

THE THEORY OF WAGE DETERMINATION

*Proceedings of a Conference
held by the International Economic Association*

EDITED BY
JOHN T. DUNLOP



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INTRODUCTION

By JOHN T. DUNLOP

THE International Economic Association was founded under the auspices of Unesco at a meeting held in Monaco in September 1950. Each year since then a round-table conference has been held with papers and discussion centred upon a single major topic or a sector of the discipline. Succeeding conferences have been devoted to The Problem of Long-Term International Balance (1950), Monopoly and Competition and their Regulation (1951), The Business Cycle in the Post-War World (1952), and The Determinants of Economic Progress (1953).

For the 1954 Round Table Conference the topic of Wage Determination was chosen. It was held September 4-13 at Seelisberg, Switzerland, in the Hotel Kulm overlooking Lake Lucerne. There were 35 participants from 13 countries; 22 papers were discussed during 16 half-day sessions. The final day was spent in a general review of the work as a whole. A summary of this discussion, in the final part of this volume, indicates the main issues of the conference, the degree to which a consensus was developed, and the questions on which a spectrum of ideas remained.

The conference brought together economists with a wide variety of professional experience, as a glance at the list of participants will show. The group included a number of general economists interested in pure theory, monetary and fiscal policy, as well as specialists in labour economics and the institutions of the wage market. Some had been solely academics; others had extensive experience in the planning and administration of public policies, and still others had been practitioners in labour organizations, managements, and governments, or arbitrators in the making of wage decisions and in the settlement of other disputes. As might be expected wherever 35 economists are gathered together, the discussion also reflected a range of political and social convictions and programmes for public policy. The sessions were much enriched by the wide diversity of these experiences and talents; in such a group general principle and stubborn fact could not long be kept apart.

The participants were drawn from quite different environments with diverse wage practices and institutions in the labour market.¹

¹ See John T. Dunlop and Melvin Rothbaum, 'International Comparisons of Wage Structures', *International Labour Review* (April 1955).

In some countries wage decisions are relatively centralized through a labour court (Australia), or through confederation-wide bargaining (Sweden, Holland, and to a lesser extent Italy), or through the influence of a government determined minimum wage (France). In other countries there is considerable industry-wide bargaining but relatively little central co-ordination of these negotiations, except in war-time (England, Belgium, Germany). In still other instances (United States), plant or locality bargaining is the dominant form, although instances of industry-wide bargaining are significant. In some countries the direct wage constitutes a comparatively high proportion (85 per cent) of total compensation and labour costs, while in other countries supplementary benefits, family allowances, and social security payments of all kinds make direct wages a comparatively smaller percentage (60 per cent). In some countries these supplementary benefits are paid largely under government auspices and have immediate fiscal significance, while in other cases these payments are made by employers in the same way as direct wages.

The economic position of a country has important impacts on its wage policies. Some economies are relatively isolated while others are keenly sensitive to changes in the volume of world trade and to the terms of trade. Some economies are highly industrialized, while others are at the early stages of economic development. Some have had chronic underemployment (Italy); others have had long periods of overemployment (Sweden); others have apparently been able to exert some measure of control over the labour market through the flow of immigration (Switzerland); still others are said to reflect a structural tendency towards long-run inflation (France). Some have had extreme price and wage increases since the late 'thirties (thirty- to fortyfold in France and Italy), while others reflect relatively little inflation (doubling in England and Sweden). Further, political and social factors may be expected to play a rôle. Thus, some of these countries have had labour governments for significant periods while others have had predominantly conservative governments. Wage developments and wage structures are shaped by these diverse wage-setting institutions and by these differences in economic position.

There is a deep-seated intellectual habit, none the less, for writers on wage determination to generalize from the experience of their own country. They tend to assume the unique validity of their native institutions, be they Americans, British, Swedish, or French. The Seelisberg papers clearly reflect this tendency. The varied descriptions and explanations of wages proffered by economists puts one in mind of the conflicting impressions of the elephant

developed by a group of blind men, each of whom explored a different sector of its anatomy.

The discussion at Seelisberg helped to provide an antidote to such parochialism in two ways. (1) A comparative view places wage determination in the context of a wide spectrum of experience. This diversity among countries quickly leads to questions of theoretical interest: how do wage movements in economies with centralized wage determination compare with those in which wage decisions are more widely diffused? What has happened to wage structures under extreme inflation, compared to relatively modest increases in wages and prices? Are there significant differences in the wage structures of relatively static as compared to highly dynamic economies, or in the wage differentials of underdeveloped as compared to highly industrialized economies? How is one to account for the fact that payments above contract scales, the wage drift or wage slide, are significant in some countries and unimportant in others? A comparative view may also highlight the particular constellation of factors which has created a unique national wage determination pattern. The chapters by Marchal and Perroux, for instance, provide much illumination on the distinctive features of the French experience.

(2) By bringing together specialists in labour economics and general theorists,¹ the round-table conference aspired towards a more general theory of wages, towards a framework of analysis of wage experience applicable to a wider range of economies. Labour specialists have a contribution to make on such matters as the behaviour of labour organizations and managements, the degree of flexibility of the wage structure in response to relative changes in employment and other factors, and the impact of labour organizations on the operation of otherwise unorganized labour markets. General theorists, in turn, emphasize the common elements in the experience among countries: the rôle of wages in inflation, the relations between wage policy and monetary and fiscal policy, the relations between wages and transfer payments, and the factors determining the structure of wage differentials. The labour specialist sees the unique features of the labour market and the internal interdependencies within the wage structure. The general theorist is a constant reminder of the larger interactions between the labour factor of production and money flows of compensation, on the one hand, and the total economy, including an international system of markets, on

¹ See Joseph A. Schumpeter, *History of Economic Analysis* (1954), pp. 946-947, n. 6, for comments on the relative lack of 'co-operation and consequent cross-fertilization' between labour economists and theorists in an earlier period.

the other hand. The interchange between labour specialists and general theorists¹ lifts attention from the features of a single country at a given time and presents the challenge of a more general analysis in which the experience of separate countries become special cases.

The focus of attention at the Seelisberg conference was wage theory. The original choice of this subject was made by the Executive Committee of the International Economic Association. The primary interest was not the comparative description of wage-determining institutions² nor an evaluation of wage or pay-roll statistics,³ nor even an appraisal of alternative wage policies⁴ under varying economic conditions. Indeed, the growth in our knowledge of the operation of these institutions and the improvements in the quantity and quality of wage data, despite many deficiencies, impose a heavier standard upon wage theory. While questions of wage-setting institutions, source of wage data and wage measures, and issues of wage policy necessarily entered the discussion at Seelisberg at many points, still the central purpose was wage theory: the general explanation of the wage level, the complex structure of wage differentials which comprises the wage structure, and the process of wage determination.

Ten topics were originally suggested for papers. When the authors had been chosen and their individual interests and inclinations were known, the emphasis and distribution among topics was shifted in some degree. None the less, these ten topics and associated questions are set forth below, since they help to explain the genesis of the chapters which follow, and at the same time they may be of interest as sub-topics within the field of wage theory.

SUGGESTED PROGRAMME FOR ROUND TABLE ON WAGE DETERMINATION

1. *The Requirements of a Theory of Wages*

What questions is a theory of wages required to answer? What data should it seek to explain? How have the questions, and

¹ By way of contrast, see David McCord Wright (ed.), *The Impact of the Labor Union* (1951).

² See International Labour Office, *Wages, (a) General Report*, International Labour Conference, Thirty-First Session (1948).

³ See International Labour Office, various reports of the international conferences of labour statisticians.

⁴ See Barbara Wootton, *The Social Foundations of Wage Policy* (1955), pp. 161-190; The Swedish Confederation of Trade Unions; *Trade Unions and Full Employment* (1953); International Labour Office, *Report of the Director-General* (1951); Allan Flanders, *A Policy for Wages*, Fabian Tract 281 (July 1950).

the scope of wage theory, changed over the past hundred years ? What is the relation between wage theory and distribution theory ? How does one integrate questions of real and money wages ? wage level and wage structure ?

2. *The Determination of the General Level of Wage Rates*

Is this subject to be within the scope of economics, or is it to be assumed that the money wage level is given for purposes of economic discussions ? What are the determinants of the wage level in various economic systems : classical, Walras, Keynes, Tinbergen, Klein ? What do econometric models teach about wage level determination ? It is sometimes said that in the nineteenth century money supply determined prices and wages were then adjusted accordingly, while in the twentieth century wages are first determined by collective bargaining and then money supply permits prices to be adjusted. How valid is this caricature ?

3. *Wage Policy and Full Employment in the Short Run*

What are the range of choices between full employment and inflation ? What conclusions are to be drawn from the experience since 1945 ? How much unemployment is required for wage stability ? What factors determine this point or level ? What are the consequences of the fact that labour supply varies with employment levels ? Are wage and price controls inevitable for practical full employment ? What 'responsibility' can be expected from the parties in collective bargaining ?

4. *The Long-term Movement of the Wage Level*

The problem of dividing the gains in productivity in the form of lower prices or higher wage rates. The problem of adjustment in wage structure and differentials and piece-rates is easier with a rising wage level. Cost-of-living escalation as a wage policy. Adjustments within the community to long-run inflation.

5. *The Impact of Bargaining on the Wage Structure*

Compare wage setting in pure theory, under non-union or unorganized conditions, and under collective bargaining. A restatement of the theory of wage differentials by occupation, sex, area, industry. How extensive are autonomously induced 'distortions' in the wage structure ?

6. *A Review and Appraisal of the Theory of Bargaining*

Review of Edgeworth, Pigou, Shackle, etc. Has the theory of games any contribution to make ? What are the limits of 'bargaining' or 'indeterminacy' ? What contribution has the theory of oligopoly to make to wage determination ?

7. *The Concept of Labour Supply*

Is the amount of labour supplied a function uniquely of price (wage rate)? Supply to the firm? Locality supply? Supply in the country? What can be said about the shape of these functions? Is it possible to develop a classification of labour market competitive conditions to parallel product market classes and types? What is a labour market?

8. *The Union as an Economic Institution*

Can any assumptions of rational behaviour be developed? What about conflicting theories of union behaviour as 'political' or 'economic'? Are there any significant degrees of difference in rationality in the behaviour of businesses and unions? What behaviouristic assumptions are warranted?

9. *Relation between Wage Rate Changes and Variations in the Size and Share Distribution of Income*

What have been the effects of changes in wage rates on size distribution of income? What models? Changes in income within labour income and between factor incomes? Where do we stand on the share distribution problem?

10. *The Impact of Inflation on Wage Differentials*

In the light of European inflations, and comparisons between countries, what can be said about relation of inflation to wage structure? Are differentials measured in percentage or absolute terms? What models can be developed to explain developments?

A preliminary committee at Seelisberg grouped the papers into major headings and arranged the sequence of their presentation. This order has been modified here only in minor respects.

Part I is introductory and seeks to present the task and problems of contemporary wage theory against the background of a brief review of the development of wage theory since the early nineteenth century.

Part II (Chapters 2-7) is concerned with the general level of wages. These chapters consider in turn the determination of the general level of money wages, the relation between the level of wages and the level of employment, the movement of real wages, and the general interrelation between wage rates and other economic variables. These chapters consider the wage level in macro-economics.

Part III (Chapters 8-11) is oriented toward the impact on wages of labour organizations and other organized groups in the labour market. In modern industrial societies wage rates are not set as abstracted under the conditions of pure competition, but rather the

price of labour services is determined, at least in part, by negotiations between organized labour and managements. The government may also play an active rôle. These chapters explore the consequences for wage determination of these institutional features of the labour market and the community.

Part IV (Chapters 12-17) is devoted to the important subject of the wage structure, considered as a complex of wage differentials. Chapter 12, by Kerr, is a general treatment of the problem ; the chapters which follow are primarily concerned with the evidence drawn from particular countries : the United States, Sweden, France, and England. While it is possible to develop a great many classifications of differentials, these chapters recognize the following types : interpersonal, interfirm within the same product market, interoccupational, interindustrial, and interregional. These chapters are concerned with explanations for the structure of wages and their changes in recent years.

Part V (Chapters 18-19) surveys the contribution of bargaining theory to an explanation of wage determination. If wage rates are determined in negotiations between labour and management organizations, the theory of wages must draw from the pure theory of bargaining.

Part VI (Chapters 20-21) is concerned with the operation of the labour market and with the difficult subject of labour supply. There has been considerable growth in recent years in our knowledge of the detailed operation of the labour market in the United States, and Chapter 20 seeks to summarize these results and to indicate their implications for wage theory.

Part VII constitutes a summary of the discussion at Seelisberg and seeks to draw together some of the principal areas of consensus of views and to indicate some of the major divisions of opinion.

Finally, may I express the gratitude not only of the Programme Committee, but also that of all those who took part in the Conference, to some of those who contributed to its success and its smooth hearing : to Mme Berger Lieser, the indefatigable Secretary of the Association ; to Mrs. Henderson, who was chiefly responsible for the translation of papers written in languages other than English ; to M. Jacob and Miss Hélène Heroys, who translated our discussions and helped to make our often incoherent contributions intelligible to our colleagues ; to Douglas Hague, who has reduced to order and summarized the record of the debate ; and to the friendly and helpful management and staff of the Hotel Kulm.

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PART I

THE SETTING FOR THE DISCUSSION

Chapter 1

THE TASK OF CONTEMPORARY WAGE THEORY

BY

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THE high purpose of these sessions is symbolized by a passage from Michael Polanyi :

Science is not conducted by isolated efforts like those of the chess players or shellers of peas and could make no progress that way. If one day all communications were cut between scientists, that day science would practically come to a stand-still. . . . The co-ordinative principle of science . . . consists in the adjustment of each scientist's activities to the results hitherto achieved by others. In adjusting himself to the others each scientist acts independently, yet by virtue of these several adjustments scientists keep extending together with a maximum efficiency the achievements of science as a whole.¹

In matters of wage theory we have all been too much concerned with domestic chess and shelling of peas ; there has been too little international adjustment of ideas.

THE HERITAGE OF WAGE THEORY

An appraisal of the current state of wage theory needs historical perspective. A brief treatment of a hundred and fifty years of wage discussion runs the dangers of superficiality and dogmatism ; it has the advantage, however, of compelling attention to fundamentals.

The task of wage theory — the questions which have concerned successive generations of economists — has not always been the same. Indeed, the wage theory of a period can be interpreted as a product of (1) the economic developments and quantities of the time and place, including the movement of wage rates ; (2) the

¹ *The Logic of Liberty, Reflections and Rejoinders* (1951), pp. 34-35.