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Dear Maynard

Many thanks for your letter and interesting notes. So far as I am concerned the matter shall not end here; I shall try to develope my ideas for a form suitable for considerations publication in the light of your reaction.

1. Despite of what you say, I still think that my book concerns the trade cycle; nay more, I hold, subject to further criticism, that it contains the essence a form of the theory of the trade cycle. This arises out of the fact that saving is primarily a function of the amount of income and investment of its rate of growth. Now so long as there is anything in the nature of acceleration, all sorts of combinations of relation and multiplier values are possible. But as soon as there is any sign of de-celeration investment must sink down towards zero. That is the peculiar and essential nature of the slump. Prima facie, on a cursory examination of economic phenomena, we should expect irregularities of growth of all sorts, the pace sometimes getting hotter and sometimes calmer, in accordance with inventions, changes of taste, of thriftiness etc. What is striking and seems at first all out of proportion is the catastrophic nature of the slump. The amount of recession seems out of all accord with such changes as may be occurring in "fundamental conditions". It is this that has led people to talk of the vicious spiral of monetary deflation, psychological depression etc. Now I believe that the secret of this unexpected, disproportionate movement depends on this un-symmetrical relation between the Relation and the Multiplier that I have explained. It is always possible to accelerate, but it is not possible to de-celerate without starting again from the zero line. I was talking to Colin Clark the other day and he held that from the statistical point of view it was not at all unreasonable to suppose that investment is fairly close to zero in the slump.

2 Your ~~alg~~ algebraic formulation is extremely helpful.

$$y = \frac{100}{MR-1}$$

[Margin note: y is a function of the state of expectation ∴ $MR = f(E)$ where E is expectation [illegible]]

I quite agree that steady growth is not to be expected in the boom. M may be expected to decline and y to grow; if R happens to be growing at the same time, the growth of y is pro tanto less.

[Margin note: y grows because of a change in expectation. This necessarily involves price changes sufficient to reduce R]

The growth of y is ultimately limited by the availability of other factors of production. A relapse in y must occur. Yet it cannot occur without a growth in MR. Take R as constant for the moment. Some growth of M is required. Yet so long as consumption is increasing, by your psychological law, no growth in M is likely to occur. A new equilibrium can only be found with $y = 0$ and M infinite (i.e. zero saving).

[Margin note: But that's what I want. In the short period M and R are commensurate; so that when y rises R falls]

The only hope is that when y begins to decline, we should engineer a sufficient growth of R. Suppose y to fall from 2 to 1. Let R_0 = relation previous to change. What must R_1 be after the change? According to me:

$$2R_0 - \frac{1}{M_0}$$ (assuming $M_1 = M_0$, i.e. multiplier unchanged)

[Margin note: But R will start to [illegible] (It is when R is [illegible] that the growth begins)]

That is the problem of the trade cycle. How to secure such a large increase in R at the end of the boom, that some increase of consumption may be maintained.

[Margin note: It is the [illegible] from [illegible] itself]

3. I can't think why you make out that these matters are of long period interest. It seems to me clear that it is the problem of the trade cycle. Certain hints were ~~thrown~~ thrown out in the chapter of your General Theory. But your treatment of the trade cycle was merely fragmentary for lack of a theory as to what governs the volume of investment.

[Margin note: Trade Cycle is a [illegible] of fluctuations in expectation]

You think I am wrong in making Investment a function of current growth only. Granted. Suppose only half were governed

[Margin note: [illegible] a long-period [illegible] Long period R is a function of the [illegible] which is [illegible] of the state of expectation [illegible]]

by current growth, the rest of long period planning. The theory is substantially intact. It remains true that the growth of consumption cannot slow down without producing a great recession; but in this case the recession would only have to be such as to reduce savings to half their normal level.

Personally I believe that for the greater part of investment rests on an immediate prospect of an increase of demand. People do not build new factories for use some years' hence nor houses that will remain untenanted. Why should they? They increase equipment at the last feasible moment to serve interest. Moreover if one is looking more than a year or so ahead everything becomes so violently uncertain.

4 I quite appreciate that R may be modified by changes in consumption. But I doubt whether the price elasticity of demand for broad types of goods, embodying respectively more and less capital is very great. Elasticity is only great, when substitution is easy. But the goods substituted are likely to contain the same amount of capital as those for which they are substituted. I don't deny that there is something in your point.

5. I agree that steady growth and full employment do not provide the same criterion. As between them I do not favour steady growth. On the contrary I say that several times that, starting with the slump, if to damp growth down to what could be steadily maintained would simply perpetuate existing unemployment, which would be intolerable. What I do say is that once revival has got going, another slump can only be prevented by a severe doctoring of R and that it is essential to maintain some increase of consumption.

6. The reason why I call the forces which make prices to fluctuate stabilisers, is that I want to bring level-of-output theory into relation with the system of cost and utility equations on which the orthodox general theory has - in a way rightly - rested. The level of output ought prima facie

to depend on the desire for goods, for leisure etc. In the human economy it would so rest. Now that in a growing and capitalist society the level of output depends on the interaction of the Relation and the Multiplier, what has happened to those fundamental forces? What has happened to the utility functions? They are still there, I say. But they are overcome by price fluctuation. The factors having agreed to bargain in money, their natural inclination to do relate their wants of certain fundamental desires is counteracted by the fluctuation of prices. The amount by which prices have to fluctuate to secure given changes of output measures the force of the stabilizing forces. The static system of equations, including the money equation, provide a field of neutral equilibrium within which output may fluctuate in accordance with the laws of growth.

Well, once so many thanks. I am sorry that the original text was so ~~also~~ obscure

JS

Roy.