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FURTHER COMMENTS ON MR. KEYNES' GENERAL THEORY

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PREFACE

Recently I had an opportunity of summarising my views on Mr. Keynes' General Theory. I should think that this further summary may be of some interest also to my foreign friends, because it covers the essential aspects of the problem in question in a more systematic form than my previous article[1] on the same subject. This is my reason for publishing this paper in English.

There is a fundamental concept running through all of Mr. Keynes' works on economics —— a concept which appears in some way or other to ascribe the defects inherent in capitalism solely to the lack of money.

For instance, the preface to "A Tract on Monetary Reform" argues that

"(The capitalistic arrangements), being in accord with human nature, have great advantages. But they cannot work properly if the money, which they assume as a stable measuring rod, is undependable. Unemployment, the precarious life of the worker, the disappointment of expectation, the sudden loss of savings, the excessive windfalls to individuals, the speculator, the profiteer —— all proceed, in large measure, from the instability of the standard of value."[2];

and "The End of Laissez-faire and Communism" demonstrates that

"The important thing for Government is not to do things which individuals are doing already, either a little better or a little worse; but to do

1) Shibata: Some Questions on Mr. Keynes' General Theory of Employment Interest and Money; "Kyoto University Economic Review, Vol. XII, No. 1.

2) Keynes: A Tract on Monetary Reform, p. v.

those things which at present are not done at all .... (The first example of tasks to be performed by Government is the control of currency and credit.) Many of the greatest economic evils of our time are the fruits of risk, uncertainty, and ignorance. It is because particular individuals, fortunate in situation or in abilities, are able to take advantage of uncertainty and ignorance, and also because for the same reason big business is often a lottery, that great inequalities of wealth come about; and these same factors are also the cause of the unemployment of labour, or the disappointment of reasonable business expectations, and of the impairment of efficiency and production.... The cure for these things is .... to be sought in the deliberate control of the currency and of credit by a central institution .... My second example relates to Savings and Investment .... I do not think that (the adjustment of these factors) .... should be left entirely to chances of private judgement and private profits, as they are at present."[3];

while "A Treatise on Money" considers the root cause of the world-wide slump of 1930 to be "the high level of the market-rate of interest."[4]

This fundamental concept runs also through the General Theory, though in a slightly modified form. It is our purpose in this paper first to examine where and how Mr. Keynes deviates from a direct encounter with the essential defects inherent in monopoly capitalism and thereafter to investigate very briefly the Keynesian remedy for the defects of the existing economic system. Section 2 is devoted to the first problem, while section 3 covers the second. In the succeeding section, I shall endeavour briefly to summarize what I understand concerning Mr. Keynes' General Theory.

I MR. KEYNES' GENERAL THEORY

Mr. Keynes' General Theory can be summarized in the customary terms as follows:

In a given situation of technique, resources and prices of such elements of production, as are not supplied by entrepreneurs, the volume of employment can be increased only when the total social product is increased, and the total social product can be increased only when the total

3) Keynes: The End of Laissez-faire and Communism, pp. 67–69.
4) Keynes: A Treatise on Monsy, Vol. II, p. 377 ff.

social demand is increased. Now the social demand for consumers' goods, which constitutes a part of the total social demand, increases in proportion as the latter is increased, but not to the same extent and it may even be subject to successive decrement in relation to the latter. Hence the social demand for capital goods, which constitutes the remaining part of the total social demand, must be increased not only absolutely but also relatively, if the total social demand is to be increased. Now the social demand for capital goods depends both on the rate of profit at which the capital to be invested for procuring a marginal quantity of the capital goods is remunerated, and on the rate of interest which the capitalists require for supplying the requisite capital. Furthermore the former rate falls as the amount of capital to be invested for procuring capital goods is increased. Hence it is necessary, in order to secure an increase in the social demand for capital goods, that the interest rate be lowered. Now the rate of interest depends both on the amount of money which individuals prefer to keep when the rate of interest, at which the wealth held in other forms can be remunerated, stands at a certain level rather than holding the corresponding amount of wealth in these other forms, and on the amount of money which the banking system supplies to the public. At the same time the amount of money which individuals prefer to keep increases in proportion as the rate of interest at which the wealth held in other forms can be remunerated is lowered. Hence the banking system must supply more money in order to bring about a reduction in the rate of interest. Hence it follows, to invert the argument, that an increase in the amount of money supplied by the banking system to the public will lower the rate of interest, while a reduction in the rate of interest will increase the social demand for capital goods; and that this increase in the social demand for capital goods will augment the total social demand and hence the total social product; while this increase in the total social product will tend to expand the volume of employment. An expansion of the volume of employment will lower the marginal productivity and hence the real wage level of labour. Hence it will be impossible to expand the volume of employment by means of an increase in the amount of money, provided that the unemployed cease to seek employment as soon as the real wage is lowered below the level at which it stood before such an injection of money took place. There are, however, many unemployed who are ready to seek employment even if they have to submit to a real wage which is lower than the prevailing standard, provided, of course, that the money-wage level is maintained. It is, therefore, possible to augment the volume of employment by means of an increase in the amount of money supplied by the banking system until the real wage level becomes so low that no one can be found offering for re-employment, no matter how stable the money-wage level may be. It is, therefore, necessary, in order to secure such an increase in the volume of employment, that the rate of profit, at which the capital to be invested for procuring the marginal quantity of capital goods is remunerated, should not have fallen so much that the lowering in the rate of interest can no longer cope with it. Should the rate of profit fall to excessively low levels, it would become necessary for the central authority to enlarge the scope of social enterprises and increase thereby the demand for capital goods irrespective of the market estimate of the rate of profit; and further, to adopt such policies as would tend to increase the social demand for consumers' goods in relation to the total social demand.

So far we have endeavoured to summarise the General Theory in the usual language. Mr. Keynes, however, developed his theory with the aid of special technical terms most of which he invented for the occasion. Let us, therefore, translate the above summary into the Keynesian expressions. But, in order to do so, it is necessary to define these technical expressions in the more customary terms.

First of all, Mr. Keynes uses, instead of such concepts as the "total social demand" (or the total social product), and the "social demand for capital goods," such phrases as "*value of current output*" or "*total income*[6]" and "*investment*,"[7] which are derived by subtracting respectively from the total social demand and the social demand for capital goods the so-called *user cost*, which, in turn, is arrived at by deducting the total price of the capital goods existing at the end of the period in question from the total sum of the total ideal price of the capital goods, —— the total price being is obtained by subtracting the cost of maintenance and improvements from the total price, which these capital goods would command at the end of the period in question, in case entrepreneurs take good care of such goods by undertaking the expense of maintenance and improvement during the period —— which existed at the beginning of that period, and the total price of the capital goods bought during that period. (Mr. Keynes defines the "social demand for consumers' goods" more briefly as "*consumtion*.") He introduces further such terms as 1) "*factor cost*" which denotes either the prices or the total price of the elements of production, which are not supplied by entrepreneurs, 2) "*propensity to consume*" which denotes the functional relation between consumption and that total income,[5] which is composed of consumption and investment, 3) "*marginal efficiency of capital*" which denotes the rate of profit at which the capital to be invested for procuring the marginal quantity of the capital goods is remunerated or, according to the expression

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5) Mr. Keynes defines the propensity to consume otherwise, as follows: "(the propensity to consume is) the functional relationship between a given level of income *in terms of wage-units*, and the expenditure on consumption (*in terms of the same units*) out of that level of income." I fail to see the necessity for referring to the wage unit, because it makes no difference so long as the marginal propensity to consume, which is the most relevant aspect of the propensity to consume, is involved. This point may be demonstrated as follows: Denoting consumption by C, total income by Y and wage unit by W, the definition of marginal propensity to consume, namely, $\frac{d(C/W)}{d(Y/W)}$ would be reduced to $\frac{d(C)}{d(Y)}$.

of Mr. Keynes, it denotes "that rate of discount which would make the present value of the series of annuities given by the returns expected from the capital-asset during its life just equal to its supply price —— a price which would just induce a manufacturer newly to produce an additional unit of such assets"[6]; 4) "*liquidity preference*" which denotes the functional relation between the amount of money, which the individuals prefer to keep rather than to hold a corresponding amount of wealth in other forms, notwithstanding the fact that such wealth, held in these other forms, would yield interest, and that the rate of such interest; i.e., to use Mr. Keynes' expression, denotes "the functional tendency which fixes the quantity of money which the public will hold when the rate of interest is given,"[7]; and 5) *involuntary unemployment*" which denotes such unemployed, as are ready to seek employment even if they have thereby to comply with a real wage which stands at a lower level than that hitherto prevailing, the money wage-level being maintained.[8] [9]

Making use of the Keynesian concepts defined above, the General Theory can be re-summarized as follows:

In a given situation of technique, resources, and factor costs, the volume of employment can be increased only when the total income is increased.[10] Now the propensity to consume is such that the consumption, which constitutes

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6) ibid. p. 135.

7) ibid. p. 168.

8) Mr. Keynes defines involuntary unemployment in a slightly different way, as follows: "Men are involuntarily unemployed if, in the event of a small rise in the price of wage-goods relatively to the money-wage, *both* the aggregate supply of labour willing to work for the current money-wage *and the aggregate demand for it at that wage* would be greater than the existing volume of employment." (ibid. p. 15) I fail to see why Mr. Keynes should put those words, which I quote here, into italics.

9) This does not exhaust all the special concepts used in the General Theory.

10) ibid. p. 27. The precise expression is "When employment increases, aggregate real income is increased."

one of the sources of the total income, is increased when the latter is increased, but not to so great an extent,[11] nor exclusive of decrement in relation to the latter.[12] Hence investment which constitutes the remaining part of the sources of the total income must be increased not only absolutely but also relatively, if the total income is to be increased under a given propensity to consume. Now investment depends both on the marginal efficiency of capital and on the rate of interest,[13] while the marginal efficiency of capital falls as the amount of capital is increased.[14] Hence it is necessary in securing an increase in investment under a given function of marginal efficiency of capital that the capital be supplied at a lower interest rate. Now the interest rate depends both upon the liquidity preference and the amount of money supplied by the banking system,[15] while the amount of money, which the individuals keep in preference to holding the corresponding wealth in other forms, even if the wealth held in those other forms should yield interest, tends to increase as the rate of interest at which the wealth held in those other forms can be remunerated[16] is lowered. Hence the Banking system must supply more money in order to bring about a fall in the rate of interest. Hence it follows also, to reverse the argument, that an increase in the amount of money supplied by the banking system to the public will lower the rate of interest, and that the fall in the rate of interest will tend to increase investment and hence the total income, which for its part thus tends to increase the volume of employment. An expansion of the volume of employment will lower the marginal productivity and hence the real wage level of labour.[17] Hence it will be impossible to expand the volume of employment by means of an increase in the amount of

11) ibid. p. 27, p. 96.
12) ibid. p. 31.
13) ibid. pp. 27-28.
14) ibid. p. 136.
15) ibid. p. 168.
16) ibid. pp. 167-168, pp. 171-172.
17) ibid. pp. 299-300.

money, provided there is no involuntary unemployment. There are, however, many who are involuntarily unemployed.[18] It is, therefore, possible to augment the volume of employment by way of an increase in the amount of money supplied by the banking system until the involuntary unemployment is exhausted. It is, however, necessary in order to secure such an increase in the volume of employment that the marginal efficiency of capital should not have fallen so low that the lowering of the rate of interest can no longer cope with it. If the marginal efficiency of capital has already fallen too far, it is necessary for the central authority to expand social enterprises and thus to increase the demand for capital goods, irrespective of the market estimation of the marginal efficiency of capital,[19] as well as to adopt such policies as would increase the propensity to consume.[20]

II EVILS OF MONOPOLY CAPITALISM

Let us now proceed to examine where and how Mr. Keynes deviates from a direct confrontation of the ills inherent in monopoly capitalism, and for this purpose we shall study Mr. Keynes' statements on the relevant points somewhat more minutely.

As we have stated in the previous section, the General Theory is developed upon the assumption of a given situation of technique, resources, and factor costs.[21] Hence it is supposed that the volume of employment changes in the same direction as the change in total income. Indeed, Mr. Keynes argues, in explaining the socalled employment function, that "if ...... the increased demand is largely directed towards products which have a high elasticity of employment, the aggregate increase in employment will be greater than it is largely directed towards products which have a low elasticity of employment," and that " employment

18) ibid. pp. 7–8.
19) ibid. p. 164, p. 267, pp. 316-317.
20) ibid. pp. 372 ff.
21) ibid. p. 27, p. 28, pp. 245–246.

may fall off without there having been any change in aggregate demand, if the direction of demand is changed in favour of products having a relatively low elasticity of employment," and that "if additional demand is directed to ...... (such goods as, requiring time for their production, is not possibly increased in their supply quickly), without notice, they will show a low elasticity of employment; although it may be that, given sufficient notice, their elasticity of employment approaches unity," and that "it is not possible for the initial elasticity of employment, in response to a given increase of investment, to be as great as its equilibrium value, unless there are surplus stocks and surplus capacity at every stage of production; on the other hand, the depletion of the surplus stocks will have an offsetting effect on the amount by which investment increases," etc.[22] But he overlooks both the so-called elevation of the organic composition of capital which necessarily arises out of the postulates inherent in capitalism and especially in monopoly capitalism, and the rapid increase in the proportion which monopoly profit bears to total income. It is hardly necessary to point out that the elevation of the organic composition of capital and the increase in monopoly profit in proportion to the total income tend to reduce the proportion which wage income bears to total income, and hence tends to reduce the volume of employment in relation to the total income, while not only the elevation of the organic composition of capital but also the increase in monopoly profit in proportion to total income tends to advance by leaps and bounds with the advance of the monopolisation of capitalism, because the monopolisation of capitalism facilitates on the one hand the rationalisation of industry through entailing amalgamations of enterprises and on the other hand, by stimulating the labour movements, makes labour appear less profitable in the entrepreneurs' eyes and encourages the replacement of labour with

22) ibid. pp. 286–288.

machinery. The proportion which the volume of employment bears to the total income tends, therefore, to decrease as the monopolisation of capitalism proceeds. But this was entirely slurred over by Mr. Keynes who assumed from the beginning a given situation of technique, because, though he introduced this assumption on the pretext of convenience, he demonstrated at the conclusion as if only those defects of capitalism, which arise under a given situation of technique and without the advance of monopolisation were " the outstanding faults of the economic society in which we live."[23]

The General Theory assumes, as was indicated in the previous summary, a given propensity to consume.[24] The factors determining the propensity to consume are, accord-

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23) ibid. p. 372.

24) The propensity to consume should, as was shown in the previous summary, denote the functional relation between total income and consumption as *one of the sources of* total income. This is why the proposition that "(since) income is equal to the value of current output, (and) .... current investment is equal to the value of that part of current output which is not consumed, and .... saving is equal to the excess of income over consumption .... the equality of saving and investment necessarily follows" is treated in the General Theory as a truism. (Keynes: ibid. p. 63). Mr. Keynes, however, treats the concept " propensity to consume " as if it denoted the functional relation between total income and consumption as *one of the items of disbursement of* the total income. This is discernible even in such a sentence as, for instance the statement, that " the *psychology* of the community is such that when aggregate real income is increased aggregate consumption is increased, but not by so much as income" (Keynes: ibid. p. 27), but is more clearly shown in his explanation of the factors determining the propensity to consume, which will be quoted in the text presently. This confusion of consumption as one of the sources of the total income and consumption as one of the items of disbursement of the total income does not cause any trouble when the income received is disbursed at the time it is received by the recipient, but does cause trouble when the income received is not disbursed by the recipient at the moment of receipt. For, to use a metaphorical expression, even if to-day's income is equal to the value of to-day's output, and to-day's investment equals the value of that part of to-day's output which is not consumed, to-day's savings do not necessarily equal to-day's investment, since to-day's savings are equal only to the excess of *yesterday's income* over to-day's consumption, and are not equal to the excess of *to-day's income* over to-day's consumption.

ing to Mr. Keynes, classified under two heads, objective and subjective. The principal objective factors are considered to be 1) the "*wage unit,*" i. e. the money wage of the unit in which the quantity of employment is measured —— because "as a first approximation we can reasonably assume that, if the wage-unit changes, the expenditure on consumption corresponding to a given level of employment will ...... change in the same proportion"[25]; 2) the difference between "income" and "*net income,*" i. e. the excess of the expected depreciation over the user cost, i.e. the so-called "*supplementary cost*" —— because the net income which is arrived at by deducting the supplementary cost from the total income is "what......the ordinary man......reckons his available income to be when he is deciding how much to spend on current consumption"[26] although "save in exceptional circumstances" "there may be a somewhat stable relationship between the two (i. e. the total income and the net income)"[27]; 3) the excess of the actual depreciation of capital assets over their expected depreciation, i. e. "*windfall losses or gains*" —— because it "should be classified amongst the major factors capable of causing short-period changes in the propensity to consume,"[28] although this "does not enter into...... (the entrepreneurs' decisions) on the same scale (as the supplementary costs)...... (i. e.) does not have the same effect as ...... supplementary cost"[29]; 4) "*the rate of time-discounting,*" which differs from interest rate in that the former allows for future changes in the purchasing power of money in so far as these are foreseen, and takes account of all kinds of risks, but can, as an approximation, be identified with the rate of interest —— because it may possibly exert some influence on the rate of spending out of a given total income, although "the influence ..... is open to a good deal of doubt ...... (and) is complex and uncertain, being dependent on conflicting tendencies"[30]; 5) the fiscal policy —— because

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25) ibid. p. 92. 26) ibid. p. 57. 27) ibid. p. 92.
28) ibid. p. 93. 29) ibid. p. 58. 30) ibid. p. 93.

"income taxes, especially when they discriminate against unearned income, taxes on capital profits, death-duties and the like," and fiscal policy aiming at the equal distribution of incomes, all increase the propensity to consume, while sinking funds for discharge of debt paid out of ordinary taxation reduces the propensity to consume[31]; 6) the expectations of the relation between the present and the future level of income —— this factor, however, does not affect the propensity to consume of the community as a whole, and moreover, belongs to a matter about which there is, as a rule, too much uncertainty to exert much influence. Thus "windfall changes in capital-values (factor 3) will be capable of changing the propensity to consume, and substantial changes in the rate of interest (factor 4) and in fiscal policy (factor 5) may make a difference."[32] But even these factors do not have significant effect (?), while "other objective factors (2 and 6) are not likely to be important in ordinary circumstances."[33] The subjective (dis-spending) factors as concerns individuals are considered to be 1) the motive of precaution —— building up of a reserve against unforeseen contingencies; 2) the motive of foresight —— provision for an anticipated future relation between the income and the need different from that which exists at present; 3) the motive of calculation —— enjoyment of interest and appreciation; 4) the motive of improvement —— provision for a gradually increasing expenditure; 5) the motive of independence —— enjoyment of independence and the power to do things; 6) the motive of enterprise —— acquisition of a masse de manoeuvre for carrying out speculative or business projects; 7) the motive of pride —— accumulation of wealth for the sake of bequeathing it; and 8) the motive of avarice —— satisfaction of pure miserliness. The subjective (dis-spending) factors which concern central and local governments, institutes and business corporations are said to consist of 1) the motive of enterprise —— acquisition of resources for

31) ibid. pp. 94–95. 32) ibid. pp. 95–96. 33) ibid. p. 96.

carrying out further capital investment without incurring debt or raising further capital on the market; 2) the motive of liquidity —— acquisition of liquid resources for meeting emergencies, difficulties and depressions; 3) the motive of improvement —— securing a gradually increasing income; 4) the motive of financial prudence —— making a financial provision in excess of user and supplementary cost, so as to discharge debt and write off the cost of assets ahead of actual wastage and obsolescence.[34] According to Mr. Keynes, "the strength of all these subjective motives will vary enormously according to the institutions and organisations of the economic society which we presume, according to habits formed by race, education, convention, religion and current morals, according to present hopes and past experience, according to the *scale and technique of capital equipment*, and according to the prevailing distribution of wealth and the established standards of life"[35] but "they are unlikely to undergo a material change over a short period of time except in abnormal or revolutionary circumstances..... (and are treated in the General Theory) as given."[36] "We are left therefore with the conclusion that in a given situation, the propensity to consume may be considered a fairly stable function, provided that we have eliminated changes in the wage-unit. ......"[37]

That is all that Mr. Keynes has to say about the determining factors of the propensity to consume. We note then that he does not pay due attention to the fact that the division of total income into consumption and investment is governed not only by such factors as were enumerated above but also by the organic composition of capital and the rate of capital accumulation. Hence he overlooks too the fact that the elevation of the organic composition of capital, which advances very rapidly owing to the urgent requirements of capitalism in general, and especially of monopoly capitalism,

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34) ibid. pp. 107-109. 35) ibid. p. 109.
36) ibid. p. 91. 37) ibid. p. 95.

and the fact that the increase in the monopoly profit exploited by the producers of the capital goods results in a disproportional increase in investment relatively to consumption; although he attaches so much importance to the fact that the wealthier a community becomes the less prone it is to spend out of its total income, as to hold this fact as the main cause underlying the tendency that "the richer the community, the wider will tend to be the gap between its actual and its potential production, and therefore the more obvious and outrageous the defects of the economic system."[38]

As was shown in the previous summary, the General Theory further assumes a given schedule of marginal efficiency of capital. Mr. Keynes expatiates on this schedule of marginal efficiency of capital as follows: "Marginal efficiency of capital depends on the relation between the *supply price* —— a price which would just induce a manufacturer newly to produce an additional unit —— of a capital-asset and its prospective yield"[39] and the prospective yield is determined by long term expectation and short term expectation, each of which is determined in turn by different factors. Short term expectation, being an expectation which has reference to the price a manufacturer can expect to get for his finished output[40] —— i. e. output ready to be used or to be sold to a second party ——, is revised in practice only gradually and continuously, largely in the light of realised results.[41] The marginal efficiency of capital will diminish as the investment is increased, so long as it is determined by short term expectations mainly because the pressure on the facilities for producing this type of capital asset will cause the supply price to increase,[42] i. e. cause the marginal productivity to fall. On the contrary, long term expectation, being an expectation which concerns what the entrepreneur can hope to earn in the shape of future returns if he purchases (or, perhaps, manufactures)

38) ibid. p. 31. 39) ibid. p. 147. 40) ibid. p. 46.
41) ibid. p. 50. 42) ibid. p. 136.

finished output as an addition to his capital equipment,[43] is liable to sudden revision, which cannot be even approximately eliminated or replaced by realised results.[44] Although the most probable forecast we can make, and the facts of the existing situation enter, in a sense disproportionately, into the formation of the long term expectations, the nature of long term expectation does not depend solely on the most probable forecasts, but also 1) on the confidence with which we make the forecasts,[45] 2) on the element of unstable spontaneous optimism, on which a large proportion of our positive activity depends rather than on a mathematically demonstrable expectation —— on animal spirit, or a spontaneous urge to action rather than inaction, and not on the outcome of a weighted average of quantitative benefits multiplied by quantitative probabilities,[46] and 3) on the amount of capital already existing, because "the greater ...... the consumption for which we have provided in advance, the more difficult it is to find ...... further (stimulus) to provide for in advance, and the greater our dependence on present consumption as a source of demand."[47] Concerning the first point, it is stated that, "(whilst) in former times, when enterprises were mainly owned by those who undertook them or by their friends and associates, investment depended on a sufficient supply of individuals of sanguine temperament and constructive impulses who embarked on business as a way of life, ... (in modern times) with the separation between ownership and management ...... (and) with the development of organised investment markets ...... (it became more and more to dependent on) the average expectations of those who deal on the Stock Exchange as revealed in the price of shares, rather than on the genuine expectation of the professional entrepreneur,[48] with the result that the investment market became exposed

43) ibid. p. 47.
44) ibid. p. 51.
45) ibid. p. 148.
46) ibid. p. 161.
47) ibid. p. 105.
48) ibid. pp. 150–151.

to a precariousness which is accentuated by such factors as 1) the serious decline in the element of real knowledge in the valuation of investments by their owners and purchasers, due to the gradual increase in the proportion of the equity in the community's aggregate capital investment which is owned by persons who do not manage and have no special knowledge of the circumstances, either actual or prospective, of the business in question, 2) the excessive, and even absurd, influence which the ephemeral and non-significant day-to-day fluctuations in the profits of existing investments tend to have on the market, 3) the liability to violent change in conventional valuation, which is established as the outcome of the mass psychology of a large number of ignorant individuals, 4) the fact that the professional investor is forced to concern himself with the anticipation of impending changes, in the news or in the atmosphere, of a kind which experience shows the mass psychology of the market is most sensitive to, and not with considerations of what an investment is really worth to the man who buys it for "keeps," and 5) susceptibility of the price of equities to the condition of the *state of credit*, i. e. the confidence of lending institutions in borrowers.[49] The marginal efficiency of capital will diminish as the investment is increased, (?) so long as it is determined by long term expectation, mainly because the prospective yield will fall as the supply of this type of capital is increased.[50] The long term expectation of one contracting party will supply a basis for the formation of the short term expectation of the other party, in case the additions to capital equipment or even sales to distributors[51] or transactions in durable goods[52] are involved.

Thus we see that Mr. Keynes entirely or almost entirely overlooks the relevance of such factors as wage, working day, intensity of labour, productivity, social unrest and monopoly profit. Let us first inspect what Mr. Keynes states

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49) ibid. pp. 153–158.

50) ibid. p. 136.

51) ibid. p. 47.

52) ibid. p. 51.

about wages——a problem to which it is possible to transfer the question of the working day and the intensity of labour He discusses somewhere the influence which a change in money wage exerts upon the marginal efficiency of capital holding the view that "if the reduction of money-wages is expected to be a reduction relatively to money-wages in the future, the change will ...... increase the marginal efficiency of capital; if on the other hand, the reduction leads to the expectation, or even to the serious possibility, of a further wage-reduction in prospect, it will ...... diminish the marginal efficiency of capital" and that "since a special reduction of money-wages is always advantageous to an individual entrepreneur or industry, a general reduction ...... may also produce an (erroneously) optimistic tone in the minds of entrepreneurs, which may (increase) ...... the marginal efficiency of capital, ... (but) on the other hand, if the labourers make the same mistake as their employers about the effects of a general reduction, labour troubles may offset this favourable factors."[53] Mr. Keynes entirely overlooks the fact that the reduction in the money wage level cet. par. naturally increases the marginal efficiency of capital, and treats with scanty courtesy the view 1) that the improvement in productivity has always been one of the main expedients to which entrepreneurs resorted in order to cope with the rise in money wages, 2) that the improvement in productivity has been repressed by both the stiffening of the economic activities and the impairment of the international division of labour, as a consequence of the monopolisation of capitalism, 3) that social unrest and labour troubles assume more extreme aspects as the monopolisation of capitalism advances, 4) that the exploitation by some industries impedes the marginal efficiency of the capital of other industries,[54] which fact in turn reacts adversely upon the demand for the

53) ibid. pp. 263–264.

54) For more precise theoretical investigation see my article "On the General Profit-rate" (Kyoto University Economic Review, Vol. XIV, No. 1)

products of the monopolised industries, thus causing the vicious circle to expand, and 5) that the monopolisation of capitalism discourages the spontaneous optimism and animal spirit which contribute to enliven the business world.

The General Theory assumes, in conclusion, a given liquidity preference. The liquidity preference owes its existence to three motives, transaction, precautionary and speculative. Money is considered to be held for transaction purposes when it is held to meet the need for the current transaction of personal and business exchanges, and for precautionary purposes when it is held in order to provide for contingencies requiring sudden expenditure and for unforeseen opportunities of advantageous purchases, as well as for holding an asset in a form convenient to meet a subsequent liability fixed in terms of money. "In normal circumstances the amount of money required to satisfy the transaction-motive and the precautionary motive is mainly a resultant of the general activity of the economic system and of the level of money-income ...... (and does not) show a continuous response to gradual changes in the rate of interest,"[55] except in the sense that, as the rate of interest falls, more money will be absorbed, because the national income is thereby increased.[56] The money held for the so-called speculative motive is the money which individuals prefer to keep rather than to hold the corresponding wealth in other forms, notwithstanding the fact that wealth held in the latter form yields interest; because the rate of interest diverges from what is considered to be a fairly safe limit[57]; or possibly because the future course of the rate of interest is regarded as uncertain.[58] "Every fall in the rate of interest may ...... increase ...... the quantity of cash which certain individuals will wish to hold because their views as to the future of the rate of interest differ from the market views."[59] Hence it follows that "the

55) Keynes: ibid. pp. 196–197.
56) ibid. pp. 171–172.
57) ibid. p. 172, p. 201.
58) ibid. p. 201.
59) ibid. p. 172.

schedule of liquidity preference ...... is a smooth curve which shows the rate of interest falling as the quantity of money is increased."[60]

Mr. Keynes seems to have laid too much stress on the influence exerted by the speculative motive in connection with liquidity preference to pay adequate attention to the effect which the money held for transaction and precautionary motives may have on the formation of the liquidity preference; and to the effectiveness of the savings in enabling the banking system to lower the rate of interest and thus facilitate the increase in investment. Nevertheless we must not overlook the great merit accruing to Mr. Keynes when he asserts the dependence both of investment and of interest rate upon the amount of money supplied by the banking system, especially in view of the present situation in economics in which even the necessity for an increase in the supply of money for the smooth procedure of investment is denied by eminent scholars (Appendix I) while the general theory is usually developed without taking into consideration the fact that the attitudes of individuals towards money holding affect the determination of interest rate. (Appendix II)

As I have noted above, Mr. Keynes overlooks most of the defects of monopoly capitalism. But he does not overlook them entirely. He notes some of them, particularly in so far as they are related with the scarcity of money. His conclusions on this point in the General Theory display a remarkable improvement over the views expressed in his former works.

Mr. Keynes had been accustomed, as will be clear from his own arguments quoted at the beginning of this paper, to attribute the most grave defects of the present economic system to the fact that the supply of money is not made available in such a way as to ensure the stability of price level. The undeniable existence of an enormous mass of unemployment, which continues to maintain itself notwith-

60) ibid. p. 171.

standing the appreciable stabilisation of price level, and the rather promising business activities which have developed since the end of the world slump of 1932, seem to have had a great effect upon the keen mind of Mr. Keynes. In any case, he discards in the General Theory his long advocated hypothesis of imputing the calamitous phenomena of the present economic system to a defective supply of money entailing instability in the price level, and admits the possibility of involuntary unemployment existing even under a stable price level, insisting upon the necessity for supplying more money than is sufficient merely to maintain the price level. Moreover he goes a step further in the General Theory, because he admits there, in contrast to his usual policy of advocating the discount-rate and open-market policy as the most effective measure for achieving sufficient supply of money, the narrow limits of such a policy, and asserts the necessity for adopting still more fundamental measures stating that:

> "The collapse in the marginal efficiency of capital may be so complete that no practicable reduction in the rate of interest will be enough. If a reduction in the rate of interest was capable of proving an effective remedy by itself, it might be possible to achieve a recovery without the elapse of any considerable interval of time and by means more or less directly under the control of the monetary authority. But, in fact, this is not usually the case"[61]

and further that:

> "I am now somewhat sceptical of the success of a merely monetary policy directed towards influencing the rate of interest. I expect to see the State, which is in a position to calculate the marginal efficiency of capital-goods on long views and on the basis of the general social advantage taking an ever greater responsibility for directly organising investment; since it seems likely that the fluctuations in the market estimation of the marginal efficiency of......capital......will be too great to be offset by any practicable changes in the rate of interest."[62]

III REMEDY FOR THE EVILS OF MONOPOLY CAPITALISM

Mr. Keynes tries, as I have pointed out in the pre-

61) ibid. pp. 316-317. 62) ibid. p. 164.

ceding section, to suggest remedies for the difficulties of the existing economic system by an injection of money, treating only some of them, and only in so far as they are related to scarcity of money. Let us now briefly examine the Keynesian remedy.

In investigating the Keynesian remedy for unemployment, or more generally for *the outstanding faults of the economic society in which we live,* it is necessary to keep clearly in mind that Mr. Keynes concerns himself only with so-called involuntary unemployment.

The monopolisation of capitalism, as I have pointed out in the previous section, entails even under an unchanged level of nominal and real wages 1) a fall in the marginal efficiency of capital, due to an exploitation of monopoly profit by some of the industries, and to a disturbance in the international system of division of labour, 2) a fall in the propensity to consume on the part of society, due both to an increase in the amount of monopoly profit contained in the price of the capital goods, and to an elevation of the organic composition of capital, and 3) a fall in the amount of employment in its relation to the amount of total income, due to the growth in the proportion of monopoly profit, and to the elevation of the organic composition of capital. Now these three factors are of such a nature that one of them alone would suffice to decrease the volume of employment. This is why unemployment increases enormously with the monopolisation of capitalism. And this is also why we have before our eyes the calamitous phenomenon of unemployment, which amounts to 1.9 million in England and to 9 million in the U.S.A. even in these days of relative prosperity. It would certainly require a reduction of real wage to an excessively low level to stimulate business activities by means of the Keynesian method in such a manner as would make possible the re-employment of all these unemployed.

If such were the case, labourers would have to endure an ever-increasing reduction in the level of real wage as the monopolisation of capitalism proceeded, in order to escape falling into the unemployed group. If they should dare to resist such reduction they would inevitably be struck off the employment list without being enlisted in *involuntary* unemployment, against which the Keynesian method assumes the responsibility of protecting labourers, because involuntary unemployment does not by definition include unemployment arising from the resistance of labourers to the reduction of the level of real wage, irrespective of whether the reduction is due to monoplisation and whether it is apt to grow worse.

Moreover, it is questionable if even involuntary unemployment can be eliminated without difficulty by the Keynesian method. The Keynesian method aims at lowering the real wage level by raising the price level. This is why he has abandoned the pricestabilising policy which he has long advocated. The acceptance by labourers of a lowering in the real wage level will be, most probably, contrary to the expectation of Mr. Keynes, a short-lived phenomenon. The labourers would probably begin, before long, to fight for the recovery of their long-accustomed standard of living, and their ability to achieve this end may possibly be fostered by the very fact that the volume of unemployed has been somewhat reduced owing to the application of the Keynesian method. The result would be recurring unemployment. Thus it would be necessary to inject money ceaselessly into the market and to raise the price level in order to maintain the real wage at a level below the point of equilibrium. But the continuous rise in price level would, by its nature, have to proceed at an ever-accelerating rate, and would tend to undermine the very financial foundation upon which the Keynesian policy is based.

The subject of the fundamental defects inherent in monopolistic capital is not exhausted by a treatment of unemployment. Social unrest, the corruption and stiffening of central activities, etc. etc. are all of them closely related to the monopolisation of capitalism. The Keynesian method, however, is too far removed from reality to deal decisively with these defects.

APPENDIX (to page 63)

I) Professor Hayek for example, has asserted that an increase in the amount of capital (i.e. investment) can naturally take place smoothly even without any increase in the total social product (in terms of money), i.e. without being supplied with so much money as would ensure a suitable increase in the total price of the total social product. (Friedrich A. Hayek: Gibt es einen Widersinn des Sparens? S. 27–28) This is why he advocates the maintenance of the so-called natural rate of interest—a rate of interest which should maintain the total social product (in terms of money) at an unchanging level. He demonstrated that the above assertion of his is both a logical consequences derived from the Boehm-Bawerkian capital theory (see for instance the above-quoted booklet on page 24ff.) and a necessary requisite in order to maintain under the indirect exchange system the equilibrium between demand and supply necessarily existing under the direct exchange system. It is rather incredible that this argument of Prof. Hayek has enjoyed such wide spread appreciation. First of all, the Boehm-Bawerkian capital theory would seem to be the last to admit the argument that investment can naturally take place smoothly without any increase in the total social product (in terms of money). Let us establish this point by reference to the tables, with the aid of which Boehm-Bawerk stated his capital theory. According to these tables (for which please refer to my article "On Boehm-Bawerk's Theory of Interest Rate" Kyoto University Economic Review, Vol. X, No. 1, or to my other article "Capital and the Subsistence-fund" in the same publication, Vol. XIII, No. 2) On the assumptions involved in these tables, equilibrium is arrived at when the period of production is 6 years and the total product (in terms of money) per entrepreneur is 11,000 gulden. If we alter in this case the assumption concerning the amount of subsistence-fund per entrepreneur from 10,000 to 12,600 gulden, while retaining all other assumptions, equilibrium will then be attained when the period of production is 7 years, and the total product (in terms of money) per entrepreneur is 13,466 gulden, thus:

		Table 3				Table 4			
		Wage .... 500; Subsistence-fund per entrepreneur 10,000				Wage .... 540; Subsistence-fund per entrepreneur 12,600			
Period of production	Annual product of laborer	Annual profit per labor.	Volume of employment	Total annual profit	Total product	Annual profit per labor.	Volume of employment	Total annual profit	Total product
5	620	120	8.00	960	10,960	80	9.33	746	13,346
6	650	150	6.66	1,000	11,000	110	7.77	855	13,455
7	670	170	5.71	971	10,971	130	6.66	866	13,466
8	685	185	5.00	925	10,925	145	5.83	845	13,445

The above argument will be simplified in case we rely upon the Wicksell's mathematical expression of the above Boehm-Bawerkian capital theory, which consists of the following four equations, i.e. (1) $P=L\left(1+\frac{rt}{2}\right)$, (2) $P=F(r)$, (3) $\frac{dP}{dt}=\frac{wr}{2}$, (4) $S=\frac{Awt}{2}$, where P denotes the annual product per labourer, r the profit rate, t the period of production, w the wage level, S the subsistence-fund, and A the volume of employment. Now $\frac{dP}{dt}$ would be negative in case the total product (in terms of money) per entrepreneur were to be constant irrespective of an increase in the subsistence-fund, and hence of the lengthening of the period of production—a condition which would be quite irreconcilable with the postulate of capitalistic production. One may perhaps argue that the deadlock is not inevitable because $\frac{dP}{dt}$ would not be negative since the total product (*in terms of real goods*), per entrepreneur, would surely increase as the subsistence-fund, and hence the period of production, is increased. But that would be of no avail, because the entrepreneur, if he conceives the marginal productivity of subsistence-fund not in terms of money, but in terms of real goods, failing to foresee the fall in price level which the lengthening of the period of production resulting from the increase in the amount of subsistence-fund is bound to entail, would only have to be disillusioned afterwards by the loss necessarily caused by the fall in price level—a sequence which is incompatible with the postulate of the undisturbed procedure of investment. The untenability of Professor Hayek's assertion will, however, become even more striking if we eliminate the confusion of subsistence-fund with capital or the misuse of the concept *capital*—a confusion or misuse which underlies the Boehm-Bawerkian capital theory (see my article "Capital and the Subsistence-fund" Kyoto University Economic Review, Vol. XIII, No. 2), and which Professor Hayek has heedlessly adopted. For if we eliminate this confusion or misuse and use the concept *capital* in the usual sense in which it involves that part of profit which is contained in the price of the producers' goods, the total product in terms of money would, under the Boehm-Bawerkian assumption of supplementary investment taking place at infinitesimal intervals, become equal to capital, and hence it will be clearly seen that it is impossible to increase the amount of capital without increasing the amount of total product in terms of money.

Concerning the second point Professor Hayek asserts:

"The necessary starting point for any attempt to answer the theoretical problem seems to me to be the recognition of the fact that the identity of demand and supply, which must necessarily exist in case of barter, ceases to exist as soon as money becomes the intermediary of the exchange transactions......In this sense demand without corresponding supply, and supply without a corresponding demand, evidently seem to occur in the first instance when money is spent out of hoards......, when money received is not immediately spent, when additional money comes on the market, or when money is destroyed. So this formulation of the problem leads immediately to the solution of a constant money stream......" (Friedlich A. Hayek: Prices and Production, 1935, p. 130) It is, however, hardly necessary to note that the amount of money received during a certain period must of necessity be equal to the amount of money spent during the same period, there being no receipt of money by any one person without corresponding payment of money by another. Similarly, the amount of money either originally possessed or originally acquired, during a certain period, must of necessity be equal to the amount of money either hoarded without spending at the end of the period or destroyed during the same period, there being no money either originally possessed or originally acquired by someone during a certain period, without its being either possessed at the end of the period or destroyed during the same period, i.e. the amout of money received and not spent by someone must of necessity be equal to and compensated by the amount of money either originally possessed or originally acquired and spent by a certain person or persons. Therefore, there can be no divergence between supply and demand if we make it depend on an existence of money, which is received and not spent by someone, and which is not compensated by precisely the same amount of money, which is spent without being acquired through transaction by some other person, and vice versa. On the contrary, if we make the divergence between supply and demand depend on an existence of money which is received but not spent by someone, or on an existence of money which is spent without being acquired through transaction by someone, then a mere constancy in the money stream will not suffice to guarantee the maintenance of coincidence between supply and demand. Because, even if the total amount of the money stream is kept constant, the amount of money possessed by each of the members of the community may change. The requirement by Professor Hayek of a constant money stream is, therefore, not supported by the requirement of coincidence of supply and demand.

II) Knut Wicksell for example, who laid the foundation of the modern monetary theory of the trade cycle, slurred over the fact that the Boehm-Bawerkian capital theory is developed by abstracting the relevance of the attitudes of individuals towards money, and built his theory on the concept of the *natural rate of interest* or *natural interest*, which he defined as "the rate which would be determined by supply and demand, if real capital were lent in kind, without the intervention of money". This careless oversight has been carelessly copied by many prominent authors, with the result that the relevance of the attitudes of individuals towards money has tended to be forgotten in most cases, notwithstanding the fact that it had once received correct treatment, though in a very naïve manner, among others by Leon Walras, (and in English, for instance by myself, in my article "Marx' Analysis of Capitalism and the General Equilibrium Theory of the Lausanne School", Kyoto University Economic Review, Vol. VIII, No. 1, where I described the attitudes of those who make savings as follows: $N_{11}=(1+p')\{K(1+p')\}$, where N_{11} denotes the amount of money held, p' the rate of interest and K the amount of savings made).

It is interesting to compare Mr. Keynes' statement on this point in the General Theory with that contained in his Treatise on Money. As I quoted above, the General Theory defines the liquidity preference as the amount of money, in which form people hold their wealth in preference to investing it in a form which it would yield interest, and hence the rate of interest acts as "a measure of the unwillingness of those who possess money to part with their liquid control over it" (Keynes: ibid. p. 167), while it seems as if the money holder is considered in the Treatise to hold money for the sake of the interest, which the money held in the form of savings-deposit would yield to the depositor, because it is stated there that even if an individual is more disposed than before to hold his wealth in the form of savings-deposit (which is regarded in the Treatise as a liquid equivalent of money) and less disposed to hold it in other forms, "his distaste for other securities is not absolute, and depends on his expectations of the future return to be obtained from savings-deposits and from other securities respectively, which is obviously affected by the price of the latter—and also by the rate of interest allowed on the former". I am not sure whether this apparent contradiction between the concept *liquidity preference* in the General Theory and the one that plays a part in the Treatise is a result of a change in viewpoint which Mr. Keynes underwent after he had written the Treatise. I should prefer, however, to interpret it as follows: Money which does not yield interest is preferred to other forms of wealth-holding, which yield interest, mainly because money is liquid, and the preference for money would be increased in proportion as the rate of interest which the other forms of wealth-holding would yield grew less, or the higher the rate of interest on money, provided it does yield interest without impairing its liquidity. Now the form of money which yields interest is usually inferior in respect to liquidity to the form of money which yields no interest. Hence the former is preferred more for its interest-yielding capacity, while the latter is preferred for its liquidity; with the result that there arises between these two forms of money precisely the same relation as exists between the holding of money and of other forms of wealth.