

Evidence Submitted

to the

Macmillian Committee

of

Finance and Industry

by

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Minutes of Evidence)*

Twenty-Fourth Day

Thursday, 1st May, 1930

Present:

The Rt. Hon. Lord Macmillan, Chairman.

Sir Thomas Allen.

The Rt. Hon. Lord Bradbury, G.C.B.

The Hon. R. H. Brand, C.M.G.

Professor T. E. Gregory, D.Sc.

Mr. J. M. Keynes, C.B.

Mr. Lennox B. LEE.

Mr. Cecil Lubbock.

The Rt. Hon. Reginald McKenna.

Mr. J. Prater Taylor.

Mr. A. A. G. Tulloch.

Sir Frederick Leith-Ross, K.C.M.G., C.B.

Mr. G. Ismay, Secretary.

Major Clifford Hugh Douglas, M.I.Mech.E., M.I.E.E. called and examined.

Statement Of Evidence Submitted By Major Douglas.

Summary

1. That the primary cause of the industrial depression and consequent unrest is financial. It is due to lack of power to buy, not due to lack of either power or will to produce. That is to say it is not in the main administrative, nor due to the technical relationship between employers and employed, but is due to money relationships which are governed primarily by the financial system, and secondarily by financial policy. Such “remedies” as “rationalisation” or “nationalisation” do not touch the fundamental problem.

2. That while the policy pursued in regard to credit issue probably controls the general rate of production, and may be the main cause of the differential rate of economic prosperity as between one nation and another, the fundamental defect of the financial system, as operated, is mathematical not political. The existing financial system is not a correct reflection of economic fact, as it should be, and is both misleading and restrictive.

3. Any effective remedy must traverse the claim of the banking system to the ownership of the financial credit extended to industry, a claim which is implied by the fact that at present money, constituting in the main new purchasing power, is loaned to a bank’s customers, not given.

Section 1

4. It may be helpful to define the phrases used in the preceding proposition.

(i) **INDUSTRIAL DEPRESSION.** — Industrial depression may be characterised as a lack of sufficient orders to keep both plant and personnel employed, together with an accompanying lowering of the price level in relation to the cost of production, so that both the manufacturer fails to make a profit and the volume of wages of the wage earning class tends to fall. The phenomena are cumulative and have no relation either to productive capacity or psychological demand. The material by-products are bankruptcies, the breaking up of plant, and the psychological by-products are industrial and political unrest and the destruction of social morale.

(ii) **POWER TO BUY.**—Power to buy consists in the ability to offer what the seller requires in exchange for his goods, i.e., money. **FINANCE.**—Finance in its relation to industry may be defined as the provision of the monetary inducement to deliver goods and services. It is obviously the same thing as power to buy. It is proposed to prove that with negligible exceptions, power to buy originates, and is vested in the banking system.

(iii) **FINANCIAL SYSTEM.**—This may be considered as having three parts, the credit issue system, the price system, and the taxation system.

(a) The credit issue system may be considered as predominantly made up of two factors, bank loans, and the discounting of bills. Since the result of both of these is to swell both the assets and the liabilities of a bank’s accounts, they may for the purpose of this investigation be treated as similar.

(b) The price system is founded in the main on two propositions. Firstly, that all costs of production must go into prices. Cost, therefore, forms the lower limit of prices. Secondly, that the price of an article is what it will fetch, that is to say, the major limit of prices is governed by the ability and willingness of the purchaser to buy. It should be noted that while there is no major limit to prices business cannot under existing conditions be carried on with prices below cost. Any attempt to do this consists, in essence, in the provision of a credit subsidy by the seller in aid of a reduction of prices below cost.

(c) The taxation system is preferably considered in conjunction with the alternative method of providing money for public expenditure, which is by means of loans. The inducement to subscribe to a loan consists in the interest paid on it, and in the varying terms of redemption. Taxation may properly be considered as being a forced non-repayable, recurring "loan," a portion of the proceeds of which are used to pay the inducement offered to a voluntary loan. It is of importance to note that while the physical effects of spending money raised by taxation

are exactly similar to those of spending money raised by a loan, in the latter case a financial asset is created, whereas in case of taxation no financial asset is created. One result of this is that, for instance, in Great Britain there is nothing corresponding to a capital account, its place being taken by the National Debt.

(iv) FINANCIAL POLICY.—Financial Policy may be defined as an endeavor to vary within the limits of the preceding definitions, both the volume of credit issue, and as a result of the second canon, of the price system, the level of prices. It should be noted that while prices may be driven down by financial policy to the cost of production, financial policy does not DIRECTLY affect the COST of production other than by producing Conditions which may induce workmen to accept lower wages and by the imposition of taxes which go into costs. The result, however, of financial policy directed to lowering PRICES within the existing financial system is to discourage production, and by causing a relative rise in overhead charges and a smaller volume of production may actually result in raising the minimum price level.

ARGUMENT.—SECTION 1.

5. In order to distinguish the artificial condition known as "industrial depression" from the underlying physical facts, it is perhaps desirable to survey the physical position of industry. It will be admitted that the ostensible objective of industry is the production for use of goods and services to an extent rendered possible by the progress of the industrial arts. The physical factors in the attainment of this objective consists of what are commonly called raw materials, which may be reasonably defined as materials in the state in which they are found in nature, the application to these raw materials of a process involving, in the broad sense, tools, and, thirdly, the expenditure of energy. The distinguishing characteristic of the nineteenth and twentieth century is the rapid advance of process together with the rendering available of large amounts of energy, which may be considered as derived from the sun, through the various agencies of coal, oil, steam, etc. It appears to be reasonably true to say that for a given process the rate of production is proportionate to the rate of use of energy, and to a large extent it is immaterial whether this energy is muscular or is applied by machines. The physical effect of these factors has therefore been to increase the rate of production of a given article per human unit of labour. For instance, the rate of production of pig iron is three times as great per man employed as it was in 1914. A workman using automatic machines can make 4,000 glass bottles as quickly as he could have made 100 by hand twenty-five years ago. In 1919 the index of factory output (based upon 1914 as 100) was 147 and the index of factory employment was 129. By 1927 output had risen to 170, but employment had sunk to 115. In 1928 American farmers were using 45,000 harvesting and threshing machines, and with them had displaced 130,000 farm hands. In automobiles, output per man has increased to 310 per cent., an increase of 210 per cent.

6. It will probably be admitted that the power and will to produce are sufficiently demonstrated in the foregoing considerations. It would not be seriously contested that the psychological will to buy does not exist, and it seems beyond dispute therefore, that the reason that buying up the power of the ability of the industrial system to produce does not take place, is because there is a lack of money required to pay the prices demanded. In a subsequent section it is proposed to prove that under the existing financial system the general public can at no time acquire by purchase the whole of production, but while this is so, and the

PROPORTION OF A GIVEN VOLUME of production which the public CAN buy is probably fixed by the system, THE TOTAL VOLUME OF PRODUCTION is almost certainly governed by financial policy.

7. In order to fix responsibility for this policy it is, perhaps, only necessary to quote a recent speech by Mr. Montagu Norman, Governor of the Bank of England, as reported in the "Times" of March 21st, 1930. A previous speaker, Mr. Hargreaves, had said, "They held the hegemony, so far as this country was concerned, in finance, and he thought he might say, considering the way in which they were regarded in foreign countries, that they also held the hegemony of the world." Mr. Montagu Norman commented, "He was glad to note what Mr. Hargreaves said about the hegemony in one place and another. He believed it was largely true, so far as Overseas were concerned, and if it was true, it was largely the result of work which the Bank had devoted; first of all to the stabilisation of Europe, and secondly to the relationships between the central banks, which were originally advocated at Genoa." In this connection it is of practical importance, as bearing on the difficulties of obtaining an alteration in the financial system itself, to note that the spokesmen of orthodox finance seem to assume the position of arbiters and protagonists of morals, both individual and international.

8. Some indication of the practical effect of the admitted hegemony of Finance and its interpretation of its functions may be gained by a consideration of the results of some of its activities in the post-war period, and may be helpful. Prior to its subjugation by the Financial Committee of the League of Nations, the following description of affairs in Austria, taken from Colonel Repington's "After the War," is fairly typical.

"I am much impressed by studying the Austrian papers. They seem detached and indifferent about foreign affairs, but are full of accounts of all sorts of new or extended industries springing up, and I counted twenty-three pages of commercial advertisements in Sunday's 'Neue Freie Presse.' I read or hear of every kind of old industry being extended and of some new one opened. New machinery is being employed, and on the farms prize stock are being bought and farm buildings improved by the rich peasants who thrive on the war.

From Upper and Lower Austria, Styria and the Tyrol it is all the same story of new developments, and what is really going on is an endeavour to make the new Austria less dependent on her neighbours, and less forced to buy abroad in markets made fearfully dear by the exchange. I find that two-thirds of the Austrian deficit is due to food subsidies, chiefly bread. A loaf of 1,260 grammes is now sold for nine kronen, but costs sixty kronen to the State. Even a Rothschild is paid, therefore, fifty-one kronen by the State for every loaf he eats."

Subsequent to the financial "stabilisation" of Austria, the correspondent of the "Observer," writing on February 15th, 1925, states "It is regrettable that the new wave of depression should have swept Vienna, to such an extent as to cause 149 cases of suicide during the past month."

The "New Republic" of New York in its issue of December 3rd, 1924, states: "The League of Nations at its last meeting imposed severe restrictions (financial) on the Austrian Government. These circumstances have made living conditions worse than at any time since the collapse after the Armistice."

9. On the other hand in France, which was physically the severest sufferer by the war, there is no unemployment, and there has been no serious attempt at deflation.

If we are to judge by such books as Monsieur Chastenet's "The Bankers Republic," French finance is free from undue purism and from any assumption of moral leadership. In spite of this, however, the industrial situation is admittedly better in France than it is in this country, and what is perhaps equally important, the plant of France has been modernised to a much greater extent than has been possible in England in these times of stringency.

10. The curves marked "Exhibit A" (NOT REPRODUCED), attached to this section, indicates the business and psychological effect in Great Britain of the policy which has been pursued. During the period covered by the curve, in which the bankruptcies have risen from about 900 per annum to nearly 7,000 per annum, and the suicides have increased over the whole of the kingdom by 67 per cent, per annum, and in Scotland by 100 per cent., every large bank in Great Britain has maintained, or increased its dividend, has enormously expanded its premises, and placed large sums to its visible reserve, and created still large invisible reserves, and this in spite of the enormous losses alleged to have been made in respect of loans to industry.

During the same period of time the greater proportion of the larger industrial undertakings have passed from the possession of those who originally initiated and financed them into the control of banks and finance houses.

It would appear a somewhat remarkable comment on this situation that the spokesmen of the Bank of England, so far from expressing any regret, appear to regard the results obtained as being a proper subject for self-congratulation.

In considering the policy pursued by this Institution and its obvious subservience to the Federal Reserve Board of the U.S.A., it is difficult to avoid the conclusion that it has come under the control of influences definitely hostile to the continued influence of Great Britain and (possibly under cover of paranoiac schemes for world reorganisation on a financial basis) has been a chief agent in the industrial demoralisation and social disillusionment which are now general.

Argument.—Section II.

11. In Section I it has been suggested that a state of industrial depression which may be considered to be synonymous with a condition of slackened production, arises primarily from financial and not from physical or psychological causes, and specifically from lack of effective demand, that is to say, from the difficulty of obtaining orders backed by the power to pay in money. If this be admitted, it is incontestable that any measures which increase the amount of money available to back orders will increase the rate of production, and conversely, any measures which decrease the amount of money available to back orders will decrease production. It is perhaps unnecessary before this Committee to go over the ground which has been so ably covered by one of its members, the Rt. Hon. R. McKenna, to the effect that the main cause of the increase or decrease in the amount of money available at any time may be found in banking policy, and notably in central banking policy. Mr. McKenna's argument may be epitomised in the statement that "every bank loan creates a deposit and the repayment of every bank loan destroys a deposit." Since rather surprisingly, there are certain orthodox economists who are not prepared to admit this statement, I attach a simple mathematical proof which would appear to put the matter outside the range of discussion.

Let Deposits = D	Then Assets = L + C.
,, Loans = L	Liabilities = D + K.
,, Cash in hand = C	
,, Capital = K	So that L + C = D + K.
Differentiating with respect to time we have	
$\frac{dL}{dt} + \frac{dC}{dt} = \frac{dD}{dt}$	$(K \text{ being fixed}) \frac{dK}{dt} = 0.$
Assuming cash to be kept fixed.	
$\frac{dc}{dt} = 0$	$\therefore \frac{dL}{dt} = \frac{dD}{dt}$

12. It would, perhaps, be misleading to describe this ingenious process as wholesale counterfeiting, as since the Bank Act of 1928 the State has resigned its sovereign rights over Finance in favour of the international private organisation known as the Bank of England.

13. Since 1920 the policy pursued in Great Britain under the leadership of the Bank of England has been continuously restrictive, that is to say, directed to the reduction of the amount of money available to back orders. This policy has been termed “deflationary,” but it is open to considerable doubt whether the term is justified. It is applicable, correctly, to a situation in which prices and money are decreased in such a manner that the purchasing power of the unit of money rises in the same proportion that its total quantity is decreased. This condition has not been fulfilled, as the amount of money in the hands of the public has been decreased by taxation and by other methods at a considerably greater rate than prices have fallen. While the upper limit of prices follows approximately the quantity theory of money, the lower limit is governed by cost of production. The outcome of this set of circumstances has been to restrict production, to force down the price of real property, and to enrich the money lenders and insurance companies at the expense of the individual and the producer.

14. To indicate the divergence between the policy which has been pursued in this country and, for instance, the United States since 1920, it is perhaps sufficient to note that the increase in the total deposits of the London Clearing Banks for the six years ending October, 1928, was only £16,000,000, to a total of £1,790,000,000. In contrast with this, the increase in the deposits of the Member Banks of the Federal Reserve system over the same period of time was £1,873,000,000, or 83 millions more of an INCREASE than the TOTAL DEPOSITS in the British banks. It is not necessary, I think, to seek further for the cause of the disparity in material and industrial prosperity between this country and the United States in the post-war period.

15. It is not suggested, however, that the difficulties inherent in the existing financial system have been solved to any considerable extent in the United States, but it seems incontestable that physical assets (which must form the basis of material prosperity under any financial system) have been increased in the United States, and their production retarded in Great Britain simultaneously, with a corresponding effect on the morale of the people concerned. The possibility of manipulating the economic prosperity as between one country and another through an international financial organisation, such as is growing up independent of effective national control, and having ends to serve which are not those of the populations affected, is perhaps one of the most serious aspects of the annexation of financial credit. It is at one and the same time rendered possible and condemned to catastrophe by the circumstance that it operates to produce a permanent and increasing disparity between the minimum collective price of products of the industrial system within a given credit area, and the collective, effective demand available for the goods so produced.

16. The causes of this disparity are complex, but the two more important are (a) the “double circuit” of money in industry, (b) the reinvestment of savings.

(a) The double circuit difficulty has been stated by me in the form of a proposition, which has been popularly known as the A plus B theory. A factory or other productive organisation has, besides its economic function as a producer of goods, a financial aspect—it may be regarded on the one hand as a device for the distribution of purchasing power to individuals, through the media of wages, salaries, and dividends; and on the other hand as a manufactory of prices—financial values. From this standpoint its payments may be divided into two groups.

GROUP A.—All payments made to individuals (wages, salaries and dividends).

GROUP B.—All payments made to other organisations (raw materials, bank charges, and other external costs).

Now the rate of flow of purchasing power to individuals is represented by A, but since all payments go into prices, the rate of flow of prices cannot be less than A plus B. Since A will not purchase A plus B, a proportion of the product at least equivalent to B must be distributed by a form of purchasing power which is not comprised in the description grouped under A.

The above proposition is perhaps most simply grasped by recognising that the B payments may be considered in the light of the repayment of a bank loan by all the concerns to whom they are made, with the result involved in the relationship previously discussed between bank deposits and bank loans. When real capital (i.e. tools, etc.) is financed from savings, that condition is complicated by (b).

(b) The persistence of the idea that monetary saving has a physical counterpart in physical accumulation will no doubt exercise the attention of historians of the present period. Since money is normally only distributable through the agency of wages, salaries and dividends, it being assumed that the interest on Government loans is provided by taxation, the whole of these wages, salaries and dividends must have appeared in the cost, and consequently in the price of articles produced. It does not appear to need any elaborate demonstration to see that any saving of these wages, salaries and dividends means that a proportion of the goods in the prices of which they appear as costs, must remain unsold within the credit area in which they are produced and are therefore, in the economic sense, wasted. The investment of the funds so saved means the reappearance of the same sum of money in a fresh set of prices, so that on each occasion that a given sum of money is reinvested, a fresh set of price values is created without the creation of fresh purchasing power.

17. It will be evident that the processes just indicated are at the core of the problem under consideration and that a more exhaustive examination of them than is desirable in this survey, is imperative. The present intention is merely to emphasise their existence and importance.

Section III.

18. From Section II it would appear indisputable that all but an insignificant amount of effective demand is dependent for its financial component on bank loans in various forms. It will be hardly necessary to remark that the only value of these bank credits is contingent on the willingness of the industrial community to produce and supply goods and services in exchange for them. While it is conceivable that an industrial system might operate without money, it is inconceivable that a money system could operate without an industrial system.

19. Financial credit, therefore, may be considered as a reflection of real credit, which is a measure of the capacity to produce, and deliver goods and services, as, when, and where, required. Since this conception of real credit implies an organised, orderly, and stable community, whose objective in production is consumption, it seems difficult to object to the statement that the real basis of credit is the producing and consuming capacity of the community, and still more difficult to justify a condition of affairs in which this credit is loaned to it as an act of grace, although a charge for its mobilisation can easily be admitted. It is practically, however, more important to realise that a financial system which separates the ownership of credit from the community is self-destructive, since only the community has the requisite consuming power to maintain production at its maximum.

20. In order to realise this, it is only necessary to bear in mind that money and credit are interchangeable, and that the definition of money is "any medium which no matter of what it is made, or why people want it, no one will refuse in exchange for his goods" (Professor Walker). Since the creation of financial credit is a costless proceeding in itself, the mechanical portion of the process merely consisting of writing figures in a book, and since financial credit arises out of this book-keeping technique, and is by definition practically the only effective demand for goods and services, it is plain that the whole of the goods and services produced by the community are the potential property of the financial system as at present operated. The financial system as such, however, is incapable of absorbing any considerable proportion of the possible production of the community, although it must be admitted that the proportion of branch banks

to new houses in the past ten years shows a painstaking effort in this direction. It is not therefore necessary to labour the fact that the identification of the credit now claimed by the banking system with the general community is an essential to the equation of effective demand with productive capacity.

21. In the future attempts which will be made to give effect to such propositions as the foregoing, it will be necessary carefully to distinguish between the private administration of credit as a public property and what is commonly called "public administration," it being quite probable that the former is in every way preferable as a means of administration.

It may, perhaps, be permissible to quote from a book which has aroused considerable attention on the Continent, by the late Doctor Steiner, in this connection: "Modern socialism is absolutely justified in demanding that the present-day methods, under which production is carried on for individual profit, should be replaced by others, under which production is carried on for the sake of the common consumption. But it is just the person who most thoroughly recognises the justice of this demand who will find himself unable to concur in the conclusion which modern socialism deduces: That, therefore, the means of production must be transferred from private to communal ownership. Rather he will be forced to a conclusion that is quite different, namely: That whatever is privately produced by means of individual energies and talents must find its way to the community, through the right channels."

22. Since it is quite probable that the time has not arrived at which it is practicable to obtain recognition of the contention advanced in this Section, it would, no doubt, be premature to put forward any constructive proposals which involve its acceptance.

It is improbable that individual business will, after the experience of the post-war period, be content to work with banks loans which are liable to call at the most in convenient moment, and there is evidence of an increasing disinclination to take all the risk and responsibility in collaboration with institutions possessing neither technical knowledge nor common interest with the individual enterprise. No doubt an appreciation of this situation has a good deal to do with the intensive propaganda for "rationalisation," jointly with a genuine inability to apprehend the fact that the "efficiency" of very large undertakings is a paper efficiency based on access to credit, bulk buying, and price making, and in many cases has no physical basis, the genuine efficiency of the smaller undertaking being frequently higher.

4374 CHAIRMAN: Just by way of preface, I should say that our Committee, Major Douglas, had a communication from the Editor of "The New Age," and also from the Social Service Section of the Congregational Union, in both of which we were urged to hear your views, and in consequence of these representations we addressed an invitation to you to come here and favour us with your views. We have the statement of evidence which you have been good enough to prepare. Perhaps before we address some questions to you, you might explain how you came to interest yourself specially in this class of financial problem. What has attracted you to it?

Answer—Well, it is really rather a long story, my Lord. I had about six or seven years in India about 15 or 20 years ago, and during that time I used to have a good many conversations with a friend of mine who was then Controller-General of India. He was Mr. Branson, who was Accountant-General of Bengal and subsequently Controller-General of India. He used to favour me with very long discussions on credit, which I am afraid did not penetrate very deeply at that time. I more or less pigeon-holed the things that he said in my mind. Of course, I am by profession an engineer as you have no doubt gathered; and I was struck by certain occurrences which seemed to require an explanation, notably the fact that just before the War it was very difficult to get on with various sorts of work in which I was engaged because there was always some question of scarcity of money. Then I noticed after war broke out there was no difficulty about getting money for anything, however wild the proposal seemed to be at the moment. I think the next stage through which I went was the drawing up of a scheme for getting some information out of the Royal Aircraft Factory at Farnborough, of which I was a senior official, and that involved the putting in of a number of tabulating machines for the purpose of getting information out of the factory very quickly. From those tabulating machines I got a lot of information for the purposes for which they were

immediately required, but I also got what struck me as being interesting information of other kinds, as to the relation between prices and wages. I used to sign wages checks at Farnborough to the amount of about £20,000 a week—something of that sort—and I noticed there was always a curious relationship between the overheads of the factory and the mere cost prices of the stuff that was turned out, and the sums I was paying out in wages and matters of that sort. That was the next stage. Then I wrote one or two articles, very tentative sort of articles, after the War on the matter, and then I went over to Washington in 1919 and 1920 at the invitation of some Americans who had seen these articles, and I discussed the matter with a number of American industrial engineers and so forth. I think that is really about the course that the matter has taken, roughly speaking.

4375 CHAIRMAN That must be a very general statement, because obviously you have given a great deal of study to the questions involved. When did you first publish an expression of your views?

Answer—The first public expression of them was published immediately after the Armistice in “The English Review.”

4376 CHAIRMAN You did not publish anything until after the War, but you had been a student of these matters before the War, I gather?

Answer—Yes.

4377 Chairman You tell us at the very outset of your statement that in your view the primary cause of the industrial depression and consequent unrest is financial. When you use that general expression do you mean that there is something inherent in our financial system in this country which necessarily leads to unemployment and unrest?

Answer — Yes, that is my view.

4378 CHAIRMAN Inherent?

Answer—Inherent.

4379 CHAIRMAN And that is quite irrespective of any special accentuation of those conditions by the War?

Answer—I have endeavoured to make that rather subtle distinction plain. If I might refer to paragraph 6 of my evidence—it is a slightly subtle distinction. I think of any given volume of production there is only a possible and probably diminishing proportion of that total which can be sold inside a given credit area, but the total volume can be expanded, and the absolute amount of the smaller proportion can be expanded by alterations in financial policy. Have I made that difference clear?

4380 CHAIRMAN What I really wanted to get at was this: If there is an inherent defect in our financial or monetary system, that is a defect which has existed certainly 100 years?

Answer—In an accelerated form, yes.

4381 CHAIRMAN I quite agree it may become much more accentuated, but if it is inherent in the system, that system has been the monetary system under which we have been living certainly since the Bank Act?

Answer—Quite.

4382 CHAIRMAN And in your view has that system been, quite bluntly, wrong from the beginning?

Answer—Well, I should not, of course, use the word “wrong” in any moral sense.

4383 CHAIRMAN No, no!—In an engineering sense.

4384 CHAIRMAN Inexpedient?

Answer—Inexpedient; pragmatically wrong. I should add that the position has been masked from the fact that you had a small number of industrial or industrialised countries able to export into an undeveloped world, and the fact that you were enabled to dispose of your unsaleable surplus in an undeveloped world enabled you to have a volume of production of which the proportion that you could sell at home was sufficient for the uses of the country.

4385 CHAIRMAN Is it your view that so long as we were on the up-grade, so long as we were a progressive country, able to produce and dispose of a growing amount of commodities, the defects of the system would not become manifest, but, on the other hand, when the world had more or less reached saturation, then the defects of the system would begin to be felt? Is that your view?

Answer — That is my view.

4386 CHAIRMAN Because, if our financial system has been on a wrong basis for over 100 years, I should have imagined that you would have had progressive unemployment and progressive depression, and not, as we have had, periods of quite excellent prosperity succeeded by periods of depression. We have had under the present monetary system periods of great prosperity, as you know, as well as periods of depression in the past. How would you account for that?

Answer—In order to give a really useful answer to that I should certainly have to look into a particular period. I think I should probably be able to find a perfectly satisfactory explanation of that.

4387 CHAIRMAN Perhaps it is too general a question to put to you, but we have already heard much evidence to show that we are at the present moment in a more or less abnormal or exceptional period when our monetary system is being exposed to stress and strain of a kind to which it was never exposed before; that the system is not itself inherently wrong, but that it will not work adequately under the exceptional strain to which it is being exposed at the present time. But your view is that it is inherently wrong?

Answer—It is.

4388 CHAIRMAN Therefore you would be giving practically the same evidence to us whether there had been a European war or not?

Answer—I think that the booms and slumps to which you refer are the result, broadly speaking, without going into details, of the fact that the improvement in the industrial system, and the rate of increase of productive capacity in the industrial system, would normally be very much greater than it is if it were not checked by the financial system. There is a sort of pull-and-haul between the industrial system, which wants to get ahead, and the financial system which perhaps automatically checks it, and, broadly speaking, that is the general explanation of the booms and slumps, without going into specific details.

4389 CHAIRMAN We have all read your diagnosis of the position, but I confess I should like to take advantage of your being here to-day to hear from you what is your practical remedy. We as a Committee have got to make practical recommendations. If you can imagine yourself in my unhappy position, as the person who is presiding over the body which has to make the recommendations, what would your practical recommendations to the country be to give effect to your view and remedy this inherently wrong system?

Answer—Well, I am afraid my training and experience as an engineer makes me want to hedge on that point. I should say that what I should first want to do would be to examine the situation very closely—more closely than in my position I am able to do.

4390 CHAIRMAN We are in that very process of examining the position, and we would like your help.

Answer—Broadly speaking, I have a very clear idea of what has to be done.

4391 CHAIRMAN Will you tell us what your clear idea is?

Answer—You have to equate the available purchasing power of the community to the collective prices of the goods for sale.

4392 CHAIRMAN That is of all the products of industry?

Answer—Yes, of all the products of industry which are available for sale.

4393 CHAIRMAN An equation involves two things, which have to be related. Which of the two things has to be corrected; is it the purchasing power which is wanting or is it the production which is wanting; which of the two sides of the balance has got to be dealt with?

Answer—Well, there, I think, you get into a technical point, and that is that if you attempt to leave the collective prices of the goods for sale alone, and proceed to deal with the collective demand by itself, you get into a technical difficulty which is commonly called inflation. That is to say that if you merely have a state of affairs in which by some process, crude or otherwise, you increase the amount of money in people's pockets—the units of money in people's pockets—and you leave everything else untouched, you get a general rise of prices which will defeat the end you have in view. But if you can utilise some mechanism, some existing mechanism, which will enable you to lower prices, and without the results which usually follow a lowering of prices—that is to say, bankruptcy, lower profits, decreased production, and so forth—if you can lower prices and leave the money in the pockets of the buyer you will produce exactly the same result of equating the purchasing power to prices without the evils of inflation. That is, broadly speaking, the position which you arrive at.

4394 PROFESSOR GREGORY: How do you propose to do it? **Answer**—How do I propose to do it? Well, I should again repeat the CAVEAT that I entered first of all, that if I were Dictator I should want to examine the situation a little more closely, but it is quite possible to use the powers of creating credit in aid of a reduction of prices. You can pay for an article from two sources; the common method of doing it, of course, is by a subsidy in aid of prices. Now a subsidy in aid of prices, of course, is normally collected through taxation, but there is not the slightest reason why a subsidy in aid of prices should be collected through taxation; it can be provided by exactly the same methods by which we provide fresh money at the present time.

4395 Mr. BRAND: In what way do you mean—by bank credit?

Answer—Yes. The basis of and the justification for bank credit is the fact that you immediately improve credit.

4396 Mr. BRAND: How would the credit be repaid?

Answer—The repayment is involved in the price of the goods, and the ratio of the credit which you can supply under those conditions to the price of the good's depends on the real depreciation of the plant and materials in the country as compared with the real appreciation. You have two processes going on in any industrial country at any time; you have a depreciation, which you can call partly consumption, partly wear, partly obsolescence, and things of that sort, and you have an appreciation, which is new plant and many things which I need not go into. In my opinion, the true price of any article is the ratio of depreciation to appreciation, and if you accelerate the appreciation you can lower your prices below what is commonly called cost.

4397 Mr. BRAND: Who pays the difference?

Answer—The physical difference is involved in the ratio of consumption to production.

4398 Mr. BRAND: If I am a producer, and I produce something at a certain cost, do you say that I can, and should be able to, sell at below that cost?

Answer—No, I do not say you can, because you are not a creator of financial credit, as a producer, but the community as a whole can afford to have a system in operation by which it can subsidise you out of credit.

4399 Mr. BRAND: The credit would not be given by the bank but by the community?

Answer—All credit is community credit.

4400 Mr. BRAND: Supposing it is given by a bank; I do not see how the bank gets that credit back?

Answer—You mean the method of doing it?

4401 Mr. BRAND: Yes. To whom does it give it, and from whom does it get repayments?

Answer—That is a matter of the mechanism. One form would be, that it could be given by the bank to the manufacturer and received by the bank from the Treasury.

4402 Mr. TULLOCH: That involves a large creation of credit, does it not, for the benefit of the manufacturer?

Answer—It does not involve any larger creation of credit than at the present time, because the result is to lower prices.

4403 CHAIRMAN: May I put one point to you incidentally? The defective purchasing power is a symptom of the disease?

Answer—Yes.

4404 CHAIRMAN: In short, we have not enough money to buy things we ought to buy?

Answer—Yes.

4405 CHAIRMAN: If you are going to cheapen commodities by a system of subsidy, the subsidy has got to be found somewhere, and you suggest it should be provided by the community; but after all, am I not the community, am I not going to supply the subsidy to enable myself to buy cheaper?

Answer—No. As a community, at the present time— putting the matter quite dispassionately—you are divorced from your own credit.

4406 CHAIRMAN: What exactly do you mean, apart from metaphor; how am I divorced from my credit?

Answer—Except for the use of the word “divorced” it is a statement of fact and not of metaphor. You have no power of creating financial credit at all as an individual at the present time. You are in possession of so much cash, you have a certain account with the bank, and the dimensions of that account are limited by certain factors which I feel sure it is not necessary to go into. That, of course, is not the case with the banking system. The banking system, with certain reservations, that is to say, the liability to pay cash on demand, which again is governed by its interlocking with the Bank of England, and the Ways and Means Accounts, which make the thing flexible, has a very nearly undefined limit of expansion, and that is the difference.

4407 CHAIRMAN: I quite understand that one of the chief assets of a bank is its credit; it can create credit by, so to speak, issuing its own obligations, and in that sense it can create a very large amount of credit, governed only by what is prudent, which an individual cannot. I do not understand yet how your theory of a subsidy is to be worked out in practice, because it seems to me that the subsidy would in the end have to be found by the people who would have to pay the price of the commodity?

Answer—I realise the difficulty of moving over from an orthodox point of view to my own point of view, which is, perhaps, a little unorthodox. I look at the position in this way. There is nothing definitive at all about the money system.—It is—or it should be; it is not at the present time—simply a ticket system, which is an adjunct to the general business of producing and distributing goods and services. The money system, as a money system, has no virtues whatever divorced—I must not use that word again—separated, shall I say, from the industrial system. It is a pure form of convenience to be considered possibly in connection with a system of producing and distributing goods and services. Now the thing to keep steadily in mind, as it seems to me, is: What are your abilities to produce and deliver goods and services and at the same time what are your desires in regard to using those abilities to produce and

deliver goods and services. That is the only thing that really matters. If you start with that objective then your business is to modify to any extent which may be necessary your ticket System to enable you to achieve those industrial and social desires.

4408 Mr. TULLOCH: It follows from what you say, does it not, that the manufacturer is to get his credit free?

Answer—The manufacturer does not, in the very tentative form in which I have put the matter, get the credit really at all; it is the consumer who gets the credit. The consumer gets the credit in the form of a reduced price.

4409 Mr. TULLOCH: I understood you to say that credit would be supplied to the manufacturer, and then you said that there would be no inflation on account of fresh bank credit created, because the price would be less. I assumed he must get his credit free, in order to produce at no greater price; in fact at a less price.

Answer—The credit which he would get would be to make up the difference between what he would normally charge for his article at the present time, and which, by hypothesis, is too high a price for the consumer to pay, and the lower price which he would be able to pay.

4410 Mr. TULLOCH: I see; but does he not get it free? If nobody pays for it he must get it free.

Answer—I am not clear as to exactly what the point is. He is really getting his present price, which he arrives at by ordinary cost accounting methods, from two sources instead of one. At the present time he gets the whole of that price from the public—the consumer. The suggestion is that he now gets his price from two sources, one of which is the credit source, and the other is the public—the cash source.

4411 Mr. TULLOCH: I see; but I cannot get away from the fact that he must get that credit free, according to your argument. (**Mr. KEYNES**): And he reduces his price correspondingly. (**Mr. TULLOCH**): Yes, he must and if he reduces his price correspondingly he must get his credit free.

Answer—The consumer gets the credit free.

4412 Mr. McKENNA: And does the bank pay for its credit?

Answer—For the employment of its very valuable mechanism in producing it, or for the actual credit?

4413 Mr. McKENNA: For the credit. Are you quite familiar with the working of the banking system?

Answer—Well, reasonably, I think.

4414 Mr. McKENNA: Reasonably?

Answer—Yes.

4415 Mr. McKENNA: I suppose you appreciate its working. Supposing for the moment that you are a borrower, and I am a banker. If you come and borrow £100,000 from me you take £100,000 from my cash?

Answer—Not from your cash, do I?

4416 Mr. McKENNA: From my cash, absolutely.

Answer—Well, it depends on the form in which I take it.

4417 Mr. McKENNA: If you borrow £100,000 you take £100,000 from my cash. You draw a cheque and it is presented to me, and I pay that. I pay it out of my cash?

Answer—You debit my cash with it.

4418 Mr. McKENNA: I have got to find the money?

Answer—You have to find the credit, yes.

4419 Mr. McKENNA: In the first instance I have got to find the money?

Answer—In what form? What are we talking about; in the form of money?

4420 Mr. McKENNA: Money, which would be my cash at the Bank of England?

Answer—Credit, not cash.

4421 Mr. LUBBOCK: Which you would pay to another banker. (Mr. McKENNA): Which I would pay to another banker.

Answer—There would be a transfer. I have no objection to the word “cash.”

4422 Mr. LUBBOCK: I, the banker, have got to pay for that £100,000

Answer—You have, as a transferrer of credit, certainly.

4423 Mr. LUBBOCK: For the £100,000 that I lend you I have to pay. Possibly you are not familiar with the working of the banking system. Do you appreciate the fact that the deposits of the bank on the debit side of its balance sheet cost it money to acquire?

Answer—I see we are at cross purposes. It is a question really of what we mean by “money.”

4424 Mr. LUBBOCK: We are under a liability to pay for those deposits?

Answer—Certainly.

4425 Mr. LUBBOCK: We are paying, perhaps, two or three per cent, for them, taking an average?

Answer—Now I think I see. You mean there is the question of the cost of the money.

4426 Mr. LUBBOCK: Surely!

Answer—The interest cost?

4427 Mr. LUBBOCK: Certainly. Your view is that when a bank lends £100,000, that £100,000 comes back to them or another bank; that leaves its cash intact; but when it comes back to them or to another bank the bank has to pay interest on the new deposit created?

Answer—Yes, as a cost for the services.

4428 Mr. LUBBOCK: And interest for using the money?

Answer—Well, I am using “interest” in the sense of being a payment for the service of using the money.

4429 Mr. LUBBOCK: For the use of the service of money?

Answer—Yes; I was looking at the bank making a reasonable charge for the use of its money. It is obvious it has to make a charge for its staff, and so on.

4430 Mr. LUBBOCK: Who is to pay for that if the consumer gets the credit for nothing? Who is to pay the bank for creating the credit?

Answer—That is perfectly easy. I should regard the interest charged on the money, which is your charge for your services, as being one of the costs of production.

4431 Mr. LUBBOCK: Then the consumer would have to pay for the credit which he receives?

Answer—He would, quite obviously, have to pay a charge for the creation of the credit. That would certainly be so. But the credit would not be a repayable credit. He would get the actual credit in the form of a reduction of price; two or three per cent., or whatever it might be, for the actual mechanism of creating that credit would be a perfectly legitimate charge, but the difference is the difference between the charge for the credit, and the credit itself.

4432 Sir THOMAS ALLEN: Would it be a charge in perpetuity?

Answer—No, it would be extinguished by the sale of the goods.

4433 Mr. McKENNA: Even if you put the charge for the bank credit as low as that, only two or three per cent., —it might be more—there is no economy?

Answer—I am afraid I have not made my point clear. The banking system proceeds upon the assumption that the industrial system has to follow the financial system—that if a difficulty arises in regard to the financial system, which, let us say, forms a check on the industrial system, the industrial system has to abide by that decision. In other words, the industrial system has to be subservient to the financial system. My primary proposition is, that the financial system has no LOCUS STANDI at all outside the industrial and distributive systems, and that you can make any changes that you like with perfect ease in the financial system so long as those changes serve the necessities of the industrial and social system.

4434 Mr. McKENNA: Up to the moment, without going into the question of whether you should have more or less money, may I take it that your view is that as the quantity of production is increased, if there is to be no fall in the price, the quantity of money ought to increase proportionately?

Answer—That is broadly so.

4435 Mr. McKENNA: Need you go any further than that?

Answer—Oh! yes, it is necessary to go further.

4436 Mr. BRAND: I understand from you that if I am a manufacturer and I go to Mr. McKenna and borrow £100,000, I then use that £100,000 to lower the sale price of my goods by £100,000 below what they have cost me?

Answer—That is the proposition at the moment, yes.

4437 Mr. BRAND: Then how do I repay Mr. McKenna?

Answer—It is a question of mechanism. I have worked out one mechanism for it.

4438 Mr. McKENNA: I would very much like to know it?

Answer—Of course, I should like to say, before I tell you what you are asking me to tell you, that in putting forward an explanation of this kind it is not put forward as a final scheme; it is simply put forward for the purpose of explaining how the thing can be done. It is quite possible. This is the form in which I gave it before the Canadian House of Commons a few years ago; it is practically the same question. Supposing that you sold a motor car for £100—we will make it an easy figure, to keep it in mind—the consumer would pay £100 as at the present time and receive an account for it, he would be given a receipt for the £100. He might conceivably turn that receipt into his bank, which would credit his account with, let us say, £25. The bank might collect the whole of those consumers' credits at any suitable period and turn them over to some Government department like the Treasury, which would credit the bank with the amount that it had credited the consumer. That would finish the transaction so far the mechanism was concerned, and the result of that would be that you would have credited to the consumer a proportion of the general credit of the country which by hypothesis is his already, but not credited to him. The result of that would be a lowering of the price of the motor car in that case by 25 per cent., and there would be an increased sale of motor cars, or, let us say, an increased sale of all goods, because he would have £25 more to spend on other goods.

4439 CHAIRMAN: I buy a motor car for £100; I pay £100 and get a receipt from the manufacturer of whom I have bought it, which vouches that I have paid him £100. I take it to my banker, do I?

Answer—Yes.

4440 CHAIRMAN: And on production of that voucher for £100 he says “I will credit you with £25”?

Answer—Yes.

4441 CHAIRMAN: The result is, I have only paid £75 for the car?

Answer — Yes.

4442 CHAIRMAN: The banker collects the credit—£25 in this particular transaction, but of course there will be a great number of them, because every commodity will be subject to the same kind of, not necessarily discount, but abatement or rebate?

Answer—Yes.

4443 CHAIRMAN: I do not get the £25; it is credited to my account and the banker pays his voucher into the Treasury?

Answer—The consumer has got the £25. That is really the mechanism. What you have got is a motor-car, which by present methods would cost you £100, for £75.

4444 CHAIRMAN: The banker then collects £25 from the Treasury?

Answer—That is right.

4445 Mr. McKENNA: Where does the Treasury get its credit from?

Answer—The Bank of England at the present time supplies the Treasury on Ways and Means Account with money out of the credit of the country. That is simply the creation of fresh money. That is the case, I think.

4446 Mr. McKENNA: That is a double debit to the Treasury. Where does the credit to the Treasury come in? It owes one bank £25; what is on the other side? (Mr. LUBBOCK): A liability which might be translated, I suppose, into currency notes?

Answer—If the bank so desired.

4447 Mr. FRATER TAYLOR: It is your subsidy without taxation?

Answer—It is your subsidy without taxation.

4448 CHAIRMAN: The Treasury, under this happy doctrine, is going to pay 25 per cent, of the cost of my car, is it not?

Answer—No, Sir; it is not. I shall have to take you back to the beginning, if you do not mind my labouring the point.

4449 CHAIRMAN: We are most anxious. We know your views have commended themselves in many quarters?

Answer—Thank you! I must apologise for being elementary.

4450 CHAIRMAN: You cannot be too elementary for me, I assure you.

Answer—The first point from which you have to start is this: You have at the present time an unused capacity for production. You cannot use it because you cannot sell; that is point one. Point two is that your financial system is nothing but a ticket system; it is not a matter of any importance whatever by itself; therefore, if it is necessary to make adjustments in your financial system then those adjustments can and should be made. Now your difficulty at the present time is the difficulty that your purchasing power in relation to your prices is insufficient, so clearly you have to lower your prices, or increase your purchasing power; to increase your money you really have to increase your purchasing power. The difficulty in discussing this subject is to keep very clearly in mind the difference between purchasing power and money. If you merely add to the amount of money you will probably not increase your purchasing power, because your prices will automatically rise. In order to avoid that difficulty one method by which it can be done is to lower your prices by means of a subsidy which does not come from purchasing power, which does not come from the public, which is already deficient in money, as compared with the collective prices.

4451 CHAIRMAN: It is just at that point that I think the difficulties begin to emerge. Up to that point I think we might more or less agree with your statement; when you come to the question of remedy it is perfectly true we could produce more if we could sell more, we could sell more if we had more purchasing power, but the trouble is, if you create more purchasing power, and increase the volume of money, then, as you very properly say, the result will be that prices will step up and you will be as you were?

Answer—That is so.

4452 CHAIRMAN: You wish to relate those two things so that you keep prices stable and at the same time increase purchasing power?

Answer—You increase purchasing power if you reduce prices.

4453 CHAIRMAN: Your method is, so to speak, to obviate the rise of price by a counter figure which you call a subsidy?

Answer—I do not call it a subsidy; I use the word “subsidy” for the purpose of making the idea plain.

4454 CHAIRMAN: A rebate, one would call it

Answer—I should call it a rebate.

4455 CHAIRMAN: It is by means of the institution of a system of rebates; although the price is nominally to rise it is not really to rise, because you are going to have a system of rebates?

Answer—not nominally to rise. You have two price limits at the present time under the existing state of affairs—probably under any state of affairs in which you use money at all—you have one which is arrived at by the cost accountant, which is simply the addition of all sums which have been disbursed.

4456 CHAIRMAN: All the factors?

Answer—All the factors. That, I think, is not the price system which in general, for instance, the banker has in mind. He has in mind the relation between the amount of money available and the amount of goods available. In other words, he assumes that the quantity theory of money works throughout the whole of the price range. Well, it does not; it works down to the point where the producer says “I am getting no money out of this and I will not produce and I will not sell,” and no decrease in the amount of money available, no continued deflation, for instance, will seriously lower the price level beyond that point, because everybody goes out of business. Now in regard to what I was saying previously, the price arrived at by cost accounting actually varies as between factories; one factory, perhaps, is more efficient, or is better placed, or has an advantage of one sort or another; the consequence is that if you attack this problem by the crude method of saying “We will fix prices; the price of a pair of boots shall be 20s.” you immediately get into the difficulty that you force the less capable and less fortunately situated producer of boots out of business, because he cannot produce at that price. You want his boots; you do not want to force him out of business; you want the fellow who produces at the lowest price to get the first orders, but when he has come to the limit of his production at that price you want the production at the other price; so instead of having a fixed price you want to have a lower price level, leaving individual prices still open to competition. Now you can lower the price level by the application to the price level of a creation of credit. You can, quite obviously, physically do it; there is nothing to prevent your doing it; your objective is to get rid of goods. The whole of the objective in mind is to produce; and distribute whether it be by the ticket system, the accounting system, the money system, whatever you like to call it; your sole objective is to get rid of the goods and to keep the production system going. You can do it; it is only a question of some form of doing it, and all the mechanism exists in embryo form at the present time.

4457 Mr. BRAND: Supposing I were a steel producer, and had a factory which was only producing to the extent of 50 per cent, and I could not find buyers, and supposing you were Dictator, what would you do to help me?

Answer—I should not do anything to help you individually, I should make such arrangements that the price level of steel would be such that you could either sell in this country or be in a very strong position to compete abroad.

4458 Mr. BRAND: You mean you would enable me to make a profit somehow, although I had to sell my product at much less than it cost me?

Answer—Yes.

4459 Mr. FRATER TAYLOR: You would give a bounty, would you?

Answer—Yes; but you must dissociate the bounty from a subsidy. It is not raised by taxation. The method of raising money by taxation is just a pure mechanism, like any other form of mechanism, and you are not obliged to use that mechanism, but the thing that does limit you is how much steel you can turn out in a day; that is the real physical limit.

4460 Mr. BRAND: You are not limited at all by the need for the Treasury to advance thousands or millions?

Answer—Not a bit.

4461 PROFESSOR GREGORY: May I go back to the motor-car? You say if the motor-car costs me £100 I will get a chit, which I deposit with Mr. McKenna's bank, and he finally deposits it with the Treasury, and by a series of book-keeping entries 25 per cent, of additional purchasing power is created?

Answer—That is one form of mechanism.

4462 PROFESSOR GREGORY: That is one form of mechanism, but I do not want to pay too much attention to the consumers' side—what is the position of the manufacturer? Are you assuming that the car costs the manufacturer £100, or that it costs the manufacturer more than £100? Is the actual cost price to the manufacturer what you pay for it?

Answer—Do you mean, is he making a profit?

4463 PROFESSOR GREGORY: No, I am asking is he covering his cost if he sells at £100?

Answer—Oh! yes.

4464 PROFESSOR GREGORY: You are assuming that he is carrying on his business on a perfectly definite commercial basis?

Answer—Absolutely. He is selling in competition with other people who may sell at £99.

4465 PROFESSOR GREGORY: Your £25 does not really go to that motor-car manufacturer at all?

Answer—No.

4466 PROFESSOR GREGORY: It is added to the general borrowing or purchasing power of the community. Well, I do not see, in those circumstances, how you can prevent prices from rising?

Answer—*I cannot see, as a matter of fact, how it can possibly cause prices to rise, again as a matter of mechanism, by this process.* Supposing they do rise, your subsidy becomes inoperative.

4467 PROFESSOR GREGORY: Let us suppose in a given period of time, one month, the total turnover of consumable goods in this country is £1,000,000,000, and let us take your figure of 25 per cent.; that means that at the beginning of next month there would be £1,250,000,000 of purchasing power available. I am only using your own figure of 25 per cent.

Answer—No, that is not quite true. I should not regard it, incidentally, as very important if it were true.

4468 PROFESSOR GREGORY: Let us clear up that point first?

Answer—The result of your having done this is greatly to increase the total amount of sales in the country. Now, the whole of the price which is collected from the public becomes an item for cancellation, just as it does at the present time.

4469 PROFESSOR GREGORY: How do you get it back? You get it from the consumer, you pay it into the bank, who pay it into the Treasury, who get additional credit from some source, but you never do get that back?

Answer—I will pursue this subject as far as you like, but I am frankly much more interested in making you see that the thing is perfectly possible. If you would really like me to get out a considered report as to the mechanism by which it can be done I shall be delighted to do it, my services are entirely at the disposal of the Committee, but the point that I want to hammer home is that it is inconceivable that you cannot get a mechanism which will enable you to equate purchasing power to the capacity to deliver.

4470 Mr. KEYNES: Is it not probable that those of us who are criticising are not inclined to accept the inherent difficulty which you develop in paragraph 16 of your Memorandum. You divide payments there into A and B payments?

Answer—Yes.

4471 Mr. KEYNES: The cost of production to the manufacturer is A plus B. Of that A goes to the public and is spent by them on manufactured goods, but B goes elsewhere?

Answer— Yes.

4472 Mr. KEYNES: Where else does it go?

Answer—I felt sure that this would arise, because it generally does arise. May I put it this way? The wording of this statement is very careful. I always make the wording very careful. I say “Since A will not purchase A + B, a proportion of the product at least equivalent to B must be distributed by a form of purchasing-power which is not comprised in the description grouped under A.” I have not said it must be paid.

4473 Mr. KEYNES: I did not want to go on as far as that. Just previous to that you see “Group B,” which includes raw material; I assume you mean imported raw material; is that right?

Answer—“Group B. All payments made to other organisations (raw materials, bank charges, and other external costs)”. Yes; simply what we should call in a company, bills payable at the end of the month.

4474 Mr. KEYNES: If they are paid through another business then that business will pay the amount as part of its cost of production to individuals? Is that it?

Answer—Yes, I quite understand the difficulty. The real weight to be attached to this undoubted statement of fact—as it stands it is simply a statement of obvious fact—is whether the transfers from one firm to another are financed by either trade credit or from the firm’s own credit, let us say its working capital, or by a bank’s credit. The exact weight which that has in the whole of the statement depends to a very large extent on that. If the B payments are really financed from working capital then that working capital must, I think, inevitably have been obtained by the process of investment which is criticised under (b) in the same precis. That is to say, the whole of the savings which have formed the working capital of that concern must previously have appeared in the cost of production.

4475 Mr. KEYNES: That would be true, but I thought the emphasis here was on the phrase “other organisations,” and what you are saying has no bearing on that.

Answer—I am sorry! I missed that.

4476 Mr. KEYNES: I thought the force of the argument here was that it was a payment made by this manufacturing firm to other organisations?

Answer—Yes.

4477 Mr. KEYNES: Its working capital is required to meet its expenditure under Group A during the period of production just as much under Group B, so what you are saying now does not seem to me to distinguish between Group A and Group B?

Answer—Yes, it does, because in Group A you are paying out to the consumer; all the payments under Group B are purchasing power, which, if it was obtained by re-investment, was originally in the hands of the public and never gets back into the hands of the public at all.

4478 Mr. KEYNES: Other organisations which were receiving money under Group B are getting back that amount from this first one?

Answer—Yes, that is the case; but there is a large amount of purchasing power which is permanently retained purely in the productive system, and never gets out into the consumers' system.

4479 Mr. KEYNES: If all firms were united in a single firm would your difficulties be overcome?

Answer—That is the obvious remedy for the financial difficulty but not necessarily the right remedy. Even from the purely financial standpoint it is a little difficult to say; you understand a time lag comes in.

4480 Mr. KEYNES: You think it would vanish?

Answer—No, I do not think it would completely vanish.

4481 Mr. KEYNES: Why not?

Answer—Because there would be a considerable amount of money being paid out in wages for delayed production, and your hypothesis assumes that the distributed costs of a given week are the total prices of the goods for sale in the same week.

4482 Mr. KEYNES: It would be diminished?

Answer—It probably would be diminished I think, yes.

4483 Mr. KEYNES: Insofar as the fact that you have a differentiation in industry means that some people have to have bank accounts which they pay to others, it means you have to create a certain amount of credit, and really it acts as a revolving fund?

Answer—Yes.

4484 Mr. KEYNES: If a revolving fund has been established, why do you have to add to it?

Answer—If the revolving fund is as large as the total amount of money required to finance the whole of all business from the time the first process takes place to the time the article goes out to the consumer, it is possible—I should not be inclined to admit it offhand—that the question might disappear; but that is certainly nothing like the actual case.

4485 Mr. KEYNES: If you once raise the volume of credit to whatever level may be required by your profit in relation to the volume of production you have only to go on increasing it in proportion as production increases?

Answer—No; there are all sorts of questions that would still arise. The question of turnover, depreciation, and the fact that the purchasing power of credit, or whatever you like to call it, which has been transformed into price values of fixed assets in the industrial system would in existing circumstances have to enter into the cost of the goods—and cost items of that type would always raise the price of the articles above the amount of purchasing power.

4486 Mr. KEYNES: And if in the interval you had to have new machines to replace old ones you would have to have individuals to produce them. How does that differ from any other form of consumption?

Answer—Because you are not starting from zero. You are starting from a world as it is.

4487 Mr. KEYNES: How does that bear on the matter?

Answer—It bears on the matter that you have a tremendous amount of real capital which at the present time is creating prices and which has not contributed anything like that amount of purchasing power.

4488 Mr. KEYNES: Do you mean that the receipts of capital are greater than the amount it pays out in dividends?

Answer—Yes; that is an obvious statement of fact; the accounts of any company will show that.

4489 PROFESSOR GREGORY: What happens to the difference?

Answer—It is represented by the fixed assets in the company which it cannot distribute in the form of money.

4490 PROFESSOR GREGORY: It does not distribute it to its shareholders, but if a company earns £100,000 in one year and puts £50,000 towards increasing its plant does not that £50,000 flow out in additional wage payments?

Answer—No, that does not happen at all. What really happens is, that during a given year's working it is necessary to create a number of things like tools, or jigs, or something of that sort, which must be charged in the cost of the product to the consumer. The same result is obtained if profits are invested in new tools.

4491 PROFESSOR GREGORY: That is perfectly true. What I am asking you is this: When a motor-car company makes new patterns, and so on, it has to pay its workmen for them just as much as for other things; consequently it does flow back to the consumer?

Answer—No, it does not flow back if it is charged to its fixed capital. A company at the end of the year shows a profit of, say, £10,000. We all know perfectly well that probably £8,000 of that is in fixed assets. It distributes of that product £2,000 in the form of dividends; it is quite obviously only distributing £2,000 out of £10,000 which appeared in prices.

4492 PROFESSOR GREGORY: What happens to the £8,000 which it does not distribute?

Answer—That is in the form of fixed assets, which it is incapable of distributing except by getting a creation of credit to distribute them.

4493 PROFESSOR GREGORY: It does not want to distribute these things. What you want, to get the equilibrium between the income of the company in the first instance and its outpayments, is that it should pay somebody for making those fixed assets, and if it pays somebody for making those fixed assets it is in effect returning to the stream what it has taken out?

Answer—I think I can prove the fallacy of what you are saying, if you imagine that it did distribute the whole of that £10,000 in a year. By your argument, if it did distribute that £10,000, it would be distributing £10,000 more than it had made.

4494 PROFESSOR GREGORY: It has made £10,000 profit?

Answer—Of course it has made £10,000 assets. This is jumping from the money to the goods all the time: it has made certain prices, things to which you attach prices and which are valued in its assets at let us say £8,000. But the money portion of those assets does not amount to £10,000, and it has already recovered the cost of them from the consumer. It is exactly the same thing as going to a man who has had 30,000 acres of land left him by will and saying "That is £1 an acre; now you have got to pay £10,000 in death duties." The man has not got £30,000. He has got 30,000 acres of land which has a price of £1 an acre. He has not got £30,000.

4495 PROFESSOR GREGORY: Nobody ever said that he had?

Answer—He is in exactly the same position as the works which show a possible profit.

4496 CHAIRMAN: I quite follow that, but after all, the manufacturer is himself a consumer of tools; he has spent £8,000 in replacing his worn-out tools by new machines, and in doing that he has given employment to people and has paid £8,000 to another manufacturer. He is a member of the consuming public. The particular commodity he wants is tools. When I buy a box of tools I am a consumer?

Answer—Yes, I quite realise the difficulty; I felt this would arise.

4497 CHAIRMAN: I am sure you are prepared for it?

Answer—Would you bear with me if I read an article which I wrote, which I think will probably be more lucid?

4498 CHAIRMAN: If it is not too long

Answer—It is not long. It is the shortest form in which this statement can be put, I think. Suppose first that I have £1,000, and I pay that £1,000 away for the purpose of having a house built. We will imagine that the whole of the £1,000 goes in nothing but wages, which does not in any way affect the argument, and we will also suppose that by doing work on something else the workmen could live and save all that they earned by house-building. Suppose now that the workmen who built the house, who collectively would have my £1,000, decided to buy the house, and I agree to sell to them for £1,000. Notice that no question of profit arises. The workmen now have the house, and I have my £1,000 back again. In other words, the workmen have got the house merely by working for it. But these workmen would express it by saying they had paid £1,000 for the house. I am now out of the transaction altogether, and we will suppose I and my money removed to another planet, or we can suppose that I tore up the money when it was returned to me (which is the equivalent of the repayment of a bank loan). Suppose now that the workmen decide to use the house to make and sell shoes. If they carry on the business on orthodox business lines the cost of the shoes will consist of at least three items:—(i) Wages, (ii) raw materials, (iii) rent of factory, i.e., house. We will suppose for the moment that they get their raw materials for nothing, and that the “rent” of the house is nothing but an appropriation of money of such amount that when the house eventually falls down they will have got back their £1,000. It is technically called “depreciation.” Since the public get the shoes, clearly they ought to pay “depreciation.” Notice, therefore, that neither interest—i.e., “usury”—nor dividends, nor land monopoly are imported into the question. But the simple and vital fact remains that the wages paid during the production of the shoes are less than the price of the shoes by an amount, large or small, which is added to the cost of the shoes before the shoes are sold, representing, at least, “depreciation”. This amount which is added to the cost of the shoes represents overhead charges in their simplest form, and in many modern productions overhead charges are between 200 and 300 per cent, of the direct cost of the product. It is NOT profit.*

* Note.—This argument was subsequently developed by Major Douglas in an article in “The New Age” of 22nd May, 1930.

4499 Mr. KEYNES: By whom are the overhead charges paid?

Answer—They are put into the cost of the product. They are not paid to anybody. They have in previous cycles of production appeared in the cost of the factory.

4500 Mr. TULLOCH: Part of them represent the depreciation of the house, which I understood you to say would fall down in a certain period?

Answer—That is the case.

4501 Mr. TULLOCH: They have not been paid in that case?

Answer—The whole cost of the house was previously paid, in the example, £1,000. Might I just finish and then we will go into it? Suppose in the instance given above that having sold my house to the workmen I had used the £1,000 to build another house, with which I had repeated the identical process. Once again I should have got the same £1,000 back again; once again the workmen would have got into possession of the house, merely by working for it; once again they would have created an overhead charge on anything they manufactured in the house of £1,000; and although there would only be £1,000 of money in existence in respect of the production of the houses there would be £2,000 of prices created in respect of the two houses which would have to be recovered in the price of something sold to the public, and the amount of money and purchasing power would be exactly what it was before the houses were built.

4502 PROFESSOR GREGORY: I do not quite see what you want to prove by this illustration. Is it that there always is a tendency for the quantity of purchasing power to lag behind the volume of output?

Answer—That is what I am trying to prove.

4503 PROFESSOR GREGORY: Supposing one adopted your scheme, how do you think it is consistent with the retention of the gold standard?

Answer—Well, I am afraid I should be sorry to express my opinion of the gold standard. I think it is archaic. I do not think there is any relation between the gold standard and the necessities of the modern world.

4504 PROFESSOR GREGORY: Then practically your scheme boils down to this: in the first instance one would have to abandon the gold standard?

Answer—I have not considered it from that point of view.

4505 PROFESSOR GREGORY: Obviously, if you think the gold standard is archaic, and that the important thing is a continuous system of purchasing power creation?

Answer—In the first place I would not agree that you have the gold standard at the present time, in any understandable sense. You have what you call “the gold exchange standard,” but it is at least as flexible, though not so desirably flexible as my scheme.

4506 PROFESSOR GREGORY: Certainly it is not as flexible as your scheme. Supposing this were the only country in the world to adopt your scheme, obviously it would be inconsistent with the gold standard?

Answer—Well, I do not see anything that follows from that. Let me admit it for the sake of allowing you to go on.

4507 PROFESSOR GREGORY: You do not think that that might have undesirable repercussions on our position as an international financial centre?

Answer—I feel perfectly certain for my own part that if we regard our position solely from a financial point of view and do not regard it from a realistic point of view we shall shortly be in a position in which anybody will be able to do anything with our financial position that they like. I do not pretend to be an historian, but it is, I think, common knowledge that you cannot possibly have a solely financial position in the world. It has been tried several times by Venice and other places, with results that are very well known.

4508 PROFESSOR GREGORY: Let us admit for the sake of argument that the advantages of your scheme are so great that one ought to sacrifice such benefits as the gold standard brings one. Supposing under your scheme you could not in fact restrain the price level from rising, what do you think would happen then?

Answer—I should not be prepared to admit that there could be any serious difficulty in making any relation between purchasing power and prices that you wish; the thing is simply a question of manipulation of figures.

4509 Mr. BRAND: You mean you can at the same time increase purchasing power and lower prices?

Answer—Undoubtedly; without the slightest doubt.

4510 Mr. BRAND: To any extent?

Answer—Yes, except that you would eventually arrive at a state of affairs in which you would get a priority problem if your productive system was not sufficiently capacious to meet your psychological demand.

4511 PROFESSOR GREGORY: But I thought you had admitted—in fact, you yourself stated at the beginning of your evidence—that the defect of ordinary inflation sometimes lay in the fact that as you increase the volume of purchasing power you raise prices. The whole of the validity of your argument turns on the effectiveness of your method or methods of subvention, or subsidy, or whatever you care to call it? Is not that so?

Answer—No, I do not agree at all. My primary object in coming here is not to put forward any specific scheme. It is to make the point, which I think is obvious, that the real difficulty is the lack of purchasing power; that the trouble is not in the administrative system, and therefore no gerrymandering of the administrative system, like nationalisation or rationalisation, is going to affect it radically; it is simply lack of effective demand. I am perfectly certain that the combined abilities of this country can get out a scheme which will increase the effective demand to any amount required if it is once thoroughly grasped. The difficulty is lack of effective demand.

4512 Mr. BRAND: If I am an individual not wanting to do any work, not producing anything, the remedy is to give me some money, in order that I may have effective purchasing power?

Answer—I should not deny that. There is no moral question in it at all.

4513 Mr. BRAND: No, no! We are not importing any moral question into it at all. The remedy would be to give all the population plenty of money? **Answer**—I should not be inclined to deny that.

4514 PROFESSOR GREGORY: Up to what limit?

Answer—Up to the combined limit imposed by the capacity of the industrial system to deliver goods and services, conditioned by the willingness of the people to work for the time required.

4515 CHAIRMAN: Would not the industrial system soon cease to operate?

Answer—I do not think so. As far as my knowledge of the industrial system goes, a very large proportion of the people who are employed in the industrial system would be very much better out of it. It is not operating very well just now.

4516 CHAIRMAN: So all the consumers are to be supplied with increased purchasing power. But the consumers are also producers; they produce in order to obtain purchasing power; but they are going to get purchasing power from some other quarter, so they will not produce any more, will they?

Answer—The object of having any money system at all interlocked with your wage and salary system is to provide an inducement to produce, undoubtedly, and the problem that you have to meet is that you do not want, as a matter of physical fact, to provide an inducement to produce to the whole of the population at the present time.

4517 CHAIRMAN: Over-production would be the result?

Answer—Overproduction would be the result. Further than that, the forcing into the productive system of large quantities of unnecessary people really slows up the transformation of the manual productive system into a machine productive system. As far as I can see, there is nothing whatever to be urged against a machine productive system; that is the march of events, and it really is a question of use of power.

4518 PROFESSOR GREGORY: Let us put it practically. We get off the gold standard, and you start your scheme by arrangement with the Bank of England?

Answer—I have not put forward a scheme.

4519 PROFESSOR GREGORY: Well, your suggestion. We start by making an arrangement with the Bank of England that any of us who buys anything shall get a bonus of 25 per cent, in the shape of bank credit. When would you stop issuing the tokens?

Answer—I have already elaborated the basis.

4520 PROFESSOR GREGORY: I want to know how long this is to go on?

Answer—The proper price of production which will equate consumption is perfectly easily obtained by the figures of consumption and production.

4521 PROFESSOR GREGORY: That is to say, you would continuously increase these subventions so long as there were people unemployed?

Answer—I am not interested in the unemployed in the least.—I am merely interested in getting rid of the product of the manufacturers.

4522 PROFESSOR GREGORY: So long as there was any unused capacity?

Answer—So long as there was any unused capacity, yes; which involves the fact that so long as there was any unused productive capacity you could not have “unemployment,” until no one wanted further goods.

4523 PROFESSOR GREGORY: Supposing you could only get a continuous utilisation of full productive capacity at the expense of rising prices; which would you choose?

Answer—That is an important question. Would you mind repeating it?

4524 PROFESSOR GREGORY: Supposing you could only get a continuous utilisation, 100 per cent, utilisation, of productive capacity at the expense of rising prices, which would you choose in fact?

Answer—Well, I should not admit that that was the dilemma.

4525 PROFESSOR GREGORY: But it may be. From your point of view you argue that it is not. It is possible to hold the view that it is desirable to increase the volume of purchasing power even though it involves raising prices. I ask you, supposing your own principles are wrong, but that there is something in the idea of expansion of purchasing power, which would you choose?

Answer—Well, that seems to me to be a very abstract question, because it involves a lot of factors that are not stated. There may be conditions, such as the condition of a country at war, in which production at any cost, raising prices or otherwise, might be

4526 PROFESSOR GREGORY: Normally. You do not want to answer?

Answer—I do not want to answer. I do not think it is a necessary state of affairs, frankly.

4527 Mr. TULLOCH: In paragraph 14 of your statement in order “to indicate the divergence between the policy which has been pursued in this country and the United States since 1920,” you refer to the tremendous increase in the deposits of the American banks and the very small increase in the deposits of the banks in this country. I should like to hear from you what is the divergence between the two policies which has produced these tremendous deposits in the United States and the paucity of deposits in this country?

Answer—Broadly speaking, I should say the result was due to the fact that there is far less insistence on collateral security in American banking than there is in British banking.

4528 Mr. TULLOCH: And that, you think, would produce the larger deposits?

Answer—Undoubtedly.

4529 PROFESSOR GREGORY: Banks must have some assets, even in America?

Answer—Yes; they have the assets of the real credit of the community, which in their case is based on knowledge of character and other capacities of the people with whom they are dealing.

4530 Mr. BRAND: I suppose the German banks have that?

Answer—Yes, undoubtedly.

4531 Sir THOMAS ALLEN: You advocate the creation of communal credit against bank credit?

Answer—Yes.

4532 Mr. LUBBOCK: I would like to be quite clear about the £100 motor-car; the concrete instance. As I understood it, at the end I, the purchaser of the motorcar, had a credit in my bank for £25, and my bank had a credit in the Treasury books for £25?

Answer—Yes.

4533 Mr. LUBBOCK: Can the bank draw that from the Treasury if it wishes to do so? Would you allow the Treasury to print notes and issue them to the bank, and the person with the credit to get them from the bank?

Answer—If it were required. Of course, the number of notes required would depend upon the volume of business which was conducted.

4534 Mr. LUBBOCK: I, having that credit in the bank, might wish to withdraw notes from the bank to make a purchase?

Answer—If you wanted, you could have the notes.

3435 Mr. LUBBOCK: So really, in effect, I should have bought the motor-car for £75 of my own money and £25 supplied by the Treasury via my bank?

Answer—Yes, and that £25 is the general credit of the country.

4536 Mr. LUBBOCK: Would that system apply to other purchases? If I go to my baker and buy bread it would hardly operate then, would it?

Answer—I do not wish to place too much insistence on this particular form of mechanism which we are discussing; it is only an exhibit.

3537 Mr. LUBBOCK: One desires to bring the matter down to concrete fact?

Answer—Yes. I think the result would be that if you applied that sort of thing to a particular industry or a particular commodity you would free a considerable amount of purchasing power which would be applied to the purchase of other commodities. The result would be that in the first place the unrestricted tendency would be for the prices of those commodities to rise, and you would then have to apply the same thing to the other commodities.

4538 Mr. LUBBOCK: So there would be a rise in price?

Answer—There would be a rise in price in the ones to which the scheme did not apply.

4539 Mr. LUBBOCK: You would gradually extend it?

Answer—Yes. The ultimate general result would be that you would be applying a certain proportion of credit—and by hypothesis increasing the credit of the country—to a reduction of the price level.

4540 Mr. LUBBOCK: You have just stated that people in industries where the rebate did not apply would find that their prices were rising?

Answer—To begin with, if you started by applying it to one instance.

4541 Mr. LUBBOCK: Would they come down again?

Answer—No; you would apply the question of reducing prices to them.

4542 Mr. LUBBOCK: But you could not reduce prices; you could give a rebate to make it easy for a purchaser to buy, but ex hypothesi the price has already been raised?

Answer— No; the price has been raised according to the second canon of the price system, which is, that the price of an article is what it will fetch; that is why the prices have risen; but the first canon is the one to which the subsidy is applied, that is to say, the cost of production, and the cost of production of those articles would not necessarily have risen.

4543 Mr. LUBBOCK: You would have at the outset to select certain industries to which the subsidy should apply?

Answer—No, not necessarily. One method by which it could be done would be to publish a certain definite discount rate which would apply to all commodities right away, and you could apply the credit appropriation to the selling of those commodities at that percentage of the cost of production.

4544 Mr. LUBBOCK: That would not apply to my loaf of bread?

Answer— Yes, it would.

4545 CHAIRMAN: We are much obliged to you, Major Douglas, for coming this afternoon.

Response—I am very glad, Sir.*

(The Witness withdrew.)

Adjourned till to-morrow, 2nd May, 1930, at 4.30 p.m.)

*NOTE—The following note was subsequently furnished by Major Douglas as an appendix to his evidence:—

The general principles required of any financial system sufficiently flexible to meet the conditions which now exist and to continue to reflect the economic facts as these facts change under the influence of improved process and the increased use of power, are simple and may be summarised as follows:

(a) That the cash credits of the population of any country shall at any moment be collectively equal to the collective cash prices for consumable goods for sale in that country (irrespective of the cost prices of such goods), and such cash credits shall be cancelled or depreciated only on the purchase or depreciation of goods for consumption.

(b) That the credits required to finance production shall be supplied, not from savings, but be new credits relating to new production, and shall be recalled only in the ratio of general depreciation to general appreciation.

(c) That the distribution of cash credits to individuals shall be progressively less dependent upon employment. That is to say, that the dividend shall progressively displace the wage and salary, as productive capacity increases per man-hour.

It seems quite possible that the form of organisation which would easily adapt itself to the embodiment of the foregoing principles would be that of the limited company. "Great Britain Limited" as a beginning for the "British Empire Limited" might form an organisation in which natural born British subjects would be bond holders. An elaboration of this conception would enable a transition to be made without shock and without any alteration in the existing administration of industry.

C. H, DOUGLAS.