

SECOND COURSE
Macro Lectures

SYLLABUS AND SYLLABUS SUPPLEMENTS

COURSE OBJECTIVES

1. To provide the student with a comprehensive knowledge of the operations of a free-enterprise, division-of-labor society, with special emphasis on the phenomena of money, production, real wages and the productivity of labor, profit, saving and capital accumulation, and economic progress. The consequences of government intervention with respect to these phenomena will be considered in depth.
2. To teach the student to think of economic phenomena in terms of their long-run effects on all groups, not merely their short-run effects on those directly concerned.

OVERVIEW OF THE COURSE

The course will focus on the current or recent problem areas of the banking system, unemployment, economic stagnation, budget and trade deficits, and inflation, in the light of the contrasting analyses of the Keynesian and “Classical” schools (the latter including the Chicago and Austrian schools). Policy solutions to these problems will be explored—in particular free-market wage rates, balanced budgets with low taxes, and limitation of money-supply growth versus expansionary fiscal and monetary policy.

Two leading themes of the course will be 1) The possibility of continuous capital accumulation and economic progress based on the combination of economic freedom, private ownership of the means of production, division of labor, saving, and technological progress. 2) The ethical implication of the harmony of the rational self-interests of all men under these conditions.

BOOKS FOR THE COURSE

- A. George Reisman, *Capitalism: A Treatise on Economics*. Ottawa, Illinois: Jameson Books, 1996.
- B. Henry Hazlitt, *Economics In One Lesson* (paperback).
- C. George Reisman, editor, *Supplementary Readings in Macroeconomics* (to be distributed in class). [The essays contained in this title appear below with references to their original sources.]
- D. Paul Samuelson and William Nordhaus, *Macro-Economics* (paperback), 15th Edition, (New York: McGraw Hill, 1995).
- E. (Optional) Ludwig von Mises, *Human Action* (paperback), Third Edition.

COURSE CONTENT AND READING ASSIGNMENTS

(Note: This course meets just once a week, for four academic hours. This explains why the midterm examination coincides with the seventh class session.)

Week 1

Orientation/review. The dependence of the division of labor on money. The vital connection between money making and productive activity in a division-of-labor society. Money-making and the distinction between production and consumption, productive expenditure and consumption expenditure, capital goods and consumers’ goods. The quantity theory of money. The increase in the quantity of money as the cause of rising prices.

READINGS

- Reisman: pp. 141–144; 441–462
Optional: Samuelson, Chapters 1 and 4

Weeks 2 & 3

The origin and evolution of money and the contemporary monetary system: from barter to media of exchange, to gold and silver commodity money; 100 percent reserve banking and fractional reserve banking; standard money, fiduciary media, and fiat money. Central banking: the Federal Reserve System and its powers of money creation. The quantity of money, the demand for money, and the business cycle.

READINGS

- Reisman: Chapter 12
Samuelson: Chapter 9 (to p. 173), Chapter 10

**GEORGE REISMAN'S PROGRAM OF SELF-EDUCATION IN THE
ECONOMIC THEORY AND POLITICAL PHILOSOPHY OF CAPITALISM**

Frederic Bastiat “The Balance of Trade” and “A Petition” in *Supplementary Readings in Macroeconomics*.

[Frederic Bastiat, *Economic Sophisms*, pp. 51–60]

Optional: Adam Smith “Of the Principle of the Commercial or Mercantile System,” in *Supplementary Readings in Macroeconomics*. [Adam Smith, *The Wealth of Nations*, Book 4, Chapter 1]

Week 4

The economic problem and its denial: production versus consumption—the scarcity of wealth versus the alleged scarcity of the need or desire for wealth; the making of goods versus the making of work. Opposite appraisals of the causes of depressions, and of the economic effects of machinery, worker competition, war, government spending, population growth, advertising, foreign trade, imperialism, and technological progress.

READINGS

Reisman: pp. 42–49, 54–61, 542–559

Hazlitt: pp. 7-102 (chaps. I-XIV)

Week 5

Say’s Law. Monetary demand and real demand; why only more production and supply can increase real demand. Say’s Law and the harmony of long-run self-interests. Say’s Law and the impossibility of a general overproduction; why falling prices caused by increased production do not represent deflation.

READINGS

Reisman: pp. 559–599

Optional: James Mill, “Consumption” and “Of the National Debt” in *Supplementary Readings in Macroeconomics* [James Mill, *Commerce Defended*, reprinted in *James Mill Selected Economic Writings*]; *Optional*: Samuelson, Chapter 12

Week 6

Mass unemployment: the causes and the remedy.

Real wages and the productivity of labor. Is government intervention to promote labor unions and raise wages in the self-interest of the wage earners or is its actual effect to cause unemployment and hold down the rise in real wages?

READINGS

Reisman: pp. 613–663

Hazlitt: pp. 134-151 (chaps. XIX-XXI)

Samuelson: Chapter 14

Week 7

MIDTERM EXAMINATION

Following midterm: Aggregate production and aggregate expenditure: the classical view versus the Keynesian view.

Week 8

The role of saving in spending and income payments. Saving versus hoarding. Saving and aggregate economic accounting: the national income/net national product identity. J. S. Mill’s proposition that demand for commodities is not demand for labor and the issue of double counting.

READINGS

Reisman: pp. 673–699, review of 441–447, then 699–715

Hazlitt: pp. 177-190 (chap. XXIV)

Samuelson: Chapter 5; *Optional*: Samuelson, Chapter 11

Ludwig von Mises, “Capital Supply and American Prosperity” in *Supplementary Readings in Macroeconomics*. [Ludwig von Mises, *Planning for Freedom*, pp. 195–214]

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Week 9

Capital accumulation and its causes. The role of saving. The role of technological progress and the productivity of capital goods. The role of economic freedom. Critique of the secular-stagnation doctrine. National income and consumption.

READINGS

Reisman: review of 622–642

Optional: Samuelson, pp. 326–333.

Week 10

Capital, the productive process, and the rate of profit. Profit and net consumption. Net investment and the rate of profit. Net investment and the increase in the quantity of money. The nominal and real rate of return on capital. Money supply growth and production growth. The springs to profitability. The inherent monetary profitability of business in the aggregate, in the absence of financial contractions.

READINGS

Reisman: 719–787

Optional: Samuelson, pp. 326–333.

Week 11

Applications of the net consumption theory: why there is no tendency toward a falling rate of profit with capital accumulation; why falling prices due to increased production do not reduce the rate of profit. The fundamental neutrality of technological progress with respect to the rate of profit. Analysis of the effects of taxation, budget deficits, and the balance of trade on the rate of profit and interest. Implications for the theory of saving.

READINGS

Reisman: pp. 809–838

Library reading: Ludwig von Mises, *Human Action*, Third Edition (Chicago: Contemporary Books, 1966), pp. 524–537. (The library at the Orange County Center has approximately a dozen copies of this book.)

Optional library reading: Eugen von Böhm-Bawerk, *Capital and Interest*, Huncke & Sennholz translation, Vol. II, pp. 77–118. (Please note: The library at the Orange County Center has at least a dozen copies of this book too.) Also recommended but not required: Vol. I, pp. 74–121; Vol. II, pp. 257–381.

Week 12

Relationship of the net-consumption/net-investment theory to the time-preference and productivity theories. The alleged problems of underconsumption and lack of “investment opportunities.” How the demand for capital goods and labor can permanently exceed the demand for consumers’ goods and the rate of profit be positive. More on why savings cannot outrun the need for savings; the automatic adjustment of the rate of saving to the need for capital.

READINGS

Reisman: pp. 787–797, 838–859

Week 13

Keynesianism and Neo-Keynesianism. Exposition and critique of the Keynesian analysis: the unemployment-equilibrium doctrine and the IS curve; the consumption and savings functions; the diminishing marginal efficiency of capital; liquidity preference and the liquidity trap; compensatory fiscal policy and the multipliers. The economic consequences of Keynesianism.

READINGS

Reisman: Chapter 18

Samuelson: Chapters 6–8 (to p. 142)

Optional: Samuelson, Chapter 15

Ludwig von Mises “Stones Into Bread, The Keynesian Miracle” and “Lord Keynes and Say’s Law” in *Supplementary Readings in Macroeconomics*. [Ludwig von Mises, *Planning for Freedom*, pp. 50–71]

Optional: Adam Smith, “Of Public Debts” in *Supplementary Readings in Macroeconomics*. [Adam Smith, *The Wealth of Nations*, Book 5, Chapter 3]

**GEORGE REISMAN'S PROGRAM OF SELF-EDUCATION IN THE
ECONOMIC THEORY AND POLITICAL PHILOSOPHY OF CAPITALISM**

Week 14

Inflation. Exposition and critique of alternative theories of rising prices, leading to the conclusion that the quantity theory of money is the only valid explanation. The meaning of inflation. Its roots in deficits, the welfare state, and the unemployment and easy money arguments.

Further effects of inflation: a. growth in government, including wage and price controls; b. the redistribution of wealth and income; c. the undermining of saving and capital accumulation and the productivity of labor; d. how inflation sets the stage for depression and deflation—why it is not a cure for unemployment or a source of capital; e. why inflation tends to accelerate to the point of destroying credit and ultimately money itself.

The current state of inflation.

READINGS

Reisman: Chapter 19

Hazlitt: pp. 164-176 (chap. XXIII)

Ludwig von Mises, “Wages, Unemployment, and Inflation” and “The Gold Problem” in *Supplementary Readings in Macroeconomics* [Ludwig von Mises, *Planning for Freedom*, pp. 150–160, 185–194]

Library reading: Ludwig von Mises, *Human Action*, pp. 466-478.

Samuelson, Chapter 13

FINAL EXAMINATION

Introduction: The Contextual Setting

1. Economics and the division of labor—definition of subject in Chapter 1 of *Capitalism*.
2. The division of labor and the productivity of labor—how the division of labor is essential for a high and rising productivity of labor—Chapter 4 of *Capitalism*.
3. Wealth and natural resources—why production not limited by lack of natural resources—Chapter 3 of *Capitalism*.
4. Dependence of the division of labor on the institutions of capitalism, including the price system—Chapters 5–8.
5. Influence of the division of labor on the institutions of capitalism—Chapter 9.
6. Much of this course picks up from Chapter 2—“The Role of Wealth in Human Life”: limitless need and desire for wealth; natural resources no obstacle; the problem is how to go on raising the productivity of labor. Division of labor and capitalism the on-going solution to this problem, which is called “the economic problem.”

George Reisman

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II. The Division of Labor and Money

A. Specific dependence of the division of labor on money

1. Problems of double coincidence of wants—money radically widens possibilities of exchange.
2. Money and economic calculations and comparisons—of methods, products, industries. The price system and its coordinating functions with respect to the division of labor, as described in Chapter 5.

B. Money Making and the Concept of Productive Activity

1. The need to earn money to participate in the division of labor; earning money thus an essential aspect of productive activity in a division of labor economy. The vital distinction between the labor of an unpaid housewife and a paid housekeeper.
2. The purpose of money making or not money making as the distinction between production and consumption.
 - a. Consumptive production—consumers’ physically productive activity versus that of business
 - b. Productive expenditure and consumption expenditure
 - c. Capital goods and consumers’ goods
 - d. Classification of capital goods and consumers’ goods not based on physical characteristics—machines that are consumers’ goods
 - e. Producers’ labor and consumers’ labor
 - f. Why government a consumer
 - g. Producers’ loans and consumers’ loans; nature of government borrowing
3. The concepts of imputed income and opportunity cost.
 - a. Fictional incomes and costs based on the idea that the saving of an expense is an income and the absence of an income is a cost. They require the introduction of counterbalancing fictional costs and incomes. E.g., the fictional income of the homeowner and his fictional cost. Fictional housewives’ income. The “income” of not having cancer.
 - b. “Opportunity cost”: the successful businessman who runs at a loss; the “gains” of closing down your research department and reducing the alternative opportunities open to you. When to buy a yacht or jump from a skyscraper.

III. Money and Spending

A. The Quantity Theory of Money: the Formula of M_1 and Velocity

1. How more M raises D : the gold mining case and the social security case
2. The quantity theory of money as the explanation of rising prices
3. Fiat money versus commodity money; the increase in fiat money and spending versus the increase in the production of goods
4. Virtual impossibility of inflation problem with gold and silver; even now, prices calculated in gold and silver coins show no rise

B. The Origin and Evolution of Money and the Contemporary Monetary System

1. How rational self-interest led to the development of money out of barter
2. How it led to the selection of gold and silver as money.
3. How paper (including checkbook) money came into being.
4. Government and the demonetization of the precious metals: the Civil War, the National Bank Act, the Federal Reserve System, World War I (including the Federal Reserve and the pyramiding of gold reserves), the New Deal, the final break with gold in the 1960s.
5. Inflation and the potential spontaneous remonetization of the precious metals.
6. Recent change in the composition of the money supply and the deficiency of the weekly reported M_1 statistics

C. The Monetary System and Banking

1. Standard money—commodity money or fiat money.
2. The monetary base.
3. Fiduciary media: transferable claims to standard money, payable on demand, and accepted in commerce as the equivalent of standard money, but for which no standard money actually exists.
4. How fiduciary media are created.
5. Fractional-reserve banking and 100%-reserve banking.
6. Limits to the private issuance of fiduciary media: the clearing difficulties of more rapidly expanding banks; the public's demand for standard money.
7. Governmental encouragement of fiduciary media.
 - a. Expanding the amount of reserves—fiat money reserves and central banking.
 - b. Making reserves more potent: expanding reserves—overcomes the problem of the clearing, and of the public's demand for currency. Rediscounting, deposit insurance, bank examinations, restrictions on bank competition, payments suspensions.
8. Contemporary money creation: open market operations.

Open market operations and deficits.

D. The Quantity of Money and the Demand for Money

1. Velocity as the reflection of the demand for money for holding.
2. General factors affecting the demand for money for holding—security of property and complexity of production.
3. Changes in the quantity of money as the cause of changes in the demand for money and thus the velocity of money.
 - a. The effect of credit expansion on the prospects for borrowing.
 - b. The ability to substitute other assets for cash holdings.
 - c. The anticipation of higher prices.
 - d. The effect of more money on the rate of interest, which, after a temporary drop, is to raise the rate of profit and thus to increase the demand for and reduce the supply of loanable funds.

E. The Demand for Money and the “Balance of Payments” Doctrine: A Critique

1. The meaning of the balance of trade and payments.
2. Historical origins of the concepts (Mercantilism) and notion of what is a “favorable” or “unfavorable” balance.
3. The concepts under a system of fiat money—no loss in an outflow of fiat currency.
4. Mainly fictional nature of the outflows.
5. Foreign investment as the source of an “unfavorable” balance of trade.
6. The balance under a precious metal or other world-wide standard.
 - a. Principle governing the distribution of precious metal money among the various countries.
 - b. Why gold mining countries export gold.
 - c. The tendency of the balance toward balance.
 - d. sufficiency of precious metal money to transact commerce—loss of precious metals due to not enough production of goods; potential destructive role of labor unions

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7. Inflation as the cause of a gold or other reserve outflow.
8. Error of blaming the citizens.

Spending abroad does not cause a money outflow if the citizens have a demand for the money.

F. An Invariable Money

1. Variations in prices from the side of money and the side of goods.
2. The need to isolate
3. The contribution of invariable money to economic theory.

IV. Production Versus Consumption—the Macroeconomic Implications of “Scarcity”

A. Scarcity

1. The reasons for postulating a limitless need and desire for wealth.
 - a. Reason and the range of knowledge and awareness, hence of action and experience. Wealth the material means of action and experience.
 - b. Scope and perfectibility of need satisfactions—based on reason.
 - c. Why the desire for wealth always outstrips the ability to produce it: the nature of desires and the nature of production.
2. “Scarcity”—transformation of its nature under capitalism.
3. The scarcity of labor and its ineradicability.
4. Why does unemployment exist?
5. Time preference and the scarcity of capital.
 - a. Meaning and foundations of time preference.
 - b. Why time preference keeps capital scarce.
 - c. What makes time preference high or low.

B. Productionism

1. According to productionism, *the fundamental problem of economic life is how to expand the ability to produce in the face of a limitless need and desire for wealth.*
2. The productionist aggregate demand curve, shown in Figure 13–2 of *Capitalism* on p. 546, is based on the quantity theory of money. It is asymptotic for a constant quantity of money and corresponding constant volume of spending and shows increases in the quantity of output and labor demanded in inverse proportion to the fall in wages and prices.

C. Consumptionism

1. The belief in a fixed aggregate demand in real terms and that *the fundamental problem of economic life is how to expand the need and desire for goods in the face of an ability to produce that exceeds it.*
2. Diagrammatic exposition of the consumptionist view of the relationship between aggregate demand and aggregate supply appears in Figure 13–1 of *Capitalism*, on p. 545.

D. Manifestations of Consumptionism

1. The fear of “overproduction.”
2. The fear of machinery and automation.
3. The belief in a fixed stock of work to be done in the world.
4. The belief in inherent group conflicts over fixed employment opportunities.
5. The advocacy of make-work and spread-the-work schemes.
6. The belief that the lack of wealth is an asset and the presence of wealth is a liability.
7. The belief in the beneficial effect of war and destruction.
8. The belief that government spending is a source of prosperity.
9. The belief that population growth is a source of prosperity by increasing the number of people who need and desire goods and thus enlarging the supply of consumer desires.
10. The related support for a policy of imperialism.

11. The related belief in the balance of trade/payments doctrine.
12. The belief in parasitism as a source of benefit to its victims.
13. The belief that advertising is inherently fraudulent yet economically necessary.
14. A belief in the purposelessness and irrationality of economic life.
15. The misconception of the value of technological progress.
16. The belief that increases in production are “deflationary” by virtue of tending to cause falling prices.

Consumptionism and Socialism

E. The Productionist Answers on the Above Points

V. Say's (James Mill's) Law of Markets

A. Monetary Demand and Real Demand

1. Real demand is different than monetary demand, which is simply the monetary expenditure for goods and services. It is the monetary demand adjusted for changes in the price and wage level—it's *the goods and services the monetary demand actually buys*.

2. A smaller monetary demand at one time can constitute a larger real demand than a larger monetary demand at another time, if prices are sufficiently lower. E.g., a 200 monetary demand can constitute a larger real demand than a 400 monetary demand if prices are lower by more than fifty percent.

3. According to productionism, there is no inherent limit to aggregate real demand. *It depends only on the willingness and ability of people to produce*. If they are willing and able to produce more, then, given the quantity of money and the monetary demand, the price level will drop and the real demand will be increased. The actual quantity of output demanded is determined by the aggregate supply curve, which can be shown as a vertical line SS.

4. Determination of aggregate real demand by supply is shown in Figure 13–3 of *Capitalism*, on p. 561.

5. The determination of aggregate real demand by supply—the productionist/classical position—is known as *Say's Law*, after an early 19th century French classical economist, J.B. Say, who was a leading popularizer of the ideas of Adam Smith. It's usually stated as “supply creates its own demand.”

6. More output per worker or more people able and willing to work results in more output that forces down prices, thereby increasing the real demand for output. (In the case of more people able and willing to work, the larger supply of labor also forces down wage rates, thereby increasing the real demand for labor as well as the real demand for goods.) In these cases, *supply is creating real demand via its effect on wages and prices in the face of unchanged monetary demands*.

7. Real demand has been defined as *the will combined with the power of purchasing*. On this definition, it's obvious that the only thing which can make possible more real demand is more supply. (The will to purchase can be taken for granted if the power is there—for, as we have seen, our desire for wealth exceeds our ability to produce it as the power of our imaginations exceeds the capacity of our arms.)

a. More monetary demand without more supply just means higher prices and thus no additional real demand—is not sufficient to create additional real demand.

b. It takes more supply to make a larger monetary demand into a larger real demand. Thus, more supply is *necessary* for the creation of more real demand.

c. But it doesn't take more monetary demand to create a larger real demand. More supply will do it with the same monetary demand, by way of reducing prices (and, if it's a larger supply of labor that is in question, wage rates).

Thus, more supply is both necessary and sufficient for the creation of more real demand. Supply, not more money, is what counts for real demand. More money is neither sufficient nor even necessary for more real demand. Only more supply creates more real demand.

B. The Referents of Say's Law

Say's Law refers to *aggregate—economy-wide—demand* in *real* terms. It does *not* mean that if the supply of some product is increased, the supply of *that particular product* will necessarily be accompanied by more monetary demand or even by more real demand. That may happen, but need not happen. An increased supply of a particular product can actually be accompanied by a lower monetary demand and by a lower real demand for that particular product. What Say's Law actually means, and which is brought out in such a case, is that the larger supply of a product *itself constitutes a larger real demand in the economic system as a whole*.

C. The Confirmation of Say's Law by Cases Apparently Contradicting It

The potato example in barter and in money. (See Table 13–1, on p. 563.)

D. Say's Law and Economic Adjustment: Partial, Relative Overproduction, But Never General or Absolute Overproduction (see Table 13–2, on p. 565).

E. Rounding Out the Picture: Say's Law and Competition

How those who introduce improvements usually benefit from them even if the industry as a whole loses.

F. Say's Law and the Average Rate of Profit

Aggregate profit equals $D_C - D_L$ —i.e., Net Consumption—and is independent of the rate of increase in production and fall in prices.

Production increases, profitability, and the fallacy of composition (see Table 13–3, on p. 571).

G. Falling Prices Caused by Increased Production Are Not Deflation

VI. The Unemployment Controversy

A. The Problem

Wants are limitless, production is limited only by labor, thus labor is implicitly scarce. Why is there unemployment?

B. Productionist/Classical Economics' Answer

1. Inappropriate relationship between prices and wages on the one side and quantity of money and volume of spending on the other—especially in depression context.
2. Inflation—artificial money creation—raises V , sets stage for later drop in V and reduction in M , too. When this happens, spending drops, including spending for labor. Unemployment develops. (Review the discussion in Chapter 12 of how more rapid increases in the quantity of money operate to raise the velocity of money, which then must drop back when the increases stop, moderate, or fail to accelerate. Also the discussion of the deflationary potential in a fractional reserve banking system.)
3. Unemployment, which usually comes into existence on a large scale in just this way, could be eliminated by a drop in wage rates and prices. The lesser spending could buy all that the previously greater spending bought if prices and wage rates were lower. The wage-level formula together with the price-level formula show this. For the wage-level formula, see *Capitalism*, p. 581.
4. For ease of analysis, we assume full vertical integration—e.g., that GM owns its own steel mills, iron mines, etc., etc., and similarly for all other companies. Thus wages appear as the only cost of production and consumer demand as the only sales revenue. For purposes of illustration and ease of arithmetic, assume that initially the demands for goods and labor both fall by 10 percent, creating 10 percent unemployment. Full employment and full production could be restored at the reduced levels of spending, if wages and prices fell by 10 percent.
 - a. The same aggregate money demand for labor can be stretched to pay an indefinitely larger number of workers at inversely proportionate wage rates. (See *Capitalism*, Figure 13–4, p. 581.)
 - b. Further: the fall in wage rates and rise in employment reduces prices—output is expanded and prices fall as the result of the larger supply; also the larger supply is produced at lower unit costs because of the fall in wage rates. Thus prices fall both because of more supply and lower production costs.
5. Major implications
 - a. Average business profitability is not reduced by virtue of the fall in prices, since it is preceded by a fall in unit costs to the same extent. Roughly speaking, total business profits equal the demand for consumers' goods minus the demand for labor. If these demands are stable at the lower levels, then total profits are not affected by changes in employment and output and wages and prices.
 - b. If the productivity of labor (the output per unit of labor) stays the same, average *real* wages also do not fall, and, indeed, actually *increase*, because prices fall as much as wages, and the burden of supporting the unemployed is eliminated. (Note: this refers to *average* real wages, not real wages in each and every case.)
 - c. Sequence is: lower wage rates permit more employment, by stretching the ability of the same total payrolls to employ labor. More employment means more production and lower prices. Profitability is not reduced because unit costs are cut to the same extent as prices. Real wages are not reduced because prices fall and the burden of supporting the unemployed is eliminated.
6. Freedom of competition and the pursuit of self-interest by the unemployed and by employers would achieve these results by driving down wage rates.
7. The obstacles to full employment—government intervention to keep up wage rates, forcibly prevent individuals from acting for their self-interests.
 - a. Minimum wage and prounion legislation.
 - b. Easy relief and employer altruism.

c. Government pressure—Pres. Hoover's White House Conferences in the 1929 depression.

A Problem to Test Your Understanding

Assume that total spending for consumers' goods and labor in the economic system both fall by 20 percent from 2000 and 1800 monetary units respectively.

1. If wage rates and prices stay the same, how much unemployment will be created in percentage terms?
2. How much must wage rates and prices fall to restore full employment?
3. Assuming that total business profits equal the demand for consumers' goods minus the demand for labor, what is the magnitude of total business profits:
 - a. Before the fall in total spending?
 - b. After the fall in total spending but before the fall in wage rates and prices?
 - c. After the fall in wage rates and prices?
4. If the productivity of labor remains the same, and during the period of unemployment the average worker was contributing ten percent of his salary for the support of the unemployed, what is the effect on average real wages of the fall in money wages and prices?

Answers to questions 1-4 appear immediately below, with 180 degree rotation.

1. 20%, 2. 20%, 3a. 200, 3b. 160, 3c. 160, 4. rise by 1/9 compared with period of unemployment

C. Unemployment and the 1929 Depression

The result of preceding inflation and a fractional reserve banking system. Deepened by government intervention preventing wage rates from falling, which caused a further contraction in investment spending, and thus in business sales revenues and the ability to repay debts. Decline in the quantity of money by one-third.

D. Unemployment, the New Deal and World War II

1. Throughout the middle and late '30s, the quantity of money and volume of spending in the economic system were stepped up by the adoption of Keynesian policies, and yet unemployment remained a massive problem, because growing labor union power raised wage rates almost as fast, with the result that growing payrolls were not able to employ correspondingly larger quantities of labor.
2. And much of the additional employment that did take place was in the form of government employment, of a make-work variety, and actually caused a drop in the standard of living of those who already were employed, since they had to produce the goods and services which the government workers consumed, and received no comparable output in return.
3. Full employment was achieved only with the coming of World War II—not because war is necessary to full employment, but because the war was financed by massive inflation of the money supply *coupled with wage and price controls*. This combination generated sharply rising payrolls and spending of all types, and wage rates and prices were prohibited from keeping pace. The result was rapidly growing quantities demanded of everything, and the emergence of shortages, including a labor shortage. The full employment of World War II was accompanied by a sharp *decline* in the standard of living of the average person, who had to work longer and harder and who got much less in the way of goods for his efforts.
4. Full employment *with prosperity* was achieved only *after* World War II, as the result of the massive reduction in the size of government spending and deficits (from 1945 to 1946, Federal Government spending fell from approximately \$93 billion to approximately \$45 billion and the deficit was virtually eliminated). The prosperity resulted from the release of funds from the government back to the citizens and the transfer of roughly twelve million government workers (most of the army and navy) back to private employment. The citizens now had vastly greater control of their own incomes and previously unproductive labor was now available for production. The unions could achieve wage increases (which would have been given anyway) without causing unemployment or higher prices insofar as the end of the war provided the physical means for a vast transfer of resources back to the private economy and thus for a corresponding increase in real wages. (The abolition of price and wage controls and the ending of massive inflation also played a major role in the return to prosperity.)

E. A Rational Full Employment Policy

A policy that would actually achieve full employment and would do so with growing benefit to everyone, would be the establishment of a free labor market, so that wage rates would free to adjust to changes in the demand and supply of labor, and a 100-percent-reserve gold standard, so that the spending for labor would not be subject to sudden sharp contractions.

F. More on Why Real Wage Rates Need Not Fall in Achieving Full Employment

Analysis of arguments claiming that a fall in money wages would be accompanied by some fall in real wages as well. Diminishing returns and the need for profit recovery. The elimination of the burden of supporting the unemployed and the basis for believing that the productivity of labor rises with recovery from mass unemployment.

VII. The Productivity Theory of Wages

A. An Alternative to the Exploitation Theory

1. Plausibility of exploitation theory based on ideas of worker need and employer greed—both irrelevant: the cases of the used car and the art auction
2. Labor useful and scarce—money wage rates fall no lower than corresponds to full employment point (occupation by occupation, place by place). Any further fall is against the self-interests of the employers. For then the scarcity of labor is felt. (See *Capitalism*, pp. 613–618, especially Figures 14–1, 14–2, and 14–3 on pp. 615 and 616.)
3. Such a drop in wage rates (to the full employment point) doesn't mean subsistence by the back door—the elimination of unemployment that the fall in wage rates brings about means more production and a fall in costs of production. Both mean lower prices. Real wages actually rise with the elimination of unemployment: not only lower prices corresponding to the lower wages, but also the elimination of the burden of supporting the unemployed—thus take home pay drops less than prices. (Recall discussion of elimination of unemployment.)

B. The Productivity Theory of Wages

1. Real wages depend on the productivity of labor—the output per worker.
2. Demonstration of how productivity works

Some Problems

These are problems to test your understanding of the above. (Answers can be arrived at by following out the analysis in *Capitalism*. They are also given below, so that you can check your own against them and then go back and figure out why a discrepancy, if any, exists.)

1. Assume that the quantity of money, the aggregate monetary demands for consumers' goods and labor, and the supply of labor all remain the same, while the productivity of labor and thus the supply of consumers' goods double.
 - a. What is the change in the general consumer price level?
 - b. What is the change in average money wage rates?
 - c. What is the change in average real wage rates?
2. Assume that the quantity of money and thus the aggregate monetary demands for consumers' goods and labor both double, while the supply of labor, the productivity of labor, and the supply of consumers' goods all remain the same.
 - a. What is the change in the general consumer price level?
 - b. What is the change in average money wage rates?
 - c. What is the change in average real wage rates?
3. Assume that the quantity of money, the aggregate monetary demands for consumers goods and labor, and the productivity of labor and supply of consumers' goods all double, while the supply of labor remains the same.
 - a. What is the change in the general consumer price level?
 - b. What is the change in average money wage rates?

- c. What is the change in average real wage rates?
4. Assume that the quantity of money, the aggregate monetary demands for consumers' goods and labor, the productivity of labor, and the supply of labor all double.
 - a. What is the change in the general consumer price level?
 - b. What is the change in average money wage rates?
 - c. What is the change in average real wage rates?
5. What factor in the problems determines the change, if any, in average real wage rates?
6. What factors in the same problems determine the change, if any, in average money wage rates?
7. What factors in the above sets of problems determine the change, if any, in the general consumer price level?

Answers to questions 1-7 appear immediately below, with 180 degree rotation.

consumers' goods
1a. halves, 1b. none, 1c. doubles; 2a. doubles, 2b. doubles, 2c. none; 3a. none, 3b. doubles, 3c. doubles; 4a. halves, 4b. none, 4c. doubles; 5. The productivity of labor, 6. Demand for and supply of labor, 7. Demand for and supply of

C. The Productivity of Labor and Capitalism

1. Dependence of real wages on the economic degree of capitalism—i.e., the higher is productive expenditure relative to sales revenues, the higher is the demand for labor by business relative to the demand for consumers' goods and the higher is the demand for capital goods relative to the demand for consumers' goods. Thus the higher is the wage share of consumption and the more rapidly rising the productivity of labor (because of the higher capital-goods share of total output).
2. The increase in the supply of capital goods and the rise in the productivity of labor also depends on the efficiency of the economic system—the productivity of capital goods. The higher the productivity of capital goods, the lower is the maintenance proportion and thus the more rapid the accumulation of capital for any given higher relative production of capital goods.
3. Both the wage share, the relative production of capital goods, and the productivity of capital goods depend on the security of property and economic freedom—viz., on capitalism.

D. The Productivity Theory of Wages and the Interpretation of Modern Economic History

1. The cause of low real wages and bad conditions in the past.
2. How things improved—rise in the productivity of labor the only possible cause.
 - a. Uselessness of more money.
 - b. Virtual uselessness of more monetary demand for labor from any other cause.
 - c. Uselessness/harm of less supply of labor.

E. The Productivity Theory of Wages and a Critique of the Intellectual Foundations of the Welfare State

1. Uselessness and harm of redistribution
 - a. Almost nothing to redistribute
 - b. Attempt to seize it cuts production: less saving, incentives, and capital accumulation, lower demand for labor relative to the demand for consumers' goods—the chaos of socialism
2. Labor unions
 - a. Artificial wage inequalities if unions limited in ability to raise wages.
 - b. Unemployment if raise wage rates through whole system.
 - c. Lower productivity of labor because of unions' opposition to labor saving machinery and worker competition, and because of featherbedding practices and misallocation of labor.

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d. The unions' wrong idea of how to raise the standard of living—they seek to raise money wages, when actually the standard of living rises only through improvements in the productivity of labor, which they fight. Money wages, free competition of individuals, and the fallacy of composition.

3. Minimum wage laws

- a. Unemployment, lower skill and lower pay long-term, because the unemployed workers don't gain experience.
- b. Preventing the less skilled from competing with the more skilled.

4. Maximum hours and child labor legislation

Forced reduction in amount of labor performed—e.g., D_L divided by $3/4S_L$ results in $3/4S_C$ and $4/3P$ (because D_C divided by $3/4S_C = 4/3P$). Even if weekly money income the same, there is a loss in real terms. If workers work less, get less.

5. Forced improvements in working conditions (the kind that don't pay for themselves)

Forced improvements in conditions equivalent to forced wage increase: result is unemployment and higher prices; workers who keep jobs lose, because while prices go up, their take home pay the same (in addition, they must support the unemployed); if unemployment is to be avoided, the take home wages must drop to offset the rise in the cost of the improvements. Either way, they are at the expense of the workers, who can't afford them.

VIII. AGGREGATE PRODUCTION AND AGGREGATE SPENDING

A. Aggregate Production

1. Classical economists' view of what is produced—see Figure 15-1 on p. 675 of *Capitalism*
2. Gross product, productive consumption, and net product.
3. Contemporary, Keynesian economics' view of production as merely the *gain* from production—the net product.
 - a. Confusion of who produces what.
 - b. View of the product as the gain from production leads to the view that the *total product is the final product*. For every product except the final one is subtracted from production in the next stage. E.g., the notion that bread is the total product of wheat farmers, millers, and bakers follows from viewing the production of each of the producers as the difference between his product and his productive consumption. Thus, over Years 1 - 3 combined,

$$x_1 + y_1 - x_1 + z_1 - y_1 = z_1$$

c. Note: *production is being conceptually obliterated insofar as it is productively consumed*. Only the production of consumers' goods is considered as real.

4. Contemporary, Keynesian economics' Platonic-Heraclitean view of entities.
 - a. The notion that the total product in the sense of total product additions (or product differences) is the final product supports the confusion that the final product is the total product in the sense not of mere "product additions," but in the sense of *actual physical entities*.

$$\textit{Bread} = \textit{Bread} - \textit{Flour} + \textit{Flour} - \textit{Wheat} + \textit{Wheat}$$

and its alternative formulations:

$$\textit{Bread} = (\textit{Bread} - \textit{Flour} + \textit{Flour} - \textit{Wheat} + \textit{Wheat}) = \textit{Bread}$$

$$\textit{Bread} = \textit{Bread} - \textit{Flour} + (\textit{Flour} - \textit{Wheat} + \textit{Wheat}) = \textit{Flour} + \text{fade out}$$

$$\textit{Bread} = \textit{Bread} - \textit{Flour} + \textit{Flour} - \textit{Wheat} + (\textit{Wheat}) = \textit{Wheat} + \text{fade out}$$

- b. On this view, a loaf of bread is not conceived of as a thing that exists independently, out there in reality—that is, as a simple loaf of bread. It is conceived instead as a bundle of abstractions: bread minus flour, plus flour minus wheat, plus wheat minus zero (zero, for the sake of brevity and simplicity).
- c. If all three of these abstraction are held together, as indicated by the placement of the parentheses and use of italics, then bread is conceived of as bread.
- d. If the abstraction bread minus flour is placed on dim, as it were, and allowed to fade from consciousness (as indicated by its removal from within the parentheses and appearance in roman type), the result is that the loaf of bread now appears as flour minus wheat plus wheat minus zero—that is, it now appears as flour.
- e. If, finally, the two abstractions bread minus flour and flour minus wheat are both placed on dim, (as indicated by their removal from within the parentheses and appearance in roman type), then the loaf of bread appears as wheat.
- f. In this way, a loaf of bread appears as a loaf of bread, a quantity of flour, and a quantity of wheat.
- g. It is on this basis that the value of the loaf of bread appears to count the value of the loaf of bread, the value of the flour from which it was made, and the value of the wheat from which the flour was made. And on this basis, counting the value of the bread, the flour, and the wheat separately appears to imply counting the value of the flour and wheat more than once. (See Table 15-1 on p. 681 of *Capitalism* and the equation on the next page showing how contemporary, Keynesian economics views \$775 as counted by \$300.)

h. Simple version: 6 “counts” 14.

$6 = 1 + 2 + 3$. Let 1 equal the value added by the baker, 2 the value added by the miller, and 3 the value added by the wheat farmer. Then, according to contemporary, Keynesian economics

(1) $6 = (1+2+3)$, which is the value of the bread

(2) $6 = 1 + (2+3)$, which is 1 plus the value of the flour

(3) $6 = 1 + 2 + (3)$, which is 1 plus 2 plus the value of the wheat

i. In all of these cases, 6, the value of the bread actually counts *only* the value of the bread. But it is viewed by contemporary, Keynesian economics as counting the value of the flour and the wheat as well. It could count the value of the flour and wheat in addition to that of the bread only if 6 equalled $(1+2+3) + (2+3) + (3)$, that is, only if 6 equalled 14. Ironically, it is contemporary, Keynesian economics that double counts: it counts the bread as counting the value of the bread plus the value of the flour plus the value of the wheat. This is double counting the value of the bread, which leads to the failure to count the value of the flour and wheat, in the mistaken belief that they’ve already been counted.

j. What is present in contemporary, Keynesian economics is a *Platonic-Heraclitean view of entities*. It is a view of entities not as independently existing physical objects which man’s mind must grasp, but as the creation of the human mind in the form of bundles of abstractions which can be put together and taken apart at will to form different entities. I call it Platonic in that it views entities as consisting of abstractions. I call it Heraclitean, in that it presents a kaleidoscopic flux, in which a thing is alleged to be simultaneously itself and other things. Instead of the Aristotelian formula that *A is A*—a thing is itself—we have the formula that *A is A+*—a thing is itself plus more than itself.

k. Contemporary, Keynesian economics’ confusions about “double counting” and its belief that the final product counts the total product—that it *is* the total product—leads it to *ignore most spending in the economic system*, along with most of production. (Its confusions are supported by the confusions of many non-economists about the nature of entities and about what one buys when one buys it.)

B. Aggregate Spending

1. What is bought when it is bought?

a. The buyers of goods do not buy the means of producing the goods they buy, nor the means of producing similar goods in the future, nor the products that may be produced from those goods.

E.g., the buyer of a loaf of bread does not buy the flour, wheat, or labor services that were used to produce his loaf of bread—those things were bought by the producers at the various stages.

Nor does he buy the flour or labor services that the seller of the bread may subsequently buy, nor make the latter’s research outlays, political or charitable contributions, or any other such outlay.

Nor does he buy a loaf of toast in buying a loaf of bread. He buys only the loaf of bread.

2. Absurdities of the Platonic-Heraclitean view of purchases:

a. Shadow purchases. Bread, flour, and wheat—all for the same money, all in the same wrapper, and all for the same calories. Contrast with *real* combined expenditures.

b. Amazing digestive powers.

c. The ice in the steam.

d. Why do producers need capital if it is the consumers who buy what they buy?

e. If you buy the inputs, you don’t have to buy the output—you already own it; you buy the output because you *haven’t* bought the inputs.

3. Need for recognition of the full parity of existence of capital goods and of expenditure for capital goods and labor.

The implicit Aristotelianism of the Classical Economists. John Stuart Mill’s explicit recognition of the entity issue in his proposition “demand for commodities is not demand for labour.”

4. Mill’s proposition should be restated as *The Demand for A is the Demand for A*.

C. Saving and Demand

1. Saving vs. hoarding

- a. Belief that consumption expenditure buys everything implies that there is nothing for savings to buy. Thus, promotes the view that saving is hoarding.
- b. Saving does not mean hoarding as per Keynes and today's financial press: "leakages"; presumed effects of higher saving rate; corollary doctrine of investment out of nowhere; same idea for taxes and government spending.
- c. Idea that saving is hoarding represents fallacy of composition; aggregate nominal saving implies equivalent increase in nominal value of assets, since cash hoarding by any individual just represents an equivalent dishoarding by someone else (the extent to which the money supply increases is the only exception).
- d. Genuine "hoarding" (i.e., increase in need and desire to hold cash) has nothing to do with saving—represents an attempt to change composition of existing savings from assets other than cash to cash.
- e. Precipitated by preceding credit expansion, which causes business firms to become illiquid and thus to have to restore their liquidity later on. Result is financial contraction and simultaneous wiping out of nominal net saving, which may become negative.

2. What is saved is spent and actually accounts for *most* spending in the economic system

- a. Expensive consumers' goods
- b. All the spending for capital goods—*viz.*, all the spending for goods at wholesale, all the spending for machinery, equipment, materials, components, and supplies, and all the wage payments made by business firms. These expenditures are made *by business firms, not by consumers*; they are not consumption expenditures, but *productive expenditures*—*viz.*, expenditures made for the purpose of making subsequent sales. (Consumption expenditures, in contrast, are expenditures made not for the purpose of making subsequent sales.) The productive expenditure in payment of wages, moreover, is the source of the great bulk of consumption expenditures.
- c. Thus the great bulk of spending in the economic system is productive expenditure, not consumption expenditure.
- d. Productive expenditure depends on saving—on the portion of their revenues and incomes that people do not consume.
- e. To the extent that people consume more of their revenues and incomes, and save less, their ability to make productive expenditures is less. If everyone did nothing but consume, there would be no productive expenditure. E.g., the case of buying goods from a store, whose owners used the proceeds to consume, which is followed by repeated rounds just of consumption out of sales revenues. Only additional consumption would exist in such a case. The only additional income would be *profit*.

3. The "Macroeconomic" Dependence of the Consumers on Business

—in contrast to the "microeconomic" dependence of the individual company and industry on the consumers. The two opposite dependencies are consistent in that competition is present at the microeconomic level, but not at the macroeconomic level.

- a. Business as the source of its own demand and profitability: The role of productive expenditure and net consumption in the generation of aggregate sales revenues. (See *Capitalism*, pp. 725–744.)
- b. No need for artificial consumption.

4. Saving increases real demand by increasing production.

5. Saving increases monetary demand by bringing about an increase in the production and supply of commodity money.

6. Saving increases consumption in the long run by bringing about an increase in the production and supply of goods.

D. Aggregate Economic Accounting on an Aristotelian Base

1. The accounting aggregates

- a. What national income (Y), net national product (NNP), and gross national product (GNP) *are*, and their mutual relationships
- b. The essential relationship:

$$p + w + i + r = Y = NNP = C + I$$

- c. Relationship of NNP and Y to GNP.

2. Keynesian confusions

- a. As shown, contemporary, Keynesian economics obliterates the role of saving and productive expenditure.
- b. In its eyes, almost all of spending is consumption expenditure. The only other expenditure it recognizes is net investment or what it calls gross investment, which is actually nothing more than net investment plus depreciation allowances. The allegedly gross investment of contemporary, Keynesian economics is plant and equipment spending plus *net investment in inventories*. It is not truly gross at all.
- c. Because consumption spending is quantitatively much larger than net or even gross investment, it is usually assumed that consumption spending *pays* the far greater part of national income and constitutes the far greater part of spending for goods and services in the economic system. This view is present in every depiction of national income as being determined by the sum of consumption plus net investment—e.g., the Keynesian cross.

3. An accurate conception: recognizing the role of productive expenditure

- a. An accurate conception of aggregate spending and its relationship to contemporary national income accounting follows below:

KEY: s = aggregate business sales revenue, s_b = that part of aggregate business sales revenue paid by business firms and constituting part of productive expenditure, s_c = that part of aggregate business sales revenue paid by consumers and constituting part of consumption expenditure, w = aggregate wages, w_b = that part of aggregate wages paid by business firms and constituting part of productive expenditure, w_c = that part of aggregate wages paid by consumers and constituting part of consumption expenditure, d = aggregate costs deducted from aggregate business sales revenues in computing aggregate profits, C = aggregate consumption expenditure insofar as it constitutes business sales revenues or the payment of wages, B = aggregate productive expenditure insofar as it constitutes business sales revenues or the payment of wages, I = net investment.

- b. On the basis of the above, it can easily be shown that most of the spending and the income payments in the economic system *are concealed under net investment*, which, in effect, is the visible portion of an iceberg.

These conclusions become crystal clear if we derive the equality of national income and consumption plus net investment from the definition of national income. Thus:

- (1) $p + w = Y$, by definition.
- (2) $p = s - d$
- (3) $s - d + w = Y$, by substituting (2) into (1).
- (4) $s = s_c + s_b$,
- (5) $w = w_c + w_b$

(s_c , s_b , w_c , and w_b can aptly be termed *revenue-expenditure subcomponents* of national income and net national product, in that they simultaneously represent revenue or income, when viewed from the perspective of sellers, and expenditure, when viewed from the perspective of buyers.)

- (6) $s_c + s_b - d + w_c + w_b = Y$, by substituting equations (4) and (5) into (3).
- (7) $s_c + w_c + s_b + w_b - d = Y$, by a change in the order of addition of the revenue-expenditure sub-components.

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(8) $s_c + w_c = C$, by definition, (i.e., consumption expenditure for goods and services purchased from business firms plus consumption expenditure in payment of wages equals total consumption expenditure)

(9) $s_b + w_b - d = I$

(10) $C + I = Y$, by substituting equations (8) and (9) into equation (7).

The full statement of the relationship between national income and net national product is:

(11) $p + w = (s_c + s_b - d) + (w_c + w_b) = (s_c + w_c) + (s_b + w_b - d) = C + I = Y$.

4. Demonstration that Productive Expenditure Minus Costs Equal Net Investment

- a. The productive expenditure for buildings and equipment versus depreciation cost.
- b. The productive expenditure for materials, parts, and labor versus cost of goods sold.
- c. Other productive expenditures and costs are expensed expenditures and net to zero. Thus,

$$B-d = B_1-d_1 + B_2-d_2 + B_3-d_3 = I_1 + I_2 + I_3 = I.$$

E. Gross National Revenue

(12) $s + w = \text{GNR} = C + B$

From this equation, it is possible, as shown in Table 15–4, on page 707 of *Capitalism*, to go directly to national income on the left, and to net national product on the right, by subtracting aggregate business costs (d) deducted from sales revenues in computing profits. On the left, d is subtracted from s, which results in aggregate profit, p. On the right, it is subtracted from productive expenditure, which results in net investment, I.

If, in this procedure, one subtracts all costs but depreciation cost, one arrives at the contemporary, Keynesian concept of GNP. That is, one has profit gross of depreciation on the left, and “gross” investment—i.e., plant and equipment spending plus the *net* investment in inventories—on the right.

F. The Optical Illusion of Consumption as the Main Form of Spending

Table 15–3 on p. 706 in *Capitalism*, is an arithmetical example that clearly illustrates the illusion of viewing consumption spending as the main source of revenue and income payments in the economic system. (The example’s relative breakdown of national income between consumption and net investment approximates the actual data found in a typical year.)

1. Questions to test your understanding: Using the numerical data presented in Table 15–3 as an example, answer the following questions:

- a. Find total sales revenue and income payments in the economic system.
- b. Find the portion of total sales revenue and income payments constituted by consumption expenditure.
- c. Find the portion of total sales revenue and income payments constituted by productive expenditure.
- d. What portion of wages is paid by consumption expenditure?
- e. What portion of wages is paid by productive expenditure?

2. Application of answers to a critique of the Keynesian multiplier doctrine.

- a. The only incomes raised by the successive rounds of consumption expenditure envisioned by the multiplier doctrine would be profits, not wages. Any rise in wages, in the demand for goods at wholesale, in the demand for capital goods of any kind depends on *saving*, which the Keynesians regard as a “leakage” and as allegedly diminishing the amount of subsequent incomes.
- b. See Samuelson’s multiplier discussion
- c. Plug in his 1000 of initial “investment” into s_b and his implied 2000 of induced consumption into s_c .
- d. State the increase in wages.
- e. State the increase in profits.
- f. Check your results against Table 15–5, on p. 708 of *Capitalism*.
- g. Assume 500 of the “initial investment” is in the form of wage payments.

- h. Repeat steps (d) and (e) above.
- i. Samuelson's assumed "marginal propensity to consume" (mpc) in the table is 2/3; rework your answers to (d) and (e) on the assumption that the mpc is .75, .9.

Answers to questions 1a–e and 2d, e, g, and i appear immediately below, with 180 degree rotation.

1a. 1450, 1b. 550, 1c. 900, 1d. 50, 1e. 400
2d. zero, 2e. 3000, 2g. 500, 2500, 2i. zero, 4000, 500, 3500, zero, 10000, 500, 9500

G. Review of Capital Accumulation and thus Real Wages as Dependent on the Relative Production of Capital Goods and the Productivity of Capital Goods

1. The requirements of capital accumulation

- a. Real wages depend on the productivity of labor—viz., on the output per unit of labor, which depends on the supply of capital goods per worker.
- b. The supply of capital goods depends on the demand for capital goods relative to the demand for consumers' goods. This determines the relative production of capital goods, which must exceed the proportion necessary for maintenance, if capital accumulation is to take place.
- c. Capital accumulation also depends on the *productivity* of capital goods—viz., on the output per unit of capital goods. (See Figures 15–5 and 15–6 on pp. 710 and 711 in *Capitalism*.) This determines the maintenance proportion and the ability of any given relative production of capital goods to result in capital accumulation.
- d. A sufficiently high relative production of capital goods and a constant productivity of capital goods—sustained by technological progress and innovation—causes a *continuing* increase in the supply of capital goods and thus a continuing increase in the productivity of labor and in real wages.

2. The theoretical significance of giving parity of recognition to the production of capital goods:

- a. This is what makes it possible to see how more capital goods are *themselves* a source of still more capital goods and the role in capital accumulation of the productivity of capital goods, technological progress, and everything else that contributes to the productivity of capital goods—above all, economic freedom. For when more capital goods come into existence, it is clear that they are used to produce *capital goods* as well as consumers' goods and that the supply of capital goods *depends on everything that production and supply in general depend on*. These identifications are impossible if one proceeds as though all that is being produced are consumers' goods.
- b. In combination with the assumption of invariable money, the recognition of the parity of existence of capital goods also makes it possible to see the role of saving in terms of force/acceleration, not simple motion. A greater relative production of capital goods, greater saving and demand for capital goods relative to the demand for consumers' goods is not necessary for capital accumulation once a sufficiently high degree of saving and demand for capital goods exists—as seen, that's accomplished on the basis of the larger supply of capital goods in the year before, coupled with technological progress. More saving and demand for capital goods relative to the demand for consumers' goods would serve not to sustain but to accelerate capital accumulation.

H. Capital, the Productive Process, and the Generation of Sales Revenues and Costs—a First Look

- a. The Diagrammatic Analytical Framework Using Figures 15–5 and 15–6, pp. 710 and 711 of *Capitalism*. Reinforcement by means of Tables 15–6 and 15–7 on pp. 713 and 714.
- b. The Inverse Relationship Between National Income and Economic Progress in an Economy With an Invariable Money
- c. Overthrow of the Keynesian Balanced Budget Multiplier Doctrine and the Doctrine of the "Conservative's Dilemma"

IX. THE NET CONSUMPTION, NET INVESTMENT THEORY OF AGGREGATE PROFIT: THE POSITIVE THEORY

All business activity is carried on for the purpose of earning a profit. What determines the average rate of profit in the economic system? Do technological progress and improvements in business efficiency raise the average rate of profit?—or, on the contrary, do they lower it by enlarging the supply of goods and thereby causing falling prices and alleged deflation? Do saving and capital accumulation imply a falling rate of profit? Does additional saving place business in the contradictory position of having more money available to invest at the very time its sales revenues are reduced because the consumers are saving instead of spending? Can there be such a thing as *too much* of an increase in production or *too much* saving? The following weeks' classes will answer these questions and satisfactorily resolve the implied paradoxes.

A. Net Consumption and the Generation of an Excess of Sales Revenues Over Productive Expenditure and Costs

1. The Nature and Problem of Aggregate Profit

- a. The treatment of interest.
- b. Profits at the macro level determined by different factors than at the micro level.
- c. Profits as the result of the difference between the demand for products and the demand for factors of production, not the demand for and supply of capital.
- d. The problem of aggregate profit: productive expenditure and the generation of equivalent sales revenues and costs.

2. Net Consumption—i.e., consumption in excess of the wage payments by business, which is financed by dividends, draw, and interest payments.

3. Net Consumption and the Generation of an Excess of Sales Revenues Over Productive Expenditure (see Tables 16–1 and 16–2, on pp. 726 and 727; Figure 16–1, on p. 729; Table 16–3 on p. 730 and Figure 16–2 on p. 732).

4. The Rate of Net Consumption and the Rate of Profit

5. Net Consumption: Its Other Sources, Wider Meaning, and Relationship to the Saving of Wage Earners

6. Confirming the Critique of the Exploitation Theory

See Table 16–4, on p. 736 for the implicit basis of the primacy of profits doctrine presented in Chapter 11.

B. The Net Consumption Theory Further Considered

1. Why Businessmen and Capitalists Cannot Arbitrarily Increase the Rate of Net Consumption and the Rate of Profit

2. Implications for the Gravitation of Relative Wealth and Income

3. Accumulated Capital as a Determinant of Net Consumption

4. An Explanation of High Saving Rates out of High Income

5. Net Consumption and Time Preference

6. The principle of time preference

7. The foundations of time preference

8. Time preference, rationality, and freedom

C. Net Investment as a Determinant of Aggregate Profit and the Average Rate of Profit

See Tables 16–5, p. 745; 16–6, p. 747; and 16–7, p. 749; see also the equations on p. 748, which show why aggregate profit equals the sum of Net Consumption plus Net Investment.

1. The Net Investment Rate as a Determinant of the Average Rate of Profit
2. Net Investment Versus Negative Net Consumption (see Tables 16–8 and 16–9 on pp. 751 and 752)
3. The Prolongation of Net Investment Under an Invariable Money
4. Net Investment as the Result of the Marginal Productivity of Capital Exceeding the Rate of Profit
5. Net Investment as a Self-Limiting Phenomenon
6. Capital Intensification and the Tendency Toward the Disappearance of Net Investment Under an Invariable Money
7. The Process of Capital Intensification (see Table 16–10, p. 760)

D. The Addition to the Rate of Profit Caused by Increases in the Quantity of Money

See Figures 16–2 and 16–3 on facing pages 764 and 765.

1. The Impact of Increases in the Quantity of Money on the Net Investment and Net Consumption Rates (see Tables 16–11 through 16–15 in *Capitalism*)
2. Increases in the Quantity of Money and the Perpetuation of Net Investment
3. The Tendency of the Rate of Net Investment to Equal the Rate of Increase in the Quantity of Money and Volume of Spending
4. Summary Statement of the Determinants of the Rate of Profit

E. Increases in the Real Rate of Profit Dependent on Increases in the Production and Supply of Goods

1. Net Investment Without Increasing Capital Intensity
2. Capital Saving Inventions

F. The Inherent Springs to Profitability

1. The Net Consumption Spring to Profitability. So long as net consumption exists, the only way an aggregate profit will not exist is if there is equivalent *negative net investment*. This situation is necessarily temporary.
2. The Indirect Net Investment Spring—Via Net Investment and Greater Capital Intensity Causing a More Rapid Increase in the Quantity of Commodity Money in Conjunction with the Resulting More Rapid Increase in Production
3. The Direct, Net Investment/Greater Capital Intensity Spring.
The potential for additional net investment represents a further “inherent spring toward profitability,” in that whenever aggregate profitability is lacking, all that need occur to restore it is further net investment. At the same time, net investment is *positively encouraged by the fact that the lower is the rate of return on capital, the greater is the degree of capital intensity that pays*.
4. Why net investment is encouraged by a lower rate of return (Note: beware the fallacy of composition in confusing this case with the case of an individual industry, in which a low rate of profit *relative to the rate of profit in other industries* discourages investment, in fact, encourages *disinvestment*.)
5. The railroad tunnel case as an illustration of the rate of return as the standard for cost savings that are necessary to make more capital intensity pay.
6. The case of methods A, B, and C, requiring different capital intensities—see Table 16-16, p. 781 of *Capitalism*.
7. The case of the older and younger scotches

8. The effects of a lower rate of return on the profit margins and prices of more and less capital intensive industries; why it favors the expansion of the more capital intensive—see Table 16-17, on p. 782 of *Capitalism*.

9. Wage Rate Rigidities and the Blockage of the Springs

10. Note: a higher rate of return reflecting a more rapid increase in the quantity of money and volume of spending need not discourage investment. The scotch case as a demonstration: the rising volume of spending operates equally on the price and profit of the younger scotch and the older scotch, thus the less capital intensive product is not favored here. (See the subsection “Capital Intensiveness and the Monetary Component in the Rate of Profit).

X. The Net Consumption/Net Investment Theory and the Leading Alternative Theories

A. Exposition and Critique of the Productivity Theory in Its Traditional Form.

1. The meaning of the productivity theory and its illustration in terms of Roscher’s famous boat and net example.
2. Problems: (a) presence of opportunity-cost doctrine (b)and what if loaves of bread forgone to obtain added fish? How calculate return? (c)Highest rate of return exists before any productivity of capital.
3. Why the productivity of capital by itself can’t explain the rate of profit: lower prices of products. A case of increased output, and thus increased productivity, but no change in aggregate profitability if the aggregate monetary magnitudes are the same. Presence of the fallacy of composition.
4. But productivity in form of cost savings or quality improvements could induce net investment and in that way raise the rate of return.
5. The productivity theory’s mistaken view of technological progress as the source of demand for capital and a higher rate of profit, rather than as a source of supply of capital goods; Ricardo’s insights here.

B. Exposition and Critique of the Time Preference Theory in Its Traditional Form.

1. An example of the formula of the time preference theory: 10 present apples are equal in value to 11 apples to be available one year later, and to the total of the means of producing those 11 apples; in one year, the means of producing these 11 future apples become 11 present apples. Hence, factors of production worth 10 present apples become products worth 11 present apples.
2. Problems of a pure time preference theory: confusion of real and money rate of profit; the formula and the doctrine of the purchasing power premiums; the discounting approach; the marginal future unit is more valuable than the first sub-marginal present unit—Böhm-Bawerk’s concession. Omission of the role of net investment and the quantity of money.

C. The Classical Basis of the Net Consumption Theory

1. Ricardo on profits rising as wages falling, and vice versa. Can be interpreted as net consumption rising or falling and productive expenditure or wage payments moving in the opposite direction in the context of invariable money.
2. John Stuart Mill on “demand for commodities is not demand for labor.” Net consumption represents a demand for consumers’ goods over and above the demand for labor, and a demand for commodities over and above the demand for factors of production to the same extent; this is the most fundamental source of profit—the only long-run source in an economy with a constant quantity of money.

D. Some Problems to Test Your Understanding

1. Adam Smith and Karl Marx postulated a simple state of affairs in which manual laborers produced and sold products, kept the whole sales proceeds, and did not act as capitalists, i.e., did not buy for the sake of subsequently

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selling. They believed that in such circumstances all income was wages and no income was profits. They held that profits came into existence only with the development of “capitalistic circulation” (i.e., buying for the sake of selling) and were a deduction from what was originally all wages. To determine what the effect on the rate of profit would be if there were no capitalists, but just sellers of products, you are given the following information, which will test their propositions in the light of the net consumption theory: Receipts from the sale of products are 1000, all of which is consumed by the sellers and constitutes a fresh 1000 of receipts from the sale of products in the next period. Using Figure 16–2 and Tables 16–1 through 16–4 as your framework of analysis,

- a. State the amount of productive expenditure present.
- b. State the amount of wages paid in the production of products.
- c. State the amount of money outlays to be deducted from sales revenues as costs.
- d. State the amount of profits earned on the sales revenues.
- e. State the amount of nominal capital in existence.
- f. State the rate of return on capital.

2. Find net investment if productive expenditure for buildings and equipment by business is 1000, while total annual depreciation charges are 820, and productive expenditure for labor materials, and supplies is 2000, while cost of goods sold is 1980.

- a. Find total business sales revenue from the above data, on the assumption that all wages have a counterpart in consumption expenditure.
- b. Find aggregate profit in the economic system, on the assumption that net consumption is zero and thus that sales revenues equal productive expenditure alone.
- c. Find net investment on the assumption that 50 of wages show up as an additional demand for capital goods accompanied by an equivalently reduced demand for consumers' goods. (You may want to use Table 16–9 as a guide to your answer.)
- d. Find aggregate profit on the preceding assumption.
- e. Find net investment and aggregate profit in questions 1 and 2, on the assumption that total costs are 400 higher.

Answers to questions 1a–f and 2a–e appear immediately below, with 180 degree rotation.

*1a. zero, 1b. zero, 1c. zero, 1d. 1000, 1e. zero, 1f. infinite
2a. 3000, 2b. 200, 2c. 250, 2d. 200, 2e. -200, -200*

XI. Applications of the Net-Consumption/Invariable-Money Analysis

A. The Analytical Framework

See Figure 17–1 on p. 811.

B. Why Capital Accumulation and the Falling Prices Caused by Increased Production Do Not Imply a Falling Rate of Profit

1. Confirmation of Fact that Falling Prices Caused by Increased Production Do Not Constitute Deflation
2. More on the Relationship Between Technological Progress and the Rate of Profit

C. Why Capital Accumulation Does Not Depend on a Continuous Lengthening of the Average Period of Production

See Figures 17–2 and 17–3 on pp. 821 and 823.

The Average Period of Production and the Limits to Technological Progress as a Source of Capital Accumulation

D. Implications for the Doctrine of Price Premiums in the Rate of Interest

E. Implications for the Process of Raising Real Wages

F. How the Taxation of Profits Raises the Rate of Profit

The Influence of the Monetary System

G. How Government Budget Deficits Raise the Rate of Profit

1. The Need to Reduce Government Spending
2. The Government's Responsibility for the Emphasis of Today's Businessmen on Short-Term Results

H. Profits, the Balance of Trade, and the Need for Laissez Faire

I. Implications for the Theory of Saving

1. Net Saving and Increases in the Quantity of Money
2. Why the Actual Significance of Saving Lies at the Gross Level
3. Net Saving and the Rate of Profit

J. "Hoarding" as a Long-Run Cause of a Rise in the Rate of Profit

Implications for the Critique of Keynesianism

K. Critique of the Investment-Opportunity Doctrine

1. Mistaken belief that the rate of profit is determined by the demand for and supply of capital, when in fact it is governed by the difference between the demand for products and the demand for factors of production (i.e., net

consumption) and by net investment and the increase in the quantity of money.

2. Error of believing that technological progress raises the average rate of profit, when in fact it is neutral (except to the extent that it increases the quantity of commodity money) and is itself an essential cause of capital accumulation.
3. Contradictory view of technological progress as both raising and lowering the rate of profit, the latter through increasing the supply of consumers' goods and causing falling prices—alleged “deflation.”
4. Failure to realize the limitless need for capital and the strictly limited ability to accumulate it through saving, because of the operation of time preference.
5. Failure to realize that continued net saving in terms of money is the result of increases in the quantity of money, which correspondingly *raise* the rate of profit.
6. Exaggerated, confused view of the role of saving in capital accumulation, based on failure to analyze matters in terms of an invariable money.
7. Role of confused view of demand for consumers' goods as representing aggregate demand in conclusion that only use for additional capital goods is in the production of consumers' goods.

L. Critique of the Underconsumption/Oversaving Doctrine

1. The seeming paradox in claiming that the demand for capital goods can be greater than the demand for consumers' goods. Resolution of the paradox even in the most extreme cases. (See Tables 17-1 through 17-4 in *Capitalism*.) In such a situation, the great majority of capital goods would be employed in the production of further capital goods. All would ultimately still serve in the production of consumers' goods, but the “period of production” would be extremely long.
 2. Consumption as the Purpose of Production and the Progressive Production of Consumers' Goods Over Time
 3. The Measurement of the Average Period of Production
 4. A Rise in the Demand for Capital Goods and a Fall in the Demand for Consumers' Goods: The Cross-Hatching of Production
- Manifestations of a less capital intensive economy today in such things as thin walls of newer buildings compared with those constructed before World War II, and in products in general as not being as well made (apart from the problem of less care by workmen). Perception of less going into products is correct.

M. More on Why Savings Cannot Outrun the Uses for Savings

1. Capital Intensiveness and Land Values
2. The Housing Outlet and Consumer Interest
3. The Automatic Adjustment of the Rate of Saving to the Need for Capital

XII. EXPOSITION AND CRITIQUE OF KEYNESIANISM

A. The Essential Claims of Keynesianism

1. The denial of the fact that a fall in wage rates and prices can achieve full employment. Call for government budget deficits as the solution. Keynesianism and Consumptionism. Implied opposition of the Keynesian doctrine to the quantity theory of money.
2. The reasons for Keynesianism's influence: the hostility to a free market in labor—the influence of the exploitation theory. The isolated position of economists. The earlier abandonment of classical economics, especially the wages fund theory and the view of saving.
3. Neo-Keynesianism: Pigou and the Pigou effect. Weakness of Pigou's position. The latest incarnation of Neo-Keynesianism.

B. The Keynesian System: The Unemployment Equilibrium Doctrine and Its Basis; the IS Curve and Its Elements

1. The meaning of the unemployment equilibrium—see *Capitalism*, p. 868, Figure 18–1. Same essential idea as Consumptionism.
2. The meaning of the IS Curve: *the relationship between the “marginal efficiency of capital” (the rate of profit), on the one side, and the volume of output and employment, on the other, for equilibria of investment and saving.*
3. The IS Curve claims that as output and employment expand, the rate of return on capital falls. The Keynesians claim that at the point of *full employment* and its corresponding output, the rate of return would either be negative or, if not negative, at least unacceptably low—somewhere below 2% is the usual estimate. See *Capitalism*, p. 869, Figure 18–2.
4. Derivation of the Keynesian aggregate demand curve and the unemployment equilibrium from the IS curve—see *Capitalism*, p. 870, Figure 18–3.
5. The meaning of the Keynesian argument is that full employment can't exist, because if, somehow, it did, the rate of profit would be too low. Businessmen would then start to hoard, and the hoarding would reduce output and employment until the rate of profit was raised back up to an acceptable level. This is supposed to be the reason why a fall in wages and prices is incapable of achieving full employment: the problem is, allegedly, that the physical output corresponding to full employment simply imposes an unacceptably low rate of return on capital. The level of wages and prices is thus held to be irrelevant.
6. Derivation of the IS Curve from a. the production function, b. the saving function, c. an equality of saving and investment, d. the marginal efficiency of capital schedule. See *Capitalism*, pp. 867–875, especially Figure 18–4, on p. 871.
7. A fall in wages and prices is held to be incapable of achieving full employment, because all of the relationships above are supposed to hold true *in physical terms*. N_f of employment means Y_f of output, means S_f of saving, requiring I_f of investment, which causes too low a rate of return. These same physical relationships allegedly hold irrespective of the wage and price level. Specifically, at a lower wage and price level, no more physical investment is profitable (yields more than 2%) than before. See *Capitalism*, p. 874, Figure 18–5 and the surrounding discussion.

Thus, there allegedly still can't be an outlet for saving in excess of this given physical amount of investment. And thus there still can't be an output greater than the one that produces such a level of saving, nor, finally, a volume of employment greater than the one that produces such a level of output. Full employment can't exist or be maintained because it would produce a physical volume of output out of which there would be a physical volume of saving requiring a physical volume of investment that would put the rate of return below the minimum acceptable rate. (See Keynes, *General Theory of Employment, Interest, and Money*, p. 261—quoted in *Capitalism*, p. 875.)
8. The fall in wages and prices and the pile up of funds in the “liquidity trap.”
9. The Grounds for the MEC Doctrine—why the “marginal efficiency of capital” (rate of profit) is supposed to fall: (see *Capitalism*, pp. 875–876.)

- a. Rising purchase prices of capital assets as net investment increases—the additional net investment perceived as an additional demand for capital assets, which raises their purchase price.
- b. Lower selling prices of products as more capacity comes on stream as the result of additional net investment.
- c. Operation of law of diminishing returns; see Keynes on these points: *General Theory* p. 136—quoted in *Capitalism*, pp. 875–876.

10. The Keynesian solution: “fiscal policy,” i.e., federal budget deficits, to absorb the allegedly excess saving at full employment—see *Capitalism*, pp. 876–878.

C. Critique of the Keynesian Analysis

1. The declining MEC argument and the fallacy of context dropping. The ability of *lower wages and prices* to achieve full employment is the context. The three reasons advanced for the declining MEC as net investment increases contradict this context.

- a. Lower, not higher, purchase prices of capital assets.
- b. Lower costs of production to offset lower selling prices.
- c. Increasing returns to capital, not decreasing returns as employment expands.

The first of the three reasons claims that a fall in wages and prices could not achieve full employment because a *rise* in wages and prices would not.

The second claims that a fall in wages and prices could not achieve full employment, because if there were no fall in costs, but only in selling prices, the rate of profit would be reduced.

The third reason claims that a fall in wages and prices cannot achieve full employment because if what occurred as wages and prices fell was an increase in capital relative to labor as employment increased, there would be diminishing returns to capital. The actual fact is that an increase in employment means *increasing* returns to capital, because it means more labor relative to capital. If ever capital were “too abundant,” the surest cure would be more labor—more employment rather than less.

2. The Keynesian claim that a fall in wages and prices cannot achieve full employment, because at full employment the rate of return on capital would be too low, implies that *the rate of return is lower in the recovery from a depression than it is in the depression*.

3. The Keynesian argument claims that in a depression saving and net investment are at their maximum limit, and that the problem is that full employment requires that they be carried still further. Actually, in a depression, saving and net investment are extremely low or even *negative*.

4. Our previous discussion of the determinants of the rate of profit showed that the rate of profit and net investment *are positively related*, i.e., that more net investment and more profits go together virtually dollar for dollar, because while profits are the difference between sales and costs, net investment is the difference between productive expenditure (which is almost equivalent to sales, since it embraces the expenditure for capital goods and for labor by business) and those same costs.

5. The actual reason the rate of profit is so low or negative in a depression is the same as the reason net investment is so low or negative—namely, that productive expenditure has fallen, taking sales revenues with it, while costs, especially depreciation costs, fall only with a lag. The restoration of net investment would be accompanied by a rise in aggregate profits virtually dollar for dollar and would thus sharply raise the rate of profit.

6. The restoration of net investment is prevented by *the failure of wage rates to fall*. When wage rates fall, the costs of individual investments will be sharply lower. Until wage rates fall, investment expenditures are postponed. In this way, as previously shown, the failure of wage rates to fall operates to deepen the depression, because it causes the postponement of investment expenditures, the consequent wiping out of profitability, and thus of the ability of business firms to repay their debts. This, in turn, causes more bank failures, a further reduction in the quantity of money and velocity of circulation, and thus necessitates greater wage cuts than would have been the case if they had come quickly.

7. Further Errors in the Keynesian Analysis: The contradiction between the marginal-efficiency-of-capital doctrine and the multiplier doctrine; critique of the “paradox-of-thrift” doctrine; critique of the saving function; critique of the liquidity-preference doctrine; critique of the balanced-budget multiplier.

D. Critique of the Keynesian Policies

1. Budget deficits.

- a. Promote expansion in size of government—if more government spending is the goal, then any and every government program appears justified—see Keynes, *General Theory*, p. 129, p. 131; quoted in *Capitalism*, pp. 35, 544
- b. Actually, budget deficits are *deflationary*, unless financed by inflation of the money supply; if not so financed, they threaten government bankruptcy, and thus a fall in the velocity of circulation of money and a contraction of the money supply insofar as it is backed by government debt.

2. Inflation

- a. In the absence of a gold standard, which the Keynesians totally oppose because of the obstacles it puts in the way of money creation and deficits, deficits are in fact financed by the creation of money.
- b. The Keynesians also desire the creation of additional money insofar as they believe that it can succeed in lowering the rate of interest. (If the rate of return is not already at its irreducible minimum, the Keynesians believe that increasing the quantity of money can push it lower and in the process stimulate additional investment, employment and output—i.e., they believe that in such circumstances the creation of more money permits a movement down and to the right on the IS curve.)
- c. As the discussion of inflation will show, the creation of money by the government, or with the encouragement of the government, is the essence of the inflation problem—inflation *is* the government's creation, or sponsorship of the creation, of money at a rate more rapid than would be possible under a gold standard.
- d. The consequence of deficits and inflation is *capital decumulation, a lower productivity of labor, and lower real wages*. *It is also a lower real rate of return on capital*—for reasons to be explained under the head of inflation.

3. Price and wage controls are the classic response to inflation. They in turn cause total economic chaos and culminate in a totalitarian socialist dictatorship. (See chaps. 7 & 8 in *Capitalism*.) Because the Keynesian policies lead to the inflation that results in price and wage controls, price and wage controls must be considered one of the consequences of those policies.

4. The Keynesian policies of deficits and inflation are not only not necessary for the achievement of full employment, but *do not achieve it*.

- a. Indeed, deficits, by themselves, apart from the creation of money, actually cause more unemployment, by virtue of their deflationary effects noted above.
- b. As shown in the discussion of unemployment, earlier in the term and in Chapter 13 of *Capitalism*, even when combined with inflation of the money supply, much, most, or even all of the extra spending can be nullified by wage increases that are just as rapid or even more rapid.
- c. Throughout the middle and late '30s, the quantity of money and volume of spending in the economic system were stepped up by the adoption of Keynesian policies, and yet unemployment remained a massive problem, because growing labor union power raised wage rates almost as fast, with the result that growing payrolls were not able to employ correspondingly larger quantities of labor.
- d. And much of the additional employment that did take place was in the form of government employment, of a make-work variety, and actually caused a drop in the standard of living of those who already were employed, since they had to produce the goods and services which the government workers consumed, and received no comparable output in return.
- e. Also as shown in previous discussion and in Chapter 13 of *Capitalism*, full employment was achieved only with the coming of World War II—not because war is necessary to full employment, but because the war was financed by massive inflation of the money supply *coupled with wage and price controls*. This combination generated sharply rising payrolls and spending of all types, and wage rates and prices were prohibited from keeping pace. The result was rapidly growing quantities demanded of everything, and the emergence of shortages, in-

cluding a labor shortage. As previously explained, the full employment of World War II was accompanied by a sharp decline in the standard of living of the average person, who had to work longer and harder and who got much less in the way of goods for his efforts.

f. As previously pointed out, full employment *with prosperity* was achieved only *after* World War II, as the result of the massive reduction in the size of government spending and deficits (from 1945 to 1946, Federal Government spending fell from approximately \$93 billion to approximately \$45 billion and the deficit was virtually eliminated). The prosperity resulted from the release of funds from the government back to the citizens and the transfer of roughly ten million government workers (most of the army and navy) back to private employment. The citizens now had vastly greater control of their own incomes and previously unproductive labor was now available for production. The unions could achieve wage increases (which would have been given anyway) without causing unemployment or higher prices insofar as the end of the war provided the physical means for a vast transfer of resources back to the private economy and thus for a corresponding increase in real wages. (The average wage earner could have more because the government took less not only from him, but also from his employer, who could now afford to pay him more without increasing his total costs.)

5. Paradoxically, the Keynesian policies reduce the rate of return on capital.

a. This is implied in the very attempt to neutralize or seize current savings, whether by taxing them away or by absorbing them in budget deficits which will never be repaid. The savings that are seized or absorbed for the most part *come out of the rate of return*. Taking them away is tantamount to taking away part of the rate of return itself.

b. This result is evident in inflation, when both saving in real terms and the rate of return in real terms become negative, and people turn to hoarding as the result of the Keynesian policies themselves—a hoarding of the precious metals.

6. The insincerity of the Keynesian policies:

a. Even if the analysis were correct (which it certainly isn't), why not try to raise the rate of return by reducing taxes on the rate of return? Only after all taxes on the rate of return had been eliminated, would it be legitimate to talk of a problem in the private economy of too low a rate of return.

b. The doctrine of the "euthanasia of the rentier" (See *The General Theory*, pp. 375-378—quoted in *Capitalism*, pp. 891-892.) All along the problem of capitalism has been presented as the rate of profit being too low for full employment. Now it turns out that it's *too high!*

XIII. INFLATION

A. Confusions Resulting From the Definition of Inflation as Rising Prices

1. Too many explanations, causing ignorance in any particular case.
 2. Implication of the responsibility of businessmen.
 3. Implication of price and wage controls as the solution.
 4. Implication of limiting inflation by expanding the quantity of money.
- Alternative definition of inflation in terms of the increase in the quantity of money.

B. Validation of the Quantity Theory of Money as the Explanation of Rising Prices

1. The demand/supply test using the formula for the general consumer price level.
2. By the nature of the formula, the price level can rise only by virtue of more D or less S.
3. Reductions in supply must be ruled out as a cause of an inflationary rise in prices because:
 - a. Supply has actually increased.
 - b. Even where supply has decreased, the overwhelmingly greater part of the rise in the price level has been the result of more demand.
 - c. Reductions in supply could explain a sustained, significant rise in prices only if material civilization were in the process of rapidly disappearing, which it isn't.
 - d. A decrease in supply is often itself merely an indirect consequence of a rapidly rising aggregate demand, rather than being an initiating cause of rising prices.
 - e. Decreases in supply do not produce the range of price increases people associate with inflation.
 - f. Decreases in supply do not produce the effects on the relations between debtors and creditors that people associate with inflation.
 - g. To say that decreases in supply cause inflation is to imply that increases in supply cause deflation and, therefore, depression and poverty. This is a self-contradiction because more supply causes prosperity, not poverty.
4. Thus, the problem of inflation is exclusively one of rising aggregate demand.
5. A rise in aggregate demand is the result of an increase in the quantity of money: recall the examples of the gold mining case and of the issuance of social security checks from Chapter 12 and the discussion of the ways in which more M raises V.
6. Governmental responsibility for inflation.
 - a. The forced abandonment of gold and the creation of fiat standard money through the open market operation.
 - b. The encouragement of fractional reserve banking and fiduciary media: expanding the amount of reserves through the open market operation and making reserves more potent.
7. The implied solution for inflation: *take the ability to create money out of the government's hands*: make the monetary unit something the government cannot create—viz., *gold*.

C. Alternative Explanations of Rising Prices: The Cost Push Doctrines

1. The cost-push doctrine: the attempt to blame rising prices on rising costs of production. Variants of the cost-push doctrine: wage-push, profit-push, the wage-price spiral, crisis-push.
2. The roots of the cost-push doctrine: the belief that more demand causes more production and supply and can only raise prices at the point of full employment ("demand-pull inflation"). The belief that in the absence of full employment another explanation of rising prices must be found. Rising costs selected as the explanation because in first

instance costs often do determine prices.

3. The logical deficiency of the cost-push doctrine: explaining prices on the basis of costs means explaining them on the basis of other prices and ultimately on the basis of mere arbitrary power.

4. The cost-push doctrine is equivalent to blaming inflation on falling supply. All the objections raised against falling supply as an explanation of inflation apply to it.

5. Critique of the wage-push variant:

a. If demand did not rise, wage push would burn itself out in mounting unemployment. The total cumulative effect of wage push would be limited and probably could not stop prices from actually falling.

b. Wage push is a continuing phenomenon only because of governmental decisions to increase the money supply and expand demand in an effort to avoid or fight the unemployment otherwise resulting from wage push. Wage push is thus actually a consequence of an expanding quantity of money and more demand.

b. Confirmation by the experience of the 1980s.

6. Critique of the profit-push variant.

a. Even a protected legal monopolist can raise his price only if the demand for his product is growing. In order to be associated with a problem of inflation, the growth in demand for the monopolist's product must be part of a growth in economy-wide demand.

b. The actual effect of the profit motive is to expand production and thus reduce prices; this confirmed even by the rise in prices in paper money.

c. Inflation is associated with high profits. This is because an expanding money supply and demand increase sales revenues. The increase in profits is purely in terms of paper money and is usually accompanied by a decline in real profits: the inventory case.

7. Critique of the crisis-push doctrine.

Confusion of non-repeatable, particular price increases with sustained general price increases.

D. Alternative Theories of Rising Prices Continued: The Velocity Doctrines

1. The basic velocity doctrine: the attempt to blame increases in aggregate demand on a higher velocity of circulation of money rather than on a larger quantity of money.

2. Critique of basic velocity doctrine.

a. Velocity not an entity or cause of anything; reflects desire to hold money in reserve.

b. This desire mainly determined by rate of increase in the quantity of money, as explained previously; thus rise in velocity itself mainly a reflection of increase in quantity of money—more rapid the increase, the less is the desire to hold money, and thus the greater is velocity.

c. Independent changes in demand for money and velocity slow and gradual, and largely offset by more complexity of production involving more stages of payment and by more production.

3. Critique of the inflation-psychology doctrine:

a. Inflation psychology not a primary—the product of the fact of inflation; quickly diminishes in the face of a serious attempt to reduce inflation, as the experience of 1980s confirms.

b. Largely describes same factors as make for higher V; but also operates from the side of supply, in the anticipations of sellers: higher wage rates and prices than corresponds to current D. To this extent, like cost-push and with the same limits. Implication here of inflation causing unemployment via wages and prices outrunning rise in D.

4. More on inflation psychology: can appear to lead life of own—can continue for a while even if government sharply cuts back or stops inflating for a while; people go on with low cash holdings or reduce them further, and go on raising prices in expectation of being bailed out by more inflation. At this point, a crisis necessary to break inflation psychology—government must not validate inflationary expectations, not bail people out as demand appears inadequate, as credit fails to materialize and cash holdings prove inadequate. Appearance of crisis easily leads to resumption

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of more rapid expansion of money—to stop, mitigate, or turn the crisis around; can lead to undoing of paper money by making inflation worse than before, producing still more rapidly rising prices and still worse inflation psychology on the next round, with problem getting worse and worse as time goes on. Validating inflation psychology not possible on the gold standard.

5. The credit-card doctrine:

- a. Thesis: reduce need to hold M—raise V.
- b. Largely *apparent* reduction in need to hold M: American-Express-type card: hold checking balance instead of currency, *two* cash holdings instead of one (American Express's and yours); probably acts to *reduce* V.
- c. Sometimes credit cards can reduce the need to hold cash: Visa and Mastercards; here we have lines of bank credit—guaranteed loans. Don't need to hold cash for case of finding something and not being able to borrow; now sure to be able to borrow. But what makes possible this great extension in lines of bank credit is ability to expand M—an instance of more M reducing need to hold M and thus raising V. Confirms quantity theory.
- d. credit cards and lines of bank credit can certainly exist without inflation, but only on basis of *savings*, where origin is drop in consumption of the savers; thus, if not based on more M, not inflationary.

6. Consumer installment credit and credit in general—inflationary if from more M; not, if financed by saving.

7. Consumer “greed”—vague: might refer to some goods bid up, but then others down; no hoards to draw down and if were, why does greed mean spending them?; desire for higher living standards *reduces* prices, not raises—more production.

E. The Meaning of Inflation

1. The alternative theories confirm the quantity theory of money: whole problem of inflation in government's expansion of M, which causes more D.

2. Hence, definition of inflation as: *an increase in the quantity of money caused by the government*, or, equivalently: *an increase in the quantity of money more rapid than the increase in the quantity of gold and silver*.

3. This definition explains all the symptoms of inflation:

- a. A sustained significant rise in prices (without material civilization disappearing).
- b. A rise not only in the general price level but the whole range of prices.
- c. Debtors gaining at the expense of creditors.
- d. High nominal profit and interest rates.
- e. A low demand for money for holding.

4. This definition shows how to stop inflation: stop the government from creating money in excess of gold and silver reserves.

5. Critique of definition of inflation as rising prices:

See points 1 - 4 under (A) on p. 105, above, plus the fact that this definition makes no distinction between higher prices due to more D or less S—hence no ability to explain *all* the symptoms of inflation described under 3a - 3e, immediately above.

6. Difference in definitions is as important as right or wrong understanding of a disease: know what it is that produces all the symptoms and what needs to be dealt with to stop them versus attempting to deal directly with an isolated symptom.

F. The Deeper Roots of Inflation: Connection of Inflation with Budget Deficits

1. Deficits not inflationary if financed by selling bonds to the “public”— i.e., private individuals and non-bank corporations; here just demand diversion: government spends instead of private borrowers, who are deprived of the funds the government borrows.

2. But bankruptcy at end if such borrowing a regular policy.

Further problems with deficits: capital diverted to consumption—economic progress slows or is reversed; rising tax burden to service debt further contributes to process of decline; private consumer borrowing also disrupted—e.g., the mortgage market; for these reasons, and others (i.e., incompatibility with principles of representative government and creation of class of public annuitants supported by others' industry), long-standing opposition has existed to public debts (see Adam Smith, *Wealth of Nations*, chapter "Of Public Debts"—also von Mises, *Human Action*, pp. 224-228).

3. If the government had no ability to create money, then, in weakening the government's credit and threatening bankruptcy, borrowing from the public would actually be *deflationary*: under a fractional reserve banking system in which government debt serves as part of the assets of the banking system, it would be a threat to the quantity of money; also prospect of government bankruptcy would lead to rise in demand for gold and its exportation.

4. What makes government deficits inflationary is the ability to finance them by the creation of new and additional money.

This exists today at the Federal level (but not at the state or local level); hence Federal deficits are inflationary; mechanisms of money creation in connection with deficits already shown: create deposits and reserves, on basis of which banking system can create still more money in purchase of additional government bonds or in granting private loans.

5. Ability to create money makes it impossible for Federal government to go bankrupt in the technical sense—always has money available to pay its debts, and also raises its tax revenues in the process (at least absolutely and often relatively, as well); as far as debt held by Federal Reserve (central bank), even payment of interest is nominal, since most of it is turned back to the treasury.

Even though it can't go bankrupt technically, the government has probably long been bankrupt in the sense of being unable to repay its debt *in the same purchasing power in which the debt was contracted*.

6. Inflation possible without current deficits in the government's budget—e.g., Fed can buy up existing government debt and thus create reserves and deposits; also, within—fairly narrow—limits the banking system might expand fiduciary media somewhat further under supporting framework the government has provided, but soon a problem of need for more reserves and more currency in circulation, which can come only from the government's creation of additional standard money.

7. *The essential element in any major inflation is government's creation of new and additional standard money.*

8. Desire for deficits implies opposition to the gold standard, since a gold standard would make bankruptcy the price of deficits, because it would deprive the government of the ability to create money and thus bail itself out; deficits unlikely under representative government where the price is this high; no end to deficits until the government loses the power to create money. Proposals for constitutionally balanced budgets make avoidance fairly easy and could be evaded. Under the American system of division of powers, they necessarily lack an enforcement mechanism.

G. The Motives for Deficits and Inflation

1. To foster the view of government as Santa Claus—apparent free benefits from government. Cost, in form of rising prices, not seen as connected—blame shifted to business. How public thinks of government even now. Government vastly larger because of its ability to inflate—benefits seen, but costs not.

2. To be able to finance wars, as well as the welfare state, without the public being aware of the actual cost.

3. The belief that deficits and inflation are necessary to prevent or combat unemployment, which is the essential teaching of Keynesian economics; this belief provides major reinforcement for the free benefits idea: the benefits are allegedly paid for by the elimination of unemployment, and much more besides—via the "government spending multiplier".

4. The belief that creating money and lending it out is equivalent to creating additional capital and lowers the rate of interest—the businessman's version of the welfare state.

5. Deeper explanation of most of these points is *the influence of the socialist ideology*.

a. Continuing expansion in size of government is movement toward socialism. Also view of government as Santa Claus conforms to socialists' belief that the individual is helpless and that the government is all wise and

all powerful.

b. A hostility to profits and interest—Keynes’ “euthanasia of the rentier”—also underlies the desire for credit expansion and the reduction of the rate of interest; but even without this, the desire for credit expansion manifests the socialist ideology insofar as it is a desire for a “free benefit.”

c. The unemployment problem also is largely an indirect result of the influence of the socialist ideology, for the labor legislation that causes unemployment is the result of the influence of the exploitation theory.

H. The Further Effects of Inflation

1. The growth of government under the influence of inflation-financed deficits and the free benefits idea.
2. Greater frequency and duration of wars in the belief not only that they do not have to be paid for, but are an actual source of prosperity.
3. Increased hostility to profits and interest because of the increase in nominal profit and interest rates, while the public suffers.
4. Price controls—as a method of controlling inflation.
5. Relative wealth and income effects:
 - a. People with fixed assets or on fixed incomes; the hypocrisy of helping the poor with inflation-financed programs.
 - b. The problem of lags and of incomes slow to adjust—an important deficiency of price indexes.
6. Effects on saving and capital accumulation.
 - a. Reversal of safety—traditionally safest investments made the least safe in terms of purchasing power; what purchasing power of the dollar made to depend on; risk effects on the average person: save less, hoard gold and silver, invest less efficiently—e.g., buy house on credit; at the same time artificially created speculative opportunities for the very nimble in commodity, real estate, and possibly stock speculation; diversion of efforts from productive work to artificially induced speculative activity.
 - b. Tax effects—recall the inventory case; now the depreciation case.
 - c. The prosperity delusion of inflation.
 - i. Of stockholders in above type case.
 - ii. Poverty coverup provided by seeming interest incomes.
 - iii. Wage earners’ lagged idea of purchasing power and consequent overconsumption.
 - d. Malinvestment—wasteful use of capital—stemming from artificially low interest rate.
 - i. Mises on false appearance of capital available for more capital-intensive projects.
 - ii. Low interest rate relative to rate of profit: wasteful inventory accumulation.
 - iii. Low interest rate relative to rate of price increases: wasteful housing and real estate investment; potential for wasteful investment in anything, the stronger inflation becomes.
 - iv. Discrimination against long term investments: if allow for rise in replacement cost, means higher prices or lower dividends now, before much of the inflation; which discourages such investments.Note: in reducing the productivity of existing capital goods malinvestment further reduces or restricts the supply of capital goods, because the capital goods of the future are the products of the capital goods of the present.
 - e. The abstraction (withdrawal of wealth) effect: spenders of the new and additional money draw goods out of the system without putting goods in to earn the money they spend; thus corresponding loss to producers; loss of capital if new money spent preponderantly by consumers; probable malinvestment to extent spent for business purposes by firms not otherwise able to attract funds.

General consequences.

- i. All five effects operate against capital accumulation.
- ii. The reversal-of-safety, tax, malinvestment, and abstraction effects also operate to reduce the real

rate of return on capital as well; reduction in real r comes in conjunction with *less* capital formation, not abundance of capital as advocates of credit expansion believe.

iii. Implication of gains of debtors less than loss of creditors—net reduction in real rate of return on investment as such.

iv. Impairment in growth of productivity of labor as the result of less capital formation because lower relative production of capital goods and less efficiency in their use—so real wages held down or reduced; real wages also held down because demand for labor depends on savings, whose growth is retarded relative to growth in consumer demand and rise in prices.

7. How inflation, especially in the form of credit expansion, sets the stage for standard, deflationary-type depression.

- a. Raises V —so superinflates demand. Higher V sustainable only so long as inflation continues. V may even need to accelerate. (Stabilization of V means slowdown in rate of increase in spending and sales revenues, hence reduction in monetary component in rate of profit. Hence profit squeeze in face of prevailing high interest rates.) Also, cash holdings run down in expectation of continuation of same or greater rate of growth in sales revenues. If M fails to accelerate, then profit squeeze and cash shortage develop.
- b. Inflation (credit expansion) encourages debt by making rate of interest low relative to rate of profit and to rise in prices—raises ratio of debt to incomes and asset values already superinflated by rise in V .
- c. In the ways shown under point 6, above, inflation undermines real capital and thus availability of real credit.
- d. And as part of (c), above, it encourages investments whose profitability exists only because of inflation.
- e. Because of all this, if inflation stops, slows down, or even fails to accelerate sufficiently, both a profit squeeze and a “credit crunch” develop. The latter occurs because capital has been diverted to projects whose profitability in whole or in part rested on inflation and the growth in sales revenues it inspired, and on the low rate of interest relative to the rate of profit that it caused. That capital is now not available. The diversion of capital shows up in the fact that in the absence of sufficiently large fresh doses of credit expansion, existing capital funds are made inadequate by the rise in wages and materials prices caused by initial injections of new money. This creates the potential for insolvencies and bankruptcies: surge in credit demand, to carry on business at higher wages and materials prices, and reduced credit supply, as the same cause makes funds more urgently required internally, leading suppliers of funds to supply less or themselves become demanders of funds. This situation makes some refinancings impossible, with the result that some firms can’t pay debts. Further result is a sudden need for cash by creditors whose own solvency is threatened because debtors can’t repay. Consequence is that V starts to fall, accompanied by inventory and other asset liquidations to raise cash. Sudden losses as investments whose profitability was based on inflation are no longer profitable; nominal profitability of all investments reduced by slower growth in D ; all can be turned into losses by drop in D .
- f. Revenues, incomes, asset values now stable or declining with huge debt incumbrance based on expectation of their rising—result: many debts not payable; further results: further credit tightening and drop in V —calling in of doubtful loans, need to raise cash as debts constituting one’s assets go bad, while the debts constituting one’s liabilities remain firm.
- g. Bank failures as too many business and consumer debts go bad; this means actual *reduction* in quantity of money—deposits and notes of a failed bank lose their money character.
- h. Less M further reduces spending and operates to reduce V further, thus compounding the problem—i.e., more business failures and still more bank failures; process like a row of dominoes falling over; ultimate stopping point: reduction of M to standard money; process descriptive of early ’30s, with successive waves of bank failures.

8. Unemployment.

- a. Unemployment of depression and deflation due to inflation, because they are the result of inflation.
- b. Inflation the preventive of unemployment only in the sense that more drugs are the preventive of withdrawal symptoms for an addict; no unemployment without inflation if don’t start the inflation in the first place.
- c. Inflation a cure for unemployment only in context where not necessary—i.e., if no unions, etc., and so wages could fall and eliminate unemployment that way—or a very limited cure in context where unions showing re-

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SYLLABUS SUPPLEMENT 8**

straint because of existing large scale unemployment and fear of adding to it.

d. If wages not free to fall and so eliminate unemployment that way, inflation will also not eliminate it—wages start rising with rise in demand, because of

- i. Removal of threat of greater unemployment.
- ii. Red flag of higher nominal profits produced by rising demand.
- iii. Rising prices of goods in limited supply and then rising prices because of rising wages.

e. Inflation a direct cause of unemployment insofar as it ultimately leads wages to rise more rapidly than demand—in anticipation of price increases over the life of employment contracts—and insofar as it brings about a fall in real wages which labor unions are unwilling to accept: i.e., the problem of the declining productivity of labor and the failure of the demand for labor to keep pace with the demand for consumers' goods.

9. Inherent accelerative tendencies of inflation, capable of culminating in the destruction of money and the division of labor; basic problem: government has the power to expand M; use of that power creates problems whose apparent solution is still more rapid expansion of M.

a. Continued growth of welfare state and deficits, with inflation to finance the deficits:

- i. Natural philosophical basis of growth in welfare state.
- ii. Help victims of previous extensions of welfare state.
- iii. Decreasing real revenues of the government.
- iv. Lags in tax collections.

b. Accelerate to paper over credit crunches and so prevent recession or depression.

c. Recessions as inflationary fueling periods—more rapid money supply expansion to prevent recession from turning into depression; then, when clear depression avoided, money comes pouring out.

d. Possible acceleration to make good general ravages of capital—e.g., an inflation-financed “reindustrialization plan.”

e. Adoption of escalators—indexing.

- i. Wages to cost of living; multiply price increases; cause larger unemployment or more rapid increase in M to ratify them.
- ii. Tax rates, depreciation.
- iii. Social security, government bonds.

Government has smaller revenues and larger outlays as result of (ii) and (iii) and thus is likely to create more M.

f. Acceleration on account of interest: when rates rise high enough to protect creditors, they impoverish debtors, creating demands for more rapid inflation to enable debtors to pay; then creditors losing again; process repeats itself until creditors realize no interest rate in paper money is sufficient; then destruction of credit; chance for quantum leap in inflation, with government creating money to make up for loss of private credit.

g. Acceleration on account of wage increases: every time wages rise more rapidly than the demand for labor, government must either allow unemployment to develop or accelerate the increase in the quantity of money; then wages rise still faster.

h. Accelerate to avoid profit reduction due to stabilization of V.

i. Continuous acceleration of inflation leads to destruction of money: becomes unacceptable when people know they must lose by taking it; then, possibility of no money; then no significant division of labor, no modern economic system.

I. The Current State of Inflation

1. The 1990 slowdown and the development of deflationary psychology.

2. The inflationary recovery and the fear of renewed inflation psychology.
3. The impending choice: will the government be willing to allow another major recession to develop to prevent this renewal?
4. Overcoming a recession/depression and ending inflation in the long run by using gold to increase the quantity of money.
 - a. Make gold, at its market price, legal tender for paper-money debts. Rise in price of gold then automatically creates the equivalent of additional paper money and thereby raises sales revenues and reduces the debt burden. This is compatible with large gold holdings relative to the spending of gold, i.e., low gold velocity, which can make possible the avoidance of a later contraction of spending in terms of gold.
 - b. At same time, exempt the rise in price of gold from capital gains taxation and make contracts written in gold fully enforceable. This will ensure major rise in demand for gold and in its price.
 - c. Government collection of some revenues in gold, e.g., a growing proportion of the tariff, phased in over a period of a few years. (Could be payable with checks on 100-percent-gold-reserve banks, which could be established for this purpose.)
 - d. A creditors' protection bill to limit present creditors' loss.
 - e. Finally, at high enough price of gold, make paper dollar fully redeemable in gold and give remaining gold reserves to banks to enable them to redeem checking deposits in full.