 25.6 per cent. in 1919 to 17.8 per cent. in 1937, 15.8 per cent. in 1939 and 14.7 per cent. in 1947.[1] In Italy, where the skilled worker's margin before the war was some 40-45 per cent., it has fallen to about 5 or 10 per cent., largely as a result of the growing importance of cost-of-living and family allowances and other payments which have little relation to the worker's skill or job. In the United Kingdom, though margins for skill declined less during the Second World War than during the first, the decline was nevertheless appreciable: the hourly rate for a bricklayer, for example, was $33^1/_3$ per cent. above that for a builder's labourer in 1939, and by 1946 the margin had fallen to 25 per cent. (in 1914 it was almost 44 per cent.).[2] In the United States also margins for skill declined in certain industries; in the building trades, for example, hourly wage rates of journeymen rose only 45 per cent. from June 1939 to July 1947, while those of helpers and labourers rose 71 per cent.[3] In Switzerland average earnings of unskilled male workers in industry, transport and commerce rose 57 per cent. from 1939 to 1945, while those of skilled workers rose 46 per cent.[4] In some countries, on the other hand, little or no change seems

[1] Cf. *Otago Daily Times* (Dunedin, N.Z.), 2 February 1948, p. 7.

[2] Cf. A. L. BOWLEY: *Wages, Earnings and Hours of Work, 1914-1917, United Kingdom* (London and Cambridge Economic Service Special Memorandum No. 50, May 1947), p. 6.

[3] *Monthly Labor Review*, January 1948, p. 51, "Union Wage Scales in the Building Trades, 1947".

[4] Cf. INTERNATIONAL LABOUR OFFICE: *Year Book of Labour Statistics, 1945-46*, p. 123.

to have occurred since 1939 in relative margins for skill ; this was the case, for example, in Austria [1], in Belgium and in Denmark. [2] In France the average margin for skill (in terms of hourly wages), which had fallen from 56 per cent. in 1929 to 44 per cent. in 1939, rose to 47 per cent. in 1945. [3]

In some cases the special circumstances of the war and post-war periods may have served merely to precipitate a decline in skilled workers' margins which was in any case to be expected sooner or later. There appears to be a long-period tendency for these margins to decline as a result of the gradual extension of more equal opportunities for education and vocational training to all classes of the population [4], increasing mobility of labour, stronger trade union organisation among the less skilled workers and an increase in the proportion of semi-skilled jobs. To the extent that the decline reflects increasing productivity on the part of the less skilled workers, and provided it does not proceed so far as to leave insufficient incentive to young workers to train for skilled work, the tendency toward greater equality in wage rates may be regarded as being in line with generally accepted social objectives. There has, however, been some concern on the part of wage-fixing authorities, as well of skilled workers' organisations, lest the decline in some cases may not already have proceeded too far. In Australia, for example, the Commonwealth Court of Conciliation and Arbitration in the course of a judgment concerning the fixation of wages in the metal trades, delivered on 26 June 1947, came to the conclusion that

> . . . the highly skilled man in this industry is not receiving, and has not for some time received, anything like a just recompense for his skilled work measured either by the personal sacrifices he has had to make to acquire his skill and knowledge — the productive results of that skill — or the social value of it. Nor is his reward adequate when measured against rewards offered to other workers in some other industries. . . . We are convinced that in the social interest, skill and enterprise should receive the maximum encouragement. [5]

[1] Cf. *Monatsberichte des Österreichischen Institutes für Wirtschaftsforschung*, No. 10, 30 Oct., 1947, p. 248.

[2] Cf. *International Labour Review*, Jan.-Feb. 1948, pp. 135-136.

[3] INTERNATIONAL LABOUR OFFICE: *Year Book of Labour Statistics, 1945-46*, p. 146.

[4] Cf. *International Labour Review*, June 1932, "Education and Relative Wage Rates ", by A. G. B. FISHER.

[5] *New South Wales Industrial Gazette*, 30 Sept. 1947, p. 545.

Differentials between Men's and Women's Wages

In a number of countries the differentials between men's and women's wages also declined during the war. In part this decline, like the narrowing of other types of wage differentials, was due to the general conditions of full employment and rising prices. Mainly, however, it was due to the greatly increased demand in wartime for the services of women workers. Women gained access, though in some cases only temporarily, to occupations which had formerly been reserved to men; and in many cases they were paid at the same piece and bonus rates. Employers, short of labour, bid against one another for their services; and where wage rates were controlled, wage-fixing authorities sanctioned increased rates as an inducement to women to enter industrial employment.

With the resulting steady expansion in the number of industries and occupations in which women find themselves doing work identical or almost identical with that done by men, the issue of equal pay for equal work has received increasing attention. It has been the subject of investigation or negotiation in a number of countries [1], and has recently formed the topic of a resolution adopted by the Economic and Social Council of the United Nations. The full text of the Council's resolution, adopted on 10 March 1948, is as follows:

> The Economic and Social Council,
>
> Having considered the question of the application of the principle of equal pay for equal work for men and women workers placed on its agenda at the request of the World Federation of Trade Unions, and the memorandum submitted on the subject by the Federation, [2]
>
> Having considered the recommendation on equal pay adopted by the Commission on the Status of Women;
>
> Reaffirms the principle of equal right to men and women laid down in the Preamble of the United Nations Charter and approves the principle of equal remuneration for work of equal value for men and women workers;
>
> Calls upon the States Members of the United Nations to implement the latter principle in every way, irrespective of nationality, race, language and religion;
>
> Decides to transmit the memorandum of the World Federation of Trade Unions to the International Labour Organization, inviting the latter to proceed as rapidly as possible with the further consideration of this subject and to report to the Council on the action which it has taken;

[1] See, for example, *Royal Commission on Equal Pay, 1944-46: Report, op. cit.*

[2] See Appendix VIII.

Further resolves to transmit the memorandum of the World Federation of Trade Unions to the Commission on the Status of Women for its consideration and for any suggestions it may wish to make to the Council ; and

Invites non-governmental organizations in Category "A" concerned to present their views on the subject to the I. L. O. and to the Council.

It will be recalled that Article 41 of the Constitution of the International Labour Organisation as it was originally adopted in 1919 affirmed "the principle that men and women should receive equal remuneration for work of equal value". In the amended Constitution adopted in 1946 the more general objective of "recognition of the principle of equal remuneration for work of equal value" is stated in the Preamble.

The principle of equal pay for work of equal value by men and women has also been incorporated in an international labour Convention, in various Recommendations and in a number of Resolutions adopted by the International Labour Conference and by other bodies of the International Labour Organisation. The Convention (No. 82) concerning social policy in non-metropolitan territories adopted in 1947 states that "it shall be an aim of policy to abolish all discrimination among workers on grounds of race, colour, sex . . . in respect of . . . wage rates, which shall be fixed according to the principle of equal pay for work of equal value in the same operation and undertaking to the extent to which recognition of this principle is accorded in the metropolitan territory".[1] The Recommendation (No. 30) concerning the application of minimum wage fixing machinery, adopted in 1928, calls attention to the principle affirmed in the original Constitution.[2] The Recommendation (No. 71) concerning employment organisation in the transition from war to peace, adopted in 1944, calls for "the establishment of wage rates based on job content, without regard to sex, in order to place women on a basis of equality with men in the employment market".[3] Resolutions concerning equal pay for work of equal value by men and

[1] Cf. INTERNATIONAL LABOUR OFFICE : *Official Bulletin*, 31 July 1947, Vol. XXX, No. 1, pp. 17-28.

[2] Cf. INTERNATIONAL LABOUR OFFICE : *International Labour Conference : Conventions and Recommendations, 1919-37* (Geneva, 1937), p. 155.

[3] Cf. INTERNATIONAL LABOUR OFFICE : *Official Bulletin*, 1 June 1944, Vol. XXVI, No. 1, pp. 61-73.

women include those adopted by the Second [1] and Third [2] Conferences of American States Members of the International Labour Organisation held in 1939 and 1946 respectively, by the Textiles Committee at its first session in 1946 [3], by the 30th Session of the International Labour Conference in 1947, [4] and by the Regional Meeting for the Near and Middle East in November 1947. [5]

The principle of equal pay for equal work has been embodied in the Constitutions of certain countries. The Constitution of the United States of Mexico, for example, provides that " the same remuneration shall be paid for the same work without regard to sex or nationality. " [6] The Constitutions of the Union of Soviet Socialist Republics, [7] and of Venezuela [8] contain similar provisions. The Constitution of Nicaragua, on the other hand, after proclaiming that " All Nicaraguans are equal before the law ", adds : " Women are excepted because of the differences inherent in their nature, and in the interest of the family. " [9]

While constitutional or other formal recognition of the principle of equal pay for work of equal value may be the first step towards its practical application, it is clearly no more than a first step. The real problems arise in the interpretation and implementation of the principle in particular occupations and industries. [10] It is clear, for example, that where the pro-

[1] Cf. INTERNATIONAL LABOUR OFFICE : *International Labour Code, 1939* (Montreal, 1941), p. 822.

[2] Cf. INTERNATIONAL LABOUR OFFICE : *Official Bulletin*, 5 September 1946, Vol. XXIX, No. 2, pp. 100-101.

[3] Cf. INTERNATIONAL LABOUR OFFICE : document IC/T/1/18, Annex, p. XII.

[4] Cf. INTERNATIONAL LABOUR OFFICE : *Official Bulletin*, 31 July 1947, Vol. XXX, No. 1, pp. 72-74.

[5] Cf. *idem*, 1 December 1947, Vol. XXX, No. 4, p. 223.

[6] INTERNATIONAL LABOUR OFFICE : *Constitutional Provisions concerning Social and Economic Policy* (Montreal, 1944), p. 375.

[7] *Ibid.*, p. 178.

[8] Cf. *International Labour Review*, Vol. LVI, Nos. 5-6, November-December 1947, p. 594.

[9] INTERNATIONAL LABOUR OFFICE : *Constitutional Provisions concerning Social and Economic Policy, op. cit.*, p. 394.

[10] Cf., for example, the following statement by the Chancellor of the Exchequer concerning the policy of the Government of the United Kingdom : " As a broad affirmation of a general principle, the Government accept, as regards their own employees, the justice of the claim that there should be no difference in payment for the same work in respect of sex. But such acceptance leaves unsettled many difficult questions of interpretation. It also leaves open the very important practical question of when effect should be given to this principle, and over what range of cases. The Government are definitely of the opinion that this principle cannot be applied at the present time " (*Parliamentary Debates*, House of Commons, 11 June 1947, Col. 1070).

ductivity of men and women workers is different, equal time rates of pay would not represent an application of this principle ; and if the difference in productivity were marked even uniform piece rates might be open to objection, since total production costs per unit would be higher for the output of the slower workers than for that of the faster. Where the work performed is not identical the problem of ascertaining what rates would represent equality is still more complicated, though perhaps not more so than the comparable problems that are constantly encountered and solved in setting rates for different jobs. Again, where the employment of women involves special overhead costs — *i.e.,* for supervision, or for rest rooms or other facilities — even equal output will not mean work of equal value.

In many occupations therefore the existence of some differential between men's and women's wages would be quite consistent with the principle of equal pay for work of equal value. What makes the inequality of men's and women's wages a problem is the fact that the differentials which actually exist are generally much greater than anything that could be accounted for in this way. The reasons for the size of existing differentials lie deep in prevailing social customs and employment practices as well as in the physiological and other differences between the sexes. These factors influence both the demand and the supply conditions of men's and women's labour. Their combined effect is, broadly speaking, that " relatively to the numbers of men and women respectively offering themselves for employment, the range over which men's services are, for one reason or another, more keenly demanded than women's exceeds the range over which women's services are more keenly demanded than men's ".[1] In these conditions, the mechanism of the market, operating through individual or collective bargaining, or through any type of wage-fixing which takes account of the relation between wage rates and employment, ensures that the wages of women will be lower than those of men.

Among the reasons for the lower intensity of demand for women's labour than for men's are legal and conventional limitations on the employment of women in certain occupations or at certain times ; the lesser physical strength of women and

[1] *Royal Commission on Equal Pay, 1944-46 : Report, op. cit.,* p. 108. The two paragraphs above which follow this quotation are based on the analysis in Chapter VIII of the Royal Commission's Report.

the common belief that men are in general more adaptable and versatile and, taking all "natural" differences into account, more productive than women [1]; and the higher absence rate and shorter industrial life of women. On the supply side there are the facts *(a)* that trade union organisation is less developed among women than among men workers, and *(b)* that most women, either because they are not dependent solely on their earnings from employment, or because they have no dependants to support, are willing to offer their services on easier terms than men.

If this analysis of the causes of existing differentials is broadly correct, it follows that any remedial action, to be effective, must be directed to these causes. The relative importance of the different factors listed will no doubt vary greatly in different industries and occupations, and also in different countries. Generally speaking, however, it would seem that in any programme of action designed to bring women's wages nearer to those of men special consideration should be given to measures designed to enlarge the opportunities of employment open to women, particularly in those directions for which their superior dexterity, greater tolerance of routine and other special qualities make them particularly well fitted; to methods of administration and management designed to minimise any special costs which their employment may entail; and to measures designed to improve their organisation and bargaining power.

[1] Cf. the following quotation from the evidence of the British Employers' Confederation before the Royal Commission on Equal Pay, 1944-46: "Where women are employed on the same work as men, their output is in general lower than that of the men, thereby increasing the number of workers required for a given amount of production and the overhead costs involved in respect of accommodation, machinery, supervision, inspection and administration of labour generally" (*ibid.*, p. 111).

CHAPTER VI

WAGES AND EMPLOYMENT

Economists are perhaps less in agreement on the relation of wage rates to the level of employment than on any other major question of economic policy. Logical and authoritative arguments have been made to demonstrate that a wage cut will increase employment, that it will reduce employment, that it will leave employment unchanged. This inconclusiveness is inherent in the nature of the problem. There is no simple, clear-cut relationship between wage rates and employment that holds for all times and places. On the contrary, the effect of a change in wage rates upon employment depends upon all the multitudinous interrelationships of a highly complex economic system. The exact nature of some of these relationships is unknown. The nature of others varies from time to time and from place to place. Consequently, the results of economic analysis depend upon the assumptions made regarding the most important of these relationships.

Much work must be done before plain answers can be given to plain questions about the effect of wage changes on employment. This chapter makes no pretence of providing a definitive solution to the problem. On the other hand, some significant conclusions can be reached, even with the limited knowledge available at present. The chapter begins by discussing the relation of employment to wage rates in individual industries, under various assumptions regarding the extent of competition or monopoly in the relevant markets. It proceeds to the more complicated analysis of the relation of the general level of wage rates to employment in the whole economy. Conditions under which wage cuts may increase employment, reduce it, or leave it unchanged, are outlined. Next, a survey is made of the main statistical studies of wages and employment, to see whether it can be decided on factual grounds which of these sets of conditions actually prevails. Finally, an effort is made to formulate a broad concept of an " optimum " wage level.

Throughout the chapter, the term " wages " means income of employees unless otherwise specified. " Profits " means all

income from property and management, including dividends, interest, rents, and entrepreneurial withdrawals (salaries of top management). International repercussions of wage policy are for the most part reserved for discussion in the next chapter. Also, wage policy is considered independently of other types of government policy, except in the final sections.

Wages and Employment in Individual Industries

In the economic literature of the 1920's and earlier, the effects of changes in wage rates on employment were discussed mainly in terms of individual industries or firms. Moreover, to a large extent the discussion was limited to the case where "pure competition" ruled throughout the economy; that is, the case of large numbers of competing employers and large numbers of competing workers in the labour market, and large numbers of competing firms in all markets for goods and services.

In this simplified case, fairly definite answers to the question of the effect of wage changes on employment could be given. For any one firm, the wages of its own workers constitute an insignificant fragment of the purchasing power which provides the market for its product. Consequently, in these conditions entrepreneurs are unlikely to take into account the effect of a change in wage rates on the demand for their product, and will consider the change only in its effects on cost of production. Accordingly, the immediate effect of a reduction in wages will be a fall in cost relative to prices, and an expansion in output to the point where prices are once again equal to the cost of producing an additional unit of output. The increase in output will require the use of more workers, and consequently the reduction in wage rates will lead to a rise in employment.

Moreover, statistical studies seemed to indicate that the demand for labour increases more than proportionately to the reduction in wages, so that a wage cut would actually increase the total amount of wages paid.[1] Thus, far from reducing purchasing power, a reduction in wages would actually increase it. On these grounds, it was frequently argued that wage cuts

[1] See Paul H. DOUGLAS: *The Theory of Wages* (New York, 1934), Chap. V (and especially pp. 151-155), and literature there cited. It was also pointed out by Alfred Marshall and others that the elasticity of demand for labour in particular industries will vary with the ratio of wage costs to total costs.

in depression would increase employment directly, and, through the consequent increase in the purchasing power of the workers, would lead also to secondary increases in employment.

However, once the unrealistic assumption of universal pure competition was dropped, the effect of wage cuts, even in a single industry, became uncertain. Suppose, for example, that the typical labour market consists of a few employers in tacit or open agreement regarding wage rates, so that pure competition among employers for workers does not exist, while labour remains unorganised. This situation is characteristic of some historical phase of most countries, and can still be found in some of the industries of virtually every country. Even Adam Smith, writing in 1776, noted that "Masters are always and everywhere in a sort of tacit, but constant and uniform, combination, not to raise the wages of labour above their actual rate . . . Masters, too, sometimes enter into particular combinations to sink the wages of labour even below this rate".[1]

Under these conditions, employers will be in a position to pay workers an amount which is less than the contribution of labour to the total value of production, by limiting employment to a level lower than the level at which the wage rate that would have to be paid to obtain additional man-hours (the "supply price of labour") would be equal to the value of the product added by those man-hours (the "marginal value productivity of labour"). If these conditions lead — as they often have historically — to organisation of trade unions, and if the unions are successful in obtaining an increase in wage rates, there may be no inducement for the employer either to increase or to diminish the number of workers that he employs; his position of maximum profits will be at the same level of output as before. The same is true in the more rare case where organised labour has been faced by a large number of competing employers, and the organisation of employers into an association leads to a reduction in wages. In the typical case of developed countries, where a small number of employers are faced by organised workers (a situation of "bilateral monopoly"), there may be a considerable range within which wage rates can change without influencing the level of employment in the industry.

Even if "pure competition" exists in the labour market itself, a similar situation may arise from lack of pure competi-

[1] *The Wealth of Nations*, Chapter VIII, p. 51 (Routledge, 1893 edition).

tion in the market for the product of the industry. It has been argued by a number of economists that where the market for the product is characterised by a small number of firms competing in the sale of products which are very close substitutes for each other, the curve showing the relationship between price and volume of sales (the " demand curve ") will have a " kink " at the existing price. This kink will develop if competitors are less disposed to follow a price increase of a single firm than they are to follow a price cut of a single firm. Consequently, the loss of sales by any firm raising its price is likely to be considerable, while the increase in sales by any firm cutting its price is apt to be limited. Under these conditions, additions to gross receipts through a price cut may be small ; a reduction in wage rates may lead to no increase in output and employment, because profits would be increased more by absorbing the wage-cut at the existing volume of sales than by reducing price and expanding sales.

A change in wage rates may, however, bring a change in the level of employment under these conditions, if the employer has interests other than the maximisation of profits. A contraction of the working force may involve the expenditure of less time and energy by the employer ; if so, an increase in wage rates may result in a contraction of employment, because the consequent reduction in the rate of profits may induce the employer to forgo part of his income for the sake of additional leisure. To the entrepreneur, a rise in wages amounts to a drop in the cost of additional leisure in terms of profits sacrificed ; consequently, he may decide to forgo part of his potential income in return for additional leisure, by reducing the size of his working force and thus diminishing the amount of time and energy necessary to manage it. On the other hand, an employer who is interested in outselling his rivals as well as in making profits may conceivably be induced to increase the volume of employment when wages are reduced, since the reduction in wages would diminish the cost, in terms of profits forgone, of expanding sales.[1]

If the bargaining power of the trade union is so strong that the full monopoly wage is paid even before the wage increase,

[1] Cf. *American Economic Review*, March 1939, " Elements of Indeterminancy in the Theory of Non-Perfect Competition ", by Benjamin HIGGINS; and *Journal of Political Economy*, Vol. 50, No. 1, February 1942, " Bargaining Power and Market Structure ", by J. T. DUNLOP and B. HIGGINS.

the increase in wages must bring a reduction in employment. If the initial wage is below the monopoly wage, however, the effect in the case of bilateral monopoly will depend on the behaviour of entrepreneurs with regard to pursuit of profits and of other objectives. The question of the relative importance of profits and other objectives in entrepreneurial behaviour is an empirical one, but it seems probable that most entrepreneurs feel that additional profits are necessary to make the additional expenditure of time and energy needed to manage a larger firm worth while. If so, the chances are that an increase in wage rates in a particular firm will tend to reduce the level of employment, even in the case of bilateral monopoly.[1]

It has been implicitly assumed, thus far, that employment in any industry would be unchanged if the volume of production is unchanged. In fact, however, a change in wage rates may affect the level of employment in a particular industry, not only through its effects on the volume of production, but also through its effects on the techniques of production. Within limits, any firm may choose among a variety of known techniques for producing its product, according to the relation between wage costs and capital costs. Any reduction in wage rates will induce entrepreneurs to substitute labour-intensive for capital-intensive methods of production in so far as such substitution is possible. For example, a considerable reduction in wages relative to interest rates might make it more profitable for construction firms to excavate with a large labour force utilising picks and shovels, than with a small labour force using steam shovels and bulldozers. Indeed, one can observe such differences in methods of production in various countries, according to the relative abundance of capital and of labour. Generally speaking, countries where wages are relatively high, such as the United States and Canada, tend to utilise highly mechanised means of production, while countries where wages are relatively low, such as China or India, tend to utilise more labour-intensive techniques. Thus, a reduction in wage rates may tend to increase employment by leading to a substitution of labour for capital.

Of course, this substitution really amounts to replacing labour utilised indirectly for the production of expensive mach-

[1] It is also possible that at some level of wage rates workers would prefer more leisure to more income, so that a further increase in wage rates would reduce employment rather than increase it, by occasioning a contraction of the labour supply.

ines, with labour utilised directly in the use of less costly machines or tools. Substitution of labour for capital therefore means that fewer workers are employed in the production of machines and tools, and more workers are employed in using machines and tools. The production process becomes simpler, in the sense of being less mechanised and less "roundabout". Instead of much of the work required for any given final output being devoted to the making of "means of production" a larger part of it is concentrated in the actual fabrication of the finished product. Thus the substitution of labour for capital involves increased employment in the stages of production most removed from the final product. Consequently, the "substitution" effects of wage cuts are not altogether clear. It seems likely that the substitution of labour for capital in the final stages of a production process will have the effect of increasing the volume of employment in the production of a particular commodity, but it may not increase employment in the economy as a whole. Indeed, it is possible that the decline in investment involved in replacing capital with labour may set up a chain of reactions that will reduce total employment.[1]

The conclusion reached, therefore, with regard to the effects of wage cuts in a single industry or firm is that in most cases there will be a tendency for employment in that industry or firm to increase when wages are reduced. The "kinked demand curve" case would be one exception. Another would be the case, presumably infrequent, in which the entrepreneur does not consider the extra profits to be made by expanding employment worth the extra effort necessary to manage the larger labour force. A third would be the case, also one of bilateral monopoly and presumably also rare, in which a trade union with a limited membership can maximise the earnings of its members by maintaining a fixed labour supply over certain ranges of wage rates.

Wages and Employment in the Economy as a Whole

Generalisation from the effects of wage cuts in a single competitive industry to the economy as a whole is quite invalid. For while the wages paid by a single firm are an insignificant portion of the incomes of all the customers of that firm, the

[1] The substitution effects of a general wage cut on total employment in the economy are discussed below.

wages paid by all firms are by no means an insignificant portion of the incomes of all customers of all firms. On the contrary, the wages bill constitutes the primary source of purchasing power in most countries, and workers in all countries spend the great bulk of their incomes on current consumption. The immediate effect of a reduction in wages is therefore a reduction in purchasing power and consumer spending. If employers as a group postpone an expansion of output until they have had some opportunity to assess the effects on their profits of a general wage cut, they will find that their gross receipts will have fallen by much the same amount as the reduction in their aggregate costs, leaving them very little better off than before. Their profits will rise only if the reduction in the consumer spending of the workers resulting from the wage cut is smaller than the reduction in their incomes, or if the employers themselves immediately increase their own expenditure for consumption or investment purposes. In fact, a wage cut might give rise to expectations of further cuts, so that workers may reduce their spending by more than the drop in their incomes in an effort to save for still rainier days, and entrepreneurs may postpone investment plans until costs fall still further. Consequently, it is by no means apparent that a general wage cut will lead to a permanent increase in employment.

Recognition of these facts has dispelled the former agreement among economists on wage policy, and has given rise to a lively discussion. [1] Two sharply contradictory views can be distinguished in the current professional literature, each with authoritative sponsorship by distinguished economists. Those who feel that the analysis for a single firm can be applied with only minor modifications to the economic system as a whole

[1] In an article written in 1937, one year after the publication of Keynes's *General Theory of Employment, Interest, and Money*, Professor A. C. Pigou of Cambridge University pointed out that " Until recently no economist doubted that an all-round reduction in the rate of money wages might be expected to increase, and an all-round enhancement to diminish, the volume of employment. Of course, this does not mean that, as a matter of history, low money wages were thought to go with high, and high money wages with low, employment. . . . If, however, in a given situation, money wage rates were reduced in a manner that did not lead to expectations of further cuts, it was the general belief among economists that employment would be higher than it would otherwise have been ; and in converse conditions would be lower than they would otherwise have been. . . . Recently, the doctrine that a general reduction in money wage rates may be expected to increase the volume of employment has been questioned. . . . (*Economic Journal*, Vol. XLVII, September 1937, p. 405, " Real and Money Wage Rates in Relation to Unemployment, " by A. C. PIGOU.)

regard wage rigidities as an important factor in economic fluctuations, and contend that unemployment could be avoided by prompt downward adjustment of wage rates wherever effective demand falls off and prices tend to decline. In a period of recovery, according to this group of economists, a premature or unduly large increase in wages would tend to stop the upswing short of full employment, whereas a belated or unduly small increase might result in excessive profits and a tendency towards over-investment and inflation. So far as long-run trends are concerned, these economists are of the opinion that highly developed economies normally operate under conditions in which an increase in wages will reduce investment — through the rise in costs — more than it will increase consumption — through the rise in labour income — and so will lead to a fall in income and employment as a whole. They also argue that trade union activity operates in such a way as to turn increases in demand for labour into higher wages rather than higher employment, once unemployment has been reduced to moderate levels, thus preventing the achievement of full employment.[1]

In opposition to this view, economists who take their lead from the writings of Lord Keynes have stressed the possibility that the effect of a wage cut may merely be to lead to the expectation of a further wage cut. In so far as production can be postponed, such an expectation will result in a reduction of employment, leading to a drop in wage incomes, in demand, and in prices. If a further wage cut is then introduced, the adverse expectations will be confirmed, and the process will be repeated. The only check to this deflationary spiral is the release of cash balances that it entails ; with lower prices and wages, households and firms will not need such large cash balances to conduct their ordinary transactions. Thus the falling wage price spiral may release cash to the money market, resulting in lower interest rates, and at some stage, perhaps, to an increase in investment. These economists point out, however, that the reduced interest rates, which are the only beneficial result of the wage cuts, can be achieved directly with much less suffering and social friction, and that low interest rates will not stimulate investment when general expectations are unfavourable.

[1] See, for example, *American Economic Review*, Vol. XXXVI, Supplement, May 1946, pp. 304-318, "Wage-Price Policy and Employment," by Sumner H. Slichter.

Even if wage cuts do not lead to an expectation of further wage cuts, the immediate effect will be a fall in wage incomes ; and if employers, cognisant of the fact that wage incomes constitute their chief market, adopt a " wait-and-see " policy instead of expanding their payrolls immediately, they will find that their sales contract more or less in proportion to their wages bill.

According to this school of thought, a wage cut that does not lead to expectations of further wage cuts, or of falling demand, will tend to reduce prices in proportion to the cut, while leaving employment, profits, investment, and workers' real incomes unchanged.

This inconclusiveness of the literature on general wage levels and employment arises mainly from the simple fact that, for the economy as a whole, wages constitute not only a major cost of production, but also the chief source of the purchasing power on which sales of final products depend. [1] Consequently, any change in wage rates must have both favourable and unfavourable effects on the level of profits and thus on investment, income, and employment. In order to simplify the analysis, it is sometimes assumed that workers as a group are too poor to make net savings, the savings of wage-earners in the higher brackets being offset by the lack of any savings on the part of wage-earners in the lower brackets. This assumption is by no means a gross distortion of the facts ; workers as a group are in practice able to save only a very small fraction of their combined incomes. Thus conclusions based on this assumption hold water reasonably well in relation to real life. Given this assumption, it is immediately apparent that a change in wages could have no direct effect on the level of profits. An increase in wages by any firm would lead to an equal increase in expenditure on consumption by the workers, and consequently to an increase in the firm's gross receipts exactly equal to the increase in total outlay. Conversely, a wage cut would reduce the workers' spending and hence the gross receipts of the firm by an

[1] " Wages have a dual nature, being at one and the same time, as an essential factor in the employer's production costs, a price ; and, as the indispensable link between a man and his work, a source of income. This, together with the many and varied relationships between wages and the structure and mechanism of economic life, contribute to make wages one of the most extraordinary and complex phenomena of economic science." (G. MARCY, Preface to J. L. GUGLIELMI : *Essai sur le développement de la théorie du salaire*, Paris, 1945, p. i.)

equal amount, leaving operating profits unchanged. Consequently, there is no reason why output, investment, or employment should be changed. In other words, the increase in wages would tend to increase prices and prime costs proportionately, leaving output and all other economic quantities as they were before, unless the wage change were somehow to alter the monopoly power of employers.

There are two ways in which a general wage cut might, nevertheless, result in an increase in employment for the economy as a whole. First, relatively high-income workers may be able to meet a reduction in wages in part by a reduction of their savings, cutting their consumer outlay by less than their loss of income; in this event, the drop in the gross receipts of all firms will be less than the drop in their total costs, and total profits will increase. Other things being equal, there will then be a tendency for investment to rise, leading to an increase in income and employment. Secondly, a reduction in wages will lead to a reduction in the demand for working capital, and, unless accompanied by a deflationary monetary policy, it will tend to reduce the interest rate. This reduction in interest rates may stimulate investment and thus expand employment.

Much depends, however, on what effects employers expect to accrue from changes in wage rates. If a wage cut leads to optimistic expectations by entrepreneurs, so that they increase their investment or their expenditure on consumption goods, profits of all entrepreneurs will tend to rise, even if the consumption of workers is reduced by as much as their incomes. Optimistic expectations will, therefore, tend to be confirmed, and a cumulative expansion may then develop. Unfortunately, it is equally true that gloomy expectations of entrepreneurs arising from wage cuts will also tend to be fulfilled, leading to a cumulative contraction in employment. If entrepreneurs generally expect a wage cut to result in a contraction in sales greater than the reduction in their outlay, and consequently reduce their investment or their consumption, profits will in fact fall, even if workers' consumption falls no more than wages. This fall in profits may lead to further reductions in investment, and so a cumulative contraction of employment may be initiated.

The question whether wage cuts lead to pessimistic expectations on the part of entrepreneurs is an empirical one, and cannot be answered on purely analytical grounds. For a parti-

cular industry, it will depend in part at least on the importance of wages in total costs, and on the importance of the wages bill as a source of purchasing power for the final product. In such an industry as residential housing, for example, where direct wage costs constitute only one third to half of total costs, but where wages constitute a major source of the income that might be used to pay for housing, either by purchase or by rental, a general wage cut affecting all industries might very well lead to gloomy expectations for the immediate future on the part of entrepreneurs. If the economy were composed primarily of industries in this kind of situation, the wage cut might be expected to lead to a decline in employment. However, for industries where wages are a large proportion of costs but whose market is composed mainly of recipients of interest, dividends and rents, a reduction in wages might be expected to reduce costs more than sales, and therefore to engender optimistic expectations. To predict the results of a wage cut in any country one would need to know what was the relative importance of the two types of industries in the economy, and the extent to which entrepreneurial decisions were based on such expectations.

The foregoing argument implicitly assumes that all income can be divided into wages (incomes of employees) and profits (incomes of employers). In fact, of course, there are categories of income-earners who do not fall into either group — independent farmers, professional men, and other self-employed persons. Thus a cut in the income of employees, even if it leads to an equal decline in spending by employees, will not lead to an equal drop in receipts of employers so long as employees spend part of their incomes on goods and services provided by the self-employed. The initial effect of a wage cut, therefore, will be a rise in profits. However, the reduction in the incomes of the self-employed, due to the decreased spending of wage-earners, will result in a reduction in their spending, and consequently will lead to a further reduction in the receipts of employers. Thus the introduction of the self-employed into the analysis can alter the conclusion only in one of the following two circumstances :

1. If the lag between the wage cut and the reduction in the spending of the self-employed is long enough for employers to enjoy an increase in profits, and, as a result, to undertake an increase in investment large enough to offset the reduction in the spending of the self-employed when it occurs.

2. If the self-employed save a larger proportion of their incomes than employees, and consequently reduce their spending by a smaller proportion of the drop in their incomes than employees do.

Because of the considerable lag of investment behind changes in profits, the first circumstance seems unlikely. Some self-employed persons (professional men) have incomes above the average for employees, and may therefore save a larger share of their incomes ; but others, such as some of the farmers in certain countries, have very low incomes, and are likely to cut their spending by almost the whole of the reduction of their incomes. Thus the second circumstance is also far from certain. On the whole, therefore, the analysis does not seem to be greatly altered when the self-employed are taken into account.

Substitution Effects of General Wage Cuts

It has been argued that in the absence of price rigidities, a general wage cut will tend to increase employment in the economy as a whole, through the substitution of labour for other factors of production, such as the services of land, other natural agents, existing items of capital equipment, and services and unfinished goods of other firms.[1] It is by no means clear, however, that decreased use of these other factors would raise employment in the economy as a whole. Decreased purchases of services and unfinished goods of other firms would certainly tend sooner or later to decrease employment in other firms. Decreased use of existing capital equipment means one of two things : either plant already in use is utilised less intensively, by eliminating double shifts or shortening hours, or fewer machines are ordered out of stock. The first method of decreasing the use of capital would reduce employment directly, and the second would tend eventually to reduce employment in the capital goods industries, as a consequence of the unplanned growth of stocks. As for land, there must be very few instances in which a given volume and type of output can be produced with significantly varying ratios of land to labour.

[1] Cf. James Tobin : " Money Wage Rates and Employment ", in S. E. Harris (ed.) : *The New Economics* (New York, 1947), pp. 572-587. For a somewhat more detailed critical analysis of this essay, cf. B. Higgins on " The Optimum Wage Rate ", to be published in an early issue of the *Review of Economic Statistics*.

In the economy as a whole, the only possibility of substantial substitution of labour for other factors of production when wage rates are cut lies in the substitution of labour for capital. True, some land may be abandoned and other land worked more intensively, but it seems unlikely that this process would raise employment. Substitution of labour for capital (as distinct from an increase of employment with a given stock of capital) usually means abandoning present techniques for less efficient ones. Why should employers abandon more efficient plant, especially when they already have capital tied up in it, just because wages fall ? In the long run, of course, employers may replace existing plant with cheaper, less efficient plant if wages fall and interest costs weigh very heavily in their considerations. There is considerable doubt among economists today as to the importance of interest rates in long-run investment decisions. In any case, the maintenance of full employment through a reversion to less efficent production techniques would be a defeatist solution of the employment problem.

Wages, Prices and Employment : the Statistical Record

Historically, wage rates and employment have usually moved upwards together in prosperity, and moved downwards together in depression. This co-variation does not, of course, mean that higher wage rates bring prosperity and increased employment while wage reductions bring depression and unemployment. Cyclical upswings have usually resulted from increased investment, which brings an increased demand for labour ; and the increased demand for labour brings in turn higher employment and rising wage rates. However, such statistics as are available indicate that higher money wage rates have not prevented a rise in employment during past up-swings, and that lower money wage rates have not prevented a fall in employment during down-swings.

Until the last decade or so, most economists believed that the explanation for this co-variation of money wages and employment was that wages lagged behind prices ; " real " wages were thought to vary inversely with money wage rates. The rise in both wage rates and employment in the up-swing was explained by a tendency for prices to rise more than money wage rates, so that employment varied inversely with " real " wage rates. This explanation seemed consistent with the pre-

valent theory ; a rise in wages relative to prices *(i.e.,* a rise in real wages) appeared to reduce employment, and *vice versa.*

In fact, however, the historical record of the relationship of real wages and money wages is by no means clear, and consequently the record of the relation between real wage rates and employment is also inconclusive. Lord Keynes believed that historically wages have lagged behind prices in both the up-swing and down-swing phases of economic fluctuations.[1] He also contended that a fall in real wages in the form of a rise in prices would not, as a rule, reduce the supply of available labour.[2] These statements started a storm of statistical controversy.

An examination of the available British statistics for the years 1860-1913 revealed that of the twenty-five years when money wage rates rose, real wage rates rose in seventeen, fell in five, and remained unchanged in three. In thirteen years of falling money wage rates, real wage rates fell in six, rose in five, and remained unchanged in two.[3] In fifteen years of unchanged money wage rates, real wage rates were unchanged in four, rose in six, and fell in five. The years when real wages fell with rising money rates (that is, years in which money wage rates lagged behind rising prices) were peaks or near peaks of booms. Adjustments for trend, and for alteration of the terms of trade, do not change this fundamental picture. This British experience has been summarised as follows: "Increases in wage rates have usually been associated with increased real wage rates, while decreases in wage rates have equally often been associated with a rise or fall in real wage rates".[4]

[1] He stated: "It will be found, I think, that the change in real wages associated with a change in money wages... is almost always in the opposite direction." (*The General Theory of Employment, Interest and Money*, London, Macmillan 1936, p. 10.)

[2] *Ibid.*, pp. 12-13.

[3] *The Economic Journal*, Vol. XLVIII, No. 191, Sept. 1938, p. 413. "The Movement of Real and Money Wage Rates", in J. T. DUNLOP.

[4] *Ibid.*, p. 421. Dunlop also concluded from an examination of British trade union activity that: "It can be affirmed without much qualification that the tradeunion leadership resists money wage reductions... to the point of strike... whenever possible.... Trade union leaders have asked for advances as soon as and for as much as they felt they had a reasonable chance of success" (pp. 422-424).

In asking for wage advances, "trade unions have attached very much importance to changes in cost of living in their *argument*", and "have been as willing to strike for advances in wage rates when the cost of living has risen... as to strike for the maintenance of a wage rate when threatened with a reduction" (p. 426).

Thus Dunlop concluded that Keynes was wrong in both his contentions.

A study of monthly data for the United States between 1932 and 1938 suggested that money wages generally move in the same direction as real wage rates.[1] It also indicated, however, that real hourly wages usually move in the opposite direction to changes in man-hours of employment. However, the relation indicated by the American data included " a considerable number of divergent cases ", and in other cases the variations were too small to be significant.[2]

In another analysis of British data [3], the relation of changes in real wage rates to changes in the cost of living was examined for the years 1860-1899. In twenty-one years when cost of living fell, real wage rates (with trend eliminated) rose in fifteen, remained unchanged in four, and moved in the same direction in only two. In fourteen years in which cost of living rose, real wage rates fell in eleven, remained stable in one, and moved in the same direction as cost of living in only two. In the four years when cost of living remained unchanged, real wage rates rose in two, fell in one, and remained unchanged in one. During periods of considerable currency deflation or inflation, the study showed a particularly marked lag of money wages behind cost of living. Swedish, Australian and New Zealand data were also found to support the following general conclusions :

1. Cost of living sometimes, but not always, varies directly with trade and employment.

2. In the short period real wages tend to vary inversely with the cost of living.

[1] *The Economic Journal*, Vol. XLIX, No. 193, March 1939, " Changes in Real and Money Wages ", by L. TARSHIS. See also *The Canadian Journal of Economics and Political Science*, Vol. 4, No. 3, August 1938, " Real Wages in the United States and Great Britain ", by L. TARSHIS.

[2] *The Economic Journal*, Vol. XLIX, No. 193, March 1939, " Relative Movements of Real Wages and Output ", by J. M. KEYNES.

In replying to his critics, Keynes cited the League of Nations *World Economic Survey* of 1937-38, to the effect that : " In most countries, increased demand for goods and services has caused commodity prices to rise more rapidly than hourly money wages, and the hourly real wage has fallen.... In the United States and France, however, the rise in money wages was so rapid between 1936 and 1937 that the hourly real wage continued to rise....".

He also drew attention to the remarkable stability over long periods of the share of labour in national income in Great Britain and the United States, a stability that suggests a tendency for wages and prices to move together in the long run. He suggested that failure of wages and prices to move together in the short run might be the result of " stickiness " of prices, and changes in the degree of imperfection of competition with changes in output.

[3] *The Economic Journal*, Vol. XLIX, No. 195, Sept. 1939, p. 425, " Real Wage Movements ", by J. H. RICHARDSON.

3. In violent cyclical fluctuations, real earnings vary directly with trade and employment.

4. No adequate statistics are available for measuring changes in general labour costs, and such changes cannot be measured by comparing time rates of wages with cost of living.

Another writer, after an examination of these studies in terms of statistical techniques, concluded that they were all of " doubtful significance, because their approaches lacked validity ".[1] Neither the price data nor the wage data utilised for the usual indices are wholly representative, and so many other forces are operating in any actual case that the effects of wage changes on prices, production, and employment are virtually impossible to isolate. The writer's own conclusion was that " the statistical studies to date have not produced any convincing evidence concerning the inter-relations between money wage rates, wage costs and welfare ".[2]

From the above summary of the controversy, it is apparent that no general and conclusive answers to questions on the relation of wages to prices and employment can be expected from statistical study alone. There is too little uniformity in the data, and the relations are too much affected by extraneous factors, for unassailable conclusions to be drawn from them.[3]

However, the questions to which answers were sought in these statistical studies are not the questions most important for wage policy. Past relations between wages, prices and employment over the course of the business cycle, interesting and important as these relations may be, do not provide a basis for deciding whether wage rates should be raised or lowered at particular times and places. Past relations reflect the results of fluctuations in the demand for labour, and of the consequent changes in wage rates, as well as the results of changes in wage rates originating from the supply side. If economic analysis is to provide a foundation for wage policy, wages must be treated as an independant rather than a dependent variable. The analysis must show the probable results when wages are changed, not in response to a shift in the demand for labour, but

[1] *Quarterly Journal of Economics*, Vol. 55, No. 1, November 1940, p. 137, " Real and Money Wage Rates ", by Richard RUGGLES.

[2] *Ibid.*, pp. 148-149.

[3] For a more extensive critical analysis of this controversy, see J. L. GUGLIELMI : *Essai sur le développement de la théorie du salaire* (Paris, 1945), pp. 332-350.

as the result of active Government, employer, or trade union policy. The Australian, French and United States experience, when Governments actively intervened to change wage rates as part of general economic policy, is therefore of greater significance than the general historical record.

Wage Policy in the Great Depression

In most countries, wages were allowed to take their course during the great depression of the 'thirties without any active intervention on the part of Government. As Dr. Reddaway has put it, "few countries can claim that they tackled the problems of the recent depression and recovery in any systematic way. Still fewer included in their policies any comprehensive treatment of wages, which for the most part were left to be settled in the traditional manner by the parties concerned".[1] However, a few countries, notably Australia, France and the United States, undertook to promote recovery through wage policy. Since the policies undertaken by Australia and France were diametrically opposed, Australia introducing wage cuts and France wage increases, a comparison of the two policies and their results is of considerable interest in connection with the question of wages and employment.[2]

AUSTRALIA

When the great depression began, Australia had in operation a system of basic wages, determined in part by authorities of the Federal Government, and in part by authorities of the State Governments. Owing to constitutional limitations, the federal basic wage was applied in a limited number of fields. This basic wage was adjusted every three months according to changes in the cost-of-living index. Skilled wage rates moved in the same direction, although less, in proportion to the changes, since they consisted of the basic rates plus fixed margins. The State wage tribunals also adjusted wages to cost of living as a general rule.

[1] *International Labour Review*, Vol. XXXVII, No. 3, March 1938, p. 314, "Australian Wage Policy 1929-1937", by W. B. REDDAWAY.

[2] The value of the comparison, though somewhat impaired, is not destroyed by the fact that the Australian wage cuts were introduced in the down-swing and the French and United States wage increases were introduced in the early recovery phase of the cycle.

Throughout 1930, the federal basic wage was reduced in accordance with the fall in the cost of living. Each reduction tended to produce further wage cuts by lowering prices as a consequence of reductions both in purchasing power and in costs. The cumulative wage cut in 1930 amounted to 12 per cent. in the case of the federal basic wage. Queensland introduced two reductions amounting to 10 per cent., reductions in South Australia amounted to 12 per cent., while basic wages were unchanged in Western Australia and New South Wales.

About August 1930, a movement was launched to reduce "real" wages as a recovery measure, that is, to reduce money wages by more than the fall in the cost of living. In November, the Federal Court stated that a fall in national income required a further reduction in the basic wage. After eight weeks of hearings, the Court announced an additional reduction of 10 per cent. in virtually all basic wages coming within its jurisdiction. In explaining this action, the Court denied the trade union contention that a reduction in wages would reduce purchasing power, arguing that the fall in wages would be offset by an increase in profits. Differences in the share of income spent by workers and employers were thus completely ignored by the Court. The Court further argued that since the cut in wages would lead to a more than proportionate increase in employment, the ultimate effect would be an increase in the total wages bill and thus in national income.

The action of the Federal Court was not followed completely or uniformly by the States. South Australia introduced a single cut of 16 per cent. Western Australia made two cuts in 1931 totalling 15 per cent., but these cuts left wage rates in occupations under State jurisdiction well above those in occupations under Federal jurisdiction. Queensland introduced a cut of only 3s. in the weekly wage, which was less than 4 per cent., while New South Wales maintained the 1929 rate. Victoria and Tasmania, however, followed the Federal Court after a time lag. In New South Wales, after a change of Government, a further 15 per cent. cut was made in the basic wage, reducing basic wage rates in that State approximately to the federal level.

In fact, the successive reductions in money wage rates had relatively little effect on real wage rates.[1] Prices continued to fall more or less in proportion to wage rates, even when a deliberate effort was made to reduce wage rates more quickly than

[1] Cf. W. B. REDDAWAY: *Op. cit.*, p. 324.

the rate of the fall in cost of living. However, recovery set in during the second half of 1932, mainly as a result of the increased demand for Australian exports, but partly perhaps due to reductions in interest rates, increased public investment outlays and the confidence inspired by the achievement of a balanced budget. By May 1933, recovery had proceeded far enough for basic wages to be raised again. Another increase in basic wages took place in 1934. Wages then remained fairly stable until 1937, when a " prosperity award " gave the workers about the same real wage rate as in 1929.

It would appear that the policy of reducing wages made a considerable contribution to the improvement of Australia's position in external trade. Lower wages improved the position of the exporter, by reducing not only the amount paid to his own employees, but also the cost of materials and equipment. However, exchange depreciation and rising export prices probably contributed more to recovery than wage cuts, and further exchange depreciation, if it could have been undertaken without provoking completely offsetting retaliation by other countries, might have been a possible substitute for these wage cuts.

FRANCE

In 1936 and 1937, the French Government, under Léon Blum, experimented with an expansionist recovery policy which included increases in wage rates. Altogether, hourly wage rates increased by about 60 per cent. between the middle of 1936 and the middle of 1937. This increase was partly the result of the strengthening of the bargaining power of the trade unions, and partly the result of the Government's Decree that two weeks' holidays with pay per year should be granted to workers, and the reduction of the working week to forty hours, without any reduction of weekly earnings.

This increase in wages was accompanied by a slight rise (3 per cent.) in industrial production, and by an increase in the wholesale prices of industrial goods approximately equal to the increase in wage rates.[1] Cost of living, however, lagged behind wholesale prices, rising only 27 per cent. There was also a shift from production of consumption goods to production of investment goods. The index for industrial production of consumption goods dropped 2 per cent. in the year, while the

[1] *The Economic Journal*, Vol. XLVIII, No. 189, Mar. 1938, p. 26, " The Lesson of the Blum Experiment ", by M. KALECKI.

index for production of investment goods rose 10 per cent. Since effective interest rates changed very little during the year, these changes in prices and production can, in the opinion of Dr. Kalecki, be attributed mainly to the increase in wages.

The real income of manual workers, it is estimated, rose by 24 per cent., leaving the worker who was employed 48 hours a week in 1936 only slightly better off in 1937. The purchasing power of fixed incomes fell by 17 per cent., while the real income of agriculture and small business underwent no important alterations. Large-scale employers enjoyed an increase in their share of national income, in real terms, their money income increasing by more than 60 per cent. Industrial entrepreneurs in particular gained an increase in real income.

The increase in wages was accompanied by an increase in the budget deficit. It might be argued, therefore, that had this offsetting factor not been present, employment and income would have dropped as a consequence of the wage increase. Mr. Kalecki calculates that the real value of the increase in the budget deficit was only 5.1 milliard francs, which was not very much in a national income of about 200 milliard francs. He also estimates that the expansionary effect of the increased budget deficit was largely offset by the unfavourable effect of the deterioration in the balance of trade.

Dr. Kalecki's conclusions from the experience of France are as follows: (1) that in the Blum experiment the cost of manual labour and foreign raw materials increased by about 60 per cent.; (2) that the rate of interest was approximately unchanged; (3) that the wholesale price of industrial goods rose by about 60 per cent.; (4) that industrial production rose slightly; (5) that the joint action of budget deficit and balance of trade was slightly expansionary and probably accounts for the slight rise in production.

According to Kalecki, therefore, French experience supports the Keynesian theory that an increase in money wages would raise prices in proportion, while leaving employment and production unchanged.

Dr. Kalecki's conclusions regarding the significance of the Blum experiment have, however, been questioned by another economist, Robert Marjolin.[1]

[1] *Economica*, New Series, Vol. 5, No. 2, May 1938, pp. 187-189, " Reflections on the Blum Experiment ", by Robert MARJOLIN.

In my view (Mr. Marjolin concludes) it is a great mistake to appraise a series of events as complex as those which took place during the Blum experiment by comparing the situation at two points of time, the one at the beginning and the other at the close of the experiment (or the point which Mr. Kalecki considers as the close of the experiment), without taking account of what happened in the meantime. This method is particularly open to criticism in that Mr. Kalecki, having chosen April 1936 as his first point of time (a choice which can be justified on the ground that June 1936, when the experiment in fact began, was a month of serious strikes) thought it essential to take as his second point of time, for purposes of comparison, April 1937—when the experiment was in full swing and the forty-hour week law had only just been applied at all fully.

Even apart from this, in order to measure the results between April 1936 and April 1937 of the various measures taken by the Blum Government, it is absolutely essential to study the course of the various economic indices throughout the whole of this period. If this is not done, two quite different things will be confused with one another. We have seen that between June and March-April 1937, two different experiments were made. From June 1936 to September 1936, the state of trade in France was dominated by a rise in wages side by side with an over-valued franc. From September 1936 to March-April 1937, on the other hand, the first devaluation of the franc was exerting its influence. How can one make a single appraisal of these two dissimilar, not to say opposite, experiments ? Mr. Kalecki notes that between April 1936 and April 1937 the volume of production rose by 3 per cent. In fact, this rise was the result of a fall of 9 per cent. between April and August 1936, and a rise of 13 per cent. between August 1936 and April 1937. If we chose to use an index from which seasonal fluctuations and the direct effects of holidays with pay are eliminated, such as the index of unemployment, we should find that it rises 6.1 per cent. between April and September 1936, and falls 17 per cent. between September 1936 and April 1937. But since unemployment was influenced by the application of the forty-hour week, we may content ourselves with the adjusted volume of manufactured goods exported as indicating the situation of one part of the French economy. From April 1936 to September 1936, this index fell by 8.7 per cent. ; from September 1936 to April 1937 it rose by 13 per cent. It is true that the worsening of the situation before September 1936 was due not only to the rise in wages without any devaluation of the franc, but also to social unrest and to the difficulties of adjustment inevitably caused by the application of the law providing for holidays with pay. But this makes little difference to the argument. The essential point is that the period examined by Mr. Kalecki embraces two quite distinct experiments, affecting the economic indices in quite contrary directions. Hence a single figure relating to the whole of the period is without significance.[1]

[1] Mr. Marjolin himself explains the experience of France under the Blum experiment as follows : " The devaluation of September 1936 set the stage for an economic expansion, which commenced by a rapid revival in the production of capital goods. Normally this would have been followed by an expansion in the output of consumption goods, stimulated by the purchasing power distributed by the capital goods industries. But the reduction in the length of the working week created an artificial scarcity of workers in the latter industries and thereby made the recovery abortive." (*Op. cit.*, p. 186.)

These criticisms demonstrate very clearly the elusive character of the "facts" in the history of wages and employment, and the difficulty of isolating any one relationship from the complex of inter-related economic events of any historical period.

UNITED STATES

The U.S. National Industrial Recovery Act of 16 June 1933 had as one of its objectives the promotion of recovery through an increase in the purchasing power of workers. The increase in purchasing power was to be achieved through an increase in wage rates which, at least in the beginning, would exceed the accompanying increases in prices. The increase in wage rates was to be achieved partly by means of agreement of employers to codes concluded under the Act, and partly through a strengthening of trade unions.

In signing the Act, the President stated the general objectives of the legislation in the following terms :

> It represents a supreme effort to stabilise for all time the many factors which make for the prosperity of the nation and the preservation of American standards. Its goal is the assurance of a reasonable profit to industry and living wages for labour, with the elimination of the piratical methods and practices which have not only harassed honest business but also contributed to the ills of labour.[1]

The theoretical basis of the Act was by no means clear cut. However, the main ideas seem to have been the following : (1) that recovery required an increase in purchasing power, and that an increase in wages would provide such an increase ; (2) that prices would lag behind wages, thus leading to a temporary increase in real wages, which would lead in turn to increased demand, output, and employment, thus "priming the pump" for a cumulative recovery[2] ; (3) that technological progress involved a certain amount of chronic unemployment, which

[1] Quoted in LYON, HOMAN, LORWIN, TERBORGH, DEARING, and MARSHALL : *National Recovery Administration ; an Analysis and Appraisal*, (Washington, D.C., Brookings Institution, 1935), p. 3.

[2] The President made the following statement with regard to the expected relationship between wage and price movements : " I am fully aware that wage increases will eventually raise costs, but I ask that managements give first consideration to the improvement of operating figures by greatly increased sales to be expected from the rising purchasing power of the public. That is good economics and sound business. The aim of this whole effort is to restore our rich domestic market by raising its vast consuming capacity. If now we inflate prices as fast and as far as we increase wages, the whole

[*Footnote continued overleaf*].

could be cured only by spreading work through a shortening of hours; (4) that in order to compensate employers for the increase in wages it would be necessary to provide means for the elimination of "cut-throat competition"; (5) that the achievement of higher wage rates required a strengthening of the bargaining power of labour through the expansion and strengthening of union organisation.

Section 4 of the Act authorised the President "to enter into agreements with, and to approve voluntary agreements between and among, persons engaged in a trade or industry, labour organizations, and trade or industrial organizations"; and, if he found that any trade was undertaking "drastic wage or price cuts or other activities contrary to the policy" of the Act, to require the enterprise in question to obtain "a licence issued pursuant to such regulations as the President shall prescribe" or to cease operations. Section 7 required the President to "afford every possible opportunity to employers and employees" to establish by mutual agreement "maximum hours of labour, minimum rates of pay, and such other conditions of employment as may be necessary"; and, where no such mutual agreement had been approved, to investigate "the labour practices, policies, wages, hours of labour, and conditions of employment" and prescribe a legal code fixing maximum hours of labour, minimum rates of pay, and other conditions of employment.

Under the Act, some 546 codes of fair competition and 185 supplemental codes, filling 18 volumes and 13,000 pages, were formulated and approved. In addition, there were 685 amendments and modifications to these codes, and over 11,000 administrative orders interpreting, granting exemptions from, and establishing classifications under the provisions of individual codes. Before the whole apparatus was declared unconstitutional in 1935, the codes covered firms employing 22,000,000 workers, and the bulk of trade and industry of the United States. Anthracite coal and certain public utilities (railways, telephones and telegraph, electric light and power, gas) were the most important exceptions.

project will be set at naught. We cannot hope for the full effect of this plan unless, in the first critical month, and even at the expense of full initial profits, we defer price increases as long as possible. If we can thus start a strong sound upward spiral of business activity our industries will have little doubt of black ink operations in the last quarter of this year." (*Ibid.*, p. 758.)

These codes varied widely from industry to industry in their coverage and in their provisions. Most of the codes included some provision for a minimum wage, and some further provisions for wages above the minimum. Other labour provisions limited hours of work, guaranteed the right of collective bargaining, abolished child labour, made provision for various other situations (stretch-out, consecutive hours, etc.) by special clauses, and provided for statistical reports on labour conditions.

The effects of the Act on wage rates varied considerably from industry to industry, and from region to region or from occupation to occupation in the same industry. For example, the code for needlework in Puerto Rico set a minimum of 12.05 cents per hour, while the wrecking and salvage code provided a minimum of 70 cents for New York City. Because of these differences, the measurement of the effect of the Act on wage rates in general is extremely difficult. It would seem, however, that wage rates increased about 10 per cent. during the year following the introduction of the codes.

Difficulties of measurement also arise in connection with cost of living. The Brookings Institution cost-of-living index rose sooner and faster than the index of hourly earnings in the months immediately following the introduction of the codes. By the end of 1933, hourly earnings had caught up with the cost of living, and in 1934 they rose slightly more than the cost of living. The Brookings Institution figures suggest that the codes raised both the average hourly earnings and the cost of living, and that there was no significant difference in the increase of wages and of cost of living.[1]

Wholesale prices rose earlier and faster than wage rates. The lag of wages behind wholesale prices seems to have arisen

[1] LYON *et al.* : *op. cit.*, pp. 788-89.

It is worth noting that the data presented by Mr. Tarshis for the period during which the codes were in force indicate a relation between movements of money wages and cost of living somewhat different from the relation demonstrated by the Brookings Institution indices. The Tarshis figures show a rise in hourly earnings of nearly 30 per cent., in real wages per hour of a little over 20 per cent., and in " corrected " real wages of about 25 per cent., for the period. They suggest, therefore, that cost of living rose considerably less than money wage rates. The difference in results seems to arise mainly from differences in the treatment of agricultural prices and imports. The Tarshis " uncorrected " data make no special allowance for agricultural prices. His " corrected " data exclude increases in cost of living resulting from higher agricultural prices, and the Brookings data exclude increases both in import prices and in agricultural prices. (L. TARSHIS : " Changes in Real and Money Wages ", *op. cit.*).

from the simple fact that the codes and the President's agreement did not become generally effective until August 1933, while the programme, with its practical assurance of higher costs and prices, had become public early in May, had been formally placed before Congress by the middle of the month and passed by the middle of June. Thus industry was given notice of impending increases in labour costs two or three months in advance, and a wave of speculative anticipation of these increases in costs and prices raised prices before the codes were actually in operation. Also, there was a widespread belief that the National Industrial Recovery Act had virtually suspended the anti-trust laws, and some employers raised prices by agreement before the wage increases became effective.

The effects of the Act are extremely difficult to isolate from the effects of the devaluation of the United States dollar in 1933, the launching of the public works programme under the Public Works Administration, and other aspects of recovery policy undertaken simultaneously with the codes—to say nothing of the impact on the United States economy of recovery elsewhere. There was a considerable increase in production, income, and employment in the first few month after the passage of the National Industrial Recovery Act; but rapid recovery gave way to recession in the autumn of 1933, to be followed in turn by slow recovery throughout 1934.

The Brookings Institution concluded from its exhaustive study that the long-term effects of the Act were on balance unfavourable. In its opinion, the Act failed to bring about monetary expansion or an increase in the rate of circulation, and tended to reduce the demand for capital goods.[1] This adverse effect on the capital goods industry was attributed mainly to the introduction of a higher degree of uncertainty into long-range investment:

> Our own view is that the N.R.A. (National Industrial Recovery Act), by introducing into the business picture a mass of new and unpredictable hazards, tended to multiply the already numerous uncertainties that stood in the way of a broad revival of capital goods for profit. Business men are accustomed to taking the ordinary risks of enterprise and investment, but not the risk of administrative rulings affecting their labour relations, their wage costs, their marketing channels, their geographic differentials, and their competitive position generally.[2]

[1] LYON *et al.*: *op. cit.*, pp. 806, 222-2.
[2] *Ibid.*, p. 824.

The authors of the Brookings study estimate that the shortening of hours through the codes led to an increase in employment of about 1.75 million men, some 6 to 7 per cent. of the average number of employees in the pre-code period of April to July, 1933.[1] However, the effect on the total number of man-hours worked was considered to be insignificant or slightly unfavourable.

According to the same study, the codes left the distribution of income between labour and capital virtually unchanged. There was a rapid increase in profits in the months following their introduction, but

> not only are profits as ordinarily computed the most volatile part of the property income of the nation, so that their movement exaggerates the changes in property income as a whole, but they had sunk to such a small volume during the depression that statements of percentage increases over these low levels have virtually no significance.[2] The N.R.A. did not materially change the position of income between labour and property as compared with what it would otherwise have been at like levels of productive activity.[3]

Wage Rates and Labour's Share in the National Income

There remains one other category of empirical evidence which might be expected to throw some light on the relationship of wage rates to employment, production and prices : the trend of labour's share in national incomes. As shown in Chapter I, the available figures indicate a remarkable constancy in the ratio of wage incomes to total incomes. Moreover, the ratio seems to vary within much the same range in all economically advanced countries, for the most part between 55 and 65 per cent. Yet workers in most industrialised countries, especially those in countries with widespread labour organisations, have gained substantial increases in money wage rates in recent decades. These increases have been accompanied by a growing

[1] LYON *et al.* : *op. cit.*, pp. 832-33.

[2] *Ibid.*, p. 866.

[3] According to the Brookings Institution, one of the most marked permanent effects of the N.R.A. was the changed position of unionism. In March, 1933, " it was being seriously debated whether or not all trade unions were on their 'death bed', soon to pass from the economic scene. Today, twenty months later, the trade unions are on the upward grade again in numbers, resources, self-assertiveness, and are clamoring for co-equal status with management in the developing scheme of industrial self-government. This striking change in the outlook for unionism may be regarded as one of the major effects of the Recovery Act." (*Ibid.*, p. 488.)

labour force, increased productivity per man-hour, and reduction of working hours. The rise in productivity per man-hour has outweighed the reduction in hours, and average weekly output per employed worker has increased. Why has the increase in wage rates and earnings failed to raise labour's share of national income ?

Theoretically, there are several possible explanations for this failure. First, the rise in money wage rates may have led to an increase in the average amount of unemployment over the course of economic fluctuations as a whole, without the increased unemployment leading to commensurate reductions in profits. Such a development would mean that the decline in workers' spending through unemployment has been less than the decline in payrolls, workers' spending being maintained by reduction of their savings, or by the spending of unemployment insurance or relief benefits. There is some evidence that average unemployment has increased in industrialised countries in recent decades, for reasons largely unassociated with rising wage rates. On the other hand, experience in the down-swing of the business cycle indicates that the percentage fall in profits has been much greater than the percentage fall in wages.

Secondly, the value of total physical product at constant prices may have risen enough to offset the rise in labour earnings, and to provide enough additional income for property and management to keep the relative shares constant. There are various ways in which such a development could have occurred. The ratio of property and management to labour may have risen, while technological progress prevented their marginal productivity from falling in relation to the marginal productivity of labour ; the marginal productivity of property and management may have risen more than the marginal productivity of labour ; the rise in money wages may have been just equal to the rise in the value of marginal product of labour at constant prices, while the value of marginal product of property and management increased in the same proportion. There is no particular reason why any of these conditions should hold continuously, but some combination of these conditions may have produced the observed result.

Thirdly, the rise in money wage rates may have been offset by equal increases in prices. There is no clear-cut evidence of a rising trend in prices over the period covered — much depends on the choice of beginning and end dates and of index. On the

other hand, there is no evidence that the reduced costs of production through technological progress have been passed on entirely in the form of reduced prices.

Most likely there has been a combination of these three kinds of development ; but the main explanation of the constancy of labour's share in national incomes seems to be that whenever money wages have risen more than labour productivity, and thus resulted in higher wage costs, the excess of the rise in money wage rates over the increase in labour productivity has been offset by increased prices.

The Problem of an Optimum Wage Level

The double aspect of wages as income and cost immediately suggests the conception of an optimum level of wages. However, the usual framework of theoretical analysis, which permits prices, national income, and sometimes interest rates to vary with wages, has produced no clear-cut means of determining the optimum wage-level. No analytical tools exist to enable economists to answer precisely and with certainty the relatively simple question, " what is the effect of a change in the general level of wage rates on the level of employment ? " The question " what is the optimum wage level ?" is a good deal more complicated ; the effect of wage levels on the distribution of income, the allocation of resources, and the rate of economic progress, as well as on the level of employment, must be taken into account in determining the optimum level of wages.

The " Minimum Gap " Wage Level

It has been suggested in a recent study [1] that since the effects of wage changes are so uncertain, and since there may be no wage policy that would in itself guarantee full employment without inflation, it may be more useful to concentrate on the contribution wage policy can make to the achievement of this objective by fiscal and monetary means. In most countries, it is noted, Government statements on employment policy include as its main components monetary and fiscal measures, supplemented by measures to eliminate structural maladjustments. Wage policy is thus not a major instrument of

[1] Benjamin Higgins : " The Optimum Wage Rate ", to be published in the *Review of Economic Statistics*.

employment policy in these countries ; the fixing of wage rates is left for the most part to employers and workers, subject in some cases to the compulsory arbitration of wage disputes or the fixing of certain legally binding minimum rates. There is little point, in such circumstances, in trying to discover a wage level that will in itself assure full employment without inflation. It may, however, be possible to determine the wage level that would minimise the divergence of total private spending from the volume of such spending that would produce full employment without inflation. If private spending, plus irreducible Government spending, is such as to produce inflation, there is an " inflationary gap " ; if it leaves total spending below the full employment level there is a " deflationary gap ". In either case, if the objective of full employment without inflation is to be achieved, some combination of fiscal, monetary and price measures will be required to close the gap. There will, however, it is suggested, be some level of wage rates at which the size of this gap, and the contribution consequently required from fiscal and monetary policy, will be at a minimum. This level is referred to as the " minimum gap " wage level.

The major relationships relevant to the determination of this " minimum gap " wage level are, it is suggested, the following : (1) the relation of workers' consumption to "wage-income " (wages and salaries) ; (2) the relation of " capitalists' " consumption to " profits " (dividends, interest and rents) ; (3) the relation of gross and net investment to profits.

Given these relationships, it is possible to determine the relationship of total consumer spending and total private investment to the proportions in which the total full employment income is divided between wages and profits. Consequently, the wage-profit ratio that would minimise the divergence of private spending from the level required to produce full employment without inflation could also be determined.[1]

[1] Cf. Benjamin HIGGINS : " The Optimum Wage Rate ", *op. cit.* Unfortunately, statistical studies of these relationships could not take account of the effects on investment of changes in expected profits, except to the extent that expectations are determined by past and current profits. This defect is less serious for the determination of appropriate long term policy than it is for short-term forecasting. In addition, it would be statistically very difficult to separate the effects on consumption and investment of changes in the general level of wages and profits from those of changes in the distribution of income between wages and profits.

However, certain complications are pointed out. It would be quite possible for gross private spending to increase with wages over a certain range, but to fall with further increases in wages as a result of a rapid decline in investment over that range, combined with a flattening out of capitalist consumption over the same range ; and over a still higher range of wages, gross private spending might increase again. Given this possibility, the further possibility must be recognised that under such conditions, wage levels may be such that either an increase or a decrease in wage rates would tend to raise employment. Such a situation might very well prevail during depression, when profits are low. Thus, the Australian Arbitration Court may have been quite right in 1931 in assuming that a reduction in wages would expand employment, and the French Government may have been equally right in 1936 in believing that an increase in wages would expand employment. Moreover, the reverse policies might have worked equally well in either country. Similarly, if the level of gross private spending, together with normal Government expenditures undertaken for social welfare and national development, is such as to produce an inflationary tendency over some ranges of income distribution [1], it might be possible to overcome this tendency either by an increase in wages to a level that would restrict investment so much as to prevent inflation, or by a decrease in wages to a level so low as to reduce consumer spending below the inflationary level.

The conception of a " minimum gap " wage level also implies that there is a wide range of technically and economically possible ratios of capital to output. In fact, however, the technical superiority of one method of production over another may be of sufficient importance to outweigh the advantages of minimising the gap between private spending and the volume needed for full employment. It cannot be taken for granted that consumers' goods and capital goods can be produced equally well in whatever combinations they are demanded, at every conceivable distribution of income between wages and profits. It seems likely, nevertheless, that in the long run the minimum gap wage would become consistent with equilibrium between the production of capital goods and of consumers' goods. Failure to produce on the equilibrium scale would lead to accumulation or dispersion of inventories of capital equipment and of consumers'

[1] Cf. *American Economic Review*, Supplement, May 1946, pp. 304-318. " Wage-Price Policy and Employment ", by Sumner H. SLICHTER.

goods, changes in their relatives prices, and consequent shifts in the relation of investment to profits, until the minimum gap and equilibrium wage rates converged. Even then, however, it is possible that the ratio of profits to wages at the minimum gap wage level would be such as to allocate too much or too little of a country's resources to the production of capital goods, in the sense that at any point of time the flow of consumers' goods and services resulting from full employment would be either more or less than the maximum consistent with consumers' time-preferences.

Other Considerations in Determining an "Optimum" Wage Level

A wage level that minimises the divergence of private spending from the full employment without inflation level has no special merit from a social point of view ; the maximisation (or minimisation) of private spending does not constitute in itself a widely accepted aim of social policy. The most widely accepted objectives of economic policy are probably a high and stable level of income and employment, a stable price level, an optimum allocation of resources, an optimum rate of economic progress, and an optimum distribution of income. The minimum gap wage level as defined above is not synonymous with any of these objectives. A higher wage level may be needed to achieve an optimum distribution of income, a lower level to achieve an optimum rate of economic progress. Moreover, in some cases social welfare might be advanced more by increasing government expenditure on social services than it could be by raising wages ; in other cases, a higher wage, diminished private investment, and increased public investment, might accelerate economic development.

The objective of full employment without inflation need not be endangered by a change in the general level of wage rates. There is always some combination of fiscal and monetary policy that would offset unfavourable effects of wage changes on employment and income. An increase in the Government budget, or in the deficit, is not in itself undesirable ; it is undesirable only if it prevents the attainment of commonly accepted objectives of social and economic policy. The same may be said of the higher taxes or tighter price controls that might sometimes be required to prevent an increase in wages as a result of

raising prices. However, once the "minimum-gap" level of wages is reached, further increases of wage rates will require Government intervention of an increasingly drastic nature to prevent both unemployment and inflation from developing.

Any deliberate attempt to influence the general level of wages will, it is true, involve some risk of misallocation of resources. The general wage level is a composite of individual wage rates for particular industries and occupations. Any change in the general level must take the form of a series of changes in these individual rates. Given the differences in bargaining power, wage flexibility, and mobility of labour, and in the various elasticities of demand and supply in the many interrelated labour markets, it is obvious that any change in the general wage level will involve re-allocation of resources. Thus any attempt to bring about a closer approximation to an optimum wage level may bring either greater or less misallocation of resources in its train. The problem is to effect any adjustment of the general level of wages in such a way as to improve the wage structure as well, by reducing the misallocation of resources that results from wage differentials greater than differences in productivity. One obvious principle is that a general wage increase should be achieved as much as possible by increases in those wage rates that are farthest below the marginal net revenue product of the workers concerned.

Wage-earners as a group belong mainly to the lower income brackets, and profits recipients as a group mainly to the upper income brackets. There are, of course, exceptions. Some professional or managerial employees classified as "wage-earners" for analytical or statistical purposes are very far up the income scale; some individuals classified as "capitalists" or recipients of "profits" are farmers or small proprietors with very low incomes, or are recipients of small incomes from property. Nevertheless, it is safe to assume that a redistribution of income from "profits" in general to "wages" in general would on the whole constitute a redistribution from upper to lower income groups. The achievement of the maximum satisfaction of the whole population in any country would require greater rather than less equalisation of income. Thus, there is a strong case for raising wage rates whenever such increases will not endanger other objectives.

Economic progress depends to a large extent on the accumulation of capital. A rise in wages, by stimulating consumption

at the expense of the production of capital goods, may reduce the rate of capital accumulation. Moreover, raising wages at the expense of profits may reduce the incentives for efficient management and for venturesome investment. Thus the optimum rate of economic progress is one of the objectives that may be threatened by rising wages.

It is, however, not easy to define the optimum rate of economic progress. Clearly, no country yet has all the capital it can use, and a wage rate so high as to reduce capital accumulation to zero would certainly be outside the optimum range. It is questionable whether any wage rate can be defended that reduces capital accumulation so much that further increases in labour productivity depend on technological progress alone. There must be at least enough capital accumulation to prevent increases in the labour force from reducing the marginal productivity of labour — and enough more to guarantee as rapid an approach to maximum output per capita (that is, to the situation where no addition of known types of plant and equipment could add to total output) as is consistent with society's preference for present over future consumption.

In any actual case, of course, it is extremely difficult to determine just what this optimum rate of capital accumulation is. For one thing, in real life capital accumulation and innovation are inseparably intertwined. Nor can we simply say, in this context, that capital accumulation should proceed at the rate necessary to absorb savings, for the volume of savings of the economy will be affected by the wage-profit ratio. In other words, the problem is one of determining the optimum rate of saving and investment for society as a whole.[1]

In highly developed ("excess savings") countries, the contribution of increases in the stock of plant and equipment to total productivity (the "marginal productivity of capital") is low, but the sacrifice involved in postponing consumption is also low. Indeed, such countries face a long-term employment problem resulting from a tendency on the part of the community to save more at high levels of employment than can be profitably invested. The "optimum rate of saving and investment" is likely to be less than the actual propensity to save at high levels of employment. Consequently, an increase in the share of

[1] This problem, as it confronts the United States, is discussed in the *Second Annual Report to the President* from the Council of Economic Advisers (Washington, December 1947), in particular, on pp. 10-20.

national income going to wages should not seriously retard economic expansion.

In underdeveloped ("capital scarcity") countries, the marginal productivity of capital is high, but so is the preference for present over future consumption. In such countries, redistribution of income from profits to wages would produce inflationary rather than deflationary pressure, and might reduce the rate of capital accumulation below optimum. On the other hand, a policy of keeping wage levels so low that private investment is discouraged by the lack of demand for final products could be defended only if it were clear that the public investment needed to maintain full employment in these circumstances would contribute more to national development and social welfare than the private investment it replaced. In some of these countries any significant sacrifice of current consumption in order to divert resources to the building up of capital would, for certain sections of the population, mean starvation. The only hope of rapid industrialisation in such cases lies in borrowing abroad some part of the capital required for development; the poverty of the people makes it impossible for them to save enough themselves to finance any rapid expansion in net investment.[1]

The conclusions of this section may now be summarised. So long as wages are below the level that would minimise the Government's task of maintaining full employment without inflation, there would seem to be a general presumption on social grounds in favour of rising wage rates. The only exception would be in cases which it was considered desirable to restrain increases in current living standards in order to make possible a more rapid rate of economic development as a result of which standards of living could be raised more rapidly at a later stage. Increases in wage-rates above the minimum-gap level would, in most cases, improve the distribution of income. If such increases were concentrated in fields where exploitation of labour exists, the allocation of resources could be improved at the same time. However, increases in wage rates above the minimum-gap level might reduce savings, and might discourage efficient management and the taking of risks

[1] Cf. INTERNATIONAL LABOUR OFFICE: *The Economic Background of Social Policy, including Problems of Industrialisation* (Report IV prepared for the Preparatory Asian Regional Conference, New Delhi, 1947) (New Delhi, I.L.O., 1947), Chapters VI and VIII.

to such a degree as seriously to retard economic progress. Such increases would also require Government policies of an increasingly drastic nature to maintain full employment and prevent inflation. It would appear therefore that there are three sets of conditions in which a rise in the general level of wage rates would not promote the achievement of the combined objectives of full employment without inflation, improved allocation of resources, greater equality of incomes and economic progress. These conditions may be summarised as follows :

(1) If the fiscal, monetary, and price policies required to offset the inflationary or deflationary consequences of the wage increases cannot be undertaken, or would involve ill effects that would more than outweigh the benefits to be expected from the wage increases themselves.

(2) If the share of income going into current savings and investment is so low as to endanger long-term improvement of the standard of living.

(3) If the change in the level of Government expenditures required to maintain full employment without inflation, which would become necessary if wages rose, would involve a sacrifice of welfare greater than any gain to be expected from this wage increase.

Summary and Conclusions

While the foregoing analysis indicates the extreme complexity of the relation between wage rates and the level of employment, certain significant conclusions have emerged.

Conclusions from Theoretical Analysis

On the purely analytical level, clear-cut conclusions regarding the effect of wage changes on employment can be obtained only in the simplified case where the changes are limited to particular industries, operating under conditions of " pure competition ".[1] In a single competitive industry, employment

[1] " Pure competition " exists when large numbers of workers bargain as individuals, and when there are so many competing employers that no one of them can have a significant influence on wage rates.

will tend to vary inversely with wage rates. However, in industries where competition is limited, either in the labour market or in the commodity market, and in which the wage-profit ratio does not affect the willingness of management to expend time and energy, changes in wage rates over a considerable range may have little effect on employment.

The effect of a change in the general level of money wage rates on total employment will depend on a large number of variables, the behaviour of some of which cannot easily be either described or measured. Since wages for the whole economy are at once income and cost, any change in the general wage level will have both favourable und unfavourable effects on the level of employment. The net effect of a wage change in any particular case will depend upon all the interrelations of a complex economic system. A number of equally plausible assumptions concerning the nature and behaviour of the determining relations can be made. Some of these assumptions lead to the conclusion that a rise in wage rates will reduce employment, others to the conclusion that it will increase employment, and still others to the conclusion that employment will be unaffected by changes in wage rates. However, unless special assumptions are introduced concerning the immediate reaction of employers to a change in wage rates, it appears from theoretical analysis that the most likely result of a change in the general level of wage rates is a proportionate change in prices, with profits, production, employment, and labour's share in national income more or less unchanged.

Given the reasonable assumption that Governments are committed to the maintenance of full employment without inflation, it is possible to define a " minimum-gap " level of wage rates, which would minimise the divergence of total private spending from the level that would produce full employment without inflation. However, this wage has no special merit from a social viewpoint ; it does not guarantee an optimum allocation of resources, and may diverge from the wage level that produces an optimum rate of capital accumulation or the level that produces an optimum distribution of income.

In most countries, increases in wages will in general improve the distribution of income, and need not lead to greater misallocation of resources. If no barriers exist to impede the adoption of appropriate fiscal, money and price policies capable of maintaining full employment without inflation, there will there-

fore as a rule be no reason to fear a rising wage level, so long as the rise does not go beyond the point at which it would seriously retard capital accumulation.

Theoretical analysis also indicates the necessity for taking into account the effect of the wage structure on the allocation of resources. Increases in the general level of wages consist of a series of increases, usually determined more or less independently of one another, in the rates for particular industries and occupations; and it is important that these increases should proceed in such a way as to improve rather than worsen the allocation of resources.

Conclusions from the "Facts"

Despite the high degree of uncertainty and inconclusiveness of empirical research, its general results are consistent with the conclusions reached on analytical grounds. There are four main types of factual study available. First, there are statistical investigations of short-period relationships among money wages, prices, real wages and employment. Secondly, there are historical studies of the effects on employment of wage policies undertaken during the great depression of the 1930's. Thirdly, there are statistical studies of the long-period relationships among wages, profits and national income. Finally, there are statistics relating to wages, prices and employment during the recent war and transition periods.

Studies of the first type have led to controversy on statistical grounds, without general and conclusive results being obtained. There is so little uniformity in the data on wage rates, prices, real wages and employment, and the relationships are so obviously affected by extraneous factors, that generalisation is extremely difficult. However, the statistics do indicate a fairly common pattern of relationships among wages, prices and employment during the course of a business cycle. During the up-swing, wage rates, employment and real wages tend to move upward together. Real wage rates are relatively stable, and the increase in the real wages bill during the up-swing results from the increase in employment and production rather than from increased real wage rates. During the down-swing, the reverse movements take place. At the turning-points of the cycle, divergences from these relationships frequently appear.

In the last phases of the boom, prices often rise faster than wages, resulting in a fall in real wage rates, and a "shift to profits". Indeed, some writers have considered this "shift to profits", and the consequent inability of wage-earners to absorb the increasing output of consumers' goods, as an important factor in the collapse of prosperity. In the early phase of a down-swing, wages often lag behind prices, leading to a temporary rise in real wage rates at the expense of employment. In the initial stages of recovery, prices have usually risen faster than money wage rates, leading to a fall in real wage rates and an increase in employment.

The lack of uniformity in the data, and the difficulty of isolating wage-price-employment relationships from the other relationships involved in economic fluctuations, make it difficult to generalise about the cyclical behaviour of wages, prices and employment. Nevertheless, certain conclusions emerge. It seems to be difficult to achieve a permanent increase in real wage rates through an increase in money wages. Unless prices are controlled, there is a tendency for money wages and prices to move together, even when the increase in wage rates is itself mainly a response to an increase in the demand for labour. Except at turning-points, wages and prices move together over the cycle, leaving real wages relatively stable. Increases in real wage rates might come about through a contraction of output, and a consequent development of excess capacity, but only at the cost of unemployment. Real wage rates may on rare occasions increase with an expansion of output, if output rises faster than employment, through the absorption of excess capacity and new investment. If output continues to rise after the optimum rate of utilisation of plant and equipment is reached, wage costs tend to rise considerably, and real wage rates are likely to fall. Once exploitation is eliminated, only enhanced productivity and increased production can be counted upon to raise real wage rates without a drop in employment, so long as prices are left free to respond to changes in wage costs.

Analysis of the cyclical behaviour of wages and employment indicates the existence of some kind of "optimum" wage rate. Real wage rates can be so high as to reduce employment; indeed, the rise in real wages in the earlier stages of the down-swing seems to be a contributory factor to the development of a cumulative decline in employment and thus of the whole process from crisis to deep depression. Similarly, low real wage

rates seem to be, sometimes at least, a factor in the expansion of employment in the early stages of an upswing. On the other hand, wages can be so low that insufficient purchasing power is provided to absorb current production at profitable prices. The drop in real wage rates in the final stages of the boom appears to be a contributing factor to the downward-turn. Indeed, since investment tends to be geared to the rate of increase in consumption, a mere failure of real wage rates to continue rising in the up-swing may result in its collapse.

These statistical studies of relationships among wages, prices and employment over the cycle are of limited usefulness in answering the question : " What is the best wage policy for the achievement and maintenance of full employment ? " They represent studies of relationships in the past, over historical cycles, in the absence of active wage policy or price control. The changes in wages are the result mainly of changes in the demand for labour, rather than of any intervention by Government, employers, or workers to induce a change in wages for the express purpose of increasing employment or preventing inflation.

However, historical studies of wage policy in the great depression of the 1930's produce much the same general conclusions as the statistical analysis of cyclical relationships. The experience of Australia, France and the United States indicates that Government-labour-employer action to change money wage rates is likely to have its main effect on prices, and to leave employment, profits and output substantially unchanged. This conclusion seems to hold whether policy takes the form of wage increases or of wage decreases. A change in wage rates in either direction may promote recovery if it makes the expectations of entrepreneurs more favourable. Similarly, a wage change may result in contraction by making anticipations less favourable. Unless there is some special reason why the change in wage rates should improve anticipations, the effect is likely to be unfavourable on balance, since the very change introduces more uncertainty into the economic picture, and private investment tends to vary inversely with the degree of uncertainty.

In countries where employment depends to a large extent on exports, the fall in prices resulting from wage cuts may lead to an increase in exports, and thereby to an increase in employment. Much the same effect might be achieved a good deal

less painfully through depreciation of the currency. In either case, however, the action taken may lead to reprisals by competing countries which would nullify any advantages that might otherwise accrue.

The experience of the great depression also confirms the conclusion that wage policy is likely to be much more effective if combined with appropriate fiscal, monetary and price policies. There is also some support for the conclusion that because the profits component of employers' incomes is most variable and most important for investment decisions, a movement of profits in either direction, consequent upon a change in wage rates, will tend to become cumulative.

The studies of long-term relationships among wages, profits and national incomes also confirm the general conclusions derived from theoretical analysis. Apart from temporary cyclical phenomena, prices and wages tend to move together, leaving the relative shares in national income of labour and of capital substantially unchanged. Historically, the improvement in the workers' standard of living has been the result of increased total production, combined with the maintenance by workers of their share in total production through collective bargaining.

Experience during the war and transition period is also consistent with the theoretical analysis. Wartime experience suggests that policies to maintain full employment combined with price controls (including subsidies and rationing) may bring a sustained increase in real wage rates and in the share of labour in the gross national income, at the expense of recipients of relatively fixed money incomes and of entrepreneurs. As soon as the various controls are removed, there seems to be a tendency, even with continued full employment, for prices to rise, for real wage rates to fall, and for labour's share in national income to decline. This experience suggests that in order to bring about a rise in workers' incomes in the form of an increase in the share of national income going directly to wages, as distinct from a constant share of wages in a rising national income, it would be necessary to have both full employment policies and a full complement of price controls and related measures. Whether wage-earners would benefit in the long run from such a policy would of course depend on the effects it would have on the total volume of national income, as well as on their share in that income.

General Conclusions

In general, it would appear from the analysis of this chapter that any level of wage rates, or at least any level within a wide range, may be compatible with the general objective of full employment without inflation, given appropriate fiscal, monetary and price policies and a willingness to accept the consequences of those policies. Given such policies, the desirability or otherwise of any particular wage level is therefore not to be judged merely or even mainly in terms of its effect on the level of employment. In order to determine whether or not a given increase or reduction in the existing wage level will serve the general welfare, it will be necessary to weigh the direct effects of such a change on income distribution, the rate of capital accumulation and other relevant factors against the effects on these same factors of the changes in fiscal, monetary and price policies which will be required if the objective of full employment without inflation is still to be attained.

In countries in which the present rate of capital accumulation appears to equal or exceed the optimum, there will be a general presumption that wage increases, by promoting a more equal distribution of income, will contribute to welfare. Where capital accumulation falls short of the optimum this presumption will not hold. In practice, however, it is by no means easy to determine what constitutes an optimum rate of capital accumulation, nor to estimate at all accurately the probable effects on such accumulation of any specified change in the wage level. There is consequently little in these considerations that can be counted upon to assist the organisations or authorities concerned in the task of framing actual wage policy.

The extreme complexity of the inter-relationships among wages, prices, profits, the distribution of incomes and the rate of capital accumulation makes it difficult if not impossible to forecast accurately the full consequences of any change in the level of wages. It is therefore not possible to lay down any simple rules for the guidance of public policy in this field.

Even were such rules available, their application would raise serious problems. To the extent that it required the detailed control of thousands of individual wage rates and prices, it might seriously hamper the efficient functioning of the economic system. Other instruments of public policy, such as measures to combat monopolies, tax policy and the extension of a wide

range of public services, are available for the purpose of influencing the distribution of incomes ; and these instruments, besides offering at least equal prospects of success, would seem less likely to endanger the increase in productivity on which any substantial improvement in workers' living standards must be based.

One final conclusion emerges clearly from the foregoing analysis : the results of the application of any particular wage policy are bound to be determined in large measure by the fiscal, monetary, price and general economic and social policies with which it is associated. Wage policy is not something which can be considered by itself ; it is an integral part of economic policy as a whole.

CHAPTER VII

WAGES AND THE PRICE LEVEL

Few countries have been concerned since the outbreak of the Second World War with the problem of unemployment arising from a deficiency of effective demand. On the contrary, virtually every country in the world has been faced since that time with the problem of checking inflation. Consequently, in most countries the vital issue in recent wage policy controversies has been the relation of changes in wage rates to changes in the price level. This involves the question whether, in a period when prices are already tending to rise, wages can be raised without aggravating inflationary pressures. Labour, management, and Governments have all been compelled to seek an answer to this question. For workers, rising prices have threatened such improvements in living standards as they have been able to obtain through wage increases in recent years. For management, the constant pressure for higher wages and better working conditions seems to require higher prices if profits are to be maintained. Finally, in most countries, Governments have had the ultimate responsibility of formulating and enforcing a wage policy that is most consistent with the interests of society as a whole.

Types of Inflationary Situation

Three general types of inflationary situation may be distinguished : first, the inflationary pressure that will continue in many countries for the balance of the transition period ; secondly, the more or less continuous threat of inflation in countries suffering from a scarcity of capital ; thirdly, the inflation that may appear under boom conditions in more highly industrialised countries. A previous I.L.O. report distinguished five criteria which must be met before the period

of transition from war to peace can properly be said to be complete for any one country [1] :

(1) The country must have ceased military activities on all fronts.

(2) Its armed forces must have been reduced to the size considered necessary in peacetime.

(3) Its production of war materials and supplies must have been contracted to the level considered necessary in peacetime.

(4) Its war plant and stocks (in excess of those considered necessary in peacetime) must have been converted to peacetime uses.

(5) General scarcities of consumers' goods, of raw materials, and of equipment must have disappeared ; that is, demand must not exceed supply at current prices over so wide a range of goods and services as to constitute an upward pressure upon the general price level.

From an economic point of view, the key criterion is the fifth one cited. In most cases it will probably be the last to be met. Most countries can be said to have met the first four of these criteria already, but a good many have not met the fifth. The problem of wage policy for the remainder of the transition period, with which this chapter is concerned, is essentially the problem of determining a policy appropriate to conditions in which there is an upward pressure on the price level as the result of scarcities of goods ; that is, a pressure occasioned by widespread insufficiency of supplies to meet effective demand at current prices.

The existence of this state of affairs, however, is not by itself a sufficient condition to cause an economy to be considered still in the " post-war transition " phase. It is a condition that may exist in under-developed countries more or less continuously for decades ; the economic position of such countries cannot usefully be described as a state of " transition from war to peace ". Even in highly developed countries, a combination of large-scale public and private spending, financed by monetary expansion, may produce " scarcities " in any period, accompanied by a rising price level. Conversely, finan-

[1] International Labour Conference, 27th Session, Paris, 1945, Report II : *The Maintenance of High Levels of Employment during the Period of Industrial Rehabilitation and Reconversion* (Montreal, I.L.O., 1945), p. 8.

cial panic, monetary deflation or a contraction of economic activity could develop before wartime deficiencies have been made up; but the consequent excess of supply over demand at current prices would not necessarily mean, in this case, that the transition from war to peace had been completed.

Nor is it sufficient to say that "scarcity" has completely disappeared when pre-war levels of production and supply have been restored in a country. "Piled-up demand" is a direct product of war, and until such demand has been satisfied, it is legitimate to argue that the transition is not over. For this reason alone, the elimination of "scarcity" in a real sense requires that levels of production should be higher than those prevailing before the war. In addition, during the decade since the Second World War began, the population and labour force of many nations have grown. Production must also increase enough to take care of these factors without price increases or piled-up demand, before "scarcities" can be said to have disappeared. Production should also have expanded in proportion to the increase that has taken place in productivity. Finally, account must be taken of the fact that the pre-war period was marked by varying degrees of unemployment. Hence, production of peacetime goods must rise enough to meet the increased demand resulting from the disappearance of this unemployment, as well as that consequent upon meeting deferred demand and expansion of the labour force and of productivity, before the transition can properly be considered to be complete.

The War and Post-War Experience

The present chapter is primarily concerned with the wage problem as it has presented itself in the war and transition period. Experience in this period and the lessons learned from it provide a useful background for the formulation of wage policy in any type of inflationary circumstances. This section presents in summary form the major facts of wage-price experience in certain countries during the years 1939-1947, and outlines the policies that were evolved in these countries to cope with problems of wage-price relationships. The concluding section of the chapter then indicates some of the lessons to be derived from the survey of war and post-war problems and policies.

ARGENTINA

Up to 1943, prices and wages in Argentina were affected by the war only to a limited extent. Monthly money earnings had increased by only 19 per cent. over 1937, and prices by 13 per cent. With a rapid increase in employment in industry and commerce, however, which was due largely to a falling off in imports of manufactured goods from the usual sources, total earnings in industry had increased in 1943 by about 50 per cent. over 1937.

TABLE X. MONEY AND REAL EARNINGS IN INDUSTRY AND MINING IN ARGENTINA, 1937-1947

Base 1937 = 100

	Index of monthly money earnings in industry and mining	Index of monthly real earnings in industry and mining	Index of total earnings in industry	Cost-of-living index in Buenos Aires
1	2	3 [1]	4 [2]	5
1937	100	100	100	100
1938	100	101	—	99
1939	102	102	110	101
1940	102	99	113	103
1941	105	99	123	106
1942	112	100	139	112
1943	119	106	151	113
1944	130	115	170	113
1945	142	105	188	135
1946	177	111	242	159
1947 [3]	227	127	333	179

Source: Síntesis Estadística Mensual de la República Argentina; I.L.O.: *Year Book of Labour Statistics* and *International Labour Review.*

[1] Col. 3 is a computation based on the cost of living in Buenos Aires, whereas the figures for earnings apply to the country as a whole.

[2] Col. 4 relates to establishments above a certain size and may be influenced by changes in the number of establishments covered. The number of workers covered rose from 720,000 in 1938 to 880,000 in 1945.

[3] Average for first eleven months.

From 1943 to 1947, in contrast, monthly money earnings almost doubled, and total earnings, reflecting in part the increase in employment in industry, more than doubled. Prices rose about three-fifths during this period, the rate of increase during 1946 and early 1947 being particularly marked. Table X shows the year-by-year changes in money earnings and real earnings of workers in mining and industry in Argentina during the period 1937-1947.

In spite of the rapid rise in prices, the position of the wage-earner in Argentina has improved, as real earnings have also exhibited an upward tendency. A high level of employment has been maintained, and the size of the labour force in industry has increased, partly owing to a movement of workers out of agriculture. As a result, total wages in industry and commerce have also risen, in real terms. The rise in money earnings is traceable in part to general wage increases granted early in 1947, amounting in some cases to as much as 25 per cent., and also to the obligation imposed on employers by the Decree of 20 October 1945 [1] (converted into law on 31 December 1946) to pay on 31 December of each year a supplementary annual wage equal to one-twelfth of the total remuneration received by the employee in the course of the year.

The above-mentioned Decree also completely changed the wage-fixing machinery of the country. Instead of wages being determined by direct negotiations between the associations concerned, the Decree provided that in the future they were to be fixed by an official body, the National Remuneration Institute. Legally recognised organisations of workers and employers participate in the constitution and administration of this body. The Decree provides that the Institute shall fix a living wage which, in every part of the country, must be sufficient to provide each wage-earner or salaried employee and his family with adequate food, healthy dwellings, clothing, education for the children, medical care, insurance, moving expenses, holidays and recreation. This living wage is to be periodically adjusted to take account of fluctuations in the cost of living. The Managing Committee of the Institute is obliged to examine the situation with a view to adjusting the minimum whenever the cost of living increases or decreases by 10 per cent. In addition, basic wage rates are to be proposed by the wage committees which are to be set up for each economic branch in each economic zone defined by the Managing Committee of the Institute. These rates may not be less than the living wage and must take into consideration the nature and risks of the work, the need to allow the worker and his family a standard of living in conformity with his technical training, the wages and salaries paid in similar occupations, local customs, the economic position and particular charac-

[1] *Boletín oficial*, No. 15373, 3 December 1945. See also *International Labour Review*, Vol. LIII, Nos. 3-4, Mar.-Apr. 1946, pp. 245-248.

teristics of the undertaking in question, and any other factors indicated by the studies and investigations of the Institute. The rates are then finally determined by the Managing Committee of the Institute.

Apart from influences bearing directly on wages, a number of other factors have tended to increase the inflationary pressure on prices. For instance, employment in industry and building has increased in the last few years by about 500,000 persons; this represents a doubling of the number of workers engaged in industrial activity in 1935. The figure cited leaves out of account the additional employment occasioned by the industrial expansion in the commercial sector and in transport services.[1] The rise in exports and the budgetary position of the country have also contributed to the increase. In addition, a large programme of public works is embodied in the Government plan for the period 1947-1951. This plan aims, *inter alia,* at improving the standard of living of the population by means of high wages, a suitable level of prices, more extensive social services and better conditions of work.[2]

The various factors leading to higher prices have naturally caused some anxiety regarding the danger of inflation. Measures designed to curb speculation were taken early in 1947, and stricter price controls were introduced in June of that year.

The general economic position of the country and the policies to be pursued were described by Señor Perón, the President of the Republic, late in 1947.[3] He indicated that wages have risen to levels equal to or above those of the cost of living and that efforts are being made to reduce the latter. As a result, the purchasing power of the wage-earner is higher than before the war. He stated that the prices of food, clothing, and household goods are being reduced or at least stabilised; and that it is essential to increase output both to meet the demand arising out of the current purchasing power of the wage-earner and to secure a greater reduction in the cost of living. He pointed out that notwithstanding higher wages output is falling, and that to avoid inflation, therefore, it is necessary to adapt wages to the cost of living, stabilising those which are above this cost

[1] *Revista de Economía Argentina:* " La Situación económica del país a través de la Memoria del Banco Central de la República Argentina ", October 1947, p. 299.

[2] Speech of the Minister of Finance, Dr. Ramón A. Cereijo, to the Senate, 24 and 25 July 1947.

[3] Broadcast speech of the President of Argentina, 23 August 1947.

and increasing to a corresponding level those which are below. As a result of these circumstances, President Perón urged that maximum prices should be stabilised at the level reached after the recently published regulations on the repression of usury and speculation, and that wages should be adapted to the cost of living in accordance with the criteria set out above. Industrial employers would also be required to communicate monthly to the executive authorities data on employment, hours of work, wages paid, absenteeism and output, with similar back figures to 1942 inclusive. Finally, the President proposed the application of sanctions whenever the normal output of an undertaking has fallen without justification. These sanctions may consist of a reduction of wages or of a fine imposed on the employer and calculated on the basis of his total payroll. Either party may be freed from these sanctions if it is established that the other is solely responsible for the falling off of output. The wage reductions and fines are to be paid into a common fund to be used for the payment of output bonuses.

AUSTRALIA

Table XI shows the movements which took place in wage rates, cost of living and real wages in Australia from 1939 to 1947.

TABLE XI. INDEX NUMBERS OF WAGE RATES, COST OF LIVING AND REAL WAGES, AUSTRALIA, 1939-1947

Base 1937 = 100

Year	Hourly wage rates		Cost of living	Real wages	
	Men	Women		Men	Women
1939	109	110	105	103	104
1940	114	112	110	104	102
1941	120	119	115	104	103
1942	129	127	125	104	102
1943	136	140	129	105	109
1944	136	150	129	106	116
1945	137	150	129	107	116
1946	141	154	131	107	118
1946 : Sept.	140 [1]	152 [1]	131 [2]	106 [1]	116 [1]
Dec.	147	162	132	111	122
1947 : Mar.	148	162	133	111	121
June	149	163	134	111	122
Sept.	155	173	136	114	127

Source: International Labour Review, Vol. LVI, No. 2, August 1947, pp. 220 and 234. The figures for 1947 were calculated from data supplied by the Commonwealth Statistician.

[1] Last day of the month.

[2] Quarterly averages.

Wage Trends

The table indicates that the average real wages of male workers remained almost constant from 1939 to 1942, and rose only slowly up to September 1946. This suggests that changes in average hourly wage rates for men workers in Australia during the war were little more than sufficient to keep pace with the cost of living, which increased relatively slowly owing to a highly successful stabilisation policy.[1] Thus, from 1939 to September 1946, average hourly wage rates rose 29 per cent., the cost of living 25 per cent., and average real wages only 3 per cent. During the same period, however, the average hourly wage rates and average real wages of female workers rose 38 per cent. and 12 per cent. respectively. Consequently, it would appear that during the war women workers improved their position considerably as compared with men workers.

From September 1946 to September 1947, fairly substantial increases in average hourly wage rates took place in Australia, although the cost of living rose only slightly. Thus, during this period the average hourly wage rates of men workers increased 11 per cent., those of women workers 14 per cent., the cost of living 4 per cent., and the average real wages of men and women workers 8 per cent. and 9 per cent. respectively. In a single year, therefore, the average real wages of men workers increased nearly three times as much, and those of women workers nearly as much as they had during the preceding seven years.

Owing to the effects of overtime pay and to the fact that employment was steady during the war years, workers' average earnings tended to increase more rapidly than average wage rates. For example, the average weekly earnings of all men workers rose from £5.63 in 1941-1942 to £6.64 in 1943-1944, an increase of 18 per cent., as compared with an increase of 13 per cent. in average hourly wage rates from 1941 to 1943. As the war effort became less intense, the necessity for considerable overtime decreased, with the result that the average weekly earnings of all men workers fell to £6.52 in 1944-1945 and to £6.48 in 1945-1946. This fall was not due to any change in the

[1] The degree of success of the Australian stabilisation policy may be judged from the fact that, according to data compiled by the United States Bureau of Labor Statistics, the cost of living rose less in Australia from August 1939 to August 1946 than in any of the twenty-one other countries surveyed, with the exception of Canada and New Zealand (see *Monthly Labor Review*, January 1947, pp. 38-50, " Inflation Problems at Home and Abroad ").

average hourly wage rates of these workers, since these remained practically constant from 1943 to 1945. From 1945 to March 1947, in contrast, the average hourly wage rates of men workers rose 13 per cent. This rise led, however, to only a slight increase in average weekly earnings ; they rose from £6.48 for the period 1945-1946, to £6.62 for the nine months ending in March 1947, a rise of only about 2 per cent. [1] The net effect of these developments was to raise labour's share of the national income from 54 per cent. in the fiscal year 1938-1939 (and 52.4 per cent. in 1939-1940) to 56 per cent. in 1945-1946. [2]

On the basis of the above data, certain conclusions may be drawn as to wage trends in Australia from 1939 to 1947. (1) Wage rates for male workers rose only slowly during the period and, generally, only as a consequence of increases in the cost of living ; wage rate increases in Australia were smaller than in most countries. (2) The cost of living in Australia increased less during the period than in practically any other country. (3) Real wages of male workers remained fairly constant during the war years, but have increased somewhat since then, being 11 per cent. higher in September 1947 than in 1939. (4) Wage rates of women workers rose fairly rapidly during the period, and their real wages were 21 per cent. higher in September 1947 than in 1939. (5) Wage differentials between men and women decreased considerably during the period. (6) Average weekly earnings of men workers increased more rapidly than their wage rates during the war, by reason of increased hours of work. (7) Wage rates have increased much more rapidly since the war than average weekly earnings.

Wage Policy

In order to understand Australian wage policy during and since the war, it is necessary to realise that wage policy in that country has been regarded for many years as an integral part of national social and economic policy. It is through its national wage policy that Australia has sought to give expres-

[1] COMMONWEALTH BUREAU OF CENSUS AND STATISTICS : *Quarterly Summary of Australian Statistics*, Bulletin No. 188, June 1947, p. 78. If data on average weekly earnings for the whole of the year ending June 1947 were available, the figure of £6.62 for 1947 would have been somewhat higher. However, although this figure is thus not strictly comparable with that given above for 1945-1946, the percentage increase in average weekly earnings from 1945-1946 to 1946-1947 was probably not very much greater than the 2 per cent. mentioned.

[2] See Chapter IV, table IV.

sion to its social philosophy that every worker has a right to a reasonable share in any increase in the productivity of industry or in general prosperity. At the same time, it is recognised that the wage level may have favourable or unfavourable effects on the economy as a whole, and may help or hinder national economic policy. Consequently, Australia has not depended upon trials of strength between opposing and often irreconcilable employers' and workers' organisations to determine wage rates in a particular industry, but has vested power to determine wage rates in various tribunals, which operate under Commonwealth and State arbitration laws.[1]

The Commonwealth Arbitration Court fixes a basic wage which is the minimum rate for most unskilled workers. It also awards margins for skill and other special conditions prevailing in particular trades. The basic wage is normally adjusted for changes in the cost of living and in the capacity of industry to pay. Various State authorities determine minimum wages for certain industries, but they are influenced to a considerable degree by the judgments of the Commonwealth Arbitration Court.[2] The wage-fixing machinery which had operated during many peacetime years required little modification to meet the needs of a wartime economy. In fact, the existence of this machinery enabled the national Government to carry out its wartime stabilisation policy much more effectively than if employers and workers had not been accustomed for years to settling their disputes through this machinery.

Two changes in the system of wage regulation became necessary, however, as the tempo of the war increased. The wages fixed by the Commonwealth Arbitration Court and other tribunals in normal times had really been legal minimum wages. Employers could pay, and individual workers could demand and obtain, higher wages if they wished. In order to make the stabilisation of the economy more effective, therefore, special regulations were issued in July 1940 making the award rates for certain categories of skilled workers maximum as well as minimum rates.[3] The National Security (Economic Organ-

[1] This is not to say that employers and workers have no influence on wage rates fixed by these tribunals, since the views of the employers' and workers' organisations concerned are heard before such rates are fixed.

[2] Cf. E. R. WALKER: *The Australian Economy in War and Reconstruction* (New York, 1947), pp. 290-297; and INTERNATIONAL LABOUR OFFICE: *The Minimum Wage: an International Survey, op. cit.*, pp. 5-49.

[3] *Ibid.*, p. 299.

isation) Regulations [1] of February 1942 extended this principle to all workers. They pegged the maximum rates at the levels prevailing on 10 February 1942, subject to adjustment for anomalies and to alteration for changes in the cost of living. A principle was established that no worker was to suffer a reduction in earnings as a result of the operation of the Regulations. [2] A special authority was set up to regulate women's wages which, as indicated above, rose more rapidly than men's wages during the war. [3]

The basic wage was altered automatically each quarter with changes in the cost of living, which continued to rise despite the system of price control instituted by the Order of 8 September 1939. [4] A danger arose that the stability of the economy would be difficult to maintain if wages chased prices in this manner. In addition, an increase in award wages was recognised by the Prices Commissioner as justifying an increase in the prices of the industries concerned. [5] Accordingly, to make the stabilisation policy more effective, an attempt was made to stabilise prices legally at the level of 12 April 1943. They continued to rise, however, and as a further stabilisation measure the Government announced on 20 July 1943 that all employers except Government and semi-Government bodies would be reimbursed by subsidies for any wage increases consequent upon increases in the cost of living. [6]

The wage-pegging provisions were amended in December 1946 to permit industrial authorities or public employment

[1] For a convenient summary of these Regulations, see *International Labour Review*, Vol. XLVI, No. 6, December 1942, pp. 729-730, " Wage Stabilisation in Australia " ; and *The Economic Record*, May 1942, pp. 47-49, " Further Developments in Australia's War Economy ", by J. S. G. WILSON.

[2] For a fuller account of the development of Australia's wage stabilisation policy, see E. R. WALKER : *op. cit.*, pp. 299-300 ; *The Economic Record*, June 1941, pp. 17-18, " New Developments in Australia's War Economy ", by E. R. WALKER and R. M. BEECROFT ; *International Labour Review*, Vol. XLIV, No. 4, October 1941, pp. 403-407, " Wartime Labour Problems in Australia ", by E. R. WALKER ; and *The Economic Record*, June 1943, pp. 90-92, " The Western Australian Basic Wage ", by J. S. G. WILSON.

[3] See *International Labour Review*, Vol. XLVI, No. 2, August 1942, pp. 198-201, " The Wartime Employment of Women in Australia " ; *International Labour Review*, Vol. XLVII, No. 1, January 1943, pp. 92-94: " Women's Wages and Conditions of Work in Australia " ; and E. R. Walker : *The Australian Economy in War and Reconstruction* (New York, 1947), pp. 300-306.

[4] E. R. WALKER : *op. cit.*, p. 253.

[5] Cf. *International Labour Review*, Vol. XLV, No. 5, May 1942, p. 546.

[6] Cf. *idem*, Vol. XLVIII, No. 6, December 1943, pp. 779-780, " Wage Subsidies in Australia " ; and E. R. WALKER : *op. cit.*, pp. 263-269.

authorities to take independent action to adjust marginal rates without the necessity of first securing authorisation from the Chief Judge of the Commonwealth Arbitration Court. The main effect of this relaxation was to allow wage-fixing authorities to revise margins in proportion to the increase in the cost of living since the beginning of the war. [1]

Inflationary pressures [2] increased during 1947 owing to the record value of exports [3], the higher cost of imported consumers' goods and raw materials and the difficulties of procuring them, the "interim" increase of 7 shillings a week in the basic wage announced on 13 December 1946 [4], and the granting of a forty-hour week by the Commonwealth Arbitration Court on 8 September 1947. [5] Although the forty-hour week was not to apply to all workers until 1 January 1948, it was introduced in New South Wales on 1 July 1947. [6] The inflationary pressures and the increasing industrial unrest led to a conference on industrial relations, which was convened by the Federal Government and held on 2 and 3 August 1947. It was attended by the Federal Prime Minister, other Ministers, representatives of the Associated Chambers of Manufacturers, and representatives of the Australasian Council of Trade Unions. A joint statement was issued which said, in part, that

> increased production is essential for the continuance of satisfactory living standards, their improvement, the meeting of many shortages in both capital and consumable goods, and for the relieving of inconveniences and hardships at present being experienced by the Australian people. [7]

[1] Cf. *New South Wales Industrial Gazette*, 31 Jan. 1947, pp. 1-8.

[2] An indication of the inflationary pressure in Australia which has been held in check but which threatens to burst through is the fact that, whereas note circulation increased 400 per cent. between 1939 and 1947 in both Australia and the United States, from 1939 to September 1947 the cost-of-living index in Australia increased by only 34.2 per cent. as compared with 63.9 per cent. in the United States (cf. STATISTICAL OFFICE OF THE UNITED NATIONS: *Monthly Bulletin of Statistics*, December 1947, pp. 112, 143, 151).

[3] Export prices rose no less than 75 per cent. from June 1946 to October 1947 (see COMMONWEALTH BANK OF AUSTRALIA: *Statistical Bulletin*, November 1947, p. 28).

[4] COMMONWEALTH OF AUSTRALIA, DEPARTMENT OF LABOUR AND NATIONAL SERVICE: *Industrial Information Bulletin*, November 1946, p. 708.

[5] Cf. BANK OF NEW SOUTH WALES: *Annual Report and Balance Sheet*, year ended 30 September 1947, pp. 10-11. The full text of the judgment of the Commonwealth Arbitration Court concerning the forty-hour week contains a comprehensive analysis of Australian post-war economic conditions (see *New South Wales Industrial Gazette*, September 1947, pp. 521-542).

[6] Cf. *New South Wales Industrial Gazette*, 31 October 1947, pp. 1-2.

[7] Cf. *idem*, August 1947, p. 177.

As one means of increasing production, the Council of Employers' Federations, in a production plan submitted to the Prime Minister in January 1947, had recommended that where practicable incentive payment schemes should be introduced in industry.[1] This view was supported by the August conference on industrial relations, which stated that

> the employers have suggested that a satisfactory solution would be the introduction or extension of incentive payments, which would give a daily or weekly benefit to the worker from the results of his immediate higher production.

Most trade unions have in the past been opposed to incentive payments, because of unfavourable experience with them. The Australasian Council of Trade Unions intimated to the conference, however, that it was prepared to make a full and complete investigation into modern incentive payment systems in order to determine whether these systems would be of advantage to the worker and the community.[2]

Further support for the introduction of incentive payment systems in Australian industry was given by the judgment of the Commonwealth Arbitration Court on 8 September 1947, in connection with the granting of a forty-hour week. The judgment drew attention to the important fact that

> for the first time in the history of capitalism we have full employment and what is more important, the promise that it will be continued indefinitely. . . . In the past the worker was kept at high pressure by the cudgel of unemployment or the carrot of incentives. He feared that he would ultimately work himself out of a job and into a condition wherein while he starved he was told there was over-production. Naturally, this spectre haunted him as his greatest fear and he resisted incentives and resented the threat. When the new doctrine is absorbed by employer and employee, when the employer realises he has lost his cudgel, and when the worker realises there is no need to fear unemployment, then we may be assured that well planned and safely guarded incentive systems will not only not be resisted but will be welcomed. Australian management will not be slow to realise these possibilities and Australian workmen not slow to respond. Some employers told us what our own experience has taught us, that, given incentive systems, Australian industry could take the forty hour step in its stride.[3]

It is significant, also, that incentive systems have received the approval of the Australian Labour Government. The

[1] *Industry and Trade and The Employers' Monthly Review*, February 1947, p. 38.

[2] Cf. *New South Wales Industrial Gazette*, August 1947, pp. 178-179.

[3] Cf. *idem*, September 1947, p. 533.

amendments [1] to the wage-pegging provisions of the National Security (Economic Organisation) Regulations, announced by the Federal Prime Minister on 8 October 1947, require that, except for special cases, the wage rates fixed by the various industrial authorities are to be maximum as well as minimum rates. Variations in these rates are to be allowed only where employers are already paying employees a margin above the award rates, in cases of promotion, etc., or where they result from the operation of a bonus, piece work, or other system of payment by results, at present in force. New systems of this kind may be introduced, provided they have been approved by an industrial authority and provided they relate the rate of remuneration to the output or production of an employee or group of employees. [2]

To sum up, Australian wage policy during the war was directed towards facilitating the success of the economic stabilisation policy. Accordingly, measures intended to stabilise wages and prices were carried through with some success, although sometimes not without a certain degree of opposition from both workers and employers. Since the war, inflationary pressures, industrial unrest, the need for increased production and the existence of full employment have necessitated: (1) some relaxation of the wage-pegging provisions; (2) the granting of wage increases; and (3) a significant change in traditional attitudes towards the establishment of maximum as well as minimum rates of wages by the wage-fixing authorities and towards the adoption of incentive systems. The latter have been approved by both employers and the Government, and the Australasian Council of Trade Unions has indicated its willingness to study them.

Belgium

Few data on the trends of wages and prices in Belgium are available for the period of the German occupation. It appears however that, while money wages rose to some extent prior to the liberation, the rise in prices was much more marked. An 8 per cent. upward adjustment in wages was allowed by the occupation authorities in May 1941. Later, as real wages declined further with the rise in living costs, the authorities supplemented money wages to some extent by bonuses, allow-

[1] *Statutory Rules*, 1947, No. 145.
[2] Press Release, 8 October 1947.

ances and allotments in kind of various types. It has been estimated that real wages at the end of the occupation in 1944 were approximately 50 per cent. of their 1936-1938 level.

In September 1944, the Belgian Government authorised a 60 per cent. increase in basic wages over 1940 rates, and an additional upward adjustment of 20 per cent. was ordered in August 1945. Money wages continued to rise further, and by the end of 1946 they were apparently about three times as high as pre-war levels. A comparable rise from their pre-war level had also occurred in prices, however, so that real wages were still somewhat below their 1936-1938 average; the official indices suggest that real wages at the end of 1946 were only about 4 per cent. below pre-war figures, but labour spokesmen questioned the adequacy of the wage and price data used, and placed the deficiency in real wages at nearer to one-sixth or one-fifth. Both wages and prices gradually rose somewhat further in 1947, but a levelling out of the latter became apparent in the latter part of the year.

Upon its return from exile in 1944, the Government's basic policy was to redress the low level of real wages by prices decreases rather than by raising wage rates. In order to effect a lowering of the price level, reliance was placed upon the expansion of production, contraction of the large volume of credit and money outstanding, subsidies, and price ceilings. Little general price reduction was achieved during 1945 and early 1946, however, and wage increases had to be permitted. Government measures initiated in the spring of 1946 proved more successful in lowering prices during that year, but during 1947 they again showed an upward tendency.

Selective increases in wages have also been given in various cases, in addition to action taken which affected all workers. These special increases have had, for a part of their purpose, the raising of the earnings of the lowest paid workers and also the adjustment of geographical differentials. They have also been used to stimulate the flow of manpower to basic industries, such as coal mining, where shortages of workers were critical for the whole economy.

An important adjunct of the programme for restoration of real wages after the liberation was the comprehensive expansion of social security benefits. This was initiated by a Legislative Order of 29 December 1944.[1]

[1] Cf. INTERNATIONAL LABOUR OFFICE: *Legislative Series*, 1944, Belg. 2.

An interesting feature of wage policy in Belgium is the role played by the National Labour Conference in its formulation. This Conference consists of representatives of both trade unions and employers. Proposals for wage changes are frequently the subject of joint discussions at the Conference, and the recommendations adopted by the Conference are often followed closely by the Government. This procedure has served to strengthen the carrying out of the post-war stabilisation programme of the Government.

CANADA

Wage-price movements in Canada fall naturally into three periods: 1939-1941, 1941-1945 and 1945 to the present day. From 1939 to the end of November 1941, wages and prices responded more or less freely to market forces, with the exception of the prices of a few essentials that where subject to control. From December 1941 to the end of the war, both wage changes and price movements were limited by comprehensive controls. An Order in Council (P.C. 7440) stabilised all wage rates at the level of 24 November 1941. Adjustments were permitted by the War Labour Board only when it was shown that an employer's scale of wage rates was low in relation to the prevailing rates for the same occupation and locality. The Board had the authority, however, to order an employer to pay a cost-of-living wage bonus, based on increases in the official cost-of-living index. A new Order (P.C. 9384) at the end of 1943, and subsequent amendments thereof, incorporated previous cost-of-living bonuses into the regular wage rates, and further increases were permitted only "to rectify a gross inequity or gross injustice". In January 1946, when price ceilings were suspended on many items, widespread wage increases were permitted. In June of the same year, wage controls were relaxed further, and in December the wartime wage regulations were scrapped altogether.

The policy of stabilising the cost-of-living index was also introduced towards the end of 1941. This policy involved price ceilings supported by rationing, subsidies, steeply increased income-tax, and large-scale loan campaigns.[1] The system was

[1] Cf. Benjamin H. HIGGINS: *Canada's Financial System in War* (New York, 1944); and *The Canadian Journal of Economics and Political Science*, February 1948, pp. 62-93, "Canadian War-Time Fiscal Policy, 1939-45". by R. Craig McIVOR.

liquidated slowly in the first post-war year and more rapidly in the following year. By the middle of 1947, direct controls and subsidies had virtually disappeared.

Hourly earnings in manufacturing rose more or less steadily throughout the whole period, with the exception of a few months in late 1945 and early 1946, when the contraction of war production resulted in a temporary decline in wage rates. Average weekly earnings reached their wartime peak in 1944, declined slightly in 1945 and considerably in 1946 as hours of work were reduced, but rose again in 1947 with rising wage rates. The cost-of-living index rose 15 points from 1939 to 1942, was more or less stable for the rest of the war period, rose somewhat in 1946 as controls were relaxed, and rose sharply in 1947 as the remaining controls were terminated and the shortage of American dollars developed.

As a result of this combination of wage, price and earnings movements, real weekly earnings rose over 31 per cent. from 1939 to 1944, fell slightly in 1945 and substantially in 1946, and

TABLE XII. CANADA : HOURS AND EARNINGS IN MANUFACTURING INDUSTRIES, AND INDICES OF COST OF LIVING AND REAL WAGES, 1939 – JUNE 1947

Date	Average hourly earnings (dollars)	Average hours worked per week	Average weekly earnings [1] (dollars)	Indices (1939 = 100)		
				Average weekly earnings	Cost of living	Real weekly earnings
1939	0.422	47.2	20.11	100.0	100.0	100.0
1940	— [2]	50.1	— [2]	— [2]	104.1	— [2]
1941	— [2]	50.6	— [2]	— [2]	110.0	— [2]
1942	0.554	50.2	27.99	139.2	115.3	120.8
1943	0.603	48.3	29.70	147.7	116.7	126.6
1944	0.646	47.5	30.94	153.8	117.1	131.4
1945	0.694	43.3	30.71	152.7	117.7	129.8
1946	0.700	42.6	29.87	148.5	121.8	122.0
1947						
Mar. 1	0.771	43.4	33.46	166.4	127.0	131.1
June 1	0.798	42.9	34.23	170.2	132.9	128.1

Statistics of Average Hours Worked and Average Hourly Earnings, various d *Employment Situation*, various dates ; and *The Canada Yearbook*, Ottawa, 1946.

[1] Computed by taking a weighted average of male and female average weekly earnings for 1939, 1942, 1943 and 1944 ; and by taking an average of the 12-monthly figures of average weekly earnings for 1945 and 1946.

[2] Data not available.

recovered in 1947 to approximately their 1945 level. Wages as a proportion of national income (at factor cost) fell from 60 per cent. in 1939 to 57 per cent. in 1941, remained constant through 1945, fell slightly in 1946, and recovered to 60 per cent. in 1947. In the latter half of 1947 and early 1948, however, the cost of living once again rose faster than money wages, and it seems unlikely that the improvement of labour's relative share will continue through 1948.

These general movements were accompanied by a reduction of earning differentials between men and women and also as between the various provinces. Women's earnings in manufacturing rose from 61.3 per cent. of men's earnings in 1939 to 67.3 per cent. in 1944. In 1939, the Province of British Columbia had the highest average hourly earnings in manufacturing ; earnings in Quebec were 74.7 per cent., in Nova Scotia 70.5 per cent., and New Brunswick 69.1 per cent. of those in British Columbia. In June 1947, the rates in British Columbia were still highest, but the figures for the other provinces had risen to 76.5 per cent., 78.7 per cent., and 77.4 per cent., respectively. While there were some changes in the rank order of leading industries in terms of wage rates, there was little change during the period in the spread from lowest-paid to highest-paid occupations.[1]

CZECHOSLOVAKIA

The evolution of hourly wage rates in Czechoslovakia from 1939 to 1947, both in terms of money and in real terms, is shown in table XIII. In the first year of the German occupation, money wages rose by about one-third ; the increase reached 50 per cent. by 1941. Thereafter, the German authorities made all wage increases subject to official approval, with the result that wage rates in general were frozen. Trade unions were not permitted to influence wage-fixing, but " the Ministry of Economic Affairs and Labour could increase or decrease wages at will without being obliged to pay attention to the legislation in force. Attempts to entice workers away from their employment by offering higher rates of remuneration were strictly forbidden." [2]

[1] Cf. *Monthly Labor Review*, October 1947, pp. 428-429, " Canada : Wage Trends and Wage Policies, 1939-1947 ", by Joseph MINTZES.

[2] *International Labour Review*, Vol. LII, Nos. 2-3, August-September 1945, p. 164, " Social Policy in Occupied Czechoslovakia, 1938-1944 ", by Dr. G. W. BRUEGEL.

Prices were also frozen during this period, so that real wages remained more or less stable at much the same level as before the war. Though statistical data on the subject are lacking, it is probable that weekly earnings increased considerably more, as "it could be said that in practice there was absolutely no limit on hours of work in Czechoslovakia".[1] In addition, the

TABLE XIII. INDICES OF COST OF LIVING, MONEY WAGE RATES, AND REAL WAGE RATES IN CZECHOSLOVAKIA, 1939–1947

Indices, 1939 = 100

Date	Cost of living indices		Indices of money wage rates [1]	Indices of real wage rates	
	Prague	Whole country	Whole country	based on Prague cost-of-living index	based on cost-of-living index for whole country
1939 III	100	100	100	100	100
1940	128	—	133	(104)	—
1941	149	—	152	(102)	—
1942	162	—	163	(103)	—
1943	160	—	165	(102)	—
1944	161	—	165	(107)	—
1945	170	—	182	(99)	—
1946	309	325	304	(98)	94
1947	295	307	315	(107)	103
1946 III	311	—	302	(97)	—
VI	309	—	303	(98)	—
IX	306	—	303	(99)	—
XII	309	324	309	(100)	95
1947 III	313	326	309	(99)	95
VI	296	308	315	(106)	102
IX	285	296	317	(111)	107
XII	289	297	317	(110)	107

Source: CENTRAL STATISTICAL OFFICE, Prague: *Renseignements statistiques* (monthly).
[1] In mining, manufacturing, industry and construction.

principle of payment by results was extended. But if earnings increased, this was accompanied by forced labour, a great extension in hours worked, loss of freedom of association, and the loss of various social insurance rights and reserve funds.

Wages, moreover, showed wide variations among industries. Some of the regulations issued during the German occupation fixed rates which were so low that they could be considered starvation wages.

[1] *International Labour Review*, Vol. LII, Nos. 2-3, August-September 1945, p. 167, *op. cit.*

After the liberation, the first step, before general planning for the economy was started, was to eliminate the most striking injustices of the wage system. At this stage, as part of the programme announced by the Czechoslovak Government, the principle of equal remuneration for men and women was introduced. Wage rates in each branch of production were then separately examined, and increases were granted to take account of the rise in prices and the devaluation of the currency. These increases were made in such a way as to reduce differences between the highest and the lowest rates. The result was a considerable narrowing of wage differentials and levelling of workers' incomes as compared with 1939.

At the end of 1945, measures were taken to reform the currency, to withdraw excessive purchasing power, and to control wages and prices. As a result of these measures, the levels both of wage rates and of the cost of living steadied at approximately three times the height of those obtaining in March 1939. From early 1946 onwards, not only was the increase in cost of living arrested, but it proved possible to bring about a slight decrease. As output improved, the index of money wage rates rose slightly, so that by December 1947 real wage rates were from 7 to 10 per cent. above those of 1939. Moreover, as a result of the great extension of piece rates and bonus schemes, earnings per hour rose more than wage rates. It has been estimated that by May 1947 average hourly real earnings had reached a point some 29 per cent. above the level of 1939.

Once a preliminary adjustment of wage rates had been effected, the Czechoslovak Government was able to give attention to systematic planning in the field of wages. The Minister of Social Welfare stated in November 1947 that the Government had adhered very strictly to the principle of wage stabilisation, had tried to equalise the wage level smoothly and to mitigate unjustified discrepancies both within and between various branches; its next task was gradually to introduce payment by results and special bonuses. A Notification [1] of the Minister of Social Welfare issued in May 1947 dealt with the compulsory introduction of piece rates as part of an incentive wage policy. In addition, bonuses of various types were granted, particularly where these included bonuses for high performance and for greater economy in the working process (saving of time or of

[1] No. 522/47.

raw materials, lowering the cost of production, or improvement of the quality of goods produced). The Notification laid down general principles for the preparation of such bonus schemes. The schemes were to be examined by a commission for piece rates and bonus schemes, on which the Trades Union Council, the Institute for Labour Standards and the industrial federation concerned are represented, and were then to be submitted to the Minister of Social Welfare for approval.

The process of introducing piece rates and other systems of payment by results is, however, slow and difficult. The Minister of Industry, addressing the Constituent National Assembly on 23 October 1947, pointed out that Czechoslovak industry was suffering from the fact that piece rates were being too slowly substituted for time rates and that, in many cases, piece rates were being fixed only by trial and error. In view of the shortage of manpower, he added, it was necessary to ensure that appropriate relationships between wages and salaries, justified from the point of view of national economy, were preserved.[1]

A Notification of the Ministry of Social Welfare was also issued concerning wages and working conditions in agriculture. The wage levels of agricultural and forestry workers are being gradually adjusted to those in industry.[2] In an endeavour to improve the relation between real income in industry and agriculture and also to induce workers on farms to remain there, agricultural wages were increased to roughly six times their previous rates. In addition, differential wages for various kinds of farm work were established, and farmers and agricultural workers were included in the scope of all Government social schemes.[3]

The problem of attracting labour to undermanned industries continued to be a source of difficulty. Apart from the readjustment of wage rates referred to above, the methods advocated included the provision of advantageous conditions for workers in such industries in proposed social insurance schemes; priorities for them in supplies of textiles, coal, footwear and other daily necessities; preference in the allotment of new

[1] *Hospodar*, 30 October 1947.

[2] Statement of the Minister of Social Welfare, 6 November 1947.

[3] *Economic Review of Food and Agriculture*, Vol. 1, No. 1, January 1948, p. 29, "Reconstruction in Czechoslovakia", by O. Bielogurskas and D. L. Glickman.

housing; and hostels for trainees. At the same time, strict measures were taken against the payment of wages in excess of approved rates, or so-called "black wages", especially where they affected prices.

FRANCE

Wartime Trends

Prices in France rose sharply during the war. Wholesale prices in the third quarter of 1945 were four times the 1938 average, and the cost of living in Paris was more than four times as high as the 1938 level.[1] Money wage rates lagged behind prices, so that real wage rates fell. In October 1945, money wage rates of skilled workers were 380 per cent. of the October 1938 level and those of unskilled workers were 369 per cent. Real wage rates of workers in general were consequently only 81 per cent. of the October 1938 level.[2] Moreover, the index of real wage rates, calculated on the basis of actual money wages and official cost-of-living indexes, greatly underestimates the decline which actually occurred. Many commodities were not available at the official prices, and had to be bought on the black market at very much higher prices.[3]

As in other countries, the war brought an increase in working hours, and consequently earnings increased proportionately more than wage rates. Even earnings failed to keep pace, however, with the rise in prices. In October 1945, the average monthly earnings of male labourers with two children, including family allowances and overtime, were 391 per cent. of the October 1938 level in Paris, and 505 per cent. of the October 1938 level in the provinces; retail prices at the same time were 460 per cent. above October 1938 in Paris, and 515 per cent. above in the provinces.[4]

It is interesting to note the growing importance of family allowances in the incomes of French workers. In the period

[1] *Bulletin de la statistique générale de la France, Etudes et conjoncture*, Feb.-March 1946, p. 70. Cf. UNITED NATIONS, DEPARTMENT OF ECONOMIC AFFAIRS: *Survey of Current Inflationary and Deflationary Tendencies* (Lake Success, September 1947), p. 38.

[2] UNITED NATIONS, DEPARTMENT OF ECONOMIC AFFAIRS: *Survey of Current Inflationary and Deflationary Tendencies*, p. 43.

[3] *Ibid.*, p. 35.

[4] *Monthly Labor Review*, August 1947, p. 150, "France: Wage Trends and Wage Policies, 1938-1947", by Helen I. COWAN.

from September 1944 to 31 July 1945, the family allowance for a father of four children working in the Seine Department was 3,037.5 francs per month, as compared to a basic monthly wage of 2,250 francs. In addition, some workers benefited by canteen services and housing made available by employers.[1]

In one respect, the effect of the war on wage rates in France was the same as in a number of other countries : the differentials between wages of men and women, and those between wages for skilled and unskilled workers, were narrowed. There was also a reduction in the gap between wage rates in Paris and in the provinces. In October 1938, hourly wage rates in ten predominantly male occupations were nearly twice those of females in seven predominantly female occupations ; eight years later they were only 17 per cent. higher. Between October 1938 and October 1946, the average increase in wages for ten highly paid occupations was 5.7 times, compared with an increase of 6.3 times for ten low paid occupations. Before the war, hourly wage rates in Paris were at least 50 per cent. above those of the lowest wage areas, while in the latter part of 1946 the difference was only 25 per cent.[1]

The decline in real wage rates and real earnings in France during the war reflects the relatively greater success achieved in stabilising wages than in stabilising prices. When war began, wages were fixed by collective bargaining, within a framework prescribed by Acts of 25 March 1919 and 24 June 1936. The latter Act required the establishment by collective agreement of minimum wage rates for each occupation and region. Within a few days of the outbreak of war, however, wage rates were frozen by Government Decree at the levels prevailing on 1 December 1938. Subsequent Decrees authorised revision of wage rates by the Minister of Labour, on the advice of a technical commission composed of Government officials and representatives of employers and of workers. The Vichy Government maintained these controls, but eliminated the technical commission, leaving the regulation of wage rates in the hands of the Minister of Labour. Rising prices led to three general wage increases up to June 1943. Employers sometimes supplemented the legal rates by bonuses, or by supplying meals or housing, so that actual wages rose somewhat more than the legal maximum. According to official indexes, in April 1944 wage rates for unskilled labourers, had risen 43 per cent. above

[1] Cf. *Bulletin de la Statistique générale de la France*, April 1947.

the 1938 level in Paris and 68 per cent. in the provinces. By this time, retail prices had already doubled, and black market prices, of course, had risen even more.

In March 1944, the provisional Government in Algiers adopted a resolution requiring immediate increases in wage rates, supplemented by increases in family allowances. After the fall of the Vichy Government, these higher wage increases became effective.

Post-War Developments

Inflation continued at an accelerated pace in France after the war, both prices and wage rates rising faster than during the war itself. Between October 1945 and October 1947, the retail price index of thirty-four commodities in Paris rose 276 per cent. ; during the same period, the index of hourly wage rates of skilled male workers in Paris rose 161 per cent.[1] Thus, post-war efforts to improve labour's position, and to increase the workers' share of national income, by a series of Decrees raising wage rates throughout 1945 and 1946, were more than offset by rising prices. During 1946, the stated policy of the Government was stabilisation of both wages and prices, in hopes of breaking the upward wage-price spiral. Production bonuses for workers were resorted to, in an effort to tie increases in money earnings to increases in labour output. However, the upward wage-price spiral continued.

On 1 August 1947, a joint statement was issued in Paris by the General Confederation of Labour (C.G.T.) and the National Confederation of French Employers (C.N.P.F.), fixing a new wage scale, retroactive to 1 July 1947. The new scale provided for an all-round increase of 11 per cent. over previous wage rates.[2] The joint statement declared that workers and employers were in favour of bringing family allowance payments into line with the new wage rates, and emphasised the necessity of detailed agreement on the best working methods for increasing output and productivity without endangering the health of workers. The statement also announced that a Central Price Committee would study the question of production bonuses for workers.

[1] Calculated from data appearing in various issues of *Bulletin de la Statistique générale de la France.*

[2] Cf. *International Labour Review*, Vol. LVI, No. 4, October 1947, pp. 473-475.

The upward spiral of wages and prices continued throughout the latter part of 1947, and on 1 January 1948, the Prime Minister, Mr. Schuman, announced a new 24 per cent. increase in basic wages ; at the same time, he warned the workers that there would be no further wage increases in 1948. The wage increase was retroactive to 1 December 1947, and was accompanied by an increase in industrial prices to a level 11 times higher than that of 1938. The latter action brought industrial and agricultural prices closer together. The Government announced that it does not intend to authorise further price increases, and that it intends to continue its policy, initiated in October 1947, of abandoning subsidies and of freeing an increasing number of products from control.

Some of the conclusions suggested by French experience during this period have been summarised as follows in an official survey :

> The inadequacy of a wage policy which is not part of an integrated economic and financial policy must be emphasised. The problem of remuneration of wage-earners cannot be satisfactorily solved in a period of marked price increases. Experience has demonstrated the futility of expecting to solve the problem by a series of alternating — or simultaneous — increases in wages and prices ; nevertheless, no restraint should be placed on the maintenance of prices through a wage ceiling in an economy otherwise relieved from controls. Quite apart from the fact that such a measure would be extremely unjust, it is ineffective so long as the increase or maintenance of excessive incomes accruing to the benefit of certain categories of producers or distributors as a result of the increase in prices is not avoided. The control of wages must be integrated into a general economic policy which ensures normal supply, at an accessible level of prices, given the state of production. The control of wages should also be accompanied by an adequate effort to ensure a minimum of equality in the distribution of the burdens and benefits of the community between the different categories of recipients.[1]

India

Earnings have increased considerably in India as a result of the war and post-war expansion in industrial activity. The average annual earnings of employees in the provinces of India, in receipt of a wage or salary of less than 200 rupees a month and employed in factories submitting returns, increased from

[1] Rèpublique Française, Ministère des Finances : *Inventaire de la situation financière (1913-1946) établi sur les instructions de M. Robert Schuman, Ministre des Finances* (Paris, 1947), p. 216.

287.5 rupees in 1939 to 595.8 rupees in 1945, or by 107 per cent.[1] The increases in earnings, however, showed great variation among both provinces and industries. The increase in 1945 over 1939 varied from 29.6 per cent. in Bihar (from 415.5 to 538.7 rupees a year) to 157.8 per cent. in Orissa (from 161.8 to 417.2 rupees a year). In Bombay the increase was 120 per cent. (from 370.4 to 814.7 rupees a year). Average earnings in ten industry groups are set out in table XIV below.

Owing to the shortage of goods available for civilian consumption and the wartime increase in consumers' money incomes, the cost of living rose rapidly in the early stages of the war, particularly from 1940 to 1943. During this period the Bombay working-class index virtually doubled. During the period 1943-1946, the rapid increase was halted and price movements became irregular, a slight fall early in 1944 being followed by a slight rise. By March 1946, the index for Bombay had risen to 233 compared to 1937, or by 7 per cent. over the average for 1943. "This comparative stability of the price level was achieved mainly by the vigorous action taken by the Government to augment civilian supplies of food and cotton cloth, to absorb surplus consumer purchasing power, and, finally, to improve the machinery for the control and rationing of essential consumers' goods."[2] In 1947, a further increase took place, followed by a slight fall, bringing the index to 256 in January 1948. The increases in other parts of the country have as a rule been larger than in Bombay; for instance, the cost-of-living index for Cawnpore reached 420 in October 1947 as compared with 100 in August 1939.[3]

Though no precise figures are available, the data presented above show that the increase in earnings in India did not keep pace with the rise in the cost of living. Accordingly, the real earnings of Indian factory workers seem to have fallen to a substantial extent. It should be borne in mind that the earnings shown in table XIV include in most cases cost-of-living bonuses which were granted in various industries, such as textiles, mines, railways, as well as to the lower-paid employees of central and provincial State Governments. These bonuses, however, vary from industry to industry and from region to region. For

[1] *Indian Labour Gazette*, Vol. V, No. 3, Sept. 1947, pp. 161-163.

[2] Preparatory Asian Regional Conference of the International Labour Organisation, New Delhi, 1947: *The Economic Background of Social Policy including Problems of Industrialisation* (New Delhi, I.L.O., 1947), p. 121.

[3] *Indian Labour Gazette*, Vol. V, No. 5, Nov. 1947, p. 332.

TABLE XIV. AVERAGE ANNUAL EARNINGS OF EMPLOYEES IN FACTORIES IN INDIA BY INDUSTRY, 1939-1945

Amounts in rupees; index numbers in parentheses

Industry	1939	1940	1941	1943	1944	1945
Textiles	293.5 (100.0)	302.9 (103.2)	314.0 (107.0)	571.5 (194.7)	633.6 (215.9)	613.7 (208.9)
Engineering	263.5 (100.0)	345.0 (130.9)	371.5 (141.0)	529.0 (200.7)	589.8 (223.8)	653.1 (247.9)
Minerals and metals	457.2 (100.0)	491.5 (107.5)	476.1 (104.1)	502.1 (109.8)	573.5 (125.4)	601.9 (131.6)
Chemicals and dyes	244.8 (100.0)	229.6 (93.8)	238.1 (97.3)	398.0 (162.6)	484.6 (198.0)	445.2 (181.8)
Paper and printing	332.7 (100.0)	360.0 (108.3)	324.8 (97.6)	414.0 (124.4)	474.1 (142.5)	568.8 (170.1)
Wood, stone and glass	194.2 (100.0)	175.3 (90.4)	199.1 (102.6)	303.1 (156.2)	368.4 (189.9)	413.6 (213.2)
Skins and hides	285.8 (100.0)	327.1 (114.5)	357.9 (125.2)	411.0 (143.8)	532.1 (186.2)	536.7 (186.8)
Ordinance factories	361.9 (100.0)	408.5 (112.9)	429.4 (118.7)	527.4 (145.7)	546.8 (151.1)	642.8 (177.6)
Mints	367.4 (100.0)	462.7 (125.9)	491.2 (133.7)	574.4 (156.3)	695.2 (189.2)	667.0 (181.6)
Miscellaneous	281.2 (100.0)	261.0 (92.8)	261.2 (92.9)	392.0 (139.4)	513.8 (182.7)	503.2 (178.9)
All industries	287.5 (100.0)	307.7 (107.0)	324.5 (112.9)	525.0 (182.6)	586.5 (204.0)	595.8 (207.2)

Source: Indian Labour Gazette, Vol. V, No. 3, Sept. 1947, p. 162.

example, the average monthly cost-of-living bonus to cotton mill workers for the period of January 1940 to March 1943 amounted to 24 per cent. of average earnings in Bombay and 26 per cent. of those in Ahmedabad. These bonuses were probably larger than those paid in other industrial centres.[1]

[1] *Indian Textile Journal*, Vol. LIII, No. 632, May 1943, p. 235. For a general review of the position up to 1944, see *International Labour Review*, Vol. L, No. 6, Dec. 1944, pp. 736-750, "Wartime Inflation in India and its Social Repercussions."

ITALY

A dominant factor in the Italian wage situation has been the great rise in the cost of living from 1939 to 1947. Reliable data on the extent of this rise are difficult to obtain.[1] An average of three indices, however, shows that the cost of living in May 1947 was about fifty times what it was in 1938. Most of this rise took place after 1943, in which year the cost of living was $4^1/_2$ times that of 1938. By the end of 1944, 1945 and 1946, it was 12, 25 and 39 times that of 1938 respectively.[2] The rise continued to September 1947, when the official cost-of-living index number compiled by the Central Statistical Institute reached a peak of 5,331 (1938 = 100; May 1947 = 4,370); a gradual decline then set in, and by February 1948 this index had fallen to 4,791.

Considerable increases took place also in money wages during the period, but they were not large enough to compensate for the great increase in the cost of living. By May 1947, according to a survey by Professor Tagliacorne,

> the wages of an unskilled labourer, instead of the 50-fold increase required to keep pace with the increase in the cost of living, had increased only 36 times; the wages of a skilled workman increased 26 times, the salary of a second class employee 19 times, of a first class technical employee 13 times, and of an executive 12 times... Real wages have decreased, compared with 1938, 24 per cent. for unskilled labour, 46 per cent. for skilled, 60 per cent. for second class employees, 70 per cent. for first class technical employees, and 72 per cent. for executives . . . The above-mentioned trend in wages paid by private firms is even more marked for State and public service employees. In 1938, the salary of a university professor was six times that of a porter at the university; today it is only twice as high. A department head of the Bank of Italy in 1938 enjoyed a salary about eight times that of the janitor; by the end of 1946 it was only one-and-a-half times as much.[3]

Wage Policy

The system of wage-fixing in force before the war was continued until 1944. Under this system, minimum wage rates were

[1] Cf. UNITED NATIONS RELIEF AND REHABILITATION ADMINISTRATION, ITALIAN MISSION: *Survey of Italy's Economy* (Rome, June 1947), pp. 361-362.

[2] Cf. *Banca Nazionale del Lavoro Quarterly Review*, July 1947, p. 75. "Cost of Living, Salaries, Consumption and the Situation of the Italian Middle Classes", by Guglielmo TAGLIACORNE.

[3] *Ibid.*, pp. 79-80.

fixed for all workers except domestic servants by national agreements concluded between representatives of the fascist employers' and workers' organisations. By a Legislative Decree of 23 November 1944, the fascist organisations were abolished and free collective bargaining between new organisations of employers and workers was introduced. Minimum wage rates were fixed at the national level, with necessary variations according to occupational groups and by regions. In contrast to the pre-war system, the Italian Government does not attempt to maintain any direct control over wages.

Wages were frozen in 1940, but as a result of the rise in the cost of living, it became necessary, during the succeeding years, to grant a number of bonuses and allowances. After the Allied landing in Italy, wage rates were increased because of the rising inflation. The increases varied from area to area, industry to industry, and firm to firm. Continued inflation necessitated further relief to the workers, which was given in the form of various bonuses and allowances, among which were a cost-of-bread allowance, emergency bonus, Christmas bonus, Easter bonus, liberation bonus and advances on future increases in wages. By October 1945, the wage structure had become so complex that an attempt was made to introduce a more rational policy, which provided that future wage increases were to be made proportionate to changes in the cost of living. An " inter-confederal " agreement brought about a general wage increase in December 1945, and an " equalisation " agreement in June 1946 ended the sizeable wage differentials which had existed between northern Italy and the south-central region. In 1946, however, the Government decided to apply the sliding scale to the " emergency bonus " only.

In May 1946, social insurance contributions were made payable only by the employer and not by the worker ; this represented an indirect but nevertheless real increase in wages. Various other bonuses and grants were also increased and, in some circumstances, factory canteens were organised. In addition, a special Republic bonus was introduced. On 27 October 1946 the General Confederation of Italian Industry, and the General Confederation of Labour, in spite of strong Government protests, agreed upon a general increase of 35 per cent. in basic wages, to which not more than 15 per cent. might be added by future negotiations. They also agreed to raise the basic figure upon which the cost-of-living allowances were calculated by

about 55 per cent. and to refrain from further wage increases for a period of six months, ending on 27 April 1947. At the end of May 1947, it was reported that a further wage truce had been signed to run from 1 June 1947 for another six months.[1]

The methods adopted in Italy for adjusting workers' remuneration to the large increases in the cost of living have meant that a worker's take-home pay bears little relation to the contract wage rates negotiated by the employers' and workers' organisations. For example, the money wages of a dishwasher in a Rome hotel for the month of April 1946 were made up as follows :

(a)	basic or contract wage	540 lire
(b)	advances on future wage increase .	2,000 „
(c)	share of percentage for service . .	1,114 „
(d)	attendance bonus	364 „
(e)	emergency bonus	2,100 „
(f)	cost of living bonus	520 „
(g)	family allowance (wife and 2 children)	960 „
	Total wages in the month	7,598 lire [2]

After May 1946, the worker in question was also released from payment of social insurance contributions, as noted above. Before the war, the contract or basic wage in Italy amounted to about 90 per cent. of an average worker's take-home pay. By the end of 1946, in contrast only about 40 per cent., on the average, came from the basic wage, the remainder being composed of various bonuses and allowances. Moreover, pre-war wage differentials between different categories of workers have narrowed markedly. For example, the average margin for skill before the war was about 40 to 45 per cent. above the unskilled workers' wage ; the difference now is only about 5 to 10 per cent.[3] Some of the difficulties involved in the adjustment of wages to cost-of-living increases of the magnitude experienced in recent years were indicated in a letter addressed to the President of the Council of Ministers in 1947 by the President of the General Confederation of Italian Industry who stated, *inter alia,* that

> the mechanism of the sliding scale leads to serious social disparities, besides having a marked influence on prices, a matter of special significance in a period of inflation. The sliding scale should

[1] Cf. UNITED STATES BUREAU OF LABOR STATISTICS : *Labor Abroad,* No. 2, June 1947, pp. 16-17, and UNITED NATIONS RELIEF AND REHABILITATION ADMINISTRATION : *op. cit.,* pp. 360-361.

[2] UNITED NATIONS RELIEF AND REHABILITATION ADMINISTRATION : *op. cit.,* p. 361.

[3] Cf. *Labor Abroad,* No. 2, June 1947, pp. 16-17.

therefore only be considered as a temporary device for meeting special contingencies ; were it to be applied over a long period of time it would lead to dangerous results. This makes it imperative to re-examine the whole matter and to return to more normal systems of remuneration. [1]

The fundamental difficulty underlying this situation has been the severe decline which has taken place in the national real income—a decline of some 32 per cent. between 1938 and 1946.[2] To ensure even a bare minimum standard of living to the lowest paid workers it was necessary to impose greater proportionate reductions on the higher-paid—a policy which reduced margins for skill and worked to the relative advantage, at any rate for the time being, of industries employing the largest proportions of skilled workers. The consequent decline in the real remuneration of skilled workers and of administrative and technical personnel may, it has been suggested [3], have affected the incentives to enter these occupations and may encourage the emigration of key workers needed for reconstruction. At the same time the highly complex system of special allowances and adjustments which has been evolved in the process of adapting wage rates to the steeply rising cost of living has made more tenuous the relation between work and wages and has added to the problems of industrial administration.

Mexico

Minimum wages are fixed every other year in Mexico by regional conciliation and arbitration boards, after special local wages committees on which employers and workers are represented have examined the position and made recommendations for the localities concerned. The law provides for the possibility of these scales being revised within the two-year period, on application by one of the parties concerned.

[1] *Italian Economic Survey, November-December 1947*, p. 12. Cf. *Review of the Economic Conditions in Italy* (Banco di Roma), November 1947, pp. 359-363, " Application of the Sliding Scale System to Workers' Wages."

[2] Cf. United Nations, Department of Economic Affairs : *Survey of Current Inflationary and Deflationary Tendencies* (New York, September 1947), pp. 45-47. This decrease in the national real income is a reflection of the decrease in industrial production, which in 1946 was only about half that of 1938, and of increasing unemployment, which in 1947 was estimated to be about two-and-a-half million. A further difficulty is the increasing inflationary pressure generated by continued large budget deficits.

[3] United Nations, Relief and Rehabilitation Administration : *op. cit.*, p. 364.

The period from 1939 to 1946 in Mexico was characterised by a considerable increase in the number of persons at work in industry, the index of employment increasing by about 25 per cent. during the period. The index of average money earnings rose from 100 in 1939 to 228 in 1946.[1] Owing to the sharp increase in the cost of living, however, average real earnings in manufacturing were nearly 15 per cent. lower in 1946 than in 1939. Total payrolls increased in about the same proportion as the cost of living, but the sums involved were spread over a greater number of workers than before the war.

Prices in 1947 remained above the average for 1946, but were relatively stable throughout the year. A campaign to reduce them was undertaken. As it was considered that an increase in wages would only lead to a further increase in the cost of living, most of the conciliation and arbitration boards decided to maintain the same minimum wage rates for 1948 and 1949 as were in force during 1946 and 1947.[2]

United Kingdom

During the first two years of war, the cost-of-living index rose somewhat more than wage rates in the United Kingdom, and real wage rates accordingly fell slightly (table XV). From the end of 1941 until the end of the war, however, the policy of stabilising the cost of living by price ceilings, rationing, production controls, subsidies, and high taxes proved strikingly effective. Meanwhile, money rates continued their slow rise. As a result, real wage rates measured in terms of the cost-of-living index were some 16 per cent. higher at the end of the war than at its beginning. The working class cost-of-living index was abandoned in the middle of 1947, in favour of an index of retail prices, pending development of an improved cost-of-living index. Even allowing for possible understatement of the rise in living costs by the wartime index, however, it would seem unlikely that real wage rates were much, if at all, lower in 1945 than in 1939.

Both the basic working week and overtime increased in the United Kingdom during the war, and earnings consequently rose more than wage rates. Weekly wage rates in 1945 were about 50 per cent. higher than in September 1939, and weekly earnings

[1] *Revista de Economía*, Vol. X, Núm. 10, 31 October 1947, p. 12.

[2] Communication from the I.L.O. Correspondent in Mexico, January 1948.

about 75 per cent. higher. The share of wages in national income before taxes was the same in 1945 as in 1938, (37 per cent.) but their share in national income net of income taxes rose from 39 per cent. to 44 per cent. Since real consumer expenditures for the whole country were some 7.5 per cent. lower in 1945 than in 1939, it is possible that the standard of living of British wage-earners was at much the same level in 1945 as in 1939 ; that of the rest of the community, however, and particularly that of salary earners, was distinctly lower. Wage differentials in the United Kingdom also showed a tendency to narrow during the war. Unskilled workers gained both in wage rates and in earnings as compared with skilled workers, those in agriculture as compared with those in industry, and women as compared with men.[1]

The British worker seems to have maintained his relative position in the two-and-a-half years following the cessation of hostilities. The official cost-of-living index remained stable up to July 1947, and the retail price index showed a rise of only four points between July and December 1947. Money wage rates rose substantially during 1946 and 1947, and even real wage rates continued to rise. Earnings fell somewhat with the shortening of hours, but the share of wages in national income before taxes was slightly higher in 1946 than in 1945, and after taxes was the same as in the previous year ; the share of interest, profit and rent was lower, both before and after taxes. Since total real consumption[2] was substantially higher in 1946 than in 1945 and slightly higher than in 1939, it seems likely that wage-earners as a group enjoyed a somewhat higher standard of living in 1946 than in 1939, while other groups of income-earners suffered a net decline in their standard of living.

The relative success of the British worker since the war in maintaining wartime gains has not been primarily the result of an increase in money wage rates. The main explanation lies, rather, in the success of the United Kingdom in stemming the tide of post-war inflation. This, in turn, was the result of a relatively slow rate of abandonment of wartime anti-inflation measures. Taxes have been kept relatively high, investment has been subject to considerable control, and price ceilings,

[1] Cf. A. L. Bowley : *Wages, Earnings and Hours of Work, 1914-1947, United Kingdom* (London and Cambridge Economic Service, Memorandum No. 50, May 1947), p. 6.

[2] *That is, aggregate consumer spending in terms of 1938 prices.*

TABLE XV. INDICES OF WAGES, COST OF LIVING, AND EARNINGS IN THE UNITED KINGDOM, 1937-1947

Year	Index of weekly money wage rates [1]	Index of working class cost of living	Index of real wage rates	Index of weekly earnings [3]
	1937 = 100	1937 = 100	1937 = 100	X-1938 = 100
1937	100	100	100	.
1938	103	101	101	100
1939	104	103	101	.
1940	115	119	97	130
1941	126	129	97	142
1942	135	130	104	160
1943	141	129	109	176
1944	148	130	113	182
1945	155	132	117	180
1946	167	132	126	190
1947: Mar.	171	132	129	194 [4]
June	172	132	131	.
Sept.	175	[2]	.	.
Dec.	179	.	.	.

Source: UNITED KINGDOM CENTRAL STATISTICAL OFFICE: *Monthly Digest of Statistics;* and *The Ministry of Labour Gazette.*

[1] The index covers a very wide range of industries.

[2] The cost-of-living index was superseded in July 1947 by an interim index of retail prices with base 17 June 1947 = 100. The latter index had risen to 104 in December 1947.

[3] Annual figures, July; except 1938 and 1946: Oct.

[4] April.

rationing, and production controls have been maintained to an important degree. In face of the fuel crisis of early 1947, the heavy overseas commitments, the decline in income from foreign investments, the exhaustion of the American and Canadian loans, the growing competition in export markets, the rapidly rising prices of imports, and other factors, the British post-war policy for control of inflation has not proved to be entirely adequate. It has, however, been more successful than in most countries.

Wage Policy

During the war itself, it was hoped that control of the cost of living would remove most of the pressure for wage increases, and wage determination was left almost entirely to the normal channels of collective bargaining. In July 1940, a National Arbitration Tribunal was added to the existing machinery for the settlement of industrial disputes. This Tribunal handled

cases that could not be disposed of otherwise and which were referred to it by the Minister of Labour and National Service. In a command paper on price stabilisation and industrial policy issued in July 1941, the Government pointed out that " increases of wage rates will defeat their own object, unless such increases are regulated in a manner that makes it possible to keep prices and inflationary tendencies under control " ; no legal wage ceilings of any kind, however, were introduced.

Since the end of the war, the United Kingdom has faced not only the danger of a general wage-price spiral, but also the problem of attracting an adequate supply of labour back into key industries, particularly coal mining. This combination of circumstances, together with the critical nature of Britain's general economic and financial situation, has led to increasing pressure for the adoption of a more active labour policy, which might include wage ceilings and some measure of compulsion in the allocation of labour. Such policies have been resolutely opposed by the Trades Union Congress. These two issues—wage ceilings and compulsory allocation of labour—constitute the kernel of the post-war wage controversy in the United Kingdom.

Early in 1947, the Government issued an official statement on wage-price policy, stressing the necessity of increased production as a basis for further wage increases. It stated that :

> Until the output of British industry is considerably increased there is bound to be some fear of our ability to maintain the stability of prices and the orderliness within our industrial system which have characterised Great Britain throughout all the difficulties of the war and the transition from war to peace . . . .
>
> How is this increase of production to be obtained ? By ensuring that those industries which provide essential supplies are fully manned up ; by maintaining full employment so that we can make use of all the manpower we can muster ; and while costs and prices are held steady, by raising the level of output per head without prejudice to earnings.

A similar point of view was reiterated in the *Economic Survey* for 1947, published in February of that year :

> Balanced national production requires a big increase in the labour force of some industries and limitation of the expansion of others. The need for more miners dominates the whole scene. Our food position depends upon more workers in agriculture. The housing programme depends upon more workers in the building materials industries, as well as upon timber. The clothing ration depends upon more workers in the cotton and woollen industries ; the supply of cups and saucers upon more workers in the pottery industry. On the other hand, further expansion in the number of

building workers, or in the number of engineering workers, would threaten to cause underemployment for lack of materials.

Now that direction of labour has been abandoned, there is no single measure which the Government can adopt to bring about these adjustments. The problem of certain undermanned industries can be greatly eased by the introduction of new machinery and by the provision of better amenities for the workers in them . . .

For this purpose also, the Government attaches great importance to the introduction of systems of payment and other arrangements which provide the maximum incentive to increase output.

By May 1947, the general economic and financial situation had degenerated so much, the coal shortage had become so acute, and the inflationary pressure had become so intense, that proposals to adopt a comprehensive policy covering wages, hours, and distribution of national income, and to set up special incentives in the mining and other key industries suffering from shortage of labour, were debated at the Labour Party Conference. On 3 July 1947, the Minister of Labour stated in the House of Commons that the Government's policy at that time called for no general regulation of wages, but that payment by results would be encouraged. It was the Minister's opinion that productivity could be increased by improved working conditions and amenities, and by joint labour-management consultations at the plant level.

With the virtual exhaustion of the United States and Canadian credits, the suspension of convertibility of sterling, restrictions on imports, and consequent aggravation of inflationary pressure during July and August 1947, the question of wage ceilings and direction of labour to essential industries once more confronted the Government. In face of the gravity of the national emergency, the Trades Union Congress accepted in a general way the necessity of a degree of direction of labour. On 18 September, a new Control of Engagement Order was issued by the Minister of Labour and National Service [1], to be effective from 6 October 1947 to the end of 1948. The essence of the Order is contained in its Article 3, which reads as follows :

Subject to the provisions hereinafter contained in this Order—

(a) no person shall seek to engage or engage any person for employment otherwise than by notifying to a local office or an approved employment agency particulars of the vacancy to be filled ;

(b) no person shall engage any person for employment unless that person has been submitted to him by a local office or an approved employment agency ;

[1] *Statutory Rules and Orders*, 1947, No. 2,021.

(c) a person seeking employment shall obtain his employment by making application to a local office or an approved employment agency, and by means of a submission to an employer by a local office or that approved employment agency and not otherwise.

Article 5 listed exceptions: agriculture, coal mining, dock workers, masters and crews of most ships, fishing, police, managerial and professional workers, and housewives. The Order was followed by the circulation among employment exchange managers of a list of essential industries, to serve as a guide in placing workers under the Order. Mining, agriculture, iron and steel, and textiles were accorded highest priority. Industries which are in themselves essential, but which were relatively well provided with labour, such as engineering industries and building, were omitted from the list, and such occupations as entertainment, sport, personal services, and distribution were classified as " less essential ". [1]

Despite this Order, wage rates continued to rise and strategic industries remained undermanned. The Prime Minister made a new appeal to organised labour not to press for higher wages during the crisis period. The trade unions countered with demands for stricter control of profits and the continuation of subsidies. Despite the growing tension, open industrial conflict was kept to a minimum; the number of working days lost during the post-war period were so few as to establish a peacetime record. But full employment and paucity of strikes were not enough to solve the wage problem.

On 8 December 1947, a new Order came into effect requiring all men between the ages of 18 and 51 years and all women between the ages of 18 and 41 years, who were unoccupied or not engaged in useful employment, to register for possible direction into essential work. [2] The Order was followed shortly after by the publication of an *Interim Report on the Economic Situation* by the Trades Union Congress. This report urged " that the Government should continue the practice of cost-of-living subsidies as one means of assuring price stability ". It also stated that it was " impracticable and would in any case be undesirable to impose specific limits and restrictions on wage increases ".

On 4 February 1948, the Government issued a *Statement on Personal Incomes, Costs, and Prices* [3], which reiterated the need

[1] *The Economist*, 11 October 1947, p. 615.
[2] *Statutory Rules and Orders*, 1947, No. 2,409.
[3] Command Paper 7,321.

to reduce costs of production, in order to improve Britain's competitive position in export markets. The statement laid down the essential principle " that there should be no further general increase in the level of personal incomes without at least a corresponding increase in the volume of production ". At the same time, it recognised that " there may well be cases in which increases in wages or salaries would be justified from a national point of view, for example, where it is essential in the national interest to man up a particular undermanned industry and it is clear that only an increase in wages will attract the necessary labour ". It added, however, that " each claim for an increase in wages and salaries must be considered on its national merits and not on the basis of maintaining a former relativity between different occupations and industries ".

The statement was followed a week later by an announcement of the measures that the Government would undertake to put the policy of income stabilisation into effect. Profits were to be curbed, a general price ceiling at the 31 January 1948 level was to be applied to manufacturers' prices of a wide range of goods to supplement the existing strict controls on essentials, and wage increases were no longer to be taken into account in allowing increases in prices.[1] The Trades Union Congress decided to endorse the general policy of wage stabilisation set forth in the Government's statement, on condition that the Government carries through its policy of reducing prices and profits.

Post-war wage problems in the United Kingdom have thus been an active concern of the Government as well as a matter of negotiation between employers and workers. Employers have favoured the imposition of wage ceilings and the reduction of taxes, and have been cool towards the continuation of subsidies, direct controls, and the compulsory direction of labour. Labour has been favourable towards the continuation of subsidies, direct controls and high taxes on profits, has accepted a measure of direction of labour, and has finally accepted a general policy of wage stabilisation, subject to certain conditions and exceptions. Of particular interest is the fact that discussion of post-war wage policy in the United Kingdom has been conducted in terms of over-all national economic policy, with full recognition of the relation of wage policy to tax policy, price policy and production controls ; and only to a limited extent in

[1] *Labour and Industry in Britain*, Vol. VI, No. 1, March 1948, p. 24.

terms of the capacity of particular firms to meet the wage demands of their employees.

United States

Hourly wage rates in the United States rose significantly from 1939 to 1941, and rose at an accelerated pace after the United States entered the war at the end of the latter year (table XVI). Consumer prices rose slowly up to the end of 1941, jumped considerably in the following two years, and then flattened out during the remainder of the war period as price controls became more effective. Consequently, real wage rates rose slowly from 1939 to 1941, and then rose more substantially from 1941 to the end of 1944. Since average hours worked also increased, earnings rose more than wage rates. Labour's share of national income fell from 1939 to 1941, and rose slightly from 1941 to the end of 1944 (table XVII).

Early scrapping of price controls, once the war was over, led to rapidly rising consumer prices in 1946 and 1947. While money wage rates also rose, they failed to keep pace with prices, and real wage rates fell. With the decline in hours worked, earnings fell more than wage rates. Industrial production and national income fell off in 1945 and 1946, but rose again in 1947. Labour's share of private national income rose slightly in 1946, but fell in 1947.

The drop in industrial production after 1944 was a result of the decline in war production, and later of industrial disputes and steel shortages, among other factors. The volume of farm production also levelled off after 1944. These trends in production, in conjunction with continued high money incomes, a heavy volume of exports, tax reductions, and abandonment of direct price controls, were responsible for an upward trend of prices. This upward movement was especially noticeable in the case of farm products, the consumption of which rose greatly after 1939. The price index for building materials, reacting to a greatly expanded level of construction, followed the farm products index very closely.

Since 1945, personal consumption expenditures and the consumer price index have increased side by side. Not only has the national income (at factor cost) failed to keep pace, but the share of wage-earners in this national income has declined. It fell with declining national income in the first quarter of 1946 and thereafter failed to keep pace with an expanding national

TABLE XVI. WAGES, PRICES AND HOURS WORKED IN THE UNITED STATES, 1939-1947

Year	Hourly earnings in manufacturing industry	Index of money wages	Consumers' price index	Index of real wages	Index of hours actually worked
	cents		1937 = 100	1937 = 100	1937 = 100
1937	62.4	100	100	100	100
1938	62.7	100	98	102	92
1939	63.3	101	97	105	98
1940	66.1	106	98	109	99
1941	72.9	117	102	114	105
1942	85.3	137	113	121	111
1943	96.1	154	120	128	116
1944	101.9	163	122	134	117
1945	102.3	164	125	131	112
1946	108.4	174	136	128	105
1947	122.1	196	155	126	104
1946:					
March	103.5	166	127	131	105
June	108.4	174	130	134	104
Sept.	112.6	180	142	127	104
Dec.	114.8	184	149	123	106
1947:					
March	118.0	189	152	124	105
June	122.6	196	153	128	104
Sept.	124.9	200	159	126	105
Dec.	122.1	205	163	126	107

Source: UNITED STATES BUREAU OF LABOR STATISTICS: *Monthly Labor Review.*

TABLE XVII. PERCENTAGE DISTRIBUTION OF PRIVATE [1] NATIONAL INCOME IN THE UNITED STATES, 1929-1947, BY CATEGORIES OF INCOME RECEIVERS

Category	1929	1932	1939	1941	1945	1946	1947
Employees	55.9	70.8	61.9	58.1	59.2	60.9	59.8
Proprietors' rental	23.8	20.0	22.7	22.1	25.3	26.6	25.8
Farm	6.8	4.6	6.9	7.3	9.2	9.7	9.2
Corporation profits and inventory value adjustment	12.4	5.4	8.9	15.5	13.4	10.5	12.4

Source: Survey of Current Business, February 1948, p. 7.

[1] Excludes armed services and Government employees.

income. This movement was accompanied by a record growth in business, professional and farm incomes, as well as in corporate profits. This growth was particularly noticeable after the removal of price controls in 1946.

The result has been that, while consumption and real wages remain well above pre-war levels, present consumption levels for workers have been maintained at the wartime high levels only by drawing on accumulated savings and by increased use of consumer credit. Real wages and *per capita* income, when corrected for price changes, have recently shown a decline.

As in other countries, wage differentials among industrial workers, such as between workers in durable and non-durable goods industries and between the lowest and highest paid occupations, have tended to become narrower in recent years in the United States. The tendency towards equalisation of wage incomes for farm and industrial workers has been particularly noticeable. In 1940, the average income per industrial worker was about 140 per cent. above that of farm workers, while by 1946 it was only about 30 per cent. higher. [1]

Wage Policy

The rapid conversion of United States industry to war production, especially after December 1941, and the rise in prices which took place during 1941, led the President on 22 April 1942 to propose to Congress a comprehensive programme of measures to check inflation. It called for higher taxes, ceilings on prices and rents, stabilisation of remuneration received by individuals for their work, rationing of scarce commodities and increased savings.

The regulation of wages was entrusted to the National War Labor Board, established in January 1942 to settle industrial disputes in war work. The general policy pursued by the Board was to authorise increases in wages only to those groups of workers whose established peacetime standards had been broken. In July 1942, in the so-called "Little Steel" case, the Board considered the peacetime standards to have been broken if any group of workers had averaged less than a 15 per cent. increase in hourly wage rates during, or immediately preceding or following, the period from 1 January 1941 to May 1942, during which time the cost of living had increased by about this

[1] Cf. *Agricultural Situation*, September 1947, p. 14.

proportion. The Board had also to "give due consideration to inequalities and the elimination of substandards of living".[1]

The general policy of wage and price control was carried an important stage further by an Act against inflation passed by the United States Congress on 2 October 1942.[2] This Act directed the President to issue a general Order stabilising wages, prices and salaries at the levels of 15 September 1942 and authorised him thereafter to make any adjustments necessary to aid in the effective prosecution of the war or to correct gross inequities.[3] Executive Orders of 3 October 1942 and of 8 April 1943[4] directed the competent authorities to grant no further increases in wages or salaries except: (1) those clearly necessary to correct substandards of living; (2) to compensate for the 15 per cent. rise in the cost of living between 1 January 1941 and 1 May 1942; and (3) to effect reasonable adjustments in case of promotions, reclassifications, merit increases, incentive wages, or the like, provided that such adjustments did not increase the level of production costs appreciably or furnish the basis either for increasing prices or for resisting otherwise justifiable reductions in prices. The Act of 2 October 1942 also forbade the reduction of wages or salaries for any particular worker below the highest rates paid between 1 January 1942 and 15 September 1942.

The workers' organisations supported without reservation the President's stabilisation programme taken as a whole, that is, with due emphasis on price control. "Labour changed its orientation from the protection of workers' standards by wage increases to protection of the people's living standards through the effective application of price controls and rationing."[5]

After the surrender of Japan, wage and salary controls were first reduced and later removed. By Executive Order of 18 August 1945[6], wage or salary increases could be granted

[1] *Labor Relations Reporter*, Vol. 10, 20 July 1942, p. 679; see also *International Labour Review*, Vol. XLVI, No. 4, October 1942, pp. 489-491, and INTERNATIONAL LABOUR OFFICE: *Labour Conditions in War Contracts* (second edition, Montreal, 1943), pp. 51-55.

[2] An Act to Amend the Emergency Price Control Act of 1942 . . . (Public Law 729, 77th Congress). Extracts from the Act and regulations issued under it are reprinted in INTERNATIONAL LABOUR OFFICE: *Legislative Series*, 1942, U.S.A. 1.

[3] INTERNATIONAL LABOUR OFFICE: *Labour Conditions in War Contracts*, *op. cit.*, p. 52.

[4] Nos. 9,250 and 9,328.

[5] *Year Book of American Labor*, Vol. I (New York, Philosophical Library, 1945), p. 449, "Wartime Wage Policy", by R. NIXON.

[6] Executive Order No. 9,599.

without permission, provided they were not used as the basis for seeking an increase in, or for resisting an otherwise justifiable reduction in, price ceilings. Where a proposed wage increase involved an increase in price ceilings, the consent of the National War Labor Board and of the Director of Economic Stabilization was required. A further Order of 14 February 1946 [1] directed the National Wage Stabilization Board (which had replaced the National War Labor Board on 1 January 1946) [2] to approve increases which it found consistent with the general pattern of wage or salary adjustments since 18 August 1945. Price ceilings were also to be adjusted in cases where industry was found to be in a position of hardship in consequence of an approved increase of wages or salaries.

Legislation on prices lapsed on 30 June 1946, but was revived on 25 July 1946.[3] The number of commodities to which price ceilings applied, however, was rapidly reduced; by April 1947 few price controls remained, of which the most important related to rents. The position at the end of July 1946 with regard to wages and salaries was that indirect controls provided that increases were not to be used as a basis for price relief or for increasing costs to the United States Government unless the wage or salary increases were specifically approved. Direct controls continued to apply in the building and construction industry, for rates for new plants or new jobs, for all wage decreases and for decreases in salaries below 5,000 dollars a year. The regulations provided in substance that failure to obtain approval in such cases was a violation of the Stabilization Act.[4] Finally, by Executive Order of 12 December 1946 [5] provision was made for the National Wage Stabilization Board to close down on 24 February 1947.

The Wage Controversy in the United States.

In the first *Economic Report of the President,* presented under the terms of the Employment Act of 1946, President Truman made the following statement:

[1] Executive Order No. 9,697.

[2] Executive Order No. 9,672 of 31 December 1945.

[3] Price Control Extension Act of 1946, Public Law No. 548, 79th Congress.

[4] Based on statement by the National Wage Stabilization Board of 26 July 1946, reproduced in *Wage and Hour Manual, 1946 Supplement* (Washington, Bureau of National Affairs, 1946) p. 324.

[5] Executive Order No. 9,809.

The relation of wages, prices and profits is the key to the maintenance of purchasing power. If prices are too low in relation to wages, they squeeze or eliminate profits, while stifling the initiative of business, interfering with production, and reducing or retarding employment. If prices are too high in relation to wages, they restrict the market and reduce employment, as well as causing suffering to individual consumers.[1]

The importance of wage-price relationships to employment in the United States during the transition was also stressed by the new Council of Economic Advisers, in its *First Annual Report to the President*. Indeed, the Council placed even more emphasis on wage-price policy than on fiscal and monetary policy :

It would be very simple indeed, if we could rely on fiscal policy as a panacea. Broadly speaking, the shortcoming of this single-track doctrine of fiscal policy is that it does not face the complexity of our economic system. It assumes that by pumping money up or down, the Government could control the Nation's economic life without regard to what employers and workers, farmers and traders were doing in the countless specific price and wage and profit relationships that make up the body of their business life . . .

Jobs and markets depend on very specific wage-price-cost relationships. If labour is pricing itself out of jobs or manufacturers and farmers are pricing themselves out of a market, or capital is pricing itself out of investment, the basic remedy is the correction of this specific situation and not the injection of some aggregate purchasing power in a dose measured in size to offset a future total of unemployment.[2]

Thus, the United States Government has been fully cognisant of the importance of wage policy in the effort to fight inflation and still avoid depression.

The controversy that arose in the United States in 1946 over the Congress of Industrial Organization statement, *A National Wage Policy for 1947* (commonly known as the Nathan Report), is of considerable interest as a clear example of the kind of disagreement that has arisen in the transition period between employers and workers in several countries. The C.I.O. report came to the conclusion that a general rise in real wages was necessary in the national interest :

The salient facts of the wage-price-profit situation in American business today indicate that the national interest requires a major general increase in wage rates. It is most important that this general wage advance be achieved without crippling work stoppages... The facts all lead to the conclusion that not only from the workers' point of view but also for the benefit of the whole economy, a

[1] *The Economic Report of the President* presented to the Congress, 8 January 1947, p. 2.

[2] COUNCIL OF ECONOMIC ADVISERS : *First Annual Report to the President*, December 1946, pp. 13 and 14.

further substantial wage increase without a general price increase is possible, justifiable and essential.[1]

In reply to this contention, the National Association of Manufacturers, while admitting that wage increases in many particular instances were justified, maintained that " the Nathan Report is a calculated attempt to mislead the public in general and organised labour in particular ".[2]

In order to give an idea of the way in which these strikingly divergent conclusions were reached — despite the fact that the same basic statistics were used by both parties — the salient points on each side of the controversy are summarised side by side below.

C.I.O. Report	*N.A.M. Report*
(1) During the transition, increased wages do not involve equal increases in cost per man-hour to the employer, let alone an equal increase in cost per unit of output. The decline in overtime work, the improved quality of the civilian labour force, the increasing output in mass production industries, and the elimination of bottlenecks all tend to offset the effect on costs of higher wages. Moreover, while the cost per man-hour in manufacturing rose 8.2 per cent. from January 1945 to October 1946, the general level of wholesale prices rose 25.3 per cent., and wholesale prices in manufacturing rose 27.9 per cent.	(1) In January 1945, hourly earnings were at a wartime high and weekly earnings at an all-time high, while consumer prices were still under control and had risen only 28 per cent. since 1939. Moreover, the figure of real wages for January 1945 is meaningless, because " it was impossible in January 1945 for each individual to spend his entire income on goods and services at the price at which they were included in the price index. "
(2) From January 1945 to October 1946, weekly earnings in manufacturing actually declined. Moreover, the reduction of wage differentials since 1939 makes a national wage policy more meaningful.	(2) Average weekly earnings in manufacturing in October 1946 were 92 per cent. greater than in 1939, the general level of consumer prices only 49 per cent. higher. By choosing January 1945 as base, C.I.O. is " advocating a return to the peak levels (of real wages) brought about by the distortions of the war economy. "

[1] *A National Wage Policy for 1947* : Analysis prepared for the Congress of Industrial Organisations by Robert R. Nathan Associates Inc., Washington, D.C., December 1946, pp. 12 and 13.

[2] *The Robert Nathan Report, an Appraisal of Robert R. Nathan, A National Wage Policy for 1947*, prepared by the Research Department of the National Association of Manufacturers, December 1946, pp. 2 and 3.

(3) Since 1939, and especially since 1945, corporation income has risen much more rapidly than wages and salaries. The average return on sales turnover is greater than the 1936-1939 average. Profits in the transition period were especially high in relation to net worth.	(3) Total corporation profits for any year are comprised of "wide variations in profit performance among different companies." In 1936-1939, an average of 60 per cent. of all corporations ended each year with no net income. These corporations accounted for 22 per cent. of gross sales of all corporations. No reliable figures of net worth are available for a year later than 1943, but the return on net worth in 1936-1939 averaged 2.9 per cent. on equity capital, only 0.3 per cent. greater than on the highest grade corporate bonds, and profits as a percentage of sales were lower in 1945 than in 1939.
(4) At full employment, the present price-wage structure yields profits before taxes as high as in any war year, and profits after taxes "50 per cent. higher than the war peak, and utterly without earlier precedent in our national experience".	(4) Nathan's figures for the fourth quarter of 1946 are his own estimates, and for the first three quarters of 1946 are higher than those of the National City Bank. Moreover, there is no assurance that the 1946 levels of profits will continue. Many economists anticipate a business recession in 1947.

Thus, the C.I.O. concluded that even a manufacturing corporation, whose profits have risen less than profits of other firms, could raise wages by an average of 21 per cent. without reducing return on net worth below the 1936-1939 average. The N.A.M., in rejecting this proposal, pointed out that there has been no substantial redistribution of income since the pre-war period; the ratio of wages to total national income in the first nine months of 1946 was substantially the same as in the pre-war or war periods. The N.A.M. also pointed out that of the 5.1 billion dollar increase in wages proposed by Nathan, 2.9 billions would come from reductions of profit after taxes, and 2.2 billions from a reduction in the yield of corporation taxes. This reduction in corporation taxes is characterised by the N.A.M. as "a subsidisation of organised labour by the general taxpayer".

It is interesting to note that organised labour in the United States was not in complete agreement on the wage question even within its own ranks. The American Federation of Labor

attacked the C.I.O. position on much the same sort of grounds as did the N.A.M. It argued in effect that an increase in wage rates would tend to raise prices, and so to leave wages substantially unchanged. With respect to the Nathan Report, the A.F. of L. stated :

> Clearly this figuring on paper has nothing whatever to do with the realities of industrial operation or with collective bargaining. Unions negotiate with thousands of companies, each faced with different conditions affecting their ability to pay higher wages. Some can pay more, some less. There could be no pooling of profits, such as the report presupposes, except under a totalitarian State. Even if it were possible to force a 25 per cent. wage increase on American industry generally, the necessary 68 per cent. cut in profits would put thousands of companies out of business, and throw millions of workers out of jobs ; it would reduce profits to the low level of 1936 to 1939 when 8,500,000 were unemployed and industry was not earning enough for the normal new plant and equipment which expands production and raises living standards . . . It is not true that industry can afford a 25 per cent. general wage increase in 1947. To deceive workers by leading them to believe they should receive such a general increase is a most irresponsible policy.[1]

This controversy illustrates very well the changing emphasis in wage conflicts. While questions of justice and of equity and of the ability of particular employers to pay higher wages are not ignored, they are stressed less than questions of national policy — maintenance of full employment, prevention of inflation, and so forth. Labour is no longer content to argue that workers deserve a higher share of their own product, and that employers are well able to make the sacrifice involved ; they now argue that higher wages are necessary for maintenance of full employment, and so essential for employers and employees alike. Similarly, management no longer limits itself to the contention that labour's demands are excessive and beyond the capacity of particular industries to pay, but insists that higher wages would damage all groups in the economy, including labour itself, by compelling inflation or unemployment.

Some Major Problems

The description of wage problems, policies, and controversies in various countries presented in previous sections of this chapter demonstrates the recognition by Governments, by labour and by management that the problem of the relation of

[1] AMERICAN FEDERATION OF LABOR : *Labor's Monthly Survey*, Vol. 8, No. 1, January 1947, pp. 5-6.

wages to prices and national income is intimately related to the problems of inflation and potential unemployment. Indeed, the most striking characteristic of recent statements on wage policy, from whichever group they come, is the implication that the question of wages is no longer exclusively a matter of collective bargaining in particular industries or firms, but is also a central feature of national policy for the maintenance of high and stable levels of income and employment, the prevention of inflation, and related objectives. There has been a growing tendency for both parties directly concerned in wage negotiations to discuss the problem in terms of general economic objectives and conditions.

In some countries, the war brought greater increases in wage rates than in cost of living, and substantially greater increases in weekly earnings than in cost of living. Since the war, there has been a tendency in certain of these countries toward readjustment of wage-price relations, prices rising in relation to wage rates and earnings. Labour is naturally anxious to maintain gains obtained during the war, while management is apt to stress the abnormality of wartime conditions and to contend that preservation of economic equilibrium requires a restoration of wage-price relationships closer to the pre-war situation. Both points of view have a certain validity. In many countries, the year 1945 combined full employment and high wages with a high degree of stability in the cost of living. Workers believe that means should be found to continue these conditions indefinitely. Employers, on the other hand, regard 1945 as a year of enormous Government expenditures, high taxes, large-scale loan campaigns, price ceilings, rationing, subsidies and scarcities, and ask whether these wartime measures may not be too high a price to pay for continued full employment, high wages and stability.

Wages, Prices, and Labour's Share of National Income

In a period of full employment, general wage increases tend to raise prices. Higher wages mean higher incomes for precisely those members of society who spend the largest share of their incomes, and whose purchasing power constitutes the major source of effective demand for consumers' goods and services. Higher wages also mean higher costs of production, whenever the wage increase is not entirely offset by expanded production

per man-hour. When costs and demand rise together, entrepreneurs will almost certainly raise prices, unless they are prevented from doing so by effective controls.

Under certain conditions, outlined in Chapter VI, the effect of wage increases may be a decline in employment rather than a rise in prices. These conditions, however, have not prevailed during the war and transition periods. Moreover, because of full employment and scarcity of raw materials and equipment, it has not always been possible to offset wage increases by higher production. Consequently, the rise of wage rates has tended to intensify inflationary pressures in a number of countries.

Because of the close relationship between wage movements and price movements, the question arises whether general wage increases can improve the workers' standard of living (real income) in inflationary periods. Such an improvement might come about through an increase in labour's share of a given national income, or through labour sharing in a general increase of real national income. Once full employment is reached, however, real income *per capita* can rise only as quickly as productivity *per capita* is raised. In the past, *per capita* output has risen slowly, the average increase being 1 or 2 per cent. per year. Thus, no rapid improvement of labour's income can be expected from this direction in the absence of major technological advances. An increase in labour's share of national consumption might be obtained over limited periods, without any increase in labour's share of national income, and even without a rise in earnings, through exhaustion of workers' savings ; but such a development is not really an improvement of labour's living standards. Similarly, if higher real income is obtained only through a lengthening of the working week and a consequent sacrifice of leisure, there is no clear-cut improvement in workers' living standards. Perhaps the clearest case of an improvement is a rise in real earnings due to a rise in real wage rates. Such a development will raise labour's share of national income if real hourly earnings rise faster than productivity per man-hour. On the other hand, labour's share of national income could rise, even if real wage rates do not rise more than productivity, through an increase in the ratio of labour to fixed factors (capital, land, and entrepreneurship) employed. It could also rise as the result of a rise in incomes received by workers from sources other than wages — for example, from social insurance benefits.

The experience of the war and post-war periods suggests that higher money wages can bring significant increases in real hourly earnings, even in periods of full employment and inflationary pressure, provided there is effective control of prices, so that increases in money wage rates are not entirely offset by increased prices. In the United States and Canada, real wage rates rose during the war, but fell during 1946 and 1947 with the scrapping of price controls. In Australia, the United Kingdom, and Argentina, where price controls during the transition period were kept closer to their wartime strength and scope, real wage rates (as measured by the available index numbers) rose not only during the war, but in the transition period as well. In Mexico, where wage controls were more successful than price controls throughout the whole period, real earnings declined both during the war and during the transition.

Theoretically, labour's real income could rise without an increase in productivity if price policy is successful in preventing prices from rising as quickly as money wages, so that labour's share of national income is increased. The record with respect to labour's share of national income during war and transition is not clear, and the conclusions that can be derived from the record are tentative at best. Up-to-date national income data are not available in the appropriate form for all countries. The results obtained vary according to whether or not income of the armed forces and salaries of Government employees are treated as wages and salaries, and whether or not the incomes of agricultural proprietors are included as "profits". Moreover, the period was one of marked changes in the level of employment and in industrial organisation, which affected the ratio of labour to fixed factors employed, as well as wages and prices.

The most that can be said is that the available data yield results not inconsistent with the conclusion of theoretical analysis that a combination of high demand for labour, rising money wage rates, and effective price controls can raise the share of labour in national income. In Australia, where price controls were quite effective during the war, labour's share rose from 52.4 to 56 per cent. of national income. In Canada, labour's share fell from 1939 until 1941, when the policy of stabilising wages and the cost of living was introduced; remained stable throughout the rest of the war; fell in 1946 with the relaxation of price controls; but rose in 1947, despite continued inflation, when the final repeal of wage control regulations in December

1946 permitted earnings to rise faster than the cost of living. In the United Kingdom, labour's share also fell from 1939 to 1941, when the cost of living was stabilised; it rose slightly during the war, and increased during the transition. Since the United Kingdom kept its price controls closer to wartime strength than did the other countries, it is reasonable to conclude that this rise in labour's share in the transition was related to the price control policy. In the United States, labour's share of private income (military pay and Government salaries excluded) fell from 1939 to 1941, when the cost of living was stabilised, rose from 1939 to 1946, and fell slightly in 1947.

The size of the changes in labour's share of the national income are, however, very small; in some cases, they are small enough to be accounted for by imperfections in the data. It is important to remember, too, that in some cases labour's gains have been obtained at the expense of salary earners and *rentiers* rather than of profit recipients. In no case has labour's share of national income risen proportionately as much as "real wage rates" calculated on the basis of cost-of-living indices. This suggests that control of some prices merely diverts inflationary pressure to goods and services not subject to control. It would appear that far more widespread and rigorous price controls than have existed anywhere would be needed to achieve really significant increases in labour's share of national income. Moreover, part of the explanation of the wartime rise in labour's share is to be found in a rise in the ratio of labour to capital; fighting a total war absorbed more unemployed labour than excess plant capacity, and resulted in relatively great expansion of Government services and other labour-intensive industries.

The subject is one that warrants further study, and one which can be more effectively studied as more experience is acquired. It seems safe to conclude, however, that in periods when effective demand outruns the supply of goods and services, and full employment exists, the efforts of labour to protect its standard of living through wage increases are apt, in the absence of anti-inflation apparatus even more effective than was employed in wartime, to be largely self-defeating. In such conditions, the spectre of a wage-price spiral, feared but sometimes exorcised during the war, may become a grim reality.

It is worth noting, moreover, that since rationing was necessary to maintain price ceilings during the war, the wartime increases in earnings were in part superficial; unable

to spend their increased earnings in precisely the way they wished, workers were more or less forced to save a larger share of their incomes than they did before the war. Some of them were also subject to compulsory savings schemes, and others found a substantial share of their higher earnings removed by higher taxes. These facts must be taken into account when assessing the possibilities of obtaining similar improvements in real earnings in peacetime. Also, the technique employed to stabilise cost-of-living indices appeared in some cases to have a somewhat haphazard effect on price-cost relation, involving distortion of the price structure and of the allocation of ressources among different industries. This distortion of the structure of prices and production was, of course, deliberate ; it was a necessary adjunct of the effort to fight a total war with as little inflation as possible. However, the wartime distortion left a heritage of badly needed readjustment once the war was over.

The distortion of price-cost structures was greatest in fields of production where subsidies were necessary to maintain price ceilings ; in these fields, the removal of subsidies after the war necessarily meant increased prices or reduced costs. Since many costs are fixed on a short-term basis, the scrapping of subsidies meant that efforts were made to reduce wages, or at least to resist wage increases, by employers who felt that price increases would be unpopular or unprofitable.

On the other hand, it should be remembered that the effect of price controls on the price-cost structure was not uniformly disadvantageous. Some countries entered the war with price-cost relationships and the allocation of resources already distorted to some degree by various types of monopoly situations. The effect of price ceilings, combined with increased demand and excess profits taxes, was to cause some markets to approximate more closely to the conditions of pure competition than before the war ; over a considerable range prices became independent of output. Consequently, prices and marginal cost were brought closer together than they had been before the war, and the allocation of resources was to that extent improved. In these cases, the removal of price ceilings permitted renewed exploitation of monopoly power, by raising prices to meet the increased demand resulting from incomes higher than pre-war ones. Such action increases the distortion of the price structure rather than reducing it.

Wages and Allocation of Labour

The war brought with it a large-scale re-allocation of labour. Men were withdrawn from normal peacetime occupations into the armed services and war industries. The less vital of these peacetime occupations were left unfilled for the duration of the war. The more essential jobs left vacant in this way were filled by less well trained workers; women, boys, and older men were drawn into the labour force who would normally have been in homes, in schools, or in retirement.

This wholesale reshuffling of labour was achieved partly by offering higher wages in key industries, partly by patriotic drives, and partly by legal compulsion. During the transition from war to peace, when the need arose to shift workers back to normal peacetime occupations, none of these factors was operating with the same force as during the transition from peace to war. When war began, most countries had excess capacity and unemployment that could be absorbed, and for a time higher wages were offset by increased output. But when the war ended, full employment was the rule, together with scarcities of materials and equipment, much higher levels of income, piled-up demand for capital goods and durable consumers' goods, and greatly increased holdings of liquid assets readily convertible into purchasing power. Moreover, wage differentials had been reduced during the war in most countries. Because of the inflationary pressures, which were very much stronger than when war began, employers were reluctant to offer higher wages as incentives to attract labour to less favoured industries, recognising that higher wages would mean either sacrificing profits or adding to the upward trend of prices. Patriotic zeal was much less effective in the allocation of labour to the fields most vital for national welfare in peacetime than it had been in wartime. The need to produce coal and iron for reconstruction was less apparent than the need to produce planes and tanks for war. Finally, no democratic Government likes to force workers into particular jobs in peacetime.

For these reasons, many countries have experienced difficulty in obtaining an adequate supply of labour in key industries, particularly those that are dangerous, unpleasant, or uncertain as to future employment. An example is provided by coal mining; lack of coal has been one of the most serious "bottlenecks" in European reconstruction, and no European

country succeeded in attracting an adequate supply of labour to the coal mines during the two-and-a-half years following the end of the war. In many countries, the problem of allocating labour has been paramount in wage policy. Various "incentive wage" schemes have been discussed, as devices for attracting workers to vital industries and inducing them to increase their productivity in those industries.

Future Wage Increases

The three interrelated problems — the close relation of wages and prices in a period of inflation, the consequent difficulty of improving labour's standards of living in an inflationary period, and the problem of using wages as a device for allocating labour without adding to inflationary forces — have been the main problems of wage policy in the transition period.

It is no part of the purpose of the present report to reach conclusions about particular wage disputes. However, certain general observations about the nature of the wage problem in the transition from war to peace can be made. First of all, it is clear that the question is primarily an empirical one. The effect of future changes in wage rates on prices, income and employment for the balance of the transition period will depend upon the general economic conditions ruling in particular countries at particular times, and also upon the specific conditions in the various industries and firms comprising the economies of various countries. As stated above, there can be little dispute that an increase in wage rates will, other things being equal, tend to raise prices at a time when high levels of employment exist side by side with scarcities of consumers' goods and services. However, it does not follow that further increases in wage rates during the transition must necessarily result in further inflation. In the first place, further increases in prices could be prevented or at least limited by the same kinds of device as were utilised successfully during the war period itself; wages did rise without proportionate increases in prices in many countries during the war. High taxes, public loan campaigns, price ceilings, subsidies, and rationing[1] could be used during the balance of the transition by any Govern-

[1] Cf. International Labour Conference, 27th Session, Paris, 1945: Report II, Chapter VII: *The Maintenance of High Levels of Employment during the Period of Industrial Rehabilitation and Reconversion* (Montreal, I.L.O., 1945).

ment wishing to permit wage increases and to maintain stable prices, despite continued scarcities of consumers' goods. However, there is in many countries a growing impatience with the continuation of high taxes, large-scale public borrowing, subsidies and direct controls, which might make the continuation or reintroduction of such wartime policies unacceptable.

A second and more important point is that on balance, the changes that have taken place during the transition period and that are likely to take place in most countries are of a sort that facilitate the maintenance of prices despite wage increases. Some of these changes were indicated in a previous I.L.O. report.[1] The reintegration of young men from the Forces into the labour supply, and the withdrawal of housewives, older men and youths, tend to raise the average productivity of the labour force. The long-delayed replacement of industrial equipment often results in modernisation and consequent increase in productivity. Application of wartime improvements in technique to peacetime industries sometimes leads to still further increases in production. Expansion of output in industries that have been operating with considerable excess capacity during the war tends to reduce costs per unit of output. Reduction of overtime and night shift work reduces costs, because the bonuses involved are no longer paid. In countries where the working week was extended during the war to the point where health and efficiency were adversely affected, reduction of the working week will result in increased productivity per man-hour. The cessation of hostilities and consequent elimination of war risks of transportation lead to lower ocean freight and insurance rates, thus reducing production costs in industries dependent on imported raw materials, and making it possible for industries producing for export to land their goods in overseas markets at lower prices. In several countries, reductions in corporation income taxes permit wage increases without any decline in net profits. In certain industries of some countries, profits appear to be high enough in any case to enable wages to be raised substantially without cutting the return of capital below a fair or normal rate.

For all these reasons, an increase in wage rates may be possible in a given situation without increasing the upward pressure on prices. At the same time, of course, it is possible

[1] Cf. International Labour Conference, 27th Session, Paris, 1945 : Report II, Chapter VII : *op. cit.*

for wages to be raised too high in any country, and thus to launch an upward wage-price spiral. Just how large a wage increase is possible without inflation is an empirical question that must be answered in the light of the specific conditions in each country. It would seem to be true that in some countries the 1945 wage-price relations could have been maintained without continuation of wartime price controls only if production and productivity had increased more in the transition period than they actually did. However, as indicated above, there are a number of reasons for supposing that such increases in production and productivity have already developed in some countries, and will be forthcoming in others.

CHAPTER VIII

INTERNATIONAL ASPECTS OF WAGE POLICY

The labour markets and wage rates of different countries are inter-connected by international movements of labour itself, of capital, of raw materials, and of finished goods. Labour, management, and Governments have all been aware that such international economic relations influence wages and prices at home. Labour and management have often expressed strong views concerning these relations, and Governments have often responded by introducing strong measures to control them. Unfortunately, the views have sometimes been ill-informed, and the policies sometimes misdirected.

This chapter is devoted to an analysis of the effects of various kinds of international economic relations on wages, prices, and standards of living, with the object of providing a better basis for formulation of views and of policies. According to the familiar arguments of the 19th century *laissez faire* economics, social welfare of the world as a whole would be best promoted by completely uninhibited international movements of money, machines, men, and materials, as well as of finished goods. This view has been challenged on a variety of grounds, and Governments have often imposed restrictions on the free international movement of capital, labour and raw materials, and of consumers' goods and services.

International Capital Movements

The argument for unrestricted movement of capital is that it permits such an allocation of the world's savings and investment as will maximise world productivity. Other things being equal, it is argued, capital tends to flow where its "marginal productivity" is highest. An inflow of capital into any country permits the importation of machines, or alternatively, the importation of food or raw materials and the diversion of domestic labour to the production of plant and equipment, without the necessity of increasing exports to pay for these imports at the same time. Later on, the increase in producti-

vity resulting from the expanded stock of capital will make possible an increase in exports to repay the loans, and will provide an improved standard of living as well. The greater stock of capital will raise the marginal productivity of labour, effective demand for labour will be increased and, under competitive conditions, real wages will rise. According to 19th century theory, in the absence of artificial restrictions this flow of capital from advanced to undeveloped countries would continue until the marginal productivity of capital in all countries was equalised.

It is obvious that this process operates only slowly and imperfectly. The past century has seen some changes in the relative abundance of capital in different countries; for example, the United States, formerly an importer of capital on a large scale from the United Kingdom, has now displaced the latter as the country with the greatest abundance of capital and the chief source of foreign loans, and certain other countries of recent settlement, such as Canada, Australia and New Zealand, have moved from a condition of relative scarcity of capital to one of relative abundance. But, by and large, the same group of countries which then enjoyed the greatest abundance of capital are still in the same relative position, while countries such as India, China, and certain Latin-American countries have remained " capital-scarcity countries ", and still suffer from relatively low labour productivity and relatively low real wage rates.[1] Yet at the same time that some countries continue to suffer from lack of capital, certain of the more developed countries have encountered difficulties in finding enough profitable investment outlets to absorb continuously the flow of savings that a full-employment income produces.[2]

[1] Cf. I.L.O.: *The Economic Background of Social Policy including Problems of Industrialisation* (New Delhi, 1947), Chapters I and VI. It is there stated, for example, that " Another important factor responsible for the low level of productivity in Asiatic countries.... is the small amount of capital stock per head of working population. It is a simple truth that the output produced by each unit of labour varies directly with the amount of capital it employs: the greater the amount of capital, the higher will be the productivity of labour.... The difference between the Asiatic and the Western countries in this respect is most striking " (p. 13). And that " The second great problem is that of capital formation. The improvement of productivity in agriculture and the development of new industries will depend largely on the rate at which capital equipment can be accumulated.... If capital cannot be formed easily within the Asiatic countries, some at least can be imported from countries which not only have well-developed capital markets but also the skill and the capacity to produce for the needs of borrowing countries as well as for their own " (pp. 144-145).

[2] Cf. I.L.O.: *The Economic Background of Social Policy, op. cit.*, pp. 184-188.

Why does this contradiction persist? The answer lies in the greater risk attached to private investment in the less developed countries, particularly those whose social, economic or political structure or institutions are markedly different from those of industrially advanced countries [1], rather than in any restrictions imposed on capital movements. Indeed, legal restrictions have been a minor factor in the failure of capital to flow in adequate amounts from countries where its productivity is relatively low to countries where its productivity is relatively high. Before the First World War there were virtually no legal barriers to international capital movements. Between the wars, some countries did impose restrictions on capital movements, but these consisted almost entirely of limitations on capital outflow, introduced by countries facing shortages of foreign exchange. For the most part, these countries were short of capital in the real sense, as well as being pressed for foreign exchange. Probably the most severe restrictions in history, for example, were those imposed by the Nazi Government in Germany, which at one stage made the unlicensed export of capital a crime subject to the death penalty. During the Second World War, control of transactions in foreign exchange became more widespread, and capital exports were among the most rigorously regulated transactions. The Articles of Agreement of the International Monetary Fund make express provision for controls on international capital movements, and the Fund is empowered to request any Member States to exercise such controls in order to prevent the use of the Fund's resources to meet a large or sustained outflow of capital.

On the other hand, legal restrictions on capital inflow have scarcely existed. Anyone not prevented from exporting capital by the regulations of his own Government has been able to invest in securities, bank deposits, or other liquid assets of virtually any country in the world. True, foreign enterprise and investment, and particularly the direct establishment of businesses by persons in countries other than their own, have often been limited or discouraged through discriminatory tax legislation, laws of incorporation, licensing regulations, and the like. Restrictions on the import of tools and machinery have also proved a barrier to direct international investment. In addition, since entrepreneurs often feel the need to supervise

[1] Cf. I.L.O.: *The Economic Background of Social Policy*, *op. cit.*, pp. 191-194.

direct investments on the spot, and perhaps also to furnish their own engineers and skilled labour along with their capital, immigration laws have to some extent impeded international movements of capital for direct investment.

However, legal restrictions on capital movements cannot be considered a major aspect of the wage problem. Far more serious is the reluctance of private enterprise in advanced countries to make investments in undeveloped countries, where more and better capital equipment is absolutely essential to the improvement of labour productivity and the raising of real wage rates. To overcome this barrier to the movement of capital from excess savings countries to capital scarcity countries, an increasing measure of international government co-operation may prove necessary. The International Bank for Reconstruction and Development, the United States Export-Import Bank, the Canadian Export Credits Guarantees Corporation, and similar institutions constitute steps in the right direction, but their combined resources are at present insufficient to handle the job required in under-developed countries.[1]

Migration

The argument for freedom of immigration is much the same as the argument for free movement of capital; in order to maximise average real earnings throughout the world, labour should be allowed to move from countries where it is abundant in relation to the supply of natural resources and the stock of capital, and where marginal productivity of labour and wages are consequently relatively low, to countries where labour is relatively scarce and where the marginal productivity of labour and real wages are relatively high.

The immense volume of immigration into the United States, Canada, Australia, and New Zealand in the century following the Napoleonic wars was in large measure a response to just such differences in marginal productivity. Since the First World War, however, such immigration has been limited by restrictions imposed by the less densely populated countries. Such restrictions prevent the geographic distribution of labour in a manner that would tend to equalise output and real earnings *per capita* throughout the world.

[1] Cf. I.L.O.: *The Economic Background of Social Policy*, *op. cit.*, p. 145.

Of course, if capital moved freely from countries where it is relatively abundant to countries where it is relatively scarce, restrictions on immigration would be less serious. However, there is no way in which the surface of the earth and the resources under the surface in their natural form can be transported from one country to another, and so long as differences in the abundance of natural resources and the fertility of the soil exist, differences in the productivity of labour in different countries, and concomitant differences in real wages, can be eliminated only through an increase in the labour force of countries which are rich in resources in relation to the labour force in countries which are poor in resources. Such being the case, differences in standards of living are likely to persist, even when all countries are equally provided with capital and with technical skills, so long as restrictions on migration persist. [1]

Whether the removal of all restrictions on the movement of people from country to country, in addition to enabling output and real earnings per head in different countries to be equalised, would also enable average output in the world as a whole to be maximised, is a question which cannot be answered without considering the effects of such a policy on population growth. If rates of population growth throughout the world remained unaffected, migration would tend to maximise the average output attained at any particular point of time (though that output might be greater or less than the level that could be reached with existing resources and techniques if the total population of the world were different). If, on the other hand, the removal of obstacles to migration led to a rapid rise in the rate of population growth, the result might be a reduction in output and real earnings in the less densely populated countries which would more than offset any improvement elsewhere. [2]

Even if the effects of free movement of people on population trends, and consequently on average output per head in the world as a whole, could be assumed to be favourable, people in those countries which now enjoy the benefit of a higher ratio of resources to population than the average could scarcely be expected to favour a policy which would in all probability have the effect of reducing their average output, real earnings and standard of living. In actual practice, however, the choice lies

[1] Cf. I.L.O.: *The Economic Background of Social Policy*, *op., cit.*, Chapters II and IV.

[2] For a somewhat fuller discussion of the relation between income and the size of population, see *idem*, pp. 140-143, 148-152 and 214-215.

not between a wholesale prohibition of migration and the complete removal of all restrictions. The questions which arise for decision from time to time in any particular country usually relate to the desirability of maintaining or relaxing or reinforcing in some degree the existing restrictions on the admission of a particular class of immigrants. The attitude of labour organisations to such issues has frequently been determined largely by two closely related fears : the fear of unemployment, and the fear that competition for jobs from new immigrants would reduce the general level of wage rates. In the case of workers in specialised occupations, faced with the prospect of competition from large numbers of new arrivals who are specialists in the same occupations, such fears may be soundly based. For workers in general, however, a well-balanced inflow of migrants, at a rate consonant with the absorptive capacity of the country concerned, need not lead either to unemployment or to a fall in real wages. There is no reason to think that immigration on such a scale would impair the effectiveness of the kind of measures which may in any case be required to ensure the maintenance of over-all employment.[1] The fear that competition for jobs from new immigrants would reduce the general level of wages is often based on a misunderstanding of the relation between the size of a labour force and the productivity of labour. Some at least of the countries where wages are now relatively high are countries in which, given effective policy for the maintenance of full employment and of competitive markets, the standard of living of workers would be raised by a suitable policy of immigration. In technical language, they are countries where the present population is below optimum, that is, they have such an abundance of capital and natural resources that they could expect to enjoy a wide range of increasing output per worker as the population increased. In Canada, for example, it has been estimated by population experts that the optimum population (*i.e.*, the population that would maximise output per head) would be approximately double the present population. Moreover, the optimum popu-

[1] It will be recalled that at its 27th Session, in 1945, the International Labour Conference adopted a Resolution suggesting the types of policies which should be followed in order to maintain full employment (cf. I.L.O. : *Official Bulletin*, Vol. XXVIII, 15 Dec. 1945, pp. 23-31). Cf. also INTERNATIONAL LABOUR OFFICE : *The Maintenance of High Levels of Employment during the Period of Industrial Rehabilitation and Reconversion* (Montreal, 1945), especially Chapter II ; and *Public Investment and Full Employment* (Montreal, 1946), especially Chapter XXII.

lation is itself an everchanging figure for any country, increasing with improvements in technique, discovery of new resources, accumulation of capital, or improvements in the balance and terms of trade with other nations.[1]

In this connection, it is important to distinguish between the " optimum population " and the " optimum rate of increase in population ". A country with a population less than optimum will naturally benefit from a rapidly growing population. Once the optimum for existing conditions is reached, however, the standard of living will be maximised if the population grows just fast enough to keep pace with any increase in the optimum which may be brought about by increases in the supply of capital, discoveries of new resources, improvement of technique, the opening of new markets, and so forth. However, it has been argued that a rapidly growing population is a stimulus to private investment, and that, far from creating unemployment, it is a factor tending to create employment opportunities.[2] There can be little doubt that investment in such highly durable capital goods as housing, transportation facilities and public utilities is more attractive when population is growing rapidly than when it is approaching stability or declining. However, any high income country which has already reached the optimum population, and is faced with the problem of absorbing the high volume of savings that full employment levels of income call forth, will wish to consider policies of expanding public investment, and of redistributing income in such a way as to increase consumption and reduce savings, as alternatives to an immigration policy designed to accelerate population growth for the sole purpose of stimulating private investment.[3] The average real income per worker will almost certainly be higher if the proportion of income spent for consumption is raised, or if the Government invests in the production of services for the lower income groups, than it would be if population were increased beyond the optimum merely in order to make private investment more attractive.

[1] Cf. Lionel ROBBINS : " The Optimum Theory of Population ", *London Essays in Economics* (ed. by Gregory and Dalton) (London, 1927).

[2] See, in particular, *American Economic Review*, Vol. 29, No. 6, Part I, March 1939, " Economic Progress and Declining Population Growth ", by Alvin HANSEN. See also, Benjamin HIGGINS : " Concepts and Criteria of Secular Stagnation ", *Income and Employment: Essays in Honour of Alvin Hansen* (New York, 1948).

[3] Cf. *The New Economics* (ed. by S. E. Harris) (New York, 1947), " Keynesian Economics and Public Investment Policy ", by Benjamin HIGGINS.

International Trade

Contribution of International Trade to Real Income

Perhaps the most familiar proposition of the 19th century *laissez faire* economics is that free trade would maximise social welfare in the world as a whole, and in each individual country, by permitting full utilisation of the enormous advantages of division of labour. Complete freedom of trade, it is argued, would make possible a more efficient allocation of resources and an improved standard of living for all countries.

Clearly, any country will be better off if it can concentrate upon those goods and services which it can produce relatively cheaply, and exchange them in the world market for goods and services which it can produce only at relatively high cost, than it will be if it tries to supply all its wants from its own production.

The classical argument for free international trade rests upon the simple axiom that it pays to specialise. In the language of economists this truism becomes the theory of comparative costs or advantages, the theory that, if competitive forces were allowed free play, countries would come to concentrate their economic activities upon the production of goods for which they had specific economic advantages, such as abundant raw materials, skilled labour, favourable climatic conditions, or even established industrial organisation.[1]

The conditions for mutually advantageous trade between two countries are very simple : there need only be a difference in the relative efficiency of the two countries in the production of some commodity. In the table which follows, example I illustrates the most obvious case of this sort. It indicates that with the same quantities of land and capital (which are assumed for the sake of argument to be adaptable to the production of either commodity), the production of a barrel of beer requires twice as many man-hours in country A as in country B, while the production of a barrel of wine requires twice as many man-hours in country B as in country A. Consequently, producing a barrel of beer in country A means sacrificing two barrels of wine that could have been produced with the same resources. As it is sometimes expressed, the " opportunity cost " of a barrel of beer to the people of country A is two barrels of wine. Under

[1] J. B. Condliffe and A. Stevenson : *The Common Interest in International Economic Organisation* (Montreal, I.L.O., 1944), p. 68.

conditions of pure competition, the money cost of beer will tend to be twice as high as the money cost of wine. In country B, on the other hand, the production of a barrel of beer means sacrificing only half a barrel of wine. Clearly, it will pay both countries to engage in trade, country A exporting wine and importing beer, and country B exporting beer and importing wine, so long as the world price of beer is more than half the price and less than double the price of wine.

Example II illustrates the case where one country is more efficient than the other in the production of both beer and wine. At first sight, it might seem that under these conditions there would be no advantage in international trade for country A, which has higher productivity in both fields of production. A little reflection will show that such is not the case. In country A, the cost of a barrel of beer is 1.5 barrels of wine, in country B the cost of a barrel of beer is two barrels of wine. Thus, it will pay country B to export wine and import beer provided the price of beer is less than double the price of wine, and it will pay country A to import beer and export wine provided the price of beer is more than one-and-a-half times the price of wine.

Example III illustrates the case where country A is not only more efficient in the production of both beer and wine, but where its relative superiority in production is exactly the same in both fields of production. In country A the cost of a barrel of beer is two barrels of wine, and in country B the cost is the same. Under these conditions, and only under these conditions, trade has no advantage for either country.

From these simple illustrations, it can readily be seen that the conditions under which trade is not advantageous for all countries are virtually non-existent. Conditions under which the relative superiority in production of one country would be precisely the same in all fields of production are obviously conditions that would not prevail in any actual case. Even in the most efficient and highly productive countries, there will always be some areas of production in which the country's relative superiority is less than in other fields, and consequently it will still pay that country to import those commodities in the production of which its relative superiority is less, and pay for them by exporting those commodities in the production of which its relative superiority is greater.

By the same token, there need never be any fear that one

TABLE XVIII. TABLES ILLUSTRATING THE CONDITIONS FOR MUTUALLY ADVANTAGEOUS INTERNATIONAL TRADE

EXAMPLE I

In country	Number of man-hours needed to produce one barrel of beer	Number of man-hours needed to produce one barrel of wine
A	2	1
B	1	2

EXAMPLE II

In country	Number of man-hours needed to produce one barrel of beer	Number of man-hours needed to produce one barrel of wine
A	3	2
B	2	1

EXAMPLE III

In country	Number of man-hours needed to produce one barrel of beer	Number of man-hours needed to produce one barrel of wine
A	4	2
B	2	1

country could succeed in underselling others over the entire field of production. As Condliffe and Stevenson have put it,

There is in fact no possibility of one country underselling others in all lines of trade. Trade is a two-way street. Imports are, and must be, paid for by exports. There may be a temporary disturbance of local industries by increased imports. It is obvious that undue fluctuations of imports are to be avoided. No business can be organised successfully if it is likely to be faced by a flood of suddenly cheapened imports. But two things must be said on this point. First, the best way to check sudden fluctuations of import prices is to create conditions — and international institutions — in which exchange depreciation and violent price fluctuations may be minimised. And, second, that tariffs or other import barriers are no protection against such fluctuations unless they are so high as to shut trade out at all times. [1]

[1] *The Common Interest in International Economic Organisation, op. cit.*, p. 70.

The full theoretical advantages of completely free trade are, of course, unattainable in a world in which national policies are conditioned by considerations of security as well as of economic efficiency, and in which heavy commitments of both human and material resources have been made on the assumption of the continuance of existing patterns of production and trade. But the greater the progress that can be made, despite these obstacles, toward the reduction of trade barriers, and the greater the resulting degree of specialisation, the greater will be the contribution that international trade will make to the raising of real wages and standard of living.[1]

International Trade and Employment

Protectionist arguments appear to have particular validity in periods of widespread unemployment, for then the "foreign trade multiplier principle" applies with especial force. This principle, which states that the ultimate rise in national income is a multiple of the increase in export surplus of a country, may be readily understood. Suppose half the labour force in a country is unemployed. Then suppose that half the unemployed are put to work producing goods for export. These goods make no direct addition to the real income of the exporting country. But the newly employed have incomes to spend, and producers of raw materials and entrepreneurs in the export trade have higher incomes. In spending these new incomes, the recipients make it profitable to expand output of goods for domestic consumption, except to the extent that the new spending goes for imports. Thus both money and real national income rise when export surpluses increase, and when all secondary effects are taken into account, the total contribution of an export surplus to money income and to employment may be several times as great as the direct contribution of the surplus itself.

However, the validity of this argument for an export surplus disappears with the disappearance of unemployment, and, in any case, the creation of an export surplus is not the only, nor is it often the best, means of eliminating unemployment. Various devices are available for creating job opportunities by increasing domestic spending: public investment, measures to

[1] For a fuller discussion of the case for freer trade and of the kinds of international arrangements needed to maximise the advantages to be drawn from it, see J. B. Condliffe and A. Stevenson: *op. cit.*, Chapter III.

increase consumer spending, and measures to stimulate private investment at home.[1] These devices have the same general kind of "multiplier" effects as an export surplus, and in addition make a direct contribution to the standard of living at home. Selling more to foreigners than foreigners sell to you is, after all, a form of "giving away goods", which at the time can add to the domestic welfare only through its "multiplier" effects.

Of course, an export surplus at one time may be offset by an import surplus later, especially if exports are financed by loans or gifts and are of a sort that increases the productivity of the importing country. In that case, the export surplus creates employment while it continues, and permits a higher standard of living later, when the import surplus develops. However, it must be remembered that the transition from an export surplus to an import surplus must be offset by increased domestic spending, if full employment is to be maintained. Thus, in a country facing a continuing problem of unemployment, a policy of creating an export surplus to be followed by an import surplus at a later date postpones, but does not avoid, the need for expanded domestic spending for the maintenance of full employment. It is worth noting also that whenever the volume of domestic spending is in itself adequate to assure full employment, an export surplus will have inflationary effects.

A continuing export surplus, to meet a continuing problem of unemployment, is justified from a purely economic viewpoint only if one of the following three conditions is satisfied:

1. If the efficiency of other countries improves so much, as a result of exporting capital to them, that a balanced expansion of trade becomes possible, such that, with the money value of the export surplus remaining undiminished, the contribution of increased imports to the standard of living of the export-surplus country is greater than would result from public investment or consumer spending creating an equal amount of employment.

2. If the reaction of private enterprise to public investment, or to publicly assisted private investment or consumer spending, is so unfavourable as to outweigh the favourable effects of such policies on national income.

[1] Cf. I.L.O.: *The Maintenance of High Levels of Employment during the Period of Industrial Rehabilitation and Reconversion*, *op. cit.*, Chapter 2.

3. If there is some constitutional or other fixed financial limit to domestic public spending, but not to foreign loans or gifts designed to promote export surpluses.

It seems unlikely that any of these conditions will hold if mass unemployment once again becomes a world problem. While foreign investment by "excess-savings" countries will greatly aid in reconstruction, it must be remembered that the principle of the "foreign trade multiplier" has at least some degree of symmetry. In the long run, an increase in the import surplus in a country already facing a deficiency in effective demand may, in the absence of counteracting measures to sustain demand, lead to a decline in employment greater than the number of workers immediately displaced through increased imports. With respect to the second condition, there is no evidence — either analytical or empirical — to suggest that public spending ever discourages private investment so much that national income may actually be lower with it than without it, and there is considerable evidence to the contrary.[1] Moreover, there are indications that the attitude of private entrepreneurs towards public spending is becoming more favourable; for example, the support of public investment expenditure by employer delegates at the 26th Session of the International Labour Conference (Philadelphia, 1944), and the conclusions reached by the International Development Works Committee of the I.L.O. in January 1946 concerning the points to which careful consideration should be given by Governments in planning public investment.[2] With respect to the third condition, it is possible that increased public spending at home may encounter stronger opposition in some quarters than increased lending or giving abroad, but the actual strain on the finances of the country is the same in both cases.

Finally, an export surplus must be financed somehow — by foreign lending, by imports of gold, or by special arrangements such as Lend-Lease, Mutual Aid, the Hyde Park Agreements, U.N.R.R.A. or the Marshall Plan. None of these methods of financing an export surplus contributes anything directly to the standard of living of the exporting country. Moreover, every country in the world cannot have an export surplus in goods or services. A "favourable" balance of trade for one country

[1] Cf. I.L.O.: *Public Investment and Full Employment, op. cit.*, Part IV.
[2] Cf. *Idem.*, pp. 303-305.

necessarily means that some other countries have "unfavourable" balances. Once post-war reconstruction is completed, the favourable effects upon (say) United States income and employment of a United States export surplus may be obtainable only at the cost of opposite effects in countries with continuing import surpluses and an inadequate level of effective demand for labour.

At present, this argument does not hold. In the devastated countries there is no lack of effective demand for goods and services in general, and such unemployment as there is arises mainly out of shortages of raw materials and equipment. During the rest of the transition period, United States and Canadian exports of materials, equipment and foodstuffs to these countries will not only meet very pressing needs, but will also provide these countries with the means of putting men to work.[1] In underdeveloped countries like India and China, imports financed by loans from abroad will help to eliminate "disguised unemployment".[2] The day is no doubt far distant when countries in this latter group will have accumulated such vast quantities of efficient plant and equipment and will have incomes so high that they will enter the group of "excess savings" countries in which special measures are required to maintain spending at a full employment level. This day may, however, be expected to arrive a good deal sooner in the case of certain of the countries in which the recovery from war damage is proceeding rapidly. When this time comes, a continued import surplus in the countries concerned will necessitate the development of offsetting sources of full employment.

Trade between Countries with Different Wage Standards

Some workers, and some employers, while agreeing with the general principles set forth above, may argue that they do not apply in the case of countries whose wage standards are very much lower than their own. Between the wars, a familiar argument of workers, employers and Governments alike was that low wage rates in other countries justify trade restrictions

[1] Cf. I. L. O.: *The Maintenance of High Levels of Employment during the Period of Industrial Rehabilitation and Reconversion* (Montreal, 1945).

[2] Cf. I. L. O.: *The Economic Background of Social Policy including Problems of Industrialisation, op. cit.*, pp. 147-148 and 158-164.

designed to " protect the higher standard of life " of high-wage countries. Sometimes, too, employers with an eye to exports would justify resistance to wage increases at home on the ground that low wages in competing countries made them undesirable. The dissenting report of the Canadian Royal Commission on Price Spreads (1936), for example, emphasised the necessity of avoiding undue increases in costs through increases in wages, if Canada was to maintain the volume of exports necessary for full employment and a high standard of living.[1] In Australia, as has been indicated in the previous chapter, basic wage rates were deliberately reduced in 1931 as a recovery measure ; and, while the wage cut was justified by a variety of arguments at the time, the necessity of reducing costs to enable exporting industries to meet the fall in world prices seems to have been the factor that weighed most heavily in the decision. In Great Britain, the relation of wage costs to exports, and thus to maintenance of the gold standard, was a subject of bitter controversy during much of the period from 1918 to 1931, when the country was struggling to create a price-cost structure suitable to a return to the gold standard at the pre-war rate of exchange between the pound sterling and the dollar. Efforts were made to reduce wage costs so as to permit reductions in the prices of British exports, and thus improve Great Britain's competitive position in world markets. These efforts were resisted by organised labour, the resistance culminating in the general strike of 1926, just one year after the gold standard was re-established. The issue continued to be a source of social friction until the country abandoned the gold standard again in 1931.

The problem has been posed again by the Swiss Committee on Economic Research :

> In those branches of the economy which are exposed to foreign competition, unduly high wages lead automatically to decline in business activity and consequently in the level of employment. In undertaking to maintain a high level of employment, the State finds itself confronted with a serious dilemma : If it allows the brake of foreign competition to operate freely, and if it prevents price increases . . . by price control, unemployment will result . . . If, on the other hand, it eliminates the action of this brake . . . it favours an inflationary development . . .[2]

[1] ROYAL COMMISSION ON PRICE SPREADS : *Report* (Ottawa, 1937), pp. 303-304.

[2] " La Politique de Conjoncture en Suisse dans l'Après-Guerre ", 75e rapport de la Commission de recherches économiques, *Supplément de la Vie Economique*, No. 12, December 1946, p. 11.

It is no doubt true that any country exporting a large proportion of its total production faces painful readjustments whenever its cost structure gets out of line with the cost structure of competitors. A rise in wage rates in export industries, or in industries engaged in producing or transporting raw materials and equipment for export industries, will tend to reduce exports, unless the entire wage increase can be absorbed without a rise in prices of exports, or unless the demand for exports is completely unresponsive to changes in price. A decline in exports will tend in turn to reduce employment in the export industries. Of course, workers so displaced may be re-employed elsewhere. If such re-employment does not occur automatically, it could be brought about by measures to stimulate increased domestic consumption (family allowances, social security benefits, etc.), increased domestic private investment (subsidies, lower interest rates, government risk-sharing, tax reductions), or by a public investment programme.[1] However, such a reorganisation of the economy might cause temporary hardships for large numbers of workers and employers, and might, even in the long run, yield a lower standard of living for workers as a whole than the use of the same labour to produce exports which could be utilised to pay for imports.

At the same time, a situation in which a country's cost structure is out of line with that of competing countries provides no justification for paying wages which represent a smaller share of the total production than the workers' contribution to it — in technical economic parlance, a wage rate lower than the " marginal net revenue product " of labour. Wages in any country can and should be equal to marginal net revenue product, even if labour in a competing country is being exploited, in the sense that wage rates there are lower than marginal net revenue product. Two wrongs do not make a right, and it is no remedy for exploitation in one country to introduce it in another.[2]

[1] Some such measures are outlined in I.L.O.: *The Maintenance of High Levels of Employment during the Period of Industrial Rehabilitation and Reconversion, op. cit.*, and *Public Investment and Full Employment, op. cit.*

[2] It is true that labour exploitation abroad might have somewhat arbitrary effects on the wage structure in a country with a more mature labour movement. If exploitation abroad results in importation of a particular category of finished goods on a scale that would be impossible if foreign workers were paid a full marginal productivity wage, the effect will be to displace workers in the same industry at home, reducing employment there and (assuming an effective employment policy) increasing employment in

[*Footnote continued overleaf*]

When the cost structure of a country gets out of line with that of its competitors, realignment of wages is not the only solution to the problem. A simpler and less onerous solution may lie in depreciation of the foreign exchange value of the currency. As pointed out above, most of the favourable results of the wage cuts in Australia in 1931 might have been obtained by a greater exchange depreciation (assuming that such action was feasible and would not have led to completely offsetting retaliation by other countries), with the great advantage of avoiding the labour-management friction involved in wage cuts, as well as the inventory losses and the increase in the real burden of public and private indebtedness involved in any drop in the price level.

In certain cases a further alternative may be the subsidising of exporters whose costs are higher than those of their competitors in other countries because they pay fair wages while these competitors exploit their workers. True, a system of subsidising exports opens the door to political favouritism, and may serve

other industries. The marginal productivity of labour in the contracting industry will rise or fall, depending on the relative effect of *(a)* the fall in price of the product, and *(b)* the reduction of output and employment in the industry, and marginal productivity in the expanding industry will fall. Under competitive conditions, wage rates in the contracting industries may either rise or fall; wage rates in the expanding industry will tend to fall. Wage rates in industries competitive with the contracting industries may either rise or fall, and wage rates in industries competitive with expanding industries will tend to fall. Wage rates in industries complementary to the contracting industries will probably fall, and those in industries complementary to expanding industries will probably rise. Thus, the whole wage structure may be altered by imports based on exploitation of foreign labour. Importation of raw materials cheaper than would be possible without exploitation of labour abroad will tend to reduce employment in competitive material-producing industries, and to increase employment and lower wages in material-using industries. Importation of equipment from such countries, on the other hand, will leave marginal costs unchanged, so long as the rate of obsolescence rather than wear and tear determines the life of the equipment. Consequently, it will tend to leave employment in industries using the equipment unchanged. At the same time, it will raise the marginal efficiency of capital, and result in higher effective demand for labour in general. It may also accelerate the rate of replacement of capital by superior equipment, and so lead to a more rapid rise in productivity of labour.

From the foregoing, it is evident that the wage structure of countries importing from countries where labour is exploited will be different from the wage structure that would prevail without such imports. However, it is not possible to say precisely what that effect will be without detailed data on relative price and income elasticities of demand and supply of various finished goods, raw materials, capital goods, and types of labour skill. Consequently, the analysis in terms of general wage levels and standards of living as a whole is more fruitful than analysis in terms of wage-price structures. In any case, so long as workers as a group benefit from international trade, deleterious effects on particular categories of workers could be offset by payroll subsidies or similar devices.

only to delay needed changes in the organisation of a dynamic economy. It is also disruptive of normal trade relations, and belongs to the category of commercial policies that is most likely to evoke retaliation. However, if conditions are such that exchange depreciation cannot be undertaken, and a reduction of wage rates below the marginal productivity level is the only alternative, the use of export subsidies would warrant serious consideration, wherever the long-term outlook for the export industries is favourable despite short-term difficulties.

It has often been stated by advocates of free trade that wage differences do not mean corresponding differences in cost of production, and therefore do not indicate a competitive advantage for low-wage countries, since a low wage is merely an indication of low productivity of labour ; whether an employer pays 10 dollars a week for ten units of output, or 100 dollars a week for a hundred units, it is argued, his wage costs per unit are the same. [1]

This argument is valid to the extent that the wage differentials concerned do in fact reflect differences in the productivity of labour. In some cases, however, they may reflect differences in the bargaining power of workers in the two countries. Part of the difference in wage rates may result from exploitation of labour in the low-wage country, in the sense of paying less than full marginal net revenue product, while workers in the high-wage country are more successful in getting wages corresponding to their marginal net revenue product. If workers in each country produce a hundred units of output per week, but are paid 10 dollars in one country and 100 dollars in the other, wage costs are ten times as high in the high-wage country as they are in the low-wage country.

If the markets for labour (and for finished products) were perfectly competitive in all countries, such exploitation of course could not exist, and it could be assumed that the productivity of labour differed by the full amount of the difference in wages. In reality, such conditions rarely, if ever, exist. As indicated in Chapter III, more typical of the conditions in which wages are actually determined is a situation in which a small number of employers, in tacit or formal agreement, are faced by large numbers of workers, who may or may not be organised. Where labour is largely unorganised, as it is in most of the relatively

[1] See, for example, BEVERIDGE and others : *Tariffs, the Case Examined* (London, 1931).

undeveloped countries, wage rates may be appreciably below the marginal productivity level. In more advanced countries, where labour is better organised, the enhanced bargaining power conferred by unionisation will tend to keep wage rates at or near the marginal net revenue product level. With these differences in bargaining conditions, the differences in wage rates will result in differences in wage costs, and industries in a low-wage country may have a strong competitive advantage in world markets.

It does not follow, even where the wage differentials do not represent commensurate differences in productivity, that the proper policy for a high-wage country is to impose restrictions on trade with low-wage countries. Given effective full employment policies of the sort mentioned above, it would always be possible to re-employ in other occupations the workers displaced as a result of imports from low-wage countries. The high-wage country as a whole would then benefit by the import of commodities at the low prices made possible by the exploitation of foreign workers. In effect, the workers of low-wage countries would be selling their manpower cheaply, so that workers in the high-wage country could enjoy a higher standard of living. Only the workers in the low-wage countries would have any selfish reasons for protesting against free international trade under these conditions.

There is one situation in which a wage differential of this kind would justify temporary restrictions on trade. If labour in the low-wage country were in the process of organising, so that the prospect of higher wages was in sight, the competitive advantage of the low-wage country might be only a temporary one. After a few years of successful development of trade unions, that part of the wage differential which was due to exploitation of labour in the low-wage country might be eliminated, and there might no longer be any advantage to the higher wage country in importing the commodities concerned from abroad rather than producing them at home. Given such a prospect, it would be foolish to scrap existing plant and equipment simply because wage costs were relatively high for the time being. A case might even be made for protecting industries that were in the course of expansion, though here the risk of error in estimating future movements of costs would naturally be great.

Even in such cases, however, there is probably more to be

gained in the long run from co-operation among all concerned, with a view to raising living standards in the low-wage countries, than there is from any system of trade restrictions, however ingenious or temporary it may be.[1] It should also be noted that there may be cases in which, even if the progress of labour organisation in the low-wage country leads to an actual reversal of the original cost differential, so that the high-wage country now finds itself with the lower costs, it may still pay that country to import the products of the industry in question. For there may be other fields of production in which the superiority of the high-wage country is even more marked.

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[1] Cf. D. B. Das Gupta : *International Wage Disparities* (New Delhi, Indian Council of World Affairs, 1947), pp. 11-15.

CHAPTER IX

WAGE GUARANTEES : PURPOSE AND MAIN TYPES

One of the main objectives of the wage-earner, as of other citizens, is greater security of income. The objective is one which may be approached in two main ways : by stabilising earnings over as long a period as possible, and by providing other sources of income when gainful employment is for any reason interrupted. The first approach has led in recent years to an increasing demand for one form or another of wage guarantee.

To appreciate the importance attached to this demand, it is sufficient to note the extent of the fluctuations in the employment and income of wage-earners. While the existence of a considerable degree of instability in earnings is a matter of common knowledge, the extent of such instability even in years of high employment is not generally realised. Data showing variations in the weekly earnings of individual workers during a year would provide the best measure of the instability of workers' earnings, but unfortunately such data are not available. The figures given in tables XIX-XXI below showing fluctuations in the average level of unemployment, in employment throughout the year in certain industries, and in the man-hours worked in certain plants, do, however, afford some indication of the losses in earnings suffered by workers as a result of such fluctuations in employment. Table XXII below shows the variations which took place in the average half-yearly earnings of workers in three basic steel plants in the United States from 1937 to 1941 inclusive.

Fluctuations in Employment and Earnings

Average Level of Unemployment

The average annual percentages of workers unemployed from 1929 to 1946 in thirteen countries are shown in table XIX. In recent years, owing to the exceptional circumstances of the war and post-war transition periods, employment has been

maintained at consistently high levels in most of these countries ; in 1947, for example, the average proportion of workers unemployed in Canada was only 2 per cent., in Denmark 4.9 per cent., and in the United States 3.6 per cent. Even these proportions, which approach the minimum attainable in a modern economy in which workers are free to offer or withhold, and employers to accept or reject, their services [1], represent substantial absolute numbers of people affected by insecurity of earnings. Taking into consideration the average number of dependants per worker, 3.6 per cent. unemployment in the United States means that on the average throughout the year over five million persons suffer the losses in earnings and the various related hardships which result from unemployment.[2]

In the years before the war, as the table shows, unemployment was much more severe. Even in 1937, the " boom " year of this period, the amount of unemployment was still considerable : on the average throughout the year the proportion of workers unemployed ranged from 8.8 per cent. in Czechoslovakia to 29.2 per cent. in the Netherlands.

While the figures quoted vary in scope and reliability, they show clearly that unemployment was a serious problem even in the most prosperous years of the 1930's, and that the number of persons affected was still substantial in some countries even in the post-war transition period. It should be noted, moreover, that the actual number of workers who experienced unemployment in the course of the year must in all cases have been much greater than the averages shown. Each of the figures in the table is an average for an entire country over a full year ; monthly or weekly figures would show higher levels of unemployment at particular times ; and detailed figures for

[1] It must, however, be noted that considerably lower rates of unemployment have been achieved in certain other countries. For example, in 1947, the average annual proportion of workers unemployed was 1.2 per cent. in Switzerland and 1.1 per cent. in Australia (see table XIX below). Unemployment in New Zealand during the year ended 31 May 1947 averaged less than 0.1 per cent. of the labour force. (Calculated from NEW ZEALAND EMPLOYMENT SERVICE : *Half-Yearly Survey of Employment*, July 1947, table XV, p. 38.) Lord Beveridge, speaking of the United Kingdom, has expressed the view that " 3 per cent. appears as a conservative, rather than an unduly hopeful aim to set for the average unemployment rate". (W. H. BEVERIDGE : *Full Employment in a Free Society* (London, 1944), p. 128.)

[2] The population of the United States is approximately 2.4 times the size of the labour force, so that the number of persons affected by unemployment is about 2.4 times the number of unemployed which averaged 2.14 million in 1947. The total number of individual workers who suffered some degree of unemployment during the year was, of course, much greater than 2.14 million.

TABLE XIX. PERCENTAGES OF WORKERS UNEMPLOYED IN 13 COUNTRIES, 1929-1946

Year	Australia	Belgium [1]	Canada	Czecho-slovakia	Denmark	Ireland	Nether-lands [2]	Norway	Poland	Sweden	Switzer-land [3]	United Kingdom	United States
1929	11.1	1.9	4.2	2.2	15.5	—	7.1	15.4	4.9	11.2	3.5	10.4	3.1
1930	19.3	5.4	12.8	4.5	13.7	—	9.7	16.6	8.8	11.8	10.6	16.0	8.8
1931	27.4	14.5	17.4	8.3	17.9	—	18.1	22.3	12.6	16.7	18.0	21.3	16.1
1932	29.0	23.5	26.0	13.5	31.7	—	29.5	30.8	11.8	22.2	21.3	22.1	24.0
1933	25.1	20.5	26.5	16.9	28.8	—	31.0	33.4	11.9	23.4	19.3	19.9	25.2
1934	20.5	23.4	20.6	17.4	22.1	—	32.1	30.7	16.3	18.0	15.9	16.7	21.6
1935	16.5	21.7	19.0	15.9	19.7	—	36.3	25.3	16.7	15.1	17.7	14.7	19.9
1936	12.2	16.2	16.7	13.1	19.3	—	36.3	18.8	15.6	12.6	18.5	12.4	16.5
1937	9.3	13.1	12.5	8.8	21.9	—	29.2	20.0	14.6	10.8	12.5	10.0 [4]	13.8
1938	8.7	17.6	15.1	9.1	21.4	—	27.2	22.0	12.7	10.9	13.1	11.8	18.7
1939	9.7	18.8	14.1	—	18.4	15.6	21.7	18.3	14.1 [4]	9.2 [5]	9.4	9.3	16.5
1940	8.0	—	10.1	—	23.9	15.5	22.9	23.1	—	11.8	5.2	6.1 [4]	14.6 [6]
1941	3.7	—	8.0	—	7.6 [6]	14.6	18.8 [6]	11.4	—	11.3	3.7	2.0 [10]	9.9
1942	1.6	—	5.3	—	9.1	14.2	—	—	—	7.5	3.9	0.8	4.7
1943	1.1	—	2.2	—	6.3	12.5	—	—	—	5.7	2.9	0.6	1.9
1944	1.2	—	1.8	—	4.6	11.3	—	—	—	4.9	3.3	0.5	1.2
1945	1.2	—	3.8	—	8.2	10.6	—	5.3 [11]	—	4.5	2.6	1.1	1.9
1946	1.4	—	3.0	—	4.7	10.6	—	3.6	—	3.2	1.3	2.5	3.9
1947	1.2	—	2.0	—	4.9	9.7	—	3.1	—	2.8	1.1	3.1	3.6

Source: INTERNATIONAL LABOUR OFFICE: *Year Book of Labour Statistics 1945-46* (Montreal, 1947), pp. 66-71; and *International Labour Review*, Vol. LVI, No 2, Aug. 1947, pp. 236-239. The figures for the United Kingdom from 1941 to 1946 were calculated from monthly data published in various numbers of *The Ministry of Labour Gazette* issued during these years and in 1947. The figures for 1947 for all countries were calculated from data communicated to the I.L.O.

[1] Days lost as a percentage of total possible working days of insured workers during the month.

[2] The series were discontinued in 1942.

[3] Total of wholly and partially unemployed.

[4] Jan.-June.

[5] Including agricultural workers.

[6] The figure for 1940 and those for later years relate to females between 14 and 60 years of age. (On 1 July 1940, women of 60 years of age and over ceased to be insurable against unemployment because they became entitled to pensions under the Old-Age and Widows' Pensions Act, 1940.)

[7] The figure for 1940 includes an allowance for January and February.

[8] New series: June-December.

[9] Jan.-July.

[10] The figure for 1941 and for later years includes non-manual workers with a rate of remuneration exceeding £250 but not exceeding £420 a year, who first became insurable in September 1940.

[11] July.-Dec.

Note: The sign ——— between two figures of a series signifies that the former series has been replaced by another, or revised.

particular plants or industries would reveal cases in which unemployment was much more severe than it was on the average in industry as a whole.

Thus, in 1933, a depression year, when the average level of unemployment in all industries in Denmark was 28.8 per cent., the average in agriculture was 39.6 per cent.; and in the United States, where average unemployment in all industries was 26.4 per cent., the average in the metal industry was 43 per cent. In the United Kingdom in the same year the average for all insured workers, excluding agricultural work-

ers, was 19.9 per cent., while 25.1 per cent. were unemployed in general engineering, 38.0 per cent. in steel and 59.3 per cent. in shipbuilding.[1]

Variations in Employment throughout the Year

Table XX below shows the seasonality of employment in six industries in the United States in 1938.

TABLE XX. SEASONALITY OF EMPLOYMENT IN SIX INDUSTRIES IN THE UNITED STATES IN 1938

Index numbers : average for each month for 1938

Month	Automobiles	Cement	Women's clothing	Boots and shoes	Radios and phonographs	Confectionery
January.....	104.0	99.0	97.0	100.0	95.0	97.5
February....	106.0	97.5	104.0	104.5	88.0	98.0
March	107.0	98.5	108.5	105.5	84.0	98.5
April	106.0	100.0	108.0	103.0	84.0	94.0
May.....	105.0	100.0	103.0	98.5	88.0	91.0
June.....	102.5	102.5	93.5	96.5	98.0	89.5
July.....	90.0	103.0	82.5	101.5	99.0	86.0
August.....	82.0	102.5	100.0	104.5	108.0	91.0
September...	90.0	101.0	104.0	101.5	116.0	111.5
October.....	100.0	100.0	104.5	98.5	122.0	118.0
November...	102.5	97.5	98.5	91.0	112.0	114.0
December...	105.0	98.5	96.5	95.0	106.0	111.0

Source: Guaranteed Wages: Report to the President by the Advisory Board, Office of War Mobilization and Reconversion, Office of Temporary Controls, Murray W. Latimer, Research Director (Washington, 31 Jan. 1947), p. 189.

As the table shows, each of these industries experienced substantial seasonal fluctuations, although with two exceptions their products were used regularly throughout the year and there was no substantial problem of seasonality in raw materials or supplies. In the automobile industry, for example, employment fell progressively from 107.0 in March to 82.0 in August. The women's clothing and the boot and shoe industries had two seasonal peaks of employment, one in the spring and the other in the early autumn. It is true that 1938 was a year of depression in the United States ; in good times seasonal fluctuations are less marked. It is true also that in certain industries the seasonal peaks provide employment for groups

[1] Cf. International Labour Office : *Year Book of Labour Statistics 1945-1946* (Montreal 1947), pp. 72-81.

of workers (such as students, housewives and others who enter the labour force only for brief periods, and farm workers available for other work at certain seasons) who would otherwise be unemployed, and thus contribute to security rather than insecurity of employment and earnings. To the extent, however, that seasonal fluctuations produce irregularity in the employment of persons seeking regular work, they are a cause of insecurity.[1]

Variations in Employment within Plants

The full impact of variations in the level of economic activity upon the employment of individual workers is more apparent from the employment data of individual plants, however, than from those for an industry, since the individual worker's employment depends on the level of production of the particular plant in which he is employed. The following table shows indexes of total man-hours worked from 1937 to 1941 in the steel industry and in three representative steel plants in the United States.[2]

The table brings out two important points. First, considerable variations in employment take place from month to month. Secondly, variations in employment in individual plants are generally greater than in the industry as a whole. [3]

An examination of weekly or daily data would show still greater variations than the monthly data given in the table, since it is common practice for workers to be laid off for a day or two. For example, in no year in the 1930's did the lay-off rate in manufacturing industries in the United States fall below 2 per cent. per month, or 25 per cent. per year. This amounts to six to eight million lay-off notices a year.[4] Of course, the

[1] Cf. *Guaranteed Wages, op. cit.*, p. 24.

[2] For similar employment data for nine other plants in the steel industry and for several plants in sixteen other United States industries see *Guaranteed Wages, op. cit.*, pp. 225-227. Actually, of all the twelve steel plants for which data are given in this report on guaranteed wages, employment was steadiest in the plant shown as plant 1 in table XXI below (plant 8 in the Official United States report).

[3] A comparison of the relative variations in man-hours of employment between plants 1, 2 and 3 with the probable gross costs of operating various types of guaranteed wage plans in these three steel plants shows that there is close correlation between such costs and man-hours of employment (see below, Appendix I, table I).

[4] *Guaranteed Wages, op. cit.*, p. 23.

lay-off rate is much higher in some months and in some industries and plants than in others.

The effects of lay-off are reflected in data showing the weekly hours worked by workers in different industries. For example, the average actual hours worked per week per worker

TABLE XXI. INDICES OF MAN-HOURS WORKED IN THE IRON AND STEEL INDUSTRY AND IN THREE STEEL PLANTS IN THE UNITED STATES, 1937-1941 [1]

Base: 1939 average = 100

Year and month	Industry	Plant 1	Plant 2	Plant 3
1937				
January	137.7	104.7	122.3	165.0
February	141.0	109.9	127.5	165.5
March	147.6	113.5	124.3	168.4
April	148.4	116.9	130.1	175.2
May	146.3	118.2	135.2	177.5
June	124.3	118.4	137.7	177.2
July	132.8	112.7	124.7	169.0
August	143.2	118.3	131.3	189.6
September	132.8	120.8	116.3	173.6
October	122.5	114.6	100.0	135.6
November	97.6	99.0	88.5	84.5
December	79.8	78.1	57.0	61.9
1938				
January	66.1	75.6	55.7	51.7
February	68.8	83.8	55.0	34.6
March	69.5	79.9	71.3	52.8
April	68.6	73.5	57.7	40.7
May	66.8	68.9	57.5	56.5
June	61.7	67.2	58.2	23.2
July	60.1	67.9	71.9	43.4
August	69.4	76.6	73.8	44.1
September	71.5	73.4	72.1	48.2
October	78.1	76.4	69.0	55.6
November	86.0	86.4	68.3	68.3
December	88.0	87.7	68.6	59.0
1939				
January	88.2	87.7	68.9	75.3
February	89.6	86.9	87.7	67.7
March	91.1	88.3	99.2	83.8
April	89.2	90.8	98.3	72.5
May	86.1	94.0	99.3	65.5
June	89.5	101.1	94.6	67.4
July	84.5	97.7	83.9	67.3
August	95.6	102.0	95.0	84.6
September	98.3	105.3	94.9	104.3
October	126.7	115.4	122.0	170.4
November	130.5	115.8	132.0	174.7
December	130.9	115.3	124.2	166.4

Source: Guaranteed Wages, op. cit., pp. 225-226.

[1] The industry indices were computed by multiplying indices of wage-earner employment by the average weekly hours worked as reported by the Bureau of Labor Statistics.

TABLE XXI. INDICES OF MAN-HOURS WORKED IN THE IRON AND STEEL INDUSTRY AND IN THREE STEEL PLANTS IN THE UNITED STATES 1937-1941 [1] *(cont.)*

Base : 1939 average = 100

Year and month	Industry	Plant 1	Plant 2	Plant 3
1940				
January	122.3	114.8	124.2	157.7
February	113.3	112.9	116.2	94.5
March	105.5	111.7	116.2	98.3
April	102.1	110.8	117.8	88.6
May	106.7	115.7	122.3	107.0
June	116.9	123.7	135.4	133.2
July	119.6	119.9	120.2	136.2
August	127.9	117.7	121.0	154.0
September	129.4	120.5	122.7	157.2
October	132.2	118.4	124.9	152.7
November	134.7	119.0	137.4	152.3
December	140.9	121.1	144.3	164.6
1941				
January	138.2	123.8	145.8	153.3
February	142.5	119.8	153.1	143.3
March	144.4	130.5	162.4	155.5
April	144.6	132.9	160.5	140.8
May	149.8	137.3	161.7	162.2
June	155.0	143.2	173.9	164.6
July	148.9	137.1	161.4	166.6
August	155.8	143.6	172.2	168.8
September	150.7	141.9	152.9	154.9
October	153.4	143.7	164.3	159.6
November	153.6	139.2	164.4	157.2
December	154.2	135.5	158.9	157.3

[1] See preceding page.

in Poland in December 1936 were 42.5 in industry as a whole, as against 39.3 in the textile industry, 41.7 in the building industry and 45.7 in the chemical industry. Again, while the average actual hours worked per worker per week in all industry in Poland were 43.7 in both June 1938 and June 1939, the hours worked per worker declined in the leather and skin industry from an average of 44.4 per week in June 1938 to 42.6 in June 1939 and increased in the clothing industry from 41.3 in June 1938 to 42.3 in June 1939. [1]

If all the factors which make for loss of employment be taken into account, it is obvious that the number of individual workers who receive less than full-time employment during a year is much greater than is generally realised, and certainly

[1] INTERNATIONAL LABOUR OFFICE : *Year Book of Labour Statistics, 1945-1946* (Montreal, 1947), p. 100.

much greater than is revealed by a study of percentages of general employment only. It is apparent that considerable losses of income are suffered by workers who become wholly unemployed or work less than normal hours as a result of short-time operation due to temporary shortage of raw materials, bad weather, or the closing down of parts of a plant for maintenance.

Economic and Social Losses Due to Full and Partial Unemployment

The effects of full and partial unemployment are reflected in variations in the average earnings of the workers. Table XXII shows the average half-yearly earnings of workers in three basic steel plants in the United States from 1937 to 1941.[1]

TABLE XXII. AVERAGE HALF-YEARLY EARNINGS OF STEELWORKERS IN THREE BASIC STEEL PLANTS IN THE UNITED STATES, 1937-1941

Year	Average earnings in dollars	Percentage change from earnings in the first half of 1937
1937: 1st half	745	
2nd half	633	—15
1938:		
1st half	399	—46
2nd half	468	—37
1939:		
1st half	584	—22
2nd half	712	— 4
1940:		
1st half	704	— 4
2nd half	806	+ 8
1941:		
1st half	884	+19
2nd half	1,001	+34

Source: Calculated from *Guaranteed Wages, op. cit.*, p. 196, table 4*(a)*.

[1] Cf. *Guaranteed Wages, op. cit.*, pp. 190-197. One of the plants was selected from the United States Steel Corporation group; the second from a corporation of medium size; the third from a relatively small producer. The basic steel industry was chosen for the purpose of illustrating the effect of variations in employment upon the earnings of individual workers, because steelworkers do not appear to accept jobs readily in other industries even during a depression, so that their actual earnings contain only small supplementary amounts. Secondly, all companies in the basic steel industry are generally affected by cyclical changes in demand at about the same time. Income data applying to the workers of a few plants in the basic steel industry, therefore, are fully representative of such data for the whole industry or for a single plant, and are illustrative of the variations in actual earnings suffered by individual workers.

It will be noticed that considerable changes took place in the average earnings of steelworkers in the United States during the period 1937-1941. For the first six months of 1938, for example, such earnings were only about half of what they were for the same period in 1937. An examination of similar data for other industries and for other countries would reveal also considerable variations in workers' incomes over a period of years.

The extent of the effect of lay-off from various causes on the earnings of workers may be further illustrated from the experience of building workers in New Zealand in 1938, a year of reasonably good weather and one in which there was a shortage of labour in the building trade. Even in this year workers in this trade earned an average of only £4 2s. 8d. per week, or 75 per cent. of the average wage of £5 10s. 0d.[1] which they would have earned for full-time work. In a number of cases, workers reported that even where several hours' overtime a week were worked, this did not bring the wages for the week up to what would have been earned had the worker been employed for a full forty-hour week.[2]

The considerable losses in income caused by full and partial unemployment are not limited to the unemployed workers alone, since any fall in workers' incomes seriously affects the real incomes of the rest of the community, not only because of the fall in the effective demand of the largest section of the population for the output of industry and agriculture, but also because the community loses the goods which the unemployed workers could have produced if they had remained in productive employment. In addition, severe or prolonged unemployment and falling real incomes may have grave and far-reaching social consequences.[3] It is the principal objective of wage guarantees to reduce the losses of income suffered by workers as a result of full or partial unemployment and thus to eliminate or at least greatly mitigate these social consequences.

[1] This amount is the approximate average of the minimum weekly wages payable in 1938 to the various types of building workers for a forty-hour week under the terms of awards made by the Arbitration Court of New Zealand (see *New Zealand Official Year-Book*, 1940, p. 814). Some workers, of course, would have been paid at rates in excess of these minimum rates. If less than forty hours were worked in any week, the amount payable would be reduced proportionately.

[2] NEW ZEALAND BUILDING TRADES FEDERATION : *Defend the Forty-Hour Week* (Wellington, March 1941), pp. 5-6.

[3] Cf. Wladimir WOYTINSKY : *The Social Consequences of the Economic Depression* (Geneva, I.L.O., 1936), Part II.

Principal Types and Examples of Wage Guarantees

Three main types of wage guarantees [1] may be distinguished : the guaranteed wage proper, the lay-off notice and the dismissal wage. These may be defined as follows :

1. *The guaranteed wage.* This is an arrangement whereby an employer guarantees, in advance, that for a specific period (a week, month, quarter, etc.) he will pay a predetermined amount to all or some previously specified group of his workers, whether or not there is work for them to do. The term " guaranteed wage " is used to include also any arrangement under which the employer guarantees to provide either *(a)* employment and wages for the specified period ; or *(b)* wages (even though he is not able to provide employment) with, in some cases, an arrangement for repayment in money or hours of work by the employees out of subsequent earnings or employment in excess of a given level.

2. *The lay-off notice.* This is an arrangement under which the employer undertakes *(a)* to notify his employees of impending lay-off a specified period before the occurrence of that lay-off, and *(b)* to provide them with employment or wages during the notice period.

3. *The dismissal wage.* This is an arrangement whereby an employer states, in advance, that he will pay a predetermined amount to any employee or to specified classes of employees, on the employment being terminated. The dismissal wage plan is usually applied in the case where an employee is dismissed permanently from his job and the lay-off notice plan where his cessation of employment is only temporary. This distinction, however, is not always made. Some collective agreements in the United States, for example, use the term " lay-off " to denote dismissal, while others allow dismissal pay to workers who are " laid-off or dismissed ".[2]

[1] For an account of the prevalence and development of the different types of wage guarantees in various countries see International Labour Organisation, Iron and Steel Committee, 2nd session, Stockholm, 1947, Report III : *Minimum Income Security : Annual and other Wage Systems Designed to Provide Assured Earnings*, Chapters II, III and V (Geneva, I.L.O., 1947).

[2] Cf. *Monthly Labor Review*, January 1945, p. 48, " Dismissal Pay Provisions in Union Agreements, December 1944 ".

The Guaranteed Wage

The basic principle of the guaranteed wage is that either employment or income is guaranteed. In the former case, employment is guaranteed for a definite period which may be as long as a year but the employee's earnings may vary. In the latter case, a certain income is guaranteed for a definite period but the length of employment may vary. However, the aim in both cases is to provide steady employment and income for all or some of the wage-earners.

Generally speaking, guaranteed wage plans vary in three main respects: (1) coverage, *i.e.,* the number or classes of workers covered; (2) eligibility requirements, *e.g.,* the length of service required before a worker qualifies for the guarantee; (3) proportion of wages or employment guaranteed, *e.g.,* the percentage of full-time wages to be paid for a specified period. These variables may be combined in many different ways, so that particular industries have been able to use the type of plan which suits their individual needs best. Guaranteed wage plans, moreover, may be introduced in any form and modified or liberalised as found desirable.

Main Types of Guaranteed Wage

In practice three main types of plans have been developed. The first (type A) guarantees so many hours' work per week for each week in a specified period, which may be as long as a year. Examples of this type are found in the United States.[1] The second and third types (B and C) guarantee a certain total number of hours' work in the specified period. Most of the guarantees relating to shorter periods such as a month or a week are of these types, and examples are found in many industries in the United Kingdom[2] and in some industries in

[1] Cf. National War Labor Board, Wage Stabilization Division: *Guaranteed Employment and Annual Wage Plans*, Research and Statistics Report No. 25 (Washington, D.C., 25 August 1944), pp. 12, 17 and 18; and *Minimum Income Security: Annual and other Wage Systems Designed to Provide Assured Earnings, op. cit.*, pp. 35-37.

[2] Cf. National Federation of Building Trades Operatives *Guaranteed Time: A Brief Survey and Present Solution* (Dalton Hill, England, 1945), pp. 8-10; Ministry of Labour and National Service: *Time Rates of Wages and Hours of Labour*, 1 Aug. 1946 (London H.M. Stationery Office, 1946); *The Economist*, 28 Sept. 1946, p. 519; *The Metal Bulletin* (London), 14 Feb. 1947, p. 3; *The Ministry of Labour Gazette*, January 1947, pp. 11-12, 27; May 1947, p. 145; Ministry of Labour and National Service: *Port Transport Industry*, Report of a Committee of Inquiry into the amount and basis of calculation of the guaranteed wage to be made to dock workers under the Dock Workers (Regulation of Employment) Scheme, 1947, (London, H.M. Stationery Office, 1947), p. 3.

Australia [1], Canada [2], New Zealand [3] and the United States.[4]

In the following paragraphs these three types of guarantees are described in greater detail and are illustrated by actual examples.

A. *Guaranteed Weekly Hours for Specified Period.*

In this type, work, or the earnings equivalent to such work, is guaranteed for a given number of hours in each of a given number of weeks during a period, *e.g.*, for thirty-six hours in each of fifty weeks during the year. The number of weeks or the number of hours per week, or both, may vary, and, if the guarantee is in terms of work, the rate of pay for idle time may also vary in relation to the standard or average hourly earnings on the job. A full-time guarantee for a year is generally forty hours per week for fifty-two weeks at the regular rate. In some industries and in some countries the appropriate standard is a shorter or longer work-week. The following clause from an actual agreement is an example of this type of wage guarantee :

Guaranteed employment of forty-eight weeks per year : Agreement between the United Steelworkers of America and the Columbia Marine Shipyards Co., Vancouver, Washington, dated 11 December 1945.

An employee who establishes three (3) years' or more continuous employment as hereinafter defined, shall be entitled to two (2) weeks' vacation with eighty (80) hours' pay in advance ; and, in addition thereto, the employer shall warrant not less than forty-eight (48) weeks' employment, including the aforementioned two (2) weeks' vacation with pay, during each year following the date of this Agreement, so long as this Agreement remains in full force and effect and this provision remains without modification.

B. *Guaranteed Total Hours in Specified Period.*

In this type, work, or the equivalent pay at regular rates, is guaranteed for a given total number of hours in a specified period, *e.g.*, for two thousand hours a year. In this case the hours guaranteed for the period may vary in relation to the

[1] See for example *New South Wales Industrial Gazette*, 31 Aug. 1946, p. 241.

[2] See for example *The Labour Gazette* (Ottawa), Dec. 1946, pp. 1769-1770.

[3] See for example NEW ZEALAND, DEPARTMENT OF LABOUR : *Awards, Recommendations, Agreements, etc., made under the Industrial Conciliation and Arbitration Act, etc.*, Vol. XLV, p. 784 (rubber workers), and p. 822 (local bodies' gardeners, labourers and other workers).

[4] Cf. *Monthly Labor Review*, September 1941, p. 573, " Guaranteed Living-Wage Provisions of State Minimum Wage Orders for Women " ; STATE OF NEW YORK, DEPARTMENT OF LABOR : *The Guaranteed Minimum Weekly Wage* (New York, February 1946), pp. 1-10.

full-time standard hours for the period. A full-time guarantee for a year is generally 2,080 hours (40×52). The following clause from an actual agreement is an example of this type of wage guarantee :

Guaranteed annual wage : Agreement between the United Steelworkers of America and the Beryllium Corporation, Reading, Pennsylvania, dated 28 April 1946.

The Corporation guarantees to every employee who has completed five years' continuous service in the employ of the Corporation at April 30, 1946, a minimum employment of 2,080 hours for each yearly period beginning May 1, 1946 and continuing each year thereafter during the life of this contract. All hours worked by said employee, both straight time and overtime, shall be credited against the 2,080 hours. If the Corporation does not provide work for any part of the 2,080 hours the employee shall be paid for the unworked hours at his straight-time hourly rate.

An employee failing to accept other work assigned by the Corporation when his own job is not working or is discontinued because of production requirements, shall not be entitled to the guarantee herein provided. An employee who voluntarily leaves the employ of the Corporation, or who is discharged for cause, shall not be entitled to the guarantee. In the event of an employee's failure to take advantage of available work hours such hours shall be deducted from the guarantee of 2,080 hours. In the event of a strike the Corporation shall be relieved of its guarantee for the current one year period as to the employees striking.

The more common variety of type B in which the period specified is a single week may be illustrated by the following example from the engineering industry in the United Kingdom :

Guaranteed week : Agreement between Engineering and Allied Employer's National Federation and National Engineering Joint Trades Movement, London, 3 April 1946.

All hourly-rated manual workers who have been continuously employed by a federated firm for not less than four weeks are guaranteed wages equivalent to their inclusive hourly plain time rate for 34 hours in any pay week.

Provided that they are capable of, available for and willing to perform satisfactorily, during working hours, the work associated with their usual occupation, or reasonable alternative work where their usual work is not available.

For the purpose of this guarantee premium payments for overtime worked on weekdays and premium payments for work done on Sundays and holidays shall be disregarded. [1]

[1] The clause quoted above is clause *(a)* of paragraph C of the Agreement. This paragraph also contains the following clauses relating to exceptions and to notice in case of termination :

(b) The guarantee does not apply in the following circumstances :

(i) In the case of a holiday recognised by agreement, custom or practice, the guarantee shall be reduced in respect of the pay week in which the holiday takes place in the same proportion as the normal

A variant of type B is the "wage advance" plan under which the employer makes an advance to the employee in "short" weeks to bring his wage up to a specified amount. This is subsequently paid for by longer hours of work or higher earnings in later weeks, or out of a fund to which both employer and employee contribute or which is created out of profits allocated from a profit-sharing scheme. However, not all "wage advance" plans are true guaranteed wage plans. For example, if a plan provides that an employee is to be advanced an amount necessary to bring his pay in a "short" week up to a stated amount, and the amount advanced has to be repaid out of the employee's subsequent earnings, such a plan is a loan plan rather than a guaranteed wage plan. On the other hand, if a plan provides that an employee is to be paid the full-time wage for a normal work week regardless of the amount of employment provided him by his employer in any week, and the amounts payable for any overtime worked in other weeks are to be offset against the payments made to the employee for idle time in "short" weeks, such a plan is a guaranteed wage plan, since payment of a wage equivalent to that for a normal work week is guaranteed by the plan irrespective of whether the amounts paid to an employee for idle time in "short" weeks are subsequently repaid by the employee or not.

C. *Guaranteed Total Earnings in Specified Period.*

In this type, wage payments equivalent to a given number of hours at straight-time rates of pay over a specified period are guaranteed, *e.g.*, total wages for a year equivalent to two thousand hours at straight-time rates. This is a variant of type B, the difference being in the procedure adopted when overtime is paid for at premium rates. In this case the number of hours credited against the guarantee in respect of overtime is the number of straight-time hours which would yield the same

working hours for the time being have been reduced in that pay week.

(ii) In the event of a dislocation of production as a result of strike action the guarantee shall be automatically suspended in respect of workpeople affected in the establishment where the strike is taking place.

(c) Where the employment of an hourly rated manual worker who has been continously employed by a federated firm for not less than four pay weeks is terminated for reasons other than misconduct (*e.g.*, redundancy or where the worker wishes to leave) the duration of notice given shall be equivalent to the non-overtime weekly hours operating in the establishment for the time being.

total earnings. For example, this principle was adopted in the two guaranteed wage plans in operation in 1939 in the mail order houses of Sears, Roebuck and Company of Chicago. Under these plans eligible employees were guaranteed forty hours' income per week. Overtime was credited at one-and-a-half times the ordinary time. Thus, one hour overtime would be equivalent to a guarantee of one-and-a-half hours' work for the purposes of the wage guarantee. [1]

The essential difference between type A and types B and C lies in the fact that in type A so much work or pay is guaranteed for each of a specified number of weeks, whereas in types B and C so many hours' work in a stated period are guaranteed with no stipulation as to when the work is to be performed. Thus in the latter types the conditions of the contract are fulfilled as soon as the number of hours guaranteed are worked. This could be done, for example, in ten months of a year with the workers idle and receiving no pay for the remaining two months. In type B, if one hour overtime is worked, one hour only is counted towards the hours guaranteed, but in type C, if the overtime rate is one-and-a-half times the straight-time rate, one-and-a-half hours are counted towards the hours guaranteed. [2]

Limits to Guarantees

In addition to the limitations on coverage and on eligibility which have already been noted, the guarantees provided are frequently subject to special limitations designed to preserve the financial stability of the firms concerned by preventing the cost of operating wage guarantees becoming excessive in bad years. These limitations are of two main kinds.

Limitation of Period of Guarantee.

The period for which income or employment is guaranteed may be limited to some specified period of work less than full-time, *e.g.,* in the case of annual wage plans, to forty weeks only

[1] For further details of these plans see NATIONAL WAR LABOR BOARD, WAGE STABILIZATION DIVISION: *Guaranteed Employment and Annual Wage Plans*, Research and Statistics Report No. 25 (Washington, D.C., 25 Aug. 1944), p. 19.

[2] Thus under a type B plan which guarantees thirty-six hours a week, a worker who in a given week works twenty-four hours' ordinary time plus eight hours' overtime (paid at the rate of time-and-a-half) will collect four hours' pay in respect of the guarantee; and his total wage will be the equivalent of (24+12+4) = 40 times the ordinary hourly rate. Under a type C plan the same worker would collect nothing in respect of the guarantee and would receive the equivalent of (24+12) = 36 times the ordinary hourly rate.

of work in any one year. The following clause from an actual agreement is an example of this type of limitation :

Guaranteed employment for 1,200 hours per year. Agreement between the United Steelworkers of America and the Wildman Manufacturing Co., Morristown, Pennsylvania, makers of knitting and hosiery machines, dated 28 June 1945.

The Company guarantees to every employee who has completed five years' continuous service in the employ of the Company at the time of the execution of this Agreement a minimum employment of 1,200 hours for the year covered by this contract. All hours worked by said employee, both straight-time and overtime, shall be credited against the 1,200 hours. If the Company does not provide work for any part of the 1,200 hours the employee shall be paid for the unworked hours at his straight-time hourly rate.

An employee who voluntarily leaves the employ of the Company or who is discharged for cause shall not be entitled to the guarantee. In the event of an employee's failure to take advantage of available work hours such hours shall be deducted from the guarantee of 1,200 hours. In the event of a strike the Company shall be relieved of its guarantee as to the employees striking.

Limitation of Liability.

The employer's liability may be limited, for example, to a percentage of his total payroll. Or the amount of the benefits may be limited to a fixed amount per year or to a definite percentage of total cost or net profit.

For example, the 1947-1948 contract between the Gernes Garment Co., Inc., Kansas City, and the International Ladies Garment Workers Union (A.F.L.) guarantees 350 employees fifty-two weeks' pay per year, but limits the company's total liability for any idle time which has to be paid for under the terms of the guarantee to 10 per cent. of the 1946 payroll. [1]

Both these methods of limiting the extent of a wage guarantee have the advantage of preserving the continuity of a plan as well as the financial position of the establishment, but it must be recognised that, where they are adopted, the effect is to place the burden of variations in economic activity on the shoulders of labour (except to the extent that it is carried by unemployment benefits financed from sources other than wages) rather than on management, and to limit the operation of guarantee plans to periods when conditions are, in any case, most favourable.

In addition to such limitations, most guaranteed wage plans embody safeguard provisions whereby the operation of the plan

[1] *Business Week*, 19 April 1947, p. 99.

may be suspended in the event of strike, lockout, or any untoward happening. Again, time-limits of one year, at the end of which a further agreement must be negotiated, are common. [1]

Lay-Off Notice and Dismissal Wage Provisions

Guaranteed wage arrangements give only limited protection to a worker against dismissal or lay-off. In the case where a worker is guaranteed only a weekly or daily wage, the protection is particularly limited. Even where an annual wage is guaranteed, there are often clauses in the agreement whereby an employee may be dismissed or laid-off for certain specified reasons. The actual position in particular cases, then, depends upon what provisions are made in the agreement between employer and employee regarding conditions under which an employee may be dismissed or laid-off. When such dismissal or lay-off occurs, provisions for the payment of dismissal or lay-off compensation [2] represent an important aid to the income security of employees. Where no guaranteed wage exists such payment is of course even more welcome.

When a seasonal or cyclical decline in business compels a firm to dismiss employees the first to be dismissed are usually young or short-service employees. However, when a firm suffers from a severe and prolonged shift in demand, or when methods of production are improved to such a degree as to reduce heavily and permanently the labour force required, long-service employees, whose age makes it difficult for them to obtain re-employment, must be dismissed also. In many countries it has become the practice to compensate these long-service employees for their dismissal. This is particularly the case where a firm has a pension plan in operation, since when a pension is due on retirement at sixty-five years it would clearly be inequitable not to allow any monetary compensation to a long service employee dismissed at, say, fifty-eight years. [3]

However, with a view to improving the income security of workers not in this class but who become unemployed as a result

[1] Cf. *Guaranteed Wages, op. cit.*, pp. 63-67.

[2] This type of compensation is also known variously as " dismissal pay ", " severance pay ", " severance compensation ", " termination pay ", " separation pay ", " dismissal wage ".

[3] Cf. Sumner H. Slichter : *Union Policies and Industrial Management* (Washington, D.C., 1941), pp. 130-136.

of either temporary or permanent dismissal, increasing attention has been paid in recent years to the provision of some kind of monetary compensation. Many types of dismissal compensation arrangements are in fact to be found in legislation, in collective agreements and in plans adopted by companies in different countries. [1]

From the point of view of the worker, such compensation serves to cushion the shock of a sudden loss of income when employment is terminated. It helps to tide him over the period before he finds another job. If he has to move to another district to find employment, it helps to some extent to cover the cost of moving. If the only job he can get is one at lower pay, it will give him some assistance in meeting fixed commitments until he can readjust his level of expenditures. The extent to which it can alleviate these various hardships is usually severely limited, but to the worker who faces them even limited assistance is better than none.

In most cases the dismissal payment varies directly with the amount of earnings and with the length of service of the employee. The reason for dismissal or the probable length of time of lay-off is also frequently taken into consideration. Payment is usually made in a lump sum with a limit to the amount payable to any individual worker. These payments are usually financed solely by the employer, but in some cases a fund is established to which the employer contributes a specified percentage of payroll or sales, and the employees a specified percentage of wages. This plan is similar to the wage-advance type of guaranteed wage plan but, of course, only applies in the case of actual dismissal or lay-off.

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[1] Cf. *Minimum Income Security : Annual and other Wage Systems Designed to Provide Assured Earnings, op. cit.*, pp. 45-49 and pp. 69-74; International Labour Organisation, Metal Trades Committee, 2nd Session, Stockholm, 1947, Report III : *Minimum Income Security : Annual and other Wage Systems Designed to Provide Assured Earnings*, (Geneva, 1947), pp. 7-13; Everett D. HAWKINS : *op. cit.*, Chapters III, VI, VIII and IX, and Appendices A, B and C; U.S. BUREAU OF LABOR STATISTICS : *Dismissal Pay Provisions in Union Agreements*, Bulletin No. 808 (Washington, February 1945).

CHAPTER X

WAGE GUARANTEES: ESTIMATED COSTS AND SAVINGS

When the cost of a guaranteed wage plan is to be borne by the employer the feasibility of introducing it will necessarily depend in large degree on how much it will cost.[1] It is of interest, therefore, to examine such estimates as are available of the probable costs of operating guaranteed wage plans[2] in different types of industries.

Estimated Costs of Operating Various Types of Guaranteed Wage Plans

A detailed enquiry into the probable costs of operating guaranteed wage plans of various types in different industries was undertaken as a part of the United States *Guaranteed Wage Study* of 1946-1947.[3] Analyses were made of what each of three types of guaranteed wage plans would have cost to operate in forty-two individual plants during the period 1937-1941. These types of guaranteed wage plans[4] were as follows:

Plan A. A guarantee of work, or the earnings equivalent to such work, for forty hours each week for fifty-two weeks.

Plan B. A guarantee of work, or the equivalent pay, for 2,080 ordinary hours each year (*i.e.*, independent of any overtime hours that may be worked).

Plan C. A guarantee of an annual wage equivalent to 2,080 hours at straight-time rates.

[1] It is of course arguable that as fluctuations in the level of employment in a particular undertaking are not within the sole control of the employer, but are determined in part by the general level of economic activity, the cost of a wage guarantee should be borne in part by the State. Cf. Chapter XI.

[2] The terms "guaranteed wage plan" and "wage guarantee" are used in this chapter to include not only annual wage guarantees but also wage guarantees for lesser periods, and lay-off notice and dismissal wage plans as defined and described in Chapter IX.

[3] *Guaranteed Wages:* Report to the President by the Advisory Board, Office of War Mobilization and Reconversion, Office of Temporary Controls, Murray W. Latimer, Research Director (Washington, 31 Jan. 1947); and *Guaranteed Wage Study: Interim Report, 12 Nov. 1946*, prepared under the direction of Murray W. Latimer for the United States Office of War Mobilization and Reconversion (Washington, 1946).

[4] The differences between these three types of guaranteed wage plan were explained in Chapter IX.

If one hour overtime is worked, one hour only may be counted towards the hours guaranteed under a guaranteed wage plan of type B, but under a guaranteed wage plan of type C, if the overtime rate is one-and-a-half times the straight-time rate, one-and-a-half hours are counted towards the hours guaranteed.[1]

The period 1937-1941 was chosen for the purpose of the enquiry because it reflected fairly well normal peacetime conditions. The object of the analysis was to estimate the probable costs of a wage guarantee after taking into account the probable effects of the guarantee in modifying fluctuations in employment in the particular plants studied. The estimates of probable costs took no account of possible offsetting economies due to improved labour relations, nor of any savings in production costs which might be expected as a result of the stimulus which the introduction of a wage guarantee might give to the regularisation of production and work requirements. The estimates of probable costs, however, did allow for any possible cost savings from reduced labour turnover which would result from the introduction of wage guarantees. A few other factors which might cause some small cost increases or savings were also taken into account in preparing the estimates.[2]

A detailed analysis of the probable costs of operating each of the three types of guaranteed wage plans in the case of the steel industry (a durable producers' goods industry), the furniture industry (a durable consumers' goods industry) and the men's clothing industry (a non-durable consumers' goods industry) is given in Appendix I of the present report.[3] The following is a summary of the conclusions which may be drawn from this analysis.

[1] Cf. *Guaranteed Wages, op. cit.*, p. 81.

[2] Cf. *idem*, pp. 70-74.

[3] The probable costs of operating guaranteed wage plans in three steel plants are shown in table I of the Appendix. The three plants are selected as representative of the twelve covered by the study: costs of plant 1 were the lowest, those for plant 2 were moderate and those for plant 3 were the highest of the twelve. The probable costs of operating guaranteed wage plans in a furniture factory and a men's clothing factory are shown in table II of the Appendix.

It is important to note, however, that the estimates of the probable costs of operating wage guarantees for these and other plants given in the succeeding pages and in Appendix I take no account of the effects on these costs of possible increases in the costs of other plants operating wage guarantees. Thus if plant A supplies plant B with its raw materials and both operate wage guarantees, the costs of production of plant B may be increased not only by a possible increase in its own labour costs, but also by a possible increase in the costs of any of its raw materials which are supplied by plant A.

First, while the costs of operating the three different types of guaranteed wage plans differ from plant to plant in the same industry, the costs of operating plan A are invariably the highest of all three plans, because it guarantees so many hours' pay or work each week. The costs of plan B are not so great, as it requires only the provision of so many hours' pay or work in the course of the year and, therefore, allows slack periods to be offset by busy ones. Plan C shows the least cost of all, because it provides the least benefits of the three plans. In a depression year, however, the costs of operating each of the three plans in the same plant are likely to be about the same.

Secondly, if the costs of operating guaranteed wage plans in a particular plant are high, as they may well be in a depression year, such costs may be reduced by limiting the employers' liability in respect of the wage guarantee to a specified proportion of the total payroll of the workers covered by the guarantee, or by limiting the length of the period for which income or employment is guaranteed. The first method is more effective in reducing the costs of a wage guarantee than the second method, particularly in a depression year. Of course, if the two methods are applied together a still more substantial reduction in the costs of operating wage guarantees may be obtained. It should be noted, however, that limiting the extent of a wage guarantee by these methods may, in certain circumstances, reduce the effectiveness of the guarantee to such a degree that it may cease to provide even a moderate degree of security to the worker.

Finally, the costs of operating wage guarantees are found to be greater in capital goods industries than in consumers' goods industries. Further, in a depression year such costs are generally considerably greater in the former than in the latter group of industries. This is because employment in capital goods industries is affected chiefly by cyclical fluctuations, while employment in consumers' goods industries is affected not so much by cyclical fluctuations as by seasonal and other factors which each year cause some part-time unemployment. This unemployment is generally less severe in its effect on the costs of operating wage guarantees than the cyclical unemployment commonly experienced by capital goods industries.

Table XXIII enables a more detailed comparison to be made of the probable costs of operating wage guarantees in

TABLE XXIII. ESTIMATED GROSS COSTS OF OPERATING WAGE GUARANTEES IN CERTAIN INDUSTRIES IN THE UNITED STATES FOR THE PERIOD 1937–1941 AS A PERCENTAGE OF THE ACTUAL PAYROLL FOR THE PERIOD

Industry	Gross cost of the guarantee			Gross cost of the guarantee with liability limited to 10 per cent. of the guaranteed payroll		
	Plan A	*Plan B*	*Plan C*	*Plan A*	*Plan B*	*Plan C*
Durable producers' goods industries:						
Blast furnaces, steel works and rolling mills						
Plant 1	13.9	12.0	10.3	8.1	6.6	4.9
„ 2	5.9	4.9	4.9	4.0	2.9	2.9
„ 3	8.8	6.6	6.4	5.4	3.1	2.9
„ 4	19.9	17.6	16.9	9.1	7.2	6.7
„ 5	14.1	11.8	11.0	7.2	5.3	4.4
„ 6	33.5	29.4	27.3	11.7	8.9	7.3
„ 7	22.8	20.4	19.7	7.8	5.8	5.3
„ 8	25.4	22.8	21.4	11.1	10.9	10.1
„ 9	29.5	28.9	28.5	12.1	11.5	11.1
„ 10	20.2	17.5	16.5	8.2	6.1	5.5
„ 11	12.8	10.1	9.6	7.0	4.8	4.3
„ 12	19.5	17.0	15.9	9.2	6.8	5.9
Average	18.9	16.6	15.7	8.4	6.7	6.0
Electrical and communication equipment						
Plant 1	7.3	6.4	6.1	3.8	2.9	2.6
„ 2	12.8	12.0	11.7	4.6	4.3	4.3
Average	10.0	9.2	8.9	4.2	3.6	3.5
Average for durable producers' goods industries	17.6	15.5	14.9	7.8	6.2	5.6
Durable consumers' goods industries:						
Automobile industry						
Plant 1	22.8	20.7	19.8	8.7	7.2	6.3
„ 2	16.7	15.8	15.4	6.5	5.5	5.1
„ 3	15.7	13.5	12.9	8.1	5.9	5.3
„ 4	24.3	21.5	21.1	10.1	8.1	8.1
Average	19.9	17.9	17.3	8.3	6.7	6.2
Furniture industry						
Plant 1	12.1	10.8	10.0	8.6	7.3	6.5
Glass and glassware industry						
Plant 1	23.3	21.3	20.9	9.4	8.0	8.0
Average for durable consumers' goods industries	19.2	17.3	16.7	8.6	6.7	6.6

TABLE XXIII *(cont.)*

Industry	Gross cost of the guarantee			Gross cost of the guarantee with liability limited to 10 per cent. of the guaranteed payroll		
	Plan A	*Plan B*	*Plan C*	*Plan A*	*Plan B*	*Plan C*
Non-durable consumers' goods industries:						
Baking industry						
Plant 1.	6.7	5.9	5.7	5.8	5.1	4.9
„ 2.	3.0	1.3	1.3	3.0	1.3	1.3
Average	4.9	3.6	3.5	4.4	3.2	3.1
Boot and shoe industry						
Plant 1.	6.6	5.5	5.1	4.4	3.2	2.9
Confectionery industry						
Plant 1.	19.0	13.3	10.5	11.8	9.6	7.5
Dairying industry						
Plant 1.	0.0	0.0	0.0	0.0	0.0	0.0
Flour industry						
Plant 1.	6.9	2.4	1.0	6.5	2.4	1.0
„ 2.	1.5	0.4	0.2	1.5	0.4	0.2
Average	4.1	1.4	0.6	4.0	1.4	0.6
Newspapers and periodicals						
Plant 1.	2.8	1.9	1.6	2.8	1.9	1.6
„ 2.	2.9	1.8	1.6	2.9	1.8	1.6
Average	2.9	1.8	1.6	2.9	1.8	1.6
Paper and pulp industry						
Plant 1.	18.3	15.3	14.0	9.4	8.1	6.7
„ 2.	0.8	0.0	0.0	0.8	0.0	0.0
Average	9.6	7.7	7.5	5.2	4.1	3.4
Printing (book and job) industry						
Plant 1.	5.1	2.9	2.7	4.8	2.6	2.5
„ 2.	10.3	8.2	7.6	7.1	5.2	4.6
Average	7.7	5.6	5.2	6.0	3.9	3.6
Rubber and tyre industry						
Plant 1.	20.2	19.7	19.4	9.4	9.0	8.9
„ 2.	5.7	2.3	2.1	5.7	2.3	2.1
Average	13.0	11.0	10.8	7.6	5.7	5.5
Slaughtering and meat-packing industry						
Plant 1.	1.0	0.3	0.3	0.3	0.3	0.3
„ 2.	2.1	0.4	0.3	2.1	0.4	0.3
Average	1.6	0.4	0.3	1.2	0.4	0.3
Average for non-durable consumers' goods industries . .	6.6	4.8	4.3	4.6	3.2	2.7

Source: Data compiled and calculated from *Guaranteed Wages, op. cit.*, pp. 251-269.

Note: The averages given above for different industries and classes of industries are unweighted arithmetic averages.

different types of industries in the United States for the whole of the period 1937-1941.

Although the number of industries and plants for which data are given in the table is too small to enable conclusions to be reached as to the probable actual costs of operating wage guarantees in all industry, two important conclusions of a general nature can, nevertheless, be safely drawn. First, a comparison of the costs of operating wage guarantees in durable goods industries and non-durable goods industries shows that such costs are much greater in the former than in the latter. For example, the average gross costs of operating plan A during the period 1937-1941 would have been 17.6 per cent. of the actual payroll for the period in the durable producers' goods industries, and 19.2 per cent. in the durable consumers' goods industries, as against 6.6 per cent. in the non-durable consumers' goods industries.

Secondly, it can be concluded that limiting liability under a wage guarantee is much more effective in reducing the gross costs of operating wage guarantees in the durable than in the non-durable goods industries. Thus, if liability under the wage guarantee had been limited to 10 per cent. of the guaranteed payroll, the costs of operating plan A would have been reduced from 17.6 to 7.8 per cent. of the actual payroll for the period in the durable producers' goods industries, from 19.2 per cent. to 8.6 per cent. in the durable consumers' goods industries, and from 6.6 per cent. to 4.6 per cent. in the non-durable consumers' goods industries. These reductions in the average costs of operating plan A are equivalent to percentage reductions of 56.0 per cent., 60.4 per cent. and 30.6 per cent. for the durable producers' goods industries, the durable consumers' goods industries and the non-durable consumers' goods industries, respectively.

The estimates so far quoted are in terms of labour costs alone. It is, however, of interest also to enquire what proportion the cost of a guaranteed wage plan would form of total production costs or of the value of the product. In the absence of direct information on this point some indication of the probable order of magnitude of the proportion in question may be gained from an indirect approach.

Table XXIV shows the proportions which labour costs formed of the total value of sales in each of certain industries in the United States in 1939.

TABLE XXIV. LABOUR COSTS IN CERTAIN INDUSTRIES IN THE UNITED STATES IN 1939 EXPRESSED AS A PERCENTAGE OF THE VALUE OF TOTAL SALES[1]

Industry	Percentage
All manufacturing industries	16.0
Durable goods	17.9
Non-durable goods	14.5
Durable goods:	
Brick, tile, and terra cotta	34.0
Grey iron and semi-steel castings	33.7
Machine tool accessories	32.9
Shipbuilding and boatbuilding	31.7
Sawmills and logging camps	31.0
Machine tools	28.6
Aircraft and parts, excluding engines	27.7
Hardware	26.0
Engines and turbines	25.7
Furniture	24.9
Communication equipment	23.2
Machinery and machine products	22.7
Stamped and enamelled ware, galvanising	22.5
Agricultural machinery, excluding tractors	21.0
Railroad cars	20.6
Stoves, oil burners, etc.	20.4
Tractors	19.6
Blast furnaces, steel works, rolling mills	18.3
Radios and phonographs	17.0
Automobiles	16.0
Non-ferrous metals and products	11.6
Non-durable goods:	
Hosiery	34.3
Printing (book and job)	28.6
Cotton manufactures	25.9
Rayon and allied products	24.3
Shirts, collars and nightwear	23.4
Men's clothing, not elsewhere classified	22.8
Cigars	21.3
Silk and rayon goods	21.1
Women's clothing, not elsewhere classified	21.0
Baking	20.6
Woollen and worsted manufacturing	20.0
Paper boxes	16.7
Rubber tyres and inner tubes	15.5
Pulp and paper	15.1
Newspapers and periodicals	14.4
Malt liquors	11.8
Industrial chemicals	11.3
Drugs, medicines and insecticides	6.4
Slaughtering and meat-packing	6.1
Petroleum refining	5.2
Sugar refining (cane)	4.2
Cigarettes	2.5

[1] Estimates were based on U.S. Bureau of Labor Statistics data. The percentages will, of course, vary somewhat between different countries, from plant to plant and from year to year.

TABLE XXIV *(cont.)*

Industry	Percentage
Non-manufacturing industries [1] :	
Bituminous coal	65.2
Power laundries	51.5
Telephone	36.3
Street railways and buses	33.3
Hotels	28.2
Crude petroleum	17.7
Electric light and power	15.8
Retail trade	10.8
Wholesale trade	4.7

Source: Business Week, 9 Nov. 1946, p. 88.

[1] Estimates for these industries were based on data which included both salaries and wages. A comparable figure for "all manufacturing industries" was 22.6 per cent. as against 16.0 per cent. for wages only.

It will be noted that the percentage which wages formed of the total value of sales in different industries in the United States in 1939 ranged from 2.5 per cent. in the case of the cigarette industry to 34.3 per cent. in the case of the hosiery industry, omitting from consideration those industries the data for which were based on salaries in addition to wages. By combining the data from this and the preceding table it is possible to arrive at rough estimates of the proportions which the cost of operating a wage guarantee plan would form of the value of total sales in various industries. Examples of such estimates relating to a type A plan, with or without a limitation of liability to 10 per cent. of the guaranteed payroll, are given in table XXV.

These estimates of the cost of guaranteeing work, or the earnings equivalent to such work, for forty hours each week for fifty-two weeks, in the ten industries listed in the table range from 0.1 per cent. of the value of sales in the slaughtering and meat-packing industry to 3.5 per cent. in the steel industry. If the guarantee were subject to the limitation that its cost must not exceed 10 per cent. of the guaranteed payroll, the cost would range from 0.07 per cent. of sales in slaughtering and meat-packing to 1.6 per cent. in steel and 2.1 per cent. in the furniture industry. The average for the durable goods industries in the former case (3.2 per cent.) is three times as high as that for the non-durable goods industries (1.0 per cent.) ; and with the 10 per cent. limitation the average for durables (1.4 per cent.) is twice as high as that for non-durables (0.7 per cent.).

TABLE XXV. ESTIMATED GROSS COSTS OF TYPE A WAGE GUARANTEES IN CERTAIN INDUSTRIES IN THE UNITED STATES, 1937-1941, AS PERCENTAGES OF *(a)* PAYROLL AND *(b)* VALUE OF TOTAL SALES

Industry	Average gross cost of the guarantee, as percentage of		Average gross cost of the guarantee with liability limited to 10 per cent. of the guaranteed payroll, as percentage of	
	payroll	value of sales	payroll	value of sales
Durable goods industries:	18.1	3.2	8.0	1.4
Automobile	19.9	3.2	8.3	1.4
Blast furnaces, steel works, rolling mills	18.9	3.5	8.4	1.6
Communication equipment	10.0	2.3	4.2	1.0
Furniture	12.1	3.0	8.6	2.1
Non-durable goods industries:	6.6	1.0	4.6	0.7
Baking	4.9	1.0	4.4	0.9
Newspapers and periodicals	2.8	0.4	2.8	0.4
Paper and pulp	9.6	1.5	5.2	0.8
Printing (book and job)	7.7	2.2	6.0	1.7
Rubber and tyres	13.0	2.0	7.6	1.2
Slaughtering and meat-packing	1.6	0.1	1.2	0.07

Source: Based on tables XXIII and XXIV above.

These figures, it must be repeated, are only rough estimates. They relate in most cases to a limited sample of plants; the base periods for the two sets of data from which the estimates are computed are not identical; and the surveys from which they are derived were confined to a single country. There is, however, no reason to suppose that the figures are seriously misleading. While more comprehensive studies would be needed before any firm conclusion could be reached, these estimates do at least suggest that even the gross costs of operating wage guarantees may be a good deal smaller than is commonly supposed.

Cost Savings from Operation of Wage Guarantees

Net costs, moreover, are likely to be less than these. A realistic estimate must make due allowance for the tangible and intangible cost savings which may be expected to result

from the improvement in labour relations consequent on the introduction of a wage guarantee in a particular plant or industry, and for possible reductions in production costs as a result of the stimulus which the introduction of a wage guarantee will give to management to stabilise production and employment. Further, consideration should be given to the manner in which the costs of a wage guarantee will fall progressively as a full employment programme reduces cyclical unemployment.

Cost Savings from Improved Labour Relations

In recent years one of the most important causes of industrial unrest has been the fear which most employees have of losing their jobs or of being laid off. Many of the actions of workers which may appear to be irrational and haphazard can be accounted for by their fear of insecurity. Accordingly, any measure which can remove this fear should go a long way towards promoting industrial peace. Thus, a wage guarantee which ensured that workers received a substantial proportion of full-time earnings should result in a considerable improvement in labour relations. Such an improvement, it is considered by many writers, would have the effect of raising workers' output and reducing the production costs of the firm operating the wage guarantee.

Differences of opinion exist as to other possible effects of a guaranteed wage plan upon productivity. Some business men feel that the operation of such a plan in a particular plant would lead to lower productivity because, they say, fear of unemployment would be removed and, in their view, such a fear is necessary to keep employees working with a maximum effort. Others contend that productivity would be increased, since increased security would encourage the worker to put forth his best efforts and would remove any incentive to make work last or to adopt other restrictive practices. This contention is effectively expressed in the following quotation from a brief submitted by Walter P. Reuther, Director of the General Motors Department, United Automobile Workers, to the United States National War Labor Board in 1943 :

> The President's Executive Order establishing a 48 hour work week as national policy was a step in the right direction. However, the order must be supplemented by the initiation of a national wage policy guaranteeing 48 hours' work or 48 hours' pay per week.

Labor morale would be immeasurably boosted — and maintained. It is difficult to convince partially employed workers that more sweat is needed, that absenteeism must end and that strikes can be disastrous. Labor would no longer need fear that more sweat would mean unemployment ; it would not have to suffer the consequences for material shortages, poor planning or the changing Army and Navy requirements and specifications.

It is impossible to maintain top labor morale when workers who meet and frequently exceed production quotas are rewarded by layoffs. Time after time workers, through encouragement and exhortation by Government, labor organisations and management, have achieved new records in production only to find, to their amazement, that they are to be laid off or placed on short work weeks.

Where such incidents occur it is exceedingly difficult, sometimes impossible, to again build labor morale. It is no comfort to a laid-off or partially employed worker that he has an "E" button and his plant an "E" banner for excellent production. He feels quite properly that neither the war effort nor his own economic interests are being advanced by such enforced idleness.

A guaranteed 48 hours' minimum pay per week would go far toward correcting this situation. The penalty to be paid for keeping workers idle would exert pressure on management and governmental production agencies to plan production, the flow of raw materials, etc., more carefully. For the worker, such a guarantee would remove the fear that extra sweat on Monday, Tuesday and Wednesday will mean a layoff for the remainder of the week. [1]

The United States report, *Guaranteed Wages,* comes to a similar conclusion. The case histories of several important guaranteed wage plans studied in this report showed, it is stated, that

in all of them the plans were believed by the company heads to have contributed very substantially to increased productivity. Except in one case, such data as can be brought together seem to be compatible with increased productivity. These results are not surprising. It is to be expected that security would have favorable effects on productivity. The increases in security which have resulted from the adoption of various social insurance measures, beginning with workmen's compensation and running through old-age insurance and unemployment insurance, have been accompanied by marked increases in the efficiency of American workers. . . .

In any large group of people there are, of course, persons of all backgrounds, motivations, predispositions, and tendencies. There can be no question that the effect of an increase in security will lead some people to loiter, to become careless, and in general to produce less than they did under conditions of insecurity. What is significant is not the behavior of particular individuals but rather the aggregate effect. The loitering worker is less likely to gain the support of his fellows, and more likely to suffer their disapproval, when the threat of economic insecurity is removed as a justification.

[1] UNITED AUTOMOBILE, AIRCRAFT AND AGRICULTURAL IMPLEMENT WORKERS OF AMERICA : *Wage Stabilization and Post-War Security* (partial brief submitted to National War Labor Board by the General Motors Department, U.A.W.-C.I.O., November 1943), p. 3.

Generally speaking, an advance in security, whatever the particular field involved, ought to have the same general effect on production. All the more so in the case of wage guarantees which assure the worker against the loss in income which might otherwise result from any improvement in output.

On the basis of such material as is now available with respect to the operation of guaranteed wage plans, together with what is known about production restrictions and causes of those restrictions and about the effects of worker security in other fields, it is reasonable to conclude that the effect of security on workers in the aggregate is to lift rather than to limit production ; and that the degree of improvement will be affected by the degree of security. [1]

Other cost savings would arise from the reductions in the quit rate and the labour turnover rate which would follow from the introduction of wage guarantees, because even in years of full employment lay-off is common, and workers are always on the lookout for jobs in industries which offer the greatest security of employment and income. The United States report, *Guaranteed Wages,* found that

it is undoubtedly true that the establishment of a guaranteed wage plan will tend to reduce substantially the rate of labour turnover among the workers of the guaranteeing employer. More than half of the employers whose guaranteed wage plans were studied in detail for this survey found such an effect as a result of the plan. Not a single employer who was able to reply found any effect on turnover except a reduction.[2]

The general adoption of wage guarantees would tend to reduce the costs of training new workers and the losses which arise from the decreased efficiency of the labour force when experienced workers leave one firm for another. The cost of labour turnover to the employer alone, apart from the costs to the employee and to society, may be judged from estimates which indicate that in the United States before the war the average cost to an employer of losing one worker and replacing him by another varied from $8.50 for labourers to $250 for skilled employees. The average cost of turnover for a typical semi-skilled worker was about $59. The turnover rate was 46.08 per cent. for all United States manufacturing industries in 1941.[3] A high labour turnover rate taken in conjunction with the costs of labour turnover per worker means that total labour turnover costs in a year can be considerable. For example, it has been estimated that labour wastage in the 1930's cost United

[1] *Guaranteed Wages, op. cit.*, pp. 170-171 and 306-384.

[2] *Idem* p. 172.

[3] J. E. WALTERS : *Personnel Relations* (New York, 1945), pp. 249-251.

States employers at least $500 million a year.[1] The actual cost today would probably be two or three times as much.[2]

In order to protect the wage structure and job standards which have been built up over a period of time, trade unions frequently insist on the incorporation in collective bargaining agreements of provisions which limit the employer's right to transfer workers from one job or department to another. A wage guarantee would give the workers the protection which they feel they need and would remove their main objection to transfer from job to job, from department to department or even from plant to plant. The consequent increased transferability of a firm's staff should make possible considerable cost savings, since it would increase technical efficiency and permit greater regularisation of production.

Further, it is to be expected that improved labour relations would tend to make employers more willing to enter into agreements providing for wage guarantees for longer periods. In so far as this is the case a firm's labour costs would become more stable and it would, consequently, be able to prepare more accurate estimates of its probable labour costs for each financial period. This would facilitate the use of budgetary control and standard costs which should enable further economies to be made through the greater degree of production control which such accounting techniques make possible.

Cost Savings from Production and Employment Stabilisation

A particular guaranteed wage plan may guarantee either employment or wages for a specified period. In either case pressure is placed on the guaranteeing firm to stabilise its production and the employment of its workers as far as may be possible, since it will have to pay its employees for the period of the guarantee whether there is work for them to do or not. Accordingly, any firm which operates a guaranteed wage plan may be expected to make an effort to apply some or all of the various techniques which are available for stabilisation.

[1] G. S. Watkins and P. A. Dodd : *The Management of Labor Relations* (New York, 1938), p. 241.

[2] Allowance was made in the estimates of the costs of operating wage guarantees given in table XXV and in tables I and II of Appendix I for the probable cost savings from lower labour turnover costs consequent upon the introduction of wage guarantees in the particular industries studied.

That considerable scope exists for the application of such techniques, and the reduction thereby of seasonal and other short-term fluctuations in employment, has been shown by a number of recent studies.[1] One of these, prepared under the auspices of the American Management Association, reaches the general conclusion that

> a beginning could be made by most companies toward more stable employment. Once a business realises that the cost of labor really does not disappear when men are laid off, much greater efforts toward a high level of employment may be made by each firm. For when a company lays off men, the cost of labor merely changes its form and comes back to plague not only the firm itself but many others as well. It is true that each employer will feel only a part of the effects of what he is doing, but he will also feel part of the effect of the dismissals by all the other employers. This is being increasingly realised, and hence there may be a change in the financial and economic thinking of the individual enterprise, and in the concept of its responsibilities.[2]

The effect of a particular employment stabilisation technique upon production costs depends partly upon the nature of the technique and partly upon the nature of the industry in which it is applied.[3] Further, each of the methods of production and employment stabilisation may involve some additional expense as well as some cost savings. For example, production for stock implies the storage of a certain percentage of the output of a firm for a particular period until improved market conditions allow sales at a more remunerative price. Storage costs arising from the rent of a warehouse, insurance, interest on capital invested, depreciation, handling and clerical expenses, etc., may be offset to a greater or less extent by the additional revenue derived from sale later at a higher price than could be obtained at the time. Also, the shape and slope of the firm's cost curve must be taken into consideration. Thus, if costs increase

[1] See in particular AMERICAN MANAGEMENT ASSOCIATION : *Annual Wages and Employment Stabilization Techniques*, Research Report No. 8 (New York, 1945) ; J. CHERNICK and G. C. HELLICKSON : *Guaranteed Annual Wages* (Minneapolis, 1945) ; A. D. H. KAPLAN : *The Guarantee of Annual Wages* (Washington, 1947) ; Joseph L. SNIDER : *The Guarantee of Work and Wages* (Boston, 1947) ; *Guaranteed Wages*, Report to the President by the Advisory Board, Office of War Mobilization and Reconversion, Office of Temporary Controls, *op. cit.*, Chapter X ; and *The Conference Board Management Record*, September 1947, pp. 259-261, " Stabilising Employee Incomes ", by S. Avery RAUBE.

[2] AMERICAN MANAGEMENT ASSOCIATION, *op. cit.*, p. 55.

[3] For a full discussion of the effect of employment stabilisation on costs, see AMERICAN MANAGEMENT ASSOCIATION : *Annual Wages and Employment Stabilization Techniques*, Supplement to Research Report No. 8 (New York, 1945), pp. 3-16.

rapidly as the rate of utilisation of capacity declines, as in the case of the steel industry, production for stock will be more advantageous than if costs increase only slowly.

Employment stabilisation is likely to lead to a reduction in overhead costs through better utilisation of the plant and of permanent personnel. Further, there are certain intangible cost reductions. For example, there is likely to be a lessening in the opposition of workers to technical improvements.

Not all of the factors in production or employment stabilisation plans which lead to cost increases or decreases have been mentioned, but sufficient has been said to indicate that, although the effect of such plans upon costs in a particular case can only be determined by actual trial, it seems reasonable to expect that the stabilisation of production and employment would, in fact, lead to reductions in production costs rather than to increases in such costs.

Finally, it must be recognised that the benefits of production and employment stabilisation cannot be measured in terms of possible savings in production costs only. More stabilised production and employment would result in greater employment and income security for the workers as a whole and, therefore, in an increase in the sum of human happiness.

Cost Savings from Operation of a Full Employment Programme

The effects of the international and national business cycles upon production and employment both in the economy as a whole and in the individual plant are well known. The magnitude of the variations in employment in different areas of the economy was discussed in Chapter VIII above, while the effects of such variations upon the costs of operating guaranteed wage plans are apparent from the data of table XXV and tables I and II of Appendix I. It will be remembered that the costs of such plans would have increased greatly in 1938, a year of depression, because cyclical unemployment was relatively high in that year. If a full employment policy could be carried out successfully, cyclical unemployment would be reduced to a minimum, with a corresponding reduction in the costs of guaranteed wage plans, the introduction of which in the durable

goods industries would thereby be greatly facilitated. In this event, firms would for the most part have to pay their workers only for idle time caused by seasonal and other factors which, as was shown above in the case of non-durable goods industries, do not have nearly so great an effect on the cost of a guaranteed wage plan as do cyclical fluctuations.

Conclusions

It will now be apparent that an improvement in labour relations, the stabilisation of production and employment, and the successful implementation of a full employment programme should cause some reduction in the gross costs of operating guaranteed wage plans. However, it seems reasonable to assume, even after allowance has been made for such cost reductions, that the introduction of a guaranteed wage plan in a particular plant would cause some increase in the production costs of an individual firm over a period of years.

It must now be asked what is likely to be the effect of such an increase in costs ? Will it lead to an increase in prices, a decrease in profits, a reduction in money wage rates or some combination of these ? Of course, it is not possible to state with any degree of certainty that an increase in the costs of an individual firm would result from the operation of a guaranteed wage plan by that firm. There may in fact be a decrease in such costs. But whatever the effect in a particular case, it is most unlikely that the introduction of wage guarantees would cause no alteration in the costs of firms introducing such guarantees and, therefore, would bring about no changes in prices, profits or wages. It is apparent that such changes in prices, profits or wages would lead to modifications in the structure of the economy which might or might not be desirable in either the short or the long run. An analysis of the economic implications of wage guarantees is therefore necessary as a basis for any judgment as to the feasibility or the desirability of introducing such guarantees on any considerable scale. Such an analysis is attempted in the next chapter.

CHAPTER XI

WAGE GUARANTEES: ECONOMIC EFFECTS AND GENERAL CONCLUSIONS

An analysis of the possible economic effects of wage guarantees involves separate consideration of the possible effects of such guarantees on the firm or industry, and on the economy as a whole. The discussion which follows is concerned first with the effects of the introduction of wage guarantees on the firm or industry concerned, with special reference to the effects of the increase in production costs which will usually be involved. The more general effects of wage guarantees on the economy as a whole are then examined.

Consideration is then given to the relation between wage guarantees and unemployment insurance or other more general forms of provision for the unemployed; and the advantages claimed for dismissal compensation schemes are briefly noted.

Because of the comprehensive and authoritative character of the recent report on *Guaranteed Wages* by the Advisory Board of the United States Office of War Mobilization and Reconversion, and the general concordance between the conclusions of this report and those reached in the present and preceding chapters, the next section is devoted to a summary of the findings of this report.

Finally, the main points brought out in Chapters IX to XI of the present report are briefly recapitulated, and attention is directed to the account of the discussions and conclusions of the Iron and Steel Committee and Metal Trades Committee which is given in Appendices III and IV to the report.

Economic Effects of Wage Guarantees on the Firm or Industry

In analysing the economic effects of wage guarantees on the firm or industry it is convenient to begin by considering certain aspects of the manner in which wage rates are determined in a modern economy. In general, wage rates and the conditions pertaining thereto are the subject of bargaining in one form or another between employers and workers, with or without the aid

of government agencies. Consequently, the terms of any guaranteed wage plan which is to be introduced in a particular plant or industry will normally also be the subject of bargaining between the employers and the workers concerned.[1] The inclusion of guaranteed wage plans in the subject matter of collective bargaining may, however, have far-reaching repercussions, since it will tend to replace collective bargaining in terms of wage rates only by bargaining in terms of a combination of price and quantity.[2] The employer will be in the position of undertaking not only to pay a specified wage for any labour he employs, but also to purchase a specified quantity of labour for a particular period. All guaranteed wage arrangements require in one way or another the purchase of a certain number of man-hours at a particular price for a particular period.

The employer may therefore be obliged at certain times to employ, or at least to pay for, a greater quantity of labour than he would have kept in employment had no guarantee scheme been in operation. He will no longer be able to engage and dismiss as he wishes and to purchase only the quantity of labour he needs from day to day. However, this is not the end of the matter. While the entrepreneur must purchase a certain quantity of labour under the terms of a guaranteed wage plan, he can still bargain as to the price he will pay for it.

From the point of view of the workers this price-quantity type of bargaining may be advantageous or not in the long run. The price of labour must still be determined by the bargaining process. What this price will be depends, in part, on the relative bargaining strengths of the parties. Some degree of monopoly is typical of the labour market under the conditions prevailing in a modern economy where both employers and workers are strongly organised. With quantity as well as price the subject of bargaining, the bargaining power of organised groups will be extended, and the group having the superior bargaining power will be able to wield a greater influence on the price of labour than if price alone was the subject of the bargaining. Thus, if the employer is the more powerful, it is conceivable that the price of labour may be forced down to the point where workers

[1] It will be recalled that both the Iron and Steel Committee and the Metal Trades Committee emphasised the desirability of guaranteed wage plans being worked out and introduced through the normal processes of collective bargaining.

[2] Cf. *Journal of Political Economy*, February 1946, pp. 76-79, " The Pure Theory of the Guaranteed Annual Wage Contract ", by Vassily LEONTIEFF.

will be no better or very little better off, as far as total earnings are concerned, than they were before they obtained a guaranteed wage.[1] On the other hand, if the workers have the superior strength, they may be able to make their total earnings higher not by trying to alter the price of labour, but by using their bargaining power to increase the quantity of labour to be purchased by, for example, obtaining an extension of the coverage of the guarantee or of the length of the period to be guaranteed.

The consequences of the exercise of this bargaining power by employers and workers will be different according as it results in an increase or a decrease in labour costs and so in an increase or decrease in the profits of employers, or in higher or lower earnings for the workers. For example, an increase in labour costs will lead either to an increase in prices or to a decrease in profits, or to some combination of both. It is obvious that such a result may have important repercussions upon the economy.

As an example of the effects of the exercise of bargaining power by employers and workers in connection with the operation of a guaranteed wage plan, the case of a single industry where both employers and workers are strongly organised may be considered. If the terms on which the guaranteed wage is introduced are such as to involve a loss to the workers, there will be a tendency for them to move to other industries. If, on the other hand, the workers gain, other workers will tend to move into the industry. A scarcity or surplus of labour in the industry may thus be created ; this in turn will tend to be corrected in time by a rise or fall in money wages in the industry until employment in the industry returns to its former level. This conclusion, however, fails to take into account the costs of movement of labour from one industry to another and the possibility that such movement may be impossible, or may be feasible only on a very limited scale, owing to the difficulties which workers experience in transferring from one industry to another requiring different skill. Steel workers or coal miners, for example, do not readily transfer to other industries. Moreover, the possible effects of substitution by employers of machinery for labour, if the latter becomes scarce, must also be

[1] In these circumstances the fixing of a legally enforceable minimum wage rate, by setting a lower limit to the price of labour, could be expected to have a beneficial effect on earnings as well.

taken into account. In practice, therefore, the employment situation which existed in the industry before the introduction of the guaranteed wage plan is unlikely to be completely re-established.

The changes in the price of labour and in the size of the labour force employed in an industry, which will occur as a result of the introduction of a guaranteed wage plan, may or may not be desirable from the point of view of the economy as a whole. In the first place, changes in wage rates may bring about a redistribution of the national income among the different income groups. Secondly, changes in the size of the labour force of particular industries will alter the relative size of the various industries. Such a redistribution of the national income and of the total labour force may have far-reaching effects, desirable or undesirable, on the structure of the economy.

The position is still more complicated by the fact that a loss in income to the workers may mean a corresponding gain in income to the employers, and *vice versa*. A gain to the employers from the bargaining means that profits are higher and consequently other investors will be attracted to the industry. On the other hand, a loss means that profits will be lower and further investment in the industry will be discouraged. In the long run, therefore, investment in the industry may either increase or decrease, with effects on the allocation of an economy's capital equipment among different industries which may or may not be desirable. However, it is by no means certain that employers will have to absorb the loss themselves as there is always the possibility that such a loss may be passed on to consumers in the form of higher prices. Whether this can be done or not depends on the nature of the demand for the products of the industry. If the demand for a particular product is inelastic [1], its price may be increased with little effect on the quantity demanded, although how much it can be increased without appreciably decreasing the quantity demanded will depend on the degree of inelasticity. On the other hand, if the demand is elastic [2], the price of the product could not be

[1] The demand for a product is said to be inelastic if a change in its price causes a less than proportional change in the quantity demanded. For example, if a rise in the price of a product by 20 per cent. causes the quantity demanded to fall by only 5 per cent., the demand for the product is inelastic.

[2] The demand for a product is said to be elastic if a change in its price causes a more than proportional change in the quantity demanded. For example, if a rise in the price of a product by 20 per cent. causes the quantity demanded to fall by 70 per cent., the demand for the product is elastic.

increased without causing a considerable decrease in the quantity demanded, and consequently in the rate of utilisation of the capacity of the individual plants concerned. The extent of the fall in demand will, of course, depend on the degree of elasticity.

If a firm, operating under conditions of decreasing costs, raises the price of its product in order to cover the cost of a wage guarantee, and as a consequence finds its sales declining and has to reduce output, the result will be a fall in profits, since it may be assumed that output had formerly been adjusted to the point where maximum revenue was attained. Since costs per unit of output will increase as output falls, the reduction in output will mean a decline in profits.

If the cost of a guaranteed wage plan is such that it cannot be covered out of profits or by a decrease in wages, the price of the product will have to be increased. If the demand for the product is elastic, the rise in price will lead to a decline in sales and in output, and, in the long run, a decline in the resources allocated to the industry as existing plant becomes redundant. This is likely to be the result in many consumers' goods industries, the demand for the products of which is elastic. However, in the case of durable producers' goods industries, the demand for the product is generally inelastic, particularly where, as in the case of steel, its price represents only a small proportion of the cost of the finished goods and where substitution by other products is impossible or unlikely. In this event it will be possible to raise the price of the product with little effect on the quantity demanded.

A redistribution of an economy's resources through the effects of wage guarantees on the price structure of the economy would seem likely to result in a more efficient distribution of such resources, since each industry will be charged with the costs of the idleness of the factors of the production for which it is responsible.[1] The economy may be expected gradually to become more stable and a greater measure of income security than is now enjoyed should be possible.

It has sometimes been suggested that industry-wide guaranteed wages would lead to a reduction of total employment,

[1] It has been suggested that no industry is entirely responsible for unemployment of its workers, since the causes of the unemployment are beyond its control. Society as a whole, it is argued, should bear the costs of unemployment. One method by which this might be done would be subsidising, out of unemployment compensation funds, employers who guarantee wages or employment. This argument is examined in more detail below.

as the stabilisation policies which would be adopted in order to minimise the cost of the guarantee would result in a smaller labour force being required by each plant. Individual plants might, it is true, be able to reduce their labour force, but it does not follow that total employment would decline. In an expanding economy, the freeing of workers from the labour force of a particular plant would, in the long run, result in a rise in output per head, and consequently in real wages, through the fuller utilisation of plant capacity in the industries introducing the scheme. Much of the economic progress of the past hundred years has resulted from a decline in the number of men required to produce a given quantity of goods. No one, for example, today deplores the fact that far fewer agricultural workers are now needed to produce a ton of food than at the beginning of the nineteenth century.[1]

To sum up, it would seem probable that the widespread adoption of industry-wide guaranteed wage plans, in conditions in which employers and workers are strongly organised, would result in a redistribution of income and a more efficient allocation of scarce resources (particularly of labour and capital) among alternative uses through the effect of collective bargaining on the total remuneration of the workers concerned, on the profits of employers, and on the prices paid by consumers for the products of the industries operating such plans. The extent of the redistribution of income and resources will depend upon a number of factors such as the relative bargaining strength of employers and workers, the relative importance of the firms operating the wage guarantee and the nature of the demand for their products. A reduction in total employment as a result of the introduction of wage guarantees need not necessarily be expected.

Effects of Wage Guarantees on the General Level of Economic Activity and Employment

So far the discussion of the economic effects of wage guarantees has centred mainly round the effects of such guarantees on the production costs of individual firms and industries, and the effects of increases in such costs on the

[1] In economies where expansion is insufficient to maintain full employment, the effect of introducing a general guaranteed wage scheme would be similar to the effects of a general increase in wage rates. This problem was discussed in Chapter IV above.

structure of the economy. A discussion of the economic effects of wage guarantees is not complete, however, without consideration of the probable effects of the widespread application of such guarantees on the stability of the general level of economic activity and employment.

If, as some advocates of these guarantees have claimed, their application would reduce substantially the severity of cyclical fluctuations, this would clearly be a particularly strong point in their favour. Cyclical fluctuations are a major cause of unemployment, and there is little that the individual firm or industry can do either to reduce their severity or to escape their effects. Any contribution which wage guarantees could make to the elimination of such fluctuations would reduce correspondingly the need to rely on other elements in a full employment policy and would be reflected in higher output and higher standards of living. Any reduction of cyclical fluctuations achieved in this way would in turn greatly reduce the cost of wage guarantees.

As is now well understood, the central problem in maintaining high levels of employment in a steadily expanding economy, and thus avoiding cyclical unemployment, is how to maintain an adequate total demand for goods and services. The extent to which wage guarantees will reduce cyclical unemployment will depend on the extent to which they will contribute to the maintenance of total demand.

The main elements in the total demand for the national product are consumers' expenditure, investment expenditure, Government expenditure and foreign demand for the exports of the economy. It seems clear that even the widespread adoption of wage guarantees could have little effect on Government expenditure or on foreign demand for exports. It is reasonable to suppose, however, that it would have some stabilising effect on the level of consumers' expenditure and investment expenditure. The question is how great this effect would be. If total wage payments at any given level of wage rates are stabilised through the widespread operation of wage guarantees [1], how far will this policy stabilise consumers' expenditure

[1] The discussion of the next few pages assumes that it is actually possible to stabilise wages (*i.e.*, total wage payments at a given level of wage rates) by the operation of wage guarantees. This assumption ignores, for the moment, the difficulties of guaranteeing wages in certain capital goods industries. The effect of such difficulties on the possible stabilisation of wages is examined below.

TABLE XXVI. CONSUMERS' EXPENDITURE AS A PERCENTAGE OF NATIONAL INCOME, AND SALARIES AND WAGES AS A PERCENTAGE OF CONSUMERS' EXPENDITURE, IN AUSTRALIA, 1938-1939 TO 1945-1946, CANADA AND THE UNITED KINGDOM, 1938-1946 AND THE UNITED STATES, 1929-1946

	Consumers' expenditure as a percentage of national income				Salaries and wages as a percentage of consumers' expenditure			
Year	Australia	Canada	United Kingdom	United States	Australia	Canada	United Kingdom	United States
1929	—	—	—	76	—	—	—	63
1930	—	—	—	78	—	—	—	64
1931	—	—	—	80	—	—	—	61
1932	—	—	—	84	—	—	—	62
1933	—	—	—	83	—	—	—	62
1934	—	—	—	78	—	—	—	64
1935	—	—	—	78	—	—	—	—
1936	—	—	—	74	—	—	—	63
1937	—	—	—	74	—	—	—	68
1938	71	72	80	76	65	66	67	66
1939	67	69	77	75	65	67	66	67
1940	65	65	68	72	66	66	72	69
1941	60	60	60	66	71	69	77	73
1942	52	55	58	57	78	77	78	83
1943	50	53	55	53	81	81	81	90
1944	51	53	57	53	77	79	79	87
1945	60	60	61	58	71	71	72	82
1946	—	67	71	70	—	69	71	71

Source: The percentages for each country were calculated from data given in the following official publications:

Australia: *National Income Estimates, 1938-39 to 1945-46* (Canberra, Commonwealth Government Printer, 1946), pp. 4-5.

Canada: DOMINION BUREAU OF STATISTICS: *National Accounts, Income and Expenditure, 1938-46* (Ottawa, 1947), pp. 2-3.

United Kingdom: *National Income and Expenditure of the United Kingdom, 1938-46*, Cmd. 7099 (London, H.M. Stationery Office, 1947), pp. 18-19.

United States: UNITED STATES DEPARTMENT OF COMMERCE, BUREAU OF FOREIGN AND DOMESTIC COMMERCE, *National Income and Product Statistics of the United States, 1929-46*, Supplement to *Survey of Current Business*, July 1947, p. 19.

Notes: 1. The percentages given in the first part of the table for Australia, Canada and the United States are based on gross national product data, while those for the United Kingdom are based on net national product data. The percentages for the United Kingdom would be a few per cent. lower than those given in the table, if such percentages were based on gross national product data. All the percentages would then be comparable horizontally.

2. The percentages given in the second part of the table for Australia, the United Kingdom and the United States were calculated from data on salaries and wages only, while such percentages for Canada were calculated from data which included supplementary labour income as well as salaries and wages. The percentages for Canada, are, therefore, slightly greater than they would be if they were calculated from data of salaries and wages only. Cf. J. B. D. DERKSEN: *The Comparability of National Income Statistics*, United Nations Economic and Social Council Document E/CN.3/WSC/5 (Lake Success, New York, 28 August 1947).

or investment expenditure? Further, if either consumers' expenditure or investment expenditure is stabilised, will this help to stabilise the other type of expenditure? Will there be other secondary effects? These are some of the questions

which must be answered in testing the validity of the proposition that it is possible to maintain total demand by stabilising wages through the widespread operation of wage guarantees.

Effects of Stabilisation of Wages upon Consumers' Expenditure

The table above shows the percentages which consumers' expenditure formed of national income and the percentages which salaries and wages formed of consumers' expenditure in four countries in certain years.

Two important deductions can be made from the data presented in the above table. First, in the case of the countries studied, expenditure for consumers' goods and services accounts in normal years for about three-fourths of the total demand for the products of industry in a well-developed economy. Such expenditure would form a higher proportion of total demand in less well-developed economies. Indeed, in a primitive economy it would account for practically the whole of total demand. Second, irrespective of the size of consumers' expenditure in any year, salaries and wages form normally an almost constant proportion of between three-fifths and two-thirds of such expenditure in the case of the four countries for which data is given in the above table.[1] It would appear, therefore, that if

[1] Not all salaries and wages are spent on consumers' goods and services. Normally, salaried employees and wage-earners save a small proportion of their salaries and wages, but during a depression dis-saving occurs. On the other hand, the proportion saved increases considerably in a year of high prosperity, or during a war, when the gap between consumers' purchasing power and the quantity of consumers' goods and services available widens as the war continues. Again, similar changes in taxation take place for various reasons and further reduce in varying degrees the proportion of salaries and wages spent on consumers' goods and services. For example, in the United States the proportion that personal savings and taxation formed of personal income from all sources (profits, rents, dividends, interest, salaries and wages) was 7.5 per cent. in 1929, 0.7 per cent. in 1933, 9.3 per cent. in 1937, 5.5 per cent. in 1938, 33 per cent. in 1944 and 18.1 per cent. in 1946. The percentages of salaries and wages which salaried employees and wage-earners save and pay in taxes will be less than the percentages of all personal income which are saved or taxed. If allowance is made for this fact, the percentage of salaries and wages which is saved or taxed over a period of years would probably average about 6-7 per cent. in the case of the United States. According to the table above, in the late 1930's salaries and wages accounted for about two-thirds of consumers' expenditure in the four countries for which data are given in the table. However, this is not the true proportion, since allowance must be made for the percentage of salaries and wages which is saved or taxed and which has just been estimated to be about 6-7 per cent. If this estimate is correct, therefore, salaries and wages would account for somewhat less than two-thirds, but probably not less than three-fifths, of all consumers' expenditure in well-developed countries in normal years, even after allowance is made for the generally higher taxation of the post-war years.

salaries and wages could be stabilised by the widespread adoption of wage guarantees, expenditure on consumers' goods and services would be largely stabilised also. This conclusion is however subject to certain qualifications.

In the first place, it must be remembered that salaries and wages do not account for all expenditure on consumers' goods and services. From about one-third to two-fifths of such expenditure is met out of profits, dividends, rent and interest. The stabilisation of salaries and wages alone, therefore, could not entirely stabilise expenditure on consumers' goods and services. Further, income from profits, dividends and rent tends to be more unstable than income from wages. If, which is by no means certain, the widespread operation of wage guarantees brought about a redistribution of incomes in favour of wage-earners, such a redistribution would tend to increase the stability of total expenditure on consumers' goods and services, as wage-earners commonly spend a greater proportion of their earnings on goods and services than do other income groups. On the other hand, if the widespread operation of wage guarantees had the effect of increasing profits, etc., at the expense of the income of wage-earners, expenditure on consumers' goods and services would become more unstable. However, some writers consider that the stabilisation of wages through the operation of wage guarantees would in time stabilise profits, dividends and rents also, because of the secondary effects which the stabilisation of wages would have on the economy as a whole.

Secondly, even if the total expenditure on consumers' goods and services remained constant over a period of years, it would not necessarily follow that the demand for the output of each of the consumers' goods industries would remain constant also, because shifts in the demand for different commodities are continually taking place in a dynamic economy.

Thirdly, it is more difficult to stabilise the demand for some types of consumers' goods than others.

The demand for durable goods fluctuates much more widely than the demand for non-durable goods. From 1929 to 1933, for example, personal consumption expenditures in the United States for durable consumers' goods fell by more than 60 per cent., while those for non-durable fell only 40 per cent., and from 1933 to 1941 expenditures for durables increased nearly three times, while those for non-durables were not quite doubled.[1]

[1] UNITED STATES DEPARTMENT OF COMMERCE, BUREAU OF FOREIGN AND DOMESTIC COMMERCE : *op. cit.*, p. 19.

In the case of durable goods, a much larger proportion of total demand than in the case of non-durable goods comes from numbers of higher income groups, and stabilisation of wages will not affect directly this sector of demand. Such stabilisation would, it is true, have some stabilising effect on wage-earners' demand for durables, since it would make wage-earners more willing to enter into long-term commitments for the purchase of such goods as furniture, radios, refrigerators or automobiles ; and to the extent that their incomes were revised as well as stabilised there would be a further addition in the total volume of stable demand for such goods. On the whole, however, it is to be expected that, even with a considerable stabilisation of workers' incomes as a result of widespread adoption of wage guarantees, a fair amount of instability in the demand for durable consumers' goods would remain.

Effects of Stabilisation of Wages upon Investment Expenditure

It was shown above that consumers' expenditure accounted for about three-fourths of the total demand for the national product. Investment expenditure comprises a considerable part of the remainder. It is, therefore, highly desirable that such expenditure should also be stabilised as far as possible. To what extent can the stabilisation of wages through the widespread operation of wage guarantees contribute to the stabilisation of investment expenditure ?

Some writers have suggested that the stabilisation of consumers' expenditure would cause investment expenditure to be stabilised also. The stabilisation of the consumers' goods industries, it is argued, would tend to stabilise industries producing plant and machinery, which in turn would tend to stabilise basic industries such as the steel industry. In particular, it is considered that the cumulative secondary effects of stabilisation in the durable consumers' goods industries would have a highly favourable effect on the stability of producers' goods industries, even though expenditure on consumers' durable goods is only a small part of total consumers' expenditure.[1]

[1] In the United States, from 1929 to 1941, expenditure on consumers' durable goods averaged about 10 per cent. of total consumers' expenditure. The importance of industries producing such goods increases, however, as the percentage of total consumers' expenditure going into durable goods and the country's standard of living rise.

While there is much truth in this argument, it is subject to definite limitations. Stabilisation of wages can affect the level of investment expenditure only indirectly through its effect on the level of consumers' expenditure. This is because practically all wages are spent on consumers' goods and services. The level of investment expenditure depends, for the most part, on decisions of business men in the case of private industry, and on the decisions of Governments in the case of publicly owned industry. Business men and Governments are influenced by many factors [1] in deciding whether or not to invest. Consequently, even if stability in consumers' goods industries were achieved by the widespread operation of wage guarantees [2], it would not necessarily follow that such stabilisation would result in a stabilisation of investment expenditure as well. All that can be said is that some progress would be made towards the stabilisation of investment expenditure. There is reason to expect that residential construction and replacement investment in producers' durable equipment would become much more stable. Additional investment in producers' durable equipment and on new industrial construction would, however, be less affected, although here too some stabilising influence could in time be expected.

Other Aspects of the Problem of Maintenance of Total Demand

In recent years, expenditure by local and national Governments on goods and services (excluding war expenditure) has provided an increasingly significant part of the total demand for the national product. Foreign private and Government investment is an important factor also in some countries. Wage guarantees could have little influence on these components of total investment demand.

Further, in many countries foreign trade is of considerable importance, and the international trade cycle has a great effect on production and employment in many industries. Wage guarantees would have no influence on foreign demand for the

[1] Cf. J. M. Keynes : *The General Theory of Employment, Interest and Money* (London, 1942), Book IV, particularly pp. 135-137 and 248-249 ; *Guaranteed Wages : op. cit.*, pp. 148 and 434-436.

[2] It was shown above that such stability could not be entirely achieved.

products of the country operating such guarantees. If all countries were to adopt wage guarantees the situation would of course be different, and it might be argued that the amplitude of the international trade cycle would be considerably reduced.

Up to this point the discussion has proceeded on the assumption that it is possible by means of wage guarantees to stabilise the scheme of wage payments at a given level of wage rates. This assumption must however be modified for two main reasons.

First, unless all employers were required by law to adopt full-time wage guarantees, it is hardly to be expected that such guarantees would be applied throughout all industry. To the extent to which they are not universally adopted, the stabilisation of wage payments will be less than complete.

Secondly, as has been shown in Chapter X and Appendix I, the costs of operating full-time wage guarantees in the capital goods industries are likely to be so high in years of even moderate unemployment that some limitation of the extent of the guarantee would have to be imposed to protect the financial stability of guaranteeing firms. Any such limitation would, of course, make the wage guarantee just so much less effective in stabilising wage payments. Anything short of full stabilisation of wage payments would mean a corresponding instability in all the various types of consumers' goods industries, and particularly in the consumers' durable goods industries. This in turn would mean instability in the producers' goods industries. The greater this instability the more costly and difficult it would be to operate wage guarantees in any industry.

This reasoning will be particularly applicable if the wage guarantees are financed by the pay-as-you-go system.[1] If, however, the reserve system of financing wage guarantees were used, and reserves were built up in good years when the costs of operating such guarantees in all industries were low, it should be possible to pay benefits for longer periods in bad years and thus to achieve an appreciably greater degree of wage stabilisation. In no case, however, is it to be expected that complete stabilisation of the scheme of wage payments could be achieved by introducing wage guarantees.

[1] The costs of wage guarantees may be met as they are incurred (pay-as-you-go system) or special financial reserves may be built up in good years, when the costs of wage guarantees are low, in order to cover the costs in bad years (reserve system).

Conclusions as to Effects of Wage Guarantees on the Business Cycle

The widespread adoption of wage guarantees in any country, by introducing greater stability into the total scheme of wage payments, would do much to stabilise consumers' expenditure ; but complete stabilisation in all branches of consumers' goods industries is not to be expected. The stabilisation of wages would have less effect on investment expenditure. It would have presumably no effect at all on the amount of foreign trade, foreign investment or Government expenditure, which account for a large share of total demand in many countries.

Wage guarantees, therefore, though capable of making some contribution to the maintenance of total demand for the national product, cannot be expected to stabilise completely that demand. They may lessen the severity of cyclical fluctuations in production and employment, but they will not eliminate such fluctuations.[1]

Wage Guarantees and Seasonal Fluctuations

Seasonal fluctuations in production and employment in particular undertakings, unlike cyclical fluctuations in the economy as a whole, are to some extent within the control of the undertakings concerned. As was noted in the preceding chapter, a variety of techniques have been developed for the reduction of seasonal and other short-term fluctuations and the regularisation of production and employment throughout the year, and in a number of cases these techniques have been applied with considerable success.

By giving the individual employer an additional financial incentive to apply such techniques, a guaranteed wage plan may provide a useful stimulus to the elimination or reduction of short-term fluctuations in employment, and thus contribute both to workers' income security and to the maintenance of high output, and to the extent that seasonal unemployment persists despite this stimulus, it should not, in the majority of cases, prove

[1] Cf. the following conclusion reached by Professors Alvin H. Hansen and Paul A. Samuelson : " From a dispassionate appraisal of the efficacy of guaranteed wages, the device would appear to be, by itself alone, a weak reed upon which to rely in an attack on such widespread unemployment as our economy has encountered in recent years ". (*Guaranteed Wages, op. cit.*, Appendix F, Economic Analysis of Guaranteed Wages, p. 417.)

beyond the carrying power of a well-designed wage guarantee plan. Indeed, the provision of a greater measure of income security for workers subject to seasonal and other short-term fluctuations in employment will normally be the main purpose of such a plan.

Dismissal Compensation Schemes

In many respects, the economic effects of dismissal compensation plans are likely to be similar to those of wage guarantees, but as both the amounts of benefit provided and the costs involved are usually less, the effects also will be less marked.

The employer who undertakes to provide dismissal compensation can expect to gain indirectly from the increased efficiency of workers whose security and morale are enhanced by the knowledge that they will not be left entirely without resources even if their employment is terminated. If the cost of dismissal compensation is charged to the department of the firm concerned, and the head of the department is thus given an incentive to stabilise employment, the benefits resulting from greater security are likely to be increased.[1]

In addition, the existence of provision for dismissal compensation may increase the willingness of workers to accept labour-saving technological improvements, with advantage to the firm in lower costs, to the workers in higher productivity and resulting higher wages, and to the consumer in lower prices. While dismissal compensation can scarcely be expected to cover the full losses experienced by displaced workers, it can at least ensure that they are not required to bear the whole cost of changes from which other members of the community benefit.

Dismissal compensation is thus likely to be of particular value in two classes of industries : first, those in which technological change involves reductions in the labour force, particularly if the workers laid off are in the higher age groups and are consequently likely to have special difficulty in finding new jobs ; and secondly, those industries in which, because of extreme fluctuations beyond their control in the demand for their product, the broader goal of stable employment and earnings can be achieved only for a fraction of the workers engaged.

[1] Cf. Everett D. HAWKINS : *Dismissal Compensation* (Princeton, 1940), pp. 22-35.

Wage Guarantees and Unemployment Insurance

The various types of guaranteed wage plans are regarded by some writers as being in substance unemployment insurance schemes financed solely by employers. It is suggested, however, that to expect individual undertakings to protect their workers against the consequences of fluctuations in employment is neither just nor prudent. The individual employer has no control over some of the main causes of these fluctuations —in particular, over cyclical fluctuations in economic activity or over the supply of raw materials or semi-finished parts on which his own operations may depend—and to saddle him with the cost of paying wages to workers whom he could not employ might be to put him out of business. " The workers," it is pointed out, " would gain no benefit from becoming the creditors of their bankrupt employers." [1] To require employers to guarantee wages would, it is suggested, be particularly inappropriate where compulsory unemployment insurance exists and benefits are consequently available for workers whose earnings cease [2]; alternatively, if wage guarantees are introduced in such circumstances, at least part of the cost of financing them should be borne by the unemployment insurance scheme. In support of the latter suggestion it is pointed out that, to the extent that employers are led by the introduction of wage guarantees to reduce the instability of their operations, the volume of unemployment and the cost of unemployment insurance will fall; and it would be reasonable to apply a part of this saving to cover the cost of the wage guarantees. Even if the total disbursements involved increased, the community as a whole, it is suggested, would gain, for men kept at work because of a wage guarantee will be producing, instead of merely consuming in idleness.

The question of where the costs of wage guarantees or unemployment insurance will ultimately fall, and in what proportions, is no doubt a good deal more complicated than argu-

[1] Cf. Appendix IV.

[2] Fourteen countries at present have compulsory unemployment insurance schemes (see International Labour Organisation, *First Report of the International Labour Organisation to the United Nations*, Vol. I (Geneva, I.L.O., 1947), p. 39). A few other countries, including Czechoslovakia, Denmark, the Netherlands and Sweden, operate voluntary unemployment insurance schemes, while others, notably France, have unemployment assistance schemes only.

ments of this character would appear to imply. As has already been noted, the costs of wage guarantees financed by the employer may in fact be passed on, wholly or in part, in the form of higher prices or of lower wages; and, similarly, the final incidence of the costs of unemployment insurance may be very different from the immediate source of the contributions. Careful analysis of the circumstances of any particular case will be required before any firm conclusions can be reached.

Whatever the proportions in which costs may be shared, however, there is bound to be a close relationship between the eligibility and benefit provisions of a wage guarantee plan and the corresponding features of any more general system of unemployment provision that may be in operation. For convenience of reference the relevant provisions of a number of existing unemployment insurance schemes have been summarised in Appendix II. Under these provisions a worker who suffers unemployment and becomes eligible for the unemployment benefit receives an amount less than the equivalent of full-time earnings, the difference being due to limitations on the rate and duration of unemployment benefit and to the waiting or qualifying period during which an unemployed worker must wait after becoming unemployed before he becomes eligible for benefit. The amount of the benefit varies in different countries. In some cases, as in Australia and New Zealand, the benefit is a fixed amount, irrespective of previous earnings, and is payable as long as the beneficiary continues to meet the conditions for the initial receipt of the benefit. In other countries, such as Canada and the United States, the benefit is not a fixed amount but varies according to contributions to the unemployment insurance fund or to previous earnings, and is payable only for a limited period. Further, the length of the waiting period varies from country to country. In most countries it is one week. In some, however, a longer waiting period is set—for example, two weeks in certain States in the United States. In Maryland, in the United States, on the other hand, no waiting period is required, while in Belgium the benefit is payable from the first day that the unemployed person is certified unemployed by his employer, and in the United Kingdom after three working days of unemployment.

In the United States Federal Social Security Act of 1935 special provision is made for reducing the unemployment taxation payable by employers who guarantee at least thirty

hours of work for each of forty weeks during a year.[1] To qualify for the tax reduction, the balance of the employer's guaranteed employment account, which is maintained as a separate account in a State unemployment fund, must amount to not less than 2.5 per cent. of that part of the payroll or payrolls for the three years preceding the computation date on which contributions to the account were based. In addition, certain other requirements must be met. The Act also permits the States to reduce the unemployment compensation contribution rates paid by employers with acceptable guaranteed employment plans, but under conditions which offer them no advantage over employers without such plans, and indeed place them at a disadvantage. Seven States adopted provisions in conformity with this part of the Federal Act, but all proved dead letters and all but one have been repealed. No rate reduction has ever been authorised for any employer under the guaranteed employment provision of the Social Security Act, and in at least two cases the adoption of this Act led to the discontinuance of guaranteed wage plans. In one of these the employer, and in the other the workers, felt that the unemployment compensation provided under the Social Security Act rendered a wage guarantee unnecessary.[2]

Where a comprehensive system of compulsory unemployment insurance is in operation, there is evidently little, if any, advantage in establishing wage guarantees which do no more than take the place of the benefits provided by such insurance ; there may indeed be a positive disadvantage, since a guaranteed wage scheme may reduce the mobility of labour by tying work-

[1] An employer may also qualify for the reduction by guaranteeing a smaller number of weekly hours for a longer period (one hour weekly may be deducted for each week added to the guarantee period).

[2] *Guaranteed Wages, op. cit.*, pp. 52-54 ; FEDERAL SECURITY AGENCY, SOCIAL SECURITY BOARD : *Compilation of the Social Security Laws* (Washington, D.C., 1944), pp. 61-65 ; and AMERICAN MANAGEMENT ASSOCIATION : *Annual Wages and Employment Stabilization Techniques*, Research Report No. 8 (New York, 1945), p. 53. Under an earlier Wisconsin law of 1932 (the first unemployment compensation law adopted in the United States) unemployment insurance contributions were related to wage guarantees ; employers who guaranteed thirty-six hours of work for forty-two weeks in a year, representing 60 per cent. of full time, were exempt from paying such contributions. In 1935, the guarantee requirement was changed to two-thirds of the regular weekly hours, while one hour weekly was permitted to be deducted for each week per year added. Some 96 employers established guarantees under this clause. When the Wisconsin law was amended further in September 1935 to bring it into conformity with the Federal Social Security Act of 1935, these employers were no longer exempted from paying unemployment insurance contributions. As a result, they abandoned their guaranteed wage plans (*Guaranteed Wages, op. cit.*, pp. 51-54).

ers to a particular employer. This need not mean, however, that where unemployment insurance exists there is no scope for wage guarantees. Apart from the inducement such guarantees may give to employers to stabilise their operations, the benefits they provide may be so designed as to supplement the insurance benefits. In order to do so they must take fully into account the specific provisions of the unemployment insurance schemes, including in particular the waiting period and the rates and duration of benefits.[1]. They will also need to take account of the methods of financing the more general scheme, and of any provisions which may exist for "experience rating" or reductions in employer contributions in recognition of stable employment or of wage guarantees.

The problem, in short, is one of adjusting wage guarantees to more general forms of unemployment provision, and *vice versa,* in such a way as to combine their possible contributions to the security of workers' incomes, while preserving or encouraging adequate mobility of labour. It is a problem which deserves more thorough examination than has been possible in the present report.

Conclusions of the United States Guaranteed Wage Study

The general conclusions suggested by the analysis of this and the two preceding chapters are substantially in agreement with those reached in the recent United States official report, *Guaranteed Wages.* For this reason, and because of the comprehensive and authoritative character of this report, it is of interest to quote the following extracts from the principal findings of this report.

[1] As an example of a guaranteed wage plan which has been designed to fit in with an existing unemployment insurance scheme, reference may be made to a plan recently introduced by a truck body building company in the midwest of the United States. Under this scheme " any worker accepted as a regular employee is given a guaranteed wage of $25 a week for one year. If an employee is laid off temporarily, he is required to apply for unemployment compensation. The company will pay the difference between the State benefits and $25 a week. If an employee is unable to work and does not receive compensation, the company pays the full amount of $25 a week for a year. Benefits start with the seventh working day off. If disabled, the employee must submit a report from a physician whom the company approves. Benefits are not paid for absences due to war, flood, fire, strike or other emergency over which the company has no control, but 'the company's inability to provide work shall not be a reason for not paying the $25 per week benefit.' The total personnel is approximately 200". Cf. *The Conference Board Management Record,* October 1947, p. 311.

Costs of Involuntary Idleness.

In the 12-year period following 1929, involuntary idleness cost the American people $275,000,000,000 of real income. That loss, if it had been productively used, would have been sufficient to build all the railroads in the country, to have substantially rebuilt the cities, and to have permitted the replacement of all obsolete and obsolescent equipment in the entire nation. The principal loser, but by no means the only one, was the American worker. Total unemployment, and the partial loss of incomes through reduced hours of work which affected millions of workers, also threatened the security of the other millions. The tragedy, suffering, and frustration which characterized the 12 years produced a deep-rooted demand for security—of which the guaranteed wage is becoming one of the most important expressions . . .

Unemployment Insurance.

Since the wages lost by individual workers through unemployment are compensated only in part by unemployment insurance, a wide field is left open to the development of guaranteed wage plans by industry or by industry and labor jointly. The very existence of unemployment insurance, moreover, makes possible the development of wage guarantees to a degree which would not otherwise be practicable. In a substantial sense, the problem of guaranteeing wages is a problem of supplementing unemployment insurance . . .

Experience with Guaranteed Wage Plans.

In general the experience with guaranteed wage plans has been highly successful in many establishments. They have proved to be flexible instruments, adaptable to a large variety of circumstances and useful for a multiplicity of purposes. They are to be found in a variety of industries and are by no means confined to industries whose activities directly reflect consumer demand. The number of plans is greater in such industries, however, than in industries which are concerned primarily with the capital goods and other non-consumer markets.

While the survey of guarantee plans covered more than those which fall into the annual wage category, it is significant that about 90 per cent. of the plans pay full-time wages for the guarantee period, and two-thirds of the currently-operating plans guarantee employment for a full year at the full-time hours of pay. Also, more than one-third of the total plans now in operation cover substantially all the workers of the establishment ; and, of these, two-thirds guarantee employment for a full year, and three-fourths guarantee 48 weeks or more of full employment annually . . . The device of guaranteeing wages is capable both of benefiting employees and producing beneficial results for employers. This is indicated by two facts gleaned from experience : (1) a substantial number of companies managed to operate plans over a long period of time—the average period of operation of plans active in 1946 was almost 10 years ; (2) the causes for discontinuance of plans lay to a far greater degree in special individual circumstances, in legislation and war rather than in depressions, competitive difficulties, and other high cost influences . . .

Cost of Guarantees.

The experience with guaranteed wage plans has not afforded any substantial evidence as to what a plan with specifed provisions might cost over a period of time. An employer who guarantees wages undertakes an obligation to pay the amount guaranteed regardless of whether he has enough work to cover the guarantee. A guarantee is self-defeating if it involves an employer in additional costs to the point where his ability to adjust becomes unduly limited. The probable cost of a guarantee obligation will, therefore, essentially determine whether any guarantee, or how much of a guarantee, is feasible. Moreover, since any forecast is subject to a margin of error, prudence dictates that in setting up a plan, limitations be thrown around the guarantee to insure that costs are kept within the bounds of reason...

Annual Incomes of Workers under Wage Guarantees.

Taking the extreme case among those covered in this study, limiting the employer's liability for time not worked to 10 per cent. of his guaranteed payroll in any year would have given the worker an income under the guarantee in 1938 totalling almost 60 per cent. of full time, including the paid vacation to which the worker would be entitled and unemployment insurance benefits at current levels and durations. In this extreme case, the average worker's income for the 5 years would be approximately 90 per cent. of full time, although there were two bad years in the five. If unemployment insurance benefits were liberalized to the extent practicable, the minimum annual income would approximate three-fourths of full-time earnings, and the 5-year average would exceed 90 per cent.

A combination of the 10 per cent. limit with a 48 instead of a 52-week guarantee would probably not reduce workers' income in a bad year for most establishments, but might slightly cut the average over the 5-year period. Thus, in the case cited, the combination would cut the average 5-year income from 90 to about 87 per cent. of full time. The income proportions cited here are based on a case involving a rarely found degree of unemployment curtailment, even for a year like 1938. In general, the limitations will produce minimum income of about 75 per cent. of full time in the worst year and average income over 90 per cent. taking unemployment insurance at present levels...

An examination of the record makes it clear that limitations of the types advocated here will not destroy the value of the guarantee for the workers. Protection will not be perfect. But adoption of such a plan will mark a significant advance in security for the group affected...

The Guaranteed Wage and Economic Stabilization.

Guaranteed wage plans, if widely adopted and properly coordinated with unemployment insurance, safeguarded against excessive costs and adequately financed, can have a healthy influence on the economy. The influence of such plans in sustaining income may avert minor cyclical swings. The plans will be helpful in dampening seasonal and other short-term fluctuations in work, and can be administered so as greatly to reduce the amplitude of short-term irregularities in workers' income, thus substantially

reducing short-term fluctuations in purchasing power. Further, by sustaining consumer income, they may contribute to regularizing the demand of consumer goods industries for capital equipment and also set a higher floor under durable consumer goods and residential construction.

But it would be highly dangerous to expect that any single device such as guaranteed wages alone would produce any marked effect in removing the causes of depressions, if relied upon as the chief anticyclical weapon. It is important to have a whole series of measures which aim at maintaining a high level of employment...

The Guaranteed Wage and the Economy.

The guarantee of wages is not a panacea but a tool, and a tool which becomes sharper, not duller, with wide and more intensive use. To mistake the tool for the end product will blunt the tool and spoil the product. And to suppose that any single tool—be it the guaranteed wage, or public works, or any other device—can become a multi-purpose instrument by which all the ills of the economy can be remedied can lead only to confusion and failure. The guaranteed wage, used with care, with full recognition of its limitations, and with eyes open to dangers in exceeding those limitations, can become an integral part of a rounded program for greater security, for harmonious industrial relations, and for a more lasting prosperity.[1]

Special interest attaches also to the conclusions reached by the Advisory Board of the United States Office of War Mobilization and Reconversion on the basis of the *Guaranteed Wage Study*. This Board consists of representatives of Government, management and labour, including the presidents of the United States Chamber of Commerce, the American Federation of Labor and the Congress of Industrial Organizations ; and its conclusions, transmitted to President Truman on 25 February 1947, were unanimous. They are as follows :

1. Adoption of guaranteed wage plans should not be the subject of legislative action, but should be referred to free collective bargaining.

2. Stabilization of employment and its effectuation through wage or employment guarantees, wherever possible, are matters of mutual concern to employers and employees. Each party has the definite responsibility of seeking to stabilize operations within a plant or industry in order to advance the level of general economic security of the nation.

3. Progress toward the achievement of stability through the institution of guaranteed wages is affected by existing legislation in the fields of social insurance, minimum wages, fiscal and tax policies, among others. Consequently, it is essential to review and evalute all such programs to ascertain their inter-relationships,

[1] Cf. *Guaranteed Wages, op. cit.*, pp. 10-18. (Most of the side headings have been added.)

with a view to co-ordinating all to the end of attaining stable employment conditions.

4. The guaranteed wage is a significant, but not an all sufficient tool, which may be employed in building national economic security and stability.

5. There is urgent need for achieving nationwide economic stability so essential to our national welfare and to the establishment of world security and peace. Since the guaranteed wage is one of the instruments for the elimination of industrial and employment fluctuations, continuing study to advance the frontiers of knowledge in this area should be undertaken. In addition, government agencies should provide data and information to those interested in wage guarantees.

Since the Report raised " a number of questions of national and industrial policy ", the Board recommended " that the Government give continuing co-ordinated attention to these policy questions and other phases of guaranteed wage plans ". It recommended further " that responsibility for assuming the leadership in integrating Government efforts be assigned to the Council of Economic Advisers with the understanding that they will consult with and call upon other agencies concerned, as provided in the Council's basic law ".[1]

Summary

The main point brought out in the present and two preceding chapters may be summarised as follows :

1. Workers commonly experience fluctuations in employment and income because of the effects of variations in economic activity on production in the plants in which they are employed.

2. The extent of such fluctuations and the amount of unemployment experience by workers varies from country to country, from industry to industry and from plant to plant.

3. The volume of unemployment also varies throughout a year, owing to seasonal factors, to temporary shortages of raw materials, and to other causes.

4. Most workers in nearly all countries are engaged on an hourly or daily basis. In the absence of any provision to the contrary, such workers may be laid off at a day's notice or less and consequently are never sure that they will be able to earn a full week's pay.

[1] Press Release 25 Feb. 1947.

5. Most workers' annual earnings are less every year than the sum they would have received for full-time work. In some years such earnings are considerably below this sum.

6. The losses and irregularity of income suffered by workers have serious repercussions upon their welfare and upon that of the rest of the community.

7. The maintenance of workers' incomes at a high level would do much to maintain total employment and economic stability.

8. A guarantee of an annual, monthly, weekly or even daily wage is one of the methods which have been proposed in recent years as a contribution to this end.

9. There are many different types of guaranteed wage plans, differing mainly in coverage, eligibility requirements, and the proportion of wages or employment guaranteed ; but in each case the aim is to provide a guarantee either of employment, or of income, or of both.

10. The extent of the guarantee may be limited by imposing either a limitation of the period of the guarantee, or a limitation of total financial liability under the guarantee.

11. Most guaranteed wage plans contain safeguard provisions whereby the plans may be suspended in certain circumstances.

12. Dismissal or lay-off compensation schemes provide lump sum payments for the worker who loses his job altogether.

13. In recent years an increasing interest in wage guarantees has been displayed by workers, employers and Governments alike.

14. Wage guarantees are to be found in operation in many countries. In most cases they are a recent innovation and are confined to guarantees for limited periods, such as a certain number of hours a week. In the United States they have been in operation in some firms for many years and in some cases provide guarantees for periods as long as a year.

15. Only a small proportion of workers and industries are covered in most countries. In the United Kingdom, however, a considerable proportion of the workers now have a guaranteed weekly wage.

16. Wage guarantees have been introduced in a variety of ways : by employers on their own initiative, as a result of col-

lective bargaining, by legislation, or in virtue of the common law.

17. The amount of the probable cost of a wage guarantee is of the greatest importance in determining the feasibility of such a guarantee in a particular firm or industry.

18. The probable cost of operating wage guarantees in the durable goods industries is greater than in the non-durable goods industries.

19. Limiting the total financial liability under a wage guarantee is more effective in reducing the probable cost of operating a wage guarantee than limiting the period of the guarantee, and such limitations yield a greater reduction in costs in durable than in non-durable goods industries.

20. Limitations of this kind, however, reduce correspondingly the value of the guarantee and may, in certain circumstances, reduce its effectiveness to such a degree that it may cease to provide even a moderate degree of security to the worker.

21. Since labour costs form only a small proportion of total production costs in most industries (the actual proportion varying from industry to industry), the cost of a wage guarantee forms a much smaller proportion of total production costs or value of sales than of labour costs.

22. Some reductions in the gross cost of a wage guarantee in any plant or industry may be expected as a result of its effect in raising productivity, reducing labour turnover and increasing the transferability of workers. Further reductions may result from the stimulus it will give to the employer to regularise production and employment.

23. Even after allowance is made for all possible cost reductions, it seems reasonable to assume that the introduction of a wage guarantee in a particular plant will usually involve some increase in production costs.

24. If policies designed to maintain full employment prove successful in reducing cyclical fluctuations and cyclical unemployment, the cost of wage guarantees will be greatly reduced.

25. Where the provisions of a guaranteed wage plan are fixed by collective agreement, collective bargaining in terms of wage rates tends to be replaced by bargaining in terms of a

combination of the price and quantity of labour to be purchased by the employer.

26. Collective bargaining along these lines, if practised on a wide scale by strongly organised employers and workers, would seem likely to bring about some redistribution of income and a more efficient allocation of resources, through its effects on the total remuneration of the workers concerned, on the profits of employers and on the prices paid by consumers for the products of the industries operating guaranteed wage plans.

27. The extent of the redistribution of income and resources will depend upon a number of factors, such as the relative bargaining strength of employers and workers, the relative importance of the firms operating the wage guarantees, and the nature of the demand for their products.

28. The widespread adoption of wage guarantees, by making the total volume of wage payments more stable, would do much to stabilise one of the main components of total demand, namely, the demand for consumer goods, though it would be less effective in the case of durable than of non-durable goods. It would have less effect on a second main component, investment expenditure, though here too some stabilising influence would be felt. It would have no effect on foreign demand for exports, on investment abroad, or on Government expenditure. Wage guarantees, therefore, could be expected to have only a limited stabilising effect on total demand, and consequently on the general level of economic activity and employment ; they would not by themselves eliminate cyclical fluctuations.

29. Wage guarantees will, however, give employers an added incentive to do all they can to eliminate or reduce seasonal and other short-term fluctuations in production and employment. Apart from providing this incentive, their main function would seem to be to make good at least in part the losses in earnings imposed on workers by such seasonal and other short-term fluctuations in employment as may remain.

30. Since both unemployment insurance schemes and guaranteed wage plans seek to protect workers from loss of income due to variations in economic activity, the question arises of how they might best be used to strengthen and supplement each other in such a way as to promote optimum income security and mobility of labour. This is a question which requires further investigation.

31. Dismissal compensation, by providing some monetary compensation for a worker who is laid off or dismissed, relieves him of some of the burden of technological change and may thereby facilitate the adoption of improved techniques.

32. To quote again the final summing-up of the United States report, *Guaranteed Wages,* " the guaranteed wage, used with care, with full recognition of its limitations, and with eyes open to dangers in exceeding those limitations, can become an integral part of a rounded program for greater security, for harmonious industrial relations, and for a more lasting prosperity ".

* * *

Finally, attention may be directed again to the account of the discussions and conclusions on this subject of the Iron and Steel Committee and the Metal Trades Committee, which is given in the extracts from the reports of these Committees reproduced in Appendices III and IV.

CHAPTER XII

PAST AND POSSIBLE FUTURE ACTION BY THE INTERNATIONAL LABOUR ORGANISATION IN THE FIELD OF WAGES

"The provision of an adequate living wage" and "recognition of the principle of equal remuneration for work of equal value" figure prominently among the objectives of the International Labour Organisation set forth in the Preamble to its Constitution. Moreover in the Declaration of Philadelphia, which is now included as an annex to the Constitution, the International Labour Conference recognises "the solemn obligation of the International Labour Organisation to further among the nations of the world programmes which will achieve . . . the raising of standards of living; . . . policies in regard to wages and earnings, hours and other conditions of work calculated to ensure a just share of the fruits of progress to all, and a minimum living wage to all employed and in need of such protection".

There is no single group of problems which is of greater interest to workers throughout the world than those concerned with wages policy. This interest has been reflected in the consideration of various aspects of these problems at different times by the Conference, by regional conferences, by industrial committees and by other bodies of the Organisation; and the opportunity is now afforded to explore in a preliminary way the whole range of problems which require to be dealt with in this field, and to lay down the main lines of a future programme of action for the Organisation.

In the following pages a summary account is given of the principal activities of the Organisation in this field up to the present time. The concluding section of the chapter refers briefly to some of the points which the Conference may wish to consider in planning a programme for the future.

Action already Taken

Principles and Methods of Wage Regulation

Recognising that a substantial improvement in living standards would result from the establishment of a minimum wage for workers in industries and countries in which provision for such a wage did not exist, the Organisation has devoted special attention to principles and methods of minimum wage regulation. As a result three Conventions and a number of Recommendations and Resolutions dealing with this subject have been adopted.

The Minimum Wage-Fixing Machinery Convention, 1928, was adopted by the 11th Session of the International Labour Conference, came into force on 14 June 1930, and has been ratified by 24 countries.[1] Each Member of the International Labour Organisation which ratifies this Convention undertakes "to create or maintain machinery whereby minimum rates of wages can be fixed for workers employed in certain of the trades or parts of trades (and in particular in home working trades) in which no arrangements exist for the effective regulation of wages by collective agreement or otherwise and wages are exceptionnally low". The term "trades" includes manufacture and commerce. The nature and form of the minimum wage-fixing machinery may be decided by the Member concerned, provided that employers and workers are consulted before the machinery is applied to a particular trade and are associated on equal terms in its operation, and provided that the minimum rates paid are binding. Steps must be taken to ensure that employers and workers are informed of the minimum rates of wages in force, that wages are not paid at less than these rates, and that any worker covered who has been paid wages at less than these rates shall be entitled to recover the amount underpaid. Recommendation (No. 30) concerning the application of minimum wage-fixing machinery, which was adopted by the International Labour Conference at the same time as this Convention, lays down certain principles

[1] For the full text of the Convention and the list of countries which have ratified it see Appendix V. Detailed information on the measures which have been taken by the ratifying countries to give effect to the provisions of the Convention is given in the annual volumes of *Reports on the Application of Conventions (Article 22 of the Constitution)*, published by the International Labour Office for submission to the International Labour Conference.

and rules for the application of minimum wage-fixing machinery.[1] Again, at its 27th Session, in 1945, the Conference recommended " the establishment of appropriate minimum wage standards, adequate for satisfying reasonable human needs ".[2]

The Wages, Hours of Work and Manning (Sea) Convention, 1946, which was adopted by the 28th (Maritime) Session of the Conference, prescribes the actual amount of an international minimum wage for seamen. Article 5 provides that " the basic pay or wages for a calendar month of service of an able seaman employed in a vessel to which this Convention applies shall not be less than sixteen pounds in currency of the United Kingdom of Great Britain and Northern Ireland or sixty-four dollars in currency of the United States of America or the equivalent thereof in other currency ". The remainder of this Article makes provision for the adjustment of the amount of this minimum wage " in the event of a change in the par value of the pound or the dollar being notified to the International Monetary Fund ". Articles 6 and 7 of the Convention contain provisions for the adjustment of the amount of the minimum basic wage as defined in Article 5 in cases where more ratings are employed in certain circumstances than would otherwise be employed and where meals are not provided free of charge. Article 8 sets out the methods by which the amount of the minimum wage in currencies other than those of the United Kingdom and the United States is to be determined. Article 9 provides for the necessary measures to ensure that remuneration is paid at not less than the rate required by the Convention and that any person who has been paid at a lower rate shall be able to recover the amount underpaid.[3]

The Conference has also given attention to the special problems of wage policy in non-metropolitan territories. The principles and methods which should be observed in fixing minimum

[1] The text of this Recommendation is reproduced in Appendix VI.

[2] Resolution concerning the maintenance of full employment during the period of industrial rehabilitation and reconversion. This and a number of other texts adopted by the Conference during the years 1944-1947, in addition to being published in the *Record of Proceedings* of the Conference and in the I.L.O. *Official Bulletin*, are available in convenient form in the *First Annual Report of the International Labour Organisation to the United Nations* (Geneva, I.L.O., 1947), Vol. II : Appendices. The passage quoted above appears on p. 320.

[3] The text of this Part of the Convention is reproduced below in Appendix VII. For the full text of this Convention see I.L.O.: *Official Bulletin*, 20 September 1946, Vol. XXIX, No. 3, pp. 178-194.

wages in non-metropolitan territories were enunciated in the Recommendation concerning minimum standards of social policy in dependent territories [1], adopted in 1944 by the 26th Session of the Conference, and in the supplementary provisions to this Recommendation [2], adopted in 1945 by the 27th Session of the Conference. These principles and methods were for the most part incorporated in the Social Policy (Non-Metropolitan Territories) Convention, 1947 [3], adopted in 1947 by the 30th Session of the Conference.

Another special group of workers for whom special recommendations on wage policy have been made is that of children and young workers. The 27th Session of the Conference (1945) adopted a Resolution concerning the protection of children and young workers which recommended, *inter alia,* that " all necessary measures should be taken to assure the material well-being of children and young persons by . . . the provision of a living wage for all employed persons sufficient to maintain the family at an adequate standard of living ". The Resolution adds that " provisions with reference to wages paid to young workers should have the objective of assuring that they are paid wages commensurate with the work performed, observing wherever possible the principle of equal pay for comparable jobs ". The Resolution also calls for the payment of fair and reasonable rates to apprentices during training and the application of certain specified principles " where the wage rates for young workers not employed under apprenticeship are customarily fixed separately from those of adults ". [4]

Various regional conferences of the International Labour Organisation have also adopted Resolutions concerning minimum wages and minimum wage-fixing machinery. Thus, the Second Conference of the American States Members of the International Labour Organisation, held in 1939, emphasised the importance of " the establishment of legal minimum rates of wages adequate to enable all classes of workers to maintain a reasonable standard of living " and requested the Governing Body to invite those

[1] Cf. I.L.O.: *Official Bulletin,* 1 June 1944, Vol. XXVI, No. 1, p. 55, Articles 35 and 36.

[2] Cf. *idem,* 15 December 1945, Vol. XXVIII, p. 6, Articles 1 and 2.

[3] Cf. *idem,* 31 July 1947, Vol. XXX, No. 1, pp. 18, 21 and 23, Articles 4, 15 and 18.

[4] For the full text of this Resolution, see *idem,* 15 December 1945 Vol. XXVIII, pp. 31-49.

American States which had not already done so to ratify the Minimum Wage-Fixing Machinery Convention, 1928, and to instruct the International Labour Office "to continue and complete its international survey of the methods and problems of minimum wage-fixing and in doing so to give special attention to the experience and problems of the countries of America".[1]

The Preparatory Asian Regional Conference of the International Labour Organisation, held in October and November 1947, adopted a Resolution concerning wage policy which stated that every effort should be made to improve the wage standards in industries and occupations in Asian countries where they are still low, with a view to achieving a living wage for every worker in these countries. The Resolution stated further that the wages in each industry or occupation where conditions are similar should be standardised in each country or area as far as possible, and that "collective agreements between employers and workers are normally the most satisfactory means for the adjustment of wages, but various reasons ... make it necessary for Governments to take an active part in the fixing and enforcement of fair wages". The Conference accordingly requested "the Governments of Asian countries to assist, by all means in their power, the conclusion of collective agreements wherever feasible, and where no arrangements exist for effective regulation of wages by collective agreements or otherwise, to formulate appropriate legislative and administrative measures to set up statutory wage boards on which workers and employers will be equally represented, with such numbers of independent persons as may be considered desirable, and with power to fix fair wages and standard wage rates, and to provide cost-of-living allowances measured by index numbers built and periodically revised on the basis of family budget enquiries". The Conference further requested the Governing Body "to instruct the Office with the assistance of the Governments concerned to study the working of collective agreements, wage boards and industrial tribunals in Asian countries, and the extent to which they have been successful in securing fair wages for workers, and to suggest,

[1] Second Conference of the American States Members of the International Labour Organisation, Havana, Cuba, 21 November-2 December 1939: *Record of Proceedings* (Montreal, I.L.O., 1941), pp. 262 and 266. The "international survey" referred to in the Resolution was the volume *The Minimum Wage: an International Survey* published by the International Labour Office in 1939, together with a supplementary mimeographed report on the same subject prepared for the Havana Conference.

in the light of international experience, what further steps can and should be taken to secure fair wages for all workers ".[1]

The Regional Meeting for the Near and Middle East, held in November 1947, included in its general Resolution on objectives of labour policy for the countries of the Near and Middle East, a comprehensive section on " remuneration of workers and related matters " which called for the payment on all public works of fair rates of wages not lower than any fixed in collective agreements for comparable work ; the encouragement of minimum wage-fixing by freely negotiated collective agreements; where no adequate arrangements exist for fixing wages in this way, the fixing of minimum wages in consultation with representatives of employers and workers and the enforcement of such wages ; measures to ensure that workers receive the wages to which they are legally entitled ; and the encouragement of thrift and the protection of wage-earners against usury.[2] This Regional Meeting also adopted a Resolution on conditions of life and work of the agricultural worker which stated, in part, that " as regards wage-paid labour, social legislation should seek, as far as practicable, to extend to the agricultural wage-paid worker the protection afforded to the industrial workers. As first steps, machinery should be designed for fixing minimum wages and the relation of wages in cash and in kind as well as methods of valuation of the latter ".[3]

The various industrial and other committees of the International Labour Organisation have adopted several resolutions concerning minimum wages and minimum wage-fixing. As will be noted later in this chapter, the Permanent Agricultural Committee, which gave some consideration to this subject at its first session in 1938[4], has recently requested the Governing Body of the International Labour Office to place the problem of minimum wage regulation in agriculture on the agenda of one of the very early sessions of the International Labour Conference.

[1] Cf. I.L.O. : *Official Bulletin*, 15 Nov. 1947, Vol. XXX, No. 3, p. 179.

[2] Cf. *idem* 1 Dec. 1947, Vol. XXX, No. 4, pp. 223-224.

[3] Cf. *ibid.*, p. 237. In paragraph 13 of this Resolution the Regional Meeting requested the Governing Body of the International Labour Office " to arrange at an early date for a special study of the working conditions of wage-paid labour in agriculture in the countries of the Near and Middle East ".

[4] Cf. I.L.O.: *Social Problems in Agriculture, Record of the Permanent Agricultural Committee of the International Labour Organisation* (Geneva, 1938), p. 139.

Brief mention may be made of certain resolutions adopted by the industrial committees. Thus, the Inland Transport Committee at its first session, in December 1945, recommended that the International Labour Office should undertake "a comparative study of wages of transport workers in the different countries with a view to studying the question of a living minimum wage" for submission to a future session of the Committee.[1] At its second session, in May 1947, this Committee expressed the view that "Governments should set up machinery whereby minimum wage rates ... can be fixed in branches or sections of the inland transport services where there are no arrangements for the effective regulation of such matters by collective agreements or otherwise", and that it was desirable that the employers' and workers' organisations should participate in the determination of such minimum wages rates.[2] The Textiles Committee at its first session, in November 1946, fearing the danger of unfair competition from Germany and Japan, urged that Japanese and German textile workers should be paid a minimum living wage.[3] The Building, Civil Engineering and Public Works Committee at its first session, in November and December 1946, recommended "that wages and hours should be established on the basis of free negotiations between the representatives of the employers' and workers' organisations" and requested the International Labour Office to undertake enquiries as to methods of wage regulation in the construction industries of the various countries.[4] The Coal Mines Committee at its second session, in May 1947, adopted a resolution concerning the determination of a social minimum for mineworkers which stated, in part, that the object of the Committee's earlier resolution concerning the Mineworkers' Charter[5] "would be more readily attained if the sum of the social advantages accorded to mineworkers in each country were arithmetically calculated in relation to a common basis of comparison selected from another essential occupation, with

[1] Cf. International Labour Organisation, Inland Transport Committee: *Report of the First Session* (Geneva, I.L.O., 1947), p. 169.

[2] Cf. *idem*, *Report of the Second Session* (Geneva, I.L.O., 1948), p. 120.

[3] Cf. I.L.O.: *Official Bulletin*, 15 Sept. 1947, Vol. XXX, No. 2, p. 130.

[4] Cf. *ibid.*, p. 137.

[5] Cf. International Labour Organisation, Coal Mines Committee: *Report of the First Session* (Geneva, I.L.O., 1947), pp. 167-172.

a view to determining, after examination, the total social minimum to which mineworkers are entitled". The Committee accordingly requested the Governing Body of the International Labour Office to instruct the Office to prepare the tables necessary for applying the rule laid down above.[1]

The Petroleum Committee at its first session, in 1947, recommended certain principles by which a minimum wage rate should be fixed for workers (other than apprentices) in the petroleum industry.[2]

Other Problems of Wage Policy

In seeking to apply to particular situations the general principles of wage policy set out in the Constitution and quoted at the beginning of this chapter, the International Labour Conference and other bodies of the International Labour Organisation have adopted a number of resolutions dealing with problems other than those referred to in the preceding section.

As was noted in Chapter V above, attention has been given on a number of occasions to the principle of "equal remuneration for work of equal value" and to the problems involved in the application of this principle. The main recommendations made on the subject of equality of remuneration for men and women were listed in Chapter V. A brief reference may be made at this point to two pronouncements which deal with the application of the general principle to other groups. At its 26th Session (1944) the International Labour Conference recommended that "wherever possible disabled workers should receive training in company with able-bodied workers, under the same conditions and with the same pay".[3] The Third Conference of the American States Members of the International Labour Organisation held that "for work of equal value, equal pay should be required, without distinction of race, colour, creed, sex or nationality".[4]

There have been a number of Resolutions concerned with

[1] Cf. I.L.O., Governing Body document G.B. 102/2/14, June 1947, p. 57.

[2] Cf. I.L.O.: *Official Bulletin*, 15 Sept. 1947, Vol. XXX, No. 2, p. 146.

[3] Cf. I.L.O.: *Official Bulletin*, 1 June 1944, Vol. XXVI, No. 1, p. 73 (paragraph 42 (1) of the Employment (Transition from War to Peace) Recommendation, 1944).

[4] Third Conference of the American States Members of the International Labour Organisation, Mexico City, April 1946: *Record of Proceedings* (Montreal, I.L.O., 1946), p. 286.

maintaining or raising the standards of living of the workers. Thus in 1919, the International Labour Conference adopted a Resolution which expressed the hope that " in no case shall the wages of workers be reduced simply by reason of the introduction of the eight-hour day and the 48-hour week ". In 1935 the Conference adopted a similar Resolution which was designed to be complementary to the Forty-Hour Week Convention, 1935, and indicated that the Conference considered that " the application of this principle (of the forty-hour week) should not as a consequence reduce the weekly, monthly, or yearly income of the workers, whichever may be the customary method of reckoning, nor lower their standard of living ".[1]

The Preparatory Asian Regional Conference of the International Labour Organisation, held during October-November 1947, was concerned about the effects which widespread inflation in the Asian countries was having on the standards of living of workers. This Conference adopted a Resolution which stated, in part, that in these circumstances " it is of special and urgent importance to take promptly appropriate and effective measures to accelerate production, prevent hoarding, speculative trading and black-marketing and to bring about a fair relationship between wages and salaries and commodity prices ".[2] Resolutions concerning the problems of wage policy raised by inflation and currency depreciation in certain American countries had been adopted earlier by the Conferences of the American States Members.[3]

Various other Resolutions have been concerned with the general objective of raising the standard of living of the workers. Thus, the 26th Session of the International Labour Conference in 1944 adopted a Resolution concerning economic policies for the attainment of social objectives. In regard to national economic policy the Conference urged, among other things, that " all practicable measures be taken to maintain a high and steady level of employment, to minimise fluctuations in business activity, and to assure a steadily expanding volume of production, more particularly by means of ... measures to provide adequate opportunity for workers to engage in productive

[1] Cf. I.L.O.: *The International Labour Code, 1939* (Montreal, 1941), pp. 559-560.

[2] Cf. I.L.O.: *Official Bulletin*, 15 Nov. 1947, Vol. XXX, No. 3, p. 168.

[3] Cf. *Record of Proceedings* of the first of these conferences (Santiago, 1936), p. 299; of the second (Havana, 1939), p. 266; and of the third (Mexico, 1946), p. 288.

activity and to obtain advancement ; among the measures which warrant careful consideration in this connection are . . . the maintenance of wages at a high level ".[1] The Recommendation concerning minimum standards of social policy in dependent territories, adopted at the same session, included as one of its general principles that " all possible steps shall be taken by appropriate international, regional, national and territorial measures to promote improvements in . . . the remuneration of wage-earners and independent producers ".[2] This part of the Recommendation was subsequently incorporated in the Convention concerning social policy in non-metropolitan territories adopted by the International Labour Conference at its 30th Session in 1947.[3] The Third Conference of the American States Members of the International Labour Organisation (1946) adopted a Resolution concerning the level of wages necessary for the promotion of a nation's economic prosperity. The relevant sections of this Resolution stated : " (1) That, as a matter of basic self-interest the principle of the highest possible real wages, in order to establish, raise and maintain buying power, is recognised and endorsed in the economic interest of both the employer who develops and the wage-earner who produces ; (2) That this principle of high real wages and high buying power, together with the effort to put it into practice, establishes a basis for greater production by reducing labour strife to a minimum." [4]

Resolutions of the industrial committees have made reference to the desirability of paying wages in their industries comparable to the wages being paid in industry in general. Thus, the Coal Mines Committee at its first session, in 1945, adopted a Resolution on the principles for incorporation into a coal mineworkers' charter. One of these principles held that the coal mining industry should pay " wages at rates which will support an income attractive as compared with income in industry generally so as to provide adequate manpower and improve the standards of living ".[5] The Textiles Committee at its first session, in 1946,

[1] Cf. I.L.O. : *Official Bulletin*, 1 June 1944, Vol. XXVI, No. 1, pp. 98-99.

[2] Cf. *ibid.*, pp. 47-48.

[3] Cf. *idem*, 31 July 1947, Vol. XXX, No. 1, p. 18.

[4] Third Conference of the American States Members of the International Labour Organisation, Mexico, April 1946 : *Record of Proceedings*, *op. cit.*, pp. 285-286.

[5] Cf. International Labour Organisation, Coal Mines Committee : *Report of the First Session* (Geneva, I.L.O., 1947), p. 172. A later Resolution of

noted that the textile operatives of certain countries had hitherto been inadequately paid and considered that " the wages paid to workers in the textile industry should not suffer by comparison with those paid to workers in industry in general for work requiring similar skill and effort ".[1]

Some of the industrial committees have requested the Governing Body to instruct the International Labour Office to undertake certain studies in the field of wages. Thus, the Iron and Steel Committee at its first session, in 1946, asked the Governing Body to instruct the Office to investigate the " prevailing conditions in the industry . . . in regard especially to rates of wages ; . . . (and) the introduction of technological changes, and their effect on the worker, specifically in regard to numbers employed, and general principles in regard to variation in wage rates . . .".[2] The Metal Trades Committee at its first session, in 1946, asked that studies be instituted " of the question of the wages of metal trade workers of the (underdeveloped) regions, making necessary comparisons with the wages of other workers in these regions ", and that recommendations be made " for securing for them adequate standards of living, full and steady employment and conditions of economic and social progress and development ".[3] The Textiles Committee at its first session, in 1946, adopted a Resolution requesting the Office to undertake, in collaboration with the international organisations concerned, enquiries into certain questions relating to the textile industries, including " disparities in wages between the various countries engaged in textiles, in conformity with the Declaration of Philadelphia of 10 May 1944, and also the question of real wages having regard to the cost of living in

the Committee suggesting a method of applying this principle is quoted on pp. 287-288 above. The Second Session of the Coal Mines Committee, held from 24 April to 3 May 1947, adopted a Resolution concerning apprenticeship and vocational training in coal mines, paragraph 32 of which stated that " each worker selected to attend the vocational training centres should, during the whole period of attendance, receive the wages for the job previously done at the mine. Apart from the basic wage, he may receive, according to local conditions, a daily transfer allowance—the amount varying with his family responsibilities—to cover the expenditure involved away from home". Cf. I.L.O., Governing Body document G.B. 102/2/14, June 1947, p. 51.

[1] Cf. I.L.O. : *Official Bulletin*, 15 Sept. 1947, Vol. XXX, No. 2, p. 128.

[2] Cf. International Labour Organisation, Iron and Steel Committee : *Report of the First Session* (Geneva, I.L.O., 1947), p. 224.

[3] Cf. International Labour Organisation, Metal Trades Committee : *Report of the First Session* (Geneva, I.L.O., 1947), p. 204.

those countries ; (and) ... collective bargaining and wage-fixing machinery ".[1]

Several of the industrial committees have also given consideration to the subject of guaranteed wages. Thus, the Iron and Steel Committee at its first session, in 1946, asked the International Labour Office to make available " the results of studies (concerning guaranteed wages) now in progress in the United States under the auspices of the Office of War Mobilisation and Reconversion and to conduct similar enquiries into the methods and results of such annual and other wage schemes as may have been introduced in other countries ".[2] At its second session, in 1947, this Committee discussed the question of guaranteed wages further and drew up a memorandum to the Governing Body on the subject. The full text of this memorandum, which the Governing Body decided to transmit to the 31st Session of the International Labour Conference, together with the relevant extracts from the proceedings of the Committee, is given in Appendix III. The Committee also adopted a Resolution concerning dismissal wage and payment for public holidays in the iron and steel industry which invited the Governing Body of the International Labour Office to request the Office to collect information on the application of the dismissal wage and payment for public holidays and their relation to allied subjects in the iron and steel producing countries, and to prepare a report on these subjects for submission to the Committee at its next session.[3] The Metal Trades Committee at its first session, in 1946, suggested that " the International Labour Office conduct an enquiry into the schemes in existence in the different countries for guaranteeing wages to the workers in the metal trades ".[4] At its second session, in 1947, this

[1] Cf. I.L.O. : *Official Bulletin*, 15 Sept. 1947, Vol. XXX, No. 2, p. 126.

[2] Cf. International Labour Organisation, Iron and Steel Committee : *Report of the First Session* (Geneva, I.L.O., 1947), p. 225. For the results of the enquiries asked for in this Resolution see International Labour Organisation, Iron and Steel Committee, Second Session, Stockholm, 1947, Report III : *Minimum Income Security : Annual and other Wage Systems Designed to Provide Assured Earnings* (Geneva, I.L.O., 1947).

[3] Cf. I.L.O., Governing Body document G.B. 103/3/11, December 1947, p. XXII.

[4] Cf. International Labour Organisation, Metal Trades Committee : *Report of the First Session* (Geneva, I.L.O., 1947), p. 205. For the results of the enquiries asked for in this Resolution see International Labour Organisation, Metal Trades Committee, Second Session, Stockholm, 1947, Report III : *Minimum Income Security : Annual and other Wage Systems Designed to Provide Assured Earnings* (Geneva, I.L.O., 1947).

Committee invited the Governing Body to inform the 31st Session of the International Labour Conference of its views on the subject of minimum income security and "to request the International Labour Office to continue its study of the guaranteed wage problems in the metal trades...".[1] The full text of the Resolution which the Governing Body decided to transmit to the Conference, together with the relevant extracts from the Committee's proceedings, is given in Appendix IV. The Textiles Committee at its first session, in 1946, requested "the Governing Body of the International Labour Office to urge States Members to recommend to employers' and workers' organisations in the textile industry that they enter into negotiations with a view to determining a guaranteed adequate minimum weekly wage for each textile worker" and requested "the Organisation to convey to each of its States Members its urgent request that they should declare their support of international policies aimed at guaranteeing adequate minimum weekly wages in the textile industries of their respective countries, requesting, at the same time, to be informed at an early date, and subsequently at regular intervals, of the position".[2] Noting the reluctance of workers to accept employment in the textile industry for various reasons, the Committee stated in another Resolution that "confidence can only be restored by a bold declaration that the workers henceforth will be assured of guaranteed adequate minimum wages".[3] The Building, Civil Engineering and Public Works Committee at its first session, in 1946, called for an investigation by the International Labour Office into the law and practice of guaranteed weekly wages in the various countries.[4]

Statistics of Wages

As a basis for the study of wages problems and for the formulation of wages policy it is desirable to have the fullest possible information on actual money and real wage rates, earnings and aggregate wages and salaries. Recognising the

[1] Cf. I.L.O., Governing Body document G.B. 103/3/12, December 1947, pp. XXX-XXXI.

[2] Cf. I.L.O.: *Official Bulletin*, 15 Sept. 1947, Vol. XXX, No. 2, p. 127.

[3] Cf. *ibid.*, p. 128.

[4] Cf. I.L.O., Governing Body document, G.B.101/9/2, March 1947, Annex II, p. XII.

importance of improving the quality and of extending the coverage of these data, the International Labour Conference and the International Conference of Labour Statisticians have formulated international standards concerning : (1) money wage rates and earnings ; (2) index numbers of money and real wage rates and earnings ; (3) payrolls and aggregate wages and salaries ; and (4) international comparisons of real wages and the cost of living.[1] Certain of the industrial committees have also adopted resolutions on these topics.

Money Wage Rates and Earnings

In 1923, the First International Conference of Labour Statisticians adopted resolutions[2] covering, among other matters, the types of wage rate and earnings statistics to be collected in each country. In 1931, the Fourth International Conference of Labour Statisticians, in a series of resolutions[3] reviewing the problems of international comparisons of real wages, included as part of this broader topic details as to the wages data to be collected. Of special importance was its recommendation[4] that the question of the supply of data on wages and the cost of living required for international comparisons of real wages should be considered with reference to the framing of a Convention that would bind Governments ratifying it to collect and supply information at regular intervals. After preparatory work by the Office and the I. L. O. Committee of Statistical Experts, the Fifth International Conference of Labour Statisticians, in 1937, formulated a proposed Convention for the consideration of the International Labour Conference. The Conference, at its 24th Session, in 1938, adopted the Convention (No. 63) concerning Statistics of Wages and Hours of Work[5], which set forth a minimum programme

[1] Cf. I.L.O. : *The International Standardisation of Labour Statistics* (Montreal, 1943), pp. 16-20.

[2] Cf. *ibid.*, pp. 70-71.

[3] Cf. *ibid.*, pp. 104-107 ; see also pp. 71-85.

[4] Cf. *ibid.*, p. 107.

[5] Cf. *ibid.*, pp. 85-94. The Fifth International Conference of Labour Statisticians adopted a Recommendation proposing an extension of the coverage of the statistics to be collected as provided in the Convention. The Recommendation could not be considered by the 24th Session of the International Labour Conference, as certain of its provisions were outside the scope of the subject included in the agenda of that session. For the text of this Recommendation, see *ibid.*, p. 95.

of wages and hours statistics to be compiled by each ratifying State. This Convention came into force on 22 June 1940 and by 1 April 1948 had been ratified by thirteen countries.[1]

The Iron and Steel Committee at its first session, in 1946, invited the International Labour Office "to examine critically the existing statistics (including their sources) relating to employment and economic problems underlying social policies in the iron and steel industries of the various countries, with special emphasis upon their adequacy and international comparability". The Committee suggested that "the report of the Office should contain recommendations for a minimum iron and steel statistical programme relating to the measurement of . . . average earnings per week and per hour".[2] The Inland Transport Committee at its second session, in 1947, suggested that "average weekly or monthly earnings (of workers in the inland transport industry) should be compiled and published not less frequently than annually"; and that "data of earnings should be published in such a way that hourly earnings can be computed".[3]

Index Numbers of Money and Real Wage Rates and Earnings

The First International Conference of Labour Statisticians, in 1923, recommended that "index numbers of wages should be computed to show the general course of changes in nominal wage rates and in actual earnings. Index numbers of the purchasing power of the wages should also be calculated by relating changes in actual earnings to changes in the cost of living, the necessary precautions being taken to ensure that the two series are comparable".[4]

Two conferences of statisticians, convened by the Social Science Research Council and held at the International Labour Office in 1929 and 1930 respectively, adopted a series of resolutions dealing with index numbers of wages.[5] The

[1] Australia, Canada, Denmark, Egypt, Ireland, Mexico, Netherlands, New Zealand, Norway, Sweden, Switzerland, Union of South Africa and the United Kingdom.

[2] Cf. International Labour Organisation, Iron and Steel Committee: *Report of the First Session* (Geneva, I.L.O., 1947), p. 227.

[3] Cf. International Labour Organisation, Inland Transport Committee: *Record of the Second Session* (Geneva, I.L.O., 1948), p. 138.

[4] Cf. I.L.O.: *The International Standardisation of Labour Statistics*, *op. cit.*, pp. 70-71.

[5] Cf. *ibid.*, pp. 71-84.

resolutions of the Fourth International Conference of Labour Statisticians made a number of recommendations concerning the compilation of national indices of real wages.[1]

The index numbers which are to be compiled by countries ratifying the Convention concerning Statistics of Wages and Hours of Work (unless they make a declaration to the contrary under Article 2 of the Convention) are prescribed by Articles 12 and 21 of the Convention as follows: index numbers of the general movement of earnings per hour, and where possible, per day, week or other customary period, and of the general movement of rates of wages per hour or per week.[2]

Payrolls and Aggregate Wages and Salaries

The first conference of statisticians called by the Social Science Research Council, in 1929, adopted resolutions dealing with the measurement of changes in the proportion of the national income formed by wages.[3]

The Sixth International Conference of Labour Statisticians, in 1947, adopted a resolution concerning workers' earnings which requested the Governing Body of the International Labour Office "to place on the agenda of an early session of the International Conference of Labour Statisticians the subject of statistics of workers' earnings with special reference to payrolls and aggregate wages and salaries".[4] The Governing Body, at its 104th Session, in March 1948, decided to place the subject of statistics of payrolls and earnings on the agenda of the Seventh Session of the International Conference of Labour Statisticians, to be held in October 1949.

International Comparisons of Real Wages

At the First and Second International Conferences of Labour Statisticians (1923 and 1925) the problem of international comparison was raised in connection with the work of the International Labour Office in carrying further the international comparisons of real wages in selected cities begun by the

[1] Cf. I.L.O.: *The International Standardisation of Labour Statistics*, *op. cit.*, pp. 104-107.

[2] Cf. *ibid.*, pp. 88-89 and 91.

[3] Cf. *ibid.*, pp. 82-83.

[4] Cf. I.L.O., Governing Body document G.B. 103/7/1, December 1947, p. 16.

United Kingdom Ministry of Labour.[1] In particular, the Second Conference adopted a resolution embodying certain suggestions for the work of the Office.[2] The problem was considered further by the two conferences of statisticians convened by the Social Science Research Council in 1929 and 1930. The Fourth International Conference of Labour Statisticians, in 1931, reviewed the whole subject and made a number of specific recommendations on the methods which should be followed by the Office in comparing internationally money wage rates or earnings and real wages.[3] The Sixth International Conference of Labour Statisticians, in 1947, adopted a resolution concerning the further study of place-to-place comparisons of cost of living, which requested the Governing Body to direct the Office to continue its studies of the problems of international, inter-regional and inter-city comparisons of costs of living, and to place the subject on the agenda of an early session of the International Conference of Labour Statisticians, when appropriate methods and techniques have been further developed and tested.[4] The Governing Body, at its 104th Session, in March 1948, instructed the Office to carry out the studies recommended in this and other resolutions of the Sixth International Conference of Labour Statisticians, giving precedence to those relating to the agenda of the Seventh Conference.

Research and Publications

As a basis for the consideration by the International Labour Conference and other bodies of the various topics referred to above, the International Labour Office has published a number of reports on wages problems. The discussions and decisions of these bodies have been published in the records of their proceedings. The Office has also made available, in its periodical publications, texts or translations of laws and regulations concerned with wages, information on current developments in wage policy and on movements in wage rates and earnings, and articles discussing a variety of problems of wage policy.

[1] Cf. I.L.O.: *The International Standardisation of Labour Statistics*, *op. cit.*, pp. 24-26.

[2] Cf. *ibid.*, p. 101.

[3] Cf. *ibid.*, pp. 101-103.

[4] I.L.O., Governing Body document G.B. 103/7/1, December 1947, p. 17.

In addition, it has published a number of special studies on these subjects.

Programme for the Future

As may be seen from the foregoing summary, the central importance of problems of wage policy has been recognised both by the framers of the Constitution of the International Labour Organisation and by the International Labour Conference and other bodies concerned with the translation of the objectives of the Constitution into specific recommendations on policy. Three major Conventions concerned with wages have been adopted: the Minimum Wage-Fixing Machinery Convention, 1928, (accompanied by a Recommendation on the same subject), the Convention concerning Statistics of Wages and Hours of Work, 1938, and the Wages, Hours of Work and Manning (Sea) Convention, 1946. On a number of occasions the Conference has given incidental consideration to other aspects of wages and has included provisions concerning them in Conventions and Recommendations which relate primarily to other subjects. Other aspects have formed the subject of Resolutions.

Up to the present, the Conference has never had an opportunity of considering the whole field of wages policy in relation to economic and social policy in general. The Governing Body therefore decided to include the general subject of wages in the agenda of the 31st Session of the Conference in the same way as the question of employment was included in the agenda of the 27th Session (Paris, 1945), *i.e.*, so as to enable a committee of the Conference to be set up to consider it, though not with a view to the adoption at the 31st Session of a Convention or Recommendation. The Conference is thus in a position to explore in a preliminary way those further aspects of wage policy which it regards as of special current or long-term interest and importance, to select any which it considers suitable for inclusion in the agenda of forthcoming sessions, and to indicate the lines on which the future programme of action of the Organisation in this field should be developed.

Certain parts of this programme have already been defined. The agenda of the 31st Session of the Conference includes, under the double-discussion procedure, two important specific aspects of wages policy in respect of which the Conference, after a first discussion in 1948, may in 1949, if it judges such

action appropriate, adopt a Convention or Recommendation. These two aspects are the fair wages clause in public contracts and the protection of wages. The Conference accordingly has before it separate reports[1] analysing national law and practice in these matters and indicating, on the basis of the views expressed by Governments, the principal points which require consideration. The initial steps have thus been taken toward the formulation of international standards concerning these aspects of wages policy.

The Conference will also have before it at an early session a report on the working of the Minimum Wage-Fixing Machinery Convention during the period since it came into force on 14 June 1930. This report will fall due in June 1950, and it will be for the Governing Body to consider, on the basis of the first twenty years' experience with the application of the Convention, whether the question of a revision or modification of the Convention should be placed on the agenda of the Conference. On the same occasion consideration will no doubt be given to the provisions of the Minimum Wage-Fixing Machinery Recommendation, 1928, and in particular to the question whether it would be desirable to review or supplement these provisions.

A further topic which the Conference will no doubt be called upon to consider at an early session is the regulation of minimum wages in agriculture. The Minimum Wage-Fixing Machinery Convention and Recommendation, 1928, it will be recalled, relate to manufacture and commerce and do not cover agriculture. The Permanent Agricultural Committee noted at its first session, in 1938, the importance of minimum wage regulation ; and at its second session, in 1947, it expressed the view that "the time is now ripe for the adoption of international regulations concerning maintenance or creation of machinery whereby minimum rates of wages can be fixed for agricultural workers by voluntary agreement if possible, or State intervention if necessary, or by a combination of both methods". Such regulations, the Committee considered, "should be flexible enough to enable their adaptation to the particular economic and social conditions of agriculture in the different regions and countries". The Committee therefore requested the Governing Body to place this

[1] International Labour Conference, 31st Session, San Francisco, 1948, Reports VI (b) (1) and VI (b) (2) : *Wages :* (b) *Fair Wages Clauses in Public Contracts* ; and Reports VI (c) (1) and VI (c) (2) : *Wages :* (c) *Protection of Wages* (Geneva, I.L.O., 1947-1948).

problem on the agenda of one of the very early sessions of the International Labour Conference.

In the course of their discussions on the topics mentioned in the preceding paragraphs the Governing Body and the Conference may find it possible to give some preliminary consideration to the desirability of extending to related fields certain of the principles already formulated, or to be formulated, on these aspects. They may wish to consider, for example, the desirability of applying to the production of agricultural commodities, the price of which is publicly supported, the principle of the fair wages clause in public contracts ; or the application of the same principle to certain types of intergovernmental commodity agreements or to internationally financed development loans.[1] They may also wish to consider the desirability or arranging for an examination by the regional conferences of the Organisation of certain of the problems involved in the effective application in different regions of the

[1] It may be recalled in this connection (1) that the Conference at its 26th Session (Philadelphia, 1944), in noting the need for international machinery for the purpose of promoting the international movement of capital, expressed the view that " the authorities responsible for the operation of such international machinery should consult the International Labour Organisation as to the appropriateness of including in the terms under which development works financed in whole or in part through such machinery are to be carried out, provisions regarding the welfare and working conditions of the labour employed ; and that such provisions should be framed in consultation with the International Labour Organisation " (International Labour Conference, 26th Session, Philadelphia, 1944 : *Record of Proceedings* (Montreal, I.L.O., 1944), p. 529) ; (2) that the Conference Delegation on Constitutional Questions drew attention in 1946 to the fact that " the negotiation of international economic agreements sometimes affords opportunities for the inclusion in such agreements of provisions on labour standards " and suggested that " every opportunity should be taken by the international organisations responsible for the preparation of such agreements to include therein, after consultation with the International Labour Organisation, provisions intended to promote the raising and equalisation of labour standards " (International Labour Conference, 29th Session, Montreal 1946, Report II (1) : *Constitutional Questions. Part 1 : Reports of the Conference Delegation on Constitutional Questions* (Montreal, I.L.O., 1946), p. 96) ; and (3) that the Havana Charter for an International Trade Organisation, which is to have important functions in relation to inter-governmental commodity agreements, contains an Article on fair labour standards in which Members recognise the common interest of all countries in " the achievement and maintenance of fair labour standards related to productivity, and thus in the improvement of wages and working conditions as productivity may permit ", undertake to take whatever action may be appropriate and feasible to eliminate unfair labour conditions and, in the case of those Members which are also Members of the International Labour Organisation, pledge themselves to co-operate with that Organisation in giving effect to this undertaking (United Nations Conference on Trade and Employment, held at Havana, Cuba, from November 21, 1947, to March 24, 1948 : *Final Act and Related Documents* (Havana, March 1948), p. 7, Article 7.)

principles laid down in general international regulations concerning wages policy.

In the case of certain other aspects of wages policy — in particular, the question of wage guarantees — some exploration of the problems involved has been undertaken by bodies other than the Conference itself — in particular by the industrial committees; and the Conference may wish to consider whether further study of this kind should be undertaken, with reference especially to the particular circumstances of the industries concerned, or whether certain specific aspects could appropriately be placed on its own agenda for a future session. As has been noted above, the problems involved in the application of wage guarantees in the iron and steel industry and in the metal trades have been examined by the Iron and Steel Committee and the Metal Trades Committee, and the conclusions reached by these Committees are reproduced in Appendices III and IV to the present report. Various aspects of the subject are discussed at some length in Chapters IX-XI above, and attention is there drawn to some of the points to which further consideration might be given. One of the most important of these, from the point of view of that great majority of all wage-earners whose employment is still on an hourly or daily basis, is the principle of the guaranteed weekly wage. The Conference may therefore think it desirable that special consideration should be given at an early date to the experience of different industries and different countries in the application of this principle and to the possible ways in which its further application might be facilitated.

In the case of longer-period wage guarantees and dismissal wages, a careful investigation of the possible relationships between such provisions and the provisions of unemployment insurance and assistance schemes would seem to be a necessary preliminary to the formulation of any definite recommendations on policy. The Conference may wish to consider whether such an investigation should be undertaken by the International Labour Office.

As was noted in Chapter V above, one question, namely, that of equal remuneration for work of equal value for men and women workers, to which the Conference has already given consideration on a number of occasions, has recently engaged the attention of the United Nations Economic and Social Council, and the Council has invited the International Labour

Organisation "to proceed as rapidly as possible with the further consideration of this subject and to report to the Council on the action which it has taken". The Conference will no doubt wish accordingly to give special consideration to the lines along which the future activities of the Organisation in this field might be developed. It may consider it appropriate in this connection to call for a more detailed examination by the industrial committees and by the Committee on Women's Work, with the assistance of the Office, of the technical problems involved in the practical implementation as regards men and women workers of the general principle of equal remuneration for work of equal value, and of the measures which might be taken, for example, to enlarge the opportunities for employment open to women workers, to provide adequate facilities for the vocational and technical training of women, to minimise any special costs which their employment may entail, and to enable women, by improved organisation or in other ways, to obtain wages representing the full value of their services.

In the field of wages statistics a substantial programme of work has been proposed by the International Conference of Labour Statisticians. As has been noted above, the Governing Body has placed on the agenda of the seventh session of this Conference, to be held in October 1949, the subject of payrolls and earnings, and has instructed the Office to carry out studies on a number of other topics in the field of wages statistics.

There are a considerable number of other aspects of wage policy, including some of much current interest and importance, which the International Labour Conference may wish the Office to examine in greater detail, in order to make available the information required as a basis for the possible formulation of policy recommendations. These aspects range from the special wages problems which arise in specific industries or among particular categories of workers, and the technical issues involved in systems of wage payment by results and in methods of adjustment of wage rates to changes in the cost of living, to such broad problems of wage policy as the relation of the general level of wages to prices and employment, the appropriateness of different possible wage policies at different levels of employment, and, in general, the wages policies most conducive to the achievement of the highest possible standards of living.

The list of topics mentioned in the foregoing paragraphs is

by no means exhaustive, and the suggestions made are of course tentative in character and are designed merely to serve as the starting point for a discussion by the Conference of the future programme of action by the Organisation in the field of wages policy. It will, however, be apparent that in this field, which lies at the core of the pre-occupations of the Organisation, there are considerable areas which remain to be systematically explored and others in which, though substantial work has already been done, much remains to be achieved.

APPENDICES

APPENDIX I

ESTIMATED COSTS OF OPERATING WAGE GUARANTEES IN CERTAIN PLANTS IN THE UNITED STATES

Estimated Gross Costs Attributable to Various Types of Guaranteed Wage Plans

The estimated gross cost of operating each of the three types of guaranteed wage plans in each of the three steel plants as set out in section 4 of table I below is the cost of payments for idle time given in section 2 of the table plus the cost of any additional overtime which it is estimated would have been worked as a consequence of the operation of the wage guarantee and minus the amounts which it is estimated would have been paid to workers eligible for the guarantee during the vacation which these workers would have been granted during the guarantee period.

It should be noted that certain factors which were not taken into account in preparing the cost estimates would be likely to reduce somewhat the actual costs of operating wage guarantees.[1] Further, in estimating the gross costs attributable to the various guaranteed wage plans, no allowance was made for possible reductions in production costs from improved labour relations and more regular production due to the operation of the guaranteed wage plans. Thus the actual net costs of operating the different types of guaranteed wage plans in each of the three steel plants would probably be lower than the estimated costs shown in table I below.

The differences in the estimated gross costs shown in table I illustrate the differences between the plans. Thus, the estimated gross costs of the guarantee for the period 1937-1941 for plant 2 would have been 14.1 per cent. of the actual payroll for the period in the case of plan A, 11.8 per cent. in the case of plan B, and 11.0 per cent. in the case of plan C. The costs of plan A are the highest, because it guarantees work, or the pay equivalent to such work, for forty hours in each week throughout the year. The costs of plan B are not so great, as it requires only the provision of 2,080 hours of work, or the wages equivalent to such work, in the course of the year, and therefore allows slack periods to be offset by busy ones. Plan C shows the least costs of all, because it provides smaller benefits.

It should be noted that when the employer's requirements of labour fall short of the guarantee level throughout the whole of the year, as in 1938, the cost of each of the plans is the same.

[1] Cf. *Guaranteed Wages: op. cit.*, pp. 61-100, pp. 237-249; and *Guaranteed Wage Study: Interim Report: op. cit.*, Chapter VI, Appendix E.

TABLE I. ESTIMATED COST OF PAYMENTS FOR OVERTIME AND IDLE TIME AS A PERCENTAGE OF ACTUAL PAYROLL, IN THREE STEEL PLANTS IN THE UNITED STATES, 1937-1941, AND COSTS WHICH WOULD BE ATTRIBUTABLE TO VARIOUS TYPES OF WAGE GUARANTEES

Plant 1

	Cost as a percentage of actual payroll for the period					
	1937-41	1937	1938	1939	1940	1941
1. Total cost of overtime under guarantee conditions . .	1.2	4.0	0.0	1.3	0.3	0.4
2. Cost of payments for idle time:						
Plan A	5.1	1.7	28.8	2.5	0.6	0.6
Plan B	4.1	0.0	28.8	0.0	0.0	0.0
Plan C	4.1	0.0	28.8	0.0	0.0	0.0
3. Total cost of payments:						
Plan A	6.2	5.6	28.8	3.8	0.9	0.8
Plan B	5.2	3.9	28.8	1.3	0.3	0.2
Plan C	5.2	3.9	28.8	1.3	0.3	0.2
4. Gross cost of guarantee:						
Plan A	5.9	5.6	26.7	3.8	0.8	0.6
Plan B	4.9	3.9	26.7	1.3	0.3	0.2
Plan C	4.9	3.9	26.7	1.3	0.3	0.2
5. Gross cost of guarantee under 10 per cent. limited liability:						
Plan A	4.0	5.6	12.9	3.8	0.8	0.6
Plan B	2.9	3.9	12.9	1.3	0.3	0.2
Plan C	2.9	3.9	12.9	1.3	0.3	0.2
6. Gross cost of guarantee under 48-week guarantee:						
Plan A	3.9	3.9	19.0	1.3	0.3	0.2
Plan B	3.9	3.9	19.0	1.3	0.3	0.2
Plan C	3.9	3.9	19.0	1.3	0.3	0.2

The estimated gross costs of operating the different types of guaranteed wage plans in the steel industry during the period 1937-1941 varied from plant to plant, ranging from 33.5 per cent. to 5.9 per cent. of the actual payroll for the period in the case of plan A, from 29.4 per cent. to 4.9 per cent. in the case of plan B, and from 27.3 per cent. to 4.9 per cent. in the case of plan C. In the depression year, 1938, the estimated gross costs of all the plans would have risen to 26.7 per cent. of the actual payroll for the year in the case of plant 1, 75.1 per cent. in the case of plant 2, and 219.6 per cent. in the case of plant 3.

The estimated gross costs of operating guaranteed wage plans can be substantially reduced by imposing one or both of two types of limitation on the extent of the guarantee. The first type would limit the employers' liability in respect of the wage guarantee to a

Note: The methods followed in arriving at the estimates given in table I and table II are described as follows in *Guaranteed Wages: op. cit.*, pp. 250-251.

Each group of cost data is numbered. The interrelationships among the cost categories are explained below, under section numbers that correspond with those in the tables.

1. The total cost of overtime under guarantee conditions represents the amount of the 50 per cent. premium paid for overtime hours worked under a guarantee, expressed in percentage of the actual payroll.

2. Cost of payments for idle time is shown under each of the three plans. (The cost of payments for idle time, which represents the sum of the payments that would have been made under the terms of the guarantee for idle time, was determined by subtracting the cost of the straight-time hours worked during the period by employees eligible for the guarantee from the cost of the total man-hours guaranteed during the period. Cf. *Guaranteed Wages: op. cit.*, pp. 237-244.) Because of the differences between the two plans, the difference between costs of payments for idle time shown for plan A and plan B is twice the total cost shown under section 1 for overtime hours worked, except *(a)* when cost of payments for idle time under plan B is zero, and *(b)* when overtime premium payments made to ineligibles exceed their usually insignificant proportions. By the same token, the difference in cost between idle time payments under plans A and C is, as a general rule, equal to three times the cost of overtime under guarantee conditions, except when idle time under plan C is zero, and when ineligibles receive overtime premium payments amounting to 0.1 per cent. of the guaranteed payroll.

3. The total cost of payments attributable to a guarantee represents the sum of the cost of payments for idle time and for that part of the overtime work under guarantee conditions which, it was estimated, would not otherwise have been overtime work. The cost of such extra overtime cannot be calculated, when the guarantee is in operation, but is nevertheless a cost considered attributable to a guarantee in these calculations. This cost represents the amount by which premium pay for overtime worked under guarantee conditions exceeds the premium pay for " actual " overtime. The actual overtime estimated to have been worked may be computed by subtracting from the costs shown under section 1 above the difference between the costs shown under sections 2 and 3 above.

4. Gross cost attributable to a guarantee represents those costs remaining after adjustment is made for the difference between vacations estimated to have been granted from 1937 to 1941, and what would have been granted under current agreements. The vacation offset applicable to reducing the cost of idle time differs among the various plans. Under plan A, vacation is an offset only to idle time occurring during the part of the year in which vacations are normally granted. An additional vacation offset exists under plans B and C, equal to the difference between overtime worked in order to schedule vacations, and the extra cost of this overtime.

5. The costs shown under this section are based on the assumption that payments for idle time in each year are limited to 10 per cent. of the guaranteed payroll in that year. These costs vary according to the guaranteed payroll, and not the actual payroll. The limitation applies to idle time only, and not to the cost of extra overtime worked under the guarantee plan.

6. Limiting a guarantee to 48 weeks exclusive of vacations reduces the amount of idle time for which the guaranteeing employer is obligated to make payments. The amount of this reduction in idle time is subtracted from cost of payments for idle time shown in section 2 above, and the remaining idle time is added to the cost of extra overtime worked under guarantee conditions. If idle time is completely eliminated by this limitation on the guarantee, the sole remaining cost is for any extra overtime worked. For any year in which this occurs, costs shown under sections 5 and 6 are the same.

7. These costs are modified from those shown in section 6 by imposing, as a further limitation on idle time costs, the 10 per cent. limitation on liability used in computing the cost of idle time shown for section 5. The cost in any year is that shown under 5 or 6, whichever is lower.

8. Here costs are assumed to be reduced by the use of a 1-year terminal period provision which allows the guaranteeing employer to terminate the guarantee benefits payable to laid-off employees after the lay-off has lasted for more than a year. When laid-off workers face the prospect of subsequent termination of guarantee benefits it is assumed that the guaranteeing employer may not work the remaining labour force more than a normal workweek. Thus, the proportion of the original guaranteed labour force subject to the termination of benefits is assumed to be limited by maximum labour requirements during the year subsequent to initial lay-off....

Percentages of guarantee cost for the 1937-1941 period as a whole are derived by dividing the aggregate costs over the 5 years by the 5-year aggregate actual payroll. In those cases where expansion in labour requirements resulted in giving to 1941 costs a disproportionately large weight, it was assumed, in calculating the 5-year average cost, that the 1941 actual payroll was no greater than one and a half times the 1937 actual payroll. This adjustment avoids giving an unduly large weight to a year of low costs.

TABLE I *(contd.)*

Plant 2

	Cost as a percentage of actual payroll for the period					
	1937-41	1937	1938	1939	1940	1941
1. Total cost of overtime under guarantee conditions . .	1.2	2.4	0.0	2.1	0.9	0.6
2. Cost of payments for idle time:						
Plan A	12.2	8.0	77.2	14.7	2.1	0.0
Plan B	11.4	3.3	77.2	10.6	0.3	0.0
Plan C	10.5	0.9	77.2	8.5	0.0	0.0
3. Total cost of payments:						
Plan A	13.4	10.3	77.2	16.8	3.0	0.4
Plan B	12.6	5.6	77.2	12.7	1.2	0.4
Plan C	11.7	3.2	77.2	10.6	0.9	0.4
4. Gross cost of guarantee:						
Plan A	14.1	10.2	75.1	15.2	2.9	0.4
Plan B	11.8	4.8	75.1	11.1	0.9	0.4
Plan C	11.0	2.4	75.1	9.0	0.9	0.4
5. Gross cost of guarantee under 10 per cent. limited liability:						
Plan A	7.2	10.2	17.7	13.1	2.9	0.4
Plan B	5.3	4.8	17.7	11.1	0.9	0.4
Plan C	4.4	2.4	17.7	9.0	0.9	0.4
6. Gross cost of guarantee under 48-week guarantee:						
Plan A	9.6	2.6	63.8	8.4	0.9	0.4
Plan B	8.9	2.4	63.8	4.3	0.9	0.4
Plan C	8.5	2.4	63.8	2.4	0.9	0.4

specified proportion of the total payroll of the workers covered by the guarantee (referred to in the note to table I above as the "guaranteed payroll"). The second type would limit the length of the period for which income or employment was guaranteed.

Estimated Gross Costs of Various Types of Guaranteed Wage Plans with Limitations on Extent of Guarantee

Section 5 of table I shows the effect of a limitation of liability under the wage guarantees to 10 per cent. of the guaranted payroll on the gross costs of operating the three types of guaranteed wage plans in each of the three steel plants during the period 1937-1941. Section 6 of the table shows the effect on gross costs of a limitation of the period guaranteed to forty-eight weeks in each year. Section 7 of the table shows for plant 3 only the effect on

TABLE I *(concl.)*

Plant 3

	Cost as a percentage of actual payroll for the period					
	1937-41	1937	1938	1939	1940	1941
1. Total cost of overtime under guarantee conditions . .	2.0	2.6	0.0	3.0	2.7	0.6
2. Cost of payments for idle time:						
Plan A	33.0	10.5	222.1	54.6	12.7	1.2
Plan B	29.1	5.3	222.1	48.6	7.2	0.0
Plan C	27.3	2.7	222.1	45.6	4.4	0.0
3. Total cost of payments:						
Plan A	34.3	12.3	222.1	57.3	14.6	1.2
Plan B	30.4	7.1	222.1	51.3	9.1	0.0
Plan C	28.6	4.5	222.1	48.3	6.3	0.0
4. Gross cost of guarantee:						
Plan A	33.5	12.3	219.6	55.4	13.6	0.9
Plan B	29.4	6.4	219.6	49.4	7.7	0.0
Plan C	27.3	3.0	219.6	46.4	4.6	0.0
5. Gross cost of guarantee under 10 per cent. liability:						
Plan A	11.7	12.3	32.2	17.5	12.5	0.9
Plan B	8.9	6.4	32.2	17.5	7.7	0.0
Plan C	7.3	3.0	32.2	17.5	4.6	0.0
6. Gross cost of guarantee under 48-week guarantee:						
Plan A	25.7	4.4	197.7	46.1	6.5	0.0
Plan B	23.0	1.8	197.7	40.1	1.9	0.0
Plan C	22.5	1.8	197.7	37.1	1.9	0.0
7. Gross cost of guarantee under 48-week guarantee with limited liability:						
Plan A	8.2	4.4	32.2	17.5	6.5	0.0
Plan B	6.4	1.8	32.2	17.5	1.9	0.0
Plan C	6.4	1.8	32.2	17.5	1.9	0.0
8. Gross cost of guarantee under 10 per cent. limited liability with benefits terminating after one year of continuous lay-off:						
Plan C	4.4	3.0	29.3	4.0	2.7	0.0

Source: Guaranteed Wages: op. cit., pp. 254-256.

gross costs of the imposition of both types of limitation on the extent of the guarantee.

In the case of plant 3, which showed the highest estimated gross costs of operating guaranteed wage plans during the period 1937-1941 of the twelve plants studied, limiting the total liability under a wage guarantee to 10 per cent. of the guaranteed payroll would have had

TABLE II. ESTIMATED COST OF PAYMENTS FOR OVERTIME AND IDLE TIME AS A PERCENTAGE OF ACTUAL PAYROLL, IN A FURNITURE FACTORY AND A MEN'S CLOTHING FACTORY IN THE UNITED STATES, 1937-1941, AND COSTS WHICH WOULD BE ATTRIBUTABLE TO VARIOUS TYPES OF WAGE GUARANTEES

Furniture factory

	Cost as a percentage of actual payroll for the period					
	1937-41	1937	1938	1939	1940	1941
1. Total cost of overtime under guarantee conditions . .	0.5	0.9	0.0	0.0	0.0	1.4
2. Cost of payments for idle time:						
Plan A	13.0	3.7	34.7	13.7	11.3	7.0
Plan B	12.0	1.8	34.7	13.7	11.3	4.2
Plan C	11.5	0.9	34.7	13.7	11.3	2.8
3. Total cost of payments:						
Plan A	13.0	3.7	34.7	13.7	11.3	7.0
Plan B	12.0	1.8	34.7	13.7	11.3	4.2
Plan C	11.5	0.9	34.7	13.7	11.3	2.8
4. Gross cost of guarantee:						
Plan A	12.1	3.7	33.0	12.2	9.6	7.0
Plan B	10.8	1.2	33.0	12.2	9.6	3.4
Plan C	10.0	0.0	33.0	12.2	9.6	1.1
5. Gross cost of guarantee under 10 per cent. limited liability:						
Plan A	8.6	3.7	13.4	11.3	9.6	7.0
Plan B	7.3	1.2	13.4	11.3	9.6	3.4
Plan C	6.5	0.0	13.4	11.3	9.6	1.1
6. Gross cost of guarantee under 48-week guarantee:						
Plan A	5.7	0.0	24.6	5.2	3.0	0.0
Plan B	5.7	0.0	24.6	5.2	3.0	0.0
Plan C	5.7	0.0	24.6	5.2	3.0	0.0
7. Gross cost of guarantee under 48-week guarantee with limited liability:						
Plan A	3.8	0.0	13.4	5.2	3.0	0.0
Plan B	3.8	0.0	13.4	5.2	3.0	0.0
Plan C	3.8	0.0	13.4	5.2	3.0	0.0
8. Gross cost of guarantee under 10 per cent. limited liability with benefits terminating after one year of continuous lay-off						
Plan C	2.9	0.0	13.4	1.3	1.1	0.6

the effect of reducing the gross costs from 33.5 per cent. to 11.7 per cent. of the actual payroll for the period in the case of plan A, from 29.4 per cent. to 8.9 per cent. in the case of plan B, and from 27.3 per cent. to 7.3 per cent. in the case of plan C. Limiting the period of the guarantee to forty-eight weeks in each year would have reduced the estimated gross costs to 25.7 per cent. of the actual payroll for the period in the case of plan A, to 23 per cent. in the case of plan B, and to 22.5 per cent. in the case of plan C. It is apparent, therefore, that the method of limiting total liability to 10 per cent. of the actual payroll for the period is more effective in reducing the cost of a wage guarantee than the method of limiting the period of the guarantee to forty-eight weeks in each year. A combination of these two methods of limiting the extent of the guarantee would have had the effect of reducing the estimated gross costs still further to 8.2 per cent. of the actual payroll for the period in the case of plan A, and to 6.4 per cent. in the case of both plan B and plan C. In the depression year, 1938, the estimated gross costs would have been reduced from 219.6 per cent. to 32.2 per cent. of the actual payroll for the year for all the different plans.

If the benefits under a wage guarantee were terminated after any eligible employee had been laid off for more than one year, the estimated gross costs of plan C would have been reduced to 4.4 per cent. of the actual payroll for the period in the case of plant 3 if total liability had also been limited to 10 per cent. of the guaranteed payroll for the period.

It should be noted that the estimates of gross costs of operating the three types of guaranteed wage plans given in the two preceding paragraphs refer to plant 3 only. The estimated gross costs of operating the different types of guaranteed wage plans are lower for the other steel plants studied in the present report.

The reductions in gross costs which can be realised by a moderate limitation of the period of guarantee are appreciable, but not as great as can be obtained from a limitation of the total financial liability. This is particularly true for depression years, unless the period of the guarantee is reduced to such an extent that it ceases to provide even a moderate degree of security to the workers.

An examination of table II shows that the estimated gross costs of operating wage guarantees in the furniture factory during the period 1937-1941 would have been 12.1 per cent. of the actual payroll for the period in the case of plan A, 10.8 per cent. in the case of plan B, and 10 per cent. in the case of plan C. A limitation of liability under the wage guarantees to 10 per cent. of the guaranteed payroll, together with a limitation of the period of the guarantee to forty-eight weeks, would have had the effect of reducing the gross costs to 3.8 per cent. of the actual payroll for the period for each of the three plans.

The estimated gross costs of operating each of the three different types of guaranteed wage plans in the men's clothing factory during the period 1937-1941 would have been 10.9 per cent., 9.1 per cent. and 8.3 per cent. of the actual payroll for the period respectively. These percentages would have been reduced somewhat by imposing either of the two types of limitation on the extent of the guarantee referred to above.[1]

[1] See Chap. VIII.

TABLE II *(contd.)*

Men's clothing factory

	Cost as a percentage of actual payroll for the period					
	1937-41	1937	1938	1939	1940	1941
1. Total cost of overtime under guarantee conditions . .	1.0	1.4	0.1	1.8	1.5	0.0
2. Cost of payments for idle time :						
Plan A	9.9	15.7	29.5	4.5	6.0	0.5
Plan B	8.2	13.2	29.4	1.0	3.3	0.5
Plan C	7.5	11.9	29.3	0.0	1.9	0.5
3. Total cost of payments :						
Plan A	10.9	16.8	29.6	6.3	7.5	0.5
Plan B	9.1	14.3	29.5	2.8	4.8	0.5
Plan C	8.3	13.0	29.4	1.8	3.4	0.5
4. Gross cost of guarantee :						
Plan A	9.2	14.8	27.6	4.2	5.5	0.0
Plan B	7.6	12.2	27.5	1.8	2.7	0.0
Plan C	7.2	11.0	27.4	1.8	1.5	0.0
5. Gross cost of guarantee under 10 per cent. limited liability :						
Plan A	6.5	11.4	13.0	4.2	5.5	0.0
Plan B	5.4	11.4	13.0	1.8	2.7	0.0
Plan C	5.2	11.4	13.0	1.8	1.5	0.0
6. Gross cost of guarantee under 48-week guarantee :						
Plan A	5.5	8.6	19.9	1.8	1.5	0.0
Plan B	5.0	6.1	19.8	1.8	1.5	0.0
Plan C	4.7	4.8	19.7	1.8	1.5	0.0

Source: Guaranteed Wages: op. cit., pp. 263 and 265.

A comparison of the estimated gross costs of operating the different types of guaranteed wage plans in steel plant 2, the furniture factory and the men's clothing factory in the depression year, 1938, shows that, while the estimated gross costs of operating plan A during the period 1937-41 would have been only 14.1 per cent., 12 per cent. and 9.2 per cent. of actual payroll for the period in the case of steel plant 2, the furniture factory and the men's clothing factory respectively, such costs for the same plants in 1938 would have been 75.1 per cent., 33 per cent. and 27.6 per cent. of actual payroll for 1938. It is apparent, therefore, that the effects of variations in the level of economic activity on the costs of wage guarantees differ as between capital goods industries and consumers' goods industries. Employment in capital goods industries is effected chiefly by cyclical fluctuations, which frequently cause sudden and severe contractions in employment in these industries in particular years, thereby greatly increasing the costs of operating wage

guarantees in such industries in those years, while employment in consumers' goods industries is affected not so much by cyclical fluctuations as by seasonal and other factors which each year cause part-time unemployment. This unemployment is generally less severe in its effects on the costs of operating wage guarantees than the cyclical unemployment commonly experienced by capital goods industries. It can be concluded, therefore, that in a depression year the costs of operating wage guarantees are generally considerably greater in capital goods industries than in consumers' goods industries.

APPENDIX II

UNEMPLOYMENT INSURANCE PROVISIONS RELEVANT TO WAGE GUARANTEES IN CERTAIN COUNTRIES [1]

AMOUNT OF THE BENEFIT

The amount of the benefit payable to an unemployed person varies in different countries. There are four main systems of calculating the amount of the benefit :

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[1] The sources of provisions for unemployment insurance in different countries given in the succeeding pages are as follows :

Australia : National Welfare Act 1943 ; Unemployment and Sickness Benefits Act, 1944 (I.L.O. : *Legislative Series*, 1944 – Austral. 2).

Belgium : Legislative Order respecting social security for employees. Dated 28 December 1944 (I.L.O.: *Legislative Series*, 1944 – Bel. 2) ; Order of the Regent to set up the Provisional Fund for the maintenance of involuntarily unemployed persons. Dated 26 May 1945 (I.L.O. : *Legislative Series*, 1945 – Bel. 1).

Canada : Unemployment Insurance Act of 7 August 1940, as amended by the Act of 24 July 1943 ; Cf. I.L.O. : *Inter-American Handbook of Social Institutions* (Montreal, 1945), pp. 63-65.

Greece : Act No. 118 respecting the insurance of employees in industrial undertakings against unemployment. Dated 13 February 1945 (I.L.O. : *Legislative Series*, 1945 – Gr. 1).

New Zealand : Social Security Act, 1942, as amended by the Act of 24 November 1945 (I.L.O. : *Legislative Series*, 1942 – N.Z. 1 ; 1945 – N.Z. 2).

Norway : Order respecting unemployment insurance. Dated 15 November 1940. I.L.O. : *Legislative Series*, 1940 – Nor. 2).

Poland : Act of 18 July 1924 (I.L.O. : *Legislative Series*, 1924 – Pol. 3) ; Decree of 24 November 1927 (I.L.O. : *Legislative Series*, 1927 – Pol. 6) ; Act of 28 March 1933 (I.L.O. : *Legislative Series*, 1933 – Pol. 5) ; Decree of 7 September 1944 ; Decree of 29 September 1945.

Switzerland : Federal Constitution, Article 34 (1) ; Order of Federal Council of 14 July 1947.

Union of South Africa : Unemployment Benefit Act, 1937, as amended by the Act of 23 March 1942 (I.L.O. : *Legislative Series*, 1937 – S.A. 1 ; 1942 – S.A. 1).

United Kingdom : National Insurance Act, 1946 (I.L.O. ; *Legislative Series*, 1946 – U.K. 3).

United States : Federal Security Agency, Social Security Board : *Comparison of State Unemployment Compensation Laws as of December 31, 1941.* Employment Security Memorandum, No. 8 (Washington, D.C. December 1941) ; Federal Security Agency, Social Security Board : *Unemployment Insurance Abstract, Program Statistics and Legal Provisions 1937-45*, Supplement to Employment Security Activities, Vol. 2, No. 1, January 1946 ; Federal Security Agency, Social Security Administration : *Significant Provisions of State Unemployment Compensation Laws, May 1946, and Enacted Amendments to State Unemployment Insurance Laws, April 17, 1947.*

1. In the first, the benefit is a fixed amount irrespective of earnings as in Australia, New Zealand, Norway, South Africa, Sweden and the United Kingdom. The size of the benefit payable to a particular unemployed person usually varies according to age, sex and number of dependants, and must not exceed the beneficiary's normal wage or, in some cases, a specified amount.

2. In the second, the benefit is a percentage of the minimum or basic daily, weekly or monthly wage, as in Belgium, Greece and Poland. Additional amounts are usually payable for dependants.

3. In the third, the benefit is a percentage of the normal rate—subject to a prescribed minimum in Switzerland—or of the earnings for a particular period, as in the United States.

4. In the fourth, the benefit is a percentage of the beneficiary's average weekly contribution to the unemployment fund, as in Canada. A higher percentage of such contributions is payable if the unemployed person has dependants. The contribution itself is proportionate to the insured person's wage rate.

Duration of the Benefit

The duration of the benefit varies as between different countries as follows :

1. The unemployment benefit is paid as long as the beneficiary continues to meet the conditions for the initial receipt of the benefit in Australia, Belgium, Greece, New Zealand and Poland.

2. The benefit is payable for limited periods in the following countries :

Canada. An unemployed person may draw one benefit payment for every five contributions made in the previous years, less one payment for every three benefit payments received in previous years.

Switzerland. The benefit is payable for ninety full working days within a calendar year.

Union of South Africa. The benefit is payable for not more than twenty-six weeks in any period of fifty-two weeks, beginning with the first day of any period of unemployment in respect of which the benefit is payable.

United Kingdom. The benefit is payable for 180 days, subject to extension in accordance with favourable contribution and benefit records.

United States. The maximum period for which the benefit is payable varies from State to State. The longest period is twenty-six weeks, in Illinois, New York and Washington, while the shortest period is fourteen weeks, in Arizona and Mississippi. For various reasons, many workers in the majority of States would not be eligible to receive the benefit for the maximum period.

Length of the Waiting Period

The waiting period in different countries is as follows :

Australia. The benefit is payable from and including the seventh day after the day on which the unemployed person becomes

unemployed, or makes a claim for unemployment benefit, whichever is the later.

Belgium. The benefit is payable from the first day on which the unemployed person is certified as being unemployed by his employer.

Canada. No benefit is paid for the first nine days of unemployment in a benefit year, nor for certain other days when unemployment is not continuous.

Greece. The benefit is payable from, and including, the sixth day in the case of wage-earning employees and craftsmen, or from, and including, the eleventh day in the case of salaried employees and servants, reckoned in both cases from the date of the notice given by the unemployed person.

New Zealand. Unemployment benefit is not payable until after the first seven days of any period of unemployment. In certain circumstances, at the discretion of the Social Security Commission, the benefit is payable from any day up to six weeks after the day on which the person became unemployed.

Norway. The benefit is payable only after the unemployed person has been unemployed and registered as an applicant for employment for twelve days. If the unemployed person has a dependant, the waiting period is reduced to six days. Sundays are not included in the waiting period.

Switzerland. The waiting period is, as a rule, one day in a calendar year, subject to special provisions for seasonal or casual work.

Union of South Africa. The benefit is not payable in respect of the first week of unemployment, and for this purpose periods of unemployment separated by less than nine weeks of employment are regarded as one continuous period of unemployment.

United Kingdom. The benefit is payable after three working days of unemployment, unless within thirteen weeks a further nine days of unemployment is experienced. Odd days of unemployment count for the benefit if two or more fall within a group of six consecutive days.

United States. The waiting period varies from State to State. No waiting period is required in Maryland, one week is required in most States and two weeks in the rest.

Methods of Financing

Unemployment insurance schemes in the different countries are financed mainly by the three following methods :

1. By contributions of employers and insured persons, together with State subsidies.

2. Mainly by contributions of employers.

3. By general taxation.

By Contributions of Employers and Insured Persons, together with State Subsidies

Belgium. Unemployment benefits are paid out of the Provisional Fund for the Assistance of the Unemployed, the resources of which are derived from State grants and from a share of the contributions of wage-earners, salaried employees and employers to the National Social Security Office which is equal to 2 per cent. of each insured person's remuneration.

Canada. Unemployment insurance is financed by contributions from employed persons and employers on a scale varying with the size of the workers' weekly earnings. The Federal Government adds a contribution equal to one-fifth of the combined contributions made by employers and employees to the fund and also defrays the cost of administration.

Norway. Unemployment benefits are paid out of an unemployment fund which receives each year one-tenth of the contributions which employers and employees pay in equal proportions according to a fixed scale to the insurance fund established under the Sickness Insurance Act, 1930. The State makes grants to the unemployment fund if it is necessary to maintain the fund's solvency.

Switzerland. In accordance with the Federal Decree of 14 July 1942, the cantonal unemployment insurance schemes are financed by the contributions of insured persons, as well as by Federal and cantonal subsidies. The cantons may maintain in force any provisions imposing contributions on employers and communes.

Union of South Africa. Unemployment benefits are paid out of an unemployment fund which is established separately for each industry. Employers and employees contribute to each fund according to a fixed scale. The Government contributes to each fund a sum equal to one-fourth of the contributions by employers and employees.

United Kingdom. Unemployment benefits are financed by contributions from employers and insured persons according to a fixed scale, and by State subsidies.

By Contributions of Employers

Greece. Unemployment benefit is paid out of an unemployment fund, the resources of which are provided mainly by contributions from employers amounting to 10 per cent. of the wages paid to employers in industrial undertakings, together with certain other contributions by employers, and periodical Government grants.

Poland. Unemployment benefits are paid out of a fund financed entirely from contributions by employers, who pay into the fund fixed percentages of the actual wages and salaries paid to their employees.

United States. Payments under the unemployment insurance system are financed from contributions paid by employers on the wages of covered workers, and, in a few States, from contributions by the workers themselves. Most State laws contain what are known as experience-rating provisions, whereby contribution rates

may be varied from the standard rate in accordance with the unemployment benefits actually paid to employees of the individual employer. The contribution rate of each employer is determined by various formulae in different States.

By General Taxation

Australia. Unemployment benefits are paid out of the National Welfare Fund, established by an Act of 1943. This Fund derives its revenue by a grant from the proceeds of a special income tax called the " social services contribution " and of a payroll tax. The income of the Fund in 1946-1947 was estimated at £61,000,000.

New Zealand. The unemployment benefit is paid out of the Social Security Fund, which is financed by a social security tax (of 7.5 per cent. at present) on all salaries, wages and other income, together with Government contributions of varying amounts.

APPENDIX III

MEMORANDUM ON MINIMUM INCOME SECURITY ADOPTED BY THE IRON AND STEEL COMMITTEE OF THE INTERNATIONAL LABOUR ORGANISATION AT ITS SECOND SESSION, AUGUST 1947

EXTRACTS FROM THE REPORT OF THE SUBCOMMITTEE ON MINIMUM INCOME SECURITY [1]

The Subcommittee on Minimum Income Security was set up by the Iron and Steel Committee at its 2nd plenary sitting on 20 August 1947. It was composed of 21 members (7 Government members, 7 Employers' members, and 7 Workers' members)...

After a lengthy exchange of views on the problem of minimum income security, the Subcommittee found itself divided between its desire to avoid prejudicing the work of the next session of the International Labour Conference and its anxiety to reach concrete conclusions.

The Workers' members explained that they neither expected nor wished the Committee to draw up detailed plans for the application of guaranteed wage systems. That was the task of the organisations of employers and workers in each country. The present function of the Committee was, in their opinion, to reach the widest possible agreement between men engaged in the industry, and not to adopt Resolutions which were impossible to apply... The Iron and Steel Committee was faced, in the international sphere, with a fundamental problem of the industry, which was not that of unemployment properly speaking, but of intermittent employment. In some countries workers in the iron and steel industry were employed for only a few days each week over a period of years. It must be realised that the employers needed the skill and experience of the workers and consequently that they should ensure them in return a certain standard of life. The Iron and Steel Committee must create an international trend in this direction. The industry must accept the principle of the guaranteed weekly wage as an integral part of its structure, and adapt itself accordingly. The Workers' members asked the Committee to express an opinion on the desirability of extending the guaranteed weekly wage system where it existed and of establishing it where it was as yet unknown. The Committee could in this way give an impetus to the action of the Conference in the matter.

After this statement, the Employers' members explained that they did not intend to take up a negative attitude, and that if the Workers' members would prepare a text embodying the ideas which had just been expressed by their spokesman, the Employers' members would give it sympathetic consideration...

[1] This report was unanimously adopted by the Committee at its 6th plenary sitting on 29 August 1947.

The text submitted by the Workers' members gave rise to considerable discussion, in which members of all the groups took part. It was pointed out from the Employers' side that the wage did not form the only element in the workers' income, for in every country the wage was generally supplemented by other benefits such as unemployment and sickness insurance, or social security provisions, family allowances, holidays with pay, and further forms of remuneration. The State, public bodies, and often the workers and employers themselves, who paid special contributions, took part in the financing of these schemes for the workers' welfare. If, however, income security was to depend only on the wage, it would mean that the employers alone would have to bear the burden of a social responsibility which rested equally, at least to a certain extent, on the national community.

The Workers' members considered that the wage was the essential element in the workers' income All other provisions, however important, were only of supplementary value in the worker's income, and if it was not to be illusory, any system of minimum income security must be based on the wage itself.

At the request of the United States Government member, the Workers' members made it clear that by a guaranteed weekly wage they understood the assurance of a remuneration which would not fall below a certain number of days at the normal weekly wage, whatever the number of days actually worked, as long as the worker was not responsible for the falling off in production. The system at present in force in the United Kingdom iron and steel industry was then mentioned, under which each worker was assured of a wage corresponding to at least four days' work a week.

The Workers' members considered that by this means it was possible to avoid intermittent work in the industry, the frequency of which had hitherto been a serious disadvantage for the workers. The industry must adapt its methods of production to the requirements of the system, but, rather than being a difficulty, it would in the Workers' opinion enable the industry to spread out its production activity over a long period, without the necessity for periodical stoppages of work.

The comment was made from the Employers' side that, if a serious study was made in the iron and steel industry on this particular point of the rhythm of production of industry and employment density, it would be found that the number of workers dismissed owing to the slackening of production activity in works was far from being in proportion to the fall in production. It was emphasised, on the other hand, that the guaranteed weekly wage system would reverse the relations between labour and management, since until the present time the employer had paid wages only for a service rendered, and the reform would involve a heavy burden on the industry, which could not be accepted without reflection...

The Employers' members stated that, for all the reasons given during the discussion, they could not accept the proposed Resolution submitted by the Workers, since it recommended the early adoption and application of the principle of the guaranteed weekly wage to all workers in the iron and steel industry. To demonstrate, however, that the Employers were not fundamentally opposed to this reform when all the conditions necessary for its application existed, the Employers' members submitted a proposed Resolution, in the hope

that it would meet with the approval of the Subcommittee. In the terms of this proposed Resolution, the Employers' members noted that the question of wages had been placed on the agenda of the next session of the International Labour Conference, and recommended that the Office should collect the necessary information on the question in the countries concerned and prepare a report for submission to the Conference, which could thus be well informed on the practices in vogue.

The Workers' members interpreted the submission of this draft by the Employers as indicating an unwillingness on their part to study the question, as otherwise they could see no valid reason for their refusal to accept even the principle of the guaranteed weekly wage. The Workers maintained that their proposed Resolution, taking into account the different conditions existing in the countries represented on the Committee, recommended that the task of working out the methods by which the guaranteed weekly wage should be applied in each of the countries concerned should be left to the organisations of employers and workers, acting through their collective bargaining machinery. The Workers' members recalled that, at the first session of the Committee, they had raised the problem of a guaranteed annual income, but in view of certain difficulties which they did not wish to ignore or neglect, they confined themselves today to the guaranteed weekly wage, for the function of the Iron and Steel Committee was to give an example and not to wait until the principle had been adopted by all industries and in every country.

As no progress had been made in reconciling the different points of view, the representatives of the Employers' and Workers' members accepted the suggestion that a Memorandum should be adressed to the Governing Body instead of formal Resolutions... The Chairman therefore laid before the Subcommittee, at its fourth sitting, a draft *Memorandum to the Governing Body of the International Labour Office on the Question of Minimum Income Security in the Iron and Steel Industry.* After the text of this document had been revised at the meeting of the Officers of the Subcommittee, it was approved by the Chairman, and by the Workers' Vice-Chairman, but not by the Employers' Vice-Chairman.[1]

The Subcommittee began the examination of the Memorandum paragraph by paragraph, and adopted the first six paragraphs unanimously.

Paragraphs 7, 8 and 9 were formally opposed by the Employers' members, because they implied the recognition of the principle of the guaranted weekly wage, and its adoption and application. A new discussion arose, during which the Employers reaffirmed that the information available on the limited experiments in progress in certain countries was not enough to justify the acceptance of the guaranteed weekly wage. In these circumstances, the Employers considered that it was not in the long-term interest of the industry to take uneconomic measures. The question would certainly be studied in the near future, but at present the Employers could not recognise the validity of the principle of the guaranteed weekly wage. The Workers expressed their surprise at the position taken by the Employers, after they had made the concession of dropping their Resolution in favour of a Memorandum to the Governing Body,

[1] This text, with minor modifications, was adopted by the Subcommittee. It will be found on pp. 324-325.

which did not embody any commitment that might involve them in sacrifices for which they were unprepared. The Chairman emphasised the fact, for the notice of the Employers' members, that, paragraph 7 was sufficiently elastic to offer them a complete guarantee against the consequences which they might fear. The Government members gave their views on the text in their turn. They approved paragraphs 7, 8 and 9, subject to slight drafting modifications.

Paragraphs 10 and 11 were adopted without opposition...

The Memorandum to the Governing Body was voted on at the sixth meeting of the Subcommittee. At the request of the Employers' members, who were unable to give their full support to the Memorandum only on account of paragraphs 7, 8 and 9, the vote was taken in two parts. Paragraphs 1, 2, 3, 4, 5, 6, 10 and 11 were therefore adopted unanimously, and paragraphs 7, 8 and 9 were adopted by 14 votes (7 Government members and 7 Workers' members) to 7 votes (7 Employers' members). The text of the Memorandum follows :

Memorandum to the Governing Body of the International Labour Office on the Question of Minimum Income Security in the Iron and Steel Industry [1]

1. The Iron and Steel Committee, having met at Stockholm for its Second Session, August 1947, had before it the question of minimum income security submitted to it by the International Labour Office, in pursuance of a decision of the Governing Body (99th Session, Montreal, September 1946). The Committee had also before it the Report of the Office setting out the different aspects of the question in the light of the limited information available on the subject and the experiments in progress in certain countries.

2. The Committee was influenced in the form to be given to its conclusions by the fact that the Governing Body had, after fixing the agenda of the Second Session of the Committee, decided to place on the agenda of the 1948 Session of the International Labour Conference the general question of wages, which would be dealt with in relation to general economic and social policy, and concerning which a plan of action would be worked out.

3. The Committee found that it was divided between two points of view : on the one hand, the wish not to prejudice the work of the next session of the International Labour Conference by adopting a Resolution based on the circumstances obtaining in one of the principal basic industries ; and on the other hand, the desire to reach practical conclusions and decisions capable of application in the iron and steel industry.

[1] The Committee, at its 6th plenary sitting on 29 August 1947, adopted paragraphs 1, 2, 3, 4, 6, 10 and 11 of the Memorandum by 53 votes to 0. Paragraphs 7, 8 and 9, on which the Employers' members had made reservations in the Subcommittee, were adopted by 38 votes to 14. In view of a comment by the French Employers' members that similar reservations applied to paragraph 5, the latter was also adopted by 38 votes to 14.

4. In order to reconcile these two views, the Committee considered that in the present circumstances it would be preferable, instead of adopting a formal Resolution, to explain its views on the question of minimum income security in the present Memorandum addressed to the Governing Body.

5. The Committee noted that, under the terms of the item placed on the agenda of the 1948 Session of the Conference, the question of a guaranteed weekly wage is not explicitly submitted to the Conference for attention, but the Committee considered that any plan of action in the field of wages arising from their relation to general economic and social policy would have the idea of minimum security as a fundamental basis.

6. The Committee realised that even if the Conference accepts the principle of the guaranteed weekly wage and includes it either in a Convention or in a Recommendation, its universal application to all industries would take some time.

7. The Committee is of the opinion that the iron and steel industry has attained such a state of development by its constant technical progress that it may now be possible and desirable to look forward to an improvement in the methods of wage payment of its workers. As the wage is the main element in the workers' income, the improvement would take into account, beyond the payment of wages for services rendered, the social necessity of ensuring the workers a guaranteed weekly wage. The Committee recommends, therefore, the adoption and the application, wherever feasible, of the principle of a guaranteed weekly wage in the iron and steel industry.

8. The guaranteed weekly wage would constitute a substantial improvement over present conditions for many workers in the iron and steel industry, by protecting them to a considerable extent from the effects of intermittent employment.

9. The Committee realises that conditions vary in the countries represented therein. It considers therefore that it should be left to the organisations of employers and workers, acting through their collective bargaining machinery, to work out the most practical means of introducing in their respective countries the guaranteed weekly wage for iron and steel workers.

10. The Committee wishes to follow the development of the practical application of all systems of minimum income security, and invites the Governing Body to request the Office to collect from the iron and steel producing countries information on the subject and to submit it to the next session of the Committee.

11. The Committee expresses the hope that the Governing Body will transmit this Memorandum, together with its own comments, to the 1948 Session of the International Labour Conference and to the Governments of the iron and steel producing countries.

APPENDIX IV

RESOLUTION CONCERNING MINIMUM INCOME SECURITY ADOPTED BY THE METAL TRADES COMMITTEE OF THE INTERNATIONAL LABOUR ORGANISATION AT ITS SECOND SESSION, SEPTEMBER 1947

EXTRACTS FROM THE REPORT OF THE SUBCOMMITTEE ON MINIMUM INCOME SECURITY [1]

The Subcommittee on Minimum Income Security was set up by the Metal Trades Committee at its 2nd plenary sitting on 3 September 1947. It was composed of 30 members (10 Government members, 10 Employers' members, and 10 Workers' members)...

The Representative of the Secretary-General pointed out that the position in regard to the question of minimum income security had been somewhat changed since the Governing Body had decided to place the whole question of wages on the agenda of the next session of the International Labour Conference, which would take place in 1948 at San Francisco. In these circumstances the special attention of the Subcommittee was drawn to the desirability of embodying its conclusions in a report rather than in the form of Resolutions, which might prejudice decisions of the Conference and hamper its discussions. The comments of the Representative of the Secretary-General on this new situation gave rise to no fundamental objections by the Subcommittee...

After a lengthy exchange of views on a number of aspects of the question, the Workers' members suggested that, at this juncture the rôle of the Metal Trades Committee should be to find what contribution it could make within the limits of its competence towards eliminating the causes involving a loss of income for the worker, and particularly towards eliminating the consequences of intermittent employment. In so doing, the Committee, so far from hampering the General Conference at San Francisco, would help it by giving detailed expression to its views on the guaranteed wage.

To this end the Workers' members put forward a proposed Resolution concerning the guaranteed weekly wage and commented on its general lines. The Workers' members thought that the preamble of the draft proposed by them could meet with unanimous approval, for it was natural that a Committee of the International Labour Organisation should examine the question of the guaranteed wage, as all others, in the light of one of the fundamental principles of the Organisation, that labour is not a commodity, and with a view to the establishment of greater economic security.

The Workers' members thought that the progress made in machinery, technical developments, and methods of organising the work and production planning in the metal trades should enable

[1] This report was adopted by the Committee at its plenary sitting on 12 September 1947 by 59 votes to 3 with 9 abstentions.

the industry to give its workers security against the effects of fluctuations in the production of undertakings ; and that this security should be given in the form of a guaranteed weekly wage, to which the workers should be entitled as long as stoppages or irregularity of employment were beyond their control.

The Workers considered that the adoption of the guaranteed weekly wage need not have any marked effect on the costs of production if it was accompanied by genuine co-operation between labour and management and by efficient organisation of production.

The Workers' members considered another aspect of income security, namely, methods of calculating wages, the diversity and complexity of which sometimes made the workers think that they were not receiving the wages due to them for the work done. The Workers' members recommended, as a remedy for this situation, the study and adoption by the organisations concerned of a limited number of simple systems easily understood by the workers.

The Workers' members stated that they realised the varying conditions in different countries. It would therefore be enough to recognise the principle of the weekly wage and to leave to the organisations of employers and workers in each country the task of finding the means of applying this reform when it seemed possible to achieve.

The Employers' members considered that the real problem of income security was that of giving the worker a feeling of security against a number of threats, such as reduction in hours of work, the possibility of dismissal which would leave him unemployed, and uncertainty as to the duration of such unemployment ; that is to say, security in all cases against the fear of a reduction in his income, *i.e.* in his wage.

In many countries provisions exist at present, designed to remedy these situations which are unfortunate for the worker : unemployment insurance, social security, dismissal notice and dismissal wage, etc. It was surprising that the Office had neglected these provisions in its Report, that it had not enumerated them so as to recommend their clarification, co-ordination and even extension if necessary, and that it had indeed confined itself to proposing that the undertakings should be responsible for the consequences of reductions in the volume of employment. It was neither just nor prudent to hold the undertakings responsible for unemployment. It was often caused by factors which were completely beyond the employers' control, such as power cuts due to fuel shortages, labour disputes in neighbouring industries, etc.

Security for the workers could be easily assured if the undertakings themselves enjoyed some security. The workers would gain no benefit from becoming the creditors of their bankrupt employers. Economic security, which was one of the objectives of the International Labour Organisation, should be extended to employers and countries, for if it was to be a reality it could not be limited to the workers alone.

The Employers' members submitted a declaration to the Subcommittee which was intended to form the framework of a Memorandum to the Governing Body and to show that they were in no way hostile to the conception of income security, in so far as a constructive and lasting solution could be found by the Metal Trades Committee, based on realistic considerations of industrial development, economic conditions, existing legislation, current

practices and the benefits of the various social insurance schemes. The Memorandum to the Governing Body proposed by the Employers' members recognised that "income security, if, when and wherever economically possible, is in the interest of sound labour relations". To make this possible, the Memorandum recommended that a positive study of the question should be made and invited the Governing Body to draw the attention of the General Conference at San Francisco to the various aspects of income security.

The United States Government member on a number of occasions expressed the view of the Government members as a whole on the substance of the question.

The Belgian Government member, however, emphasised the importance of agreeing on the methods of calculating wages in the metal trades, and showed the necessity of simplifying these methods so that the worker would always be in a position to work out and check the amount of his wage.

The United States Government member considered that account must be taken of the benefits received by the worker from the different social insurance schemes when the guaranteed wage was under discussion... There should therefore be a review of existing legislation in the fields of social insurance and minimum wages and hours, and of tax policies, in order to estimate the importance of the different elements as relating to the possibility of introducing guaranteed wage plans.

Neither the Workers' proposed Resolution nor the Employers' declaration completely met these considerations, and the United States Government member suggested a proposed Resolution based on the ideas explained above. This proposed Resolution invited the Governing Body to inform the General Conference at San Francisco that the Metal Trades Committee considered, on the one hand, that the guaranteed wage was one of the instruments for eliminating industrial and employment fluctuations, and that the Office should therefore continue its study of the question in the way described above ; and, on the other hand, that it attached some importance to the adoption of guaranteed wage plans on an experimental basis in a few enterprises.

The Subcommitte found therefore that it had three draft texts before it ; one submitted by the Employers' members, one submitted by the Workers' members, and one submitted by the United States Government member. The Chairman invited the Subcommittee to take from these texts the principles and ideas which were common to all members. A full and interesting discussion took place in the search for a common denominator on income security by the three groups.

The Employers' members emphasised that they could not at present undertake more than to recommend the Office to make a serious study of the question, so that the Committee might have at its disposal realistic, up-to-date, accurate, and complete information for an examination of the question at its next session. The Employers asked what compensation they would receive for the new responsibility of minimum income guarantee which they were asked to undertake, and which would be a new and heavy burden for the undertakings.

The United States Government member pointed out that there could be real and positive compensations for the guaranteed wage,

the application of which had certain effects of benefit to the employers ; for example, reduction in labour turnover, which meant reduction in the cost of engaging and dismissing workers, of adjusting them to new conditions, and of vocational training ; an increase in the individual output of workers who were thoroughly accustomed to the operations of the undertaking ; and better industrial relations.

The Workers' members emphasised the point that the workers possessed practical and technical skill which constituted the power of the industry. The industry must realise this if it did not want this power to be dispersed and destroyed with every slackening in production.

The common denominator was not found during the discussion, and the Swiss Government member proposed that a Conciliation Committee should be set up, to facilitate the work of a Drafting Committee. The proposal was adopted and the three texts were referred to this small committee. The Conciliation Committee could not reach complete agreement, but the United States Government member submitted a new proposed Resolution to the Subcommittee, which was approved in principle by all the Government and Workers' members. The Employers' members accepted certain parts, but in addition to several drafting changes which they wished to make in some points, they declared that they could not adopt the paragraph which stated without any proved basis that economies for the employers would result from the introduction of the guaranteed wage, or the paragraph which implied the recommendation that guaranteed wage systems should be established immediately, even with the safeguard that they should only be applied " if, when and wherever economically possible ". In the course of the new discussion which arose the members attempted to reach agreement. The Employers' members proposed a new paragraph, requesting the Office to include in its enquiry on income security complete studies on the possible economies and increase in production anticipated in one of the paragraphs of the proposed Resolution, and also studies on the additional costs in which the introduction of income security systems would involve employers and consumers. . .

The Subcommittee accepted a suggestion made by the Chairman that the small Conciliation Committee should be constituted as a Drafting Committee and should endeavour to reach an agreement. The Drafting Committee drew up a proposed Resolution which it submitted unanimously to the Subcommittee... It was agreed to meet the wish of the Employers' members, on the one hand, to add a paragraph concerning the studies to be made by the Office to estimate the extent of savings and increases in production or additional costs resulting from the application of guaranteed wage systems, and on the other hand, to delete the paragraph concerning " the achievement by the employer of economies ", so as not to prejudice the studies to be made by the Office on the question, and to replace it by the two other paragraphs concerning security from intermittent employment and the wage guarantee as a factor in good industrial relations. The Employers' members accepted, however, after amendment, the paragraph concerning the possibility of adopting " guaranteed wage plans, if, when and wherever economically possible ", and which invited the Conference at San Francisco to consider this possibility during its discussion on wages.

The Subcommittee congratulated the Drafting Committee on having reached an agreement, which it ratified unanimously with two amendments: (1) to the title, which became "Proposed Resolution on Minimum Income Security" instead of "... the Guaranteed Wage"; (2) the deletion of the words "on the national level" in the paragraph concerning systems of calculating wages, and the substitution of the words "in the different countries concerned".[1]

The Netherlands Employers' member asked that the paragraph concerning systems of calculating wages should be withdrawn and become a separate Resolution, as the problem seemed to him to have a much wider scope than merely in connection with the question of income security. The Subcommittee did not adopt this proposal.

This report was examined by the Subcommittee and adopted by 25 votes to 2...

Resolution concerning Minimum Income Security[2]

The Metal Trades Committee of the International Labour Organisation,

Having been convened by the Governing Body of the International Labour Office, and having met at Stockholm for its second session from 3 to 12 September 1947, and

Having examined the question of minimum income security in the light of the fundamental principles of the International Labour Organisation, as expressed in the Declaration of Philadelphia;

Believing that security for the worker, particularly from intermittent employment, is in the interests of good labour relations;

Believing that a wage guarantee is a factor in labour relations;

Believing that it is of the utmost importance to provide wherever and whenever possible, steady employment and income for the wage-earners in the industry; and

Believing that stabilisation of employment, security for the worker and greater economies and efficiency in production wherever possible are objectives of mutual concern to employer and worker — each having a genuine responsibility for attempting to stabilise operations within a plant or industry so as to advance the general economic security of the country,

adopts this twelfth day of September 1947, the following Resolution:

1. The Governing Body of the International Labour Office is invited to inform the next session of the International Labour Conference at San Francisco that the Metal Trades Committee holds—

(a) that income security, if, when and wherever economically possible, is in the interest of sound labour relations;

[1] For the text of the Resolution, as amended and adopted by the Subcommittee, see below.

[2] This Resolution was adopted by the Committee by 60 votes to 9 with 6 abstentions. Before the final vote was taken, an amendment, proposed by the French Employers' member, that the words "or minimum income" be inserted after the words "guaranteed wage" in subparagraph *(e)* of paragraph 1 and in paragraph 3, was rejected by 28 votes to 36.

(b) that there should be continued studies of the problem of income security which would deal with the problem on a realistic basis that would safeguard the interests of the workers, employers and consumers in all countries represented on the Committee ;

(c) that, to be constructive and lasting, any solution of this problem must be based on a realistic consideration of industrial development, economic conditions, existing legislation, current practices and the benefits of unemployment and other social insurance schemes ;

(d) that in connection with the study of income security there should be a review of existing legislation in such pertinent fields as social insurance and in minimum wages and hours, in order that the inter-relationship may be evaluated to the end of co-ordinating their effects ; and

(e) that it would be desirable for the Conference to consider the possibility of adopting guaranteed wage plans, if, when and wherever economically possible, preferably through the processes of free collective bargaining, which will meet the varying conditions of different countries and of different segments of the metal trades. Any guaranteed wage plan is self-defeating, however, if it involves an employer in additional costs to the point where his ability to adjust becomes unduly limited.

2. A limited number of systems of calculating time rates or piece rates which are simple enough to be understood by all workers to whom they apply should be worked out and adopted by the organisations of employers and workers in the different countries concerned.

3. The Governing Body of the International Labour Office is invited to request the Office to continue its study of the guaranteed wage problem in the metal trades, bearing in mind the principles set forth in this Resolution as to the basis on which such studies should be made ; this study should include a thorough examination of anticipated savings and increases in production resulting from the possible adoption of guaranteed income plans as well as additional costs to be borne by the employers and by the consumers.

APPENDIX V

CONVENTION (No. 26) CONCERNING THE CREATION OF MINIMUM WAGE-FIXING MACHINERY [1]

The General Conference of the International Labour Organisation,

Having been convened at Geneva by the Governing Body of the International Labour Office, and having met in its Eleventh Session on 30 May 1928, and

Having decided upon the adoption of certain proposals with regard to minimum wage-fixing machinery, which is the first item on the agenda of the Session, and

Having determined that these proposals shall take the form of an international Convention,

adopts this sixteenth day of June of the year one thousand nine hundred and twenty-eight the following Convention, which may be cited as the Minimum Wage-Fixing Machinery Convention, 1928, for ratification by the Members of the International Labour Organisation in accordance with the provisions of the Constitution of the International Labour Organisation :

Article 1

1. Each Member of the International Labour Organisation which ratifies this Convention undertakes to create or maintain machinery whereby minimum rates of wages can be fixed for workers employed in certain of the trades or parts of trades (and in particular in home working trades) in which no arrangements exist for the effective regulation of wages by collective agreement or otherwise and wages are exceptionally low.

2. For the purpose of this Convention the term " trades " includes manufacture and commerce.

Article 2

Each Member which ratifies this Convention shall be free to decide, after consultation with the organisations, if any, of workers and employers in the trade or part of trade concerned, in which trades or parts of trades, and in particular in which home working trades or parts of such trades, the minimum wage-fixing machinery referred to in Article 1 shall be applied.

[1] This Convention was adopted by the International Labour Conference at its 11th Session, in 1928, and came into force on 14 June 1930. The text here reproduced is the text as amended by the Final Articles Revision Convention, 1946. By 1 April 1948, the Convention had been ratified by the following twenty-four States : Australia, Belgium, Bulgaria, Canada, Chile, China, Colombia, Cuba, France, Germany, Hungary, Ireland, Italy, Mexico, Netherlands, New Zealand, Nicaragua, Norway, Spain, Switzerland, Union of South Africa, United Kingdom, Uruguay and Venezuela.

Article 3

1. Each Member which ratifies this Convention shall be free to decide the nature and form of the minimum wage-fixing machinery, and the methods to be followed in its operation :

2. Provided that—

(1) before the machinery is applied in a trade or part of trade, representatives of the employers and workers concerned, including representatives of their respective organisations, if any, shall be consulted as well as any other persons, being specially qualified for the purpose by their trade or functions, whom the competent authority deems it expedient to consult ;

(2) the employers and workers concerned shall be associated in the operation of the machinery, in such manner and to such extent, but in any case in equal numbers and on equal terms, as may be determined by national laws or regulations ;

(3) minimum rates of wages which have been fixed shall be binding on the employers and workers concerned so as not to be subject to abatement by them by individual agreement, nor, except with general or particular authorisation of the competent authority, by collective agreement.

Article 4

1. Each Member which ratifies this Convention shall take the necessary measures, by way of a system of supervision and sanctions, to ensure that the employers and workers concerned are informed of the minimum rates of wages in force and that wages are not paid at less than these rates in cases where they are applicable.

2. A worker to whom the minimum rates are applicable and who has been paid wages at less than these rates shall be entitled to recover, by judicial or other legalised proceedings, the amount by which he has been underpaid, subject to such limitation of time as may be determined by national laws or regulations.

Article 5

Each Member which ratifies this Convention shall communicate annually to the International Labour Office a general statement giving a list of the trades or parts of trades in which the minimum wage-fixing machinery has been applied, indicating the methods as well as the results of the application of the machinery and, in summary form, the approximate numbers of workers covered, the minimum rates of wages fixed, and the more important of the other conditions, if any, established relevant to the minimum rates.

Article 6

The formal ratifications of this Convention under the conditions set forth in the Constitution of the International Labour Organisation shall be communicated to the Director-General of the International Labour Office for registration.

Article 7

1. This Convention shall be binding only upon those Members whose ratifications have been registered with the International Labour Office.

2. It shall come into force twelve months after the date on which the ratifications of two Members of the International Labour Organisation have been registered with the Director-General.

3. Thereafter, this Convention shall come into force for any Member twelve months after the date on which its ratification has been registered.

Article 8

As soon as the ratifications of two Members of the International Labour Organisation have been registered with the International Labour Office, the Director-General of the International Labour Office shall so notify all the Members of the International Labour Organisation. He shall likewise notify them of the registration of ratifications which may be communicated subsequently by other Members of the Organisation.

Article 9

1. A Member which has ratified this Convention may denounce it after the expiration of ten years from the date on which the Convention first comes into force, by an act communicated to the Director-General of the International Labour Office for registration. Such denunciation shall not take effect until one year after the date on which it is registered with the International Labour Office.

2. Each Member which has ratified this Convention and which does not, within the year following the expiration of the period of ten years mentioned in the preceding paragraph, exercise the right of denunciation provided for in this Article, will be bound for another period of five years and, thereafter, may denounce this Convention at the expiration of each period of five years under the terms provided for in this Article.

Article 10

At least once in ten years, the Governing Body of the International Labour Office shall present to the General Conference a report on the working of this Convention and shall consider the desirability of placing on the agenda of the Conference the question of its revision or modification.

Article 11

The French and English texts of this Convention shall both be authentic.

APPENDIX VI

RECOMMENDATION (No. 30) CONCERNING THE APPLICATION OF MINIMUM WAGE-FIXING MACHINERY [1]

The General Conference of the International Labour Organisation,

Having been convened at Geneva by the Governing Body of the International Labour Office, and having met in its Eleventh Session on 30 May 1928, and

Having decided upon the adoption of certain proposals with regard to minimum wage-fixing machinery, which is the first item on the agenda of the Session, and

Having determined that these proposals should take the form of a Recommendation,

adopts this sixteenth day of June of the year one thousand nine hundred and twenty-eight the following Recommendation, which may be cited as the Minimum Wage-Fixing Machinery Recommendation, 1928, to be submitted to the Members of the International Labour Organisation for consideration with a view to effect being given to it by national legislation or otherwise, in accordance with the provisions of the Constitution of the International Labour Organisation :

A

The General Conference of the International Labour Organisation,

Having adopted a Convention concerning the creation of minimum wage-fixing machinery, and

Desiring to supplement this Convention by putting on record for the guidance of the Members certain general principles which, as present practice and experience show, produce the most satisfactory results,

recommends that each Member should take the following principles and rules into consideration :

I

(1) In order to ensure that each Member ratifying the Convention is in possession of the information necessary for a decision upon the application of minimum wage-fixing machinery, the wages actually paid and the arrangements, if any, for the regulation of

[1] This Recommendation was adopted by the International Labour Conference at its 11th Session, in 1928. The text here reproduced is the text as modified in accordance with the second report of the Committee on constitutional questions of the 29th Session of the International Labour Conference, adopted by the Conference on 8 October 1946.

wages should be ascertained in respect of any trade or part of trade to which employers or workers therein request the application of the machinery and furnish information which shows *prima facie* that no arrangements exist for the effective regulation of wages and that wages are exceptionally low.

(2) Without prejudice to the discretion left to the Members by the Convention to decide in which trades or parts of trades in their respective countries it is expedient to apply minimum wage-fixing machinery, special regard might usefully be had to trades or parts of trades in which women are ordinarily employed.

II

(1) The minimum wage-fixing machinery, whatever form it may take (for instance, trade boards for individual trades, general boards for groups of trades, compulsory arbitration tribunals) should operate by way of investigation into the relevant conditions in the trade or part of trade concerned and consultation with the interests primarily and principally affected, that is to say, the employers and workers in the trade or part of trade, whose views on all matters relating to the fixing of the minimum rates of wages should in any case be solicited and be given full and equal consideration.

(2) *(a)* To secure greater authority for the rates that may be fixed, it should be the general policy that the employers and workers concerned, through representatives equal in number or having equal voting strength, should jointly take a direct part in the deliberations and decisions of the wage-fixing body ; in any case, where representation is accorded to one side, the other side should be represented on the same footing. The wage-fixing body should also include one or more independent persons whose votes can ensure effective decisions being reached in the event of the votes of the employers' and workers' representatives being equally divided. Such independent persons should, as far as possible, be selected in agreement with or after consultation with the employers' and workers' representatives on the wage-fixing body.

(b) In order to ensure that the employers' and workers' representatives shall be persons having the confidence of those whose interests they respectively represent, the employers and workers concerned should be given a voice as far as is practicable in the circumstances in the selection of their representatives, and if any organisations of the employers and workers exist these should in any case be invited to submit names of persons recommended by them for appointment on the wage-fixing body.

(c) The independent person or persons mentioned in paragraph *(a)* should be selected from among men or women recognised as possessing the necessary qualifications for their duties and as being dissociated from any interest in the trade or part of trade concerned which might be calculated to put their impartiality in question.

(d) Wherever a considerable proportion of women are employed, provision should be made as far as possible for the inclusion of women among the workers' representatives and of one or more women among the independent persons mentioned in paragraph *(a)*.

III

For the purpose of determining the minimum rates of wages to be fixed, the wage-fixing body should in any case take account of the necessity of enabling the workers concerned to maintain a suitable standard of living. For this purpose regard should primarily be had to the rates of wages being paid for similar work in trades where the workers are adequately organised and have concluded effective collective agreements, or, if no such standard of reference is available in the circumstances, to the general level of wages prevailing in the country or in the particular locality.

Provision should be made for the review of the minimum rates of wages fixed by the wage-fixing bodies when this is desired by the workers or employers who are members of such bodies.

IV

For effectively protecting the wages of the workers concerned and safeguarding the employers affected against the possibility of unfair competition, the measures to be taken to ensure that wages are not paid at less than the minimum rates which have been fixed should include :

(a) arrangements for informing the employers and workers of the rates in force ;

(b) official supervision of the rates actually being paid ; and

(c) penalties for infringements of the rates in force and measures for preventing such infringements.

(1) In order that the workers, who are less likely than the employers to have their own means of acquainting themselves with the wage-fixing body's decisions, may be kept informed of the minimum rates at which they are to be paid, employers might be required to display full statements of the rates in force in readily accessible positions on the premises where the workers are employed, or in the case of home workers on the premises where the work is given out or returned on completion or wages paid.

(2) A sufficient staff of inspectors should be employed, with powers analogous to those proposed for factory inspectors in the Recommendation concerning the general principles for the organisation of systems of inspection adopted by the General Conference in 1923, to make investigations among the employers and workers concerned with a view to ascertaining whether the minimum rates in force are in fact being paid and taking such steps as may be authorised to deal with infringements of the rates.

As a means of enabling the inspectors adequately to carry out these duties, employers might be required to keep complete and authentic records of the wages paid by them, or in the case of home workers to keep a list of the workers with their addresses and provide them with wage books or other similar record containing such particulars as are necessary to ascertain if the wages actually paid correspond to the rates in force.

(3) In cases where the workers are not in general in a position individually to enforce, by judicial or other legalised proceedings, their rights to recover wages due at the minimum rates in force, such other measures should be provided as may be considered effective for preventing infringements of the rates.

B

The General Conference of the International Labour Organisation thinks it right to call the attention of Governments to the principle affirmed in the annex to the Constitution of the International Labour Organisation that men and women should receive equal remuneration for work of equal value.

APPENDIX VII

WAGES, HOURS OF WORK AND MANNING (SEA) CONVENTION, 1946 : PART II. WAGES

Article 5

1. The basic pay or wages for a calendar month of service of an able seaman employed in a vessel to which this Convention applies shall not be less than sixteen pounds in currency of the United Kingdom of Great Britain and Northern Ireland or sixty-four dollars in currency of the United States of America or the equivalent thereof in other currency.

2. In the event of a change in the par value of the pound or the dollar being notified to the International Monetary Fund—

(a) the minimum basic wage prescribed in paragraph 1 of this Article in terms of the currency in respect of which such notification has been made shall be adjusted so as to maintain equivalence with the other currency ;

(b) the adjustment shall be notified by the Director-General of the International Labour Office to the Members of the International Labour Organisation ; and

(c) the minimum basic wage so adjusted shall be binding upon Members which have ratified the Convention in the same manner as the wage prescribed in paragraph 1 of this Article, and shall take effect for each such Member not later than the beginning of the second calendar month following that in which the Director-General communicates the change to Members.

Article 6

1. In the case of ships in which are employed such groups of ratings as necessitate the employment of larger groups of ratings than would otherwise be employed the minimum basic pay or wages of an able seaman shall be an amount fixed as the adjusted equivalent of the minimum basic pay or wages stipulated in the preceding Article.

2. The adjusted equivalent shall be fixed in accordance with the principle of equal pay for equal work and due allowance shall be made for—

(a) the extra number of ratings of such groups who are employed ; and

(b) any increase or decrease in cost to the shipowner consequent on the employment of such groups of ratings.

3. The adjusted equivalent shall be determined by collective agreement between the organisations of shipowners and seafarers

concerned or, failing such agreement and subject to both countries concerned having ratified the Convention, by the competent authority of the territory of the group of seafarers concerned.

Article 7

If meals are not provided free of charge, the minimum basic pay or wages shall be increased by an amount to be determined by collective agreement between the organisations of shipowners and seafarers concerned or, failing such agreement, by the competent authority.

Article 8

1. The rate to be used for determining the equivalent in other currency of the minimum basic pay or wages prescribed in Article 5 shall be the ratio between the par value of that currency and the par value of the pound of the United Kingdom of Great Britain and Northern Ireland or of the dollar of the United States of America.

2. In the case of the currency of a Member of the International Labour Organisation which is a Member of the International Monetary Fund the par value shall be that currently in effect under the Articles of Agreement of the International Monetary Fund.

3. In the case of the currency of a Member of the International Labour Organisation which is not a Member of the International Monetary Fund, the par value shall be the official rate of exchange, in terms of gold or of the dollar of the United States of America of the weight and fineness in effect on 1 July 1944, currently in effect for payments and transfers for current international transactions.

4. In the case of any currency which cannot be dealt with under the provisions of either of the two preceding paragraphs—

(a) the rate to be adopted for the purpose of this Article shall be determined by the Member of the International Labour Organisation concerned ;

(b) the Member concerned shall notify its decision to the Director-General of the International Labour Office, who shall forthwith inform the other Members which have ratified this Convention ;

(c) within a period of six months from the date on which the information is communicated by the Director-General, any other Member which has ratified the Convention may inform the Director-General of the International Labour Office that it objects to the decision, and the Director-General shall thereupon inform the Member concerned and the other Members which have ratified the Convention and shall report the matter to the Committee provided for in Article 21 ;

(d) the foregoing provisions shall apply in the event of any change in the decision of the Member concerned.

5. A change in basic pay or wages as a result of a change in the rate for determining the equivalent in other currency shall take effect not later than the beginning of the second calendar month following that in which the change in the relative par values of the currencies concerned becomes effective.

Article 9

Each Member shall take the necessary measures—

(a) to ensure, by way of a system of supervision and sanctions, that remuneration is paid at not less than the rate required by this Convention ; and

(b) to ensure that any person who has been paid at a rate less than that required by this Convention is enabled to recover, by an inexpensive and expeditious judicial or other procedure, the amount by which he has been underpaid.

APPENDIX VIII

THE PRINCIPLE OF EQUAL PAY FOR EQUAL WORK FOR MEN AND WOMEN WORKERS: DECLARATION OF PRINCIPLES ON THE EARNINGS OF FEMALE LABOUR

Memorandum Submitted to the Economic and Social Council by the World Federation of Trade Unions and Transmitted by the Council to the International Labour Organisation [1]

In view of the increasing volume of female labour and the ever-larger part it plays in production, the World Federation of Trade Unions consulted its national headquarters as to the situation of women workers in the different countries. From the replies, which provide numerous facts and interesting suggestions, it is possible to draw up an outline of trade union policy on this subject. The World Federation of Trade Unions draws the attention of the United Nations Economic and Social Council to this policy, as set forth in the report submitted to the members of the Council and in the present document.

I. As a result of the growth of large-scale industry and mechanisation, of improvements in plant or equipment, the emancipation of women, of the two world wars, and of advancing industrialisation in the more backward countries, the number of women wage-earners has grown considerably during the twentieth century. An ever-increasing number of married women are obliged to enter the world of production. Without wishing in any way to pronounce an authoritative judgment upon the development above described, we feel bound to state that it seems impossible to reverse them, and therefore the woman worker, in her own interests and those of the working population as a whole, should be ensured, for the same amount of work of equal quality, a wage equal to that of the male wage-earner.

II. It is a fact that in most countries women are paid lower wage rates than men. For piece work the difference is even greater, because in many cases the piece work rate is fixed by adding a certain percentage to the hourly rate, with the effect that in the very case where equal remuneration is most unquestionably right it most frequently does not prevail. The difference in remuneration is also more marked when one compares the wages of qualified or specialised workers of the two sexes.

[1] This memorandum was circulated to the Members of the Economic and Social Council on 28 January 1948 as document E/627/Add. 1, and was transmitted to the Director-General of the International Labour Office by the Secretary-General of the United Nations on 21 April 1948 in accordance with the provisions of the resolution on the principle of equal pay for equal work for men and women workers adopted by the Council on 10 March 1948.

III. *Occupational selection and guidance.* Nevertheless, it becomes increasingly evident, and is proved by industrial psychology tests, that in very many occupations women, thanks to their natural skill, dexterity, etc., can do excellent work in no way inferior to that of men. It should be added that a kind of preselection has been practised in most States in the form of legislation which for some time past prohibited women from doing certain types of work at certain times and in certain conditions. The need now is to consolidate and rationalise scientifically all the progress which has been made so far. In the employment of female labour the capacities and physical constitution of women should therefore be taken into account in any relevant legislation or regulations. A rational system of occupational selection and guidance would enable women to make the fullest use of their natural qualities (dexterity, skill) in occupations which suit them and in which they can do the best work.

IV. *Apprenticeship, occupational training.* All legislation, regulations or practice applying to instruction, occupational training, apprenticeship and wages during training, should apply to female labour equally with male labour.

V. *Rational assessment of the value of work.* Within the general wage scale the rates for female labour should be reclassified according to the quantitative and qualitative value of the work done, in order to eliminate the present difference between wage rates for women workers and the market value of their work. A general reclassification of occupations, taking into account the skill and qualifications generally required for each type of work, would enable women's work to be valued at its true worth ; the rates for trades which are essentially women's should be re-assessed on the basis of a rational comparison with similar men's trades. A comprehensive system of professional grading, with definite steps based on co-efficients of occupational merit should be introduced. The rates of remuneration for all labour, whether time work or piece work, should be fixed on a strictly identical basis for workers of both sexes.

VI. *Maternity insurance.* Maternity being one of the functions of women, equal remuneration for the two sexes implies mitigating the material disadvantages of maternity by means of a system of pregnancy and maternity insurance.

VII. *Reduction of domestic tasks.* Women who have to work should be enabled to bring up a family and at the same time do an efficient job, through being largely freed from domestic cares by the existence, at factories, or elsewhere, of collective institutions such as crèches, day nurseries, canteens, laundries, domestic help systems and a wider use of domestic labour-saving devices. Trade unions, staff representatives or works councils should be responsible for the installation and operation of these services, the establishment of which would be encouraged by the public authorities, in particular by means of money grants.

VIII. *Inspection.* To ensure comprehensive application of the formula of equal pay for equal work and to prevent female labour from being employed as a competitive element prejudicial to male labour, women labour inspectors, with the co-operation of the trade

unions, staff representatives or members of works councils should keep a watch on the standards adopted for computing women's pay rates and on the net wages paid to women. Control should also be exercised over the regulations governing the engagement and dismissal of women workers, with a view to protecting the interests and security of employment of women, who are often unable to get their rights respected. Women labour inspectors should be democratically recruited ; women members of trade unions should be given access to these positions and the trade unions would be called upon to help form a body of officials for this purpose.

IX. *Importance of trade union organisation.* For the woman worker, the principal means of obtaining effective equality with male labour is to be guaranteed fully operative trade union rights. In this connection the World Federation of Trade Unions recalls the proposal on trade union rights which it placed before the Economic and Social Council, and emphasises that the full exercise of trade union rights could greatly contribute towards the achievement of one of the purposes of the United Nations, namely, equality for all without distinction as to sex. In the non-self-governing or trusteeship territories this could be done by means of facilities granted by the Governments or international institutions concerned to the metropolitan trade unions to give the fullest assistance to the local trade unions in securing an increasingly larger number of women members.

X. On the basis of Articles 55, 73 and 76 of the United Nations Charter, the World Federation of Trade Unions requests the Economic and Social Council, after discussion of the above principles, to invite the Trusteeship Council, the International Labour Organisation and the Commission on the Status of Women, each in its own field, to submit concrete proposals for ensuring equal pay for women and men for the same amount of work of equal quality. In drawing up these proposals the above institutions should take into account the points of view expressed before the Council and the foregoing declaration of principles presented by the World Federation of Trade Unions.

The Question of the Payment of Women Workers

In view of the increasing volume of female labour the World Federation of Trade Unions in August 1946 asked the central headquarters of the national trade unions to report on the status of women workers in the various countries.

Many detailed and interesting replies were received. The information obtained, together with certain more recent documents, makes it possible to establish a number of interesting facts ; we shall try to make clear the trend thus disclosed.

Certain practical and concrete problems (length and type of work, maternity, right to employment) are raised by the conditions under which women work ; these problems are bound up with the question of wages and we shall examine them first.

We shall then deal with the basic problem : the earnings of women workers.

We shall conclude by considering the urgent measures which

need to be taken in order to improve the conditions of women workers.

It must be clearly understood at the outset that this report is merely a general statement, made with the object of defining the problem and offering the elements of a solution.

PART I : THE FACTS

I. *Historical Summary.*

It was the birth of large-scale industry at the beginning of the nineteenth century which provided the motive force for the mass entry of women into this new "form of production". Underpaid female labour competed with the male labour and tended to lower rates of wages. This led to the emergence of women's trade unions, but it was only gradually that women came to understand the value of trade unionism. For a long time there were but few women trade unionists, and sometimes trade unions with only women members opposed the men's unions. Thus, the first improvements in the conditions of women workers were not due to trade union efforts.

II. *Twentieth Century Developments.*

In the first half of the twentieth century the status of women workers underwent great changes. These were due to a series of causes which we shall set out in chronological order, where possible. These causes operated in all the civilised countries, but naturally in different degrees according to the political and social evolution of the country concerned :

(a) improvements in women's education and the consequent opening up for them of other careers than those of factory workers ;

(b) deteriorating conditions of life obliged women and girls of the lower middle-classes to enter employment (these new workers were attracted more to commerce or office work than to the factories) ;

(c) technical improvements made factory work less and less laborious. Many women gave up domestic work to enter factories ;

(d) during the war of 1914-1918 large numbers of women had to do work hitherto performed by men, with a consequent diminution of the prejudice against women's work ;

(e) between the two wars advances were made both in labour legislation and in the recruitment of women into trade unions ;

(f) the war of 1939 led to a great increase in the numbers of women workers, thereby giving greater weight to their claims.

It is difficult to say at the moment how this situation will crystallise, but it is certain that it will be impossible to deprive women of many of the benefits which they have gained.

III. *Some Figures.*

(A) *General.* The number of women in employment in proportion to the total feminine population varies, for most countries — leaving agriculture out of consideration — between 11 per cent.

in Hungary and 26 per cent. in Switzerland and Great Britain. Naturally, the proportion of working women is considerably higher in the agricultural countries if we include the number of women employed in agriculture and domestic work : *e.g.,* 45 per cent. in Finland.

The proportion of women workers to the total labour-force is more constant. In 1930 it varied between 24 per cent. (Netherlands) and 36 per cent. (Switzerland). In the majority of countries it represented about one third of the total labour force (these reports exclude agriculture). In Russia women, including women agricultural workers, constituted 43.4 per cent. of the total labour force in 1939.

It is interesting to note that, while the absolute figures of women in employment are rising, the fraction of the total labour force which they represent has increased only very slowly in the course of the first forty years of the twentieth century (U.S.A. : 1900, 18.3 per cent. ; 1940, 24.3 per cent. ; but in March 1944, 32.9 per cent. ; and in 1946, only 29 per cent.). These figures show the extent to which the war interfered with the general trend. Netherlands : 1909, 23.9 per cent. ; 1920, 23.2 per cent. ; 1930, 24.1 per cent. In Switzerland, on the other hand, women, taking into account only women employed in factories, represent an ever smaller fraction of the total labour force : 1901, 38.1 per cent. ; 1923, 38.2 per cent. ; 1929, 35.9 per cent ; 1937, 35.3 per cent. (This decline may be due to the fact that women have migrated to other branches of work.)

Women are also employed in large numbers in non-self-governing or backward countries : in India the number of women employed in agriculture and industry was 49 millions, and in 1931 they constituted 29 per cent. of the total number of workers in industry. In China, in 1930, women represented 46.6 per cent. of the total labour force.

(B) *Women in the various branches of employement.* An examination of the distribution of women amongst the various branches of industry leads to the following general conclusions :

(a) In many countries women represent at least 90 per cent. of the total number of domestic workers ; they are particularly numerous in the backward countries. In India, there are 8,800,000 women domestic workers, that is, double the number of women in industry.

(b) It is the textile industry which, from the very outset, has made the greatest use of female labour. In 1943-1944 the percentages of women workers in this industry were as follows : Canada, 60 per cent. ; Finland, 88 per cent. ; Czechoslovakia, 63 per cent. ; France, 57 per cent. In Switzerland the number of women in the textile industry has decreased over the last twenty years as a result of the slump in the industry and of its mechanisation. In the Union of Soviet Socialist Republics a similar trend may be observed : in 1929, 64.5 per cent. of employed women worked in the textile industry ; in 1939, the industry employed only 22.9 per cent. of all the employed women. The same development took place in Canada : in 1940, 42.3 per cent. of women in the textile industry ; in 1944, only 25.2 per cent. In Hong-Kong, women represented 70 per cent. of the total labour force of the textile industry in 1943.

(c) There is also a high proportion of women employed in commerce : Canada, 49 per cent. of the total number of workers in

this field ; Finland, 56.7 per cent. ; Hungary, 58 per cent. ; Ireland, 33 per cent. ; Norway, 43.8 per cent. ; Union of Soviet Socialist Republics, 34 per cent.

(d) In agricultural countries women are also employed in large numbers in agriculture. For example, in Canada, the total of 1,800,000 women workers included 800,000 women employed on farms. In 1930, the number of women employed in agriculture in Hungary represented 33 per cent. of the total labour force in this field ; in France, 41 per cent. ; in Norway, 12 per cent. ; in the Netherlands, 16.8 per cent. ; in the Union of Soviet Socialist Republics, 25.7 per cent. ; in Czechoslovakia, 40 per cent. In India, in 1931, there were 29,000,000 women employed in the exploitation of animal and vegetable resources.

(e) The numbers of women employed as shop assistants are also very high : in Austria, 52 per cent. of the total number of such workers ; in Hungary, 58 per cent. ; in Ireland, 52 per cent. ; in Czechoslovakia, 40 per cent.

(f) Information supplied by certain countries also shows that women are very numerous in social and health work and in education, particularly education in kindergarten and primary schools.

(g) In many countries of Asia women are employed for heavy work such as the transportation of heavy loads. In India, in 1944, women represented 34 per cent. of the total labour force employed in the mines.

In the countries which developed their war industries very intensively, such as Great Britain and the United States of America, it is interesting to note that women workers have entered branches of employment where they had never previously been active. For example, in the United States of America, in certain branches of the aviation industry, the percentage of women workers rose from 1 per cent. (April 1941) to 39 per cent. (June 1943) ; in shipbuilding, from 0.4 per cent. (June 1942) to 8 per cent. (June 1943) ; in the oil industry, from less than 2 per cent. (1939) to 10 per cent. (August 1943). These percentages will probably not be maintained in peacetime, but it is certain that women have now gained a foothold in industries once closed to them and that it will be impossible to dislodge them. This is the more important in that these industries generally have very well organised trade unions which will assist women to defend their rights.

In the Union of Soviet Socialist Republics the adoption of the Five-Year Plans led to a rise in the percentage of women workers, particularly in the metallurgical industry : 8.9 per cent. before the first Plan, 32.4 per cent. in November 1939.

(C) *Distribution of married and unmarried women within the general female labour force.* This is an interesting question ; married women generally represent a more stable labour force than spinsters, but on the other hand the employment of married women gives rise to problems of holidays, insurance, maternity grants, etc. Unfortunately, we have useful information only for certain countries. In 1944, United States of America : spinsters, 42.6 per cent. ; married women, 44.4 per cent. ; widows or divorcees, 13 per cent. France (excluding agriculture) : married women, 40 per cent. This figure is five times higher than the figure for the Netherlands, and

more than twice as high as the percentages for Great Britain, Italy and Switzerland, respectively.

It must be mentioned here that, contrary to the views of those who object to married women working, the practice of a trade by the mother of a family does not in general result in a badly kept home. A very interesting study was made of this subject in Holland. This showed that homes are generally better kept where the wife works. The investigation showed that the reasons why married women went to work were the following (in decreasing order) : uncertain or insufficient wages of the husband, husband's unemployment, arrears in payment for furniture bought on the instalment system, purchase of clothes, sickness of the husband or a child, payment of debts, social advancement, desire for independence, desire to save. In certain countries, however, working mothers consider that it is becoming difficult to reconcile both functions. Food difficulties make conditions particularly hard at the moment, yet it is essential for the wife to work. The restriction of women to the home, advocated in some quarters, is contrary equally to technical progress, economic and production requirements and the advance of women towards emancipation.

The solution must therefore be sought in the development of collective agencies for assisting housewives. In the present social system, in which efforts are made to keep workers of both sexes at loggerheads, the progress achieved in facilitating the lives of working women has been quite inadequate. It is the duty of the trade unions to draw up precise programmes in this field, to apply them in practice, and to exert pressure on public authorities to have their programmes put into effect. We shall return to this question in more detail elsewhere.

In France, it has been noted that in Paris 50 to 60 per cent. of working married women have no children and 30 to 40 per cent. have one child. This does not, however, seem sufficient to prove that the employment of married women entails a fall in the birth rate. In Czechoslovakia, Poland and Russia, the percentage of working women is as great as in France ; yet the birth rate is high.

Part II : The Problem

It is a definite fact, therefore, that female labour is an economic necessity. The point is not whether this is a benefit or a disadvantage ; it is an established fact. Our aim rather is to ensure that this labour is carried on under the best possible conditions.

There is another definite fact ; female labour is not as well paid as male. We shall try to discover the reasons for this and ascertain whether they are really valid or not.

Before considering the question as a whole, however, we shall examine a special problem involved in the employment of female labour, namely maternity protection. Though responsible only to a very small degree for the difference in the rates of pay for men and women, nevertheless, in certain cases, it constitutes a rather important element in women's pay, a fact which justifies its consideration here.

I. *Maternity Protection*

Because of the fact that a woman may become a mother and hence responsible for the well-being of another person, all countries,

even those still backward, have recognised that women workers need special protection. The measures taken to provide this protection vary greatly from one country to another.

Maternity protection has been the subject of a number of Conventions and Recommendations adopted by the International Labour Conference.

It should be noted that in a number of countries, particularly England, Hungary and Switzerland, and in certain States in the United States of America, women are entitled to leave of absence before and after childbirth and have the right to come back to their job (this latter guarantee is lacking in some States of the United States of America). The new social security scheme in England provides maternity allowances and grants. In Norway, and in Finland also, women are entitled to leave without pay for six weeks before and six weeks after confinement and may receive State aid. In Denmark there is an allowance paid by the State. The Netherlands, Yugoslavia and Czechoslovakia have more advanced legislation ; at the time of confinement a woman is entitled to leave with pay for, in most cases, sixteen weeks. She also receives a grant for confinement expenses, layette, etc. These are paid either by the State or by the employers.

In some backward countries (India, Malaya, Burma) women workers are entitled to allowances in kind during their absence from work before and after confinement. The amount of such allowances, the length of leave, the qualifications and period of service entitling a woman to these benefits, vary from one country to another, but in almost every case it is the employer who must pay the allowance, a circumstance which gives rise to serious difficulties.

Women workers are often unable to prove that they have completed the requisite period entitling them to the benefits because their employer has failed to keep time-sheets. Women workers may be dismissed as soon as the first signs of pregnancy appear. Often women workers are engaged not by official employers, but by subcontractors who are not bound by the laws to the same extent as the employers themselves. In such cases women do not enjoy any protection. This is often the case in mines and quarries.

Moreover, whenever maternity protection does exist in these countries, it is quite inadequate ; no medical assistance is given and the benefit period is very short. It should be noted here that in the more backward countries the laws are generally better observed on the plantations than in industrial enterprises.

The best guarantee for women would, it seems, be a general extension of maternity insurance within the framework of social security. This is what the national headquarters in Switzerland and Czechoslovakia demand.

On the other hand, in countries like the United States of America and the United Kingdom, where female labour has been very widely used, it has been realised that the ablest women workers are recruited between 25 and 40 years of age. Consequently, in order to attract women workers of that age group, crèches and day nurseries have been established, to a very remarkable degree. In most cases, however, they have been instituted through private initiative and on a very temporary basis. It is to be feared that many of these institutions will disappear with the decrease in the number of women workers following the cessation of hostilities. This question is particularly important since, according to some authorities, the employ-

ment of women results in a serious fall in the birth rate. The point is open to question (cf. Russia, for example). It is certain, however, that a well-organised crèche system would definitely help to encourage motherhood, as would also laws providing pregnancy and maternity protection.

It should always be borne in mind that a mother who is employed has many other tasks to do outside of her work at the factory. But we shall have to return to that question later.

II. *Lower Rates of Pay for Women*

In some cases, as we have seen, maternity protection constitutes a part of women's wages. It cannot, however, be accepted as a reason for the lower rate of pay which they receive.

After a survey of women's wages in the various countries, in the various branches of work, at different periods, we are going to consider and discuss the main factors responsible for the difference in the amounts earned by men and women. We shall see that these factors are not, in reality, valid reasons for the lower rates paid to women and that the slogan " equal pay for equal work " is therefore perfectly legitimate.

The elements which have affected women's wages are quite diverse, some resulting from the status granted to women by tradition and the structure of present-day society ; others from the very protection afforded by law to women workers ; still others, finally, are the result of economic situations which must be remedied.

(A) *Survey of Rates of Pay for Women.*

The percentage difference between the rates of pay for women and men varies greatly from one country to another (Austria, 60-80 per cent. ; Denmark (hourly rates), 60 per cent. ; Finland, 80 per cent. ; Ireland, 56 per cent. ; Norway, 62 per cent. ; Switzerland, 69 per cent. for manual workers, but only 56 per cent. for office or shop employees ; Sweden and Italy, 70 per cent. These percentages relate to 1945-1946, except in the case of Ireland, for which the statistics are those of 1944).

In the Union of Soviet Socialist Republics, the principle of equal pay for women and men has actually been put into effect. There, as in Yugoslavia also, the Constitution provides that women be granted equal rights with men in every field of economic, public, cultural, social and political life. Specific provision is made for equality of rights between men and women as regards remuneration. It should also be noted that the principle of equality is in practice applied in Czechoslovakia.

In all countries, however, most women are in the lower-wage brackets, while men's salaries are usually on the intermediate levels. Thus, a graph in a report to the American Senate dated October 1945 shows that most women's wages average between 60 and 90 cents an hour, while those of men average mostly between 70 cents and $1.20 an hour.

Women are thus always at a disadvantage, though their position is less unfavourable in certain industries. The following percentage figures show the relation between rates of pay for women and men : Austria in 1946 : chemical industry, 60 per cent. ; electrical industry, 68 per cent. ; textile industry, as much as 82 per cent. Denmark in

1946 : leather, 58 per cent. (minimum) ; pottery, 76 per cent. (maximum).

In France the situation is now undergoing a change. It may be noted that since 1914 the difference between rates of pay for men and women has steadily decreased (Paris region metallurgy in 1913, women's pay 55 per cent. of men's ; in 1917, because of the war, 83 per cent. ; in 1921, 68 per cent. ; in 1936, 86 per cent.). The regulations on wages introduced on 15 March 1945 give men a 10 per cent. advantage. This difference was subsequently abolished by the Labour Ministry's ruling of 30 October 1946.

In Ceylon, in the occupation for which wage councils have been set up, the rates for women vary between 70 and 89 per cent. of the rates fixed for men.

In all countries where statistics have been compiled on this subject, it has been observed that skilled women workers are at a greater disadvantage than the others. In Austria in 1946, for example, in the chemical industry, a skilled woman worker's pay was 60 per cent., an unskilled 67 per cent. of a man's ; in the textile industry, expert or skilled, 75 per cent. ; unskilled, 82 per cent.

(B) *Factors which have Contributed to Lower Rates of Pay for Women.*

Women who have only their pay to live on must compete with girls who live at home and with married women who are merely seeking additional income. In Australia and New Zealand, the minimum pay for women was fixed before 1914 at 54 per cent. of the amount paid to men, because a woman's earnings were supposed to provide for a single woman while a man's represented provision for a married man with three children.

All work deserves to be paid for so as to afford the worker an adequate livelihood. The fact that a woman is less often than a man the main support of the family is no excuse at all for her being inadequately paid for her work. It should be noted that a man's basic earnings are not affected by his family status and neither should a woman's be. Trade unions should carry on active propaganda to give all women workers a sense of their worth.

As a matter of fact, most of the women who work are obliged to do so in order to earn their living. In France, in 1946, there were eight million women employed in industry, seven million of whom needed their earnings to live on. In the United States of America, when an investigation was made in the State of New York, it was found that 93 per cent. of the women workers had to work to support their family. Another investigation, again in the United States of America, shows that the number of families where a woman is the head of the household increased by 53.4 per cent. between April 1940 and May 1945.

Because of the traditional belief that a woman's place is in the home, the number of women who work at home is still very large. Not being organised, they are very often exploited by their employers. Their position is particularly tragic in the more backward countries.

This exploitation of home workers, which in many cases still continues in spite of the International Labour Convention of 1928 concerning the creation of minimum wage-fixing machinery, is a disgraceful situation which must be stopped by every means possible. What is needed is State intervention through *ad hoc* legislation (as

for example the new French laws on social security which give a certain degree of protection also to people who work at home) and also a trade union for home workers. Women who work at home are often not declared by their employers and do not therefore enjoy any protection.

It should be noted also that though a woman is legally eligible for all types of employment, this privilege is, in actual practice, greatly restricted. In countries where the legislation grants women full rights, it is only seldom that they gain access to higher posts. Even in the industries where many women are employed, though the percentage of women in executive posts is higher, it is still lower than it ought to be. In Denmark, for instance, in the textile industry, where labour is predominantly female, women held only 15 per cent. of the executive posts in 1935. In other countries, such as Czechoslovakia and Norway, which are socially advanced, the percentage of women in executive positions is still very small. In the Union of Soviet Socialist Republics, on the other hand, the percentage of women holding technical and supervisory positions has more than doubled in six years. In 1933 women represented 9.2 per cent. and in 1939, 20 per cent.

There is a great propaganda work to be done in this field, both amongst the general public and amongst women themselves. Often (as has been noted in the United States of America and in France) women are satisfied to do routine work ; they make no attempt to improve their situation, and hesitate to change their habits, even in order to obtain higher wages. This lack of initiative is often due to the fact that women workers have no chance of benefiting from the experience of more varied work, which would be more responsible and also more interesting to do. It has also been suggested that the statutory limitations imposed on the employment of female labour justified the payment of lower wages.

Actually, while most legislations recognise the equality of the sexes as regards working hours, there are some rather important restrictions in this matter. In Austria, before 1934, the working week was 44 hours for women, instead of 48 as for men. Night work is generally prohibited for women. Often the amount of overtime is limited by the fact that women are not allowed to work beyond a certain hour (10 p.m. in England and Ireland, 9 p.m. in Finland).

Some countries (Switzerland, the Netherlands) have laid down stricter rules in the case of women with domestic responsibilities. Most countries, even those where there is complete equality between the sexes (Czechoslovakia, Yugoslavia), have, in the interests of mothers and children, limited as far as possible the admission of women to certain specially harmful types of industry, such as mining, white lead painting, the phosphorus industry. The regulations are far less strict in backward countries and have been severely modified as a result of the war.

It should be pointed out that the limitation of working hours should not affect payment by the hour, and the Recommendation voted by the International Labour Conference, concerning employment organisation in the transition from war to peace, 1944, lays down the following principle : " The redistribution of women workers in the (peace) economy should be organised on the principle of complete equality of opportunity for men and women ... without prejudice to the provisions of international labour Conventions and Recommendations concerning the employment of women. "

Furthermore, if the work is properly organised, female labour can be employed without inconvenience. In the United States the following fact has been observed. A factory was working in three shifts, two composed entirely of men and one composed entirely of women. The women were paid 10 cents less per hour than the men and their output was from 6 to 7 per cent. more.

It is often housework which prevents women from working overtime. The proper organisation of crèches, day nurseries, canteens, and possibly centres for doing laundry and mending, would probably remedy this situation. But this problem is closely linked with the question of the overhead costs involved in the employment of female labour and the question of female absenteeism. We will examine it later.

As a result of the laws for the protection of women workers, the employment of female labour often involves additional overhead charges : toilet accommodation, higher insurance rates, probably crèches, etc. In the more backward countries, certain kinds of work are forbidden to women, even though they suit them better than other heavier work. But the employment of women would require certain adjustments, which people are reluctant to make. Yet, improvements in working conditions benefit everyone and it is wrong that women workers should, in a certain degree, be the only sufferers. As industry develops, continual efforts are made to lighten work, to cut down working hours, etc. The improvements that the employment of female labour necessitates are but an indispensable and normal stage in this evolution. Thus, in the United States of America, it has been noticeable that demobilised men seek work in factories staffed by women during the war because they are cleaner and more sanitary.

An excuse for paying lower rates to women has also been found in the absenteeism of women workers. Absenteeism is admittedly greater amongst women than men (in England and in Australia, for example, women are absent twice as often as men) and it has therefore sometimes been agreed that the less regular worker should receive less pay. This question, like that of working hours, is linked up with the living conditions of women wage-earners. Women have always a considerable amount of housework to do in addition to their paid work. An interesting survey made by the Ministry of Labour in France provides significant figures on this subject : " As a whole, women spend an average of $3^1/_2$ hours on housework and the purchase of food on every working day, and $7^1/_2$ hours on rest days, that is, nearly 29 hours a week, or almost three-quarters of their working hours. " It is not surprising in these circumstances that women are absent more often than men ; because they are really doing two jobs at once. One or the other must suffer.

It seems that here again the solution would be a proper organisation of canteens, laundries, mending centres, crèches, etc. Such centres are already functioning in certain factories in the Paris region to the great satisfaction of the women workers. Their creation is generally due to the women's group in factory labour-management committee. They are therefore under the direct control of the women workers, who can thus have full confidence in them. Two difficulties hindered the organisation of these useful bodies in the Paris region : scarcity of machinery and lack of premises. It seems that in the case of the first difficulty it should be possible for trade unions to help each other on the international plane. Certain countries could provide

machinery for those which are without it. As a result of experiments made in France, it was found that group laundrying was 30 per cent. cheaper than private laundries. Women workers will, therefore, have no further incentive to stay away from the factory in order to do their washing. Furthermore, certain countries (Czechoslovakia, for example) have fixed the times for the opening of shops so as to allow women workers to do their shopping easily outside working hours.

The problem of crèches is more difficult. The crèches with the highest hygienic standards are those established on the initiative of the trade unions, but they are near the factory, often far distant from the women workers' homes. The objective should be to have crèches organised in each neighbourhood, which would be open at times which would allow working women to bring their children before themselves setting off for work. In backward countries the problem of crèches is also acute ; the few establishments of this kind in existence leave much to be desired.

Consideration should also be given to the problem of domestic help in the event of sickness either of the woman worker herself or a member of her family. There again it seems that the best solution would be the creation of special collective organisations.

It must be noted that Article 122 of the Soviet Constitution grants the same rights to women as to men and provides for the protection by the State of the interests of the mother and child, in addition to a wide system of maternity homes, crèches and kindergartens. Considerable efforts along these lines have also been made in Yugoslavia.

These material problems seem only remotely connected with female absenteeism, but as a matter of fact the regular attendance of the woman worker at the factory depends upon their solution. Investigations made in the United States of America and in France on this subject reach the same conclusion. However, even if, in view of the stage of social organisation reached in a large number of countries, feminine absenteeism is substantial, it does not justify setting a lower value on the work done by women. Payment should be made for the work actually done and wages should not be affected by external considerations.

Among the economic factors conditioning lower wages for women must also be numbered the much-discussed question of the physical and professional capabilities of female labour. The arguments adduced by the detractors of these capabilities may be summarised as follows : women have less physical strength than men ; vocational training for women is usually inferior ; women only stay in industry a short time, particularly after the age of twenty-five.

The statistics furnished by employers and published by the Royal Commission on Equal Pay, London, 1945, give the following figures :

Between 18 and 20 years of age : 79 per cent. of women are gainfully employed ;

Between 21 and 24 years of age : 65.1 per cent. of women are gainfully employed ;

Between 25 and 29 years of age : 42.7 per cent. of women are gainfully employed ;

Between 30 and 34 years of age : 29.6 per cent. of women are gainfully employed.

In the case of men, on the other hand, the percentages for the same age groups are more or less constant : 95.4 per cent., 97.3 per cent., 98.4 per cent., 98.5 per cent.

These arguments call for certain comments. In view of the development of mechanisation, the importance of physical strength in work is steadily decreasing. The high degree of mechanisation in production also creates possibilities for fine and delicate work, particularly suitable for women. Machinery has often been reproached with reducing the skill of the worker and making work purely automatic. But it might be remarked with no less justice that mass production also entails a continual seeking after greater perfection and the constant invention of new means of improving production and cutting down expenditure, with less fatigue for the worker. One could quote here the example of the steady improvement in weaving looms, the evolution of the lathe, the mechanisation of cotton-spinning, beating, carding, combing and drawing, the replacement, in cotton-spinning, of the self-acting looms by throstle frames, which has rendered possible the employment of women specialists as "throstle frame operators". This development allows factories to employ a large number of women, in processes where they can now work more easily and with less fatigue.

In the Union of Soviet Socialist Republics, since 1918, special commissions have been set up in the trade unions to fix rates of pay in accordance with qualifications and the risks involved, irrespective of sex. The application of this policy of equal pay has brought about a continual rise in women's pay in relation to men's pay. The over-all daily wage for women employed in industry, in 1914, represented 47.2 per cent. of men's wages, and in 1930 it was already 67.4 per cent. It should be pointed out that wages increased more slowly, in industries such as the textile industry, where female labour predominates, this very fact rendering more difficult comparison of their work with that of men.

Studies have been made in the United States on this subject, and in certain cases it was found that the work done by a woman was rated at from 60 to 66 cents per hour, while the same work done by a man was paid for at the rate of 80 to 85 cents. A scientific analysis of the work showed that, even if women did not, in the same class of job, turn out as much as men, they were nevertheless worth a wage of from 74 to 80 cents per hour. Thus the physical strength factor is much less important than is generally believed. Finally, this factor plays no part at all in the case of women office workers, who are often paid less than their male colleagues. The investigations made by the Council of Women Workers which functioned in Australia from March 1942 to October 1944 yielded the same conclusions. In accordance with their qualifications and their output in relation to men, the women with whom the Council had to deal earned wages representing 60 to 100 per cent. of those paid to the men. And this female labour did not involve any additional expenditure for the employers. The studies of the National War Labour Board of Canada convinced the Board that a woman often produces as much or more than men. The organisation concluded that they generally deserve payment equal to 90 per cent. of men's basic pay.

It is true that the vocational training of women is often inferior. In France, for instance, in the metallurgical industry, 106,000 women out of 188,000 were doing specialist work, but only 6,000 were fully qualified. Despite the Recommendation of the International Labour

Conference of 1939 on vocational training, there is still an immense amount of leeway to be made up. In backward countries the situation is very serious, owing to the complete lack of education of the majority of women. When there are girls' schools, they are often poorly attended, as the girls are busy looking after younger children. This lack of education has serious drawbacks ; it makes it impossible for women to acquire any vocational training at all and to obtain better paid and lighter work as a result of that training. Furthermore, because of their ignorance, women remain in those occupations where the workers are least organised ; thus, they take very little part in trade union activities, and for that reason constitute a branch of labour particularly easy to exploit.

In Latin America, where there is equality in theory, women have no actual equality, as the curricula in primary and secondary girls' schools differ from those in boys' schools. Consequently, they cannot have access to the same technical and vocational training.

Since the war, certain countries like India and China have made great efforts to improve education and vocational training for women, but there is still much to be done, and trade unionism might be very useful in this field.

However, it should be pointed out that women profit less from specialisation than men, since, as we have seen, their wages do not increase in the same proportion. On the other hand, in countries like the United States, and particularly in England and Canada, the war led to a rapid development in vocational training for women, and it was noticed that women were quite capable of replacing men. As fitters they even proved to be slightly better than men. The facts thus go to prove how little foundation there is for scepticism about the professional abilities of women workers. The examples on which we base our arguments are taken from the Reports and Bulletins of the Women's Bureau of the United States Department of Labor, 1945.

In France, students at the vocational training centre for women metallurgical workers at Puteaux have shown that women are quite capable of becoming qualified workers in this trade, which until now has been essentially masculine.

If women do not constitute such a stable labour force as men, that is precisely because they are seldom qualified, and therefore have no definite trade to which they are attached and in which it is worth their while to remain after marriage.

Finally, it must be pointed out that if men have greater physical strength than women, the latter, on the other hand, possess other qualities which should make their work valuable. They are generally skilful and careful about details. These qualities, due to some extent to natural preselection, should be carefully fostered in all women in order to enable them to enter the occupations to which they are suited and in which their abilities will be fully appreciated. (In civilised countries for many years, certain occupations have been statutorily closed to women. This is a sort of preselection based on the physical nature of women.)

Consequently, the expansion of vocational training for women would greatly contribute to obtaining equality of pay. We cannot, therefore, agree that unequal rates of pay between workers of the two sexes is in any way justified. Women can do their work quite as well as men. However, the conditions in which they have to work do not always permit them to do so. Every effort should there-

fore be made to improve these conditions still further. It is already certain that this can be done and so basic inequality between the rates of pay for men and women can no longer be accepted.

(C) *Equal Pay for Equal Work.*

This formula, for which many central associations of trade unions are at present fighting, is therefore quite legitimate. However, its exact meaning should be defined and effective methods of applying it should be studied.

(a) *How the formula should be understood.* Whenever a woman replaces a man and does the same work, she should receive the same pay. In England, during the war, equal pay was only granted after a probationary period of thirty-two weeks (sometimes twenty-four or twelve). The woman should be capable of working without extra supervision or assistance, in the same conditions as the man she replaces. Cases as simple and well-defined as this are rare ; usually the woman does not do exactly the same work as the man, but very similar work, for which, however, the pay is considerably less. In this case also, a means of applying the formula must be found, that is to say, the woman worker should be paid according to the real value of her work, not a rate based on a prejudice against female labour. The problem is therefore to find a rate for the job and not for the individual who does it. That principle has been applied, as we have seen, in all the war industries in which women have had to replace men. It should now be applied to all women workers, even those who are doing work regarded as essentially feminine.

(b) *Practical problems raised by the logical application of the formula "equal pay for equal work".* One might have thought that the increasing adoption of piecework would have led automatically to equal pay. That, however, is not the case. Apparently it is only in Finland that payment at piecework rates means that women receive the same wages as men, even if the hourly rates of pay differ in the industry concerned. Generally that is not the case, since piecework wages are based on the hourly rates of pay.

In the Netherlands, payment at piecework rates entails a maximum increase of 20 per cent. in the hourly rate of pay, and so women are still at a disadvantage. The situation is the same in Great Britain, where piecework rates of pay can easily amount to 27.5 per cent. more than payment by the hour.

In the United States it is estimated that more than a third of the women workers are paid at piecework rates. The system is particularly widespread in the textile, leather and clothing industries, in which women workers predominate. Work demanding manual dexterity and skill is frequently undervalued in these industries.

Piecework therefore does not ensure women workers fair rates of pay. Furthermore, there are several trades where piecework rates of pay cannot be applied. Therefore a job-assessment system must be found which would make possible to reassess women's earnings on a scientific basis.

In the United States of America a permanent section was set up in 1920 in the Department of Labor to study the question of equal pay. This section found it had to envisage a reclassification of occupations, based on qualifications, responsibility, intellectual and physical capacity, and conditions of work. The Women's

Bureau of the Department of Labor then made investigations in various establishments and reached the following conclusions :

The enterprises (for example, certain telephone companies) had often fixed the job, and consequently the wage, categories themselves ; but these job categories contained artificial differentiations resulting in lower wages for women. Frequently also a job was incorrectly rated ; women's work demanding manual skill and a certain amount of intelligence was qualified as easy while men's work only demanding strength was said to demand certain qualifications. Thus, the wages are low in certain branches of leather working for which real qualifications are necessary, whereas they are high in the building trades which often demand physical strength, but in many cases few other qualifications. Even in the industries where it is easy to compare jobs with one another, flagrant injustices were observed. In the big electricity concerns each job was assessed by its content according to a certain scale. That should have led to the principle "equal pay for equal work" being applied. Actually, however, men's work assessed at 39 "work points" was paid 75.5 cents an hour, whereas women's work assessed at 68 "work points" was only paid 66 cents.

Apparently, therefore, in order to obtain a fair division of wages a fair assessment of work must first be made. Reclassification should be carried out in each branch of industry ; it would be based on a comparison between the work of men and women. Where only women were employed, the comparison might be made with related industries employing male workers.

When the value of a job has been correctly assessed, and consequently equal pay for men and women has been achieved, it will still be necessary to consider how to apply these new rates of pay in the various industries. Where women workers are not in the great majority, reform will probably be easier. The women workers are generally better organised and their wages are already closer to those of the men. But, in industries where women are in the immense majority the situation is different ; trade union organisations are less developed, and comparison with other jobs is more difficult. Demands for fair pay must be supported by Governments, and their application must be carefully controlled both by the public authorities and the trade unions.

The main object to be achieved is this general and scientific adjustment of wages, which is also provided for in a Recommendation by the International Labour Conference of 1944. We must not, however, lose sight of immediate realities and content ourselves with reforms which only exist on paper. In this field good legislation is not enough to ensure that women workers obtain their due. We have seen that in the United States, in those States which had passed a law on equal pay, employers have done their best to continue underpaying women's work. The position of the American woman worker is not so very enviable.

In Australia only women workers who come under the Council of Women Workers have obtained equality ; other women workers are still in a less advantageous position.

In England the campaign for equal pay originated with the trade unions and has usually been waged in rather empirical fashion. Women workers have nevertheless obtained real advantages, which will probably be extended as a result of the work of the Royal Commission for Equal Pay.

Finally, in France the campaign has been waged on two parallel levels, legislative and trade union, and it is in France that women have secured the greatest advantages, though it is possible that those advantages have not been definitively won. The difference in women's pay has been progressively reduced and is stabilised at about 7.5 or 8 per cent. (July 1947). A certain reaction, however, against equal pay rates may be noticed. There is a tendency to grant larger pay increases to male workers than to female workers, which leads to the difference in rates being widened (this is particularly noticeable in the metallurgical industry, where the difference rose from 3.2 per cent. in January 1947 to 6.5 per cent. in July 1947). Moreover, it is among ordinary manual workers that this tendency is most noticeable (difference : April, 4.2 per cent. ; July, 7.3 per cent.). In this category women are very numerous, and may be clearly divided from men workers. Qualified women workers, on the contrary, seem to be placed more and more on the same level as men workers, and the difference in pay rates fell from 11.8 per cent. in April to 8.9 per cent. in July. Finally, the breaking down of official grades due to a greater increase in low wages has been more noticeable among men than among women.

We should remember that in the Union of Soviet Socialist Republics, where there is equality, the trade unions were responsible for the reform. This factual development is a good indication of the essential importance of trade unionism in this matter ; women are less well-organised than men, and manual workers less well-organised than qualified workers. Consequently it is obvious that women manual workers are the branch of manpower most easily exploited, and this is confirmed by the figures.

Conclusions

The facts we have just described enable us to come to definite conclusions on very different subjects. First of all, there is a social problem involved : to lighten, as far as possible, the duties of the woman worker outside her employment. Then we have to consider, on the one hand, the problem of vocational training for women, and, on the other hand, the scientific as well as the practical problem of framing an international scale that will enable wages in general and women's wages in particular to be fairly assessed.

Finally, we shall note the importance of women's trade unions for the solution of these various problems.

(A) *Easing the Strain on the Woman Worker Outside Her Employment*

We have seen that, in several cases, household cares were a handicap for the working woman. She should, therefore, be relieved of them as far as possible. The problem is not merely to create useful organisations (canteens, crèches, day nurseries, laundries, mending centres, assistance for the mother in case of illness of husband or child), but these organisations must inspire absolute confidence in the parties concerned and intelligent and effective propaganda must be carried out on their behalf. This would be a very useful but rather difficult task, for it is necessary to overcome the present deeply-rooted prejudice of the housewife, who thinks

it her duty to spend valuable hours darning linen instead of giving it to a centre organised for that purpose. The best results in this domain have been obtained through the trade unions.

(B) *Vocational Training*

We have seen also that women are perfectly capable of acquiring good vocational training. But they must be given the opportunity to do so. In France, for example, there is too great a tendency to put girls to sewing, embroidery, mending, etc., without consideration of their individual tastes. If women are entitled to the same pay as men for the same work, they must also be given an opportunity of performing this work and therefore of being trained for it.

Considering the widespread shortage of labour and particularly of skilled workers, the moment is favourable for the development of vocational training for women. Not only, therefore, should vocational schools for girls be established, but public opinion should be induced to accept the idea that girls should be trained for callings often considered hitherto as essentially masculine. Every trade union should consider which apprenticeships within its province should also be open to girls.

The reconversion of war industries must not deprive women of certain advantages they have gained. In England, for example, in the Government plans for rehabilitating specially trained war workers for work in peace industries, no provision has been made for women. Here again, women should be entitled to vocational training equally with men.

(C) *Creation of Standards for the Assessment of Work*

Even if the problem of the reclassification of jobs may appear, at first sight, difficult to carry out at present, there is still no reason to neglect it. This scientific reclassification will completely eliminate the two still firmly-rooted categories of female work (badly paid) and male work (better paid). It will also enable a fair wage to be fixed as payment for work done.

The co-operation of the trade unions seems indispensable in order to establish a fair scale for job assessment. American draft legislation on equal pay provided for industrial committees to determine, each in their own domain, scales of pay applicable to both sexes. In the international sphere our International Professional Department could furnish interesting data for each branch of industry, which would enable it to establish in its own domain a wage-scale based on the value of the work, without distinction of sex.

(D) *Women's Trade Unions*

Despite the complexity of the problems, there is one point which is absolutely certain : one is never better served than by oneself. It is women who must take the initiative, but at the same time militant trade unionists must take widespread action to get women to join the trade union organisations in great numbers. It would appear that through women's trade unions, several schemes drawn up by experts of the I.L.O. Commission on Women Workers (1946) for improving the lot of working women could be carried into effect. We have seen that in France, for example, it is the women's commit-

tees of the works councils which are at the back of organisations for assisting the housewife. The vocational schools often depend on the trade unions ; the more women there are in the trade unions, the more vocational training they will be able to acquire and so achieve real economic equality.

It is incumbent on organised women workers to carry on active individual propaganda to combat existing prejudices. Under present conditions it is more than ever necessary to prove to male workers the necessity of women's work and to make them understand that the woman worker has to struggle like themselves. It is also necessary to emphasise the fact that the division of workers according to sex endangers the solidarity of wage-earners and the effectiveness of their activity ; it should be pointed out that in present-day society clashes of interest are artificially created, but that, in reality, they do not exist.

The trade unions have to combat the mental attitude of certain male workers who fear a loss of prestige through the admission of women to certain occupations on an equal footing with men. During the war, woman won her place in the trade union organisations (sometimes with difficulty) but the figures are there : in England, in 1939, 970,000 ; in 1944, 1,805,000, or more than 23 per cent. of the membership. It should be her aim to keep this place and to develop in women workers a taste for trade union activity by showing the practical and immediate advantages to be derived from it. It is through trade unionism that every woman worker will become aware of her own worth and the interests that she has to defend.

However, women are not so well organised as men, nor are they so well aware of their rights and interests. This enables certain persons and certain influences to place them in opposition to male workers. The results of this opposition are therefore clear : production and economic and social progress are retarded and international agreements are violated both in the letter and the spirit.

Under these conditions international action is imperative. We fully appreciate the efforts made by the I.L.O. since its inception to find a solution for the problem, the details of which we have just analysed. But it must be noted that, in this matter, they have merely formulated general principles, sometimes rather vaguely, in certain Recommendations and Resolutions.

It is necessary, therefore, to particularise, deepen and widen the action already begun, especially as the words uttered by Albert Thomas in 1929 are still valid : " We have sometimes thought that the first state in the protection of workers was past, that the most elementary reforms had been achieved, that women and children were protected throughout the world. As we try to see how our agreements are being put into effect, we find that Robert Owen's work itself has not yet been carried out. "

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