FIRST COURSE
Micro Lectures

SYLLABUS AND SYLLABUS SUPPLEMENTS

COURSE OBJECTIVES

1. To provide the student with a comprehensive knowledge of the nature, foundations, and operations of a division-of-labor, capitalist society, with special emphasis on the institutions of private ownership of the means of production, competition, the profit motive, and the price system as the basis for economic coordination and economic progress. The consequences of government intervention with respect to these institutions 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 five main current problem areas: 1) The validation of economic activity and fundamental economic institutions in the face of widespread criticisms. 2) Environmentalism and energy supplies. 3) Economic "planning" and the reasons for the worldwide collapse of socialism. 4) The monopoly question and antitrust policy. 5) Prevailing ideas on the nature of productive activity and the effect of government intervention on the standard of living of the average wage earner.

Two leading themes of the course will be 1) The possibility of continuous 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 capitalism.

BOOKS FOR THE COURSE

A. George Reisman, *Capitalism: A Treatise on Economics*

B. Ludwig von Mises, *Human Action,* Third Edition (paperback).

[In some years I used von Mises's *Socialism* instead of *Human Action.* The reading assignments in *Socialism* appear in brackets throughout this syllabus. Please note that the page references are those of the Jonathan Cape edition, which can be found in the Liberty Press Edition.]

C. Paul Samuelson and William Nordhaus, *Micro-Economics* (paperback), 15th Edition, (New York: McGraw Hill, 1995).

[I include Samuelson in my university courses in order to avoid the charge of being "one-sided." Somehow professors who use only Samuelson or the equivalent, who have never even heard of von Mises, much less assign his writings, do not have to worry about being considered "one-sided." They are automatically presumed to be fair-minded scholars, who present all viewpoints that those who know little or nothing about capitalism believe should be presented. Participants in this program who think that they need to learn more about leftwing arguments from their supporters should read the assignments in Samuelson and, to the extent necessary, the titles listed in the bibliography to *Capitalism* under the heading "The Enemies of Capitalism."]

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

Introduction: The nature and value of economics. An overview of the subject's content and history. Principal applications. The philosophical foundations of economic activity. Economics and capitalism.

READINGS

Reisman: Introduction and Chapter 1

von Mises, *Human Action:* pp. 1-3, 7-10, 862-885. Also see glossary at the end of this syllabus.

Week 2

The role of wealth in human life. "Scarcity" and the limitless need for wealth. The law of diminishing marginal utility and its reconciliation with the limitless need for wealth.

READINGS

Reisman: Chapter 2

von Mises, *Human Action:* pp. 257-326
[von Mises, *Socialism*: 289–313, 395-403, 452-453]
Samuelson: *Optional:* Chapter 1

Week 3

Natural resources, the law of diminishing returns, and conservationism. The ecological critique of economic progress: a rebuttal.

READINGS

Reisman: Chapter 3
von Mises, *Human Action:* pp. 119-131, 654-663
[von Mises, *Socialism:* pp. 404–408]
Samuelson, pp. 96–97 (upper left); *Optional:* Chapter 19

Week 4

The division of labor as the central requirement of a high and rising output per capita; its advantages and alleged shortcomings. Dependence of the division of labor on the economic institutions of capitalism, especially the price system. Prices, economic planning, and economic coordination.

READINGS

Reisman: Chapter 4; Chapter 5, Part A; Chapter 8
von Mises, *Human Action:* pp. 143-176

Week 5

Demand and supply curves. The law of demand. Elasticity of demand.

The uniformity-of-profit principle and its applications to consumer sovereignty, economic progress, farm subsidies, rent and price controls, profit taxes, and racial discrimination.

READINGS

Reisman: Chapter 5, Part B; Chapter 6, Part A
Samuelson: Chapters 3–5 (to p. 86)

Week 6

Tendencies toward uniform prices over space and time; applications to the Arab oil embargo and commodity speculation. Tendency toward a uniformity of wage rates at any given level of ability. Equal pay for equal work. Permanent inequalities in wage rates. Prices and costs of production. Ultimate analysis of cost of production. Cost of production and supply and demand.

READINGS

Reisman: Chapter 6, Part B
Samuelson: Chapter 6, Part A; Chapter 7, Parts A and C

Week 7

MIDTERM EXAMINATION

Following Midterm: Pricing of goods and services in limited supply. Costs and economic coordination.

Week 8

The free market's efficiency in responding to economic change. Factor prices. Price controls, shortages, and economic chaos. Illustrations from the energy crisis and rent controls. From partial price controls to universal price controls.

READINGS

Reisman: Chapter 7
von Mises, *Human Action:* pp. 730-736, 758–769; [von Mises, *Socialism:* pp. 527–543]

Week 9

Universal price controls and *de facto* socialism. The chaos of socialism. Understanding the collapse of Soviet Russia and the communist bloc on the basis of price theory. The tyranny of socialism.

READINGS

Reisman: Chapter 8

von Mises, *Human Action:* pp. 689–710, 716–719, 732–736; *Optional:* pp. 710–715

[von Mises, *Socialism*: pp. 114–142, 196–220, 516–521]

Samuelson: Chapters 8–10; Chapter 18, Part B

Week 10

The influence of the division of labor on private ownership of the means of production. Implications for redistributionism, inheritance, taxation, and land rent. Economic freedom, territorial sovereignty, and peaceful international relations.

READINGS

Reisman: Chapter 9, Parts A and B

von Mises, *Human Action:* pp. 737-742, 804-832, 664-688; [von Mises, *Socialism:* pp. 37–42]

Week 11

Economic inequality and economic competition. Equality of opportunity. The law of comparative advantage and the pyramid-of-ability principle. Free international trade. Population growth and the freedom of immigration.

READINGS

Reisman: Chapter 9, Part C

von Mises, *Human Action:* pp. 743-757, 833-861; [von Mises, *Socialism:* pp. 314–358]

Optional: Samuelson: Chapter 22

Week 12

The monopoly question. The political versus the economic concept of monopoly. Capital requirements and entry "barriers." The alleged tendency toward universal monopoly. The predatory-pricing doctrine. Marginal revenue and marginal cost. The pure-and-perfect-competition, oligopoly, and monopolistic-competition doctrines.

READINGS

Reisman: Chapter 10; [*Optional:* von Mises, *Socialism:* 361–392]

Weeks 13 & 14

The division of labor and the concept of productive activity. Exposition and critique of the Marxian exploitation theory. The productivity theory of wages. Labor unions and labor legislation. A reinterpretation of modern economic history. The productive functions of businessmen and capitalists, of retailing, wholesaling, and advertising.

READINGS

Reisman: Chapters 11 and 14

von Mises, *Human Action:* pp. 592-623, 628-634, 769-779

Optional: Samuelson, Chapter 13

FINAL EXAMINATION

(Accompanies Weeks 1–3)

I. The Nature and Value of Economics

A. Some Definitions

l. Economics: the science that studies the production of wealth under a system of division of labor

2. The division of labor: the separation of the total labor required to serve human life and well-being into separate, distinct occupations. In a division of labor society, each person lives by producing or helping to produce just one or, at most, a very few things and is supplied by the labor of others for practically all of his wants.

B. The Need for Economics; Leading Applications of the Subject

The division of labor doesn't exist or function automatically—e.g., fall of Rome, rise of U.S. and Western World; it depends on human choices; thus knowledge of its nature and requirements is necessary

1. Survival of material civilization:
2. Understanding history and the present-day world
3. Solving current economic problems—e.g., unemployment, inflation, stagnation, shortages, international economic conflict
4. Business and financial applications—influence of anti-business ideas; defending the freedom of businessmen to make money
5. Personal, philosophical applications—understand own and others' economic role, not feel chronically victimized or regard self as victimizer because successful

II. Theme of Course: The Division of Labor Depends on the Institutions of Capitalism

1. Definitions

    a. capitalism: a politico-economic system based on private ownership of the means of production and characterized by the pursuit of material self-interest under freedom

    b. freedom: the absence of the initiation of physical force

    c. freedom and the necessity of limited government

2. The philosophical foundations of capitalism and economic activity

    a. secularism

    b. acceptance of causality—influence on: science and technology; willingness to work hard; self-responsibility; saving and capital accumulation

    c. acceptance of power of reason: consequent view of Man and the individual as valuable and competent—the base for the acceptance of the idea of individual rights and economic freedom; connection to great entrepreneurship

3. Capitalism: its nature and origin. The "spontaneous" emergence of capitalist institutions based on the rational pursuit of material self-interest under freedom: private property and private ownership of the means of production; saving and capital accumulation; economic inequality; the division of labor; exchange and money; financial self-interest and the profit motive; economic competition; the price system. The economic history of the U.S. as illustration.

4. The controversial character of economics and capitalism

    a. the assault on economic activity and capitalism

    b. economics versus unscientific personal observations

    c. economics versus altruism

    d. economics versus irrational self-interest

    e. economics versus irrationalism

III. Wealth and the Economic Problem

A. The Wealth Centeredness of Economics

1. Wealth: material goods made by man

2. Goods (economic goods): things recognized as having the power to serve a human need or want, requiring the performance of labor or effort to be enjoyed, and over which we possess sufficient command gainfully to direct them to the satisfaction of our needs or wants. Examples of things that are not (economic) goods:

    a. atmospheric air and sunlight
    b. oil or uranium before their uses discovered
    c. iron on Mars
    d. desert land
    e. "imaginary goods"—e.g., rabbit's feet, tarot cards

3. The service industries as almost entirely auxiliary to the production or distribution of wealth.

B. "Scarcity"

1. No matter how abundant, wealth is always "scarce" in the sense that the need and desire for wealth is still greater.

2. Scarcity in this sense operates *against* scarcity in the sense of scantiness, insofar as it leads people to increase production—e.g., increasing food production to provide meat safeguards against famines; to provide steak, safeguards against a scantiness of meat, and so on.

3. The ineradicability of "scarcity"

    a. not eliminated by more workers—correspondingly more needs and desires
    b. not eliminated by rise in the productivity of labor—new desires for products accompany the new methods of production

C. The Objective Basis of the Limitless Desire for Wealth

1. The scope of the need for wealth: not just food, clothing, and shelter, but:

    a. art, science, music, athletics, human relationships—virtually every human activity without exception depends upon or is substantially facilitated by the use of wealth adapted to it. (Try to think of exceptions)
    b. the psychological-aesthetic aspects of the satisfaction of physical needs; variety and novelty

2. The perfectibility of human need satisfactions and the use of human faculties: the wealth applicable to the needs for nutrition and health; to the use of our eyes, ears, limbs, and minds.

3. The fundamental bases of our limitless desire and need for wealth: the capacity of our imaginations exceeds the power of our arms; our possession of reason gives us the potential for a limitless range of knowledge and awareness, hence, of action and experience; wealth is the material means of action and experience—in the form of instrumentalities (e.g., tools and machines) and objects of contemplation (e.g., works of art, landscaped grounds); our desire for wealth exceeds our means of producing it because of the abstract nature of knowledge, which has no fixed limits, while our physical capacities are always strictly limited.

4. The "naturalness" and "necessity" of economic progress.

    a. the result of the use of reason as a constant
    b. our awareness of the future and its impact on our happiness in the present.
    c. the need to offset the operation of the law of diminishing returns

5. The division of labor and capitalism the on-going solution to raising the productivity of labor in the face of a limitless need and desire for wealth.

D. The Law of Diminishing Marginal Utility and Its Reconciliation with the Limitless Need for Wealth

1. Statement of the law: *the utility, importance, or subjective value that is attached to a unit of a good diminishes as the quantity of the good one consumes or possesses increases.* The examples of successive glasses of water and Böhm-Bawerk's pioneer with the five sacks of grain.

2. Basis of the law:

a. the progressive satisfaction of wants, so that each additional unit confronts a want that is already more and more satisfied
b. the rational choice to satisfy our more urgent wants ahead of our less urgent wants, leaving only wants of progressively less urgency to be satisfied by succeeding units

3. Observations:

a. the substitutability of units, with the result that the utility of each unit equals that of the marginal unit
b. the marginal unit serves the least important of the most important wants that the supply can serve

4. The reconciliation of diminishing marginal utility with the principle that our need for wealth is limitless (a reply to Galbraith's criticism):

a. so long as there is any marginal utility at all, the utility of a larger supply is always greater than the utility of a smaller supply
b. the availability of more wealth is caused by a process that at the same time raises the marginal utility of additional units of wealth—i.e., more efficient methods of production are accompanied by new types of consumers' goods, which represent new, more important uses for wealth, e.g., the electric motor and all the electrical appliances
c. with the availability of more wealth, the size of the marginal unit tends to increase: e.g., a house versus a hut, a car versus a horse and wagon, a hundred dollars or a thousand dollars versus one dollar or ten dollars; the marginal utility of the second house or car is less than that of the first house or car, but almost certainly greater than that of the second hut or horse. On the basis of such examples, it is mistaken to conclude that the utility of the marginal units *actually under consideration in real life* diminishes as wealth increases, or that the importance of the pursuit of additional wealth diminishes.
d. the ideal arrangement is for the marginal utility of any given sum of wealth to steadily diminish toward the vanishing point, while we deal with larger and larger sized units

5. Applications of the principle of diminishing marginal utility:

a. resolution of the value paradox of classical economics
b. recognition of the actual role of cost of production in price determination—Böhm-Bawerk's explanation
c. consumer spending patterns
d. Say's Law and relative overproduction and underproduction

E. The Assault on Wealth

1. The moralistic denigration; asceticism—the confusion of pleasure and pain.

2. The doctrines of conspicuous consumption and cultural relativism; why wealth *deserves* prestige; the objective advantages of an economically successful culture; socialism and non-material incentives

3. Wealth as the alleged cause of poverty: the overproduction and underconsumption doctrines (elaborated in Second Course)

4. The ecology doctrine

IV. Natural Resources and the Environment

A. The Limitless Potential of Natural Resources

Matter and energy supplied by nature. Goods and wealth character supplied by man. Expandability of the supply of economically useable, accessible natural resources.

B. The Law of Diminishing Returns

1. Statement of the law: *If increasing quantities of a factor of production (or a group of factors of production) are applied to the production of a product, while the quantity of all the other, complementary factors of production is held fixed, then, beyond a certain point, additional output will be less than proportional to the additional input.*

2. Classic illustration of the law: the application of successive equal doses of labor and capital to a fixed quantity of land. The need for more land.

Ricardo and grades of land of decreasing quality.

3. Basis of the law:

 a. physical: "quantitative definiteness"
 b. rational self-interest: choose most productive uses of a factor of production first, leaving only less productive uses for later (this principle applies to Ricardo's grades of land case)

4. Reconciliation of the law with the limitless potential of natural resources: the law applies at any given time, not over time; improving technology and capital equipment can constantly raise the point from which returns diminish; the operation of quantitative definiteness can be offset by our ability to manipulate larger quantities of matter and by our ability to manipulate properties of pieces land (and other forms of matter) that we were unable to manipulate before (e.g., trace elements, new strains of seed, hydroponics, etc.); economic progress permits *less* labor to be employed in agriculture and mining.

5. Applications of the law of diminishing returns:

 a. Why aren't pieces of land and mines exploited to the maximum possible extent?
 b. Why production is not limited by a lack of natural resources even in the short run.

6. Diminishing returns and the need for economic progress

C. Implications for the Ecology Doctrine

1. Why the inherent tendency of production is to *improve* the environment.

2. How the populations of species and the quality of water and air support this proposition.

3. The ethical perspective of the ecology movement: the intrinsic-value doctrine and its implications.

4. Environmentalism, collectivism, and socialism. The alternative of individualism and capitalism as the means of solving alleged global problems.

V. The Gains from the Division of Labor

1. The multiplication of knowledge; the ability to produce products that would otherwise be impossible
2. The benefit from geniuses and other rare talents
3. Concentration on all individual advantages—the Crusoe-Friday example of deer and salmon
4. Economies of learning and motion

 a. ratio of application time to learning time—more learning
 b. subconscious automatizing of motions
 c. elimination of wasted motions in changing positions and operations
 d. specialization in dissemination of knowledge

5. Geographical specialization

6. The gains from machinery attributable to division of labor

    a. sufficient fund of knowledge and materials
    b. science and invention as specializations
    c. simplification of design
    d makes use of machinery pay

    Why the Industrial Revolution began in England

A. Some Implications of the Division of Labor

1. Appropriateness to Man's mind, body, and nature-given environment—accomplish more with the same
2. The individual and society
3. Self-interest and ethics: objective value of other people—their existence and freedom

B. Criticisms of the Division of Labor and Rebuttal

1. The alleged narrowness and one-sidedness of the worker
2. "Alienation" and boredom—rebuttal:

    a. how the division of labor creates the opportunity for everyone to *be* a "Renaissance Man"
    b. how it operates against alienation via providing wealth and leisure and thus education—the means to understand and control one's environment; anti-intellectuality of the alienation charge
    c. anti-boredom: housewives and money motivation; how practically every job could be made challenging (piece-work and team competition), and what prevents it (i.e., unions: anti-piece-work, anti-worker competition, prevent firing bad workers—create split between work and worker's self-interest)

(Accompanies Week 4)

VI. The Dependence of the Division of Labor on the Institutions of Capitalism

A. The Dependence of the Division of Labor on Private Ownership of the Means of Production

1. The direct dependence: separate, independent minds and knowledge; need separate, independent action—separate, independent production—and thus separate, independent wealth holdings—i.e., private property and private ownership of the means of production.

2. The incompatibility of collectivism and socialism—*viz.,* functioning as an indivisible unit—with a division-of-labor society: all or some must know all.

   a. the absurdity of "central planning"; b. contradictory partial planning under socialism
   c. socialist discoordination and the destruction of the division of labor; Western aid and trade prevented famine and collapse

3. The indirect dependence of the division of labor on private ownership of the means of production: the need for a price system as the foundation of economic planning.

   a. the unseen economic planning of capitalism: its existence all around us; its basis in prices; the coordinating function of prices: the harmoniously integrated planning of the capitalist system by tens of millions of separate, independent planners.
   b. the dependence of the price system on the profit motive and competition; the dependence of these on the institution of private ownership of the means of production

B. The Dependence of the Division of Labor on Exchange and Money

1. The need for exchange in a division-of-labor society.

2. The need for *monetary* exchange.

   a. the radical increase in the extent of the division of labor
   b. the ability to make economic calculations and thus comparisons—between input and output, different methods of production, and different industries

C. The Dependence of the Division of Labor on Saving and Capital Accumulation

1. The initial rise in the productivity of labor in agriculture.

2. The division of payments.

D. The Dependence of the Division of Labor on the Freedom of Competition

1. The organization of the division of labor with respect to persons for jobs, products for markets, and technological methods of production.

2. The protection against the exercise of arbitrary power by the companies or workers of any given vital industry.

E. The Dependence of the Division of Labor on the Freedom of Economic Inequality

1. Forced equality and the destruction of causality in production; the destruction of causality in cost—e.g., socialized medicine.

2. Great achievers and great inequality as the means to great achievement.

3. The connection between economic inequality and differences in the degree of saving.

4. Economic inequality and the ability of the less able to compete against the more able.

(Accompanies Weeks 5 and 6)

VII. Demand and Supply

A. Classical Demand and Supply

1. Expenditure and quantity sold; price as the ratio of the demand to the supply.

2. Makes clear the relationship between the direction of price changes and the direction of demand and supply changes. Valuable in "macroeconomics," where competitive factors cancel out.

B. Contemporary Demand and Supply.

1. Schedules or curves: *the set of quantities buyers are prepared to buy or sellers to sell at varying prices, arranged in descending (ascending) order, all other things equal*.

2. For a hypothetical demand and supply schedule, see Figure 5–1 on p. 153 of *Capitalism*

3. Reproduce the diagram based on the data in columns 1–3 of Table 5–1 on p. 152 of *Capitalism.*

4. The law of demand: *other things equal, the quantity demanded increases as the price decreases, and decreases as the price increases; to sell a larger quantity requires a lower price, while a smaller quantity for sale will bring a higher price.*

5. Reasons for the law of demand:

   a. Marginal utility must be above the price; a drop in price puts the price below the marginal utility of additional units and so makes their purchase advantageous. Marginal utility and price "sandwiching."
   b. Substitution effect.
   c. Income effect.

6. Change in quantity demanded versus change in demand—see the column Quantity Demanded II in Table 5–1. Derive the diagram $D'D'$ in Figure 5–1.

7. Reasons for changes in demand: changes in: quantity of money, income, prices of substitutes or complements, knowledge, tastes and preferences; development of new substitutes or of substitutes for complements.

C. Elasticity of Demand

1. Meaning: *the percentage change in the quantity demanded divided by the percentage change in price*.

2. The total revenue test.

3. Examples of elastic, inelastic, and unit elastic demand.

   a. Elastic: close substitutes, luxury goods.
   b. Inelastic: poor substitutes, necessities.
   c. Unit elastic: aggregate spending.

4. Applications of concept of elasticity: employment effects of machinery, the profitability of charging a different price where there is little or no competition.

5. The elasticity of demand for a particular company under freedom of competition almost always much greater than for the industry as a whole.

6. Income and cross elasticity.

7. Elasticity changes even over the length of the same demand curve.

8. No constancy of elasticities.

D. Supply Curves

1. Basic case is vertical supply curve—reflecting a given quantity that sellers are prepared to sell at best price they can obtain.

2. Reasons for supply curves sloping up and to the right.

   a. The marginal utility of sellers—actually not a significant reason.
   b. Riding up other demand curves (case of broader fixed supply—e.g., wheat, gasoline in different partial markets).

3. Partial equilibrium and the confusion between cost of production and supply and demand as the determinant of price.

   a. Upward sloping supply curve typically thought to reflect law of diminishing returns. Most prominent in agriculture and mining. And here not usually relevant in the short run, in which supplies of agricultural commodities are simply given.
   b. *Horizontal* supply curve (the most common case, prevailing throughout manufacturing and retailing) actually represents determination of price by sellers, *based on consideration of costs of production.* Equilibrium price only apparently determined by the intersection of the supply and demand curves here.
   c. Economies of scale and a downward sloping supply curve—again, price actually based on consideration of cost of production.
   d. Ricardo and Böhm-Bawerk on the comparative influence of the buyers and sellers in determining prices—each correct in a different context.

E. Some Errors to Avoid

1. Why it is incorrect to try to derive S and D curves by observing prices and quantities bought and sold over time: all we observe are intersection points of any number of possible S and D curves; with any price change, at least one of them must be different; the curves highly volatile; no reason to assume even one of them the same one over time.

2. The existence of a rising price accompanied by a rising quantity demanded does not invalidate the downward slope of the demand curve: a change in the curve present.

VIII. The Uniformity-of-Profit Principle

A. Statement and Explanation of the Principle

1. *The rate of profit (return) on capital invested tends toward uniformity in all branches of industry.*

   The rate of profit contrasted with a profit margin.

2. Uniformity-of-profit principle based on the fact that capital is withdrawn from areas of low profitability or losses and invested in areas of higher profitability, the effect of which is to reduce the initially high profit rates and raise up the initially low profit rates.

B. Significance of the Uniformity-of-Profit Principle

1. The harmonious balancing of the different branches of industry; incentives and means for the counteraction, delimitation, and prevention of mistakes in production.

2. The power of the consumers to shift the course of production—"consumer sovereignty."

3. The need of businessmen to introduce continuous improvements in production ahead of others in order to earn an above average rate of profit; how the concern with profits expands production in the economy—the significance of cost cuts; why prices rise, even though the uniformity-of-profit principle operates to make them fall.

C. Applications of the Uniformity-of-Profit Principle

1. The repeal of farm subsidies, rent controls, and price controls on oil and natural gas.

2. Differential tax rates—e.g., the depletion allowance on oil and its abolition.

3. Rents and prices in minority neighborhoods.

IX. The Tendency Toward a Geographical Uniformity of Prices

A. Statement and Explanation of the Principle

1. *The price of a good capable of transportation tends to be the same throughout the world, plus or minus costs of transportation (and tariffs, if any).*

2. Basis in the fact that it pays to buy in the cheaper market and sell in the dearer market, which has the effect of raising the price in the former and lowering it in the latter.

B. Significance and Applications of the Principle

1. Why local crop failures don't cause famines.

2. The Arab oil embargo against the U. S.

3. The export of Alaskan oil to Japan.

X. The Tendency Toward a Uniformity of Prices Over Time

A. Statement and Explanation of the Principle

1. *The price of a good in the present tends to equal its expected price in the future,* or, more precisely, the expected price of a good in the future tends to exceed its price in the present by no more than the costs of storage and an allowance for the going rate of return on capital for the period of storage.

2. Basis in the fact that buying and holding to take advantage of a higher price acts to raise the price in the present and, by making larger supplies available in the future, reduce the price in the future.

B. Significance and Applications of the Principle

1. The mitigation of scarcities.

2. The productive role of commodity speculation.

XI. The Tendency Toward a Uniformity of Wage Rates for Labor of the Same Degree of Ability

1. Basis of the principle in the movement of workers from lower paying to higher paying fields and effect of more (less) workers on wages in a field; accomplished mainly by movement in supply of young workers entering the labor force.

2. Corollary tendency toward unequal wage rates for labor of different degrees of ability.

3. Premiums and discounts in wages accompanying non-monetary disadvantages and advantages of employment.

4. Consumer control over the relative size of the various occupations.

5. Seeking the highest paying job means trying to do what the consumers most want you to do

XII. Prices and Costs of Production

1. The tendency for price of products to be governed by their costs of production

    a. Indirect determination by cost through variations in supply.

    b. Direct determination by cost through the decisions of sellers in setting their prices: the need to hold down the profits of competitors and potential competitors.

2. Analysis of cost of production into prices times quantities of factors of production; prices of factors of production at each stage largely determined by supply and demand—e.g., wage rates. Role of supply and demand becomes

cumulatively greater, the further back in the production process one goes—e.g., autos to steel making to iron mining. *Explanation of price by cost, therefore, ultimately comes down to explanation based on supply and demand operating in markets for labor and other factors of production in given supply.*

3. Full explanation of prices based on cost and of all other prices depends on explanation of prices by supply and demand.

(Accompanies Weeks 7–9)

XIII. The General Pricing of Goods and Services in Limited Supply

1. A "catalog" of goods and services in limited (given) supply.

2. The prices of goods and services in limited supply are determined by the quantity of money and by the value judgments of the consumers with respect to the various goods and services on which they spend the quantity of money. The quantity of money determines the absolute height of all prices, and the value judgments of the consumers determine their relative heights.

> Under this head, the value judgments of the consumers determine the relative incomes of the different kinds of workers, e.g., the incomes of skilled workers in relation to those of unskilled workers.

3. The prices of goods and services in limited supply are set high enough in a free market to level down quantity demanded to or below equality with the supply available. Consequently, shortages even of these goods and services are impossible in a free market. By the same token, the competition of the sellers of such goods prevents unsaleable surpluses in a free market—implication of no mass unemployment in a free economy.

4. The setting of prices high enough to limit demand to the supply is to the self-interest of buyers as well as sellers, and of poor buyers as well as rich ones; similarly, the setting of prices low enough to clear the market is to the self-interest of sellers as well as buyers.

5. In a free market, goods and services in limited supply are distributed to consumers in accordance with a combination of their wealth and income and needs and desires.

6. The prices of factors of production in limited supply have the same characteristics and the same significance as the prices of consumers' goods in limited supply, as described under points 3, 4, and 5, above. (Factors of production are labor, materials, and machinery bought for business purposes, i.e., for the purpose of earning profits through subsequent sales.)

7. In addition, factors of production in limited supply have an added dimension of "distribution": Namely, they are distributed to different concrete uses or employments. E. g., wheat is distributed to the production of bread, crackers, etc. This kind of distribution, of a factor of production among its various products, takes place through a process of the different needs, desires, and purposes of one and the same individual consumers bidding against each other.

8. In a free market, factors of production in limited supply are distributed to their most important uses, in accordance with the pattern of consumer spending.

9. The concept of "most important uses" is a variable range, determined by the supply of the factor.

10. Prices of factors in limited supply are determined with respect to their marginal uses—that is, the least important of their most important uses. Consequently, prices determined by cost of production are determined with respect to the marginal uses of the factors of production.

11. All prices of goods and services in limited supply are determined by the consumers' value judgments with respect to marginal quantities, e.g., rental space.

12. More on the rationality and efficiency of the free market in responding to changes in economic conditions: In a free market, every change in the demand or supply of any factor of production is dealt with in a way that maximizes gains and minimizes losses. Factors of production in reduced demand or additional supply are channeled to the most important of their previously submarginal uses. Factors of production in additional demand or reduced supply are taken from the least important of their previous uses—viz., from their marginal uses.

13. More on the harmonious integration of all production and consumption in a free market: The significance of using lower priced factors in place of higher priced factors. The significance of cost calculations. What the prices of consumers' goods reflect.

XIV. Price Controls and Shortages

A. The Distinction Between Shortages and Scarcities

1. The meaning of a "shortage."

2. Why only price controls can cause shortages.

3. Scarcities do not cause shortages but shortages cause scarcities.

4. How price controls create shortages by expanding the quantity of a good demanded and reducing the amount of it supplied.

Five ways that price controls reduce supply: a. Making the production of a good unprofitable: the examples of oil and rent control. b. Making a local market uncompetitive: application to the surge in the demand for wheat and soybeans in 1972 and 1973 and to the natural gas crisis of 1977. c. Making the consumption of a commodity too rapid and thus reducing future supply. d. Making an occupation or industry unable to compete for labor. e. Making some products of a factor of production unable to compete with its other products.
How price controls are equivalent to a prohibition of production.

XV. The Effects of Price Controls and Shortages

A. The Impotence of Consumers

The consumer made worse off than if he were dealing with a protected legal monopolist. Valuelessness of the consumers' business. Consumers reduced to the status of a nuisance and source of expense. Egoistic relation between buyer and seller replaced by altruistic relation. Reduction in quality and service. Hatred between buyer and seller: the examples of the gas shortage and rent control in New York City. How the repeal of rent control would give tenants economic power over landlords and restore harmony between them.

B. The Impetus to Higher Costs

1. The disappearance of low-priced models, cornercutting. More on the decline of quality: effects of shortages on the methods of production. Declining quality as a cause of higher costs. Shortages themselves as a direct cause of higher costs.

2. Price controls and cost-plus pricing. The administrative problem of multiple price controls for the same good, based on different costs: the case of oil prices in the 1970's.

C. Chaos in the Personal Distribution of Consumers' Goods

Destruction of the free market's principle of distribution in accordance with the combination of wealth and desire; nullification of the value of higher incomes. The rule of the random and the accidental.

D. Chaos in the Geographical Distribution of Goods Among Local Markets

How shortages prevent more supply from reducing prices. Indeterminacy in geographical distribution: the case of the gasoline shortage. Why the burden of shortages is randomly distributed, with some areas suffering relatively mild shortages and other areas suffering far more severe shortages. The significance of the time of year when gasoline controls were imposed. Potentially disruptive effects of small bureaucratic adjustments in the controls.

E. Chaos in the Distribution of Factors of Production Among Their Various Uses

Indeterminacy in the allocation of a factor among its various uses. The case of the oil shortage. Accidental nature of which products bear the burden of the shortage. The significance of the time of year when controls were imposed on oil. The instability of supply under controls. The hoarding demand.

F. Shortages and the Spillover of Demand

Shortages increase the demand for other goods and, if the other goods are not controlled, cause their prices to be higher and the profitability of producing them to be greater. Implications: a. Partial price controls (i.e., controls confined to some goods only) are contrary to purpose. b. partial price controls cannot hold dawn the general price level. c. partial price controls do not "save people money" in the aggregate. The bizarre sense in which they do "save people money." How partial price controls raise the general price level. Why repeal of partial controls reduces the general price level.

Application to rent controls. Present rent controls apply to only part of housing market. Consequences of a fully controlled housing market: compulsory assignment of boarders to private homes and restriction of the internal freedom of migration; the case of the communist countries. Effects of partial rent controls on the housing subjected to them. How partial rent controls raise rents on the uncontrolled housing supply. How partial controls raise the costs of providing new housing. Why the "luxury" housing of recent decades is inferior to earlier housing. The case for the immediate repeal of rent control: the unrecognized victims of rent control: Why repeal on net balance would alleviate hardship even in the short-run. Why there are no beneficiaries of rent control in the long run.

Application to the price controls on domestically produced oil in the 1970's. How repeal of these controls enabled American oil companies to sell at higher prices, and simultaneously reduced the price received by OPEC.

G. The Tendency Toward Universal Controls

Why partial price controls must be extended to the prices that constitute costs, to prices of alternative products of the same factors of production, to all employments of the same labor, and, finally, to all remaining prices in the economic system.

XVI. Universal Price Controls and Socialism

A. Excess Demand Under Universal Controls

The compounding of the excess demand for each good by the unsatisfied demand for all other goods; how the shortage of each good reflects the sum of the shortages of all other goods. Shortages in Soviet Russia. How excess demand exists even though incomes are controlled. The buildup of surplus, unspendable income resulting from the government's injection of new money.

Why controls do not produce their full effects immediately.

B. Universal Price Controls and the Destruction of Production Through Shortages

1. Review of the ways that shortages destroy production: (It should he recalled in this review, by the way, that anything that acts to raise costs implies a decline in production.)

a. Shortages make buyers impotent and thereby remove the incentives of sellers to provide good quality and service. As a result, quality and service decline and the costs of maintenance and replacement increase.
b. Shortages of means of production, such as a material, often force sellers to reduce quality and service and make it necessary to resort to more expensive substitute methods of production.
c. Shortages encourage sellers to concentrate on the production of unnecessarily expensive models as a disguised way of raising prices.
d. Shortages create a positive incentive to using more expensive methods of production if the government allows the pass-through of higher costs and makes the incurrence of higher costs a source of higher profits.
e. Shortages result in delays in production.
f. Shortages cause hoarding and the construction of additional storage facilities.
g. Shortages cause the waste of time in searching for supplies.
h. Shortages create chaos in the geographical distribution of a good among local markets—for example, gasoline during the oil shortage.
i. Shortages create chaos in the distribution of a factor of production among its various uses in production—for

example, crude oil in the production of the various oil products.

2. Now, under universal price controls, every industry affected and the problems of each intensified, because of the compounding of the shortage of its product and because of shortages of means of producing its product. Also, a new dimension of chaos: the shortage of capital and labor.

3. Total chaos in production: the expansion of any product at the expense of any other product, irrespective of the will of the consumers. How production declines in such conditions:

a. The reduced benefit from production caused by disproportions among the different kinds of consumers' goods; this equivalent to less production.
b. The reduced ability to produce resulting from disproportions in the individual kinds of capital goods; cumulative self-reinforcing process of less production, less capital goods, less production.
c. The labor shortage: the excess demand for labor and the falling supply of labor; cumulative, self-reinforcing process of shortages of consumers' goods, reduced supply of labor in response, and then worse shortages of consumers' goods.

4. The prosperity delusion of price controls. Mistaken belief that World War II was a period of prosperity.

C. The Government's Response to the Chaos It Causes Through Price Controls: *De Facto* Socialism.

The government's seizure of production and distribution: It decides what and how much of each product to be produced, where, and by what methods, and to whom to be distributed. In conjunction with price controls, this represents total usurpation of powers of ownership. Hence, the government now the real owner.

Why Nazi Germany was a socialist country and why the Nazis were right to call themselves "national *socialists.*" Why Israel and Sweden, however, are not in fact socialist countries, but simply "mixed economies." (Why the same was true of Britain under the Labour Party.)

D. The Essential Characteristic of Socialism

Government ownership of the means of production the essential feature of socialism. Socialism the same whether government ownership arrived at through price controls or open nationalization, through peaceful means or forcible means.

E. The Essential Economic Identity Between Price Controls and Socialism

Price controls and socialism essentially the same economically because both destroy the same thing: viz., private property rights and its offshoots the profit motive and the price system. Private property rights and the profit motive are the foundation and driving force of the price system and all of its laws. Their destruction, whether by price controls or by socialism, destroys the one and only source of economic order and harmony in the world and therefore results in chaos. Socialism does not go beyond destroying the system based on private ownership. It is simply an act of destruction, not a positive economic system.

XVII. The Chaos and Tyranny of Socialism

A. The Myth of Socialist Planning

1. See Syllabus Supplement 2, VI. A. above.

2. Socialism's destruction of the price system destroys the possibility of economic calculation, economic coordination, and, therefore, rational economic planning. Rational planning under socialism would require the planning of the economic system as an indivisible whole—i.e., with no division of the intellectual labor involved in planning. Each planner, or *the* planner, would have to be able to see the production of each good in all of its relations to the production of all other goods. This is impossible because it would require a mind able to hold and use all the knowledge that only millions can hold and use—i.e., an omniscient deity.

3. In reality, socialism can never have a rationally integrated plan for the entire economic system. In reality, it is characterized by separate ministries and even factories all planning independently of each other, and at cross purposes. The discoordinated plans of socialism make their mutual execution impossible. Planning under socialism is also made

impossible because each industry is dependent on disinterested monopoly suppliers. Socialism is not a planned economy, but an "anarchy of production"—a true one.

4. Socialism's anarchy of production illustrated by the Russian quota system. This system encouraged the maximum possible production of each good—every farm and factory encouraged to exceed its quota by as much as possible. This creates same situation as universal shortages, in that ready and waiting employment exists in every field for a larger supply of factors of production. Lack of precision of quotas also illustrates lack of rational planning—e.g., quotas for screws in terms of mere number or weight. Chaotic consequences of such lack of precision.

5. Quota system an inevitable result of socialism's lack of ability to determine costs and to trace connections among industries.

6. Socialism's anarchy of production and its shortages of labor and consumers' goods.

B. Further Economic Flaws of Socialism

1. The most fundamental flaw is that government's monopolization of means of production is attempt to monopolize intelligence and initiative in production. This underlies socialism's inability to plan and also its technological backwardness and the utter powerlessness of the plain citizen under socialism.

2. Contrast between capitalism and socialism in the introduction of improvements: capitalism has initiative, incentives, and competition. Socialism lacks all three.

3. Why socialism has no reason to maintain the standard of living inherited from capitalism, even if it had the ability. How socialism's paralysis of initiative and incentives causes death: the case of Russia under the Communists.

4. Why the government of a socialist country is only interested in the values of its rulers. Application of this principle to technology and all production under socialism: socialism's concentration on the technology and production of weapons, spectacles, and "monuments"; its dependence on capitalist technology even for these. Socialism as the true system of the exploitation of labor and the progressive impoverishment of the workers.

C. The Tyranny of Socialism

1. The need for force or fraud to establish socialism: why the methods of the communists are necessary.

2. The need for terror to maintain socialism: a. Stopping the growth of the black market. b. The logic under socialism of accusing black marketeers of sabotage. c. The impossibility of freedom of press or speech when the government owns all the presses and meeting halls and is the sole employer. d. Socialism as a court society. e. The necessity of forced labor under socialism. f. The rulers' dilemma of how to stay in power while promising a life of bliss and yet by the nature of socialism being unable to deliver anything but poverty and misery. Consequent need for diversions of hysterical propaganda, periodic purges, and the ruthless suppression of all criticism. g. From forced labor to mass murder.

(Accompanies Week 10)

XVIII. The Influence of the Division of Labor on the Institutions of Capitalism I

A. Private Ownership of the Means of Production

1. The prevailing view of private property, including private ownership of the means of production, as serving only the interests of the owners.

   a. The alleged need for redistribution or socialism.
   b. The assumption that the advocacy of capitalism implies that one is a capitalist.
   c. The media's treatment of voting patterns.
   d. The belief that fighting communism requires creating capitalists.

2. Prevailing view ignores the division of labor and the fact that under capitalism privately owned means of production *serve the market,* and thus provide a *general* benefit.

   a. The benefit of the buyers of products served by the means of production—if you can buy the products, you don't have to own the means of production to benefit from them.
   The buyers' control over production in contrast with the powerlessness of the consumers under socialism—the dictator and the people's shoes; the lack of stores in Moscow's suburbs.
   b. The benefit of the wage earners from the demand for labor.

3. The *increasing* general benefit from private capital.

   a. Profit and loss incentives and the freedom of competition and individual initiative; the chances for new ideas being tried.
   b. Gains to non-owners greater, the more the property rights of capitalists respected: stronger incentives; higher demand for labor and capital goods relative to consumption; more efficient production of capital goods—all result in capital accumulation and rising productivity of labor and real wages.

4. The special benefits of private ownership of the means of production to the owners: not profits or interest, but limited personal consumption—probably less than ten percent of the national income—and the psychological benefit of the *potential* of personal consumption.

5. The absurdity of "redistributionism."

   a. Already have the benefit of almost all the capitalists' wealth without redistribution—the wealth is in means of production; and the benefit steadily growing
   b. An open demand for capital decumulation and impoverishment.
   c. If not such a demand, then a demand for at most a one-time, non-repeatable transfer of about ten percent of the national income; capitalism gives the equivalent over and over again every few years, through economic progress.

6. Consequences of redistributionism:

   a. Can't achieve even the one-time transfer—the destruction of incentives to maintain and manage capital; collapse into the chaos of socialism.
   b. The lesser case of isolated nationalized industries: the destruction of profit and loss incentives and the freedom of competition and individual initiative—the Post Office case; nationalization and the destruction of the *special* benefits of ownership: the inability to sell one's "shares"; instead of dividends to consume, taxes to cover losses brought on by the nature of government ownership—no profit and loss incentive, uncontrolled costs, run up costs in vote-buying employment and contracts.

7. Conclusion: the institution of private ownership of the means of production in a division of labor, capitalist society serves everyone—*non*-owners as well as owners; the real self-interests of everyone lie with capitalism, not just the interests of the capitalists; better to be a non-owner under capitalism than an equal owner under socialism.

B. Private Property Continued: the Special Case of Inheritance

1. The prevailing view: only the heirs gain; the non-heirs gain by a policy of confiscation and redistribution.

2. Fact: the institution of inheritance promotes capital accumulation, from which *all* gain, non-heirs as well as heirs.

3. Confiscatory inheritance taxes destroy the incentive to accumulate capital insofar as the motive of accumulation is to leave wealth to heirs; the collection of inheritance taxes diverts capital into consumption: if estates did not have to be sold to pay taxes, the buyers would have used their funds to purchase capital goods that would have existed in addition to the estates; with the inheritance taxes, their funds are diverted to the purchase of existing capital goods, and from there to the Treasury.

C. Private Property Continued: the Taxation of Profits, Interest, and Capital

1. As far as the taxes come out of capital or additions to capital, they reduce or hold down the demand for labor and capital goods—cause lower wages relative to the demand for consumers' goods and lower productivity of labor.

2. Also retard innovation—reduce incentive and means for implementing new ideas; especially destructive for new firms, which are prevented from growing large.

3. These the effects in whole or part not just of inheritance taxes, but of corporate income tax, progressive personal income tax, capital gains tax, social security taxes, and government deficits. Need to reduce or abolish these taxes and the deficits to restore economic progress; need to cut government spending.

4. Self-interest of everyone lies with ability of business to save and invest and innovate: interests of non-owners hurt by whatever keeps down the demand for labor and supply of products.

D. Private Ownership of Land

1. Ricardo's doctrine on land rent, and Georgism: land rent, population growth, diminishing returns, and subsistence; the "unearned gains of the landowners."

2. Seeming application of the doctrine in the period l250-l750.

3. The real problem: too slow progress caused by *the lack of private property and property rights in land*—the common lands, feudal restrictions on selling and alienating land, the impossibility of firing unnecessary agricultural workers under serfdom.

4. Private property in land provides the incentive basis for rapid enough progress to more than offset the operation of the law of diminishing returns and the need for inferior lands; it thus works to hold down and actually reduce land rent as a share of national income.

   a. Historical confirmation: the decline in the economic significance of land rent coincides with the enclosure movement in England, the privatization of North America, and the establishment of property rights on the European continent.
   b. Further confirmation: the case of oil today.

5. Conservationist criticisms of private property in land: deforestation, the near extermination of the buffalo. Rebuttal:

   a. Deforestation because of *lack* of private property rights—the land didn't belong to the logging companies, thus they had no incentive to replant; if it did, they would have.
   b. The buffalo not raised on ranches because of the competition of cattle—the price of buffalo meat limited by the price of beef; the price of beef too low to enable buffalo ranching to be profitable. A waste to use labor and capital to raise buffalo when it's better employed raising cattle.

E. Private Property and Political Sovereignty

1. Mistaken view on the need for extensions of sovereignty; what is really needed is free trade and respect for the property rights of foreigners; then the whole world gains all that can be gained from the territory of each country; extensions of sovereignty made unnecessary; implications for world peace.

2. The general interest in free government everywhere—the historic role of the British Empire.

3. The exportation of natural resources not an exploitation but a source of benefit to the countries in which found: higher demand for local labor, the import of goods otherwise impossible to obtain.

4. How the backward countries could be rapidly developed and how their policies prevent it: property rights vs. confiscations and restrictions on dividend remissions.

(Accompanies Week 11)

XIX. The Influence of the Division of Labor on the Institutions of Capitalism II: Economic Inequality

A. The Nature of Economic Inequality Under Capitalism

1. The prevailing view: “the rich get richer, the poor get poorer”—one man’s gain is another man’s loss.

2. Fact: the division of labor allows for constant increase in the total of what is produced. One man’s gain resulting from an increase in the total of what is produced is *not* another man’s loss—the example of Crusoe and Friday.

3. How the gain of the one easily leads to the *gain* of the other: productive emulation.

4. The fallacy of unjust “distribution,” when what is actually involved is an inequality of production.

5. How in a division-of-labor society, one man’s gain *typically implies the gain of others:* productive emulation—present in competition; the nature of free exchange and the sharing of the growing gains from the division of labor.

6. The especially important case of *the origin and disposition of fortunes:* the earning of a high rate of profit over a long period of time, with most of the profit constantly being plowed back. The high rate of profit reflecting the introduction of repeated improvements in production of benefit to the buyers; the plowing back of the profit resulting in growing means of production employed to the benefit of the buyers.

7. Illustration of point 6 in American economic history: the cases of Carnegie, Rockefeller, and Ford.

B. The Marxian Doctrine on Economic Inequality: A Critique

1. The claim that inequality under capitalism is an extension of inequality under feudalism and slavery and that socialism is the culmination of political democracy and will represent the establishment of a classless society.

2. The injustice of comparing capitalist with feudal inequality: productive contribution and general benefit versus force and loss.

Position of the feudal aristocrats not based on any economic role, such as land ownership, but on governmental power: they lacked essential rights of ownership (such as ability to sell their land, compete for the workers of others, and fire their own workers) and possessed powers far beyond those of any property owner: i.e., tax collection, “low and high justice.”

3. Marxist and Galbraithian equivocation on freedom: the doctrine of “wage slavery” and “nominal” freedom (see J. K. Galbraith, *The New Industrial State,* Second Edition, New American Library, New York, 1971, p. 141—quoted in *Capitalism*, p. 331.)

a. “Having” to work for a capitalist, even a hundred and fifty years ago, at very low wages, not a violation of freedom; the vital importance of being able to choose for *which specific employer one works.*
b. Capitalists (businessmen) not responsible for workers feeling the pain of hunger, as Galbraith implies, but for paying wages to *alleviate* the hunger.
c. Opposite character of freedom and slavery shown in the simple fact that a slave is held at his work by force, while it takes force to keep the poor but free worker of the capitalist *from* his work.

4. Inequality under socialism (see *Capitalism*, Chapter 8, Part B).

a. The observed existence of “the new class”—special stores, clinics, schools, housing, and transportation for the party and government elite.
b. The existence and servile character of inequality under socialism deducible from the leading moral-political premise of socialism that *the individual is not an end in himself* (as he is acknowledged to be under capitalism), but is *the means to the ends of “society”—which ends the rulers interpret.* It is also implied by the powerlessness of the plain citizen in his capacity as a consumer—only the values of the rulers count.

5. Socialism *versus* democracy (free government)—see *Capitalism*, Chapter 8, Part B.

C. The Equality of Opportunity Doctrine: A Critique

1. A fallback position for egalitarianism.

2. Some unpleasant implications of the equality of opportunity doctrine: Platonic orphanages, eugenics, tearing down advantages.

3. Observations on the nature of opportunities.

   a. The meaning of an opportunity.
   b. Their fundamental superabundance.
   c. Their creation by the individual.
   d. The room for all to rise in the context of a division of labor society.
   e. The need for the *freedom* of opportunity, not the "equality" of opportunity.

f. How individuals beginning under extreme disadvantages overtake others who begin with the greatest advantages—*the self-made man.*

XX. The Influence of the Division of Labor on the Institutions of Capitalism III: Economic Competition

A. The Nature of Economic Competition under Capitalism

1. The prevailing view: law of the jungle, survival of the fittest, dog eat dog, etc.

2. Actual nature: not the grabbing off of limited, nature-given necessities, but competition in the positive creation of new and additional wealth for the market—the inherent general gain; no genuine losers.

3. Competition and the survival of all: e.g., the effects of competition among farmers, eyeglass manufacturers, pharmaceutical makers, etc., on the hungry, the weak, and the disabled.

4. How even the apparent losers gain: e.g., the effects of the competition of the automobile on the horse and buggy makers.

5. The short-run loss periods; differing effects on unskilled and skilled workers; the effects on the losers of fortunes.

6. How *opposition* to free competition implies the advocacy of the law of the jungle.

7. Economic competition and economic security.

   a. Competition and the physical security of having goods—the paradox of the guild system.
   b. Competition and job security—the need for *fully* free competition; the seniority system and the artificial lengthening of the short-run loss periods.

8. More on competition and the "weak": the law of comparative advantage and the room for all in the division of labor. Statement of the law: *Even if one party is productively superior to the other in every respect, it still pays them to engage in division of labor, with the productively superior party concentrating on his area(s) of greatest superiority and the productively inferior party concentrating on his area(s) of least inferiority.*

   a. The boss and the secretary, the lady lawyer and the maid.
   b. International applications: England and Portugal, the US and Brazil.
   c. How both cases work out in terms of money.
   d. The implied dependence of international free trade on a free labor market domestically.
   e. The competitive damage to the less able of attempting to force the market to pay them the wages of the more able.

9. The pyramid of ability principle: *To the degree that the more able obtain the higher positions in the economic system, the productivity and standard of living of the less able are increased*—e.g., the case of the engineer and the mechanic, the foreman and the worker, the great industrialist and the average person.

10. The integration of the law of comparative advantage and the pyramid of ability principle: the gain from the

existence of other people; the greater gains from the existence of the more able—even janitors can have automobiles and television sets.

B. Competition and the Population Question

1. The Malthusian specter of overpopulation: the implied competitive conflict over land and natural resources.

2. Applies only to *non*-division of labor societies; in a division-of-labor society more population means a more intensive division of labor (Adam Smith's principle that the division of labor is limited by the extent of the market) and the realization of more economies of scale—manufacturing, the advantages of cities, the case of the medical school and all other sources of new knowledge; more people and more productive geniuses.

   a. The implicit case for worldwide free trade.
   b. Partial explanation of the higher standard of living in the US compared to Western Europe.
   c. Explanation of the effects of the Common Market.

3. Unlikely problems of too high a ratio of children to adults and of labor to capital.

4. The case for free immigration into a *capitalist s*ociety: the general benefit from others' possession of freedom—the bringing of talent to freedom, where it can flourish.

(Accompanies Week 12)

XXI. The Political Concept of Monopoly

1. The rational versus the anarchic concept of freedom: what violates freedom? Initiation of physical force or "obstacles" in the way of desires?

2. The distinction applied to "censorship," the "freedom of competition," and "barriers to entry."

The actual significance of high capital requirements.

3. The political versus the economic concept of monopoly. Monopoly as politically versus economically imposed.

4. Meaning of the political concept: *A market or part of a market reserved to the exclusive possession of one or more sellers by means of initiation of physical force by the government.*

The political concept is the original concept: *an exclusive grant of government privilege*—Charles I—East India Co., guilds.

5. Leading examples of monopoly according to the political concept:

a. Exclusive government franchises.
b. Licensing laws.
c. Tariffs.
d. Minimum wage and pro-union legislation.
e. Government owned or subsidized enterprises.
f. The antitrust laws.

6. Four points to remember about monopoly on the political concept:

a. Monopoly can be many protected against one or a few (e.g., New York City taxicabs: many driver owners protected against a few large fleets).
b. Is not necessarily profitable—high cost producers protected, as in tariff monopolies and subsidies.
c. Patents and copyrights are *not* monopolies—merely give legal recognition to property rights and in the long-run reduce costs and prices by virtue of promoting economic progress.
d. All monopoly is based on government intervention, which restricts the freedom of entry and competition.

7. Significance of monopoly on this concept—less choice, higher cost and price, lower quality, because of restricted freedom of the sellers and potential sellers.

XXII. The Economic Concept of Monopoly

1. A single seller of a given good in a given territory—embraces hardly anything (1920's) or almost everything (now).

2. "Monopolistic competition" and "oligopoly." Only wheat farming left as "pure competition."

3. The myth of past pure and perfect competition.

XXIII. Significance of Monopoly on the Economic Concept

1. Alleged tendency toward a single firm controlling the entire economic system—General Bullmoose rules the world, via mergers and predatory pricing.

2. Influence: Marx and the alleged inevitability of socialism; the antitrust laws; fears about the marriages of the wealthy.

3. In fact such a state of affairs exists only under socialism—established and maintained by force.

4. Why no tendency toward such situation under capitalism—critique of the merger route.

a. Anti-division of labor—bad mergers.
b. Prospects—the talented can't be merged; application to conglomerates.
c. Successful mergers create new capital for new firms.
d. More new firms all the time anyway—still more without tax problems of executives and insider trading restrictions; in addition, the tax laws restrict the growth of small business, as do regulations and the costs they impose in terms of time and need for staffs of accountants and lawyers.
e. Tax stimulus to uneconomic mergers: already large firms expand for capital gains treatment, medium size sell out for capital gains treatment; absorb loss makers.

5. Positive reasons for mergers: more division of labor and economies of scale, including wider application of better management; access to the capital market, advertising, complementarity of products (e.g., better use of salesmen's time); transportation economies.

6. Truth about 19th century—higher production, lower prices—the reverse of what led to expect on basis of monopoly on the economic concept.

7. The trust movement: earliest merger device.

a. Necessary to achieve benefits of improved transportation methods, which favored larger scale manufacturing. Example: Assume a large scale plant has a manufacturing cost per unit of $1, while a small scale plant has a manufacturing cost of $10 per unit. Consider the implications if transportation cost for both is initially 50¢ per mile and then falls to 1¢ per mile.
b. Trusts represented pooling of capital to make possible replacement of small, inefficient facilities with large-scale, efficient facilities.
c. The Supreme Court in decision breaking up Standard Oil: "Much has been said in favor of the objects of the Standard Oil Trust, and what it has accomplished. It may be true that it has improved quality and cheapened the costs of petroleum and its products to the consumer. But such is not one of the usual or general results of a monopoly; and it is the policy of the law to regard not what may, but what usually happens."
Ironically, the record of Standard Oil is usually thought to be the leading evidence of the bad consequences of the trusts!

XXIV. The Predatory Pricing Doctrine

1. Statement of the doctrine: the large firm can allegedly afford losses which the small firm can't, so it allegedly temporarily slashes price to force the small firm to sell at a loss, in order to drive it out and then jack prices up to higher levels than before. Potential newcomers supposedly kept out by threat of further ruinous price cuts. All achievements of big firms in reducing prices and improving quality seen as a prelude to this kind of gouge.

2. Problems with the doctrine:

a. The narrow market case: e. g., A & P and the chain stores. The limited nature of the potential extra profit from any one location, even if it could be obtained. Most of big firm's capital *irrelevant* to what it can afford to lose in any one location. Many on just as good a footing. Exposure to competition of newcomers who haven't lost anything yet. Pouring money down a bottomless hole. Not a formula for growing rich. Actual fact is lower real prices in retailing, not higher, and brought about largely by the chains.
b. Doctrine ignores fact that in degree the large firm is larger in the same market, it must take the price cut and loss or profit reduction on a correspondingly larger volume. E. g., if "Big John" [Rockefeller] wants to make Little Joe take a loss on the latter's ten percent share, he must take a loss or a profit reduction on his *ninety percent* share.
Big John must sell below little Joe's operating costs—for as long as the latter's capacity lasts. And then, when little Joe is gone, he still can't get more than a new comer's full costs plus the going rate of return.
c. Not possible to keep small firms out by intimidation of threat of ruinously low prices—forward contracting at manufacturing and wholesaling level, niches of competition at retailing level that can't be driven out even with *permanently* lower prices, and which prevent rise in prices. Also, support from suppliers and producers of complementary goods, who stand to lose volume if higher price imposed.

3. Implication of above is that it doesn't pay a large firm to seek 100% of the market by cutting price—unless there will be a vast increase in volume. The small firm's minor market share not a sufficient reward by itself. (Fact is that the small firm has much more to gain by being aggressive in cutting price against the large firm—the latter's market represents a major potential for its expansion, while its market doesn't offer much prospect for the large firm's expansion.)

4. This is a further reason for industries usually having more than one firm, simply because it doesn't pay anyone to go for the whole market unless there is a radical expansion in that market at a lower price.

5. Historical confirmation: According to John S. McGee, in "Predatory Price Cutting: The Standard Oil (NJ) Case," (*Journal of Law and Economics,* October 1958), Standard Oil actually never practiced predatory price cutting—because it would have been unprofitable.

XXV. The Doctrine of Marginal Revenue and Higher Prices in the Single Industry

1. Example of the doctrine:

Price	Quantity	Total Revenue	Unit Cost	Total Cost	Profit
$15	100	$1500	$8	$800	$700
9	200	1800	8	1600	200

Large firm supposedly "restricts" output in order to profit more from a smaller number of units than a larger number, even though the second 100 units are independently profitable and should be produced. It allegedly takes into account *the marginal revenue* attaching to the extra units, rather than their price. The marginal revenue is the change in total revenue that accompanies a change in quantity sold. Marginal revenue takes into account the drop in price on the quantity that is already being sold. In degree that a firm is large, it will supposedly restrict production, because of its concern with the effect on the price of what it already is selling.

2. Fact: unless it has legal protection from outside competition, the firm's real choice is not between 100 at $15 or 200 at $9, but between 100 at *$9* or 200 at $9. So long as the second 100 units are profitable in their own right, they will be produced. The only question is whether they will be produced by the firm that is already producing the 100 or by another firm. In the latter case, the first firm ends up selling at $9, but only 100 units instead of 200 units.

Note:

a. No firm subject to the competition or potential competition of others can view the industry demand curve as its own. It cannot lastingly get a price higher than outsiders' costs plus an allowance for the going rate of return, as a maximum. No matter what the elasticity of the industry demand curve, the long-run demand curve to it specifically is highly elastic at any price above outsiders' costs plus an allowance for the going rate of return.

b. In the case of a new industry, founded by one firm, it might be that it will decide that it does better by getting the higher price as long as it can, and waiting for competition to reduce the price. If so, this is a further reason why there is no tendency toward the formation of a single giant firm.

c. Paradoxically, although the marginal revenue argument is directed against "big business," the actual meaning of the argument is a denunciation of big business for refusing to become still bigger. If the firm goes ahead and produces the 200 units, the marginal revenue argument will not apply. Then, however, it will be denounced for being a monopoly. If it doesn't produce the 200 units, and thereby creates the opportunity for another firm to produce some of them, it is denounced for restricting production.

XXVI. The Cartel Doctrine

1. With few exceptions (where there are very few physical sources of supply, such as is the case with diamonds), the only time cartels pay is when they serve *merely to reduce the extent of losses, i.e., raise price from a point of more severe losses to a point of less severe losses or modest profits.* This is because, in addition to the problem of deciding

which producers must curtail production how much, which is difficult enough in itself, profitable cartels have two further problems, which tend to make their success impossible:

a. The problem of controlling the investment of the profits. If the firms are profitable and want to reinvest their profits, the industry will expand and the cartel price will crash.
b. A profitable price attracts outside entrants to the field, which will make the cartel price crash. But if the cartel is not profitable, these problems do not arise, and so the cartel may succeed. If it is profitable, the only way it can succeed is if outside entrants can't enter and if the members' reinvestment policy can be controlled. In the light of these facts, the following passage from Richard Caves' *American Industry: Structure, Conduct, Performance* should not be surprising: "We even have evidence suggesting that large firms caught engaging in illegal collusion earn *lower* profits than other large firms. Perhaps collusion is most commonly attempted in situations where some adversity has depressed profits below a normal level." (p. 59, 4th ed.)

2. Cartels as a serious problem are the result of government intervention:

a. The OPEC oil cartel today. Its success was the result first of price controls and then of confiscatory taxation applied against its leading competitors, the American oil companies. In their absence, its high prices would have made these competitors extraordinarily profitable and enabled them to expand, thereby reducing prices or forcing the cartel to further restrict its output, which would have given the American industry high profits on a still greater volume, permitting further expansion, until ultimately either the price came down or the cartel was forced out of the market. The cartel's success is also due to American government policies restricting oil exploration and development, such as on the continental shelf, and in wildlife and wilderness areas. The extra oil from these sources would either reduce the price or force the cartel to reduce its own output still more. Price controls on natural gas, restrictions on the strip mining of coal, restrictions on the development of atomic power add to the demand for oil. So does the requirement that automobiles use unleaded gasoline. In the absence of these regulations, OPEC would have to restrict its own output still further in order to maintain the present price of oil. The amount of restriction of its output required would be so large as to make it not worthwhile. The major benefit of any higher price would simply go to the cartel's competitors. Our policies did most of the work of making oil scarcer, and then prevented the cartel's competitors from profiting from the high prices it was able to impose.
b. The German cartels before World War I (which were the classic case of cartelized industry) were promoted by the Imperial German Government. Mises shows in *Human Action* how social legislation raised production costs in Germany relative to those in other countries, which had not adopted this legislation. The result would have been that German manufacturers could not have sold profitably either at home or abroad. To deal with this problem, the German government enacted protective tariffs and encouraged the formation of domestic cartels, which could thus sell at high prices in the German market. At the same time, the extra profits reaped in the domestic market permitted the subsidization of German exports, which could then be sold abroad at competitive prices or even below competitive prices ("dumping"). The exports were necessary to permit Germany to import vital raw materials and food stuffs not available domestically. (See *Human Action,* Third Edition, pp. 366-368.)
c. U.S. agriculture under government price supports

XXVII. The Pure and Perfect Competition Doctrine

1. A denunciation of business as "monopolistic" for refusing to sustain unnecessary losses.

2. The meaning of pure and perfect competition (ppc): *the set of conditions required to drive price to equality with marginal cost.*

3. The meaning of marginal cost: *the extra cost required to produce an additional unit of output;* usually this is the cost of labor, materials, and fuel.

Marginal cost means different things in different contexts. Can equal full cost, or zero, or anything in between, depending on the context.

4. The alleged significance of marginal cost: a measure of value of output forgone in order to produce the output in

question. Price equal MC seen as desirable because of alleged optimization of use of resources: so long as price greater than MC, value of product gained greater than value of product lost. Thus ppc, in causing price to equal MC, seen as conditions required to optimize use of resources.

5. The treatment of fixed costs—analogous to Ricardian land rent: only properly recoverable as and when that category of plant and equipment becomes "scarce". Any allowance for fixed costs other than in case of plant and equipment being "scarce" is "monopolistic withholding of supply": The fish case. The machine case: A machine has the capacity to produce 1 million units of product—renders 1 million service units.

Quantity Supplied and Demanded (in thousands)	Price	Marginal Cost	Implied Machine Rent
500	$10	$8	$2
600	9	8	1
700	8	8	0

Implied machine rent justified only if quantity demanded at price of $8 is greater than 1 million units. Then machine's services are "scarce" and deserve a price.

6. The need for the huge number of sellers and product uniformity as the principal conditions for getting sellers to drive price to marginal cost. Why rivalry seen as antithetical to competition.

7. Effects if price did equal MC

a. In many cases, price = zero; no supply or nationalize and subsidize.
b. Smaller industries that would operate at capacity more often.

8. The alleged lack of price competition because price not driven to MC.

The omnipresence of price competition: 200 years of lower real prices everywhere. Chrysler, American Motors—anyone driven out of business. The omnipresence of price competition even in inflation—the quest for higher productivity and the need to match others' lesser price increases based on improvements in efficiency. The consequent need to improve one's own efficiency.

(Accompanies Weeks 13–14)

XXVIII. The Division of Labor and the Concept of Productive Activity

A. The Doctrine That Only Manual Labor Is Productive

1. Manifestations: the IRS and "earned" vs. "unearned" income; the attitude of labor unions and their supporters; the attitude of socialist governments.

2. Will show that this doctrine rests on ignorance of the requirements of a division-of-labor society, and is both far too narrow and, in one major respect, too broad in its view of what is productive activity.

B. Money Making and Productive Activity

1. Need for money making for activity to be productive in context of a division-of-labor society—need to be able to obtain *products of others* as a result of one's labor. Must earn money to do so. Even manual labor not productive if doesn't earn money. In context of a division-of-labor society, *productive activity is activity the purpose of which is the earning of money.*

Application: the maid who works for money and the housewife who cleans the house without earning money—the significant difference.

2. If activity is not for purpose of making money, it is inherently *consumption*—in that it starts with materials and equipment, which can't be replaced. Physical production, when purpose is not money making, is a *consumptive production.*

3. Productive expenditure and consumption expenditure: expenditure for the purpose of bringing in subsequent sales receipts (implicitly at a profit) versus expenditure *not* for the purpose of bringing in subsequent sales receipts.

Practical significance of distinction: the one is self-sustaining and a source of wealth; the other is a using up of wealth. The case of the two brothers starting with an equal inheritance, one growing richer through productive expenditure, the other growing poorer through consumption expenditure.

4. Capital goods and consumers' goods; producers' labor and consumers' labor; producers' loans and consumers' loans. Purpose for which funds expended or advanced critical, not physical nature of the activity. Heavy machinery can be consumers' goods; all food and clothing are capital goods when bought for business purposes.

a. Consumers' goods that reduce expenses are still consumers' goods—a smaller consumption expenditure is still a consumption expenditure.
b. The status of government borrowing.

5. Adam Smith correctly understood these issues, even though he introduced a second, irrelevant criterion for distinguishing between productive and unproductive activity—namely, the question of whether or not there is a tangible, physical product. But Adam Smith very bad on the questions of the legitimacy of profits and interest and on the productive role of businessmen and capitalists.

C. The Marxian Exploitation Theory

1. The Smith-Marx framework.

a. See Smith, *Wealth of Nations,* p. 72, para 1 & 2 of University of Chicago Press Edition; then pp. 73-74 (quoted in *Capitalism*, pp. 476 and 477).
b. Claims labor the source of all wealth; has right to the full produce or to full value of the produce. Claims income of labor is wages; profits, interest, etc. an unjust deduction that arises with the coming of capitalism and capitalists.
c. Marx: C-M-C—equivalent to Smith's early and rude state. Allegedly no "surplus value" here; surplus value only under "capitalistic circulation"—M-C-M'.

2. Marx's theory of profits (surplus value)—attempt to explain the extent of the unjust deduction from wages.

a. The absolutist labor theory of value—exchange value of everything allegedly determined by "congealed labor content" and nothing else.
b. Implies all value added is proportionate to fresh labor added, since materials and machinery convey their labor content to the product—neither more nor less.
Thus fresh labor allegedly adds all value—the sum of profits and wages.

Corresponding Marxian terminology of "constant" and "variable" capital.

c. Wages, the value of labor, allegedly determined by quantity of labor required to "produce" labor—i.e., subsistence. Wages put there by the arbitrary power of the capitalists—the Marxian "iron law of wages." Subtraction of wage share of value added by labor, then leaves profit—"surplus value.".
d. Example and elaboration of Marx's theory:

i. 48 hours of labor in materials and machinery + 12 hours of fresh labor yield product embodying 60 hours of labor.

ii. If $1 of product value represents every hour of embodied labor, then the materials and machinery that pass into the product are worth $48, while the product itself, embodying 60 hours of labor, is worth $60. The 12 hours of fresh labor adds the whole difference in value between the product and the materials and machinery. This value difference is the sum of wages and profits together.

iii. The division of the value added, between wages and profits, says Marx, is determined by the fact that the 12 hours of fresh labor can be purchased at a price representing the number of hours of labor required to "produce" that 12 hours. If, to use Marx's own example, the worker can work for 12 hours on the basis of necessities which require only 6 hours to produce, then, says Marx, he is paid a wage of only $6. Thus the capitalist acquires 12 labor hours and the value added by 12 hours at a price corresponding to only 6 hours.

iv. Thus profits are made, says Marx, by the systematic underpayment of labor: the capitalist buys a full labor day, but pays only for the hours required to produce the worker's necessities. The hours the worker works over and above what are required to produce his necessities represent unpaid, "surplus labor time." Profits relative to wages, "surplus value" relative to "variable capital" are both expressions for "the rate of exploitation.".

v. Marx's formula for the rate of exploitation:

Rate of Exploitation = profits/wages = s/v (surplus value/variable capital) = surplus labor time/necessary labor time.

e. The exploitation theory and the Marxian rhetoric: "wage slavery" and the capitalists as the heirs to the slave owners and feudal aristocracy—meant literally. Capitalists depicted as profiting on the same basis as slave owners—the capacity of the workers to produce more than is needed for their own subsistence.
f. Implications of the exploitation theory:

i. All progress passes the workers by—improvements are either in things still beyond their reach, or, if within their reach, their wages are cut correspondingly. Thus, the workers men without a country, with nothing to lose but their chains.

ii. Things are still worse: the doctrine of progressive impoverishment: the capitalists more calculatingly greedy than earlier exploiters and the falling rate of profit leads them to constantly increase the rate of exploitation in an effort to offset it. (The falling rate of profit inferred by Marx from a growing proportion of capital in the form of "constant" capital, which adds no value. Thus the surplus value added by fresh labor has to be spread thinner, with the result that the rate of profit falls unless the rate of exploitation is increased. Example: Total capital invested in whole economy initially equals 100 = 50v + 50c. Rate of exploitation is initially 100%. Then s = 50. Rate of profit = 50s/(50v + 50c) = 50%. Now total capital grows to 200, and all the growth is in constant capital. Thus, now, rate of profit = 50s/(50v + 150c) = 25%. Capitalists need to step up the rate of exploitation to offset the fall in the rate of profit.

iii. The working day and child labor—step up the rate of exploitation by squeezing more labor out the workers for the same subsistence.

iv. Sweat the worker—reduce the labor time needed to produce necessities.

g. Influence of the exploitation theory.

i. Assumed correct by almost everyone as a description of *laissez-faire* capitalism; believed not descriptive of present-day world because of government intervention.

ii. The corresponding interpretation of modern economic history—things bad in the past because of the unrestrained greed of the capitalists; better now because of government intervention.

iii. The whole "liberal" program a reflection of the influence of the exploitation theory: laws to limit working day—only the capitalists lose; abolition of child labor—only the capitalists lose; boost pay above subsistence through unions and minimum wage laws—again, only the capitalists lose; the welfare state—progressive income and inheritance taxes, on the one side, plus social welfare spending, such as for public housing, public education, social security, socialized medicine, etc., on the other—this seen as simply taking back some of the loot from the exploiters and returning it to the victims.

D. Critique of the Smith-Marx Framework—Implications of a Correct Positive Theory of Profits

1. Under C-M-C—the early and rude state—all income is *profits*, not wages. Demand for commodities is not demand for labor—product sales revenues but zero costs of production because no M laid out to bring in M.

2. Capitalists don't deduct profits from wages; they create productive expenditure, wages, and costs, which *reduces the profit share* and raises the wage share.

3. Producers in the pre-capitalist economy were profit earners, and the fundamental producers are now, too. The standard of the guiding and directing intelligence. Columbus and his crew. The President and the State Department employees. Ford and Rockefeller.

4. The problem of profits as a labor income and the variation of profits with the amount of capital invested. Adam Smith's denial of profits as a labor income (quoted in *Capitalism* on p. 476). Variation of profit with capital not a contradiction of their attribution to labor of businessmen—the capital is the means by which businessmen implement their ideas. Variation of results with the means employed does not contradict attribution to the intelligence which guides and directs the means.

E. The Productivity Theory of Wages

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 & scarce—money wage rates fall no lower than corresponds to full-employment point (occupation by occupation, place by place). Then the scarcity of labor is felt. See *Capitalism,* Figures 14–1, 14–2. and 14–3 and the surrounding disucssion on pp. 613–618

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.

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

$$\text{Average money wage rate} = \frac{\textit{Demand}\text{ for }\textit{Labor}\ (D_L)}{\textit{Supply of Labor Employed}\ (S_L)}$$

$$\text{General consumer price level} = \frac{\textit{Demand}\text{ for }\textit{Consumers' Goods}\ (D_C)}{\textit{Supply of Consumers' Goods Sold}\ (S_C)}$$

a. Money supply (and thus monetary demands for labor and goods) constant, population constant, productivity of labor rising.

b. Money supply and thus monetary demands rising, population and productivity constant.

c. Money supply and productivity rising, population constant.

d. Money supply and productivity constant, population rising.

e. Money supply constant, productivity and population rising.

f. Money supply, productivity, and population rising.

5. An algebraic demonstration of the role of productivity in determining real wage rates:

Where
W = the average money wage rate
P = the general consumer price level
D_L = the aggregate demand for labor (total business payrolls)
D_C = the aggregate demand for consumers's goods (total expenditure to buy consumers' goods)
S_L = the supply of labor employed
S_C = the supply of consumers' goods sold
then

1. The average real wage (what the worker's money wages actually buy) = $\frac{W}{P}$

2. W = $\frac{D_L}{S_L}$

3. P = $\frac{D_C}{S_C}$

By substituting equations 2 and 3 into equation 1, we obtain

4. The average real wage = $\frac{D_L}{S_L} \div \frac{D_C}{S_C}$

By following the rule of inverting and then multiplying with the second fraction, we obtain

5. $\frac{D_L}{S_L} \times \frac{S_C}{D_C}$

Finally, by changing the order of multiplication, we obtain

6. $\frac{D_L}{D_C} \times \frac{S_C}{S_L}$

The supply of consumers' goods relative to the supply of labor reflects the productivity of labor. The demand for labor relative to the demand for consumers' goods can be called the "distribution" factor. It represents the extent to which wage payments are the source of consumption expenditure versus other sources of consumption expenditure, such as dividends.

6. Real wages and the economic degree of capitalism—$\frac{M}{M'}$: the higher is $\frac{M}{M'}$, the higher is $\frac{D_L}{D_C}$ and the higher is $\frac{D_K}{D_C}$.
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).

a. 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.

b. 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.

7. The futility of anything but a rise in the productivity of labor as a cause of higher real wages.

a. Increases in the quantity of money.
b. Less population.
c. D_L up at the expense of D_K.
d. Less consumption on the part of non-wage earners. Limited one-time rise in real wages, but can't obtain by

force—same issue as in redistribution discussion. (Capitalists quit if no ability to consume. Can only get higher wage share by voluntary inducement to save more, which requires security of property.) Cut in government spending and taxes increasing the demand for labor more potent, but also of a one-time nature. Rise in productivity the only source capable of large, continuing increase.

8. The productivity theory of wages explains why the standard of living was so low in the past, including long hours, child labor, and bad working conditions.

9. It explains how all these things improved—the higher productivity of labor based on *respect for private property rights and economic freedom,* which led to higher saving and a higher productivity of capital goods, thus to capital accumulation and a rising productivity of labor; also to higher wage share of consumption. All in degree of respect for private property rights.

a. Hours shortened and child labor eliminated by virtue of rising real wages based on higher productivity of labor—people could then *afford* to work less and keep their children at home longer. How the desire for shorter hours then made it profitable for employers to offer shorter hours.
b. Improvements in conditions achieved in the same way—more of them pay for themselves or workers are able to bear the cost of more of those that can't pay for themselves, because now they have higher real earnings.

10. Uselessness and harm of redistribution: almost nothing to redistribute; attempt to seize it cuts production: less saving, incentives, and capital accumulation, lower $\frac{D_L}{D_C}$—chaos of socialism.

11. The harm of maximum hours and child labor legislation and of forced improvements in conditions (the kind that don't pay for themselves).

a. Forced reduction in amount of labor—e.g., $\frac{D_L}{\frac{3}{4}S_L}$ results in $\frac{3}{4}S_C$ and thus in $\frac{4}{3}P$ (because $\frac{D_C}{\frac{3}{4}S_C} = \frac{4}{3}P$). Even if weekly or family money income the same, a loss in real terms. If workers work less, get less.
b. Forced improvements in conditions equivalent to forced wage increase: unemployment, higher prices; workers who keep jobs lose, because while prices go up, their take-home pay the same; if unemployment to be avoided, the take-home wages must drop to offset the cost of the improvements. Either way, they are at the expense of the workers, who can't afford them.

12. 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.
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.

13. Effects of minimum wage laws: unemployment, lower skill and lower pay long-term, because the unemployed workers don't gain experience. Preventing the less skilled from competing with the more skilled.

F. The Division of Labor and Productive Functions

1. The specific productive function of businessmen and capitalists: *to raise the productivity and remuneration of manual labor by creating, coordinating, and improving the efficiency of the division of labor.*

a. Create division of labor: found and organize business firms—the units of the division of labor; provide capital, without which little or no vertical division of labor (and which creates and raises the wage share of consumption).
b. Coordinate the division of labor: internal management, balance among the different branches of industry (uniformity-of-profit principle).

c. Improve efficiency of the division of labor: introduce improved products and methods of production; achieve a sufficient relative production of capital goods to achieve economic progress.

2. The productive function of financial markets and institutions and of passive capitalists: promote saving, investment out of saving, and the efficiency of investment.

a. Promote saving by providing opportunity to earn a rate of return.
b. Investment the same way.
c. Promote efficiency of investment by making it possible to provide use of one's saving to others who can use them more efficiently—e.g., small businessman and the electric utility.
d. Contributes to height of relative production of capital goods and thus to economic progress. (Note: productive role here only in context of division-of-labor economy and role of capital in production).
e. If the payment of interest and dividends to passive capitalists an exploitation, then at the expense of businessmen, not the wage earners. Implication of the widows and orphans exploiting Rockefeller. But not an exploitation—all gain. Also, investors usually need to perform some labor if no government bonds or government deposit insurance. Else make minimal rate of return—safety and trustee fees.

3. The specific productive function of the stock market in view of the criticism that only the purchase of newly issued stock actually provides funds to business firms.

a. Ability to sell shares encourages buying them in the first place.
b. Holders of outstanding stock can use the funds from its sale for new business purposes—e.g., the small businessman who sells his shares of GM or IBM to obtain money to expand his store.
c. Price of stock sets terms for sale of new shares.
d. Stock market gives more power to stockholders—individually, can sell if investment bad or need the money; low stock price resulting from bad treatment of small stockholders by management makes corporate takeover more likely; compels the management to consider the interests of the small stockholders; also, low stock price makes new financing less favorable.

4. The productive function of retailing and wholesaling:

a. Need distribution system because of division of labor—the products originate in great concentrations, must be brought to all. This the basis of the need for retailing and wholesaling.
b. These institutions lower distribution costs and achieve greater variety available to consumers.

The problem of assembling the ingredients of breakfast.

The case of the 100 manufacturers and the 1000 retailers.

5. Advertising—need information because of division of labor: the sellers and buyers separate parties.

a. More benefit from the same production—toothpaste brand A and brand B; a gain even if costs higher. But extra cost always limited—advertize lower price.
b. More research and development—faster acceptance of new products; consequent encouragement of research and development.
c. Promotes competition—new entrants need it to gain exposure. Going by experience alone favors the existing suppliers.
d. Works like a bond posted with public: usually only pays to advertize good products.