BUSINESS CYCLE THEORY
Winter, 1949
Lecture Notes by Gladys Parker Foster (then Gladys Myers)

1-6-49:

There is no such thing as business cycles except in a very special sense, but there is such a thing as fluctuations in the level of economic activity.

Follow in general the organization of the text.

Order of the course:

1. Pure Monetary Theory of the business cycle.
2. Monetary Over-Investment Theory of the business cycle.
3. Non-Monetary Over-Investment Theory of the business cycle..
4. Under-consumption Analysis.
5. Keynesian Theory.
6. Eclectic Theory.

At what level of "full" employment do we carry on the economic process?

There are two categories of economic problems: (1) how much of the means of life are provided, and (2) what kinds of the means of life are provided. The first is the one that concerns us in this course.

Actually, a business cycle is not a cycle in that it is regularly recurrent. It is determined by factors that are independent of time.

Read R.G. Hawtrey's *Pure Monetary Theory*, and anything else by him.

1-7:

Business cycles are not caused by something within the economic process itself; they are not chronologically rhythmical. There were ups and downs of varying intensity in the U.S. from 1790 to 1948. War always occurs just before the peak; that is, a peak always occurs after a war. This sequence always occurs in a capitalistic system, but it seems that there are some continuing factors in any institutional structure. If you think Jevons' "sunspot" idea of business cycles has played out, read Gustav Cassel. Hawtrey's *Pure Monetary Theory* is the best statement of it. Also read:

Hawtrey, *Contemporary Monetary Theory; Capital and Employment; Trade, Depression, and the Way Out.*

Saulnier, *Contemporary Monetary Theory.*

Haberler, *Prosperity and Depression,* Ch. 2.

McFie, *Theories of the Trade Cycle,* Ch. 3.

McCracken, *Value Theory and Business Cycles,* Ch. 13.

<u>Pure Monetary Theory</u>

1. Demand ceases to be sufficient to recover the goods from the market.
2. But, demand comes from consumers' outlay.
3. Consumers' outlay is that portion of income spent in the *final* purchase of goods, and is therefore derived from consumers' income.
4. Consumers' income is derived from production.
5. Disequilibrium is caused by variations between consumers' outlay and consumers' income.
   a. If consumers' outlay is greater than consumers' income, we have expansion.
   b. If consumers' outlay is less than consumers' income, we have contraction or recession.

c. If consumers' outlay is equal to consumers' income, we have stability.

6. This release or absorption of cash can be accomplished by one or more of three groups in the economy: a. Consumers. b. Traders. c. Banks.
7. But the release or absorption of cash is in response to effective demand, and so the thing to do is to control demand.
8. This can best be accomplished by stabilizing income, because thereby consumers' outlay can be stabilized.

What does demand mean? How much money is on hand; the rate of receipt of expendable funds; the quantity of goods in existence subject to exchange (particularly the classical definition); the quantity of money in the hands of final purchasers available for the purchase of goods (Hawtrey). All of these definitions are floating around.

Hawtrey says that demand comes from consumers' income. Consumers are the ones who buy the items with no intention of reselling. It includes fixed capital equipment but not land. Income subject to final expenditure is consumers' income. It is money available for the final purchase of goods. Consumers' outlay is the actual purchase of such goods.

Difficulty is caused by variations between consumers' outlay and consumers' income. These differences result in release or absorption of cash, which is what causes the trouble. The three groups who have discretion over it are consumers, traders, and banks. "Consumers" is used in the ordinary sense of the word. Hawtrey notes that consumers' expenditures don't vary very much. It's capital goods expenditures that vary. Also prices. So consumers really don't have much effect on it; such expenditure is more a consequence than a cause. But consumer variation starts a little sooner than capital variation, although it doesn't vary as much. Consumers have discretion in that they can spend more or less than their income. Traders can release or absorb cash in much the same manner but to a greater extent. They release cash when new security issues are greater than security issues called in plus gross profits over the same period. But Hawtrey doesn't mean gross profits for the economy at large. Banks release cash when they buy securities and absorb cash when they sell securities.

What is money? A legally designated medium of exchange.

1-10:

The pure monetary theory hinges around the idea of the release or absorption of cash. The problem of the distinction between consumer goods and investment goods is avoided; it deals only with aggregates. The level of employment is not a matter of whether you make consumer or investment goods but only a matter of whether you're working (Hawtrey). The relationship between the two will come into some kind of balance.

The general theory of wages used in this theory is the orthodox supply and demand schedule: utility. But the pure monetary theory suggests that there is such a thing as ineffective demand, so it is a denial of the supply and demand theory of wages (and of Say's law). (Incidentally, Foster thinks that Say's law is true, which does not mean that there can be no decrease in economic activity.)

How can the economy be stabilized? It is purely a monetary business. Stabilize income.

You can do something about it, although you can't do much about consumers' outlay. (Consumers' outlay is analogous to propensity to consume.) So do something about consumers' income. Most of this is in the form of wages. You can't control wages. But you can control some of the items that control wages. You can do something about demand for labor by controlling the rate of interest. The rate of interest is most effective for the wholesalers. (Brokers don't care what the rate is as such; what concerns them is

whether it will go up or down.) Almost all the wholesaler's goods are purchased on commercial credit. If the rate of interest goes up it may wipe out his entire profit. So it is the wholesalers upon whom we must concentrate, by controlling the rate of interest. Through them wages can be controlled. Then consumer outlay will be stabilized; that is, there will be no violent fluctuations. (The quantity of commercial credit in existence just about equals the circulating capital in wholesale and retail stores, according to Federal Reserve Bulletins. Very few non-borrowed funds are being used. Some non-commercial credit funds are government credit funds. There is no other way to create capital assets than through credit, says Foster.)

What theory of prices does this theory—pure monetary theory—stand on? The quantity of money theory of prices; that is, the quantity of money in circulation. Fisher's equation. We have almost four times as much money as we did in 1940; prices have increased three times. Under conditions of full employment there is some correspondence, but Fisher's equation has to assume full employment. And under conditions of full employment what sense is there in talking about business cycles?

It all boils down to the fact that consumer outlay and consumer income are the same; you can't get a disparity between the two.

Income is receipt from sales. Expenditures and receipts are the same. $Y=C + I$.

1-11:

Suggested reading in Monetary Over-Investment Theory:

Wicksell, *Interest and Prices; Lectures on Political Economy*, Vol.2; *Economic Journal, 1907, pp. 213-220*

Von Hayek, *Prices and Production,* 2nd edition; *Monetary Theory and the Trade Cycle; "The Paradox of Saving, Economica, 1931, pp. 125-161; "The Maintenance of Capital," Economica, 1935, pp. 241-276; "Forced Savings," Quarterly Journal of Economics, 1932-33, pp. 123-33; "The Mythology of Capital," Quarterly Journal of Economics, 1935-36, pp. 199-228; Econometrica, 1934, pp. 152-167; Economic Journal, 1932, pp. 237-249; Economic Journal, 1934, pp. 207-276.*

Saulnier, *Contemporary Monetary Theory,* pp. 213-300.

Haberler, *Prosperity and Depression,* pp. 27-68.

Alvin Hansen, *Full Recovery or Stagnation,* Ch. 3; *, Econometrica, , 1933, pp. 119-147.*

Stratchey, *The Nature of the Capitalist Crisis*, Ch. 4 and 5; *What Are We To Do?*

McFie, *Theories of the Trade Cycle*, Ch. 4 and 5.

American Economic Association, *Readings in Business Cycle Theory,* 1944.

Ayres, *The Divine Right of Captal.*

Arthur Burns and W.C. Mitchell, *Measuring Business Cycles.*

Alvin Hansen, *Fiscal Policy and Business Cycles,* 1941.

Villard, *Deficit Spending and the National Income.*

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Von Hayek is probably the best exponent of the monetary over-investment theory.

Return to pure monetary theory: The only way to control is through wholesalers. You can't control consumer outlay, price, wages, etc., because you get into such problems as too vast police control, black markets, etc.

Reexamination of the quantity of money theory: The equation $\frac{mv + m'v'}{T}=P$ is a truism.

It is still accepted as true. But what these theorists are saying is that if M increases, P will increase proportionately. That's not true. If you vary M, v and T also change, so the effect on P is not as anticipated.

So they decided to encourage the wholesalers by making money available to them through certain banks.

These theorists are confusing money and income. Curtailment of production affects income but not quantity of money.

[Me: Questions raised while thinking and reading.

1. *Are goods in the higher stages of production, i.e., higher order goods, producers' goods, and goods in the lower stages of production consumers' goods?*
2. *Investment is addition to the supply of capital equipment beyond replacement of that used in the productive activity of the period. But if there is unexpected destruction of capital equipment (as by war or floods) is not replacement of it investment? The multiplier would work on such investment, would it not? Yes. And if productive activity is at a high level, thus wearing out capital goods very fast and necessitating a high level of production of capital goods for replacement, the multiplier works in this replacement even though there is no investment (as defined by Keynes), does it not?*
3. *Income spend for replacement of capital equipment used in the productive process is not investment (as defined by Keynes). Then it is consumption. (Me later: <u>No</u>!) But this seems an odd classification. Or is it that money spent for such purposes <u>is not income?</u> Yes. What about the distinction between net income and income? What is gross income? <u>User cost.</u> It must be subtracted from gross income to get income. Is that it?*
4. *During the Great Depression replacement fell far short of the amount necessary to maintain the capital stock. (Hansen: F. Rec or Stag.) Then there was negative investment, and negative saving, and consumption. Right? I didn't think so. We don't know, but it probably was. Very well could have been.*
5. *Does investment in Keynes mean gross investment? And income gross income?]*

[More thoughts from me: Isn't accumulation of capital investment? There are no profits in the aggregate; profits equal zero in the aggregate. What are profits? Return on capital? Some would say, I think, that profit is capital accumulation. There is in fact capital accumulation, or investment, isn't there? Yes. If not, consumption would be 100%. Then capital accumulation or formation must not be profit. What is profit? That left after expenditures on consumption and investment? Is it formed through debt? If so, it's clearly zero. Can something that is always zero be defined? If not, what is the definition of profit in the comprehension of the community? As indicated above, there is little or no disagreement as to its definition. And it can be defined. It is zero in the aggregate but not necessarily for the individual.]

1-12:

Hawtrey's theory is confusing because (1) of the terminology and (2) it is concerned with the machinery and not the causes.

<u>Monetary Over-Investment Theory</u>

1. There are two kinds of goods, consumer goods and investment goods.
2. The individual has the choice of which he will produce and which method of production he will pursue.
3. Which he produces depends upon the relative strength of effective demand for each of the two kinds of goods.

4. But the only way that a change in the production of one kind of goods can be accomplished is by a change in the production of the other.
5. In the case of an increase in investment it can come from only one of three sources:
   a. Sales of securities; b. Plowing back profits; c. Bank credit.
6. When bank credit is used there is a shift from the production of consumer goods to the production of investment goods, because of relatively increased prices of producers' goods as compared with prices of consumers' goods.
7. Thus there is a reduction in the quantity of the factors used in the production of consumer goods and thus a reduction in the rate of production of consumer goods.
8. The reduction in the rate of production of consumer goods, without a concurrent reduction in the quantity of funds available for their purchase, results in an increase in prices for consumer goods. This is what Von Hayek calls forced savings.
9. As the price of consumer goods increases, and as the capital installations that preceded them come into use, the producers of consumer goods are enabled to outbid the producers' goods for the factors. And so there is a shift of the factors back from the production of producers' goods to the production of consumers' goods.
10. It is this constriction of the production of investment goods that constitutes depression.
11. Therefore, the thing to accomplish is to maintain equilibrium between relative prices of consumer goods and producers' goods.
12. Therefore, the thing to do is to control bank credit and thus do away with forced savings.

This is the theory that served as the major foundation of the Federal Reserve System in the U.S. and of the central bank in other countries.

[Aren't producer goods and investment goods synonymous? Yes.]

The trouble is in the shift in the relationship between the prices of consumer goods and the prices of investment goods. If both sets of prices remain constant or vary together, there is stability. But if one varies more than the other there is disequilibrium.

If production of producers' goods is increased through bank credit, there is more money in the community and thus there is increased demand for consumer goods at the same time that there is decreased production of consumer goods. This is forced savings. But if production of producers' goods is increased through the sale of securities this does not happen.

Out of this comes the University of Chicago 100% reserve plan. The idea of neutral money is advanced. It is money so dispersed that it has no effect on the relative prices of consumer and producers' goods. Thus the production of producers' goods has to come out of voluntary savings instead of forced savings. The banks would be controlled so that they could make no loans in excess of the amount of deposits on hand.

It is the shift from producers' goods to consumer goods that causes trouble. They seem not to be concerned with the shift from consumer to producers' goods.

Actually, the production of consumer and producers' goods vary in the same direction. This theory would have a little trouble explaining that. For this theory to hold, it is necessary to assume full employment. There is frictional but no involuntary unemployment. But in the case of history investment and consumption have always varied together. So we have never had full employment.

In our system, there can never be full employment. Or complete unemployment. As full employment is approached, inflation is hit which stops the economy before full

employment can be reached. (Russia's entire foreign policy is built upon the assumption that we'll have a depression.)

Assuming the classical theory of wages and unemployment, this theory will work. Those beyond a certain point are voluntarily unemployed, so there is no real unemployment.

This theory and the one we'll take up next do no violence to the classical theories of wages and employment.

1-13:

Back into the problem of hoarding. We know that "hoarding" is not a part of income. But can money be "hoarded"? All money is held all the time. Then either all the money there is, is "hoarded," or there is no such thing as hoarding in the aggregate.

In the underconsumption analysis, hoarding is thought of as the part of income not spent for consumption or investment. But income is receipt from sales. You can sell consumption or investment goods. What is hoarding a receipt from the sales of? Ir can't exist.

Individually, you can hoard. That is, you can receive income that you don't spend for either consumption or investment. But by the amount that you hoard, someone else goes in debt, and for the community at large hoarding is zero.

[If the above paragraph is true, it appears that income would be stable. Income is a certain amount for one period. In the next period whatever part of it is hoarded by some persons becomes an equal amount of debt by other persons. Then in that period income would be the same as for the first period. And so on. But that isn't true in fact. What's wrong with my reasoning?]

[Later: Income can still vary. In one income period, by the amount that some individuals hoard, others go in debt. The next period income is whatever is sold in that period, regardless of income of the previous period. I was assuming that income from one period is expenditure for the next period. In fact, income from one period is expenditure from <u>that</u> period.]

1-14:

Depression is what Von Hayek speaks of as a shrinkage of the structure of production, which is a lessening of the round-aboutness of producing and hence of capital goods.

Depression is characterized by forced savings as opposed to voluntary savings.

This round-aboutness concept is the axis upon which it is judged. How many steps are involved in the creation of a commodity? Bohm-Bawerk's example is that of a man whose cabin is located near his only source of water-supply or spring. He can (a) go to the spring and drink, (b) make a dipper and go to the spring and use it to drink, or (c) make a pipe which brings the water to his cabin. The degree of round-aboutness is the structure. Depression is a restriction of that structure.

By cutting down on the consumption phase, you can elaborate the round-aboutness. By abstaining from consumption, you can spend more time in producing capital. This idea came from Jevons, from thinking of machines as embodied capital. It focuses on what Bohm-Bawerk calls the theory of capital and interest. Capital formation occurs by not consuming. It is a decision of the entrepreneur relative to utility (want-satisfaction). What concerns us is the thing that determines how an entrepreneur makes up his mind. Abstinence in view of anticipated enhanced satisfaction of wants. You are making a choice in terms of time, and so the process is time-consuming. The time-consuming aspect of the process varies with the character of the structure. The higher the structure, the greater the time-consumption.

Look at the theory of capital formation in terms of the two kinds of goods. Consumer goods are those used to satisfy human wants; producers' goods are those not used to satisfy human wants (directly). You have a choice as to what kind of goods you can produce. You can go to the spring and drink without the aid of a dipper (consumer goods), or you can make a dipper which will enhance the production of consumer goods later (producers' goods). So a choice to make producers' goods lessens the production of consumer goods. Then how can you reconcile the fact that the production of consumer goods and producers' goods vary in the same direction? The theory still holds, they say, in view of the fact that you make a choice and your choice to make investment goods still lessens your potential production of consumer goods. That is, consumer goods production can go up when the choice is made to produce producers' goods, but it would have gone up more if it had not been for this decision. So in terms of potential they vary still in opposite directions, even though in terms of actual production they vary in the same direction.

What they are saying is this: An increase in production of producers' goods is not the same in all enterprises at the same time. The reason they go in the same direction is that income from producers' goods eventuates in increased demand for consumer goods, to some degree. So the increase in the latter is due to the increase in the former of the previous period. It is a matter of acceleration. The incidence of incline of production of consumer goods in one period is due to the incidence of incline of production of producers' goods in the previous period.

The theory of capital formation when stated in terms of round-aboutness comes out to be a little different from the theory of capital formation as more frequently stated. The critics usually attack on the basis of the fact that production of the two varies together.

Inflation is attained before full employment is attained. It is impossible to reach full employment. True inflation is that situation in which an increase in the rate of effective demand does not result in an increase in the offerings of the things demanded. That would be full employment. You can get neither true inflation nor full employment. You get a degree of inflation first that disrupts the economy. You get as low as 100% propensity to consume. [Me: You can get lower than that.]

The normal is the situation that results in the use of neutral money. This doesn't mean that there wouldn't be any bank credit. You increase or decrease the amount of money "needed " to keep it neutral. (With integration of industry you need more money; with trust-busting you need less.) Neutral money is such that it has no effect on the prices of producers' and consumers' goods.

1-17:

The round-aboutness of the productive process is not the same thing as the division of labor, although our text says they are the same thing. It is rather the division of capital.

The amount of capital per capita means the structure. The structure is a function of the quantity of capital in use.

This theory has given rise to the notion that depressions come out of booms. You shouldn't let things get too good or they'll get equally bad later. (There is a diagram here showing the schedule of employment, illustrating Von Hayek's application of the theory to depression, giving the theory of wages and the number of units employed.)

Combine this theory with Say's law and it would appear offhand that you couldn't have depressions.

These theorists reconcile this theory with the level of employment and income. (There is another diagram here showing Y, C, and I fluctuating over time.) They reconcile the two through the idea of frictional unemployment. Example:

1. Round-about process (more time-consuming per unit of production).
2. Direct process.

In the formula, P/T, T (time) remains the same in both #1 and #2, but in #1, P (production) is less. So they have P going up and going down at the same time, because they say that #1 is more productive. It is both more time-consuming and more productive, in the same time period. But that's impossible. In fact, both consume the same amount of time, but #1 produces more. It becomes absurd.

Another assumption is that producers' and consumers' goods are fundamentally different—in a physical sense, not an institutional sense. That's not true. The distinction is institutional: whether it makes a profit or not. As a matter of fact, all goods are consumed, in that they are destroyed through use.

1-18:

The durability of the goods is not pertinent to this theory. It is the purely institutional distinction between goods that is pertinent.

In this theory the general price level would decline, but individual prices could rise.

This theory says that debt causes depression. (Debt of course is the same as bank credit. Private debt cancels out.)

Hansen and Hayek agree that you can get an increase in capital formation through savings.

Capital formation is the present creation of goods to be used in the future.

How does plowing back profits create bank credit? (Answers in *Income and Economic Progress* and *The Formation of Capital.*)

What's bad about true inflation is that it wipes out debt.

The rate of interest as such has no effect investment. It can be no greater than the marginal efficiency of capital. It is the expectation of a change in the rate of interest that has an effect.

[Look up velocity. It is an unnecessarily elaborate way of getting at income. Velocity is the ratio between income and the quantity of money.]

[Capital formation comes out of debt. Then investment comes out of debt. Then of aggregate income, a certain part is always debt. Of course, you jerk.]

This theory is perhaps the most widely held business cycle theory held today.among businessmen.

Assuming that this theory is true, what do you do to act on it? Neutral money, control of bank credit.

1-19:

The 100% Reserve Plan is usually associated with the University of Chicago and with Fisher.

1. Economic fluctuations are monetary in character and cause.
2. Fluctuations are occasioned by variations in the level of bank credit.
3. Therefore, the basic requirement for attaining stability is the elimination of fluctuations in bank credit, and this could most easily be accomplished by requiring 100% reserves for banks.

4. This would require, however, a separation of the three kinds of banks in conformity with the three kinds of banking functions:
   a. Deposit banks.
   b. Investment banks.
   c. Government banks.
5. Several beneficent results would be brought about:
   a. All banks would always be solvent.
   b. It would wipe out all government debt.
   c. The community instead of the banks would get the profits from creating money..
   d. No individual (such as a banker) should have discretion as to whether the productive process can be carried on.

The 100% reserve plan is an outgrowth of the monetary over-investment theory.

<u>Non-Monetary Over-Investment Theory</u>

This conceives of the initial causes of fluctuations being non-monetary. Gustav Cassel is the maturest exponent of this theory. There is a rather striking similarity between this and the previous theory, in that both are applications of the same general theory, supply and demand. Outline of the theory:

1. Depression is a downward fluctuation in the production of capital goods. (The same as the monetary over-investment theory.)
2. The upswing is in response to new opportunities for investment. These new opportunities are occasioned by new inventions, the development of new techniques, the discovery of new markets, new frontiers, or by events such as a hailstorm or war.
3. The labor to produce the new capital equipment cannot be withdrawn from the production of consumer goods, because (1) variations in both are in the same direction, and (2) variations in the level of production of consumer goods are less than variations in the level of production of producer goods, in fact even when the variations are in the same direction.
4. Then where do they get the additional labor, within the general supply and demand theory? They get it from workers already employed—in agriculture. Agriculture is a peculiar kind of enterprise in that when labor is decreased, production does not go down. The institutional structure is such that arrangements can be more easily made to take care of the problem. They say that this is true also because of technological reasons. (This is not true, but it is true of the institutional structure.)
5. When the new fixed capital is completed, the variation must continue in the same direction or it will taper off. (A truism.) What they say is that if there is no additional non-economically-determined incident to continue the demand, the rate of demand for fixed capital goods falls off. Constriction therefore.
6. Also, when this new productivity reaches its maximum utilization of its available means (when all agricultural workers possible have been shifted), a demand in agriculture is increased, and thus halts the shift. Thus there is a price halt as well as a physical halt in the shift of labor. Agriculture prices go up. Also raw materials and the interest rate. As long as the expansion occurs, the ratio between agricultural and industrial purchasing power increases.
7. All these rises in cost reduce the market value of capital assets by virtue of having raised costs.

8. Therefore, there is a constriction in the production of capital equipment, and that's what constitutes depression.
9. So depressions are characteristic of transitional phases, so they are beginning to disappear with the closing of new frontiers, maturing in technology, etc. (Now they've sort of changed their minds.) So you really shouldn't do much about it; the world is settling down and things will sort of smooth out of their own accord. (You can't have progress without depression.)

1-20:

Cassel, *The Theory of Social Economy:*

Conjuncture movements are changes in the direction and the level of economic activity. Crises are those conjuncture movements that are down.

Gets away from rhythm idea of cycles as recurring because of something inherent in the cycle itself.

Conjuncture movements are non-agricultural.

In the crisis period you get rid of a lot of old methods and inefficiencies, so it really forces us to advance and it really helps the community.

Period of depression are not periods of over-production; they are periods of under-use.

The rate of interest passes from a fall to a rise when the output of pig iron reaches its old record. It starts to fall when the output of pig iron reaches a new record. Up until 1930 this was true. Cassel thought this was the case because: Capital is scarce.

Assumptions in Cassel:

1. Consumption has very little to do with cycles. Is this true? Ayres says no. Consumption is what causes investment to fall off so rapidly. (Principle of acceleration.)

1-21:

Contrast the two over-investment theories.

1. Shifts of the factors of production are different.
2. The cause of and the remedy for the non-monetary theory lie outside the economic process; in the other they are within the economic process itself.
3. Hayek has a moral factor in his theory: consumers are forced to save to pay for the new capital assets, which are in the hands of another group; i.e., one group benefits at the expense of the other. An ethical matter. In Cassel's analysis there is no ethical or moral factor. In both instances the fluctuation is brought about through the rate of interest, but in the one those who save are not the ones who come into the possession of capital assets, and in the other there is no forced saving and thus those who save are those who gain title to the capital assets.

(Emphasis has nothing to do with validity or accuracy. Over-emphasis is sometimes confused with inaccuracy.)

4. In the non-monetary over-investment theory, depression isn't so bad. It weeds out inefficiencies and sort of aids progress. But in the other, depression is of course bad.
5. In the monetary over-investment theory, you wouldn't have a depression if you didn't have a boom.

<u>The Under-Consumption Theory</u>

References:

1. Malthus, *Principles of Political Eonomy,* Book II.

(Malthus gets a <u>cycle</u>, but subsequent underconsumptionists make it <u>depression</u> theory.

2. Ricardo, "Notes on Malthus' *Principles of Political Economy*."

3. Hobson, John Akinson, *The Industrial System,* 1909; *The Economics of Unemployment,* 1922; *Rationalization and Unemployment,* 1931 "Underconsumption: An Exposition and a Reply," *Economica,* 1933.
4. Henderson, Fred, *The Economic Consequences of Power Production.*
5. Stratchey, *The Nature of the Capitalist Crisis,* Ch. 3.
6. Robbins, Lionel, "Consumption and the Trade Cycle," *Economica,* 1932.
7. Haberler, *Prosperity and Depression,* Ch. 5.
8. McCracken, Harlan Linneus, *Value Theory and Business Cycles,* Ch. 2,3,9,11,12,l7.
9. McFie, *Theories of the Trade Cycle,* Ch. 8.
10. Niesser, "General Overproduction: A Study of Say's Law of Markets," *Journal of Political Economy,* 1934.
11. Durbin, *Purchasing Power and Trade Depression,* Ch. 1, 2, 3.
12. Hayes, Gordon, *Spending, Saving, and Employment. One of the maturest.*

1-24:

Underconsumption Analysis

Ancient lineage. Ricardo won in his controversy with Malthus.

According to Say's law, there can be no insufficient effective demand, no under-consumption. It is difficult to refute. According to Malthus, however, goods exchange not for goods but for money; hence, there can be ineffective demand.

The theory usually takes the form, today, of the tendency of the supply of goods to outrun the purchasing power, due to inequality of income. Classical analysis took the position that S=D; thus there could be no over-saving. Savings in the aggregate do not decrease consumption in the aggregate. (This was held by Smith and Ricardo and up through Senior; the neo-classicists did not hold this.) Only the capitalist decreases his consumption. Savings, according to Malthus, result in additional production while at the same time is decreased effective demand.

The central substance of the argument hasn't changed much since Malthus.

(C.E. Ayres also clearly sets forth some aspects of the under-consumption analysis: *The Theory of Economic Progress, The Problem of Economic Order, The Divine Right of Capital.*

Central substance: It is inescapable that there should come about a deficiency of effective consumer demand, because if any income is not spent, either for consumption or investment, there will not be enough spent to clear the price tags because the sum of the price tags includes prime cost, --------, and --------. People do not spend all of their income; something is wrong with our institutions that this is so. Malthus centered his attack on the problem of unemployment. Sufficient effective demand cannot come from wages or there would be no profits, nor from profits or there would be no savings, so it should come out of rent. The classical theory of the rate of interest is a concept of the demand for and the supply of savings (brought into equality by the rate of interest). The under-consumptionists agree except as to the shape of the supply schedule of savings. (Keynes disagrees with both.)

Taussig conceived a negative rate of interest; the under-consumptionists a more elastic supply schedule.

Malthus says businessmen are just too busy to spend all their income in a time of prosperity, which tends to cause depression. In times of depression they spend more than their income, which gives an impetus toward prosperity. Thus he got a cycle.

Hobson, later, got depression theory. No cycles.

From 1933 to 1936 our country was using the balance-the-budget theory of the classicists. It didn't work. Then we tried the under-consumptionist theory: don't balance the budget. It didn't work too well either. The classicists said Y=C + I. The under-consumptionists said, no, Y=C + I + H (hoarding). Hayes said that as long as there is a positive rate of interest, there will be H. Interest is an incentive for holding money as such.

Then Keynes came along and said Y=C + I. Since Keynes came out we have been applying his theory even when we don't admit it. So are all the other countries, including Mexico.

1-25:

As long as there is a positive rate of interest, people build up prices of established debts, and there is hoarding. This is the under-consumptionist position. But this very activity decreases the rate of interest.

The rate of interest is, in fact, sometimes low at the bottom of the cycle and sometimes high. It does not have much effect as such on the amount of investment. It has effect only indirectly through its effect as it is related to the marginal efficiency of capital.

Investment is expenditure made with the expectation of gaining a return. It is the expectation of change, not the quantity of funds, that is important.

1-26:

Suggested readings for Keynesian theory:

1. Keynes' *General Theory of Employment, Interest and Money.*
2. Hansen, *Full Recovery or Stagnation,* Ch. 1.
3. Saulnier, *Contemporary Monetary Theory,* Part IV**.**
   Not very satisfactory.
4. Hawtrey, *Capital and Employment*, Ch. VII.
5. Lerner, A.P., "Mr. Keynes' General Theory of Employment, Interest, and Money," *International Labor Review*, 1936.
6. Hicks, J.R., *Economic Journal* , 1936, pp. 238-53.
7. Pigou, A.C., "Mr. Keynes' General Theory," *Economica,* 1936.
8. Roll, Eric, *History of Economic Thought,* pp. 524-42.
9. Keynes, "Alternative Theories of the Rate of Interest," *Economic Journal,* 1937.
10. Harris, Seymour, *The New Economics.*
11. Viner, "Mr. Keynes on the Causes of Unemployment," *Quarterly Journal of Economics,* Vol. 51, pp. 1936-37.
12. Knight, Frank, *Canadian Journal of Economics,* 1937, pp. 100-23.

Back to Under-Consumptionism

The market process provides no way for the maintenance of continued sufficient effective consumer demand, because it makes it mandatory that individuals do not spend all of their income in the period of its receipt. Hayes and Malthus take the position that they cannot do so. The central core of under-consumption theories take exception to the classical tradition that there is no motive for holding money as such. They take exception to the Marshallian theory that money has no utility. Under-consumptionists say that it's true that money has no utility as such for the community at large, but to the individual it gives satisfaction to have money. Get a concept of the diminishing utility of money in contrast to the classical theory of the constant marginal utility of money. Get the answer that the difficulty lies in the inequality of distribution of money. Also get the idea of

incentive taxation. The comparative rigidity of prices (or elasticity) causes insufficiency of effective demand. If prices always varied directly with the purchasing power needed to recover the goods from the market, the under-consumptionists would have a very difficult time supporting their position. Hobson especially went to great lengths to demonstrate that price does not vary in such a fashion; It is an institution, and it is customary and traditional. Prices are a moral issue. The point is very ably demonstrated.

When you have a variation in effective demand, you get a variation in price rather than in production. Under-consumptionists had to re-examine their analysis in the light of that happening.

The quantity of money people hold is not a function of the amount of income spent. The quantity of money people hold is simply all the money there is.

1-27:

Hobson does not hold that saving equals investment. It may for awhile, but when there is over-investment the result is ineffective consumer demand, which results in the inequality of saving and investment.

Keynesian Theory

If the supply and demand (classical) theory of employment holds, you could increase N in four ways:

1. Reducing frictional unemployment.
2. Decreasing the marginal disutility of working in order to decrease voluntary unemployment:
   a. Decrease social insurance, etc.
3. Increasing real wages by a reduction in the price of wage-goods. ((Increasing marginal physical productivity of labor in the wage-goods industries.)
4. A rise in the price of non-wage-goods relative to the price of wage-goods. (Would result in #3.)

Keynes sets out to prove that this same theory requires both an increase and a decrease in the price of wage goods in order to increase N, and you can't have both. He is right.

He has two objections to the supply curve:

1. Labor does not respond to a change in real wages as it does to a change in money wages. As money-wage rates go up, real-wage rates go down, in fact. What you get is an increased offering of labor with an increase in disutility, which is incompatible with the classical theory.
2. There is no expedient whereby the laborer can adjust his real wage. The market process offers no way. The bargaining between employer and employee does not determine real wages, although it may determine money wages. (The escalator clause is based on Keynesian theory. It may not work out; sometimes could result in spiral. So long as the firm is not operating at the firm is not operating at the supply-price schedule, it will work.

1-28:

The Determination of N

Definition of terms:

Aggregate supply price, or function.

Aggregate demand price, or function.

Envision two enterprises with both supply and demand for N sloping upward in both.

Both supply and demand are expectations, but in supply it is what the employer _must_ expect to receive in order to hire a certain number, in contrast to demand, which involves

what he <u>does</u> expect to receive. With $ on the vertical axis and N on the horizontal axis, the supply schedule Z and the demand schedule D both slope upward, but the supply schedule is steeper. The point of intersection indicates the level of N and the wage.

This is a picture of the Keynesian theory of employment. So the shape of these schedules is very important. A good study would be on the shapes of these schedules for various enterprises, to see which enterprises it would be most effective to underwrite. Dropping the supply function in #1 would have much more effect in increasing employment than dropping the supply function in #2.

We still are running about $7 billion a year investment out of about $47 billion income.(?)

Keynes' position is that you can't have full employment because you reach inflation first.

Outline of Keynes' *General Theory of Employment, Interest and Money*

1. As employment increases, aggregate real income increases.
2. As income increases, consumption increases but less than the increase in income.
3. Therefore, if the whole of the increase in income were devoted to the purchase of consumer goods, operators would suffer a loss.
4. Therefore, there must be an increase in investment equal to the difference between the increase in consumption and the increase in income.
5. Therefore, given the schedule of the propensity to consume, employment will depend on investment.
6. The rate of investment depends upon the expected net income to be derived from investment and the amortization of the funds invested. (It depends upon the relationship between the marginal efficiency of capital and the rate of interest.)
7. There is only one level of employment consistent with equilibrium. Therefore, the level of employment in equilibrium depends upon: (a) the marginal efficiency of capital, (b) the rate of interest, and (c) the propensity to consume.
8. Given the schedule of the propensity to consume and the schedule of the inducement to invest, there can be only one level of employment consistent with equilibrium.

[Simplified Statement of Keynes' General Theory of Employment, Interest and Money. By Gladys Parker Foster

1. If employment increases, aggregate output increases.
2. Aggregate output is equal to aggregate income.
3. Aggregate output or income consists of consumption and investment, i.e., Y=C + I.
4. If income increases, consumption increases but not by as much as income.
5. Therefore, if there is an increase in employment, there must be an increase in investment equal to the difference between the increase in income and the increase in consumption, or employers will suffer a loss.
6. The level of investment is determined by the inducement to invest.
7. The inducement to invest depends upon the relationship between the marginal efficiency of capital, i.e., the return on investment, and the rate of interest. If the marginal efficiency of capital is greater than the rate of interest, there will be investment, i.e., production of capital goods.
8. Therefore, the level of income depends upon three independent variables, the propensity to consume, the marginal efficiency of capital, and the rate of interest.]

Back to lecture notes.

Terms:

Propensity to consume equals the proportion of total income spent for consumption.
Marginal efficiency of capital equals the rate of discount that would bring the series of annuities expected from ownership throughout the life of a capital asset into equality with its supply price. Or the ratio of expected yield to supply price. This concept is useful because it gives you a way of determining the termination of capitalization. In pre-Keynesian analysis there was no way of determining the value of land according to capitalization. Now, in assessment, true or real value is in Keynesian terms.

1-31:

Keynes presents his argument as a denial of Say's law. This is unfortunate. He is in fact denying a corollary of Say's law, i.e., that there is no such thing as insufficient effective demand.

Keynes takes the position that you can increase savings by taxing income.

The classicists say that the rate of saving determines the rate of investment. Keynes says no, the amount of investment determines how much can be saved. Both, of course, hold that S=I. Keynes says that under the classical assumption there could be no depression.

The determinants of savings (and therefore investment) are in the decision to invest, not in the decision to not consume or to save.

A=receipts from sales
Y=income in money's worth (money's worth of those things that have come into existence during the period minus what you used up in making them
U=user cost=money's worth of those things that are used up by virtue of producing Y
Y=A-U
Y=C+I
S=Y-C
Therefore S=I.

Keynes is inaccurate in his discussion of the propensity to consume. Many attack him on that score (Gordon Hayes, C.E. Ayres, Haberler). Division into objective and subjective factors.

2-1:

If Keynes' theory of the rate of interest is not valid, is his general theory of employment therefore not valid? Or does the latter hold anyhow?

The aggregate supply function is the relation between the aggregate supply price and the level of employment. It is the money return that the entrepreneur must expect to gain to induce him to produce an additional unit.

Keynes' conclusion is the same as that of the under-consumptionists—that the forces of the market, without interference, lead to insufficient demand i.e., depression. But he differed with the under-consumptionists in the reasons for this result, and therefore in the public policy that should be carried out.

The Propensity to Consume

Determinants:

A. Objective factors, discussion:
1. The propensity to consume varies directly with the wage unit, which is the same as saying that a rise in the cost of living causes a greater amount to be spent on consumption.
2. (Missing)
3. Of some importance in the short period: Cost is not brought into consideration; such gains are un-calculated. "Easy come, easy go." Windfall losses have similar

treatment, in reverse. This result contravenes the propensity of the community at large. It is limited to a small segment of the people and to a certain specific time. (Speculation is the expectation of gaining a return through a variation in price.)

4. Not particularly important except insofar as they affect the price of capital assets (windfall gains and losses). Indirect result only. Savings vary inversely with the rate of interest, not directly as the classicists hold. The classical theory conceives of interest as the price of saving, or that price that equilibrates the demand for and the supply of savings. In fact, when interest goes up investment goes down. Therefore, the classical theory, which holds that a rise in interest would cause a rise in savings and investment, is not right. Keynes: what people pay for by interest is the use of money. They pay someone to part with liquidity and to purchase a debt. So interest equilibrates the supply of and the demand for money. (This last statement is unfortunate.)
5. A tax on large incomes, e.g., will increase the propensity to consume. Sinking funds will lower it. Also retiring bonds, selling securities by Federal Reserve banks, and putting money in vaults.

2-2:

Continuation of discussion of objective factors determining the propensity to consume.

6. Changes in the expectations of the difference between present and future incomes. If he expects the latter to be higher than the former, his propensity to consume will be higher.

Keynes and the under-consumptionists agree that depression is caused by a deficiency in effective demand. Their reasons for the deficiency, however, are different. The under-consumptionists say that saving is greater than investment. Keynes says that *efforts* to save might reduce effective demand. The three independent variable are the items that determine effective demand: propensity to consume, rate of interest, and marginal efficiency of capital.

Now we consider the subjective factors determining the propensity to consume. There are two categories, one for individuals and one for corporations.

The inducement to invest, as we have said, is a function of the rate of interest and the marginal efficiency of capital. The latter is the ratio between the prospective yield and the supply price. The prospective yield, A-U, is symbolized by Q. Add up Q1, Q2,, etc., and you get the prospective yield. (The supply price is the price necessary to induce a producer to produce an additional unit of capital; it is not the market price.) The ratio between prospective yield and supply price gives us the marginal efficiency of capital. The schedule of the inducement to invest is that schedule that will bring that ratio to unity. The rate of discount that will bring the prospective yield into equality with the supply price is the marginal efficiency of capital. (The marginal efficiency means the efficiency of each additional unit. It doesn’t refer to aggregates.) The extension of investment in any particular capital asset causes the marginal efficiency of capital to decrease, although the aggregate efficiency increases.

The schedule of the marginal efficiency of capital, however, will not alone give us the rate of investment.

2-3:

Keynes does not say that incomes should be equal. Nor does he deal with an ism; he describes the existing facts.

Investment flows toward those industries in which the marginal efficiency of capital is highest. A schedule of the marginal efficiency of capital of all industries will give you an investment schedule, but you still don't know what investment will be because you still don't have the rate of interest. Investment will continue as long as the investor thinks he can make more money there than elsewhere. The entrepreneur can hold his money in case, or buy an existing debt, or buy capital assets.

In his criticism of the classical theory of interest, he brings up two points to approach the matter:

1. Observation shows that we do not have an increase in the rate of saving when we have an increase in the rate of interest. Rather, the rate of saving decreases.
2. Then what does equilibrate the demand for and the supply of savings? The rate of interest does not; it is a payment for parting with liquidity. It would seem to follow that the inducement to invest is that schedule which would bring the marginal efficiency of all types of capital into equality with the rate of interest. The reat of equilibrates the demand for and the supply of money. Three determinants of demand:
   a. The transactions motive.
   b. The discretionary motive.
   c. The precautionary motive.

2-4:

The distinction between Keynes' and the classical theories of the rate of interest. (Both are supply and demand theories.)

1. The classicists say that interest is payment to induce people to save. Keynes says it is inducement to people to part with liquidity.
2. The classicists say that interest is a price equalizing the demand for and the supply of savings and that the demand for savings is the same as the demand for capital. Keynes says the demand for capital goods and the demand for savings are dependent variables. They both depend upon the propensity to consume, the rate of interest, and the marginal efficiency of capital. The amount of cash that people choose to hold, according to Keynes, is independently determinant of the amount of investment that people choose to make. The demand for capital is in part dependent on the rate of interest. The classicists consider the demand for savings as the same as the demand for capital. Keynes does not.
3. The classicists hold an automatic (or at least unique) investment of savings. Keynes holds that they overlook the effect on income of not spending for consumption or investment. (Keynes did not hold that an increase in the quantity of money automatically reduces the interest rate, although it would appear from this that he might. But there are necessary and concomitant events on the other side of the equation. A change in the quantity of money affects all three independent variables.)

Liquidity preference. Increasing the quantity of money doesn't affect whether people hold it or not; they hold all of it all of the time. But the demand for money changes.

Determinants of liquidity preference:

1. Transactions motive. Enough money to carry on business. Two factors: (a) carry on current transactions, (b) take care of current expense before receipt of money payment for sales that are being made currently. Transactions funds vary directly with income.

2. Precautionary motive. Desire to be secure in meeting expected and unexpected expenses in the future. Also to be able to take advantage of some suddenly appearing opportunity to gain (A bargain or something.) Varies directly with Y.
3. Speculative motive. The object is to secure profit from knowing better than the market what the market will do. Knowing what changes will occur as a result of expected changes in the rate of interest. (You can shift only in differential liquidity, not in aggregate liquidity.) Expectation of gain through a variation in price. It is different from investment, which is expectation of gain through the use of an asset, and from gambling. In gambling, gains and losses exactly offset each other; in speculation, this is not necessarily true.

Quantity of money (supply of money) depends upon:
1. Central banking policy.
2. Government fiscal policy.

2-7:

The supply of money is not determined by abstention from consumption but by the above-named factors. This is very significant. If investment is not a function of abstention from consumption, many answers may turn out to be different than previously supposed.

If everyone tries to get liquid, the interest rate rises. Banks would probably then be inclined to supply more funds, that is, to create money. Individuals are the same as banks in increasing supply insofar as they make available more of what they hold. The difference is that when banks lend they <u>cannot</u> make use of what they don't lend, while when individuals lend they <u>can</u> make use of what they don't lend. The lending power of both is reduced, but the kind of liquidity preference is different in each case. The motives for liquidity preference would seem to be a little different in the case of banks than in the case of individuals. The transactions motive doesn't apply to banks; all they need is enough money for day-to-day transactions, and they can get this from the Federal Reserve Bank. The precautionary motive applies to both, but perhaps a little differently. The speculative motive is probably identically applicable.

Both the classical and the Keynesian theories of the rate of interest could stand a little investigation. They're both complete, but both suffer from difficulties.

The monetary over-investment theorists disagree with Keynes here in their theory that bank credit increases prices a similar amount (forced saving), so all saving must come from individuals (voluntary saving).

Every asset has a rate of interest—the "own rate." The own rate of money is the rate of interest. If the own rate of wheat is greater than the own rate of money, people will prefer to buy wheat. In order for people to buy any asset, therefore, its own rate must be greater than the rate of interest. Otherwise, people would prefer to hold money, because:
1. Its carrying costs are low.
2. It doesn't depreciate.

The own rate of money is generally the highest own rate.

The money own rate is the rate equal to the marginal efficiency which other assets must attain in order to sell.

Stamped money and similar plans would raise the carrying costs of money. Keynes says they were thinking in the right direction.

The rate of interest is therefore the most important own rate, for the above reasons. Another reason is its low elasticity. In this sense it is different from other commodities. You can't go into the business of making money. The power of the bank to produce

money is set by law as to quantity, and so the incentive for making money doesn't work the same as the incentive for making automobiles.

2-8:

The difference between the marginal efficiency of capital and the rate of interest. The former is a function of the yield of a capital asset; the latter is a function of the yield, carrying cost, and liquidity premium of a commodity, which may of course be a capital asset. No, that's not it. Does money have a marginal efficiency? That is, can "marginal efficiency of capital" refer to money capital? No.

Keynes would say that it is impossible to finance additional aggregate investment out of voluntary savings. Hayek says that's the only way it can be done.

Back to the money rate of interest. It is usually higher than other own rates because:

1. Low carrying cost and depreciation.
2. Low elasticity.
3. There is no substitute for it. Its use value is determined by its exchange value.

2-10:

Investment will continue until the marginal efficiency of capital is equal to the rate of interest, and no further. The investment demand schedule is the aggregate for all types of assets, which will bring each of the marginal efficiencies of capital into equality with the rate of interest. The investment demand schedule is the demand for capital. It varies inversely with the rate of interest, given the marginal efficiency of capital.

The classical theory holds that a higher rate of interest results in more saving and thus in more investment. Keynes says that a rise in the rate of interest results in a drop in the rate of investment and thus a drop in the rate of saving. The latter is in fact the case. Therefore, the rate of interest is not the payment for saving, as the classicists hold.

Ceteris paribus, an increase in the quantity of funds would result in a lower rate of interest, which would result in a higher rate of investment. (In fact, there are other factors which may prevent a fall in the rate of interest in response to an increase in the quantity of money. That is, "other things do not remain equal.") Thus, burying funds in the ground for people to dig up is better than nothing in a time of depression. But building a hospital is better. Here he differs with the under-consumptionists. Keynes says you get additional purchasing power and the hospital too (which is a capital asset.) The under-consumptionists would say that building a hospital would give rise to too much saving. It would increase consumer demand but would also increase saving, and saving tends to be too high.

2-11: More on "The Propensity to Consume."

Debt is equal to capital. That is, capital is created by increasing debt.

Ayres would start progressive taxation just above the income at which the propensity to consume becomes fractional.

You can't gain in the aggregate at the expense of individuals in the community. There is no such thing as an isolated gain or loss. If you gain at the expense of others, there isn't a gain.

The multiplier is the ratio between the increase in income and the increase in investment that occasioned that increase. It is the reciprocal of one minus the marginal propensity to consume.

The difference between the classicists and Keynes on this point is that the new expenditure never disappears, according to the classicists. If an additional dollar is invested, it continues to be spent in full. The multiplier is infinity, and the ratio of

acceleration is unity. Keynes says this isn't true, because people don't spend all they receive.

Without knowing the time it takes for the multiplier to play out, you don't know how much is required to raise the income a certain amount. If you know the ratio of acceleration, you know how much you have to spend. The multiplier gives you aggregate income; the ratio of acceleration gives you the rate of increase of income.

2-15:

People will hold a capital asset the marginal efficiency of which is below the rate of interest, but they will not hold a good the own rate of which is below the rate of interest. The own rate is chiefly a matter of liquidity.

The multiplier equals the reciprocal of one minus the marginal propensity to consume. The difference between the marginal and the average propensity often gives the naïve student the idea that there is something wrong with the multiplier.

The marginal and the average propensity vary in the same direction but not at the same rate. In a poor community the multiplier may be no higher than in a wealthy. A community may tend to hold additional income—that is, spend it for neither consumption nor investment. It may have a very high average propensity to consume but a relatively low marginal propensity to consume. In a high-income community the average propensity to consume is always lower than in a low-income community, but the marginal propensity to consume may be higher.

Application of the principle of the multiplier and of acceleration to the problem of employment: Employment is 50 million, and we want it to be 60 million. Income is $150 billion, so it will have to be $180 billion. The marginal propensity to consume is 75%, so the multiplier is 4. Then is the answer to spend $7.5 billion? We want this increase to come about within a year, and Keynes says nothing about how long it will take for the multiplier to work. We must bring into the problem the principle of acceleration.

As effective is increased in conditions of unemployment, both prices and production (employment) will go up. It is not easy to establish the point at which production ceases to go up and price only goes up. (It will be somewhere before full employment is reached.) It is not easy to determine national income. How do we know that employment is going up or going down?

Keynes and Ayres don't attempt to calculate money income. They would solve the problem through the level of employment. You can count the number of people employed.

2-17:

"How to Prevent Socialism," *Fortune*, February.

[The only way a community can save is to invest. Investment is capital formation is debt. Then the only way you can save is to go in debt.]

Keynes forces you to the conclusion that you can export your unemployment. He and the mercantilists are in agreement in that. (Where they disagree is that money is wealth.) So Keynes' theory is sometimes called "neo-mercantilism." You can produce goods and give them away and make your own country rich. A favorable balance of trade in the long run means giving goods away. And in conditions of unemployment it helps our economy.

2-18:

The effect of money changes in the wage-unit. Classical theory says that a reduction in money wages will reduce prices and thus cause an increase in effective demand and encourage entrepreneurs to expand and thus raise the level of employment. Price is the

automatic adjustor. Such reasoning comes about by taking the case of an individual entrepreneur and raising it to the level of the aggregate. Keynes says, however, that the two situations are different.

Keynes asks, does a reduction in money wages have an effect on the level of employment, given the three independent variables? This is an illogical (a nonsensical) question, because there can be no effect without an effect on these three variables, which are the determinants of employment. This is similar to the question the classicists ask on that score.

Does a reduction in money wages have an indirect tendency to affect employment as a result of its effect on these three independent variables? Keynes asks this question. First, what would be the effect on the propensity to consume of a reduction in money wages? Income would be redistributed, from wage-earners to (1) the rentier, (if prices have been reduced in proportion to the fall in money wages), or to (2) the entrepreneur (if prices have not been so reduced). So there would be a decrease in the propensity to consume. Second, what would be the effect on the marginal efficiency of capital? The immediate effect could be to raise expected proceeds, but the expectations could not be realized, unless the propensity to consume were 100%. And in fact the propensity to consume goes down, so the marginal efficiency of capital goes down in spite of expectations. However, the question of foreign trade enters. Investment by foreign countries might go up. The total effect on the marginal efficiency of capital then depends on whether entrepreneurs expect the money wage to go down more, stay the same, or bounce back. If the last, the marginal efficiency of capital will go up. If the first, the marginal efficiency of capital will go down. So the answer to this question depends upon expectations for the future. Usually, however, when wages go down there is an expectation of a further fall, so a fall in the money wage results in a fall in the marginal efficiency of capital.

2-21: Variations in money wages.

Effect on the rate of interest. A reduction in money wages would reduce liquidity preference. (through the transactions motive), which would reduce the rate of interest and therefore increase the inducement to invest, and therefore the level of employment, unless a further drop in the rate of interest is foreseen, in which case liquidity preference (the speculative and precautionary motives) would go up and the rate of interest would go up and the inducement to invest would go down. In other words, if the reduction in the rate of interest is thought to be terminal there will be a rapid rise in investment, but if the reduction in the rate of interest is a trend investment will go down. People just wait until it hits bottom.

We are in part stymied by this because we can’t change the rate of interest on old debts. Even if we could, a reduction of interest rates could be brought about more easily than by reducing money wages. Do it rather by increasing the quantity of money.

2-22: Keynes’ theory of prices.

Take off from the quantity of money theory. If effective demand varied directly with the quantity of money, then, “So long as there is unemployment, employment will change in the same proportion as the quantity of money,” etc. If there is full employment, price changes. But there are some difficulties in this. He explains prices, then, as a deviation from Fisher’s equation, by virtue of some complicating factors:

1. Effective demand does not change in direct proportion with the quantity of money.

Liquidity preference also affects effective demand.

2. Resources are not homogeneous. So there will be a decreasing rather than a constant return as employment increases and you get an increase in price before all the factors are employed.
3. The factors are not interchangeable. There is very little mobility in terms of interchangeability. This results in a rise in price in some areas while there are unemployed units in other areas. Bottlenecks. This can occur without any increase in the quantity of money.
4. The wage-unit will tend to rise before full employment is reached.
5. Remuneration of the factors at the margin does not change in the same proportion as an increase or decrease in the quantity of money. Marginal productivity varies in different firms.

Thus the theory of prices might be stated a little differently. An increase in the quantity of money will raise both employment and prices, and as you approach full employment the increase in prices is at a faster rate than the increase in employment, so as you approach full employment you approach true inflation. So inflation keeps you from full employment. On the other hand, it affects the ratio between the rate of interest and the marginal efficiency of capital through its effect on prices.

What is the relationship between the rate of interest and price? Is there a peculiar, functional relationship? Or can we say no more than what Keynes says? Primarily, the effect of the quantity of money on price is through the rate of interest.

2-23:

[Does rational mean based on evidence, or does it merely mean on a conscious level, based on whatever?]

What Keynes is really talking about is the theory of price levels.

What is user cost? A1 and G, B prime and G prime.

2-24:

Why do you hit true inflation before full employment? Resources are not homogeneous; they are not completely mobile. You will hit bottlenecks in certain areas because of some stoppage of supply (labor, land, or something), and prices will go up in those areas. Certain commodities can command terrific prices. In Keynesian theory, here is the connection between monopoly and inflation. Monopoly makes the bottlenecks appear sooner in relation to the level of employment—the less close you can get to full employment. Monopoly is in a position to increase prices. In effect, monopoly is a bottleneck—a way of increasing prices rather than production.

In fact, you can't hit <u>true</u> inflation; it means a price level of infinity. You reach neither full employment nor true inflation. First, you hit such a degree of inflation that the economy can't operate. It breaks down before you hit <u>true</u> inflation or <u>full</u> employment. [But it is due to approaching true inflation, not to approaching full employment.]

2-25:

User cost is equal to sacrifice incurred in producing A.

Effective demand is income. Keynes' attack is in the question, "How do you get voluntary savings?" How can effective demand be greater than effective demand? For capital formation to come out of voluntary savings, it would have to be. It really comes out of credit. We get positive capital formation all the time, through bank credit. Then the question is asked, how do entrepreneurs pay it back? They don't. If one does, another

acquires the debt. There is no way to pay off debts for the community at large. Individually, debts are paid—one pays his debt, and another acquires one.

Before we know how much capital formation is during a period, we have to take out user cost. How do we know how much it is? It is conceived as the difference between what the entrepreneur <u>has</u> and what he <u>could have had</u> if he hadn't produced. It's a little fuzzy, but the entrepreneur can calculate it. But our bookkeeping methods don't account it—part of it isn't necessary to business operation from the viewpoint of the entrepreneur. What Keynes is saying is that capitalism is a credit kind of economy, that you can't have capitalism without credit. Credit can be either bank credit or printed money. Thus his theory is not destructive of capitalism but is in fact the only explanation which admits of its existence.

2-28: Comparison of Keynesian theory with under-consumption theory:

Similarities:

1. A free market does not work out to maximize production.
2. Both claim to be presenting continuing and inclusive factors with the universe identified—the market process.
3. Both constitute a theory of depression.
4. Both think there is some unique relationship between saving and investment.

Differences:

1. Under-consumptionists get a deficient effective demand through over-saving—hoarding, that is. They identify income, saving, and investment as quantities. Keynes says this doesn't solve our problems; to be significant in analysis they must be identified as <u>rates.</u> This is very important. The propensity to consume, e.g., is the ratio between two rates. That's the only way it can be meaningful.
2. What the relationship is between saving and investment. The under-consumptionists say that investment comes out of saving. Keynes says no. The persons who do the investing have no identity with those who do the saving. Here he agrees with Hayek: Those who purchase capital assets are not those who save.
3. Both are looking at the rate of effective consumer demand; both agree that the demand for capital goods is derived from that. But Keynes says that it is by virtue of the fact that S=I that you can have depression; the under-consumptionists say that you have depression because S is <u>not</u> equal to I. (The classicists say that you can't have depression because S=I.) Those who decide to save are not the same ones as those who decide to invest, but saving and investment are necessarily equal. When the sets of circumstances that determine each are not in harmony, we have fluctuations—Keynes. Decisions to save reduce income, and that's what constitutes depression.

[It seems to me that Keynes discusses depression from the standpoint of investment rather than consumption. The latter is very important but relatively constant, so he focuses his attention on investment and decisions to invest. But I guess he holds that decisions to invest come from changes in the rate of consumption. A slight change in the latter causes a rapid change in the former. The propensity to save is determined by the factors that determine the propensity to consume. Thus it is important but doesn't vary so much as the factors that determine decisions to invest. In a depression the propensity to consume goes up, so the propensity to save goes down. But I thought that everyone <u>wanted</u> to save in a depression (liquidity preference) but <u>could</u> not. Am I confusing

propensity with incentive or desire? I guess so. Propensity is tendency or habit, not desire…. Saving and investment are kept equal by variations in income, not by decisions to save and/or invest. The only way you can stabilize the economy is to control income (employment). You can't control propensity to consume or inducement to invest. Then how can you control income? Government investment.]

3-1:

Under-consumptionist and Keynesian theories hold that depression comes about through the failure of the market process to provide for effective demand. In this they are in contrast with the other theories which hold that depression is caused by something outside of the market process.

But Keynes differs from the under-consumptionists in that the latter say that a diminution in effective demand comes about through hoarding. Keynes says that a diminution comes about for other reasons.

Similarities between pure monetary theory and these two theories:

1. The idea of liquid cash constituting effective demand is present in some measure in Keynes and the under-consumptionists.
2. $\frac{MV + M'V'}{T} = P$ is common to both pure-monetary and under-consumptionist theories, but Keynes disagrees and attacks it.
3. All agree that there is a failure in the rate of effective demand, and they are the only theories that so agree.

All disagree as to its cause, so policy is different for all three. The rate of effective demand and production vary together in Keynes. Hawtrey would control the rate of interest. There is some of this in Keynes. The under-consumptionists would agree with the pure monetary theory that there is a discrepancy between consumer outlay and consumer income, with some differences in terminology. Under-consumptionists have a glut on the market; pure monetary theorists do not.

Keynes says that the faster goods come out, the higher the level in transit. The under-consumptionists and the pure monetary theorists hold that when they come out slowly, the level rises. Note that the principle of acceleration is at work here. Keynes says that when goods come out slowly, inventories decrease even more rapidly. When the rate of coming-out increases, inventories increase more rapidly. Last year when the production and consumption of wheat were at an all-time high, there was more of a glut of wheat than at any other time—a substantiation of Keynes' theory. In fact, the rate of investment turns up after an increase in income. This too supports Keynes. The better things get, the better you expect them to get, and the worse they get, the worse you expect them to get. The under-consumptionists say that the inducement to invest is greater when consumption is low, because people expect things to get better. And the inducement to invest is lower when consumption is high. That's not true.

In Keynes, something outside the market process has to happen to increase income. In the market process, things would just keep on getting worse.

It may be true that at a period of low income the desire to invest may be high because people think things will have to get better, but would-be investors couldn't get money. Banks had plenty of funds but wouldn't lend. Farmers couldn't borrow a cent. Bankers knew that agriculture was losing money.

3-2:

Credit is outside the market process. The quantity of money is determined by government fiscal policy and central banking policy, both of which are determined independently of the market process.

Continuation of comparison of theories:

In the monetary over-investment theory the trouble is with credit, which is non-market-determined. (In the non-monetary theory, it is any item.) If you follow it through, you come to the conclusion that it is impossible to create more capital in the long run than people choose to save—in the monetary over-investment theory. It is different from Keynes in that in Keynes all capital formation is out of credit, and none out of voluntary savings. In fact there are no voluntary savings, according to Keynes. Either Hayek or Keynes, then, is dead wrong.

In the over-investment theory, a boom has an inevitable bust. What foes up must come down. The Hoover Administration was applying the monetary over-investment theory.

(1) we had to pay for our orgy of producing in the 20's—it was inevitable—all we could do was to try to ease the downswing. That is x <u>had to</u> equal y, but it could be spread out a little so we could adjust to it. So we should make some funds available to those who invest, so we gave the banks a lot of money. That didn't help. So we created the RFC to make funds available to anyone who can convince the administration that he wants to invest. That didn't help. The farmers still couldn't get any money. So we created the Federal Land Bank. That might have helped a little. Incidentally, it made money by lending to farmers who had been turned down by bankers who thought they couldn't make any money. So application of this theory didn't help; things continued to get worse. The community was getting desperate. Then Roosevelt got in and did some experimenting. He didn't have any theory, but he did <u>something</u>, and during the thirties we began to realize that Keynes' theory would work.

3-3: In regard to Say's law:

Keynes holds that the fact of production does not create sufficient effective demand to maintain that level of production. Things are sometimes produced which can't be sold. This is an attack not on Say's law but on an imputation of Say's law.

All Say's law as such proposes is that the creation of a product distributes its money's worth to the factors.

Both over-investment theories operate as if the imputation (corollary) of Say's law were true. Keynes says it doesn't hold. Keynes says that if products are sold by virtue of a decrease in price which came about by virtue of a decrease in effective demand, there will be a diminution in the rate of production. He says that if you have pure competition there will be no diminution in the rate of effective demand, but there will be no return on capital. But where there is a struggle for the market there will be a diminution.

3-4: Alvin Hansen.

Hansen is difficult to classify as to the theories we have been considering. He is Keynesian, but his influence in business cycle theory has not been of that character. His contribution, however, is primarily an application of Keynesian theory to problems in our economy.

He has long recognized the insufficiency of investment. Even if consumption were stabilized, collapse would occur. There is a chronic inability to use the factors of production, inherent in our economy in its present structure.

The more recent Hansen work has been almost purely Keynesian, but he is of interest to us largely because of his earlier work in connection with business cycles.

How does insufficient effective demand affect our use of the factors through its effect on the inducement to invest? Hansen posed this question. Our kind of economy is geared to work under conditions of expansion, and we have reached the point where it is no longer possible to expand as rapidly as is necessary to maintain full employment.

Three things in this connection he points out:

1. A matter of population. In one hundred years our population has increased 100,000,000 people. In the present century, world population has declined.
2. A great many frontiers were opened up in the 19th century. At the beginning of the 20th, most of these were closed. In America the frontier was land. A frontier is something that does not have to be entered as a factor cost (recovered in production).
3. The employment of labor in the production of capital goods as such. Since the turn of the century, technological innovation has been of the character that requires less of the factors—capital-saving as contrasted with capital-consuming of the previous century and a half.

Whereas Keynes proved that expansion is a requisite for prosperity, Hansen concludes that new investment opportunities have been and are disappearing. This has been occasioned by the three factors mentioned, which have really been a lessening in the rate of expansion rather than an absolute decrease.

How can we maintain the necessary rate of increase increase in effective demand to maintain employment, Hansen asks. We had trouble on that score even when we were expanding very rapidly. In the past we have done it through bank and increasing investment, but they have been only partially effective. We seem to be working through a central banking policy, but that isn't enough.

Three ways to maintain purchasing power:

1. Increasing investment.
2. Spending consumer hoardings.
3. Government finance of new credit.

Try to get people from wanting to hold money. Provide sufficient social security so that there will be a weakening of the precautionary motive to liquidity preference. Try to weaken the speculative motive and strengthen the investment motive. Lessening the precautionary and speculative motives won't be enough. We must try to strengthen investment.

No longer can business investment be relied upon to distribute sufficient purchasing power. Because we can get greater and greater productivity through the use of fewer individuals, we can't rely on business to do it. We must connect the banking system with the ability of individuals to purchase for consumption. Consumers' increase must be maintained at a sufficiently expanding rate to maintain employment. It must be independent of the pattern of motivation which our banking system necessarily follows.

Do this by:

1. Building up government reserves in the boom period and paying them out in the downswing. (Corporate reserves act in the opposite manner because they bring about the juncture which they wish to avoid.)
2. Old age assistance is better than insurance. How can the government do it?
   a. By making and withdrawing deposits in banks.
   b. By investing in securities (in its own bonds, primarily).
   c. By creating funds and using them to pay current expenses
   d. By hoarding and dishoarding. (Hansen uses the word to mean holding money.)

He looks at the effects of each of these items:

a. If you have an increase in these deposits or a decrease in the velocity of circulation you need large bank reserves. Also you must keep reserves sufficient in depression. It won't cure it but it is necessary for recovery Also, aid banks in making consumer loans—guarantee them.
b. If bonds are bought on the open market, the effect is deflationary, because the owners of bonds on the open market have such a propensity to consume that they don't need to use these funds. So the government has to buy its own bonds for the most part, which really transfers government debt to wage-earners and decreases insecurity, which encourages spending.
c. You have both effects at the same time. Reduce inclination to invest and increase capacity to purchase. He doesn't know quite what to conclude. If producers respond to an increase in effective demand, it would be inflationary. (Depends upon level of employment.) This leads to a shift in basis of taxation. It can be deflationary because it can be used to shift the burden to those lease able to pay.
d. It can't be done.

He urges abolition of any special tax on employees and pay-as-you-go. Don't accumulate funds to meet anticipated expenditure. Collect when you need it, and pay it out as you collect it. You can't prime the pump; you have to furnish the water.

What can you do? If it's inherent, you could just resign yourself to it.

3-9: Eclectic Theory

It presumes that there are cumulative causal factors in each phase of the cycle that bring about the ensuing phase. First, in Mitchell, in the upswing there is a lag in wages (payments to the factors) behind prices. This results in an opportunity for increasing rates of profits. However, as this proceeds, surplus labor is absorbed and the less efficient units are brought into use, and wages go up in relation to the productivity of the labor purchased. Second, the lending capacity of banks is approached, and banks raise the interest rate. Third, the prices of raw materials begin to soar, especially as each raw material approaches its physical limits. These increases result in a narrowing of the profit margin, which results in a constriction of banks' willingness to lend. Then businessmen make a strong effort to attain liquidity by selling immediately as many goods as possible. To do this, they have to reduce prices. Reduction in prices makes it more difficult to get liquid, and it gets worse. The same cost factors that lagged going up also lag going down. (Sticky prices.). They cause the depression to deepen. This continues until:

1. The banks get too much "stock" on hand, so they lower the interest rate.
2. Wages fall below the immediately past normal relationship to prices.
3. This continues until the prices of raw materials fall sufficiently to enable them to be used in production profitably, possibly.

Then, Mitchell says, you're on the upswing again, in view of the profit margin newly arrived at. Thus there is a true cycle inherent in the economy.

Commodities are not sticky; they respond to supply and demand. Interest rates, wages, and raw materials are sticky. Monopoly prices don't change much, regardless of the period of the cycle.

It is the stickiness of these prices that occasions the difficulty. It is really a function of the comparative variations in various prices. So theorists of this school usually talk of stabilizing the cycle through stabilizing prices. The other theorists are not interested in stabilizing prices.

If you stabilize all prices, then what? Some have considered the matter in terms of competitive prices as compared with monopoly prices. (Usually sort of under-consumptionists.) In fact, historically, those commodities whose prices vary a great deal vary little in quantity of production, and vice versa.

Can you do away with monopoly? Can every enterprise be competitive? How about telephone companies in Denver? It would take a great many to have competition. You can't eliminate some monopolies.

How can you vary prices? With general price level? If so, you would have to see that costs would also so vary. That would include wages. How would you vary these? Set wages, rents, commodity prices, everything.

Another alternative is to make the unsticky prices sticky. But your comparative advantage is to get your price relatively higher, and everyone would so act, so price would become infinity and production zero.

3-10:

What would be the policy implications of the eclectic theory?

What makes the upswing stop and the downswing begin? What makes the downswing stop? In the upswing, it seems to me that an approach to full employment could cause a break in prosperity; that is, it is one thing that could cause repercussions that would lead to the downswing. But in the downswing, what could it be? Is there a floor to employment? It isn't 100% propensity to consume. Consumption can be greater than income. How much greater? What is there at the trough of the depression that causes expectations to be greater than before the trough is reached? Nothing inherent in the economy that I can see. It may be that the government stepped in with expenditures at this point, whereas it didn't before things got that bad, but this isn't a cyclical thing.

What causes prices to level off?

Is it really a matter of comparative stickiness? The sticky prices have to become less sticky than the unsticky ones at some period in order for them to cross. How explain that? Mitchell says that the sticky prices get unstuck.

Keynes' theory is like this:

Quantity on the horizontal axis going up and down slanting downward to the right.

Mitchell doesn't consider the trend as pictured above, just the fluctuations around it.

Most students of the business cycle now say that Mitchell's presentation is not an explanation of the business cycle. In a depression something outside of the market process has to step in to turn it up; there is nothing within the economy that will do it. It keeps going down until something happens, like a flood or a war. It looks like this:

Like the one above: quantity on the horizontal axis fluctuating up and down. There is a continuous downward trend.

Theories about stickiness of prices:

1. Mitchell: Commodity prices not sticky; factor prices sticky.
2. Others: Stickiness depends upon amount of transportation involved in producing a commodity. The more transportation, the greater the stickiness.
3. Others: In terms of monopoly and non-monopoly.

Array distribution of prices:

Quantity sloping upward toward the right, then leveling off, then up again.

Those who approach it from monopoly picture it thus:

Re use of the factors, wheat sloping slightly upward; "still"(?) steeply up, then down.
Caption below: Destroy monopoly.

3-11:

The eclectic theory has eventuated into all sorts of “plans,” such as the 100% reserve plan. (The eclectic plan itself is more a description than a theory.)

Another is the Douglas plan. It is something of a mixture—under-consumptionist, Keynesian, neo-classical, Hawtrey—maintaining and controlling purchasing power so as to stabilize price level. Widely circulated during the depression:

1. A public works program, concentrated around housing.
2. A flexible governmental budget—easily raised above and below tax receipts.
3. A nationally managed currency and credit system, so that the government should take over the creation of credit to:
   a. Provide work during depression.
   b. Stabilize the general price level.
4. The creation of a national wage policy, so that you could control wage units—floors, minimum wages, etc. This was proposed so that:
   a. Wages could be raised in case prices or efficiency goes up, so that there would be no glut.
   b. Wages could be lowered if prices or efficiency goes down.
5. Make arrangements to maintain flexible prices of commodities, within the general system of stabilized general price level. Rewards would be:
   a. Facilitate transfer of labor and capital equipment from one industry to another by:
      (1) Attaining and maintaining competition in industries where units are small.
      (2) Controlling directly through government pricing where there are monopolies.
6. Unemployment insurance, which is one way of transferring purchasing power from prosperity to depression, thus lowering the boom and raising the trough.
7. If all these things don’t work sufficiently, use the “social dividend”—the distribution of purchasing power to those who have very little of it,thus raising effective demand.
8. If this doesn’t work, create a separate economy for the unemployed.

This plan demonstrates an almost total lack of coherent thinking, about a general theory, of the community at large. It is a sort of admission of inadequacy of understanding, as is most eclectic theory.

We have tried Douglas’ plan, in some part, all over the place—public works, flexibility in the budget (but not as he proposed, not set a budget), etc..

National wage policy has raised a lot of debate. We couldn’t figure out what the wage bill should be, but we have decided on some wage rates. At first a minimum rate of $.25 was set. Many businessmen insisted that they would go broke in short order. But probably nobody ever did; most of them made more and more money. The acceleration principle must operate very rapidly. But such a bill really should have a provision for the immediate loss that a businessman might experience. Many, however, began to get orders as soon as the bill was effective.

3-14: Connections between internal and external economy in terms of employment problem.

There have been notable efforts to connect the level of employment with such matters as the balance of trade—controlling the level of economic activity internally in an international community. (Bretton Woods is an example of what grows out of this.)

In India bad times are apt to come in the presence of a decrease in the level of income accompanied by an increase in the level of employment. There is very great wealth in that country, in liquid form.

In our country bad times come in times of unemployment, while at the same time there may be an increase in income.

What seems to have occurred in India is that during periods of plenty a large amount of unemployment is exported, with "treasure" coming in. Then in periods of hard times, those who have share with others. But you can't eat gems. However, the tendency toward revolution is not there, because the hungry masses don't see food held back from them. There just isn't any. In our community there is much more production and less "treasure," so in depression the hungry can see the food that they can't get because of the maldistribution of money.

Our monetary system is different. Modern money takes the form of bank credit and coins and currency. What is the supply schedule of money? (Keynes's treatment of it in the rate of interest theory is unfortunate.) It has no supply price, as do gold and silver. It is not a commodity.

In India the whole supply of food is open to everyone in periods of poverty, but there just isn't any there. If we exported out products and put away in Fr. Knox the gold we received for them, our situation might be same as that of India.

In India there is a way of exchanging goods produced for commodities that they can't consume, such as gold and silver. We have no such possibility. We have to exchange for money, and in our society money isn't a commodity.

The mercantilists had always suspected that they could export their unemployment in a community like ours. It can't be done in India, but it can here. So some sort of hazy idea of this has persisted throughout the period of classical ascendancy, even while the classical economists were insisting that imports and exports had to balance. (We've had a favorable balance every year since 1891.)

At Bretton Woods the economists began to fool with the idea that maybe if we had an international money we could get paid for a favorable balance. (They were probably wrong.) The dollar became that international unit except that it is legal tender only in the U.S. So the recipients of dollars can't buy anything except what is produced in the U.S.

3-15: Business cycle theory in relation to international trade and monetary systems.

The level of employment is connected with, e.g., the balance of trade. Control the balance of payments so as to control the level of employment, domestically and internationally.

The distinction between mercantilist type thinking (e.g. India) and in problems of maintaining domestic prosperity (U.S.).

1, India: Bad times resulting from diminution in income and production.

2. U.S.: Bad times resulting from plethora of production.

It hinges on the difference between what is thought of as most liquid and is therefore used as money.

1. India: Valuable consumer goods—gold, precious jewels—in periods of plenty, large proportion of production exported for these liquid commodities. In times of famine, you can't eat them. They aren't productive goods which will make more goods.
2. U.S.: Application of classical theory, which comes down to mercantilism in regard to the character of money. But money has no supply price, is not a commodity.

The things they produce are the things they consume; the things we produce are not the things we consume—they are the means of producing what we consume.

The mercantilists always thought you could export your unemployment. In India you can't. But we can. By giving goods away we can have more goods at home than if we didn't have a favorable balance of trade. Throughout the period of the ascendancy of the

classical period, this notion has persisted among separate notions even though the economists were arguing against it.

Keynes and White at Bretton Woods thought they could keep a favorable balance of trade and get paid by using international money (turned out to be the dollar). If you're going to receive payment in dollars, you have to buy goods and services from other countries to the same amount as exports.

Compensatory spending: By taxing away the peak of the boom, fill in the depression trough. Also see to it that undistributed corporate profits are used in the depression. This is presented as an application of the Keynesian analysis, but if Keynes is correct, such a program won't succeed. It would merely make the depression lower. What you should do is to fill the whole thing in, not only the trough, for all income to equal that at the peak of the boom.

A compensatory plan, in Keynesian terms, could only succeed if in times of inflation (when prices were increasing faster than employment), very high taxes were levied. This would increase employment even at the time, and could be spent later when employment started to go down. But in times of ordinary prosperity without inflation, taxation without equivalent spending is deflationary. You just level off demand and start bringing on the depression for which you're preparing.

When you have true inflation you have full employment, but less and less production. Everybody is getting rich speculating, and everyone starves to death. All trade and no industry. Keynes said (wrongly) that production wouldn't be any less at this point.

3-16:

Forced savings does not mean that the community is forced to save but that consumers are forced to cut down on consumption due to a rise in prices and to the fact that they spend all their income on consumption. It is not really saving; it is only abstention from (lessening of) consumption.

It is the enforcement of a reduction in consumption by reason of an increase in price, occasioned by an increase in capital formation purchased with bank credit.

Marginal efficiency of capital: What is prospective yield? The schedule of effective demand is factor cost plus profits, or it is the money income of the remainder of the community. But this is independent of his judgment. Sort of a circle, because what he pays out is a part of effective demand, but the part is infinitesimal.

Keynes doesn't explain prospective yield very well. But expected return is in the same direction as current yield.

Non-market seems to mean for purposes other than making money, and also which does not result in a price tag representing factor cost plus profit. Like bank credit—has no supply price but is worth as much as gold.

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