

THE FACTS OF
INDUSTRY : :
THE CASE FOR PUBLICITY

PRICE 1/- NET

MACMILLAN AND CO., LIMITED
ST. MARTIN'S STREET LONDON

1926

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ACKNOWLEDGMENTS

The Compilers of this report wish to express their thanks to Mr. J. A. FARRELL, President of the United States Steel Corporation ; Mr. WM. GREEN, President of the American Federation of Labour ; Mr. A. LEGGE, of the International Harvester Company ; PROFESSOR WESLEY C. MITCHELL, of Columbia University ; Mr. HAROLD G. MOULTON, Director of the Institute of Economics, Washington ; Mr. GEORGE E. ROBERTS, of the National City Bank ; PROFESSOR F. W. TAUSSIG, of Harvard University ; Mr. MELVIN A. TRAYLOR, President of the First National Bank, Chicago ; all of whom have been kind enough to furnish them with statements and expressions of opinion as to the economic effects of publicity in the United States. They also wish to express their gratitude to Mr. Charles E. LYON, American Trade Commissioner in this country, for the information given them by him as to the American statistical system ; and to the various members of British Government Departments who have given them valuable assistance.

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CHAPTER I

THE FACTS OF INDUSTRY

STATEMENT OF THE CASE

The assumption which underlies the following report and which induced us to take up this inquiry is that it is impossible to formulate a wise policy in industrial and economic affairs without first knowing the facts of the case.

We need spend no time in proving that the economic condition of this country is far from satisfactory in many respects, but until the maladies of British industry have been properly diagnosed and means have been found for watching the progress of the patient it is very hard to prescribe a remedy. There may always be differences of opinion as to what the economic organisation of society should ultimately be, but the demand for exact and adequate knowledge on economic affairs is common ground to those, at the one extreme, who believe that radical changes are needed to meet the case, and to those at the other who think that the facts will show that under the present system we are doing the best possible in the circumstances. The present committee has not attempted in any way to consider any problems of policy ; but it is unanimous in thinking that the economic information available in Great Britain is quite inadequate to enable the country to deal with the difficult economic questions with which it is faced.

We have considered the matter from various points of view. There is the problem of industrial relations. Clearly there is no more vital problem for the nation than that of assuaging industrial unrest. Among many causes of our difficulties a leading one is dissatisfaction with the sharing of the product of industry and the feeling that the worker sometimes does not get a fair deal, and at others, owing to lack of knowledge, demands impossibilities. This suspicion can only be allayed by the fullest information, by which we mean not merely facts produced in time of emergency, but a regular watch upon the progress of production and the distribution of the proceeds. We are not optimistic enough to think that the disclosing of information alone will create industrial peace, but we are satisfied that industrial peace cannot be attained without it. The next point of view from which we have approached the problem is in connection with the ups and downs of trade which bring in their train unemployment and business disturbances. There are many ways of moderating, if not abolishing,

these movements altogether, but clearly no remedy can be applied until the movements are measured and analysed. Our resources for doing this are at present quite inadequate.

We have also considered the question from the point of view not merely of production in general, but of the results obtained by individual concerns. The problem here is a very difficult one, for it is generally assumed that it is the interest of the individual firm to refrain from giving any information which might encourage competition. But the community cannot accept this view. The theory of private enterprise presupposes that capital and labour flow in those directions where they are needed most and that this movement is brought about by high prices, high profits and high wages. The concealment alike of profits or of losses tends to check the adjustments that should take place in the public interest. Our discussion of this subject starts from the assumption that company accounts, and particularly the accounts of concerns which control the economic destiny of large parts of the community, are not of interest merely to the shareholders or to the creditors of the company, but are a matter of general interest, and that therefore company law should be based on this assumption. In view, however, of the existence of a committee which is enquiring into company laws and is about to report, we have not gone in detail into this question, but have contented ourselves with the enunciation of certain general principles.

There are various other aspects of the problem of publicity—one important one being the point of view of the consumer, who is very much concerned at present with the problem of retail prices as compared with wholesale prices. This question raises very big issues which cannot be settled without facts which would show clearly what proportion of the prices charged to consumers represent various forms of services such as transport, merchandising, actual retail distribution, overhead charges, etc. But this matter is one on which new experience is rapidly being gained by the activities of the Food Council, and we have not thought it desirable to delay our report for an investigation which might be more effectively undertaken at a later date.

We have therefore confined ourselves to the three problems of industrial peace, trade fluctuations and the classes of information which should be divulged by a joint stock company. The case for publicity under each of these heads is more fully considered in the following chapters, in which we have also endeavoured to survey what has already been done, and to draw up a programme of definite action that should be taken. Our specific recommendations are summarised at the end of each chapter.

CHAPTER II

INDUSTRIAL RELATIONS

It is unnecessary to lay stress upon the fact that the industrial problems with which the country is confronted are unprecedented in their urgency, and that the problem of the relations between employers and employed is one of the most urgent. Every year we have to face the fact that a large number of working days are wasted owing to disputes, with the result that the productive power of the country is diminished and that large sums which would otherwise be payable in wages are lost by the workpeople concerned. Nor can the damage suffered by the nation be measured merely by the results of actual stoppages. The efficiency of industry is impaired not only by disputes which lead to stoppages, but also by the atmosphere of distrust and suspicion which pervades so great a part of industry to-day. We are aware that political controversy as to the proper basis on which industry should be carried on is acute at the present time. With that fundamental controversy, which involves a challenge to the system of private enterprise itself, we are not as a Committee concerned; or, to be more accurate, we are only concerned to this extent, that we feel that all parties to the controversy may well agree in desiring that the available facts about the present industrial system should be more accessible and more widely known.

Moreover the issues involved in most of the industrial disputes with which the nation is from time to time confronted relate directly to wages, hours of labour and working conditions; and they have to be settled on the assumption that industry will, for the present at any rate, continue on its present basis. Their settlement turns upon the ability of each industry to meet a given wages cost, and on the willingness of employers and employed to offer and to accept the best terms which the industry can be shown to afford. In an atmosphere of secrecy, however, it is impossible for the wage-earners to be sure that they are receiving equitable treatment, or for the public to form a sound opinion on the merits of any particular dispute.

We hold that an important consideration in industrial relations is the necessity for the workers and their representatives to have a clear knowledge of the position of the industry, and to be well informed with regard to the costs of production in respect of wages and of all other factors, including the profits made or losses incurred, and that this information should be made available continuously and at

regular intervals. It cannot be expected that confidence will be secured unless the wage-earners are in possession of information which will enable them to estimate whether or not they are receiving in wages a fair proportion of the proceeds of the industry. We feel, moreover, that the public is in need of information, covering the whole field of industry, which will show how the total national production is absorbed.

We have made a survey of the statistical information at present available and have been led to the following conclusions. There is evidence of the existence of a general and increasing desire for such information as is above indicated, and so far as wages and profits are concerned figures relating to these matters are frequently available in the course of wage disputes. The value of statistics where they have been made available is shown by the following striking statement made by a Committee of the Joint Industrial Council of the Pottery trade.

“ We have been very greatly assisted in coming to a decision on the matters referred to us by the report of the Accountant. We feel very strongly that had information such as that contained in his report been available to the parties prior to the 25th March last, the present very serious difficulties between the Manufacturers and the Operatives would probably never have arisen. We desire to emphasise the permanent importance which, in our opinion, attaches to the information which he has brought together as affording a basis for the regulation of wages in the future, and it is our earnest hope that the National Council of the Pottery Industry will find means by which this information can be so utilised and for bringing it up to date from time to time. Our experience in the course of the present inquiry has demonstrated conclusively that accurate particulars as to profits on turnover, earnings of the Operatives, movements in selling prices, etc., can be obtained and presented in a form which can be easily understood. If information such as that furnished to the Committee during the present inquiry was more frequently at the disposal of bodies of Employers and Workers, much of the distrust and suspicion which is constantly arising between Employers and Workers owing to inaccurate statements made by one side or other, arising from insufficient knowledge of the facts, would be obviated. It is the unanimous view of the Committee . . . that neither the Committee nor the honorary members could have come to a satisfactory decision upon the main issues without the information contained in his (the Accountant's) report.”

Only, however, in a very few instances, such as those of the Pottery and Wire trades, is there any arrangement for the systematic and continuous supply of such figures. Information prepared *ad hoc* for use on one occasion only, generally when a particular demand for an increase or a reduction of wages is under discussion, in our opinion does not meet the case. Whatever may be the value of figures supplied in such circumstances, the fact that they are only available at such a time has a tendency to create in the minds of Trade Unionists a distrust of statistics as a basis of argument. If statistics are to remove the element of suspicion from industrial relations they must be readily available to the workers' representatives at all times and under all conditions of trade. Moreover, an instantaneous statistical photograph of the position of any industry is apt to be most misleading: and in any case is useless as a means of carrying conviction to the workpeople that they are getting "a square deal." Only the facts at any time and at all times available can remove that mistrust which at present is so unfortunate a factor in industrial relationship.

Statistical information would, in our opinion, have a beneficial effect on industrial relationships, not only because it would enable the workpeople to ascertain whether they were being fairly treated, but because of the assistance it would give to employers and to the public. If employers were constantly in possession of information covering the whole field of industry, the efficiency of industry and therefore its capacity to make good profits and to pay good wages would be increased. Employers, moreover, would be able to go about their business, in freedom from the constant suspicion on the part of their employees and the public that they were paying too little and charging too much. These suspicions are frequently unfounded, but the only sure way to eliminate them is the fullest possible disclosure of the facts.

Finally, the public needs the facts. The time has long gone by when industrial disputes could be regarded as purely the private concern of the individuals engaged in them. Their consequences to the public are too grave, and grow yearly more serious. The force of public opinion is already a potent factor in the settlement of disputes, but it cannot be effectively mobilised or justly applied unless the public is enlightened as to the facts. The experience of recent years has in our opinion proved that the public cannot be adequately enlightened by sudden inquisitory raids upon individual industries for the purpose of discovering whether a given scale of wages or of prices is justified. The information thus elicited is generally inadequate, and frequently consists only of *ex parte* statements by the contending parties from which

even the expert can only with difficulty deduce the true position.

Given, however, that statistical publicity is desirable it remains to decide what form it should take and how the requisite statistics should be compiled and published. Before proceeding to our recommendations on this head we give a survey of the information already available.

SURVEY OF INFORMATION AT PRESENT AVAILABLE

In their Report on Joint Industrial Councils, the Whitley Committee did not include the collection of statistics among the subjects which they suggested as suitable for consideration by the Councils. The "Model Constitution" prepared by the Ministry of Labour, however, contained the following clause :

"The collection of statistics and information on matters appertaining to the industry."

Of the 49 Joint Industrial Councils at present actively functioning, 36 include in their Constitution specific provision for the collection of statistics and information on matters appertaining to the Industry, including the Boot and Shoe, Electricity Supply, Gas, Hosiery, Pottery, Iron and Steel Wire and Tramways Councils. In the main the clause in the constitution follows the suggestion contained in the Model Constitution prepared by the Ministry, but certain Councils amplify it considerably. The Metallic Bedsteads Joint Industrial Council makes provision for the appointment of an independent Accountant where the information desired is of a private and confidential nature ; the Asbestos Council extends the suggestion to the compilation of statistics relating to foreign trade, a practice which, in fact, is followed by other Councils. The Pottery, Quarrying and Welsh Plate and Sheet Councils specify definitely the exact nature of the statistics which are to be collected.

It should be noted that the industries in which information as to the state of trade is regularly communicated by the employers' representatives to the workpeople's representatives are few in number, though some are large and important. Further, the information in almost every instance is supplied for the purpose of or with reference to the fixing of wages. During recent years it has become increasingly common for employers' organisations in resisting a wage application to produce detailed information as to the state of trade. The tendency is no doubt connected to some extent with the fact that during these years trade has in general been depressed

The position where information is placed on the table, and is available to both sides, is obviously different from that which exists when the information has not been laid on the table. Attention may be drawn in this connection to the extract from a report on the Pottery industry already quoted. It is, however, becoming increasingly common for trade union leaders to acquire information as to the state of trade from public or private sources, and to use it in wage negotiations. In the cotton textile trade, for example, employees have for long been shareholders, and the trade unions in the past have deliberately encouraged their members to become shareholders, in order that they might obtain the balance sheets of the firms for use in wage negotiations. Many of the monthly or quarterly reports of trade unions contain references, sometimes in detail, to the state of trade and to the trading results of individual firms.

The possibility of estimating the real position varies also according to the nature of the industry. In the cotton textile industry, again, from their own knowledge of production costs and the published information as to the cost of raw cotton and the selling prices of the products together with the recognised standard estimates of overhead charges, the Trade Union officials are able to form a fairly accurate view of the financial position and of the capacity of the industry to bear wages charges. Similar circumstances prevail in other industries manufacturing standard products but, in big industries carrying on business of a very varied kind, calculations of costs and margins are not possible without data which are available only to the employers and which are not as a rule disclosed to the workers in such a form as to be of real value. In such cases, of course, the employers themselves are in possession of less information as to one another's position than is the case in the cotton and other industries.

The following statement sets out the information available regarding the disclosure of facts and figures indicating the state of trade. For convenience the information has been classified under the following heads :

- (a) Industries in which statistics as to the state of trade are compiled and used as a normal practice.
- (b) Cases in which such statistics have been made available on the special occasion of a wages application.
- (c) Statutory or other official publication of such information.

(a) INDUSTRIES IN WHICH STATISTICS AS TO THE STATE OF TRADE ARE PUBLISHED AS A NORMAL PRACTICE.

(i) *Coal Mining.*

The National agreements of 1921 and 1924 between the Mining Association of Great Britain and the Miners' Federation of Great Britain contain provisions for the collection and publication of certain information in each district.

Under these arrangements the coal owners furnish returns to independent accountants appointed by the district Joint Board of Employers and Workpeople, and the items of information supplied are collated by the accountants and the results published. These items of information include: Output; costs of production (wages, stores, royalties, management, salaries, insurances, repairs, office and general expenses, depreciation, etc.); proceeds (commercial disposals); number of workpeople employed; number of man-shifts worked; number of man-shifts lost which could have been worked; and output and earnings per man-shift worked. The owners' returns to the accountants are checked by joint test audit of the owners' books. These ascertainment are made every month from figures relating to the three preceding months, and the distribution of the proceeds of the industry as between employers and workpeople is based on them. It should be noted that figures showing the capital sunk in the industry are not required by the agreement; and no allowance for interest even on loan capital is included under the heading of costs.

The Joint Committee of the Association and the Federation which sat recently to consider the position of the industry had before it a large amount of detailed statistical information as to output, prices, costs, exports, imports and foreign trade, prepared in the main by the Association either from special returns or from published sources.

(ii) *Iron and Steel Trades.*

For the present purpose this group may be taken to include iron ore mining, the manufacture of pig iron from the ore, the production, rolling and forging of steel ingots, iron puddling and forging, and the manufacture of sheets and tinplates. In all these trades wages are governed in part at any rate by a sliding scale, which varies with the selling price of the product either of the industry itself or some closely allied industry. Thus the wages of iron ore miners and of blast furnacemen are governed by a sliding scale which depends upon the selling price of certain grades of pig iron manufactured in the district concerned, except in South Wales where it depends upon the selling price of steel bars and rails. Wages in the heavy steel

trades are governed by the selling price of some product of the industry, such as steel bars or steel ship plates, which may, however, not be a product of many of the works governed by the scale. In the sheet trade a class of product common to the trade is taken. In the tin plate trade the governing factor is the selling price of steel bars—a case in essence different from the rest, because the steel bar is not the product of the trade but the principal raw material.

The selling prices referred to are average selling prices during a specified period—usually three months—ascertained by accountants at the end of that period and governing wages in the industry during the three months following the month of ascertainment. Usually the sliding scale is perfectly definite in its operations and the change in wages as a result of the ascertainment is automatic.

In this industry very full and useful statistics of production are published monthly and annually.

(iii) *Iron and Steel Wire Manufacturing.*

In the annual reports of the Joint Industrial Council up to and including the annual report for 1923-4, dated June, 1924, statistics were embodied showing the "total capital estimated in accordance with requirements of the Finance Acts, total wages, salaries, State and local taxation, payment under the National Insurance Acts, amount of excess profits duty, total amount paid for traffic purposes, amounts distributed amongst shareholders, amount of taxed profit allocated to reserve and special depreciation, aggregate tonnage sales output of the wire from factory, total coal consumption, units of electricity purchased, cubic feet of gas purchased for power purposes, total number of wage-earners and the average wage." These statistics were from figures furnished by twelve firms in 1923. In the previous years the figures furnished were by twelve firms in 1920, ten in 1921, and ten in 1922. Further, statistics were given showing the imports from Germany, Belgium, U.S.A., and other countries of steel billets and blooms, iron sheet bars, angles and rods, and various other imports. Again, the aggregate exports of cables and ropes, nettings, nails and staples, and various other articles were also given. The principal Trade Union, the Amalgamated Wire Drawers' Society of Great Britain, contributed statistics showing the amount of sickness benefit, unemployment emergency benefit, number of apprentices and proportion of apprentices to journeymen, for various years.

Owing to differences between two of the Unions on this Council, the Amalgamated Society of Wire Drawers and

the National Union of General and Municipal Workers, the Council has not functioned for six months, and accordingly no annual report has been drawn up for 1924-5 and no statistics have been exchanged.

(iv) *Pottery.*

In 1918 a Statistical and Enquiry Committee was appointed by the Joint Industrial Council and is still functioning. At the outset it conducted an investigation of the industry which resulted in an immense amount of valuable information being supplied. Its functions are to supervise the collection of such statistics as may from time to time be required—wages, making prices, profits, etc.

From 1913 to 1919 the Committee obtained and collated statistics showing the average percentage of profits on turnover. In 1920 the work was dropped, but was resumed in 1923.

In 1924, claims by the Unions for increases of wages, and counter-claims by the employers came before the Joint Industrial Council, who decided that they should be dealt with by a special Sub-Committee. This Sub-Committee dealt with certain of the claims and referred the remainder to the arbitration of three honorary members, at the same time instructing a firm of Chartered Accountants to conduct an independent investigation and report to the Committee as to the comparative average selling prices, the earnings of the operatives and aggregate profits in the industry as a whole; and to the honorary members as to the aggregate profits of the different sections of the industry. In their Award, the Committee, dealing with this aspect of the case, made the remarks which we quoted in our opening statement.

It should be noted that this information was supplied on the strict understanding that it was not to be used in any way for publication either in the Committee's report or otherwise. The figures supplied, therefore, are not available.

(v) *Glove Industry.*

Statistics as to imports, home production and employment are regularly supplied at each meeting of the Joint Industrial Council, but are not as a general rule disclosed to the public.

It would appear, judging from the course which wages negotiations in the past have taken, that the facts thus supplied have impressed the workers' side to the extent of inducing them to modify their claims considerably.

Facts regarding the industry have also been made available by reason of the inquiry under the Safeguarding of Industries Act.

(vi) *Matches.*

It was agreed in 1920 that the figures of importations of Foreign Matches should be regularly given at the J.I.C. meetings, as the importation of these matches, which are sold for less than British made matches, is the main item which affects production. Since 1922, similar information has been given regarding importation of mechanical lighters.

(b) CASES IN WHICH STATISTICS AS TO THE STATE OF TRADE HAVE BEEN MADE AVAILABLE ON THE SPECIAL OCCASION OF A WAGES APPLICATION.

(i) *Engineering and Foundry Trades.*

In the Engineering Trades there seems to be no systematic publication of statistics, but figures are occasionally drawn up for special purposes and for use in particular negotiations. In May, 1924, for instance, there was a special conference between the Engineering and Allied Employers' National Federation and the various Trade Unions engaged in the trade. Sir Allan Smith, who was in the Chair, put before the Unions statistics purporting to show the state of the trade. The figures showed the total turnover of 1,046 firms for the year 1922/23, and the total work in the live Order Book for 985 firms for the year 1924. The firms making the returns represented an employing power of over 65 per cent. of the total employing power of the Federation. The percentage costs of the turnover were given :

ABSTRACT OF PARTICULARS received up to and including 14th May, 1924, on Forms "A," 1922/23, and "B," 1924.

	"A" { 1,046	Firms } "B" 985
Turnover as per returns :	£155,437,297	£66,909,694
Cost of Turnover made up as follows :		
	Per cent. on Turnover	Per cent. on Turnover
Materials	43.17	44.75
Direct Wages.....	19.84	20.00
Indirect Wages	13.27	13.78
General Charges	19.59	19.80
Administration Charges	1.50	1.50
 Total	 97.37	 99.83
Balance available	2.63	.17
	<hr style="width: 50%; margin: 0 auto;"/> 100.	<hr style="width: 50%; margin: 0 auto;"/> 100.

Direct Wages were the wages which could be booked direct to particular contracts : Indirect Wages were the wages, only a proportion of which could be so charged. General Charges included Rents ; Rates and Taxes (other than Income Tax) ; Insurance ; Depreciation ; General Office Expenses, including fire, light and heat ; and materials for maintenance, repairs and renewals of building, machinery and plant.

Administrative Charges represented the remuneration to Partners, Directors and Managing Directors.

The small balance available had to provide for all Capital Charges, any Income Tax owing, and money required for work in progress.

(ii) *Shipbuilding.*

A Joint Committee of employers and of representatives of the unions was in session while our investigations were being carried out. This Committee issued an interim report on 14th October, 1925. Comparative figures as to wage-rates and hours of labour in Britain, Germany and Holland were considered. Special attention was concentrated on the recent placing of a contract in Germany ; and it was disclosed that the German price accepted was £153,000, and that the lowest British tender was £213,000, although in making that tender no allowance had been made for indirect charges or return on capital.

Details of the make-up of the price quoted were given to the Committee under the following heads, but were not disclosed to the public in the report.

Labour ; Steel (plates and sections) ; Timber and Store materials ; Forgings, Castings, Rivets, and Smithy Iron ; Deck Machinery ; Anchors, Chains, Boats, Blocks, Rigging Hawses, Awnings and Tarpaulins ; General Outfit ; Board of Trade and Classification Fees ; Harbour and Dock Dues, Insurances, etc. ; Coal and Power ; Margin for indirect charges and profit.

In the course of the enquiry the Trade Union representatives asked for information on the following points :

Capital invested in shipbuilding ; 1912 and 1924.

How much is paid up ; what profits have been distributed 1912-24 year by year ; what bonus shares have been issued firm by firm ; price paid for original share on re-floatation or purchase.

Profit per ton, 1912 and 1924.

Cost of Administration 1912 and 1924.

Salaries of Management and Directors' Fees 1912 and 1924.

Number of ships and berths, 1912 and 1924.

What proportion of Admiralty work to total tonnage produced, 1912 and 1924.

What proportion of idle berths are allocated to costs, and how costs are made up.

What reserves have been accumulated, and what reserves have been distributed.

The Employers in reply pointed out that these matters really belonged to a sphere of the enquiry which the Unions had up to the present ruled out, namely the discussion of a basis for the future regulation of wages. If such a basis were arrived at firms could not expect to get relatively better treatment by reason of their having increased their capital by the free distribution of shares. During the last three years prices had been such that on the average the margin over labour and material had been so small as to cover only the increased local rates. There had been no margin for administrative charges or depreciation, and no remuneration for capital services.

The Committee is now proceeding with the second stage of its work, namely the examination of elements of cost which are outside the control of the shipbuilding trade itself. The interim report contains proposals for the greater interchangeability of labour, etc., but the Trade Union Executives have stated that they have come to no conclusion pending the completion of the enquiry.

The tonnage of ships built is given in Lloyd's List. Figures are also published showing the tonnage of ships launched, and the tonnage on which work is suspended.

(iii) *Railways.*

When meeting the National Union of Railwaymen and the Railway Clerks' Association on the subject of their claims for increased wages, the Railway Staff Conference, on behalf of the Railway Companies, put forward figures as to the decline of railway receipts and increase in the wages bill. Again, the Great Western Railway, in discussing with representatives of the men on the Sectional Councils a proposal to reduce wages and suspend the guaranteed day and week as an alternative to discharges gave figures as to the extent of the coal traffic in 1924 compared with that in 1913, and also gave particulars of the decrease in the dividends paid.

Statistics on Railway costs, etc., are published by the Ministry of Transport under Statute. (*Vide* p. 25).

(iv) *Electricity Supply.*

In 1924, the Joint Industrial Council appointed a special tribunal to examine and report upon a claim for an advance in wages put forward by the workpeople. As this advance was claimed in part upon the ground of the ability of the industry to bear an increase owing to the improvements in organisation which had resulted in increased output per man and decreased labour cost per unit, the examination turned largely upon the financial position of the industry; and the fact that information was readily available concerning the industry which could be used by the parties in argument and which could be examined by the tribunal undoubtedly gave great weight to the findings and recommendations of that body, which were subsequently accepted by the Joint Industrial Council.

(v) *Tinplate.*

As explained in paragraph a(ii) above, wages in this trade are based on the cost price of the raw material, and for this purpose certain information is regularly supplied. Apart from this, a recent incident in the industry may perhaps be mentioned as of some interest. Some short time ago a Selling Association was formed which covered the majority of the firms in the Tinplate trade in South Wales. After some months it was evident that some of the members of the Association were not being loyal to it, but were trying to undercut Association prices. As a result, the Association was dissolved. Upon this the workpeople called a special conference with a view to deciding the course that they should adopt on the Joint Industrial Council and strong resolutions were passed to the effect that the Association should not have been dissolved without the workpeople being consulted. In the Tinplate trade, owing to its small and localised nature and the high state of organisation, the workpeople have for some time taken an exceptionally strong interest in and have an exceptionally good knowledge of its commercial position, owing to local publication of important figures relating to the trade. This is probably in a large measure due to the close relations which exist between employers and employed, and which result in the dissemination of the essential facts about the industry. Among the objects of the Joint Industrial Council is that of considering and advising on matters "affecting the interests of employers and employed, e.g., the position of the trade commercially (production, exports, foreign production and competition, raw material): the position of the trade technically (inventions, suggestions for improving technical efficiency). . . ."

(vi) *Chemicals (heavy)*.

In 1924, in opposing an application for an increase in wages, the employers supplied certain information regarding the industry, including tables of accounts for the consideration of the workpeople. It is not known what was disclosed.

(vii) *Dyeing (not including bleaching or printing)*.

The facts regarding this industry were on one occasion made available through the report under the Profiteering Act.

In arbitration proceedings involving the English Dyeing trade, the employers, in reply to the workers' argument of high dividends, tendered a large volume of evidence to show the severe handicap under which the trade was suffering in its competition in foreign markets.

(viii) *Sugar Refining*.

In October, 1924, a strike occurred at the Greenock Sugar Refineries over the refusal of a demand for a 12/- increase in wages and settlement was not reached until the employees agreed to the preparation of a financial statement showing that the industry could not bear the increase. The statement which was prepared by a firm of Chartered Accountants and submitted to a Special Tribunal, on which the Transport and General Workers' Union was represented, was to the effect that for the year ended 30th September, 1924, the percentage of actual loss to wages paid was 188.5 per cent. before charging any remuneration to Directors or Partners and interest on capital. The workers acknowledged the position and withdrew their request for increased wages.

(ix) *Flour Milling*.

In connection with applications for increased wages and also in connection with attempts on the part of the employers to revert to a 2-shift instead of 3-shift day, reference is occasionally made at the meetings of the Joint Industrial Council to the excess capacity of the mills and competition by the importation of flour from abroad. No definite statistics appear, however, to be given.

In 1924, the Employers' Side of the J.I.C. issued to the Workers' Side a chart showing for two years the relative variations between Flour Milling Wages, taking the rate of pay for a general labourer in a Class A mill as the basis, and the cost of Flour and the cost of Bread. It is not known in what connection this was prepared.

(x) In a recent arbitration between the employers repre-

senting the cloth working section of the Export Packing Joint Industrial Council, London Area, and the work-people, the arbitrator, Sir Richard Redmayne, was empowered by the employers to inspect their books and to decide whether the state of trade as revealed in the books justified an increase in wages ; but no detailed figures appear to have been communicated to the operatives.

(c) STATUTORY OR OTHER PERIODICAL PUBLICATION OF INFORMATION AS TO THE STATE OF TRADE.

(i) *The Census of Production.*

The first Census of Production was taken for the year 1907, and in 1911 it was decided to hold one every five years. The Census of 1912, however, was never completed owing to the War, and when preparations were made for a Census in 1920 the scheme was dropped in the supposed interests of national economy. It was again proposed that a Census should be taken in 1922, but again the proposal was dropped. The Census now being taken relates to the year 1924 and was authorised during that year.

The Present Census.

The information required varies a little from industry to industry, but in general it is as follows :

Compulsory Information.

(a) *Output in year of return.*

The output has to be shown under a large number of heads, each relating to an important product of the industry. Both the quantities produced and the net selling value have to be shown.

(b) *The Materials used.*

A total sum has to be given, showing the total cost of all the material purchased and used in the production of the output shown above.

(c) *Work given out.*

Showing the estimated amount paid to other firms for work done on behalf of the firm making the return.

(d) *Persons employed.*

Showing the total numbers of wage-earners and salaried workers separately ; and also showing the number of males and females and of workers over and under eighteen years of age.

(e) *Capacity of Machinery.*

Showing the capacity of engines and generators ordinarily in use during the year, and also of those idle or in reserve.

In addition to the compulsory information, a certain amount of voluntary information is asked for. This varies very considerably from trade to trade, but includes in each case the quantities of fuel consumed.

It should be noted that no return is compulsorily asked for which would enable an estimate to be made of the total Wages Bill, either of individual industries or of the nation as a whole. In order to make good this lacuna as far as possible, the Ministry of Labour, acting in collaboration with the Census of Production Office, is endeavouring to obtain a voluntary return of the wages paid; and we understand that a reasonably satisfactory response is being made.

(ii) *Railway Statistics.*

Elaborate Statistics relating to the Railways are regularly issued by the Ministry of Transport as follows:

The Annual Railway Returns.

A preliminary statement is issued in March, followed by a final return in the Summer, both relating to the previous year. These returns contain a mass of detailed information describing both the financial position and the actual work done by the Railways.

The following is a rough summary of the information given:

Summary Table of financial statements showing the capital position; and also the year's receipts and expenditure in great detail.

Summary Table of Statistical Returns—showing mileage of lines, quantities of rolling stock, etc., engine mileage run, passenger and goods traffic carried, and average receipts from both, etc.

Similar information is also given in detail for the several Railways. The returns include a Table showing the quantities of a number of different types of commodity carried.

Monthly Statistics.

These give particulars of receipts and tonnages for all descriptions of passenger and goods traffic, and the leading operating figures. Periodically they contain

operating figures in regard to Marshalling Yards, Depots and Cartage, in which the results are reduced to a man-hour basis. These returns show the amounts of about 72 different classes of commodity carried and the corresponding figures for the same month in the previous year, and are useful as a rough indication of the degree of activity prevailing in different trades. In the same Table they also show the receipts, gross and per ton, for each of these classes of commodity. In a number of cases statistics are given on a ton-mile basis.

Census of Railway Staff.

This relates to a single week in March each year and gives a full analysis for the various grades of labour, with the average wages and total earnings of most of the grades.

It should be noted that no figure is published which gives the total Wage Bill of the Railways, nor is it possible to compile from the returns an accurate total of the Wage Bill. It seems, however, that the Chairmen of the different Railway Companies frequently give such figures in their annual speeches to the Shareholders, and it is desirable that it should be included in the official returns.

Another point to be noted is this. The Railway Rates Tribunal, which was established under the Railways Act, 1921, has authority under the Act to settle such charges for the conveyance of merchandise and passengers, etc., as shall produce the relationship between charges and revenue contemplated by the Act, the relationship being, roughly, such charges as shall yield a "standard revenue" equivalent to the net revenues in 1913. The Railway National Wages Board, though given statutory notice through the Railways Act, 1921, is in effect a voluntary body, without powers other than the powers of a conciliation board; it is charged with the duty of considering matters that may be referred to it by the Central Wages Board, and, under an agreement between the Railway Companies and the Railway Unions concerned, the Board considers the matters so referred to it, with a view to making a report thereon to the Central Wages Board. The Central Wages Board is representative of the Companies and of the Railway Unions; the National Board includes also representatives of railway users and has a neutral chairman. The National Board cannot make an award. The Railway Rates Tribunal and the National Wages Board are independent of one another and, under the present constitution, the Railway Rates Tribunal has no

official contact with the National Wages Board. Thus rate fixing and wage fixing are divorced from one another. Reports made by the National Wages Board are more or less public documents, and are available to the Railway Rates Tribunal; similarly, adjustments of railway rates authorised by the Railway Rates Tribunal are available to the National Wages Board.

(iii) *Tramways and Light Railways.*

A detailed annual return is published by the Government relating to all Tramways, whether owned by Municipalities or Companies, and giving elaborate financial and statistical information with regard to their working.

(iv) *Gas and Electricity.*

Both Gas and Electric Light Companies have to draw up their accounts in accordance with statutory forms. Annual Returns relating to the Gas undertakings are issued by the Board of Trade. So far as the Gas Companies are concerned complete statistics of cost are prepared from the reports and are annually published under the titles, "The Gas World Analysis of Companies' Accounts" and "The Gas World Analysis of Municipal Accounts."

Garcke's "Manual of Electrical Undertakings" contains a mass of information and, as over one half of the undertakings are carried on by local authorities, information concerning production, costs and trading conditions is available in published reports.

(v) *The Board of Trade Returns.*

Statistics of import, export, and navigation.

(vi) *Mining.*

The Board of Trade issues an annual report on the mining industry. It also issues the quarterly reports referred to above, and a weekly figure of the total production of coal, and of the number of miners employed.

(vii) With regard to Co-operative Societies statements are regularly issued showing Sales, Profit and Loss and dividend payable to the members. The "People's Year Book" and the Annual Reports of the Co-operative Congress give much information on the trading of the Societies. The general rule that employees shall not be on the Committee of Management of Co-operative Societies has been rescinded by some Societies and the workers in these Societies may, therefore, be more aware of the actual financial transactions.

RECOMMENDATIONS.

The information collected and set out in the second part of this report demonstrates two points. It reinforces the case for publicity, for it shows that in a number of instances the collection of complete and reliable statistical information has proved to be most useful in industrial negotiation. On the other hand it shows that only in a few industries is there any systematic effort made to collect and to make continuous use of such information. In the majority of cases statistical information is either non-existent, or is only sporadically forthcoming, or is not specially suited to the purposes we have in view. We suggest, therefore, that one of the most useful directions in which the attention of all parties concerned in industry—the Government, the employers, and the trade unions—could be turned, is towards the elaboration of a scheme for the compilation and publication of the relevant and essential facts.

The Information which is needed.

It remains to determine what facts are relevant and essential. To some extent the answer to the question must vary from trade to trade. We do not pretend to be able to put forward proposals which will prove adequate over the whole field of industry. Our purpose is rather to indicate the general lines which in our opinion a scheme of statistical publicity should follow, and to prescribe a minimum of information which all industries ought to be able to collect and publish and without which sound deductions for the purpose of industrial negotiations cannot be drawn.

The lines of such a scheme have already been sketched out in practice. The experience of the Joint Industrial Councils of the Wire and Pottery trades, the coal mines agreement, and the figures prepared for the joint conference of employers and employed in the engineering trades in 1924, provide a solid basis on which to work. We recommend, therefore, as a necessary and practicable minimum that information on the following points should be collected and published for each industry.

- (a) *Total Production*, estimated both in quantities and in money values (selling prices).
- (b) *Cost of Material*.
- (c) *Cost of Labour*, divided, where the conditions of the industry lend themselves to the distinction into—
 - (i) *Direct*, i.e., wages which can be booked to individual contracts.
 - (ii) *Indirect*, i.e., wages which cannot be so booked.

- (d) *General Charges*, e.g., rents, rates and taxes (other than Income Tax), insurance, depreciation, general office expenses, maintenance and renewal of buildings and plant, and fixed salaries.
- (e) *Balance* available for interest on loan capital, dividends and profits, and for allocation to reserve.
- (f) *Number of Wage-earners*, male and female, adult and juvenile, with indications sufficient to show their ages and the rates of wages paid.

There may be some difficulty, in the case of large concerns engaged in several industries which are generally regarded as distinct, in the splitting up of figures as to turnover, cost of material, etc., for the purpose of making returns. This difficulty, however, has to be surmounted and is in fact surmounted, when returns have to be made for the purpose of the Census of Production. We propose that as far as possible the lines of demarcation between industry and industry should be the same for a scheme of publicity as they are for the Census, and therefore we do not consider that this will prove in practice a serious obstacle.

Such concerns, however, will need to be very careful, when valuing the product of one branch of its business which is also the raw material of another, to value it at the price current in the market. In the case, for instance, of an iron and steel company owning its own collieries, its coal will appear in two sets of statistics. It will appear as part of the total output of the coal industry and also as part of the raw material of the iron and steel industry. Unless it is valued at a price which an independent coal mine could obtain, or which an independent iron and steel concern would have to pay, both sets of statistics will be vitiated.

We do not propose that the actual results of particular firms should be published, but that the results should be published in an aggregate form. It may be convenient for the industry to arrange that some impartial persons, acting under a pledge of secrecy, should have access to the figures of individual firms in order to ensure the uniformity of the returns. It is clear, however, that aggregated or average figures are not sufficient by themselves; for the average may be unduly raised or depressed by the conspicuous success or failure of a small proportion of the firms engaged in the trade. It is necessary, therefore, to devise some plan which will indicate the statistical distribution of the results among the different firms without disclosing their individual results. In some industries it may be possible to disclose the individual figures, labelling them A—Z, without giving the names of the firms. In other cases, where such a method would lead to the immediate identification of some of the

firms, the analysis should be less complete. The returns might be aggregated first as a whole and secondly in classes. The principle of classification should be to include in the same group those firms which show a similar proportionate relationship between profit and output. Further information should then be given to show the relative size and importance of the different groups. The following table indicates how the classified results might be drawn up.

Profit as Percentage of Output	No. of Firms	Total Net Output	No. of Employees	Labour Cost as Percentage of Net Output
Group A—4 to 0				
„ B 0 to 4				
„ C 4 to 8 etc., etc.				

In a few industries it may happen that one firm occupies so commanding a position that even the disclosure of an aggregate figure will in fact enable accurate deductions to be drawn as to its individual position. Even in such cases we are strongly of opinion that the advantages of publicity would outweigh the disadvantages.

It will be noted that in the case of the statistics prepared by the Joint Industrial Council of the Iron and Steel Wire trade a figure representing the total capital, as estimated for the purposes of the Finance Acts, is included.

On the other hand the exhaustive figures prepared under the Coal Agreement include no figure expressing the value of the capital sunk in the industry. We have considered at length whether or not an attempt should be made to include some figure representing the value of the capital of an industry in the scheme of publicity we propose. The desirability of such a figure is as obvious as are the difficulties of obtaining it. In some industries, a very large element in the cost of running the concern is the provision of the necessary interest on the large amount of capital originally required to instal the plant. In other cases, the capital equipment required is small.

In this connection a most instructive paper was read by Mr. A. W. Flux, C.B., the head of the Census of Production Office of the Board of Trade, before the Royal Statistical Society in 1913. In this paper Mr. Flux gave comparative figures for the "net output" per worker employed in the various industries of the country. The "net output"

* i.e. (a) - (b) on page 28.

is the difference between the output valued at selling price and the cost of the materials used, in other words a—b in our suggested table. No doubt the new Census will reveal that great changes in the relative figures for different industries have taken place, but the changes will not, we think, invalidate the present argument.

Mr. Flux showed that the net output per head in 1907 averaged about £104 per annum for the whole of industry ; out of which figure all expenses other than the cost of materials (i.e. wages, general charges, repairs and depreciation, interest and profits) had to be met. The figures for individual trades, however, and this is the important point, ranged from under £50 to over £400. Taking large and fairly typical trades as example, we find the clothing trade with a net output of only £62, at one end of the scale ; and at the other, private Gas undertakings with £200, private Electricity undertakings with £254, and publicly-owned Water undertakings with £423.

Clearly this wide divergence is mainly due to the difference in capital equipment per head employed or per unit of output.* In the clothing trade, an actual majority, in the proportion of 25 to 19, of the workers engaged were employed in workshops not using power at all. In the case of the other undertakings referred to, a large proportion of the cost of production would be the necessary interest and sinking fund on the elaborate plant required for production and distribution.

The following table, taken from Mr. Flux's paper, demonstrates the importance of the point very clearly :

Average Net Output Per Head	Horse Power of Engines per 100 employed	
	In all Establishments	In Factories
Under £50	21	92
£50 and under £75 ..	50	67
£75 ,, £100 ..	97	118
£100 ,, £125 ..	100	189
£125 ,, £150 ..	266	269
£150 ,, £175 .	81	89†
£175 ,, £200 ..	215	221
£200 and over	793	834

* Available statistics also indicate that the output per head tends to be low in those industries where a high percentage of the workers employed are women.

† This group, which interrupts the progression, is small and is dominated by the figures for the tobacco trade.

The value of machinery, moreover, is not the only factor which can cause the minimum capital charges of an industry to be high. In some other trades the high value of the materials used, the need for a large technical staff, the cost of advertising, etc., necessitate the employment of a large working capital.

It is therefore clear that unless some figure be included in the scheme which will adequately represent the value of the capital sunk in the industry, it will not be possible to use the figures in order to compare the position in one trade with that in another. That is to say, if the proportion of wages to profits in one trade is far higher than it is in another, it will not be possible to argue that the workers in the one case are being more generously treated than they are in the other. This fact, however, would in no way diminish the usefulness of the statistics to each trade individually, for the purposes either of estimating the exact position at any given moment or of making comparisons covering periods of time.

We feel unable to propose that a valuation of capital should be a necessary element in the minimum information which we are here suggesting. The difficulty of obtaining any such figure, which would be sufficiently accurate to serve as a sound basis for drawing comparative deductions, is too great. The capital of one firm may have been subscribed before the war, of another at the height of the post-war boom, of yet another after that boom had subsided. In such a case the money capital of the three concerns may differ very greatly, although the current value of their assets may be approximately the same. If the expenditure on buildings and plant be taken as a basis of comparison, the same wide variations, due to changes in the value of money, will be encountered. Furthermore, one concern may have capitalised its reserves while another may not; and one may have invested these in the business while another has invested them in securities from which profits independent of the success or failure of the business are derived. For these among many reasons we feel that the compilation of a figure representing the value of the capital engaged in industry cannot be generally enforced, and that the most we can recommend is that, if any industry finds it possible to add such a figure to the statistics we suggest as a minimum, this should certainly be done.

The Compilation of the Figures.

It is necessary to determine, not only what statistics should be prepared, but also by whom and in accordance with what rules they should be prepared; and clearly the first question which arises is whether the scheme should be

voluntary or compulsory. We take the view that the scheme would so obviously be beneficial to industry as a whole that it ought to commend itself on its merits to the generality of employers. Quite a small proportion of firms in any trade could, however, by holding aloof deprive the statistics collected of a great part of their value. Even the most enlightened employers, moreover, might hesitate before undertaking to participate in a voluntary and partial scheme, which would benefit competitors who contributed nothing to it. We are of opinion, therefore, that the scheme must have a compulsory basis.

On the other hand, we regard it as neither necessary nor desirable that a government department should itself undertake the task of compiling statistics covering the whole field of industry. There are obviously many well-organised industries which are able to implement our proposals themselves. The cases of the railways, the coal mining industry, and the steel wire and pottery trades will at once occur to anyone who has read the earlier sections of this report; and we are sure that others among the industries of the country are in a position to undertake the work.

We propose, therefore, that the Board of Trade should be given statutory power to inaugurate a scheme of publicity on the lines we have suggested, and that the Board should itself collect and publish the information if it can find no other body to do the work. Where, however, in any industry there is some adequate and representative body which is able and willing to implement the scheme, the Board of Trade should permit it to do so, and should delegate to that body its own powers of compelling the disclosure of the facts required. The principle of compulsion should extend only to the information which we prescribe as a necessary minimum, and any industry undertaking to work the scheme itself should be required to compile and publish that minimum. Any industry, however, which finds it possible and useful to add other items of information to the minimum prescribed should be encouraged to do so.

We regret that we do not regard it as practicable to suggest that the scheme should be extended at present to agriculture. It is clear, however, that reliable agricultural statistics are urgently needed not only by the wage-earners but also by the farmers and the community. We suggest therefore that the Ministry of Agriculture, working through the national and district wages boards, should exert itself to encourage the compilation of useful and reliable statistical information.

CHAPTER III

INDUSTRIAL FLUCTUATIONS

In the second part of our survey, which is concerned with the value of reliable statistics for the mitigation of the severity of trade cycles and fluctuations, a great deal of exploratory work has been done for us by others. Notably in America, under the energetic direction of Mr. Hoover, a great effort has been made to collect statistics of production and sales and to make them rapidly and continuously available to the trading and manufacturing communities. The experience of the United States in this connection is so important that we have prepared a special memorandum upon it which forms part of this chapter of our report. It will be noted that Mr. Hoover has expressed the very definite opinion that "there is no question but that the curves in the business cycle from activity to depression have been less disastrous in those industries or trades where accurate, lawful statistical data have been available to all," and that "if industry is to march with reasonable profits instead of undergoing fits of famine and feast, if employment is to be held constant and not subjected to vast waves of hardship, there must be adequate statistical service."

In order to demonstrate the truth underlying these dicta, it is not necessary to accept any one among the prevailing theories as to the cause of trade cycles. They may or may not be due to defects in the present monetary and credit systems, to variations in the world's harvests, or to some other cause or combination of causes. Indeed, there is strong evidence in support of the view that, just as all booms tend to have slightly different characteristics, so also they are originated by different causes. Nor do we claim that statistical publicity will eliminate the fundamental causes of trade cycles, and prevent all oscillations of the pendulum of trade. The point on which we wish to lay emphasis is that the pendulum in fact oscillates much more violently than it need do, owing to the absence of data from which manufacturers and merchants can accurately forecast the probable course of supply and demand.

The originating cause of a boom, either in a particular trade or in industry generally, may be quite small. All that is needed is that the immediate demand should slightly exceed the available supply, a state of things which may be due to little more than the exhaustion of the stocks left over to be liquidated at a considerable loss after a previous period of over-production. The moment, however, this excess of demand over supply becomes effective, a series of cumulative consequences begins. Retailers press merchants for supplies, merchants ply manufacturers with orders and press for speedy delivery. Manufacturers increase their production and begin to compete with each other for raw materials. The prices of these last begin to rise, for the supply of raw material is apt to be relatively inelastic. Wages also begin to rise, the increase being even greater than is superficially apparent if extensive overtime is worked in order to complete urgent orders in the minimum possible time. Industries making immediately consumable goods launch out upon schemes of capital extension, thus drawing the constructional trades into the orbit of the boom.

The rises in costs, wages and prices which quite soon take place in themselves tend to neutralise the demand for goods which started the boom. But they induce optimism rather than pessimism as to the future in the minds of the business community. The merchant sees the opportunity of big profits on a rapid turnover on a rising market and places orders freely. The manufacturer also feels justified in taking risks while the demand for his product continues to be eager and the prices he can obtain continue to improve. He is apt to overlook the alarming rate of increase in his costs, and the burden which will be laid upon his business, if his roseate expectations are falsified, by the extensive capital commitments he is making. Sooner or later the inevitable turning point at which supply shoots ahead of effective demand is reached. By this time, however, it too often happens that industry has received an impetus which cannot quickly be checked. Orders have been placed for some time ahead; extensive advance contracts for materials have been placed; new factories and workshops are in course of erection. The bottom falls right out of the market. A long depression sets in, which lasts until the accumulated stocks have been liquidated, often at ruinous loss; until costs and wages have been forced down; until the capital of many industrial concerns has been written down to wipe out their losses and to make it correspond with their real earning power in more normal times. This depression is itself likely to be more prolonged and more intense than it need be. For just as the boom creates excessive optimism in the minds of the business community, so a depression breeds excessive

pessimism. Dealers refrain from placing orders, even while prices remain at very low levels, until the market becomes denuded of stocks. When in fact they do place their orders, there may be a shortage of supplies and the cyclical process will begin again. These psychological features which exaggerate the trade cycle beyond all economic necessity have been concisely summed up by Sir Josiah Stamp (*Sunday Times*, December 13th, 1925) :

“ It is generally acknowledged that whatever may be the predisposing causes of trade fluctuation, whether such natural events as harvests or financial changes, psychological features are also important in exaggerating them. One of these subjective features is the tendency to miscalculate on the part of a number of people acting separately as to the existing stocks of a product, as to the rate of production of all taken together, and as to the aggregate change impending. Each person is liable to consider the total market from his own point of view, and is optimistic about the marketability of his contribution towards it. This tends to excessive production in times of optimism and excessive holding up in times of pessimism, to exaggerate unnecessarily both boom and depression. Actual knowledge of the rapidity of change in production would tend to correct this aggregated miscalculation : to introduce steadily growing caution at an earlier point on the upward curve instead of the present crescendo of optimism ; to introduce on the downward grade increasing optimism instead of waiting for unreasoning pessimism to spend itself.”

An example of the wild inaccuracy of the business world's expectations in a particular industry has been provided by the recent course of the rubber market, and curiously enough in this instance American business men seem to have been more blind than any others. It became reasonably clear more than a year ago that with increasing consumption and a steady decrease towards the vanishing point in the world's reserve stocks, the long-continued slump was nearing its end and that circumstances favourable to a boom were becoming established. Yet the price continued to fall, buyers held off, opportunities for favourable forward contracts were forthcoming and were largely ignored, with results which are now notorious. To a lesser extent, but nevertheless in a similar manner, the same thing happens throughout the industrial field. Many cases could be quoted of the wild movements of prices during the post-war boom. The textile trades and the metal trades were probably the worst sufferers. Lancashire is still suffering from the effects of the inflation of capital which accompanied the inflation of prices. The price of steel rails rose from £13 10s. od.

per ton in April, 1919, to £25 10s. od. on January 1st, 1921, only to fall to £9 10s. od. about a year later. In the ship-building industry the effects of a very transitory demand for ships at the end of the war were especially disastrous. In their anxiety to obtain steel plates in order to meet an urgent demand shipbuilders bought up steel works, and placed orders extending for two or three years ahead. And this occurred in spite of the fact that an actual fleet of existing ships was soon to break the market. The end of the boom found almost every industry overloaded with stocks. Many firms had raised loan capital at high rates of interest to finance extensions which proved unprofitable. Many were additionally crippled owing to the fact that they had made forward contracts at peak prices. Wages were very high, and so was the cost of living. Easy profits, moreover, had bred a disregard of economy and many businesses have since found it necessary to prune their costs most severely.

The consequences to the working population of the boom and slump stand out bleakly from the figures showing wage movements and the extent of unemployment. The wage figures as compiled in the Ministry of Labour Gazette—which do not cover agricultural workers, police, Government employees, domestic servants, shop assistants and clerks—show the following net variations in weekly wages.

	Increase	Decrease
1919	£2,456,000	—
1920	£4,760,000	—
1921	—	£6,024,500
1922	—	£4,209,500
1923	—	£317,000
1924	£554,000	—
1925	—	£79,000

The unemployment figures show that the percentage of trade unionists unemployed, which was well under 2 per cent. during the summer of 1920, was more than 16 per cent. by the end of 1921. The trade cycle is one of the root causes of unemployment. Obviously it makes unemployment on a large scale inevitable in periods of depression, but it is perhaps not quite so clearly understood that it also causes the average level of unemployment to be higher than it would be if trade could be kept on an even keel. During boom periods workers become definitely attached to industries which cannot provide them with work except at such periods, and pools of reserve labour are created in those occupations which are most subject to oscillation between prosperity and adversity.

In the existing state of economic knowledge it is clearly most difficult, if not impossible, for the business community to avoid the errors of calculation which intensify the process of boom and slump. It is worthy of note, however, that the United States have enjoyed great trade prosperity during the last few years without any serious upward movement in prices ; and this in spite of the fact that the huge American gold stocks might have facilitated a boom if they had been permitted to do so. We do not claim that the statistical knowledge available in America has by itself prevented such a boom, but it is reasonable to assume that it has played its part. It should be noted, moreover, that the Conference on Unemployment at Washington in 1921-22 took the view that the most hopeful line of attack on trade fluctuations was a wide diffusion of economic information.

An examination of the subsequent memorandum on American statistics will show the nature of the information which the business world requires. Broadly stated, what is needed is an accurate measure of supply, of demand, and of the rate of change in both. In order to form an estimate of the total supply available, and of the rate at which it is changing, manufacturers and merchants need to have before them figures showing the total stocks in hand of the principal varieties of goods, the total output of each industry over a given period, and if possible the proportion of that output to the total productive capacity of the industry concerned. Demand is in the nature of things more difficult to measure ; but valuable indications can be derived from figures which show whether stocks are increasing or decreasing, and whether new orders exceed or do not exceed deliveries. It should be noted, moreover, that the interest of business men in such figures is not limited to the statistics of their own trade alone. The shipbuilder and engineer will be closely interested in the figures relating to the iron and steel industries. The cotton manufacturer will be concerned with the output of textile machinery, for if that shows signs of rapid increase he can infer that the potential output of cotton goods will very soon increase proportionately. Finally, the whole business world is affected by the prosperity or adversity of each of its component parts.

Before we proceed to lay down the broad lines of a scheme of statistical publicity for the purposes with which we are here concerned, we wish to make it clear that in matters of detail careful consideration will need to be given to the circumstances of each industry. Take, for instance the proportion of actual production to the total potential capacity of an industry. In some industries—as for instance in the textile trades—the percentage of

capacity at which machinery is running will give a valuable indication of the proportion. In other industries, engaged on less standardised and more varied work, information on this point may be more difficult to obtain. Take again the unit of time which should be covered by each statistical return. It is in all cases essential that the figures published should be up to date and speedily issued; but clearly returns will be needed more frequently from industries—such as the textile trades, boot and shoe trade, etc.—which turn out goods rapidly, than from industries like the ship-building trade which may spend as much as three years on the construction of one unit of output. For most industries monthly returns are desirable, and it should be noted that the Americans contrive to issue their monthly figures by the 20th of the following month, but exceptions will clearly have to be made. The necessary promptitude is only possible if individual firms contribute the information required of them with alacrity, and if a competent and adequate staff is kept permanently at work on the task of collating them. The staff required when a scheme of publicity is in its initial stages will, of course, be considerably larger than at a later stage when the lines on which it is to be operated are clearly laid down and generally understood. Before proceeding to summarise our proposals, we give an account of the statistics of production, etc., available in the United States.

THE STATISTICAL INFORMATION PREPARED AND PUBLISHED IN THE UNITED STATES

The statistics prepared and published in the United States are so voluminous and are issued by so many different organisations, official and unofficial, that we have felt compelled to select those which seem to us the most important for the purposes of our enquiry.

The leading channels for the collection of statistics relating to production and distribution are :

- A. The Department of Commerce.
- B. The Trade Associations (corresponding to our Federations of Manufacturers, etc.)
- C. The Federal Reserve Board.
- D. Harvard University Bureau of Business Research, and Committee on Economic Research.
- E. Various Statistical Services carried on by private Enterprise.

A. THE DEPARTMENT OF COMMERCE.

The Department of Commerce prepares :

- (a) a decennial census of population.
- (b) a 5-yearly census of production.
- (c) a biennial report on the products of manufacturing industries, which is not quite so complete as the 5-yearly census.
- (d) Monthly and quarterly statistics of production and consumption, which are issued in the "Survey of Current Business."

The following list shows the monthly enquiries which were being made by this department in 1923 and the results of which form the basis of these reports. Considerable extensions of activity were then contemplated, and the current numbers of the Survey indicate that they have been made.

- Cotton consumption and stocks in mills and warehouses.
- Activity of cotton spindles.
- Cotton ginned.
- Cottonseed, stocks, receipts, and quantity crushed.
- Cottonseed products manufactured, shipped, and on hand.
- Active and idle wool machinery giving both numbers of machines and machine hours for spindles, looms, cards, etc.
- Wool consumption by textile mills.
- Hides, skins and leather, showing stocks of various hides and skins and the production and stocks of the different kinds of leather.
- Boot and shoe production classified by kind.
- Beet and cane sugar production, sales, stocks, etc.
- Fabricated structural steel sales.
- Steel castings sales.
- Steel furniture shipments.
- Automobile and truck production.
- Railway locomotive shipments and unfilled orders.
- Wood chemicals production and consumption.
- Mill prices and lumber.
- Building material prices in some 50 cities.
- Hosiery production, orders and stocks, by kinds, styles, etc.
- Leather substitutes, production, stocks, orders, etc.
- Rubberised stocks production, stocks, orders, etc.

The "Survey of Current Business."

This Survey is too voluminous to describe in full in this memorandum, but some indication of its contents is

essential. It contains over 150 pages of elaborate statistical tables. It opens with general tables indicating the course of business as a whole, comparisons over several years, and with a general written report upon the statistics. Then there follow a large number of tables relating to particular trades. These tables cover the following trades: Textiles, Metals, Fuels, Automobiles, Rubber, Hides and Leather, Paper, Building construction, Building materials, Chemicals and Explosives, Fats and Oils, Foodstuffs and Tobacco, Transportation and Public Utilities, Labour Tables, Distribution Movements and Price Indexes, Banking and Finance, Foreign Exchange and Trade. The following description of the tables dealing with the textile industries, which cover 9 pages, will give some idea of the scope of the work. The issue dealt with is that for February, 1925.

TABLE 1. *Textiles and Clothing.* This shows:

Pyroxylin-coated textiles.—Pyroxylin spread, shipments billed, unfilled orders on first of month.

Hosiery.—Production, shipments, stocks, new orders, unfilled orders.

Men's and Boys' Garments Cut.—Showing suits, trousers, and overcoats.

Work Clothing.—Cut, sales, cancellations, stocks on hand at end of month.

The monthly averages for 1923-24 are given and also the actual monthly figures for each month of 1923-24.

TABLE 2. *Wool.*—Receipts at Boston, Imports, Consumption and Stocks.

Figures are given for each month from May, 1923—December, 1924 (under some heads to January, 1925), and also the monthly averages from 1913-24. There are two tables, one giving actual quantities, and the other index numbers related to the 1913 or 1920 monthly average as 100.

TABLES 3 and 4 describe the production, receipts, imports, exports, consumption, stocks, and world visible supply of cotton. Both actual figures and index numbers are given comparing monthly figures back to 1913.

TABLE 5. *Active Textile Machinery.*—Index numbers are given comparing the numbers of each type of machine active for each month of 1922, '23, and '24, and the monthly averages for each year from 1913 to 1924. Other figures are given showing the percentage of active machines to the total available.

TABLE 6 gives somewhat similar figures on a machine hour basis. These, however, do not go back further than 1921.

TABLES 7 and 8 give figures showing the movements of wholesale prices from 1913 to December, 1924, of cotton, cotton yarn, cotton goods, wool, worsted yarn, women's dress goods, suitings, and raw silk. There are index numbers with the average for 1913 as 100 ; and also actual prices.

TABLE 9 gives for finished cotton goods, monthly figures for 1923 and 1924, and earlier monthly averages, for billings, orders, shipments, stocks and percentage activity of machinery ; production and sales of fine cotton goods ; exports of cotton cloth ; imports, deliveries and stocks of silk ; sales of elastic webbing ; imports of fibres and burlap ; and total dividends and ratio to capitalisation of 38 textile mills.

(e) *The Commerce Year Book* : This is a large volume of some 700 pages, containing Statistics for the whole year as to the domestic and foreign trade of the United States, and as to the trade of other countries. It contains a great deal of information derived from the same sources as the "Survey of Current Business" and also from the Biennial Census of Manufactures.

(f) "*The Statistical Abstract of the United States.*" This contains a vast mass of statistics—economic, vital, social, etc. It is published annually.

(g) *Miscellaneous* : The Department of Commerce also issues a large number of miscellaneous statistical reports upon special matters of economic and industrial interest.

Sources of Information.

The data in the Survey are compiled from information in the possession of a large number of Government departments, and from reports from about 150 Trade Associations and private organisations and from about 40 technical periodicals.

Weekly Commerce Reports.

The Department of Commerce also issues a weekly survey of foreign trade, which is not strictly relevant to the work of this Committee, but indicates how anxious the American Government is to use all its resources for the assistance of American trade.

The Department of Labour maintains a Bureau of Labour statistics and issues a monthly review, which contains a considerable amount of information as to the movements of wages and prices affecting the cost of living. It does not seem to us, however, that the information

here provided is more extensive than that available in this country.

B. TRADE ASSOCIATIONS.

It will have been apparent from the fact that the "Survey of Current Business" is compiled with the assistance of information provided by a very large number of Trade Associations that the Department of Commerce works in the closest co-operation with these bodies.

Indeed, the following written statement made by Mr. Hoover indicates the extent to which the Government of the United States enjoys the support of the business community in its statistical work. It also gives a very clear idea of the value and purpose of the statistics.

"Most Trade Associations have evidenced active interest at some time or other in the collection, compilation, preparation, and dissemination of statistical material relative to their industries or trades. They have been considered with particular emphasis as to production, stocks, shipments, or cancellation. Sometimes the greatest desire has been for data regarding prices and orders. Statistical activity by Trade Associations has legal limitations. However, *there is no question but that the curves in the business cycle from activity to depression have been less disastrous in those industries or trades where accurate, lawful statistical data have been available to all.* Fundamentally it is impossible for business men to form those vital judgments as to their future course of action in the wise and safe direction of their activities unless they are informed as to the changing currents of production and consumption, not only in their own lines but also in other lines of business, which indicate broader currents of economic life. The only criteria are statistics, and *if industry is to march with reasonable profits instead of undergoing fits of famine and feast, if employment is to be held constant and not subjected to vast waves of hardship, there must be adequate statistical service.* Whether these services are to be maintained by the Government or by Trade Associations, they must be maintained if we are to have an orderly economic life. To the Trade Associations are due the vast majority of our statistical services, and if they be conducted alike for the benefit of the producer and consumer they are constructive."

These Associations prepare for their own use statistics on lines similar to those adopted in the "Survey of Current Business," and doubtless in many cases the statistics which they interchange are even more voluminous. In the course of a report * prepared by the Department of Commerce,

* "Trade Association Activities" (U.S.A. Department of Commerce), 1923.

under the direction of Mr. Hoover, on the statistical activities of these Associations, the Department remarks that "after a careful canvass of current statistical material prepared by a great number of Trade Associations the Department of Commerce has made the following classification of their work."

Probably none of the statistics prepared by any individual association exactly correspond with this table, which is intended, as far as we can see, partly as a standard for them to aim at, and partly as a general description on a least common multiple basis of their work.

1. Production during period reported :

- (a) Quantity, i.e., number of pieces, yards, dozens, tons, etc., shown in total and for principal types or classes of product.
- (b) Activity of production or plant units, i.e., machinery, etc., per cent. of total active or idle—
 - (1) Active and idle units or machines.
 - (2) Active and idle unit or machine hours.
- (c) Per cent. of normal capacity—
Quantity units and Time units.

2. Employment conditions :

- (a) Employee hours during period reported.
- (b) Number of wage earners on last pay roll by classes—
Men, Women and Children being shown separately.
- (c) Average wages, by classes—
Full and part time—Men, Women and Children.
- (d) Labour turnover (per cent.)—Men, Women and Children.

3. Shipments during period reported (tonnage), physical quantity :

- (a) Quantity shown in total and for principal types or classes of product.
- (b) Prices (quantity shipped at each price).
- (c) Geographical distribution of shipments—
 - (1) Foreign trade, by countries.
 - (2) Domestic trade, by States or districts.
- (d) Distribution by classes of customers—Jobbing, Wholesale, and Retailing.

Consuming—

- For further manufacture.
- Ultimate.

4. Orders or sales :

- (a) Unfilled orders on books at end of period reported—
 - (1) Quantity, shown by principal types or classes of products.
 - (2) Value.
- (b) New (Current) orders booked since last period reported—
 - (1) Quantity booked at specific prices.
 - (2) Time contracts.

5. Stocks on hand at end of period reported :

- (a) Quantities shown in total and for principal types or classes of product, and whether unsold, sold, or consigned—Raw materials, Goods in process, Finished goods.

6. Cancellations, orders, or contracts—Domestic and Export.

7. Price quotations :

- Raw materials (costs).
- Finished goods.
- By-products.

Domestic and foreign—Importing, Wholesaling, Jobbing, Retailing, Consuming.

- (a) Contract—
 - (1) Actual.
 - (2) List discounts.
- (b) Specific orders—
 - (1) Actual.
 - (2) List discounts.

The following points from the report are of considerable interest :

Production Statistics. “ In planning production reports the first essential is to determine the unit which will serve as the most satisfactory basis. Values are generally unsatisfactory for the reason that they constantly fluctuate and have no necessarily constant relation to quantity produced. Usually, the most satisfactory unit for production reports is the sales unit.”

“ Another unit which in some industries has proved valuable in indicating the trend of production is that of machinery activity, or, better still, of active machine hours. In industries where the types of goods produced

are widely diversified, such a unit often gives a better basis for measuring the industry as a whole than any other that can be used."

"Another measure of production, especially where the product is diversified, is the consumption of raw material."

"Many Trade Associations have successfully established figures representing the productive capacity of each member. Where such a figure is computable it forms an excellent base from which to measure current productive activity."

Orders. "A proper system for reporting statistics on orders unfilled, booked or current, and on time contracts, gives one the most satisfactory views on the trade or the industry possible."

"Current orders received show the present state of demand for the product. Unfilled orders, on the other hand, show to what extent buying has exceeded production."

Stocks. "Statistics relative to stocks on hand, unsold, sold and consigned, have not been perhaps so generally compiled by Trade Associations as have other forms of statistics."

Preparation of Statistics. "Prompt report is essential to all current statistics of this kind. There is nothing more perishable than trade statistics. Some Associations are able to compile and issue their monthly reports by the 10th of the following month, but experience shows that most Associations issue their monthly figures about the 20th."

"The following are the principal methods used in the preparation of statistical data by Associations :

- (1) Consolidated totals of all reporting members.
- (2) Averages of all reporting.
- (3) Percentages of capacity or of normal activity.
- (4) Percentages of changes from proceeding or corresponding period.
- (5) Percentage of fixed normals (index numbers).
- (6) Actual individual totals unconsolidated."

The last method is not regarded by the Department as advisable.

C. THE FEDERAL RESERVE BOARD.

The Federal Reserve Board and the Banks work in close connection with Trade Associations in the preparation of statistics. The following examples will give a good idea of the nature of the work being done.

- (1) The Associated Knit Underwear Manufacturers of America collect reports showing production, new orders, unfilled orders, shipments and cancellations for about 50 mills each month. The report of each mill is forwarded to the Federal Reserve Board as soon as it is received and the Board compiles from these data a monthly order and production report. The report is distributed to the members of the manufacturers' association and material is issued to the Press and is also published in the Federal Reserve Bulletin.
- (2) The National Automobile Chamber of Commerce compiles monthly statistics of production of passenger cars and trucks for the members of its Association, which are forwarded to the Federal Reserve Bank of Chicago. From these and other figures the Federal Reserve Bank compiles and issues statistics of the monthly production of automobiles in the United States.
- (3) The National Retail Dry Goods Association has assisted the Federal Reserve Board in securing monthly reports from about 500 Department Stores. The Board compiles a national summary of department store business which it issues to the Press and also sends to the National Retail Dry Goods Association.

It will be seen that the work of the Board to some extent duplicates that done by the Department of Commerce. The reason for this seems to be that the Board was doing the work before the Government started, and in accordance with the principle of following the line of least resistance, it was allowed to carry on.

D. HARVARD UNIVERSITY.

The Harvard University Bureau of Business Research Bulletins contain the results of investigation into the costs and profits of thousands of separate business firms. One of the outstanding features of the work of this Bureau has been the assistance which it has rendered to Trade Associations and to individual firms in devising adequate and uniform methods of accounting, and especially of cost accounting. One of the results of the present policy of publicity in the United States has, we are informed, been a great improvement in accounting. It is clear that so elaborate a system of statistics cannot be accurate and useful unless the statistics

are compiled in accordance with a soundly devised scheme, but it seems that both the Department of Commerce and the University of Harvard give every possible assistance to the Trade Associations and to individual firms in order that the work may be properly done. The Harvard Committee on Economic Research (Economic Service) analyses a great deal of statistical material.

The Statistical work done by Harvard University is clearly very much appreciated by American business men. They give it lavish financial support, and its periodical publications, which are costly, command so wide a circulation that they bring in a substantial revenue.

RESULTS AND VALUE OF THE AMERICAN SYSTEM.

In the course of our enquiry we approached a number of prominent Americans—bankers, economists, manufacturers, and Labour leaders—and asked them to give us their personal opinion of the elaborate statistical system we have just described. We put to them the following questions :

(1) Is the enormous expenditure on statistics in America of real value or is it a luxury which only a rich country can afford ?

(2) Has it had results in shortening the gap between producer and consumer and making it less necessary to carry large stocks ?

(3) Does it have the effect of checking incipient booms ?

(4) Are the statistics of the volume of production reliable ?

(5) Are they in fact used by business men to a sufficient extent to influence production ?

(6) Are private or Government statistics of most value ?

(7) Is the Department of Commerce responsible for the post-war boom in statistics, or was it coming in any case ?

(8) Has increasing information played any part in America in smoothing industrial relations ?

(9) Does the experience of America suggest that it would be a valuable thing for the British Government to start a campaign for the development of economic statistics ?

On the whole the replies to the questionnaire were very favourable to the American system. Many of our correspondents, of course, pointed out that the machinery was new, and that it was too early to form a decisive estimate of its value or the extent to which it is used. It seems that a certain amount of money and time is being wasted, and that there is a good deal of reduplication and overlapping, but the prevailing opinion seems certainly to be that the statistics are worth their cost.

So far as the relative value of Government and private statistics are concerned, Mr. Legge, of the International Harvester Company, thought that private statistics have been the more useful. All our other correspondents, however, including Mr. Farrell, of the United States Steel Corporation, prefer the Government statistics. In this connection it should be understood that the Government's statistics are largely based on figures collected and collated by trade associations and other private bodies, and that many private publications consist in the main of Government statistics edited for the use of a special public. There is general agreement that the keenness and energy of Mr. Hoover have been important factors in the development of the American system.

The answers we have received do not indicate that statistical publicity has played any great part in improving industrial relations. Nor, as a matter of fact, did we expect any different result. The great development in the United States has been in connection with statistics of production, stocks, orders, etc. ; in short with the information discussed in this section of our report, rather than with information specially useful in industrial negotiations. So far as we can discover America is in no way in advance of our own country so far as the kind of publicity we suggest in our first section is concerned. Mr. Green, the President of the American Federation of Labour, and Professor Wesley Mitchell, however, both take the view that increased knowledge of accurate facts must help to improve relations.

In view of the nature of the American system, the greatest interest attaches to the answers to our second and third questions. These questions were answered for the most part in the affirmative, though with varying degrees of caution. Professor Taussig, of Harvard University, does not think the statistics have been useful either in checking booms or in rendering it unnecessary to carry large stocks, and Mr. Moulton, of the Institute of Economics at Washington, thinks that it is too soon at present to attempt an answer to the questions. Mr. Traylor, of the First National Bank,

Chicago, however, thinks the statistics have had a useful effect in this direction, and so does Professor Wesley Mitchell. Mr. Legge thinks there has been a distinct improvement in the matter of stocks ; and Mr. Farrell agrees and also thinks they have had a stabilizing effect on trade. Mr. Green is emphatically of opinion that they have proved themselves useful in checking booms.

Mr. George Roberts thinks that it stands to reason that adequate information as to current production, consumption, and stocks will tend to stabilize industry ; but that it is impossible to say whether the checking of incipient booms since 1920 has been due to statistical publicity or to other causes, such as the still present memory of the disastrous consequences of the 1919-20 boom. He points out also that the American statistics are not yet subjected to a sufficiently scientific treatment. For instance, large deliveries of pig-iron do represent a large demand from consumers, while large deliveries of farm products merely show that there has been a good harvest and do not necessarily indicate that the farming community is prosperous. In a number of particular industries the figures are valuable and arouse great interest, but attempts to consolidate them in order to show the economic position of the country as a whole have not been altogether satisfactory.

We are informed that the initial cost of inaugurating the Government's Statistical services has been large, but that it tends to diminish rapidly, as each service becomes a going concern. It should also be remembered that a very large proportion of the cost of compiling the statistics is borne by Trade Associations and private firms themselves.

In this section we have concentrated our attention on the American statistics of production and demand, because in America statistics of this kind have been developed to a point far in advance of anything existing in this country. We do not wish, however, to convey the impression that no information of this type is available in Great Britain. The descriptive section of Chapter II is in itself sufficient to show that this is not the case. Many Chambers of Commerce and trade organizations display a great deal of activity in an endeavour to bring together statistics relating to particular trades. The information forthcoming, however, is patchy ; and no co-ordinated effort has been made to think out what facts are generally required, and to make them readily available to the business community as a whole.

RECOMMENDATIONS

In our second chapter we discussed at considerable length the statistics which we regard as desirable for the improvement of industrial relations. We decided that among other facts adequate statistics of the total production of each industry were needed. This study of trade cycles shows that production statistics are also necessary for the mitigation of industrial fluctuations. It is essential that such figures should cover the whole field of each trade and that they should be promptly forthcoming. In most industries we regard monthly figures as desirable, but, as we have already remarked, the frequency with which the figures should be published varies with the speed at which a unit of output can be produced. The circumstances of each industry will have to be taken into consideration and no hard and fast rule can be laid down. For the purposes discussed in this section the statistics of production should show, if possible, not only the actual quantities produced of each type of product, but also the percentage of full capacity at which each industry is working.

We propose that in addition to figures showing total output, information under the following heads should also be provided by each industry.

Stocks.—Quantities, and increases or decreases in the period under review.

Deliveries.—Quantity and value.

Orders.—Unfilled orders on books at end of period.

New orders booked since last report.
Cancellations.

It is clearly not necessary that any figures indicating the position of individual firms should be shown, as the whole point of information of this kind is that it should show the position of each industry as a whole. It is not even necessary that actual aggregates should be given. Carefully compiled index figures—a figure of 100 for the same point of time being taken as the basis under each head of information—should in nearly all cases prove sufficient.

The Compilation of the Figures.

In America, as our preceding memorandum shows, statistics of this kind are for the most part collected by the Trade Associations and communicated by them to their members and to the Department of Commerce. This department issues monthly, quarterly and annual surveys in which the information thus amassed is collated and tabulated. It seems to us that the Census of Production Department of the Board of Trade should be fully competent to under-

take the task performed by the similar American organisation ; and that our own big industries are well enough organised to do for themselves the work done by the American Trade Associations.

We suggest, therefore, that the Board of Trade shall be given statutory power to require manufacturers to furnish information under the heads suggested above. As the precise form in which the information will need to be given will vary from trade to trade, the nature of the figures can only be broadly described in the Acts ; and it will be necessary to empower the Board to issue regulations applying to each trade, after consultation with its representative association.

As in the case of the statistical information suggested in the second chapter of our report, we consider that where any industry is able and willing to undertake the task of collecting and collating the figures it should be encouraged to do so. It may then collect and distribute to its members the information we suggest and any other facts which it may regard as useful. The information required under the Act must in such cases be promptly forwarded to the Board of Trade for publication in a consolidated survey.

CHAPTER IV

THE INVESTOR

In this section of our report we are concerned with the information which ought to be available to the individual investor, if he is wisely to use his resources in his own interests and in those of the community. While our informal investigations have been going on, an official Committee has been conducting an inquiry into the Companies' Acts. We have, of course, no connection with that Committee, but the fact that it is in session has led us to refrain from going deeply into the mass of technicalities involved in this part of our enquiry. This chapter, therefore, is short in proportion to the two other principal chapters of our report, and is intended only to give a general survey of the points at issue.

The investing public would, of course, be closely interested in the statistics discussed in the earlier sections. It would be more discriminating in its response to appeals for fresh capital in boom periods, if the figures of production and demand described in our last section were available to it. At present it is apt to succumb entirely to the optimism prevailing at such moments, and thus assists to augment the boom. It would presumably prefer moreover to support those industries in which the relations between employers and employed are relatively good; and more especially those in which machinery of proved reliability for the settlement of disputes exists.

None of the statistics hitherto proposed, however, would assist the investor to discriminate between one concern and another, for the reason that we have necessarily concerned ourselves with figures dealing with industries treated as a whole and not with figures relating to individual concerns. For information relating to particular companies the public has to rely, and would continue to have to rely even if our proposals were adopted, on the balance sheet annually issued. It cannot be disputed that, although some concerns provide their shareholders with full and sufficient information, a far greater number make only a perfunctory attempt to enlighten them as to the actual state of the Companies' affairs.

We are aware that at this stage of our discussion we are traversing highly controversial ground. Company law has in the past been concerned with the provision of information to creditors and existing shareholders rather than to investors. The rules governing the preparation of prospectuses and balance sheets have been devised for the most part merely to prevent actual fraud, and do not necessarily secure either the enlightenment of the public or the efficient conduct of industry. Moreover, a powerful body of opinion would probably maintain that the old course is the right one. A large proportion of practical men engaged in the management of public companies hold that the efficiency of the concerns for which they are responsible is not compatible with the disclosure of all the company's affairs to shareholders.

They maintain that in good years shareholders would press for the maximum possible dividends, and would resist the allocation to depreciation and reserve of the sums the directors regard as prudent ; that it is difficult for directors to disclose any doubts or misgivings they may entertain about certain aspects of the business without risking damage to the business itself ; and that the risks which must be taken by an enterprising management would be shirked if every failure had to be publicly confessed. We do not dispute the fact that there is a good deal to be said in defence of this point of view, but we consider that the present methods have great disadvantages. Moreover we think that directors exaggerate the importance and the influence of the shareholder who criticises the directors' policy at a general meeting. Finally, we consider that the outlook of shareholders would change with a change of system. Shareholders would soon become as accustomed to frankness on the part of directors as they are now accustomed to discretion ; and they would speedily come to appreciate the reasons which necessitate an adequate allocation of profits to reserve and to depreciation.

The defects of the present methods are obvious enough. The published balance sheet need not, and frequently does not, indicate the true financial position of a company. Assets and investments may be valued at cost, regardless of the fact that their present value may be many times the original value or that it may on the other hand have dwindled towards the vanishing point. Profits may be concealed by the piling up of hidden reserves, and losses may be concealed by failure to write down the value of assets to a figure representing their true value.

This inadequacy in many balance sheets is one among several causes which have divorced the owners of industrial cap-

ital from all real responsibility for and control over the management of their property. It means, as several notable cases in recent years have demonstrated, that unwise courses can for a long period of time be persisted in, the blissful ignorance of the shareholders being disturbed only when the breaking point at last comes and the bulk of their capital has to be written off as lost.

The effect of such a state of affairs on the investing public may be and often is deplorable. The ordinary investor is compelled to sell shares and to buy shares in ignorance of their real value. He is at the mercy of those who possess inside information and such information is not always scrupulously used. Moreover, an inefficient and declining concern may actually be able to raise fresh capital, in spite of the fact that it is continuing on the downward path and that the necessary remedial measures are being shirked. This last point is one with which we are closely concerned; for we regard it as most desirable in the interests of the country as a whole that the capital available for new investment should be directed into the channels where it will prove most productive. In the circumstances at present prevalent a large amount of capital is unnecessarily lost, and a still larger amount is invested without due discrimination; with the results that the investing public suffers a needless loss of capital and income, that the community piles up an excessive capacity to produce some commodities while it continues to go short of others, and that the demand for labour is rendered much less stable than need be the case.

We take the view, therefore, that a balance sheet should give as true as possible a picture of a company's financial position. The question is, how true and how complete can that picture be? It must be admitted that, a balance sheet being purely a financial document, it cannot completely indicate a company's *economic* position. We have dealt in the earlier section of our report with the difficulties which arise when any attempt is made to put a value on industrial capital. These difficulties are relevant here. It is not possible in a balance sheet to assess the earning power of a concern in the future, for any such assessment can only be based on hypothetical and indeed speculative considerations.

Although, however, it may be impossible to value a company's assets on an earning power basis, that does not mean that its earning power need be unnecessarily obscured. Yet to-day many concerns refrain from publishing a profit and loss account, and many devices are resorted to in order that the full trading profit may not be known. This policy is defended on the ground that any disclosure of the profits

made will attract competition into the field exploited by the concern, and thus in time reduce the profits. In our view this defence is inadequate. Big profits ultimately mean big dividends, and these will stimulate competition. But concealment involves delay, whereas the public interest demands that new capital should flow promptly into those industries where there are big profits, partly in order that prices may be reduced and partly because the very existence of big profits indicates that there is a public demand for the goods concerned which is in excess of the supply.

When we turn to the Balance Sheet proper two distinct problems confront us. A Company's assets will normally be divisible into :

1. Its Tangible Assets, with a further sub-division into :
 - (a) Fixed Assets—Land, Buildings, etc. ;
 - (b) Investments in Subsidiary Companies ;
 - (c) Liquid Assets—Cash, Debtors, Stocks, Realisable Assets, etc.
2. Its Intangible Assets—Goodwill, etc.
3. Nominal Assets, if any, such as Preliminary Expenses, Discount on Debenture Issues, etc.

It is most important that Companies should not place under one heading different kinds of assets, as many do to-day, and that in dealing with each category of assets they should make clear exactly what basis of valuation has been adopted. In the case of Fixed and Intangible Assets three bases of valuation are possible in theory : the actual cost of the assets, the current cost of replacing them, and their value as part and parcel of the business as a going concern.

The last of these three possibilities we discard for practical reasons already discussed. It is not possible to estimate the future earning power of a business with sufficient certainty. In practice most firms value their buildings and plant at cost and allow for depreciation at a rate based on their expected life. Where this is done the original cost, and the rate and amount of depreciation, should in our opinion be clearly stated. The question of replacement is a difficult one. It is clearly impossible for firms to write the value of their plant up and down in accordance with fluctuations in the prices of machinery. On the other hand if a concern is equipped with machinery bought at pre-war prices, and sets aside sums for depreciation related to the original cost, its reserve will clearly not be sufficient to provide for the renewal of the machinery when the time comes

to replace it. If, however, its allocations in respect of depreciation are related to current costs of new machinery, it seems unreasonably conservative to ignore the fact that its existing plant is worth much more than its original cost. In normal times cost, with adequate and clearly defined provision for depreciation, would seem to be the wisest basis of valuation ; but we feel that in present conditions attention needs to be given to the wide fluctuations in prices which have recently occurred.

In the case of investments an essential point is that the balance sheet statement should discriminate between securities and ordinary investments having a market value, which are really equivalent to cash, and trade investments in kindred businesses made in pursuance of the company's commercial policy. The two classes of investments are entirely different in kind, and should be shown separately.

Difficult though these problems are in the case of ordinary companies they are still more complex in connection with holding companies formed to control groups of undertakings, holding little or no tangible physical assets at all themselves. This comparatively new type of organisation in British business requires special consideration from the point of view of the public interest. Though by no means always monopolistic in character, organisations of this kind tend to include the larger joint stock enterprises of the country, and are therefore those which have in their keeping the welfare of a substantial proportion of the nation's economic interests. On the other hand, the balance sheet of a concern whose assets include perhaps the whole capital of one subsidiary, a bare majority of the voting shares of another, holdings of which some have a quoted value, while others have never been put to the test of the market, cash advances to this undertaking and loans to that, may be of singularly little help in revealing its economic position. The practice of holding companies giving supplementary information, while quite common in America, is just beginning to be introduced in England in certain cases in which the directors consider that the shareholders are not adequately informed by the ordinary balance-sheet. A distinguished accountant, writing in this connection, cited as one among many illustrations of the way in which a misleading impression might be given, the case of a holding company " which owns a number of subsidiary concerns, some of which are making large profits and others large losses ; the latter may also be financed by loans from the holding company. When preparing its own accounts the holding company might credit the Profit and Loss Account with dividends received from the prosperous undertakings,

interest charged on the advances to the insolvent companies, and also a contribution towards its own expenses levied both on the successful and the unsuccessful subsidiaries ; all these items might be taken to the credit of Profit and Loss Account, while the losses incurred by some of the companies were ignored." It is such possibilities as these that stimulate the movement we have referred to. The Chairman of a large holding company, for example, recently observed to his shareholders that "There is no obligation upon this company to supply more particulars than are usually found in a holding company's Balance Sheet. We decided two years ago that to enable you, as shareholders, to assess the value of our investments, you were entitled to learn the results of the combined trading of our associated companies, and I believe we were the first holding company to do so."

How the results of a composite concern are to be shown is a matter on which the accounting profession is not agreed. There are three possibilities :

- (1) That attached to the holding company's balance sheet should be appended the balance sheets of all the subsidiaries.
- (2) That the balance sheets of the subsidiaries having been made up on a standard basis as to the method of valuing assets and liabilities, a statement should be presented giving the total of the figures for these subsidiaries.
- (3) That a consolidated balance sheet should be prepared for the whole organisation as a going concern, including the parent company.

This is not the place to discuss these differences. The first proposal is the simplest, but in some cases where very large numbers of companies are concerned it might become absurdly cumbersome. The third plan is better than the second ; but until more experience has been gained, the second proposal perhaps involves the least dislocation. In any case whatever additional information is required of holding companies, it should be sufficient to enable the shareholder to get a true picture of the combined assets and liabilities of the group and to ascertain whether or not there is sufficient net profit in the group to cover the proposed dividends.

There remains a question which is responsible for a considerable part of the suspicion which is so frequently entertained in regard to the finances of public companies, namely, the issue of bonus shares. At the outset it is important to distinguish such shares from "watered capital" with which they are commonly confused in the public mind. Bonus shares may indeed be "water" but they are not

necessarily, or even generally, to be so regarded. Bonus shares should be shares representing a distribution to the shareholders of reserves representing capital already invested in the business out of previous profits. Watered capital is a term very hard to define ; but broadly it refers to capital which was never represented by assets or was only partly represented by assets. It may arise from many causes, of which the following are the chief :

- 1.—The reconstruction of a company when the assets are sold to a new company on a very high basis of value ;
- 2.—The purchase of a business or other assets at a figure much above real or market value.
- 3.—In Statutory Companies the replacement of one class of stock by two classes each of the same nominal value as the old capital without any increase of assets.

Both bonus shares and the watering of capital are commonly condemned on the ground that they conceal the real dividend that is being earned on the subscribed capital and make it appear less than it really is. The employer is, therefore enabled, or at all events encouraged, to stand out for a higher return, either in dealing with labour or in selling his goods to the public, than he is entitled to. Whether the desire to secure a particular unit of profit is in fact an influence which affects the employer's bargaining position in relation either to his employees or his customers is a question we need not discuss here ; we are merely concerned with the common view that bonus shares and stock watering are a form of misrepresentation. Stock watering is a matter which should be dealt with by sound accountancy methods. The bonus share requires a further word of comment. In so far as the bonus share represents merely the capitalisation of reserves or, in other words, is a recognition of the investment of profits which would otherwise have been distributed to the shareholders, there is a *prima facie* presumption that such fresh capital is entitled to a reasonable return. If a company with £100,000 in fact doubles or trebles its effective capital through withholding a portion of its profits the fact that it can earn 20 per cent. on its original investment does not imply that the shareholders are getting an excessive return, if reckoned on the much larger sum they have now invested in the business. On the other hand it does not necessarily imply that the return is justified. From the wage-earners' point of view it might in certain circumstances be argued that the reserves that had been capitalised were built up out of profits which represented an excessive profit as compared with the wages they had been paid, while between the company and the public such reserves may have come into being through the existence of monopolistic

values or the increase for some other reason of the company's assets. In short, the question whether undistributed reserves are capital on which shareholders are reasonably entitled to get a normal return (whatever that may mean) throws us back to the question whether the profits out of which the reserve was built ought to have been left to the shareholders or should have gone in lower prices or higher wages. It is a not unnatural instinct which makes the public think that investors should be satisfied with a normal return on the capital originally invested. But the setting aside of profits to build up capital is perhaps the chief source by means of which fresh capital flows into British industry and assists in its development. Nothing should be done to check this tendency. When capital has been so invested and is proved to have been wisely used, it is reasonable that it should be remunerated. We therefore consider that there is no reason to penalise the issue of bonus shares and that the burden of proof that any additional capital entered on the company's capital account represents profits which should have gone to the public or to the wage-earner, should rest upon the company's critics. There is room for two opinions as to the advisability of showing in every company's capital account what proportion of the capital represents the capitalisation of reserves as distinct from capital raised by cash subscription or exchanged against specific assets. We therefore make no recommendation on this point. It should be noted, moreover, that if the accounts give a true picture of the annual earnings they will show what proportion goes to reserves ; and a file of the balance sheets will show what bonus shares have been issued, and how the reserves capitalised were built up. A more definite kind of stock watering sometimes occurs when shares are issued, not for cash, but for some other consideration ; for the nominal value of the shares allotted in exchange may exceed the true value of the assets thus acquired. It would therefore be useful if companies were compelled to show separately what shares have been issued in this way.

There remains one further point, namely, the distinction between private and public companies. The only obligation on the former is to file at Somerset House an annual return showing the nominal capital, the issued capital, and what shares have been issued for a consideration other than cash. Nevertheless some of the largest concerns in England are private companies. If company finance was merely a matter of interest to the proprietors there would be no objection to this ; but in fact very large concerns may well hold in their hands the destiny of great masses of workpeople and the prosperity of large industrial districts. Company law has hitherto assumed that company accounts are matters

only between those who administer the concern and the proprietors and creditors. We suggest that the time has come when the public interest requires that some indication should be given of the results of great joint stock enterprises. We therefore suggest that private companies, whose operations have reached a magnitude which makes them a matter of public interest, should be subject to the same regulations as public companies in regard to publishing their balance sheets. To make identical rules for all private companies would be imposing obligations on numerous tiny concerns which are perhaps unnecessary. On the other hand, to draw an arbitrary line between large and other companies may seem to have no logical justification. Moreover, the existence of such a line would tend to influence the accounting of concerns which might be near the margin. But these considerations do not seem to us of great importance and on the whole we suggest an arbitrary line which might be changed as experience accumulated. As the basis of discussion we suggest this line should be, say £2,000,000 of assets.

In order to give effect to the preceding arguments, we suggest, without going into technical detail, that the principles set out below should be embodied in any legislation amending the existing Companies' Acts. These recommendations relate only to the problem of company balance sheets; we have not attempted to consider such questions as company prospectuses and what they should contain.

We would, however, add in conclusion that progress in this matter is not solely to be achieved by means of provisions in statute law. On the one hand, it is to be anticipated that the tendency to adopt standardised forms of accounts suitable to particular kinds of businesses whether compulsorily imposed (as in the case of railways and other public utilities) or adopted because of their proved utility, will gradually cover an increasing part of the economic field. On the other we confidently look for a development in the practice and traditions of accountancy in the fostering of which it is clear that a great part must be played by the accountancy profession.

RECOMMENDATIONS

In order that the public may be properly enlightened as to the position of limited companies we propose that the following minimum requirements should be made compulsory.

It should be obligatory on all public companies to issue a balance sheet annually.

This balance sheet should be available not only to shareholders but to members of the public on demand and on payment of a small fee.

These accounts should be published promptly, not more than six months after the conclusion of the accounting period to which the balance sheet refers.

The preceding obligations shall also be imposed upon private companies whose assets exceed say, £2,000,000. In the case of a company owing property largely financed by mortgage the value to be included for this purpose would be the net value after deduction of the mortgage.

Companies controlling Subsidiary concerns shall publish annexed to their own Balance Sheet either :

(a) The Balance Sheets of the Subsidiaries or a summary of the assets and liabilities of the Subsidiaries or a consolidated Balance Sheet.

or

(b) A Statement of the net trading results of the Group.

Some of us would go further and require every Company's balance sheet to be accompanied by a list of concerns in which it holds a majority of the voting shares.

In the statement of its capital every Company shall indicate the number of shares issued for consideration other than cash except in the case of the capitalisation of reserves.

Every Company shall show *separately* in its Balance Sheet :

1. Its Tangible Assets, with a further subdivision into :
 - (a) Fixed Assets—Land, Buildings, etc. ;
 - (b) Investments in Subsidiary Companies ;
 - (c) Liquid Assets—Cash, Debtors, Stocks, Realisable Assets, etc.
2. Its Intangible Assets—Goodwill, etc.
3. Assets such as Preliminary Expenses, discount on Debenture Issues, etc.

In the case of Fixed Assets and Intangible Assets the basis of value shall be clearly indicated.

The exact basis of valuation—cost or market price—of stock in trade should be clearly stated.

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