

CHAPTER 1 ECONOMICS AND CAPITALISM

经济学的 nature 和重要性

1. Economics 的定义

I define economics as the science that studies the production of wealth under a system of division of labor, that is, under a system in which the individual lives by producing, or helping to produce, just one thing or at most a very few things, and is supplied by the labor of others for the far greater part of his needs.

依赖（dependency）关系（前者依赖于后者）：Human life and well-being, the production of wealth, the division of labor, the laws and institutions countries adopt, our understanding of the dependencies.

2. 经济学的重要性

解决政治经济问题（因为经济学解释了什么东西利于人类文明发展。比如 inflation, deflation, unemployment, shortage, wars.）。

理解历史（因为经济学能解释繁荣和衰落）。

对伦理学启示（一个人的获得不是另一个人的损失，而是另一个人的获得，每个人利己是和谐的）。

有助于 business（比如某个商人更加懂得人们对他的产品的需求依赖于什么，比如更加好的保护自己免受通胀影响，比如最重要的是，理解经济学有助于商业的持续存在下去）。

Capitalism

The laws and institutions that the division of labor depends on are capitalism.

1. Capitalism philosophical foundations

A this-worldly(prosecular), proreason philosophy.

this-worldly(prosecular) philosophy → the pursuit of material self-interest

proreason: the cultural acceptance of the closely related philosophical conviction that the world operates according to definite and knowable principles of cause and effect.

Private property rights rest on the recognition of the principle of causality in the form that those who are to implement the causes must be motivated by being able to benefit from the effects they create. They also rest on a foundation of secularism—of the recognition of the rightness of being concerned with material improvement.

Thus, insofar as production depends on people's desire to improve their material conditions, and

on science, technology, hard work, saving, and private property, it fundamentally depends on the influence of a this-worldly, proreason philosophy. And to the extent that production depends on peace and tranquility, on respect for individual rights, on limited government, economic and political freedom, and even on personal self-esteem, it again fundamentally depends on the influence of a this-worldly, proreason philosophy.

2. Capitalism and freedom

Freedom means the absence of the initiation of physical force.

2.1 Freedom and government

Government exists to make possible an organized, effective defense and deterrent against the initiation of force.

The very existence of government can easily secure the freedom of the individual in relation to all other private citizens. The crucial matter is the individual's freedom in relation to the government. The individuals must be free from the initiation of force from the government, too.

2.2 Freedom is the foundation of personal security and economic security

Personal security follows from the definition of freedom.

Economic security: through free competition, saving instead of consumption by government.

2.3 The Indivisibility of Economic and Political Freedom

To respect the right and freedom to use property is to respect the right and freedom to carry on the activities in which property is used.

2.4 The Rational Versus the Anarchic Concept of Freedom

The rational freedom means free from the initiation of physical force. In order for a violation of freedom to exist, it is not sufficient merely that someone be unable to achieve what he desires. What is necessary is that the specific thing stopping him be the initiation of physical force; in particular, the government's threat to use force against him in response to an action of his that does not represent the use of force. The stock-in-trade of the anarchic concept of freedom, however, is to construe precisely such facts as a violation of freedom and rights. On the basis of the anarchic concept of freedom, it is claimed that freedom is violated any time there is anything that, for whatever reason, a person cannot do, from flying to the moon, to being able to afford a house or a college education that is beyond his reach, to committing murder.

2.5 The Decline of Freedom in the United States

一方面，对犯罪的打击变少了，另一方面，政府对守法公民的 initiation of physical force 增加了。

2.6 The Growth of Corruption as the Result of the Decline of Freedom

随着政府可以越来越多地启动 initiation of physical force，商人会贿赂官员，不仅为了自己的正当利益不被政府侵犯，甚至为了使自己获利而损害其他企业的利益。

3. Capitalism and the Origin of Economic Institutions

在 freedom 下追求 self-interest, 开垦未被占有的土地和资源, 形成 private property right, 生产出资本品, 形成 private ownership of means of production。rationality 使得人们为未来考虑, 从而有 saving 和 capital accumulation。在 freedom 下追求 self-interest, 人们意识到劳动分工重要性, 认识到间接交易和货币的重要性, 使用货币交易加深了劳动分工, 因为人们只需要专注生产少量种类的产品来换取货币从而购买自己所需的各种东西。

在劳动分工、货币经济下, 追求 self-interest 变成了追求 financial self-interest,

即以尽量低的价格购买东西，以尽量高的价格出售东西。即 profit motive--the principle of "buying cheap and selling dear."。

追求 self-interest 也形成了 economic inequality, as those who are more intelligent and ambitious outstrip those who are less intelligent and ambitious; and to economic competition, as different sellers seek to sell to the same customers, and as different buyers seek to buy one and the same supply of a good or service。

Profit motive 和 economic competition 形成了价格体系。

这些 institutions 造成 economic progress- the increase in the productive power of human labor and the consequent enjoyment of rising standards of living。

economic progress 也是 the harmony of the rational self-interests of all men-the success of each promotes the well-being of all 的体现。

4. Capitalism and the Economic History of the United States

美国历史是上述 capitalism 的 institutions 的现成的好例子。

不过美国近些年经济没那么闪耀，原因是美国在破坏这些 institutions。

5. Why Economics and Capitalism Are Controversial

The Prevailing Prescientific Worldview in the Realm of Economics: 出现不好的事情认为是有鬼怪在发力，需要祈求更大力量的神来压住。类似地，经济中出现不好的事情，认为是有一些恶毒的人在发力，需要更大的力量（政府）来压住。

Economics Versus Unscientific Personal Observations: 由于每个人专注于自己的领域，所以只关注事情对自己领域的影响，而不考虑对其他领域的影响，不考虑如果自己换了领域则这件事情对自己的影响。与该概念相关的是人们混淆了 money 和 wealth（个人来说挣钱越多越好，但是不能说对于 average person，挣钱越多越好）。

Economics Versus Altruism: 传统的道德标准是个人追求 self-interest 对他人不利，所以要倡导利他主义和自我牺牲。而经济学的结论是理性追求个人追求 self-interest 对每个人都好。

Economics Versus Irrational Self-Interest: 经济学也受到 the practitioners of an irrational, short-sighted, self-defeating form of self-interest 的反对。These are, above all, the businessmen and wage earners whose short-run interests would be harmed by the free competition of capitalism and are protected or positively promoted by policies of government intervention, and who do not scruple to seek government intervention. 这些人的行为是自损的，对每个人都不利。这种行为导致互害。利他主义攻击利己主义的一个原因就是不理性的利己造成的互害。

Economics Versus Irrationalism: 人们不愿意使用 reason 和 logic，甚至不愿意去 think。这种局面很有可能是两个世纪的哲学家对对 human reason 的可靠性的攻击造成的。

6. Economics and Capitalism: Science and Value

科学和价值不必分开。科学本身就以一些基本价值为前提，如 values such as reason, observation, truth, honesty, integrity, and the freedom of inquiry。

CHAPTER 2 WEALTH AND ITS ROLE IN HUMAN LIFE

1. Wealth and Goods

We can define goods—economic goods—as things which are recognized as capable of satisfying human needs, requiring the expenditure of labor or effort in order to be produced or enjoyed, and over which one has sufficient command gainfully to direct them to the

satisfaction of one's needs

Goods 包含 free goods 和 economic goods。前者是指不需要人的 labor 或 effort，自动在那里的 goods，比如空气、阳光、雨水、风。后者是指不是 free goods 的 goods，如 houses and automobiles, piles of lumber and bars of copper, steel mills and pipelines, foodstuffs and clothing. It is also land and natural resources in the ground insofar as man has made them useable and accessible.

Wealth is material goods made by man。Wealth 专指 economic goods。

2. Economics and Wealth

economics is a science of wealth。

两个挑战。

挑战一。我们的经济已经变成了服务经济。反驳：很多服务也是服务 goods 的（比如运输是运输货物的），而且很多服务的完成要用到 goods，而且生产服务的目的也是为了 wealth（在货币经济下，直接为了 money，间接为了 wealth）。

挑战二。经济科学是关于选择的科学而不是关于 wealth 的科学。反驳经济学关注选择也是因为关注财富的生产才发生的。

3. The Limitless Need and Desire for Wealth

4. The Law of Diminishing Marginal Utility and the Limitless Need for Wealth

The law of diminishing marginal utility states that the utility or, equivalently, the importance or personal value that an individual attaches to a unit of any good diminishes as the quantity of the good in his possession increases.

5. Applications of the Law of Diminishing Marginal Utility

6. "Scarcity" and the Transformation of Its Nature Under Capitalism

Economists almost universally describe the condition in which the desire for wealth exceeds the amount of wealth available as one of "scarcity." Scarcity, they hold, means any limitation of wealth relative to the need or desire for wealth, irrespective of whether the limitation proceeds from the lack of wealth or the abundance of desires.

For the people of precapitalistic societies, scarcity means a deficiency of wealth relative to urgent biological needs; it means supplies of food insufficient to still hunger; supplies of shelter and clothing insufficient to provide protection from the elements. Under capitalism, on the other hand, scarcity does not mean any such deficiency of wealth, but a vast and growing supply of wealth that lags behind the desire for wealth—a desire that always exceeds it, always grows as it grows, and that provides the impetus for its further growth. Scarcity under capitalism actually means economic ambitiousness, and is the cause of the progressive elimination of scarcity in the urgent biological sense

7. Time Preference and the Scarcity of Capital

According to the principle of time preference, an individual values goods available to him in the present more highly than goods available to him in the future, and goods available to him in the nearer future more highly than goods available to him in the more remote future.

Time preference must be understood as applying other things being equal.

The Foundations of Time Preference: The greater importance of life in the nearer future is what underlies the greater importance of goods in the nearer future and the perspective-like diminution in the value we attach to goods available in successively more remote periods of the future.

资本品稀缺体现在两方面。一方面，资本品用来生产消费品，而人们的 needs and desires

相对消费品是无限的，所以消费品是稀缺的，所以资本品是稀缺的，称作 **horizontal scarcity**。另一方面，资本品可以用在不同 **capital-intensive** 程度的生产过程上，资本品相对于各种 **capital-intensive** 程度的生产过程的需求来说是不足的，即稀缺的，称作 **vertical scarcity**；该稀缺性由时间偏好来决定，时间偏好越低，**capital-intensive** 越大。

Time Preference, Rationality, and Freedom: 越理性，对未来的考虑越多，时间偏好越低；越自由，未来的财富越容易得到保障，时间偏好越低。

8. Wealth and Labor

劳动生产了财富，财富是稀缺的，所以劳动是稀缺的。所以要提高劳动生产率。

the fundamental and essential nature of economic life is this: the need and desire for additional wealth are there and the nature-given means of producing it are there; all that is lacking is the ability of human labor to transform the nature-given means of production into additional wealth.

An ineradicable scarcity of labor resulting from a need and desire for labor that are always vastly greater than the supply of labor requires that the productivity of labor be rendered greater and greater. The rise in the productivity of labor is the only conceivable way in which man can obtain the progressively greater amounts of wealth that his rational and progressive nature requires.

CHAPTER 4 THE DIVISION OF LABOR AND PRODUCTION

1. The Division of Labor and the Productivity of Labor

The division of labor raises the productivity of labor in six major ways.

- 1.1 It increases the amount of knowledge used in production by a multiple that corresponds to the number of distinct specializations and subspecializations of employment. This makes possible the production of products and the adoption of methods of production that would otherwise be impossible.
- 1.2 It makes it possible for geniuses to specialize in science, invention, and the organization and direction of the productive activity of others, thereby further and progressively increasing the knowledge used in production
- 1.3 It enables individuals at all levels of ability to concentrate on the kind of work for which they are best suited on the basis of differences in their intellectual and bodily endowments
- 1.4 It enables the various regions of the world to concentrate on producing the crops and minerals for which they are best suited on the basis of differing conditions of climate and geology
- 1.5 It increases the efficiency of the processes of learning and motion that are entailed in production
- 1.6 It underlies the use of machinery in production.

2. The Division of Labor and Society

On the basis of all of the foregoing considerations, it should be obvious that from the perspective of the production of wealth and all that depends on the production of wealth, a division-of-labor society is the form of society that is appropriate to man's nature.

The gains from the division of labor constitute an objective foundation for the existence of good will on the part of each individual toward the rest of mankind.

3. Rebuttal of the Critique of the Division of Labor

4. Universal Aspects of Production

该部分的概念都很重要。

劳动分工通过前 6 点提高生产，从而提高的资本品的产量，从而增加了劳动生产率。而且劳动分工通过有利于科技发展来提高的资本品和劳动力的使用效率，从而降低了资本品的维持比例，从而利于资本积累。

CHAPTER 5 THE DEPENDENCE OF THE DIVISION OF LABOR ON CAPITALISM I

THE NATURE OF THE DEPENDENCIES

1. Dependence of the Division of Labor on Private Ownership of the Means of Production

Direct dependence: In order for them to act and produce separately and independently from one another, they must hold wealth separately and independently from one another—that is, there must be private property, including private ownership of the means of production.

Indirect dependence: division of labor depends on the price system, and the price system depends on the profit motive and the freedom of competition. The profit motive and the freedom of competition, in turn, vitally depend on the institution of private ownership of the means of production.

The price system also depends on exchange and money, and saving and capital accumulation, which depend on the institution of private ownership of the means of production.

That the division of labor depends on the price system is that under capitalism each individual plans his own particular sphere of economic activity. But he plans on the basis of a consideration of prices—the prices he will receive as a seller and must pay as a buyer.

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

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

4. The Dependence of the Division of Labor on Economic Competition

A major source of the gains from the division of labor is that the production of everything tends to be carried on by those who are able to do it best. Economic competition is the process of establishing who is able to produce things best.

It is the process that establishes not only which individuals are best suited in the eyes of the market for all the various occupations, from wealthy businessman on down to janitor, but also which products are best suited for any given market, and which technological methods are best suited for the production of any given product. Thus, economic competition is the process of determining the organization of a division-of-labor society with respect to the choice of products for markets and the technological methods of producing any given product, as well as of persons for occupations.

The freedom of such competition is necessary to a division-of-labor society in preventing it from being put at the mercy of the arbitrary demands of particular categories of producers.

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

A division-of-labor society depends on economic inequality in the sense that it depends on individuals being free and motivated to produce. The abolition of economic inequality would mean the abolition of all connection between an individual's efforts and his income. It would be tantamount to the abolition of causality in the receipt of income.

The economic inequality is that economic inequality that results from the existence of individual freedom and respect for individual rights, not inequalities forcibly imposed by the government.

6. Summary

该段落直接总结了前面的 5 点。

ELEMENTS OF PRICE THEORY: DEMAND, SUPPLY, AND COST OF PRODUCTION

需求定律：其他条件不变的情况下，某个商品的价格越低，其需求量越大。

研究整个经济的价格水平的时候，需求看作是对商品的总花费（其主要由货币量决定），供给是所有商品的存量。

研究单个行业或商品的价格的时候，需求曲线是指需求定律代表的曲线，供给是指供给曲线。对于在研究的时间尺度下，数量不变的商品，比如劳动力，各种原材料，供给曲线看作是一条竖直的线，因为在劳动分工的情况下，这些商品的边际效用对于商品的提供者来说是几乎是零。价格的决定是价格使得，存量的最后一单位的边际效用要大于价格对应的其他商品组合的边际效用，且额外一单位的边际效用要小于价格对应的其他商品组合的边际效用。对于在研究的时间尺度下，数量可以在 0 到一个上限之间调整的商品，比如很多制造品（汽车，电器）、一个饭店提供的 meal 量，一个理发店提供的理发个数，供给曲线是一条水平直线或斜向下的线。水平直线是因为该供给者在给定的价位下愿意提供的数量从 0 到上限之间。这种类型的价格确定是，供给者先根据自己的成本（单位产品的平均成本，不是边际成本）或潜在竞争者的成本确定价格，然后由需求曲线确定需求量，从而确定供给量。有些供给曲线是斜向下的是因为其单位平均成本随着供给量增加会下降。

可变量商品和固定量商品定价的统一：可变商品的价格由成本直接决定，但是成本是由生产时使用的生产要素和要素的价格决定的，而对于要素价格，如果要素本身也是可变量商品，则其价格由该要素的生产成本决定，如果该要素本身是固定量商品，则其价格按照上述边际效用的方式决定。假设最终的生产要素都是固定量商品，则商品的价格最终是由边际效用的方式决定的。

可变商品的定价：由成本直接决定，在成本的基础上加上一般利润率。

需求的价格弹性：

- (1) 无弹性：价格降低 1%，需求量增加量小于 1%，在该商品上的总花费变小。比如当前已经成本比较低的东西，如盐，小麦，食盐等。
- (2) 有弹性：价格降低 1%，需求量增加量大于 1%，在该商品上的总花费变大。比如奢侈品。
- (3) 单位弹性：价格降低 1%，需求量增加量等于 1%，在该商品上的总花费不变。比如加总需求。

CHAPTER 6 THE DEPENDENCE OF THE DIVISION OF LABOR ON CAPITALISM II: THE PRICE SYSTEM AND ECONOMIC COORDINATION

UNIFORMITY PRINCIPLES

The dependence of the division of labor on the price system centers on the coordinating function of prices. The price system coordinates the various branches of the division of labor in a variety of essential respects. It keeps the various branches of industry, and thus the production of the various products, in proper balance with one another by appropriately adjusting their relative size. It does the same with respect to the relative size of the various occupations. It also achieves a harmonious balancing of the supplies of the various products produced with respect to their distribution in terms of place and time. These results are accomplished by the operation of a series of principles that I call uniformity principles, which are described and elaborated in the first four sections of this part.

1. The Uniformity-of-Profit Principle

There is a tendency in a free market toward the establishment of a uniform rate of profit on capital invested in all the different branches of industry.

The desire of businessmen to earn profits and avoid losses, and to earn higher profits in preference to lower profits, brings about a tendency toward a uniform rate of profit on capital invested in all the different branches of industry. The operation of this tendency counteracts, delimits, and largely prevents mistakes from being made in the relative production of the various goods. Because of it, consumers have the power of positive initiative to shift the course of production simply by changing the pattern of their spending; because of it, businessmen are made to act virtually as the consumers' agents. The operation of the tendency toward a uniform rate of profit requires that high profits be made by continuously introducing productive innovations in advance of competitors. These innovations are the base of a continuous increase in production, whether they take the form of new and improved products, reduced costs of production, or correct anticipations of changes in consumer demand. As such, they operate continuously to raise the average standard of living. They steadily enlarge and improve the goods available while reducing not only the amount of work that must be performed in order to produce any given quantity of goods but also the amount of work that must be performed in order to buy any given quantity of goods. In other words, they make possible progressively improved products at prices corresponding to progressively falling real costs of production.

2. The Tendency Toward a Uniform Price for the Same Good Throughout the World

In a free market there is a tendency toward the establishment of a uniform price for the same good throughout the world.

3. The Tendency Toward Uniform Prices Over Time: The Function of Commodity Speculation

In a free market there is a tendency toward the equalization of the price of a good in the present with the expected price of that good in the future.

4. The Tendency Toward Uniform Wage Rates for Workers of the Same Degree of Ability
5. Prices and Costs of Production

In a free market the prices of products tend to be governed by their costs of production.

原因:

The uniformity-of-profit principle implies that the prices of products tend to equal their costs of production plus only as much profit as is required to afford the going rate of profit on the capital invested。

Now there are two ways that cost of production governs prices. One way is indirectly—through variations in the supply of the good, as above. The other way is directly—through the decisions of the sellers of the good in setting their prices.

方式 1: 对于固定量商品, 把时间尺度拉长, 如果其价格高于成本加上平均利润率, 则资本投入增加, 使其价格趋于成本加上平均利润率, 反之亦然。

方式 2: 对于可变量商品如上所述。

ALLOCATION PRINCIPLES

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

属于这种类型的有:

- (1) Human labor,
- (2) Materials whose supply is temporarily limited, such as agricultural commodities between harvests. Housing and buildings of all kinds are in a state of temporarily limited supply, because considerable time is always required before their supply can be increased through new construction. Any material, any product whatever, is capable of being in limited supply temporarily, if the demand for it outruns the ability to supply it from existing facilities at a price based on cost of production。
- (3) Land sites are in the category of goods in limited supply on a long-run basis, insofar as there is anything special or unique about them that makes them superior to other land, such as their superior location or superior fertility. In a few cases, the products of such land sites are also in the category of goods in limited supply on a more or less permanent basis: for example, wines of a special flavor that can be produced only from grapes grown on a soil of a very limited extent, or caviar found in sturgeon beds located only in a few places.
- (4) Goods such as paintings and statues by old masters, first editions, rare coins, and so on, are in the category of goods in limited supply on an absolutely permanent basis, because their production is necessarily past.
- (5) Finally, all second-hand goods are in a state of limited supply.

In sum, the quantity of money determines the absolute height of the prices of goods and services in limited supply, and the value judgments of the consumers determine their relative heights. The value judgments of the consumers are, of course, judgments with respect to marginal quantities, and one may say that the relative prices of goods and services in limited supply are determined by their relative marginal utilities, or, in the case of factors of production, the relative marginal utilities of their final products to the consumers。

2. The Pricing and Distribution of Consumers' Goods in Limited Supply

The most important characteristic of the price of a good in limited supply is the fact that in a free market it always tends to be set high enough to level down the quantity of the good demanded—that is, the quantity of it that buyers are seeking to buy—to equality with the limited supply of it that exists.

It implies that shortages cannot exist in a free market, even in cases of the most severely limited supply.

It is to the self-interest of buyers of goods in limited supply that prices be high enough to exclude their competitors from the market.

3. The Pricing and Distribution of Factors of Production in Limited Supply

To summarize our discussion of factors of production in limited supply, we have seen that all the principles apply that we developed in relation to consumers' goods in limited supply, plus two others: First, that factors are distributed to their most important employments through a process of the different needs, desires, and purposes of the same individual consumers bidding against one another. And second, that the prices of the factors are determined with respect to the least important among the employments for which their supply suffices. Determination of price by cost, we have seen, therefore, ultimately means determination with respect to the consumers' value judgments concerning the marginal products of factors of production.

4. The Free Market's Efficiency in Responding to Economic Change

例子 1：洗衣机和冰箱。假设洗衣机的需求突然变多，冰箱的需求变少，假设洗衣机和冰箱生产用的生产要素差不多，很容易替换，则最终效果只是生产要素从冰箱变到洗衣机，洗衣机和冰箱的价格，以及生产要素的价格很可能不变。

例子 2：手表和衣服。假设手表的需求突然变多，衣服的变少，假设二者的生产要素不能替换，例如手表的要素是 *skilled labor*，衣服的要素是 *unskilled labor*。则手表的利润增加，衣服的利润减小；然后投资手表的资本增加，投向衣服的资本减小，导致手表的要素的价格升高，衣服的要素的价格降低；然后使用 *skilled labor* 的其他行业比如眼镜的成本增加，利润减小，导致眼镜行业提价，从而眼镜的需求和供给量减少，从而眼镜的生产要素释放给手表行业。对于衣服行业类似的。

分析上面例子的时候注意利用前面介绍的 *profit motive* 的作用。另外注意“突然”二字，“突然”表示之前生产者没有预料到会有这种突然的变化，所以才会有接下来的一系列调整。

The principle that emerges from this discussion is that in a free market if a factor of production is in reduced demand or additional supply, the portion of it that becomes newly available is channelled to the most important of its previously submarginal uses; if the factor of production is in additional demand or reduced supply, the portion of it that is no longer available is taken from the least important of its previous uses, that is, from its previously marginal uses.

CHAPTER 7 THE DEPENDENCE OF THE DIVISION OF LABOR ON CAPITALISM III: PRICE CONTROLS AND ECONOMIC CHAOS

一般是 inflation 导致的物价水平整体上涨,, 但是政府不取消 inflation, 反而是使用 price control。类似于把沸水壶的气压计指针掰断或手动让其不动, 沸水依然在继续, 反而更危险, 因为管理者看见指针显示气压很低, 所以完全不关心隐患, 更加肆无忌惮地 inflate。

A shortage is an excess of the quantity of a good buyers are seeking to buy over the quantity sellers are willing and able to sell.

Price controls cause shortages.最终导致全面的价格控制 (因为控制的一个产品的价格, 该行业由于不断 inflation, 成本是上升的, 所以要使该行业存活, 必须再控制其成本, 这样控制传播下去), 导致计划经济, 社会主义。

CHAPTER 8 THE DEPENDENCE OF THE DIVISION OF LABOR ON CAPITALISM IV: SOCIALISM, ECONOMIC CHAOS, AND TOTALITARIAN DICTATORSHIP

CHAPTER 9 THE INFLUENCE OF THE DIVISION OF LABOR ON THE INSTITUTIONS OF CAPITALISM

PRIVATE OWNERSHIP OF THE MEANS OF PRODUCTION

1. The General Benefit from Private Ownership of the Means of Production

在劳动分工的社会, Private Ownership of the Means of Production 具有 general benefits。

There is a twofold benefit to the nonowners from other people's private property in the form of means of production—of capital: Namely, it is the source of the supply of what the nonowners buy and of the demand for what the nonowners sell。

2. The Capitalists' Special Benefit from Private Ownership of the Means of Production

There are two gains that the capitalists obtain which others do not. The first is the portion of their profits and interest that they do not save and invest, but consume. Even this overstates their special gains to the extent that their consumption includes such things as the support of universities, libraries, hospitals, and opera companies, because here again are general benefits. The second is the psychological value that the possession of capital has. To the extent that an individual possesses capital, he has the potential of consuming it. He thus has the psychological security of knowing that he could consume it if he had to or wanted to.

有许多 implications。保护 Private Ownership of the Means of Production。减少收入税、遗产税。

ECONOMIC INEQUALITY

1. Economic Inequality Under Capitalism

In a division-of-labor society, one person's gain is not only not other people's loss, but is other people's gain.

The most fundamental and important instance of this kind, is precisely the building of great business fortunes. Both in their origin and in their use, these fortunes are a source of gains to everyone who participates in the economic system.

On the basis of all of the foregoing, it should be clear that the economic inequality that exists in a division-of-labor, capitalist society is an inequality in which the greater success of some is the cause not of the failure of others, but of their success too. It is in its most important respects simply an inequality of success and progress—an inequality in which some are merely further ahead than others on the road of improvement. The inequality of such a society is an inequality in which the "rich" and the "poor" both grow richer, and in which the classification of any given individual as belonging to the class of the "rich" or the "poor" is constantly subject to change by virtue of his own efforts and abilities.

ECONOMIC COMPETITION

1. The Nature of Economic Competition

The competition that exists in a division-of-labor is not competition over any limited, nature-given supply of means of subsistence. On the contrary, it is a competition in the positive creation of new and additional wealth.

It is not at all about one human being's survival causing another human being to perish for lack of subsistence. Rather it is about one product serving a given market instead of another product serving that market, about whether this or that technological method will be used to produce a given product, and to what extent, and about which individuals are to perform which jobs in the economic system. Throughout, it is a competition for the patronage of customers (including employers) and for the services of workers—a competition which can be won only to the degree that one renders labor more productive and so operates to raise the general standard of living by producing more and better products. Economic competition is the process of achieving an ever more efficient organization of the division of labor.

In this competition there are no genuine, long-run losers—only winners. Everyone benefits from the ever-increasing wealth that economic competition creates. Even those who at first sight appear to be losers turn out to be winners, and usually fairly quickly.

It is vital to realize that there is room for all in the competition of a division-of-labor society. To "lose" in such competition does not mean to be cast out of the productive system and to perish. It means only to have to relocate to some other point in the productive system—to produce some different product, to work in some different occupation; or, perhaps, to continue in the same occupation and learn to produce one's present product differently. The effect of making such adjustments is almost always that one ends up benefitting even from the very improvement

in production that caused one's initial "loss".

It is a process in which the success of the more able raises the productivity and improves the standard of living of the less able. For the competitive success of the more able is merely their achievement of positions in which they, rather than the less able, take charge of production. The less able remain in the productive system and are more productive because they work under the direction of the more able.

2. The Short-Run Loss Periods

(1) unskilled labor

短暂的失业，然后找到新工作，从找到新工作起，他将作为消费者从竞争带来的好处中获益。之所以能找到新工作，可以用比较优势来理解，或者人的 *desires and needs* 是无限的。另外，能较快换工作的一个前提也是 *freedom of competition*.

(2) skilled labor

较长的失业，然后找到新工作，从找到新工作起，他将作为消费者从竞争带来的好处中获益。But from time to time the nature of the competition is such that the individual must change his job.

(3) businessman

较大的财富损失。他可以去找工作，从找到新工作起，他将作为消费者从竞争带来的好处中获益。在较长时间后，他即使作为 *wage-earner*，也能够比以前作为百万富翁生活得更好（作为消费者享受到竞争带来的好处）。另外，他以前的财富也是他竞争得来的，所以贬低竞争是矛盾的。

Thus, an accurate description of the millionaire's loss, or anyone else's loss in connection with competition, is not to say that the phenomenon of competition has caused him any kind of actual loss or harm, but that competition both before and after his financial loss has benefitted him incalculably. It is just that after his financial loss, competition, while still benefitting him incalculably, benefits him somewhat less than it did before, and will require some period of time to benefit him even more than it did at its previous peak of benefit to him. Always, the effect of economic competition on the standard of living of everyone is positive—enormously positive.

3. Economic Competition and Economic Security

The freedom of competition is an essential basis of economic security—that it is so in terms both of the individual's ability to obtain physical goods and services in exchange for the money income he earns and to earn a money income in the first place.

行业协会限制协会成员之间竞争，限制外面的人与之竞争，这会造成人们的生活越来越差。行业协会只关注了收入和工作职位，而忽视了收入的购买力（竞争才能提高购买力）。

限制竞争使得人们被竞争掉之后的 *loss* 加剧，所以人们害怕竞争正是因为限制了竞争。Competition is terrifying when one is not allowed to compete. People are terrified of losing the competition concerning their present jobs, because if they lose it, they are prohibited from competing for alternative employment.另外，人们害怕竞争又导致限制竞争。害怕竞争导致了按资历而不是按能力给工资，这导致人们被竞争掉时损失很大，所以害怕竞争。

4. The Law of Comparative Advantage

This law holds that human cooperation in a division of labor is mutually advantageous even when one party is productively superior to the other in every way, because it allows the superior party to concentrate on those areas of his superiority which are greater and more important—i.e., on his areas of comparative advantage. By the same token, the inferior party concentrates on those areas in which his inferiority is less or less important, which represents his comparative advantage.

Table 9-1 The Absolute Advantage of the United States over Brazil		
Labor Required In (country)/ to Produce (product)	United States	Brazil
<i>x of Coffee</i>	1 million man-days	2 million man-days
<i>y of Cars</i>	.5 million man-days	5 million man-days

(1) International Competition and Free Labor Markets

It follows from this discussion that there is room for every country in the world market. However backward it may be in its methods of production, it can still be competitive in whatever it sells, provided only that its relative money wage rates compensate for its deficiencies in the productivity of labor.

对于上表，逐渐降低巴西相对美国的工资，可以看到巴西现在生成咖啡上有优势，然后在汽车上也有优势。

The principle that emerges is that every country can be internationally competitive provided that its relative level of money wage rates corresponds to its relative productivity of labor.

The source of problems in international trade is the persistence of wage rates that are too high in relation to a country's productivity of labor. A major implication of this whole discussion is that one of the requirements of free international trade, and thus of world peace, is free labor markets within countries.

(2) How the Less Able Can Outcompete the More Able in a Free Labor Market

Thus, on the basis of the law of comparative advantage, there is room even for the least talented individuals in the productive system of a division-of-labor society. Even they have a contribution to make, and one that is of benefit to others who are more talented. Namely, by taking over tasks in which their productive inferiority is relatively small, they enable those who are more talented to concentrate on areas where their productive superiority is greater and more important.

5. The Pyramid-of-Ability Principle

To the degree that those who are more able occupy the higher positions in a division-of-labor society, the productivity of those in the lower positions is increased.

Freedom of Competition and the General Gain from the Existence of Others

The pyramid-of-ability principle and the law of comparative advantage can be integrated into a wider principle that subsumes them both. Namely, that each person gains from the existence

of other people who participate with him in the division of labor. If they are less productively capable than he, his gain from them is described by the law of comparative advantage. If they are more productively capable than he, his gain from them is described by the pyramid-of-ability principle. In either case, looking down the scale or up, the individual gains from the existence of others who participate with him in the division of labor. The great precondition of his gain is the freedom of competition: that everyone should have the legal right to enter every occupation and every industry. That is the condition which simultaneously guarantees him the widest possible scope for his own talents as a producer and operates to assure that everything he buys will be produced by those who are best suited to produce it, in an environment of constant progress and improvement. The freedom of competition is the true basis of his economic security and the diametric opposite of the law of the jungle. It gives a place in the system of division of labor to everyone, and tends to put everyone in the particular place for which he is best suited, with the result that the productivity and standard of living of all are increased and go on increasing. So far from being the law of the jungle, the freedom of economic competition emerges as the true principle of the universal brotherhood of man.

6. The Population Question

In a division-of-labor society, a larger population means a greater, more intensive division of labor.

The effect of population growth in a division-of-labor society is radically different than in a non-division-of-labor society. In a division-of-labor society it means a greater, more intensive division of labor, including the larger absolute size of the various specializations and subspecializations concerned with making new discoveries and implementing them in the form of new products and better methods of production—in a word, it means a greater absolute number of productive geniuses, whose work operates to raise the standard of living of everyone. These advantages enable a division-of-labor society easily to overcome any problems that would otherwise be associated with the need to produce more food and minerals for a larger population.

Implication for Worldwide Free Trade: The fact that a larger market provides important gains, in the form of a more intensive division of labor and a larger absolute size of the various specializations and subspecializations, implies the desirability of worldwide free trade. Under worldwide free trade, every producer would be able to regard the entire world as his market. Production could be carried on in each locality on the vastly greater scale commensurate with a world market. Thus, the division of labor could reach its maximum possible extent consistent with the existing size of the world's population and the proportion of it already incorporated into the division of labor within the various national boundaries.

7. Free Immigration

8. The Harmony of Interests in the Face of Competition for Limited Money Revenues

一个简单的具有说服力的带公式推导的例子。

CHAPTER 10 MONOPOLY VERSUS FREEDOM OF COMPETITION

1. The Meaning of Freedom and of Freedom of Competition

对 capitalism 人们贬低竞争，但是人们更加贬低资本主义缺乏竞争且倾向于垄断。这是 irrational freedom 导致的，rational freedom 不会导致。If a man possesses only a few thousand dollars of capital or no capital at all, freedom of competition for him does not mean the ability to enter into competition with General Motors. It does mean the ability to do whatever he is capable of doing with the few thousand dollars of capital he has (or with his abilities unaided by any capital)—without being stopped by the government.

Freedom of competition does not mean that one is automatically able to compete—that one automatically has the necessary knowledge, capital, or whatever else may be required to compete. It means only that insofar as one does have the means of competing, one will not be stopped from exercising those means by the initiation of physical force.

The fact that freedom of competition does not guarantee that one will be able to compete—the fact that freedom in general does not guarantee that one will be able to do whatever it is one would like to do, because freedom does not by itself supply the necessary means—does not reduce freedom to the status of a trivial luxury capable of being enjoyed only by the wealthy, as the Marxists claim. Freedom, including the freedom of competition, is a vital necessity for everyone. It means, in essence, the freedom of opportunity—the freedom to exploit the opportunities one already has, and so later on be capable of enjoying greater opportunities.

Not only does everyone need freedom for himself, but he also needs freedom for others because he enormously benefits from their freedom.

High Capital Requirements as an Indicator of Low Prices and the Intensity of Competition:由于竞争，businessman 想赚取更多利润，就要降低成本，其采取的措施是增加资本强度。另外，由于竞争，其价格也会长期趋于成本。所以高资本要求是竞争的结果，是低成本和低价格的体现。、

2. The Political Concept of Monopoly

According to the political concept of monopoly, monopoly is a market, or part of a market, reserved to the exclusive possession of one or more sellers by means of the initiation of physical force by the government, or with the sanction of the government.

3. 政治概念的垄断不一定表示高利润，而是低利润，高成本的体现，保护一些高成本的企业不被淘汰。

4. The Economic Concept of Monopoly

According to the economic concept of monopoly, monopoly exists whenever there is only one supplier of a given good in a given territory. That supplier is said to have a monopoly and to be a monopolist.

5. A Further Word on Cost of Production and Prices

The discussions of the marginal revenue and pure-and-perfect-competition doctrines make clear that the reaction to classical economics' exaggeration of the explanatory role of cost of production as a determinant of prices has gone too far, in two respects.

First, cost of production operates to set many prices far below what they would be if they were determined on the basis of the direct marginal utility of the good concerned. This, of course, is the case with respect to some necessities and virtually all components and spare parts used in manufactured goods.

Second, cost of production operates to establish prices at a point that is above what they

would be if producers did in fact have to regard their plant and equipment and intellectual property as not deserving to command an allowance in the price of the product because their renditions of service were not scarce. The fact that producers do not have to regard their plant and equipment in this way is, of course, what makes it possible for prices to be below the direct marginal utility of the specific goods concerned, because producers then have the productive capacity on hand immediately to make more of the goods available. And the fact that they do not have to regard their intellectual property in this way is what underlies their incentive and ability to go on introducing further productive innovations, which steadily reduce prices in real terms.

Thus, prices are very often lower than one would expect on the basis of the direct marginal utility of the product. At the same time, they are typically higher than corresponds to the marginal utility of the full available supply of the means of producing the product—viz., the full available supply of renditions of service that the plant and equipment and, even more, the knowledge of the requisite methods of production, is capable of providing. In both cases, prices are pulled toward cost of production—the full cost of production.

In the first case, they are pulled in a downward direction; in the second case, in an upward direction. In the first case, cost of production communicates the marginal utility of the means of production in other employments and pulls the marginal utility and price of products in specific industries down to conform with that wider marginal utility. In the second case, cost of production on the part of potential outside entrants, together with an allowance for the going rate of profit, sets the upper limit to which producers can raise the price of their product without encouraging outside competition—except insofar as their products possess premium quality. It thus limits the extent to which prices can exceed a correspondence to the marginal utility of the full available supply of means of production. As stated, and it cannot be too strongly stressed, such excess of price is an essential foundation for the cheapness of price in comparison with the direct marginal utility of many goods and for the progressive decline in prices in real terms.

CHAPTER 11 THE DIVISION OF LABOR AND THE CONCEPT OF PRODUCTIVE ACTIVITY

THE ROLE OF MONEymaking IN PRODUCTIVE ACTIVITY

1. The Division of Labor and Productive Activity
2. Productive Activity and Moneymaking

In the context of a division-of-labor society, productive activity can appropriately be defined, just as it often is in practical life, as activity the purpose of which is the earning of money. The purpose of moneymaking is the essential element.

Consumptive production : In a division-of-labor society an activity that is physically productive but is not carried on for the purpose of earning money is not only not to be classified as productive, but actually represents consumption.

3. Productive Expenditure and Consumption Expenditure

Productive expenditure is buying for the purpose of subsequently selling (and, implicitly, at a profit, for there can be no other reason to buy for this purpose).

Unproductive expenditure (consumption expenditure) is buying not for the purpose of subsequently selling. It is buying for any other purpose than subsequently selling. "Consumer" can be reserved exclusively for those who make unproductive expenditures.

4. Capital Goods and Consumers' Goods

Producers' goods or, what is a synonymous expression, capital goods, are goods purchased for the purpose of making subsequent sales.

Consumers' goods are goods purchased not for the purpose of making subsequent sales.

Labor employed for the purpose of (its employer) making subsequent sales is producers' labor. Labor employed not for the purpose of (its employer) making subsequent sales is consumers' labor.

Loans taken out for the purpose of the borrower making subsequent sales are producers' loans. Loans taken out not for the purpose of the borrower making subsequent sales are consumers' loans.

Government is a Consumer,政府的生产时 Consumptive production, 政府的支出是 consumption expenditure,政府购买的 goods 是 consumers' goods., 政府雇佣的 labor 是 consumers' labor, 政府的贷款是 consumers' loans, 但是政府的贷款与个人消费者的贷款还有区别, 因为政府的贷款的还款者是 lender (政府通过收税或者通胀)。

Capital goods 的扩展:

Capital goods are goods purchased for the purpose of making subsequent sales, and, by extension, goods produced, with means of production that have been purchased, for the purpose of making subsequent sales. Consumers' goods are goods purchased not for the purpose of making subsequent sales, and, by extension, goods produced, with means of production that have been purchased, not for the purpose of making subsequent sales.

In a division-of-labor society, capital is the wealth employed by business enterprises.与之对应的是 "consumers' wealth."

The prior expenditure reflected in the possession of goods—whether productive expenditure in the possession of capital goods, or consumption expenditure in the possession of consumers' goods—is known in accounting as their book value. Book value can be said to reflect a putting of money into goods. The putting of money into goods for the purpose of making subsequent sales is investment. The book value of any aggregate of goods in which money has been invested, i.e., of capital goods, is the book value of capital, that is, of wealth reproductively employed.

The concept of capital value refers to more than the value of wealth reproductively employed, that is, to more than the value of capital goods or capital. The concept of investment refers to more than investment in capital goods. The concepts of investment and capital value also respectively refer to investment in, and the accompanying purchase or acquisition value of, such intangible assets as stocks and bonds, mortgages and other types of loans, and patents and

copyrights. One can invest in such intangible assets, and their purchase or acquisition value constitutes capital value.

Investment in capital occurs only when business enterprises buy either tangible goods or labor of the kind that is vested in tangible goods. The value of capital is the value of the tangible goods purchased by or produced within business enterprises, plus, insofar as it itself constitutes actual wealth, the money they hold. It is, to this extent, their cash and the value of their raw, semi-finished, and finished inventories, of their furniture and fixtures, plant, equipment, and all other tangible property, including, of course, their land. The objective expression of the value of these capital assets is their accounting book value, which derives from their purchase prices.

THE PRODUCTIVE ROLE OF BUSINESSMEN AND CAPITALISTS

1. The Productive Functions of Businessmen and Capitalists

Creation of Division of Labor

Coordination of the Division of Labor

Improvements in the Efficiency of the Division of Labor

CHAPTER 12 MONEY AND SPENDING

1. The Quantity Theory of Money

The quantity theory of money holds that the volume of spending in the economic system, for goods, for labor, or any other broad economic category of things, is determined primarily by the quantity of money that exists in the economic system. To state the theory in the simplest possible terms: the amount of money that is spent is determined primarily by the amount of money that exists.

$$M \times V = D$$

M is the quantity of money in the economic system,

D is the aggregate demand, as manifested in a definite total expenditure of money in the economic system, and

V is the average number of times a unit of the money supply is spent in the period (i.e., the so-called velocity of circulation of money).

D 如果是 GDP, GDP 跟总消费接近, 跟国民收入也接近, 则 V 称为 GDP velocity or consumption velocity, income velocity。

Total aggregate demand for all products, consumers' goods or capital goods, is one such measure; that plus all wage payments (a concept I refer to as Gross National Revenue—GNR) is another; total spending of all kinds, including for stocks, bonds, and other securities, is yet a third. When these measures of aggregate demand are used, a correspondingly different figure for velocity of circulation results. The best known is called transactions velocity, which relates the quantity of money to the total of spending of every description.

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

Fiduciary media are transferable claims to standard money, payable by the issuer on demand, and accepted in commerce as the equivalent of standard money, but for which no standard money actually exists. The larger part of our money supply today consists of fiduciary media in the form of checking deposits.

Standard money in contrast is money that is not itself a claim to anything further. It possesses ultimate debt-paying power, in that when it is received no further claim to be paid is present. Under a gold standard, standard money is gold. Any paper money that exists is a claim to it. Under a system of irredeemable paper money—fiat money—the irredeemable paper money is the standard money. In the present conditions of the United States, the standard money consists of the supply of Federal Reserve notes and, for all practical purposes, the checking deposit liabilities of the Federal Reserve System, which are fully equivalent to the notes. It is essentially the same as what is referred to as “the monetary base,” which is the sum of currency in circulation outside banks plus bank re-serves.

Fiduciary media 的形成过程见图 12-1.

Figure 12–1			
The Creation of Fiduciary Media			
<i>The Public</i>			
Assets		Liabilities	
Minus Currency \$100 (1)		Plus IOU'S to Banks \$80 (2 or 2a)	
Plus Checking Deposit \$100 (1)			
Plus Currency \$80 (2), or Plus Checking Deposit \$80 (2a)			
<i>The Banking System</i>			
Assets		Liabilities	
Plus Currency \$100 (1)		Plus Checking Deposit \$100 (1)	
Plus IOU'S from Public \$80 (2 or 2a)		Plus Checking Deposit \$80 (2a)	
Minus Currency \$80 (2)			

Fiduciary media 的问题是如果借款人还不了钱，那么在银行，这部分贷款资产对应的 checking deposit 就消失 (the wiping out of its fiduciary media)，相当于货币量减小，从而导致总需求减小，导致借了钱的企业或个人还不上钱，导致银行里这部分贷款资产对应的 checking deposit 减小， ...。

It must be said immediately, however, that no one should expect the deflationary potential of our day to be realized, because today, unlike 1929, the Federal Reserve System has unlimited power to expand the quantity of standard money. It will almost certainly do so to whatever extent is necessary to prevent a reduction in the quantity of money. Normally, when a bank fails nowadays, arrangements are made for it to be taken over by another bank, without loss to its depositors. In recent years there have been a few cases of losses to depositors who held over the insured amount of \$100,000, but in no case has this occurred at a major bank. Indeed, when Continental Illinois National Bank, one of the country's major banks, was in danger of failing some years ago, the Federal Reserve and FDIC (Federal Deposit Insurance Corporation) made clear their willingness to make available however many billions of dollars might be necessary to

prevent the failure.

This means that the government's policy of money creation—of inflation—will continue and almost inevitably accelerate. Nevertheless, the Continental Illinois case still confirms the existence of the domino effect I have described. It was rescued precisely in order to avoid that effect. Its failure would have precipitated runs on other financially troubled banks. A substantial volume of checking deposits would have been wiped out, correspondingly reducing the quantity of money and volume of spending in the economic system. The consequence would have been the onset of a major depression, accompanied by waves of bank failures.

3. The Quantity of Money and the Demand for Money

The demand for money refers to the extent to which people desire to hold balances of money relative to the receipts they take in and the sums they pay out. People need to hold money in order to make purchases and pay bills in the future.

The greater is the demand for money, the lower is the velocity of circulation of money. The smaller is the demand for money, the higher is the velocity of circulation of money.

The demand for money is determined by a variety of factors.

- (1) the security of property: 未来财产越安全, 人们对金银货币的需求越小; 未来财产越不安全 (政府通过印钞使得不安全), 人们对纸币的需求越小。
- (2) 清算机构 (clearing house) 的发展使得人们对货币的需求减小。
- (3) 金融机构和金融市场的发展, 促进了储蓄, 储蓄使得人们对货币的需求减小。一是储蓄被借出去买东西, 那么相比于自己持有是减小了货币需求; 二是储蓄增加了信用提供, 使得人们更方便地能够借到钱, 所以对货币的需求减小。
- (4) 最重要的因素: 货币量本身的变化 (该因素在 100 金本位不起作用, 在部分准备金金本位和法币系统下起作用)。The more rapidly the quantity of money increases, the lower tends to be the demand for it; the less rapidly the quantity of money increases, the higher tends to be the demand for it.
 - (a) 货币量增加越快, 未来物价越高, 当前赶紧购买, 当前对货币需求减小
 - (b) 货币量增加越快, 当前投资于实物商品更有利, 对当前货币需求减小
 - (c) 货币量增加越快, 未来 credit 越可得, 当前货币需求减小
 - (d) 货币量增加越快, 未来利率越高, 或资金借出去越有利, 当前货币需求减小。之所以利率会越高, 是因为货币量增加会导致利润率 (类似资本回报率, 类似利率) 增加。

4. Demand of money and balance of payment

5. Invariable money

货币量不变的时候, 只是对于货物的需求对应的货币流通速度不变, 其他速度可以变化。在货币量不变情况下分析, 能够去除货币的影响。

CHAPTER 13 PRODUCTIONISM, SAY'S LAW, AND UNEMPLOYMENT

SAY'S (JAMES MILL'S) LAW: under the freedom of competition the process of production itself creates purchasing power equal to what is produced—that, in the typical formulation of Say's Law, "supply creates its own demand."

The principle is that under the freedom of competition, more supply is the necessary and sufficient condition for an increase in real demand.

The only kind of overproduction that can exist is a partial, relative overproduction—that is, overproduction in some industries counterbalanced by precisely equivalent underproduction in other industries—never a general, absolute overproduction in which the economic system as a whole overproduces.

表 13-2 的例子展示了 overproduction 和 underproduction.

Table 13–2 Say's Law and the Process of Economic Adjustment					
	Revenue and Income of Potato Growers	+	Revenue and Income of Rest of Economy	=	Revenue and Income of Economy as a Whole
I. Initial Equilibrium (Price = 1)	5	+	495	=	500
II. Doubling of Potatoes (Price = 1/3)	3.33	+	496.67	=	500
III. New Equilibrium (Quantity = 3/2; Price = 1/2)	3.75	+	496.25	=	500

We use Condition III as the standard for describing Condition II. From the perspective of this standard, it is clear that a doubling of the production of potatoes constituted an overproduction of potatoes. By the same standard, it is equally clear that going on with an unchanged production of other goods represented an underproduction of goods other than potatoes.

Say's Law and the Average Rate of Profit

In the circumstances of full vertical integration of business enterprises, total profits in the economic system would equal the aggregate demand for consumers' goods minus the aggregate demand for labor—that is, the spending to buy consumers' goods, which would constitute the sales revenues of business firms, minus the total wages business firms paid, which would constitute their total costs of production.

$$\text{Aggregate Profits in the Economic System} = D_c - D_L$$

D_L is the aggregate demand for labor, as manifested in a definite total expenditure of money to employ labor in the economic system, that is, in total payrolls of a given size.

D_c is the monetary demand for consumers' goods.

The monetary profitability of the economic system as a whole is absolutely independent of its level of physical production!

Table 13–3 Production and Profitability in the Individual Industry and in the Economy as a Whole				
Initial State of Affairs				
	A Given Industry	+	The Rest of the Economy	= The Economy as a Whole
Sales	5	+	495	= 500
Costs (Wages)	<u>4</u>	+	<u>396</u>	= <u>400</u>
Profit	1	+	99	= 100
CASE 1: State of Affairs Following the Expansion of the Given Industry by Means of an Increase in Its Productivity (A Potato-Industry-Type Case)				
	A Given Industry	+	The Rest of the Economy	= The Economy as a Whole
Sales	3.33	+	496.67	= 500
Costs (Wages)	<u>4.00</u>	+	<u>396.00</u>	= <u>400</u>
Profit	(.67)	+	100.67	= 100
CASE 2: State of Affairs Following the Expansion of the Given Industry at the Expense of the Rest of the Economic System				
	A Given Industry	+	The Rest of the Economy	= The Economy as a Whole
Sales	7	+	493	= 500
Costs (Wages)	<u>8</u>	+	<u>392</u>	= <u>400</u>
Profit	(1)	+	101	= 100
CASE 3: State of Affairs Following the Expansion of the Given Industry by Means of an Increase in Its Productivity (A Luxury-Industry-Type Case)				
	A Given Industry	+	The Rest of the Economy	= The Economy as a Whole
Sales	6.67	+	493.33	= 500
Costs (Wages)	<u>4.00</u>	+	<u>396.00</u>	= <u>400</u>
Profit	2.67	+	97.33	= 100

Thus, in all cases, the change in sales revenues, costs, and profits of the given industry, whether in the downward or upward direction, is shown to be accompanied by opposite changes in the sales revenues, costs, and profits of the rest of the economic system. This, as I say, is the inescapable implication of the aggregate demands for consumers' goods and labor remaining the same. The table shows that while profitability in the particular industry can fall as the result of an overexpansion in its production relative to the rest of the economic system, profitability in the rest of the economic system correspondingly rises. It makes clear that the proposition that there can be no fall in general profitability, no matter how great the increase in production, is perfectly consistent with the fact that profitability in any given industry or group of industries can be reduced by an increase in its production. The reconciliation is that profitability in any given industry is determined by its competitive status, which changes in the industry's production relative to that of other industries can profoundly influence. At the same time, however, as I have said—and it cannot be stressed too strongly—the general profitability of the economic system as a whole is independent of the level of physical production. It is independent of all competitive factors—which, in the nature of the case, are always mutually offsetting. What aggregate profit depends on, basically, is consumption spending minus wages; from the perspective of the economy as a whole, the level of physical production acts only on the general price level and on the buying power of wages, not on profitability.

生产增加不是 depression 的原因，depression 是货币现象。Depression 除了物价下降，还有平均利润率下降，企业偿债能力下降，而这两点生产增加都不满足，生产增加只能导致物价下降。

CHAPTER 14 THE PRODUCTIVITY THEORY OF WAGES

THE PRODUCTIVITY THEORY OF WAGES

Average Real Wage Rate = W/P

W is the average money wage rate, and P is the general consumer price level

$W = D_L / S_L$

$P = D_C / S_C$

D_L is the aggregate demand for labor, as manifested in a definite total expenditure of money to employ labor in the economic system, that is, in total payrolls of a given size; S_L is the aggregate supply of labor, as manifested in a definite total quantity of labor employed; D_C is the aggregate demand for consumers' goods, as manifested in a definite total expenditure of money to buy consumers' goods; and S_C is the aggregate supply of consumers' goods, as manifested in a definite total quantity of consumers' goods produced and sold.

所以

$$\text{Average Real Wage Rate} = \frac{S_C}{S_L} \times \frac{D_L}{D_C}$$

= The Productivity of Labor \times The Distribution Factor

The productivity of labor depends on the supply of capital goods per worker.

The supply of capital goods per worker depends on

(1) the economic degree of capitalism—in particular, the extent to which this results in the economic system concentrating on the production of capital goods relative to the production of consumers' goods;

(2) the efficiency of the economic system in using existing capital goods. (This latter cause, as we shall see, subsumes technological progress.)

These two causes depend on respect for property rights and the consequent security of private property, and on the degree of rationality in a society—in short, on the values of freedom and reason.

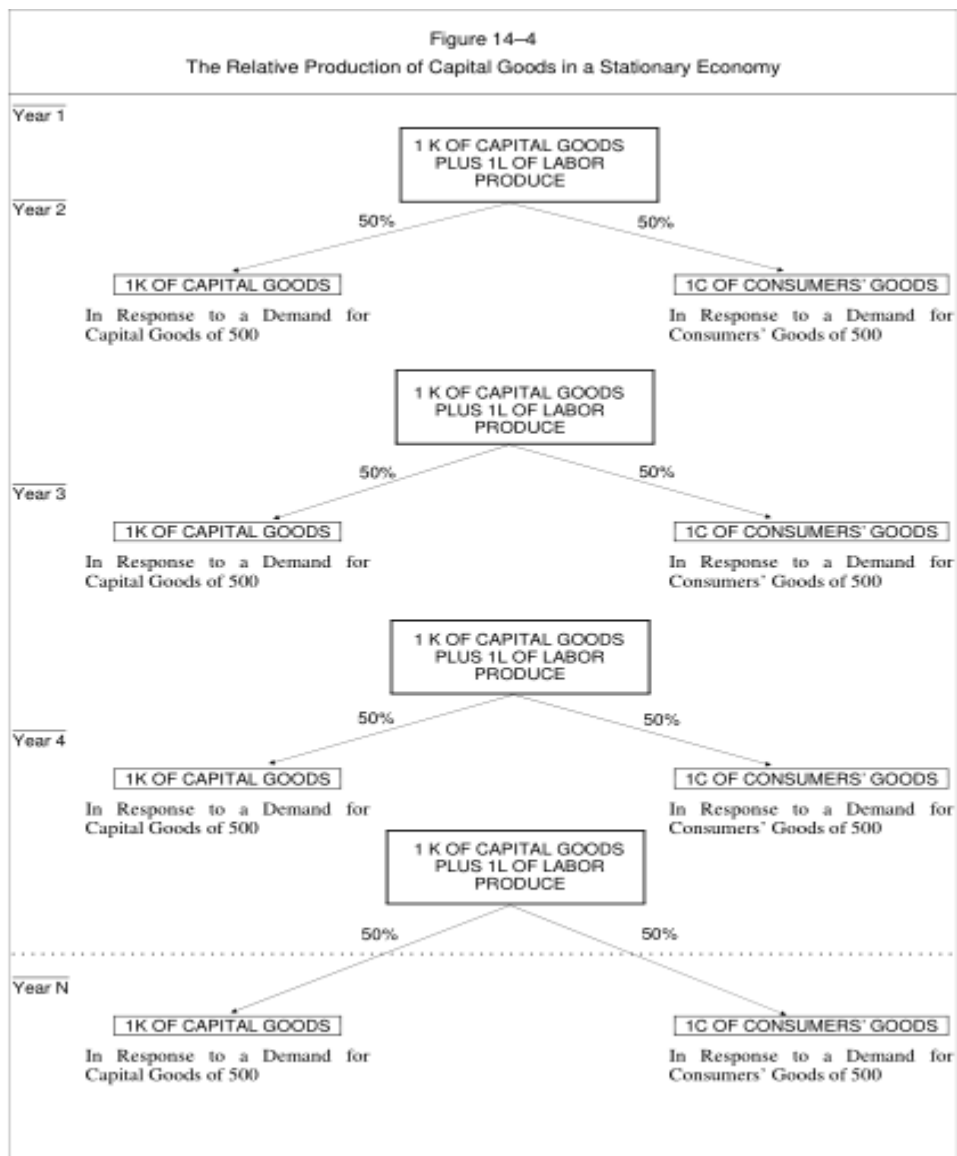
下面两图演示了 The supply of capital goods 受储蓄（以及 the economic degree of capitalism）的影响。

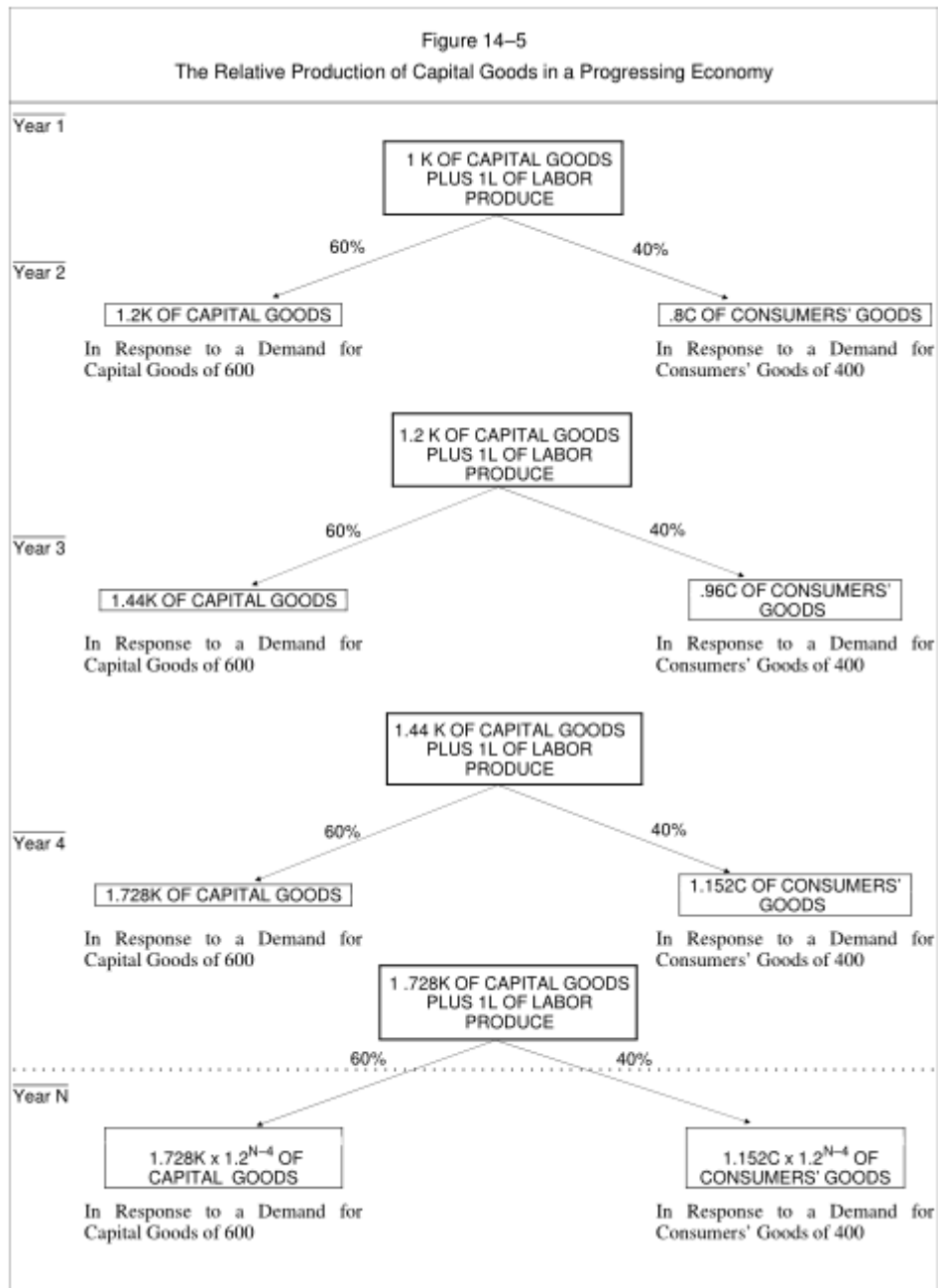
另外 the economic degree of capitalism 还能决定 The Distribution Factor，资本主义程度越高，businessman 愿意把越多的钱花在 productive expenditure 上，其中包括工资花费上，而不是自己的消费上。

Maintenance proportion: 当前的生产资料(资本品)中有百分之多少用来生成下期的资本品，才能使得当期资本品的量等于下期资本品的量。

The economic degree of capitalism: the proportion of sales revenues and incomes saved and

productively expended.





技术进步的作用：

上述两图假设资本的生产率（单位资本对应的产品产量）不变。技术进步是导致资本的边际产量不递减的一个因素。其他能够提升资本生产率的因素也可以，比如国际贸易，移民。

Other Factors, Above All Economic Freedom and Respect for Property Rights, as Sources of Capital Accumulation.

CHAPTER 15 AGGREGATE PRODUCTION, AGGREGATE SPENDING, AND THE ROLE OF SAVING IN SPENDING

$$\begin{aligned}
Y &= p + w \\
&= (s_c + s_b - d) + (w_c + w_b) \\
&= (s_c + w_c) + (s_b + w_b - d) \\
&= C + B - d \\
&= C + I \\
&= NNP
\end{aligned}$$

其中,

p: profit,

w : wages,

Y:national income,

s_c : that part of total business sales revenues paid by consumers, i.e., paid not for the purpose of making subsequent sales;

s_b :that part of total business sales revenues paid by business firms, i.e., paid for the purpose of making subsequent sales;

w_c :that part of total wages paid by consumers, i.e., paid not for the purpose of making subsequent sales;

w_b : that part of total wages paid by business, i.e., paid for the purpose of making subsequent sales.

d :aggregate business costs deducted from sales revenues in calculating profits

C: total consumption expenditure constituting revenue or income

B: total productive expenditure constituting revenue or income

I: net investment

Y: national income

NNP: net national product

为什么 $I=B-C$,参见下面三图, the sequence is: productive expenditure, capitalization of productive expenditure in asset account, decapitalization of asset account, cost in income statement

Figure 15–3 The Elements of the Balance Sheet	
ASSETS	LIABILITIES
Cash	
Gross Plant and Equipment and Other Fixed Assets	Borrowed Capital
less: Accumulated Depreciation Reserve	
Net Plant and Equipment and Other Fixed Assets	Equity Capital
Inventory and Work in Progress	

Figure 15–4 The Elements of the Income Statement	
Sales	
Costs	
Depreciation	
Cost of Goods Sold	
Selling, General, and Administrative Expenses	
Net Profit Before Taxes	

Table 15–2 Productive Expenditure Minus Costs Equals Net Investment						
B	=	B ₁	+	B ₂	+	B ₃
– d	=	– d ₁	+	– d ₂	+	– d ₃
I	=	I ₁	+	I ₂	+	0

productive expenditure $B = B_1 + B_2 + B_3$.

B_1 = productive expenditure on account of plant and equipment,

B_2 = productive expenditure on account of inventory, and

B_3 = productive expenditure that is expensed, i.e., written off as made.

(For the sake of brevity, I have omitted reference both to “other fixed assets” in connection with plant and equipment and to “work in progress” in connection with inventory, and will hereafter continue this practice.) In exactly the same way, aggregate business costs d are broken down into d_1 , d_2 , and d_3 , where

d 1 = depreciation cost,
 d 2 = cost of goods sold, and
 d 3 = cost constituted by productive expenditure that is expensed.
 In the table,
 I represents total net investment, while
 I 1 is net investment in plant and equipment, and
 I 2 is net investment in inventory

B1+B2 作者称为 gross gross investment，B1+B2-d2 当代经济学称为 gross investment，
 B1+B2-d2-d1 当代经济学（这个与作者的结论相同，因为作者的 net investment 定义是 B-d，
 而 B3 等于 d3）称为 net investment。
 当代经济学的 GNP 是当代经济学的 gross investment 加上消费，即 B1+B2-d2+C。
 作者推荐概念 GNR（Gross National Revenue），当代经济学的国民经济核算比较忽视
 productive expenditure B，应该引起重视。

Table 15-4								
From Gross National Revenue to National Income and Net National Product								
s	+	w	=	GNR	=	C	+	B
- d			=	- d	=			- d
p	+	w	=	Y/NNP	=	C	+	I

CHAPTER 16 THE NET-CONSUMPTION/NET-INVESTMENT THEORY OF PROFIT AND INTEREST

$$\begin{aligned}
 p &= (s_c + s_b) - c \\
 &= [(s_c + s_b) - (s_b + w_b)] + [(s_b + w_b) - c] \\
 &= \textit{net consumption} + \textit{net investment} \\
 \textit{net consumption} &= (s_c + s_b) - (s_b + w_b) = s_c - w_b \\
 \textit{net investment} &= (s_b + w_b) - c
 \end{aligned}$$

当期的 Productive Expenditure 是下期的 cost。
 1. 表 16-1，16-2，16-3，16-4 和图 16-1 展示了 net consumption 对 profit 的贡献。

Table 16–1		
The Components of the Demand for Factors of Production and Products		
Demand for Factors of Production by Business (Productive Expenditure)		Demand for the Products of Business (Sales Revenues)
1. Demand for Capital Goods	—IDENTITY—	1. Demand for Capital Goods
2. Demand for Labor	—EQUALITY—	2. Labor's Demand for Consumers' Goods
	SOURCE OF EXCESS:	3. Businessmen's and Capitalists' Demand for Consumers' Goods

Table 16–2				
The Components of Demand Numerically Illustrated				
Demand for Factors of Production by Business (Productive Expenditure)			Demand for the Products of Business (Sales Revenues)	
1. Demand for Capital Goods:	500	—IDENTITY—	1. Demand for Capital Goods:	500
2. Demand for Labor:	300	—EQUALITY—	2. Labor's Demand for Consumers' Goods:	300
		SOURCE OF EXCESS:	3. Businessmen's and Capitalists' Demand for Consumers' Goods:	200
Total Demand for Factors of Production by Business:	800		Total Demand for the Products of Business:	1,000

Figure 16-1
Net Consumption and the Determination of Aggregate Profit

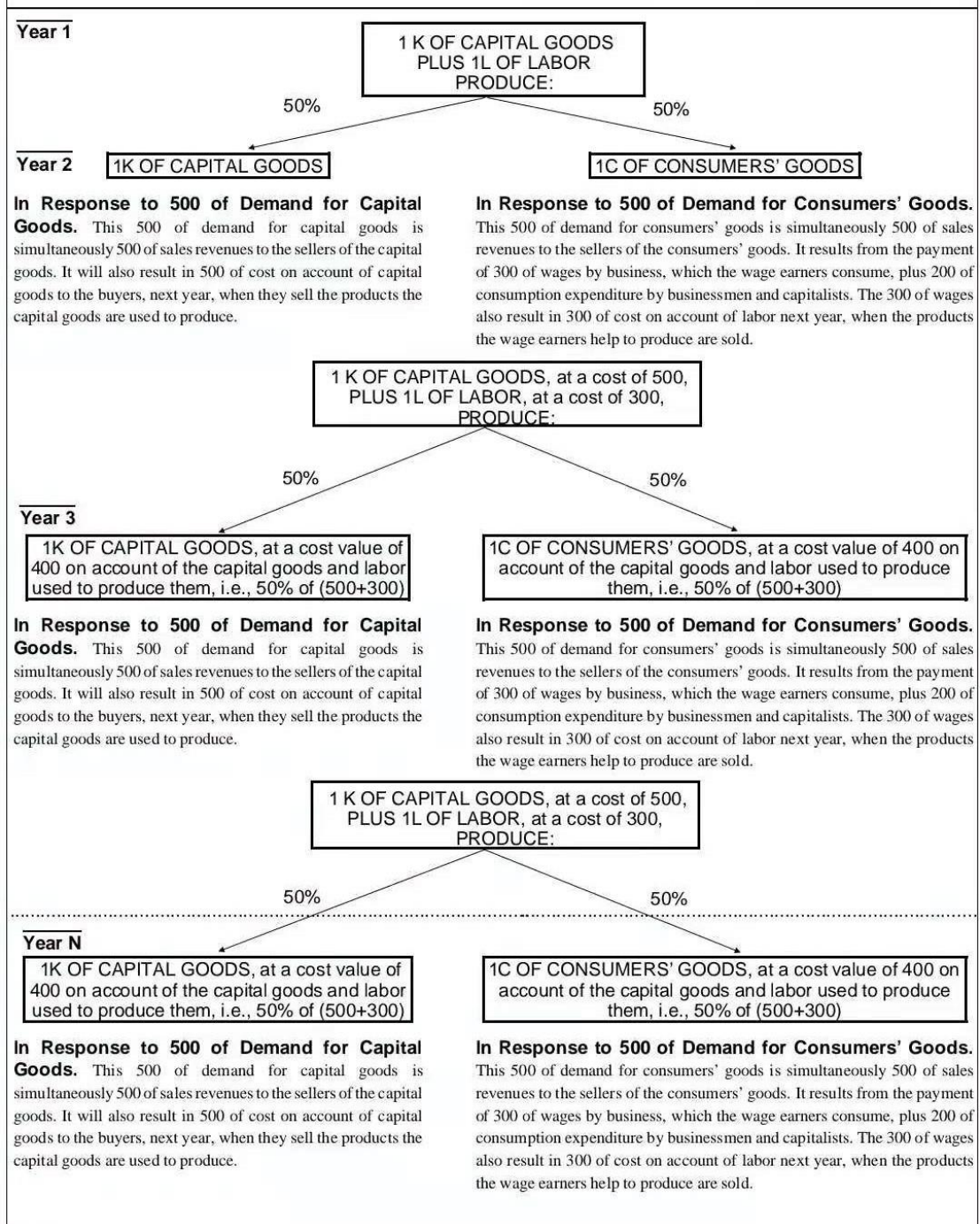


Table 16-3 Productive Expenditure, Costs, and Sales Revenues —the Elements Generating Profit in Figure 16-1					
Year	Productive Expenditure	Costs	Sales Revenues	Profit	Net Consumption
1	NA	NA	NA	NA	NA
2	800	NA	1,000	NA	200
3	800	800	1,000	200	200
4	800	800	1,000	200	200
5	800	800	1,000	200	200
...
N	800	800	1,000	200	200

The table above shows that the productive expenditure of each year shows up as equivalent costs in the next year. It also shows that a repetition of the same amount of productive expenditure in the next year generates sales revenues equal to those costs. Finally, it shows that the excess of sales revenues over costs is determined by net consumption, which is essentially the consumption expenditure of businessmen and capitalists. (As in Figure 16-1, on which the table is based, quantitative data are not available for Year 1, with the result that neither costs nor profits can be calculated for Year 2.)

图 16-2 展示了 net consumption 对 rate of profit 的贡献。

该图中，利润率=利润/资产总值=200/1800=11.1%。

净消费率：the rate of net consumption. The rate of net consumption is the rate borne by the amount of net consumption to the total capital invested in the economic system.该图中净消费率=200/1800=11.1%。

Figure 16-2
The Elements Determining the Average Rate of Profit

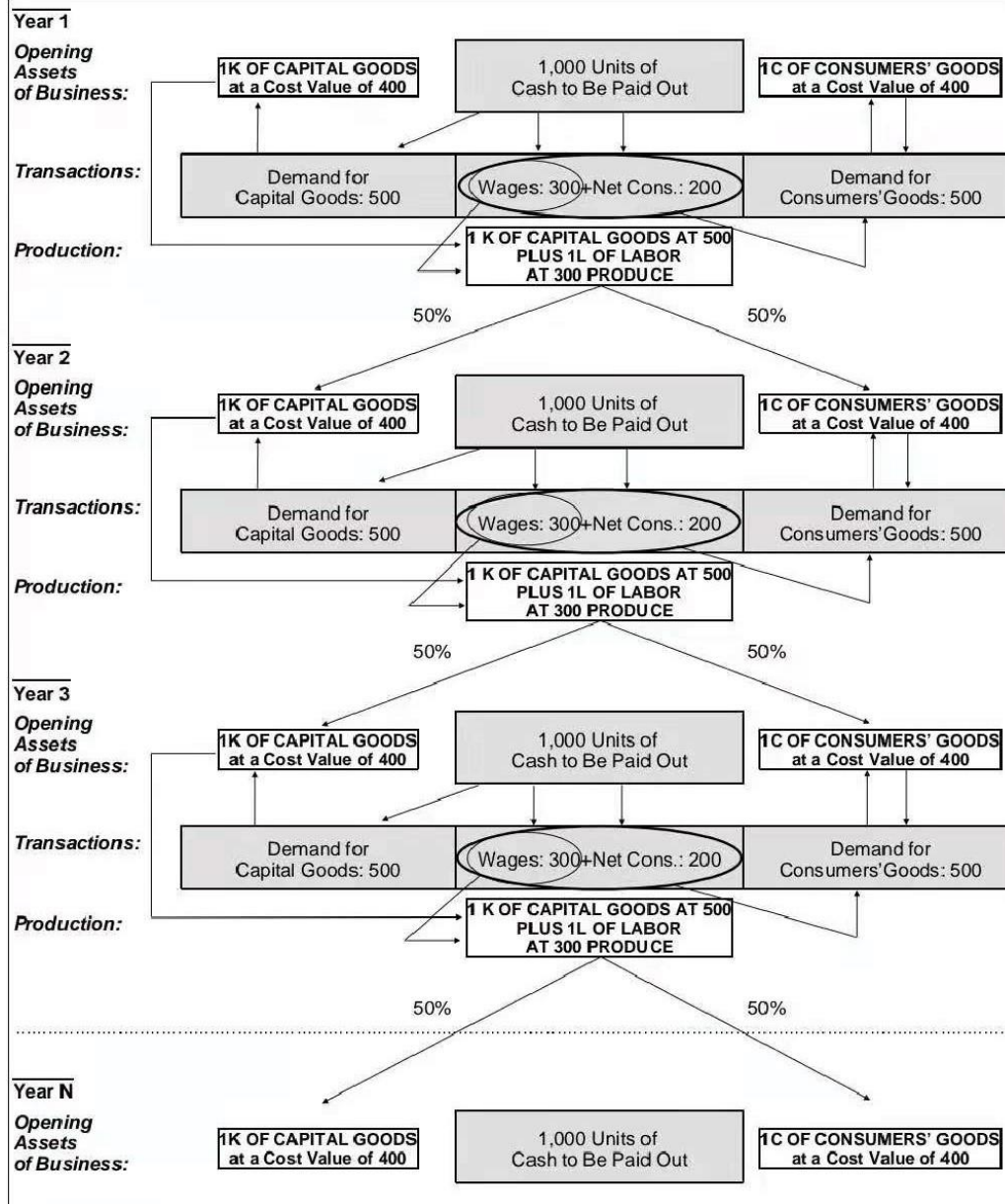


Table 16-4					
A Rise in Profits Caused by a Rise in Net Consumption and Fall in Productive Expenditure					
Year	Productive Expenditure	Costs	Sales Revenues	Profit	Net Consumption
1	600	600	1,000	400	400
2	600	600	1,000	400	400
3	600	600	1,000	400	400
4	600	600	1,000	400	400

The 600 of productive expenditure in the above table results from a fall in the demand for capital goods from 500 to 400 and in the demand for labor from 300 to 200, which are the consequence of a rise in net consumption from 200 to 400. Sales revenues continue to equal 1,000: while receipts from the sale of capital goods are 400 instead of 500 and receipts from the sale of consumers' goods to wage earners are 200 instead of 300, receipts from the sale of consumers' goods to businessmen and capitalists are now that much larger: 400 instead of 200. The effect is that the excess of sales revenues over productive expenditure is correspondingly increased. And since the productive expenditure of each year determines the costs deducted from sales revenues in the next year, profits are increased equivalently. In other words, the rise in net consumption results in unchanged sales revenues accompanied by equivalently lower costs of production deducted from those sales revenues.

The full principle determining the growth or decline of the fortunes of individual businessmen and capitalists relative to one another must be stated as follows: The relative wealth and income of individual businessmen and capitalists tends to grow to the degree that their productive ability is above average and their rate of consumption relative to accumulated capital is below average, and to decline to the degree that their productive ability is below average and their consumption relative to accumulated capital is above average.

Net consumption is itself determined by time preference. The higher the prevailing degree of time preference, the higher is the proportion in which people devote their wealth and income to present consumption in comparison with provision for the future. To the degree that time preference is high, and people are therefore not prepared to make provision for the future relative to present consumption, the demand for factors of production to produce products which are to be sold will be low, the amount of capital invested will be low, and net consumption will be correspondingly high.

2. 净投资对利润的作用。具体见表 16-5,16-6

Table 16–5 The Emergence of Net Investment					
Year	Productive Expenditure	Costs	Sales Revenues	Profit	Net Consumption
1	800	800	1,000	200	200
2	900	800	1,000	200	100
3	900	900	1,000	100	100
4	900	900	1,000	100	100
...
N	900	900	1,000	100	100

The table above shows that in Year 2, profit remains at 200 despite the fall in net consumption to 100 and resulting rise in productive expenditure to 900. The reason is that the rise in costs lags the rise in productive expenditure. Only from Year 3 on, will costs also be 900. In Year 2, the 100 excess of productive expenditure over cost implies the existence of 100 of net investment.

Table 16–6 Net Investment as a Source of Aggregate Profit			
Demand for Factors of Production by Business (Productive Expenditure)		Demand for Products of Business (Sales Revenues)	
Demand for Capital Goods:	600	=	Receipts from the Sale of Capital Goods: 600
Demand for Labor:	300	=	Receipts from the Sale of Consumers' Goods to Wage Earners: 300
Total Demand for Factors of Production by Business (Productive Expenditure):	900		Total Sales Revenues Generated by Productive Expenditure: 900
less:			less:
Costs:	800	=	Costs: 800
Net Investment:	100		Profits Corresponding to Net investment: 100
			Receipts from the Sale of Consumers' Goods to Businessmen and Capitalists (Net Consumption): 100
			Total Sales Revenues: 1,000
			less:
			Costs: 800
			Total Profits: 200
			Profits Corresponding to Net Consumption: 100

净投资率 The net-investment rate: the amount of net investment separately divided by the amount of capital invested .

$$\begin{aligned}
 \text{profit rate} &= \frac{\text{profit}}{\text{capital invested}} \\
 &= \frac{\text{net consumption} + \text{net investment}}{\text{capital invested}} \\
 &= \text{net consumption rate} + \text{net investment rate}
 \end{aligned}$$

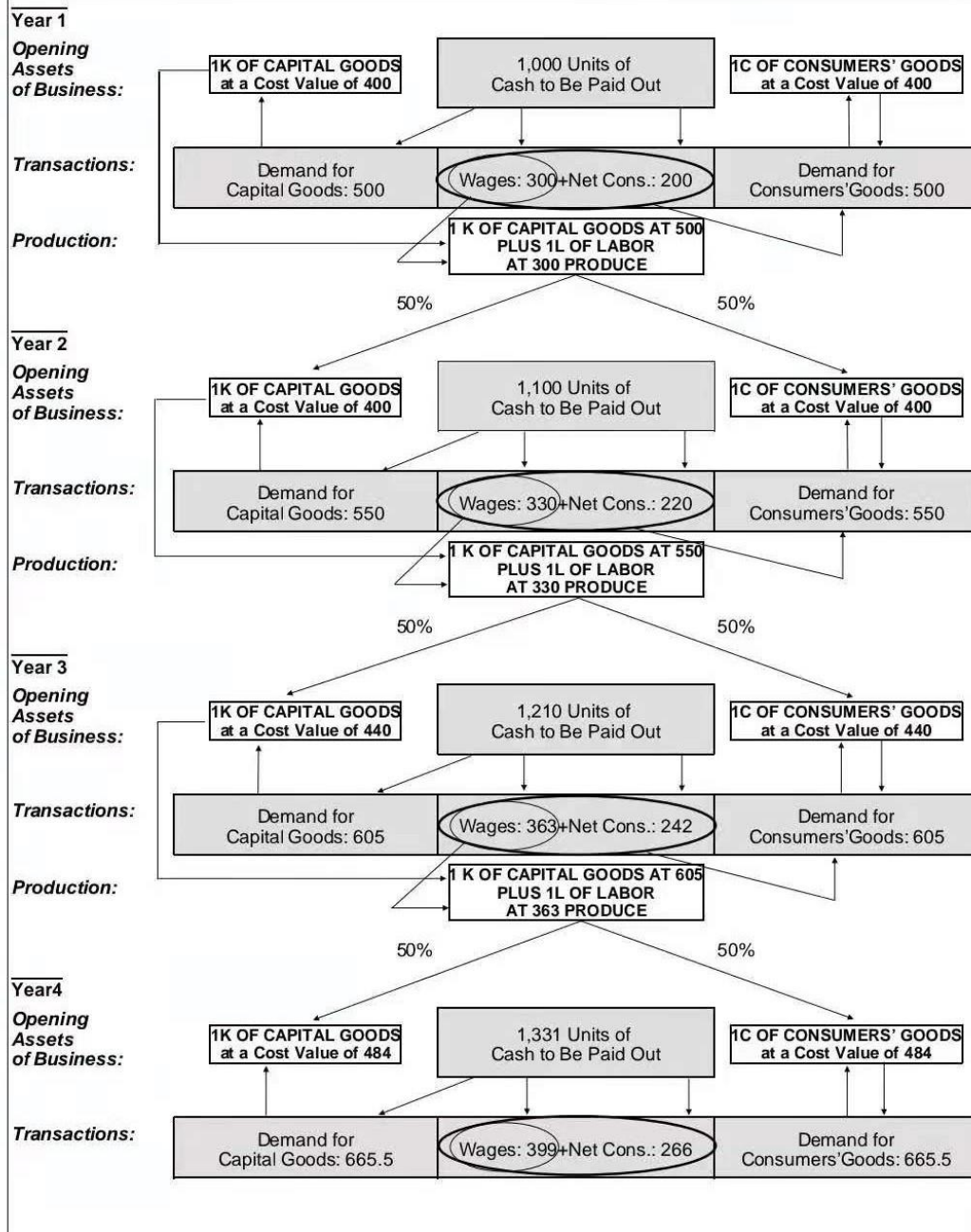
在 invariable money 下，net investment 除了通过降低净消费来增加，还可以通过对现有的 productive expenditure 进行调整来增加。基本原理是使得生产更加偏向于距离成本出现比较远的生产。比如把生产从一年就消耗掉所有资本品调整到一年只消耗部分资本品。再如，偏向于需要多年才能生产出来的产品而不是一年。

Net investment 倾向（tendency）于消失。

Capital intensification 见 excel 表。

3. 货币量对利润和利润率的影响
将图 16-3.

Figure 16-3
Profits in an Economy with an Increasing Quantity of Money



记第 1 年年初交易阶段的销售收入为 $s = s_b + s_c$ ，成本为 d ，货币增长率以及花费增长率为 τ ，第 1 年之前的货币量为 M ，则第 $n+1$ 年年初交易阶段的利润为

$$s(1+\tau)^n - c(1+\tau)^{n-1} \quad (1.1)$$

利润率为

$$\frac{s(1+\tau)^n - c(1+\tau)^{n-1}}{M(1+\tau)^{n-1} + c(1+\tau)^{n-1}} \quad (1.2)$$

由于 M 相对于 s, c 来说数量级较小，且能够达到较好的推导结果，把(1.2)中的 invested

capital 中的货币成分去掉，则利润率为

$$\frac{s(1+\tau)^n - c(1+\tau)^{n-1}}{c(1+\tau)^{n-1}} \quad (1.3)$$

将利润分解为净消费和净投资

$$s(1+\tau)^n - c(1+\tau)^{n-1} = s(1+\tau)^n - B(1+\tau)^n + B(1+\tau)^n - c(1+\tau)^{n-1} \quad (1.4)$$

所以，利润率也分解为净消费率和净投资率

$$\begin{aligned} & \frac{s(1+\tau)^n - c(1+\tau)^{n-1}}{c(1+\tau)^{n-1}} \\ &= \frac{s(1+\tau)^n - B(1+\tau)^n + B(1+\tau)^n - c(1+\tau)^{n-1}}{c(1+\tau)^{n-1}} \\ &= \frac{s(1+\tau)^n - B(1+\tau)^n}{c(1+\tau)^{n-1}} + \frac{B(1+\tau)^n - c(1+\tau)^{n-1}}{c(1+\tau)^{n-1}} \\ &= \frac{s-B}{c}(1+\tau) + \frac{B(1+\tau) - c}{c} \\ &= \left(\frac{s-B}{c} + \frac{s-B}{c} \tau \right) + \left(\frac{B-c}{c} + \frac{B\tau}{c} \right) \end{aligned} \quad (1.5)$$

可以看到，净消费率增加了 $\frac{s-B}{c} \tau$ ，即原来均衡状态下的净消费率乘以货币增长率；

净投资率增加了 $\frac{B\tau}{c}$ ，在原来均衡状态下 $B=c$ ，所以，净投资率增加了 τ ，即货币

增长率。注意：上述规则说的是 $n+1, n=1, 2, \dots$ 年年初的利润率与第一年年初的利润率相比。即第二年年初相比第一年年初利润率要增加这么多，第三年年初相比第一年年初利润率也增加这么多，...而第二年，第三年的利润率是相等的。

前面将货币量不算在 invested capital 中，如果要将它算入 invested capital 中，则把货币的增加量也算作利润，可以得到上面类似的公式。具体地，第 $n+1$ 年年初交易阶段的利润为

$$\begin{aligned} & s(1+\tau)^n - c(1+\tau)^{n-1} + M(1+\tau)^n - M(1+\tau)^{n-1} \\ &= s(1+\tau)^n - c(1+\tau)^{n-1} + M(1+\tau)^{n-1} \tau \end{aligned} \quad (1.6)$$

利润率为

$$\begin{aligned}
& \frac{s(1+\tau)^n - c(1+\tau)^{n-1} + M(1+\tau)^{n-1}\tau}{M(1+\tau)^{n-1} + c(1+\tau)^{n-1}} \\
&= \frac{s(1+\tau)^n - B(1+\tau)^n + B(1+\tau)^n - c(1+\tau)^{n-1} + M(1+\tau)^{n-1}\tau}{M(1+\tau)^{n-1} + c(1+\tau)^{n-1}} \\
&= \frac{s(1+\tau)^n - B(1+\tau)^n}{M(1+\tau)^{n-1} + c(1+\tau)^{n-1}} + \frac{B(1+\tau)^n - c(1+\tau)^{n-1} + M(1+\tau)^{n-1}\tau}{M(1+\tau)^{n-1} + c(1+\tau)^{n-1}} \quad (1.7) \\
&= \frac{s-B}{M+c}(1+\tau) + \frac{B-c+(B+M)\tau}{M+c} \\
&= \left(\frac{s-B}{M+c} + \frac{s-B}{M+c}\tau \right) + \left(\frac{B-c}{M+c} + \frac{(B+M)\tau}{M+c} \right)
\end{aligned}$$

可见，净消费率的增加为原来的净消费率乘以货币增长率，净投资率的增加为货币增长率（因为 $B=c$ ）。

To summarize the determinants of the rate of profit: The rate of profit is determined by and equal to the sum of the rate of net consumption plus the rate of net investment. It can also be expressed as tending to equal, as an approximation, the sum of the rate of net consumption plus the rate of increase in the quantity of money and volume of spending. For the rate of increase in the quantity of money and volume of spending tends to generate an equivalent rate of net investment and, in the long run, to be the only source of net investment.

The increase in the quantity of money and volume of spending also, of course, tends to raise the rate of net consumption. While it may not do so by the product of itself times the rate of net consumption prevailing in the absence of an increase in the quantity of money, it does so at least to some extent, and one which becomes the more significant, the more rapid is the rate of increase in the quantity of money and volume of spending.

The inclusion of money in capital does not materially affect the accuracy of the proposition that the rate of profit is elevated by a percentage approximately equal to the rate of increase in the quantity of money. In the real world, the quantity of money held by business is small relative to capital and sales revenues, and thus the “dead weight” aspect of counting money in capital is minimal. Moreover, under a 100-percent-reserve gold standard, the increase in the quantity of money would itself properly enter into the calculation of total profit and thus completely offset the otherwise dead weight aspect of counting money in capital.

The amount and rate of profit is ultimately determined on the basis of time preference operating through the rate of net consumption, the marginal productivity of capital operating through the rate of net investment, and the rate of increase in the quantity of money operating through both the rate of net investment and the rate of net consumption, though primarily through the former.

4. 货币增加对真实利润率（real rate of profit）的影响

真实利润率=名义利润率-物价增长率。

所以，在 100%金本位下，货币增长率约等于生产增长率，所以物价不变，所以真实利润率等于名义利润率，真实利润率的增长等于名义利润率的增长，即约等于货币增长率。而且在 100%金本位下，货币增长率很可能小于生成增长率，说以物价下跌，所以真实

利润率的增长比名义利润率的增长还要更大。

而在法币系统下，货币增长率伴随的生产增长率为 0，所以物价增长率等于货币增长率，所以真实利润率等于名义利润率减去货币增长率，所以真实利润率跟货币没有增长前相比没有变化。如果考虑通货膨胀带来的坏处，真实利润率很可能比没有货币增长前减小了。

5. The Inherent Springs to Profitability

前面净投资部分介绍了在不变货币情况下，净投资提升 **capital intensiveness**，从而提高生产，增加货币量，增加利润率。净投资为什么会增加，一个原因是净投资有自我恢复的潜力，具体地，**a lower rate of profit favors a higher degree of capital intensiveness**。

A lower rate of profit on capital invested encourages greater capital intensiveness in the economic system by increasing the cost savings that more-capital-intensive investments must achieve relative to the additional capital required。修建铁路隧道的例子。

A lower rate of profit on capital invested is also accompanied by a more rapid wiping out of the profit margins of higher-cost, less-capital-intensive methods of production than of the profit margins of lower-cost, more-capital-intensive methods of production, with the result that the more-capital-intensive methods are rendered the comparatively more profitable.见表 16-6.

Table16-16			
Capital Intensive Methods and the Rate of Profit			
Method of Production:	A	B	C
Capital Required:	\$10,000	\$20,000	\$30,000
Annual Production Costs:	9,000	8,000	7,000
Annual Sales Revenues (1):	11,000	11,000	11,000
Annual Sales Revenues (2):	10,000	10,000	10,000
Annual Sales Revenues (3):	9,000	9,000	9,000
Annual Profits (1):	2,000	3,000	4,000
Annual Profits (2):	1,000	2,000	3,000
Annual Profits (3):	0	1,000	2,000
Annual Rate of Profit (1):	20%	15%	13.33%
Annual Rate of Profit (2):	10%	10%	10.00%
Annual Rate of Profit (3):	0	5%	6.67%

a lower rate of profit reduces the premiums in price or in revenue that more-capital-intensive products, more capital-intensive-methods of production, and more-capital-intensive industries must bear relative to less-capital-intensive products, methods of production, and industries.例子：不同年份的葡萄酒。使用机器所要求的机器带来的年收益。表 16-17 的例子。

Table 16-17 Capital Intensive Industries and the Rate of Profit			
Industry:	A	B	C
Sales/Capital:	10	1	1/3
Profit/Sales:	1%	10%	30%
Profit/Capital:	10%	10%	10%
Sales/Capital:	10	1	1/3
Profit/Sales:	1/2%	5%	15%
Profit/Capital:	5%	5%	5%

CHAPTER 17 APPLICATIONS OF THE INVARIABLE-MONEY/ NET-CONSUMPTION ANALYSIS

1. 分析框架
见图 17-1.

Figure 17-1
Profits in a Progressing Economy with an Invariable Money

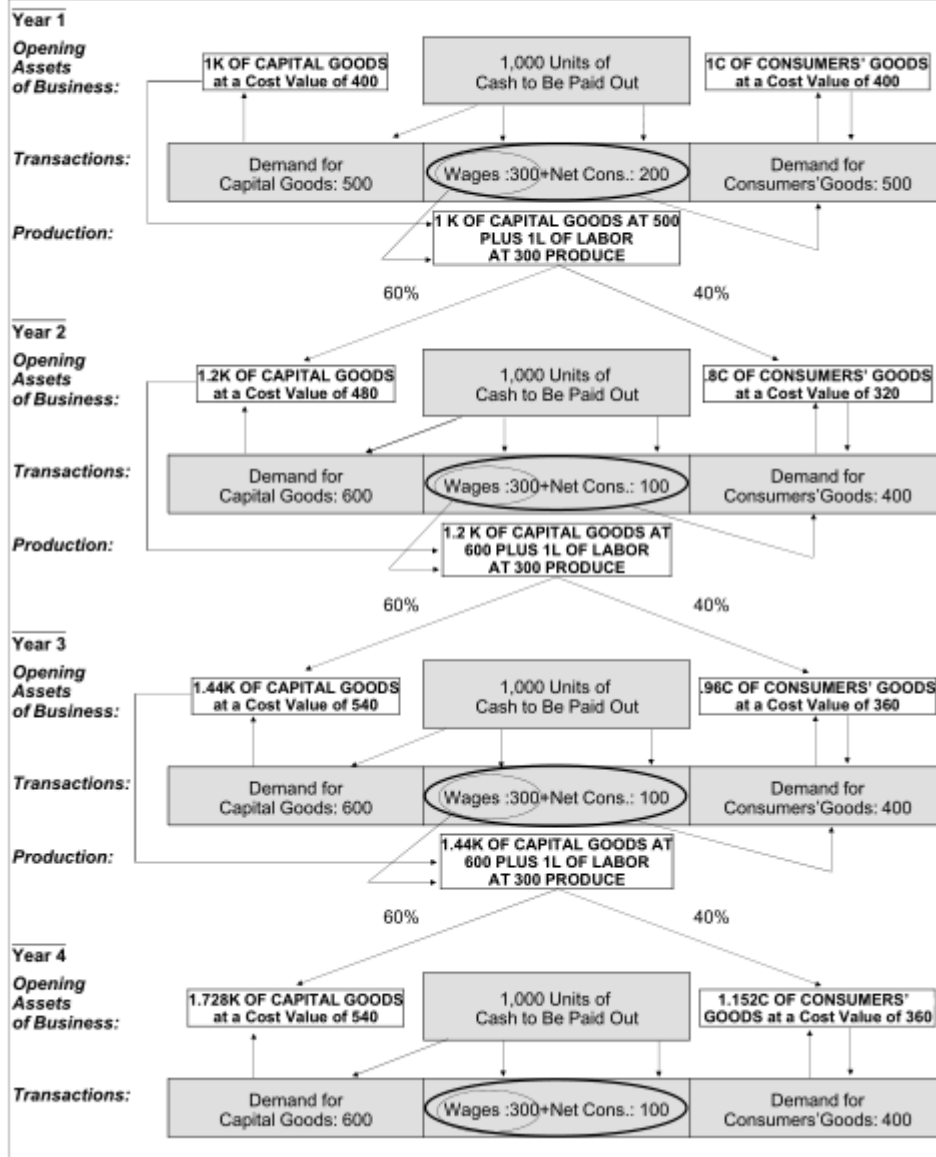


Table 17-2																	
The Demand for Factors of Production at Various Degrees of Remove from the Production of Consumers' Goods																	
YEAR	s	=	D _C	+	D _K	=	D _C	+	D _{K1}	+	D _{K2}	+	D _{K3}	+	D _{K4}	+	...
N	1,000	=	200	+	800	=	200	+	160	+	128	+	102.4	+	81.92	+	...
									20		16		12.8		10.24		
N+1	1,000	=	200	+	800	=	200	+	160	+	128	+	102.4	+	81.92	+	...
									20		16		12.8		10.24		
N+2	1,000	=	200	+	800	=	200	+	160	+	128	+	102.4	+	81.92	+	...
									20		16		12.8		10.24		
N+3	1,000	=	200	+	800	=	200	+	160	+	128	+	102.4	+	81.92	+	...
									20		16		12.8		10.24		
N+4	1,000	=	200	+	800	=	200	+	160	+	128	+	102.4	+	81.92	+	...
									20		16		12.8		10.24		
...	...	=	...	+	...	=	...	+	...	+	...	+	...	+	...	+	...
N+n	1,000	=	200	+	800	=	200	+	160	+	128	+	102.4	+	81.92	+	...
									20		16		12.8		10.24		

KEY:

s = Sales revenues.

D_C = Demand for consumers' goods.

D_K = Demand for capital goods.

D_{K1} = Demand for capital goods to produce consumers' goods.

D_{K2} = Demand for capital goods to produce the capital goods to produce consumers' goods.

D_{K3} = Demand for capital goods to produce the capital goods described under D_{K2}.

D_{K4} = Demand for capital goods to produce the capital goods described under D_{K3}.

CHAPTER 19 GOLD VERSUS INFLATION

1. 通胀定义

Inflation should be defined in terms of an increase in the quantity of money at a rate more rapid than the increase in the supply of gold and silver or, equivalently, as an increase in the quantity of money caused by the government.

THE DEEPER ROOTS AND FURTHER EFFECTS OF INFLATION

Deeper roots: 通胀的来源是政府赤字 (budget deficit), 而政府赤字来源于建设福利国家, 给战争融资, easy money doctrine (businessman's version of the welfare state in that it too implies the existence of something for nothing, 商人认为可以以较低的利率获得资本), 治疗失业。

Further effects:

通胀造成财富与收入的重新分配: 固定合同的债权人亏损, 债务人受益。商品价格相对于成本价格先涨的企业受益, 商品价格相对于成本价格后涨的企业亏损。较早收到 fiduciary money 的收益, 较晚收到的人亏损。Eventually, people come to recognize the destructive effects of inflation in redistributing wealth and income, and take steps to protect themselves from them. Thus, interest rates rise in anticipation of the rise in prices to come. The terms of employment,

sales, and rental contracts are increased. Price indexing is introduced into various contracts. But these remedies are at best only partially effective, and create additional problems, namely, unemployment and/or the acceleration of inflation, as will be shown.

通胀造成资本品的破坏：

（1）由于通胀使得固定合同的债权人亏损，导致这些投资人减少这方面的投资而倾向于投资贵金属等生产性功能较差的资本。

（2）税收效应：对公司由于通胀引起的名义利润收税，使得公司不能购买与前期等量的资本品，即资本品减少。

（3）繁荣幻想和过度消费：一些人将通胀带来的名义利润或收入认为是实际的收入，导致花费掉的实际收入要比没有通胀时高，所以花费在资本品上的相对花费比没有通胀时要小，所以资本减少。

（4）**Malinvestment**：货币创造的一个主要途径是信用扩张。信用（超预期）扩张导致利率人为较低，赶不上利润率（预期之内的通胀对应的利润率），所以导致人们做了一些本不应该的投资。

（5）财富的撤出效应：由于通胀造成的财富分配使得一些人损失，另一些人获益，获益的人如果是去消费或者做 **malinvestment**，则表示在破坏资本品。

资本品减少导致的恶果：

（1） 实际回报率降低。

（2） 债务人的 **gains** 小于债权人的 **losse**，因为实际回报率在降低。

（3） **Wage earner** 变得贫穷

（4） In its initial phase or when it undergoes a sufficient and relatively unanticipated acceleration, inflation in the form of credit expansion can create a stock-market boom. However, its longer-run effects are very different. The demand for common stocks depends on the availability of savings. In causing savings to fail to keep pace with the growth in the demand for consumers' goods, inflation tends to prevent stock prices, as well as wage rates, from keeping pace with the rise in the prices of consumers' goods. The same consequence results from the fact that inflation also leads to funds being more urgently required internally by firms—to compensate for all the ways in which it causes replacement funds to become inadequate (credit crunch) .

通胀导致 **depression** 和 **deflation**。

（1） Inflation of the money supply brings about an even greater increase in the volume of spending in the economic system, and a corresponding diminution in the size of cash holdings relative to spending and to current liabilities.

（2） It encourages people to pile up a mass of debt that they can pay only so long as their revenues and incomes hold up.

This alone must set the stage for a depression if and when inflation stops. Because then the causes of the reduced demand for money balances are removed. At that point, people start trying to rebuild their cash holdings. As a result, spending and the velocity of circulation fall, with the further result that people's money revenues and incomes fall. The effect of this, in turn, is that they cannot pay their debts. A substantial number of business and personal bankruptcies occurs. The consequence of this, of course, is that the assets and capital of

banks which have lent to such borrowers is correspondingly reduced, and many of them also fail. The failure of banks, of course, causes the money supply actually to be reduced, since the banks' outstanding checking deposits are part of the money supply. The reduction in the money supply then leads to a further decline in spending, revenue and income, and thus to still more bankruptcies and bank failures. The process feeds on itself, potentially to the point of eliminating all fiduciary media from the money supply and making the money supply equivalent to the supply of standard money alone. The reduction in the quantity of money can be avoided only if the government is prepared to create additional fiat standard money to whatever extent may be necessary to guarantee the fiduciary media of the failing banks. But this lays the foundation for a still greater expansion in the supply of fiduciary media in the future.

通胀导致大失业: The fall in spending that takes place in the course of a depression causes mass unemployment, unless and until wage rates fall to the point of permitting the consequently reduced payroll funds to employ all who are able and willing to work.

The Inherent Accelerative Tendencies of Inflation:

Inflation tends to accelerate for a variety of reasons. One is that the underlying premises which lead to the policy of inflation in the first place—namely, the alleged helplessness of the individual and the alleged omnipotence and benevolence of the government—logically call for more and more rapid inflation as time goes on. As we shall see, two factors closely related to this are that inflation itself creates problems whose solution is perceived as requiring still more inflation, and that the stimulative effects of any given rate of inflation tend to wear off and to require a more rapid rate of inflation to maintain them.

Both of these phenomena are present in the very fact that inflation tends to raise the velocity of circulation. So long as the velocity of circulation is rising, the rate of increase in the volume of spending in the economic system is greater than the rate of increase in the quantity of money. But once the velocity of circulation stabilizes at any given higher level, the rate of increase in the volume of spending necessarily falls to that of the rate of increase in the quantity of money alone. To maintain the previously higher rate of increase in the volume of spending, a more rapid rate of increase in the quantity of money is now necessary, which, in turn, tends to be accompanied by a still higher velocity of circulation of money, leading, of course, to the same result and the need for a still more rapid increase in the quantity of money later on. In addition, as the result of any stabilization of velocity after a sustained period of rise, the rate of profit is almost certain to fall, inasmuch as it will now reflect a lesser rate of increase in spending. Its fall, furthermore, operates to diminish the gains inflation provides to stockholders and other business debtors at the expense of bondholders and other business creditors. These gains meanwhile are also tending to be reduced by a rise in the rate of interest toward any given rate of profit. Thus, an acceleration of inflation is called for to maintain the rate of profit, and a more rapid acceleration to maintain any given ratio of excess of the rate of profit relative to the rate of interest. These accelerations must be indefinitely repeated if the rate of profit is not to be allowed to fall and if its relationship to the rate of interest is to be maintained.