Work Peoples College,
Box 39, Morgan Park,
Duluth, Minn.

MARXIAN ECONOMICS

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The purpose of these notes is to compress the substance of the three volumes of Capital by Karl Marx, along with the major commentaries and conclusions of those who have followed his line of thought, into a convenient form. Page and volume references, unless stated otherwise, refer to the edition of Capital issued by Chas. H. Kerr Co., Chicago.

I. Production is the process in which we exert ourselves to make use of the materials and forces provided by nature by changing less useful matter into more useful matter. The utility of a thing may be co sidered as of these types:
- a) form utility such as manufacture adds;
- b) place utility such as transportation adds; (II 169)
- c) time utility such as storage adds. (II 154)

II. Production is a social process. Society exists only because of the mutual interdependence of its members. It is held together by the labor bond of social production. Society is co-extensive with its labor bond. Today all parts of the world are in increasingly greater dependence on each other for the satisfaction of human wants; and thus a world society is in the making. This interdependence is due to the division of labor; and is effected in the modern world by the exchange of goods, which, when offered in exchange are termed commodities. This interdependence makes labor, even when it is individually performed, a part of the social labor. This social labor is the basic function of society, giving society its integrity, and furnishing the relation between society and nature on which and by which society persists, and on which the growth and development of society depends. (This Marxian concept of the social labor process is well expounded by Bukharin in his "Historical Materialism".)

III. Value Concepts. The distribution of wealth is effected by business transactions, largely by purchase and sale. This makes the ratio at which commodities exchange a basic consideration of economics. This ratio changes with the historic facts that condition exchange .A generalization about it that fits us would not necessarily fit the exchange of fur and beads here some years ago. "What everything really costs the man who wants to acquire it, is the toil and trouble of acquiring it....Labor is the real measure of the exchangeable value of all commodities." So wrote Adam Smith in his Wealth of Nations published in 1776. Ricardo expressed the idea even more clearly in his Principles. In a simpler world of handicraft production, where each producer owns his own tools and sells his product, this labor concept of value is accepted as a fact fitting expereince, and as part of the common sense of the day; for should commodities under such conditions exchange on any basis other than the labor required to produce them, effort would flow from one type of production to another and bring about exchange at this labor value. Under other conditions prices need not be so proportionate to the corelated amounts of labor. This current and classic labor concept of value was taken over by Marx, but he was careful to note that things do not have values; instead values are ascribed to things by men. Value is a relation between men that appears as a relation between things; to conclude otherwise is to make a fetish of commodities. (I-81-96)

Commodities must be physically different to occasion exchange. Since the basis of exchange must be something common to all the wide variety of goods and services offered, it cannot, therefore be found in their physical properties. The features common to all the goods on the market are:-

1. they are products of labor;
2. they have utility, i.e. they satisfy some want

This second feature has been emphasized, almost to the exclusion of the former, in modern economics. The utility of a thing however is embodied in its physical peculiarities, and it varies with each prospective user, and thus lacks the objective same-for-all-ness requisite in the factor determining exchange and values. Moreover, utility is made real only by consumption; and, while a continuous consumption without production might well result in the offering of more money or what-have-you for the decreasing stock of goods, it could not consistently be considered as increasing the sum of values or creating wealth. Economics has developed as a means for solving the actual problems of actual people. An analysis of price as the point at which the utility of an object to its least prospective buyer balances the utility of the price accordingly offered to the marginal producer who would not produce it should the price drop but slightly, has proved serviceable for an understanding of the marketing process, and it meets many of the intellectual needs of a non-producing class concerned rather with the variations of the market than with its norms. The concern of Marxian economics however, is with the fundemental and hidden processes of capitalism, and its internal dynamics. The perspective required for this is that of production. Contrary to the concern of the non-producers, productive workers have occasion to view the economic process as one into which they pour their labor, and out of which they extract goods which consist exclusively of the free gifts of nature plus the labor of man; they are consequently concerned whether the goods they get represent such an amount of labor as they put into the process. For such an analysis the labor concept of value is necessary; and Marxian economics has become the economics of the labor movement. The scientific validity of this approach is attested by the increasing respect universally shown to the work of Marx by all economists of the present day.

IV. The Marxian Concept of Value. Aristotle had posed the problem that the exchange of five beds for one house indicated that the five beds in some respect equalled the one house; but how could they be said to be equal since they were incommensurable? Marx replaces the apparent absurdity of the equation by the intelligible equation: The labor in the five beds equals the labor in the one house. This is the basis of his concept of value. But the labor making different goods, such as masonry, brewing, etc., is as different and as incommensurable as are the products. (I-51) But any person's labor may be considered as a definite, though an unknown, fraction of the total social labor, or as Marx terms it, "human labor in the abstract." The value of a commodity in this system of thought is determined by the socially necessary labor required for its production. (So far as production and reproduction are continuous processes, no distinction is necessary;

in some cases, however, it seems more reasonable to connect value with the labor required for reproduction of a commodity.) For labor to be socially necessary, it must:-

1. be of average efficiency (III 215-223)
2. add utility, i.e. be productive;
3. be subordinate to social need, i.e. be exercised in a suitable proportion to other kinds of labor. (I-120 & III 221 &745)

Value is made evident by the act of exchange. The consequent exchange-value is the phenomenal or apparent form of value, just as weight, dependent on the relation between aggregates of matter, is the "phenomenal" form of mass. Just as physics requires the underlying concept of mass, so Marxian economics requires the underlying concept of value. Continuing the analgy, just as we measure weight by the approximately correct means of a scale reading, so we measure exchange value by the rather inaccurate and haphazard means of the money system as price.

Price is a quantity of money. Value is a quantity of labor. They are qualitatively as well as quantitatively different, and should not be confused. Money consists of some selected product, usually gold, or of tokens for it, standardized, stamped and issued by a government or other social authority as a medium of circulation. The value of the selected money-commodity is determined just as is the value of any other commodity -- by the socially necessary labor required for its production. (for further consideration of price see sections 3 and 8)

V. Wages. The essential characteristics of capitalism are: production for sale, and wage-labor. It is a system of apparent freedom, where we can go, buy, and sell where we wish. Yet, despite these highly prized and much fought for liberties, there is a greater exploitation of the mass of the people than in any previous society. That this exploitation occurs is shown by obvious facts:-

1. Our increased productivity has not been acompanied by a similar increase in our living standards;
2. There is a class which consumes but does not produce;
3. Most capitalistically developed countries export more than they import.

To understand how this exploitation is accomplished despite our liberties, it is necessary to understand the theory of wages, or the relation of what workers get to what they produce. It is a world of purchase and sale, where every sale is a purchase. To get the means with which to buy, we must sell. The great mass of people have nothing to sell but their ability to work. They make a living by selling this ability to work (called labor-power) for wages.

A necessary premise to Marxism is the distinction first made by Marx, between labor and labor-power. Labor is not sold; it is an unsaleable process. Labor is the expenditure of labor-power; power is sold, but not its expenditure. Labor is the use to which labor-power is put; the use of a commodity belongs to its buyer and not to its seller. Labor is a process that requires something to work with, and something to work upon; these belong to the buyer of labor-power, or there would be no sale of the ability to work; since the wage-worker cannot sell to the buyer what is already his, he cannot sell labor, but can and does sell labor-power. Labor is what we do; labor power is what we sell. It is upon this difference that the entire Marxian explanation of profits rests -- the difference in the value of labor-power, and the value produced by the resultant labor.

Whether labor-power is a commodity or not depends on whether we define a commodity as something offered for sale or something produced for sale. Labor-power is offered for sale, and is sold; but it is not produced for sale. Were its production restricted by the business-like considerations that attend the production of most other things offered for sale, economic facts would be vastly other than they are.

Labor-power is produced by living -- getting born, eating, getting dressed, going to school, giving birth to others and getting buried. Its value is determined by the socially necessary labor required to produce it. So long as the supply of labor-power is maintained in proportion to the buyers' need for it, it is evident that the sellers of labor-power, as a class, must have received the value of what they have sold, whether or not individuals of that class have starved or failed to breed. The fact that they got the value of what they sold does not mean that they got the value of what they produced.

The value of labor-power depends on the standard of living. Tradition, climate, the exhaustive nature of the machine process (which has made entertainment a necessity) all influence the standard of living, and thus influence the value of labor-power and wages. Most important in recent times has been the deliberate effort of the labor movement to raise this standard and make its own traditions; compare the Minnesota and Washington lumberjack for evidence of this. On the other hand the preachment of thrift is an effort to lower the standard of living and thus lower the value of labor power. Wages, as the price of labor-power, can of course be changed apart from changes in value, just as this is true of any other price; but such changes are not as secure as those that arise from a change in the value of labor. All technical improvements in the industries that supply the needs of the working class lower the value of labor, even without changing living standards, and provide for a relative increase in the difference between the values produced by the workers and the values they get. Note: Marx utters no "iron law of wages". His summary (I chapter 6) emphasizes the historic factor of the standard of living; in his Critique of the Gotha Program he ridicules Lasalle for his "iron law of wages".

VI. Surplus Value. The excess of the value produced by labor over the value of the labor-power so used up is surplus value. It varies directly with the hours of labor divided by the hours needed to produce what the workers get. It increases with the productivity of labor, as pointed out in the foregoing paragraph ; apart from this, it increases with the intensity of labor. It decreases as the living standard rises. These four factors are the determinants of surplus value.

It is convenient in considering the basic relations of this capitalist society, to consider the employing class as a whole hiring the working class as a whole. A portion of the total man-hours is used to produce what the workers get; each working day can be divided accordingly. Marx calls these two divisions of the working day "necessary labor" and surplus labor. The product turned out in the surplus labor hours is a product that labor will not be able to buy; it will be the embodiment of the surplus value. This surplus value is the source of all rent, interest, profit, and the various unproductive expenses of capitalism, as the costs of war and advertising. It is the great dynamic factor of capitalism, and it is the attention of Marxians to it that have enabled them so accurately to forecast the development of capitalist society. (Non-Marxian economists have had very bad luck with their forecasts.)

Since value is determined by the socially necessary labor required to produce things, an increase in the productivity of labor means a greater physical product, but not a greater value. Apart from temporary advantages to the particular employer, the advantage of this increased productivity to the capitalist class is that it cuts down the portion of the working day in which the workers produce their own living, and thus adds a <u>relative surplus value</u> (I 342&557)

The fact of a surplus is obvious. If it is not to be explained as Marx does, through a payment to workers of a value less than they produce, then it must be explained on the supposition that the prices paid by workers for the needs of life are high "robbery" prices. This supposition cannot be followed consistently, for then those who buy the most would be "robbed the most, which is absurd.

VII. <u>The Formula of Capital.</u> This surplus value arises by the use, or exploitation, of labor-power. Labor-power put to use is labor; the value of the labor power, paid out as wages, expands into the value created by labor, and received by the employer. Since value is produced only by labor, it is the investment in man-power and not the investment in things, that is to be considered as the source of surplus. For this reason Marx divides capital into the <u>"constant capital"</u> invested in things, and the <u>"variable capital"</u> <u>invested in labor-power.</u> (He recognizes of course the advantage of the division of capital, for other purposes, into circulating capital which rotates each turn-over, and fixed capital which is transferred to the product only by slow depreciation, as buildings, machines, etc.) Using the letters c as the symbol for constant capital, v for variable capital or wages, s for surplus value, M for money, C for commodities, he draws the following formulae:

A) M - C - M ordinary exchange
B) M - C - M plus m merchant capital
C) M - M plus m finance capital

D) M -C (c+v) .....P..... C (c+v+s) - M+m industrial capital

Formula A is self-explanatory, there is no mysterious surplus. The surpluses in formulae B and C are mysteries unless explained as rising from the surplus produced in industrial capital, formula D. Here, even with the assumption of a typical exchange of goods at their value, a surplus arises in the process of production, P.

The amount of surplus value is determined by the hours of labor, the productivity of labor, the intensity of labor, and the standard of living. The rate of surplus value, or degree of exploitation is measured by the fraction: s/v, or surplus value divided by wages. This degree may likewise be expressed as the relative wage, or portion that the worker gets of what he produces. The formula for this would be v/(s+v). The amount of surplus value is the amount of wages multiplied by the rate of surplus. If there were no deductions for rent, interest, taxes, or unproductive expenses, the amount of surplus would equal the amount of profit; but the rate of profit would be less than the rate of surplus value, for it would be the surplus divided by the total capital, not merely by the investment in man-power. As will be shown, the amount of profit is much less than the amount of surplus because the expenses of distribution, and the profits of merchant and finance capital are all derived from it by the process of circulation, and the attendant deviation of price from value.

VIII. <u>The Price of Production.</u> To furnish an explanation of the essential working of capitalism that would not depend on varying business practices, Marx gives the foregoing explanation on the assumption that goods exchange at their values, and these values are proportionate to the amounts of labor required for the production of goods. This furnishes the general explantion of profits. He points out that in reality exchange is not at value because of the operation of the profit motive in the relation of each industry to each other. This discrepancy arises from the differences in different industries of the <u>organic composition</u> of capital, or relative proportions of the capital invested in exploitable labor-power, and in non-exploitable things. (I 671 & III - 170)

If in two industries hours, intensity of labor, and the standard of living are the same, and equal amounts of capital are invested, but in one 50% of the capital is put into wages, and in the other only 25% is so invested, then in the first the amount of surplus value produced will be twice the amount produced in the other. Should the products of these two industries sell at their values, the amount of profits in the former would be twice that in the latter (assuming again no deductions for rent, etc.) and so would the rate of profit. However, the motive of capitalist enterprise is to obtain the maximum rate of profit. Capital tends to flow to those industries that have the higher rates of profit, and by competition to bring down the price of their products, and consequently their rate of profit, by increasing the relative amount of these products on the market. Thus, in a completely competitive society, price tends to be determined, not by the value of the product as measured in labor, but by the cost of production plus the average rate of profit on the capital invested, divided by the itmes produced. Here Marx meets conventional economics and agrees with it. Has he thrown aside his concept of value? No, it is still necessary to explain the average rate of profit. Prices deviate by calculable and accountable amounts from value. Where a greater portion of the capital is invested in wages, the price will be less than value; where the reverse is true of the investment, the reverse is true of the price and value relation. They balance.

A table showing how these deviations work and balance is shown in the next section, in discussing wages and their relation to price

The distribution of wealth is accomplished by ordinary business transactions for the most part. Wages is the price of labor-power; its value has been determined by the standard of living and the productivity of labor. The amount of money received by workers depends on the facts of an incessant class-struggle, the major dynamic of the Marxian system. The amount of goods obtainable with this money will be discussed in the next section.

Referring back to the formula already given for industrial capital, it should be noted that at different stages of its cycle, different amounts of money are needed. It is the custom to put all money not needed in the care of financiers who loan it at interest, usually to industrial capitalists, and who pay the depositers a portion of the interest so received. This specialization results in finance capital, whose formula is simply money for more money. To it they have added an important business in paper claims to tribute, discussed in section II of these notes. Similarly the circulation of the commodities produced has been specialized as merchants capital, and it too without producing any surplus, receives part of the surplus, not only for its profit, but also for its unproductive expenses. (The employee of the merchant produces nothing, and therefore produces no surplus value; however he realizes a greater surplus for his employer than he receives, and so is exploited. II-150) This distribution of the surplus is all accomplished by the process of competition and has its effect on the average rate of profit.

The difference in the period of turnover of different capitals will have an influence similar to differences in organic composition. The tendency is under uniform competition for equal capitals to receive equal profits in equal times.

But compeitition is not uniform. In general it is those capitals in which the investment is mostly in man-power that are most competitive, and in those industries where the investment is mostly in thing we find the strongest tendency toward monopoly, or at least of deliberate organization of the market. This produces a further redistribution of the surplus by competition in the same direction as that resulting from organic composition of the capitals. (Monopoly price tends to be that at which neither a rise nor a reduction would so alter sales as to yield a greater profit.) And since the capitals that are invested chiefly in things have a greater portion in fixed than in circulating capital (as a rule) this difference in turnover further accentuates the deviation of price from value. In the specialization of finance and merchant capital there are strategic "bottlenecks that result in extra surpluses for some. There someone gets something for nothing, someone else must get nothing for something. The total values must equal the total prices. The effects of this very considerable deviation of price from value on farmers and other "independent producers" will be considered in section 10.

IX. Wages and Prices. If we consider the capitalist economy as a whole, we need not distinguish between value and price. The value of the product is not altered by the distribution of that value. If the workers get more, the employers get less. This is the net result of any increase in wages, but because of the discrepancy of value and price it is necessary to note how it works out competitively.

Assume for the sake of simplicity that no deduction is made from the surplus for rent, interest, taxes, or unproductive expense, and that the total social capital consists of three capitals of equal amounts and equal periods of turn-over, but of different organic compositions. Assume too that hours, productivity, and intensity of labor and living standards are uniform, and that at the beginning of the process the workers are getting one half of the values they add. i,e. that the rate of surplus value is 100%. The price and value relation could be depicted thus:-

Composition	Amt. Surplus	Used Constant	Value	Price
1, 60c 40v	40	27	107	97
2, 70c 30v	30	32	92	92
3, 80c 20v	20	39	79	89
all 210c 90v	90	98	278	278

The figures for used constant are of course arbitrary; the value is the sum of variable, surplus and used constant; the price is the used constant plus the amount of profit (30 in each case) that tends to go to these equal capitals under uniform conditions of competition. In the average case there is no deviation of price from values; in the other cases the deviations balance. Assume now that these workers organize, strike, and win a general increase in wages of 50%, and that more capital is brought in to pay them

1, 60c 60v	20	27	107	102-15/23
2, 70c 45v	15	32	92	92
3, 80c 30v	10	39	79	83-8/23
all 210c 135v	45	98	278	278

We can reckon the amount of surplus in all four lines by subtracting from the value, which has not been changed, the sum of the used constant and the variable capital. The result is that surplus is now one third of the wages. This same conclusion could have been reached by considering that where before the workers worked half the day for themselves and [illegible] half the day for the employer, so as to produce a rate of surplus of 100%, they now, by a 50% increase, work three quarters of the day for themselves, and one quarter for their employer, so that the rate of surplus value is now 33 1/3%. There is now a sum of only 45 units of surplus value to be spread over a total capital of 345; if spread evenly it will mean that each 100 units of capital will tend to get 13-1/23 unit of surplus. So the first capital of 120 units will receive 15-15/23 units of surplus, the second of 115 units invested will receive 15 surplus, and the third of 110 units will receive 14-8/23. These sums added to the constant used up and the variable give the prices, the sum total of which is not changed, nor is the price changed in the average case. Prices rose in capitals of lower organic composition and fell in capitals of higher organic composition. This is the general effect of an increase in wages.

The foregoing is the argument presented by Marx in Vol. III p. 236 et. seq. As all other factors tending to produce equal rates of profit, or distributing the surplus by the competitive process, are involved, it tends to minimize these effects of wages on prices. The greater the difference between value produced by labor and value received by labor, the greater are these discrepancies. Since the price of the raw materials used by the theoretical capital of average composition and average turnover would be affected by the change, it too would have some slight deviation in price. As an additional temporary effect of changes on wage rates, Marx points out in his pamphlet (Value, Price & Profit) that there is a changed demand for the goods that workers buy, tending slightly to increase prices with an increase in wages, on account of the extra demand. It is commonly felt that higher prices are the result of higher wages. A factual study of wage and price changes indicated however that changes in price ordinarily precede major changes in wages, and the effect cannot be considered as preceding the cause. The argument that it is useless to raise wages because of their alleged influence on prices can be met not only by this Marxian argument, and practical consideration and experience, but as follows: If men are producing $20 worth of new wealth each day and getting $5 in wages, organize, strike, and raise their wages to $7.50 what will happen. Even if the employer can add the $2.50 increase to his price workers can now buy one third instead of one quarter of their product. And the opportunity to raise the price will depend on market conditions and not on the wish of the employer. Should the price rise so that workers could still buy only one quarter of the product, they would have to rise to 4 x 7.50 or $30, leaving the employer a profit of 22.50 instead of the former 15. Should this be the ordinary consequence it would be impossible to explain the opposition of employers to increases in pay. The practical experience of the class struggle fully attests the validity of the Marxian analysis and the consequent labor union practice of going after more pay.

X "<u>The Independent Producers</u>". There are many persons in our modern society who are neither characteristically wage-workers nor employers, but who are productive workers, as most farmers, fishermen, trappers, etc. Their labor is part of the total social labor, and they are not really "independent". How does the general process of capitalism affect them? Assuming again a uniform degree of competition in all industries, and some operations in farming etc., on a capital-wage-labor basis, the tendency would be for prices to be such for agricultural products and manufactured products as to yield equal profits on equal capitals in equal times. But since the organic composition of capital in agriculture is much lower than in manufacture, prices would be below values for farm products. For the capitalist farmer this would be no disadvantage, since he is compensated for the suppression of price below value by the fact that his investment is mostly in exploitable farmlaborers and not in non-exploitable things -- he gets the average rate of profit on his capital. But for the farmer who does his own work with the labor of his family, there is no such compensation; he cannot grow rich by under-feeding himself or by picking his own pocket. These "independent producers" are exploited through the process of circulation while wage workers are exploited in the process of production; this is because the "independents" own their own product. Since this exploitation is the result of a deviation of price from value, and since this deviation increases with the rate of exploitation, it is to the advantage of these "independent producers" that this rate of exploitation of industrial workers should be cut down. (It is of course to their advantage that the exploitation of man by man should cease altogether.) Where farmers are employers of labor, however, they will, like any other employer, tend to keep wages as low as they can, and consequently there will be a class struggle between them and their employees.

XI. The Distribution of the Surplus. The classic trinity of economics is: Land, Labor and Capital. Marx's criticism of the common doctrine that these are three partners joining in production and sharing the resultant values in proportion to their contribution to production, takes the form of fragmentary notes compiled as Part VII of his 3rd volume of capital by Engels, and other notes worked into "Theorien uber Mehrwert" by Franz Mehring. His conclusions are implicit in his premises however. Land is a free gift of Nature, and Nature does not receive the rent; the landlord does. (Marx accepts substantially Ricardo's analysis of rent based on the utility of difference of location or fertility.) Capital is essentially "the product of past labor used for the exploitation of present labor", not a thing, but a social relation. Considered as a sum of values embodied in productive equipment and raw materials, this capital is the result of the application of our past labor to the free gifts of nature; the reward of capital however goes to the capitalist and not to this "past labor" The premises for an ethical apologetics for capitalism are weak. (Marx gives a much better apology for it as a necessary link in an historic process.) The earnings of capital are sometimes considered as of two sorts: interest, or the earnings of capital itself ("the reward of abstinence"!) and the "wages of superintendence", or payment for management of a value equivalent to the increase in production that results from such management. De Leon, in good Marxian spirit, elaborating on chapter 12 of Vol. I of Capital, in his pamphlet "Marx on Mallock", points out that while "management" always assumes responsibility when it is time to receive its "earnings", it usually dodges all such responsibility when it comes into court charged with responsibility for train wrecks, etc. Thorstein Veblen, carrying on in many ways the Marxian tradition, makes an even sharper thrust at conventional theory when he points out, as in his "Theory of Business Enterprise", that business and industry are quite different: the function of ~~business~~ industry being to turn out a continuous flow of goods, while the function of business is so to disturb the even flow as to maintain prices that yield a maximum profit. In capitalist society business controls industry, and controls it in order to sabotage it. It is to the most expert saboteurs of industry that the "wages of superintendence" go. (Veblen elaborates this latter point most fully in his book: "The Engineers and the Price System".)

The control of modern capitalism is largely in the hands of finance capital. Were there uniform competition the earnings of this specialized form of the circulation of money would be such that after paying expenses, incurring normal losses, and paying depositors the average rate of profit on their deposits, it would have left an amount with which to pay itself the average rate of of profit on the capital invested in its own business. However is a strategic bottle-neck in the process of distribution and is very much subject to manipulation for the purposes of "business-like sabotage" as Veblen terms it. It is not the concern of this course to go into the sundry regulations by which banks can lend 2½ times the amount of money they have. The function of banking makes it appear that money itself is capital; and the use of money is sold through the banks for interest, regulated by no other factor than supply and demand (III chapter 22). There is a "use of money" so to be sold only because social circumstances permit this money to buy means of production and labor power and exploit the latter. The other great function of finance capital, (promotion, capitalization and the issuance of stocks, bonds etc.) rests on this same social fact of the exploitability of labor. The "value" of a going concern does not depend on the value of the machines, buildings, etc. that it owns, but on the amount of profits it can expect to receive. If it is sold outright it is sold on this basis. If it is sold piece-meal by selling stock, the amount of stock issued is based on its capitalization, normally its prospective profits divided by the current rate of interest expressed decimally as a fraction of 100. If a business makes a profit of $5000 per year and the rate of interest is 5%, it can pay 5% on a capitalization of $100,000. The actual investment may only be $2000. The other $98,000 is then considered as an intangible "good will". This good will of course is a mathematical expression of the willingness of the working class to be exploited. This process of purchase and sale of tribute-bearing pieces of paper in which ownership of the industrial equipment is substantially invested, is a process remarkably adapted to business-like manipulation and sabotage. Great fortunes are made by the changes in price of these pieces of paper; the essential factor for making money thus is a controlled and anticipatory change in any direction of these prices of stocks, bonds, etc. Money can be made by wrecking a company as well as by building it. The persons who control these processes are usually very influential in the affairs of state, and the actual practice of imperialism is scarcely to be understood apart from the study of their manipulations.

The total surplus value produced in a society is determined by the number of productive workers, their hours, their intensity and productivity, and their standard of living. This surplus is widely distributed among merchants and bankers and industrial capitalists, among the holders of stocks and bonds, and it also pays for the personal lackeys of those who can hire them, and for all unproductive workers and expenses, all taxes not paid by workers, all rent not paid by productive workers, and for the colossal waste of capitalism. This waste has been described by Chase ("The Tragedy of Waste") and its extent may be appreciated by comparing the productivity of labor with the productivity of labor two centuries ago, and noting that neither living standards nor realized profits can account for an increase of several-hundred fold in the general productivity of labor.

A moot point among Marxists is whether workers pay taxes. If "the law of wages" is held to be that workers receive the cost of subsistence only, then any tax imposed on workers would have to be added to their wages to make subsistence possible. If wages are considered as elastic and as exceeding subsistence, then the possibility of imposing taxes follows. Most taxes are not paid by workers in either case, however.

XII. The Price System. The general nature of money and price has been stated in the last paragrpah of section 4; the general relation of price to value in section 8, and the relation of wages to prices in section 9. In any exchange if one gets the best of it, the other proportionately gets the worst of it, and so all deviations of price from labor value (or any other standard) must necessarily balance and in the total of transactions wipe themselves out. Historically gold has been accepted in our civilization as a "universal equivalent" or yardstick for the measure of all other embodiments of value. Even when we are "off the gold standard" and wish to ascertain whether price changes are real in relation to a world market, we measure these price changes by the gold yardstick. There is difficulty in applying the labor concept of value to a commodity, that like gold, is steadily accumulated and has been produced in part under many historically different degrees of the productivity of labor. This however only makes its value less rapidly fluctuating and makes it more serviceable as a standard of price. For convenience as a standard of price it must be so scarce that a small amount of it represents a large amount of labor. For its other purpose as a medium of exchange, it must be abundant enough to facilitate exchange. Assuming that all business is done with gold coins of one denomination, and that everything ~~is paid~~ for spot in cash the number of such coins required during any period would be found by dividing the total prices by the number of moves made on the average by each coin during that period. (I - chapter 3) From this simple formula by adding the number of past obligations maturing within the period and substracting both those payments deferred past it and those transactions in which the use of cash is avoided whether by balancing accounts or using checks that are not cahhed actually, we have in substance the formula for the amount of money needed under any specific set of circumstances. If there is not enough money it will slow up the circulation. (Please note "enough" means enough in accordance with the preceding formula.) Under such circumstances if tokens whose validity is assured are put into circulation, they will replace the actual coins without changing the purchasing power of money. Since there is not enough gold to perfomm the circulating function of currency, this is done, and the national debt of most countries is used as an underlying "value" for these needed tokens. If more are put in, then...? It should be clear that they cannot be pumped into circulation by giving them to people who are already hoarding money; they can be pumped in only by lending them to people who could not otherwise borrow money, giving them to people, or buying things that would not otherwise be bought. If this is done there is inflation, and its effects are well known. This occurs usually by governments who desire to use their power of coining money to get something for nothing. The holders of mortgages and long time securities do not desire it. There is a long-standing contradiction between the rapid increase in the sum of values to be circulated and the very slight increase in the quantity of the yard-stick gold. This either produces disturbances in the orderly operation of capitalism, or aggravates disturbances otherwise produced. The power to issue currency, to alter discount rates, etc., can be used in business-like manipulation to produce or aggravate crises, wipe out marginal and speculative business and center wealth in fewer hands. A Marxian analysis of these factors has been made by Kautsky (The High Cost of Living), by Hilferding (Finance Capital) and by Cahn (Capital Today) -- and perhaps one might add by recent congressional investigations of bankers in the panic.

XIII. Total Circulation of Capital. (Vol. II 404 et seq.) We may consider the total industrial capital as divided in two parts: department I as the capital in industries turning out such means of production as steel rails, sacks of cement, electric motors, etc., and department II as the capital in such industries as turn out means of consumption, overalls, bread, silk hats and caviar. To see the relation of these two departments, assume that this is all of the capitalist enterprise of a society (getting along without banks, merchants, landlords etc.) and that this society is not expanding and its capital not accumulating. Then we could tabulate the product of the two departments thus:

Dept. I c (onstant) plus v (ariable) plus s (urplus)
Dept. II c plus v plus s

In Dept. II, the variable or wages, will circulate inside this capital, and so will the surplus, for without expansion all wages and surplus must be consumed in means of consumption. Similarly in department I the constant capital as raw materials and as worn out equipment will have to be replaced from its own department. It is also impossible for the workers or capitalists in Dept. I to consume the rails or sacks of cement. Consequently if all goods are to be exchanged, the constant portion of the product of Dept. II will have to exchange in toto with the wages and surplus value of Dept. I. The prices of the sums of these two sub-groups of values will have to be equal to make this possible.

The fact that our society is not so simple as this diagram does not stop this from being a fundemental equation for the internal balance of capitalism. The surpluses produced by workers do as a fact accumulate, and can be accumulated, apart from heaps of luxuries, only by increasing Dept. I. But Department I can be expanded only by increasing its product and transferring workers either from the "industrial reserve army" or, by and large from Dept. II. This tends to decrease the amount of IIc to be offered in exchange with the increasing I(s plus v), and there is occasion for Dept. I to expand only if its s plus v is insufficient to exchange with this decreasing IIc. This is another very disturbing factor in capitalist economy.

A major thesis of Marxian economics is the accumulation of capital, brilliantly outlined by him in the 32nd chapter of Vol. I. Despite its major importance, it is not gone into detail here for the accumulation and concentration of wealth are so generally taken for granted today because of common experience. In addition to the above factors this concentration and accumulation are sources of obvious disturbance in the smooth operation of capitalism.

XIV. Unemployment is not merely a chance result of capitalism; it is its essential basis. It was only by causing mass unemployment by closing in the common lands that capitalism got started in England. (Vol. I chapter 27) Means of production or of consumption and money can become capital only in the presence of men looking for work (I-chapter 33) Wages are kept at a level that permit profits only because of a "surplus population" or "industrial reserve army". The unemployed are capital's unpaid task-masters, and such relief as they receive is much less than the surplus value that results from their unintended services. Unemployment is commonly attributed to machinery. It should be noted that unemployment on a large scale existed in ancient Rome and Greece, largely as the result of slave exploitation and imperial tribute-taking. An even greater imperialism today provides its quota of unemployment. Unemployment was a problem of the "middle ages" because of the warlike destruction of the means of production, because of the property rights of others to bar these idle men from using the natural resources, and in the rise of the modern world, because of the extension of sheep-raising to provide more wool. Certainly similar factors operate today. Even with no technical changes in a society, continuous employment would depend on the saleability of the product of labor, and this is impossible when those who have the means with which to buy have the things they need, and those who need the product have no money with which to buy it. The disturbing factors outlined in sections 11, 12 and 13 all tend to produce crises and unemployment. It is upon these that technical advance has been added as an extra aggravation of our problem. All these many factors resolve themselves however into one: Somebody was getting something for nothing. A machine is a labor saving device only if the labor required to produce it is less than the labor it displaces in turning out the same physical product. Consequently every labor saving machine must add to unemployment unless the effective demand for the product increases. By and large throughout history there has been such an increase in the demand for goods, or the world's population could not have increased to two billion in the last century. But this demand has largely been that of capitalists for more means of production with which to build branch factories in India and South America, establish capitalist economy everywhere, and thus bring on such a world depression as we now have. Apart from this ultimate outcome, technical change has obliterated whole trades and has often meant the actual death by starvation of masses of people, whose poorly conditioned viscera could not wait for the slow process of automatic economic adjustment in this progressive capitalism. The general trend is toward a surplus of capital and a surplus of labor side by side. The tendency for the organic composition to change so that less and less of it is invested in man-power, means: (a) that a greater amount of capital must be invested to give employment to the same number of workers, and (b) that the surplus produced must be divided over a total greater capital, with the result that unless the degree of exploitation rises more rapidly than this change in organic composition, there will be a <u>falling rate of profit</u>. This trend, despite the increasing exploitation of labor, in its relation to the practices of finance capital noted in section 11 and 12, tends to set up additional disturbances. The one effective remedy for unemployment is higher wages and shorter hours, less exploitation. Shorter hours, cutting out of night shifts, etc., directly increases the constant proportion of the capital, and tends to lower the profit. The higher priced labor-power is, the more advantageous it is to replace it with machinery, for machinery is used not to save labor but to save wages. This too tends to increase the constant proportion of capital, and to lower the general rate of profit, as well as to increase the rate of exploitation that is back of unemployment, and to aggravate this unemployment further by the resultant technological changes. Thus unemployment is inextricably woven into the very fibre of capitalism. The means to relieve it tend to accentuate it, and eventually the only solution for it will be the abolition of capitalism. (Capital III chapter 15)

XV. <u>The dynamics of Capitalism.</u> A great merit of the Marxian theory of surplus value is that it puts all economic relations in such a perspective that every end result, be it profit, rent, or interest, be it the investment of new capital or the imperialistic expansion of a capitalist nation, be it a boom in industrial activity, or a depression in trade, be it the sky-rocketing of the "market values" of the stock exchange, or the collapse of the economy of a nation -- can be traced back to its source in the concrete facts of production. (It is very different in the "folk-lore" of conventional economics, where everyt'ing depends on everything else, and there is no rock bottom at all.) The theory of absolute and relative surplus value exposes to scientific observation the main-spring of the forward and backward, start-jump-and-stop movement of capitalist economy. From this viewpoint crises are not accidents or the result of such extraneous factors as sun-spots, or of such superficial factors as unwarranted speculation or bank discount rates, but are the inevitable results of the essential process of capitalist production and accumulation. It is the inherent motion of such an economy to follow this process:-

a) a busy period -- or we could start anywhere else in the spiral cycle -- with new inventions being brought into play, great profits being made, reflecting this fact in a boosting of the fictitious 'values' of the stock exchange; the increasing production of consumption goods accumulating as an unsaleable stock, and making unworkable a portion of the equipment of these industries, the while that more equipment ordered on the basis of previous profit-taking is being added to them; the inability of workers to buy these goods, or of capitalists to consume them, resulting in a disturbance, unemployment, panic in financial operations, until the necessary re-adjustment could be made ---

b) this re-adjustment requiring the surplus to be invested instead in industries producing goods for further production, as machinery, steel rails, etc., and this re-adjustment in turn being dependent on finding a market for these capital goods -- a market to be found only by establishing new industries based on new technical departures at home, or in the expansion of capitalism to the far ends of the earth, ---

c) this expansion of capitalism geographically -- the one ultimate direction to the process -- taking the political expression of imperialism and militarism, assuming often the immediate direction of securing the raw materials of industry cheaper than their competitors, but more and more clearly becoming a process of forcing equipment on backward nations to increase their surplus that they might pay greater tribute, --

d) this expansion of imperialist capitalism accelerating the accumulation of capital by reason of the fact that the lower standard of living of the peoples thus exploited makes for even greater surpluses, and at the same time limits the possibilities for expansion to relieve recurring crises, thus tending to make these crises or panics longer and the unemployment more severe, and their effects more uniform and world-wide, until ---

e) eventually -- stalled off by the ever increasing internal waste of competition and the external waste of this competition as expressed in militarism and war, which also becomes an industry promoted for its own sake -- there ~~xxx~~ is no further room for expansion; then capitalism must either check itself with deliberately planned retreat through the restriction of production and the restric ion of exploitation by doles, etc., accompanied by a restriction of the traditional liberties of individual enterprise (Fascism), or give way to a new social order in which production is regulated by the producers for their own benefit. This great change does not proceed automatically from the economics of capitalism but only from the deliberate effort of labor in its class struggle. (This process of imperialism is described by C.K. Hobson, J.A. Hobson, N. Lenin, R. Luxembourg and countless others.)

XVI. Automatic Camouflages of Capitalism. It seems that the capitlist system is one of much prized liberties. It seems that the wage labor relation is one of free contract. It seems that the trend is for each citizen to get out of production a reward proportionate to his contribution to production. It seems that capitalists furnish employment to workers. It seems that thrift makes for prosperity. It seems that workers in capitalist nations should expect to benefit by their conquests. It seems that increasing wages increases prices. It seems that there is not enough money. It seems that commodities have values, and that capital is money and means of production -- and men in capitalist society actually think of economic problems as rising from what things do to men and disregard what men do to things. It seems accordingly that machinery causes unemployment It seems that profits are derived equally from all parts of the capital invested, and that the more machinery is used the higher will be the rate of profit. It seems that capitalism is a remarkably efficient social order. None of these are so however. That they are not so has been shown in the foregoing summary, and the means by which they are made to seem so have been indicated. It is precisely because the world is not as it seems, that we need science.

XVII. <u>Tactics of Class Struggle</u>. Apart from non-ecohomic factors, the tactics for the employer is to support capitalism, to portray its virtues and opportunities, to create the maximum competition among workers, to induce the maximum intensity, to work his equipment 24 hours a day, to pay the least wages needed to get the most work, to keep hours long, to maintain an industrial reserve army of jobless men, to subordinate eduction into a process that standardizes the reflexes of his labor-power and renders it technically competent, and to preach the simple life -- for workers.

For the worker the appropriate tactics are to educate himself and others to the full possibilities of life, to look on all things critically, to combine in industrial unions and in One Big Union with structures that assure the utmost solidarity, to cut down hours and raise wages -- and a little hell at times -- to oppose speed-up but not efficiency, to develop a strong regard for the well-being of his fellow worker, to have his union take more and more control over the productive process, and eventually through One Big Union to take complete control of it and establish Labor's Planned Economy of Abundance.

For the practical work of a union in formulating its daily policies the study of economics is very important. Equally important is factual research. Without it, labor can establish no new social order and make it function. Marx' major conclusion is: "Workers of the world, unite! You have nothing to lose but your chains; you have a world to gain."