## Economics 301Y and 303Y

#### **Some Basic Principles of Marxian Economics**

## **Updated September 2008**

#### **Introductory Note:**

In the following, I have tried to make the basic principles of Marxian economics as clear and as concise as possible, though I certainly cannot pretend to be any authority on Marxism in general or on Marxian economics in particular. While I shall try to clarify any points related to the following, please do not ask me to defend any of the following principles of Marxian economics, since I do not believe in them all. In particular, I do not accept the fundamental principles underlying the labour theory of value.

Since most of my colleagues in Economics also do not accept any of these principles, it is hardly surprising that Marxian economics is not taught as such in any generally available course in this department. That *lacuna* is perhaps regrettable, given the importance of Marxism in courses in Political Science, Philosophy, and History; and more generally, given the enormous impact that Marxism and Marxist political movements have had upon world history since the 1890s.

Marxism and Marxian economics have also had a very significant impact upon the literature of economic history in the 20<sup>th</sup> and 21<sup>st</sup> centuries; and, though my personal sympathies in political economy do not generally lie in this direction, I feel that my duty as an educator is to discuss and make available all points of view in the economic history literature, including the Marxist points of view. Furthermore, while I may not accept all the conclusions of Marxist writers in economic history, I do recognize the obvious fact that they have often asked very important and interesting questions that we 'bourgeois' historians have too often neglected. The contributions of Marxist economic historians may be found particularly, though not exclusively, in the following topics, which are covered in my various European economic history courses:

- (1) Feudalism and Serfdom: and the transition from 'feudalism to capitalism'
- (2) Enclosures: in the Tudor-Stuart and Industrial Revolution eras
- (3) The 'General Crisis of the Seventeenth Century'
- (4) Proto-Industrialization and 'Primitive Accumulation'
- (5) The Origins and Nature of the Modern 'Industrial Revolution'
- (6) The Standard of Living Debate: the Changing Standard of Living of the Working Classes in the Industrial Revolution era (1760 1840)
- (7) The Development of Labour Unions and Working-Class Movements
- (8) The 'New Imperialism' or 'Capitalist Imperialism' and the Export of Capital, 1870 1914.

For this course, topics 6 and 8 particular are very important ones that cannot be fully understood without knowing at least the basic fundamentals of Marxian economics, focusing in particular upon:

- (a) the labour theory of value;
- (b) the economics of 'exploitation' and the concept of 'surplus value'; and

(c) the 'inevitable' fall in the rate of 'profit' (which combines interest, rent, and profit) --or the historic tendency of 'profit' to fall.

In Marxist theory, the inevitable fall in the rate of profit would lead to a fundamental crisis in capitalism and then to revolution; but in the fully developed Marxist-Leninist theory, late 19th-century European capitalism sought to avoid this problem of falling profits and to avoid its inevitable fate and destruction, by seeking new and overseas sources of economic exploitation: **in essence by exporting capital abroad**. According to this Marxist-Leninist viewpoint, fully mature industrial capitalism was necessarily forced to export more and more capital; and the export of capital to underdeveloped regions was itself, ipso facto, a form of Imperialism, with or without outright political and military control of such regions receiving these capital exports.

Quite clearly, apart from such Marxist theory, both the export of capital -- in very large and every growing quantities -- by the various European and American industrial powers -- and 'imperialism' in the simpler sense, i.e. the forcible acquisition of overseas colonies or 'spheres of influence,' are simple facts of world economic history from the 1870s to World War I. European economic expansion had an enormous influence upon the world economy, upon the economic development of so many regions across the world, in this era, that no one should question the importance of this topic. Thus, if you do not accept the Marxist-Leninist model for this 'imperialism' -- and I would expect (suppose) that most of you will not accept this model, you must then construct an alternative model, which does not necessarily have to be an economic, or purely economic, one in order to explain these phenomena (i.e., both the export of capital and European expansionism).

## THE FUNDAMENTALS OF MARXIAN ECONOMICS

All references are to Karl Marx, Das Kapital (Capital), Vols. I to III

## **1.** Fundamental Principles

#### (a) **Stage-Theory of Economic and Historical Development**:

From Slavery (Graeco-Roman) to Feudalism (Medieval) to Capitalism to Socialism and finally its highest form, Communism.

#### (b) **Dialectical Materialism**:

with its core the concept of *Internal Contradictions*, in turn based on the Hegelian concept that historical progress is achieved through the clash of opposites and their ultimate resolution in the form: THESIS + (vs.) **ANTITHESIS** -> **SYNTHESIS**. From this is developed the theory of the *class struggle* as the central historical dynamic explaining the transition from one stage to the next. In each stage the economic superstructure determines social classes and the nature of the ruling class; but from those economic dynamics develops the antithetical or opposing class which, through violent conflict, will inevitably bring about the destruction of that ruling class.

(c) **The Labour Theory of Value**: that labour is the sole source of value in production.

## 2. The Labour Theory of Value (Kapital, I, 41-55).

- (a) **Definition**: 'That the exchange value of a commodity is determined by the *quantity of socially necessary labour* contained in it.'
- (b) **The Quantity of Socially Necessary Labour,** as the common denominator determining the equality of exchange, is the average amount of time required for the production of a commodity under normal conditions, with an average degree of skill and intensity of labour, utilizing the contemporary, most advanced technology available. Thus: 'no more time than is socially necessary'; 'homogeneous congelations of undifferentiated labour'.
- (c) Significance of Technology:

Marx clearly recognized that machinery, technological innovation directly enhanced the productivity of labour. Thus: 'the greater the productivity of labour, the less

labour time is involved in the production of the commodity, and the lesser will be its value, or the lower will be the price of the commodity.' Or: 'The value of a commodity ... varies directly as the quantity [of labour] and inversely as the productiveness of the labour incorporated in it.'

(d) This *labour-value* of a commodity includes not only the current labour involved in the actual, or final manufacture of it, but also all the previous expenditures of 'labour power' that may be considered as 'congealed' in the production of the original raw materials, the machines and tools, etc. involved in all stages of production from extraction of the raw materials to the disposal of the finished product.

## (e) **Wages and the Market Value of Labour Power**: (*Kapital*, I, 187 - 90)

- i) **the worker has only one commodity to sell**: his labour power, which he is obliged to sell to the capitalist in the process of production, obliged in order to exist. That labour-power which he sells obviously has a definite exchange value. That value is no different from any other such exchange value: namely, the amount of socially necessary labour time required for the creation of that labour power, in terms of the subsistence (food, clothing, shelter, etc.) of the worker and his family and of his education. Such 'family' costs may be viewed as the necessary costs of the reproduction of that labour power.
- ii) **The only value or price that the capitalists are obliged to pay the workers** for that labour-power is exactly this 'labour-value' as defined above. The market place, the competition of capitalists for labour and the competition of workers selling their labour-power, will [or should] determine that no more and no less than that will be paid.[Marx owed at least that to the Classical School of Economics.]
- iii) **Subsistence is not to be taken as some point just above starvation**: it means a decently comfortable existence that will enable the worker and his offspring to be reasonably productive; indeed comfortable enough to permit the worker to raise a family, to reproduce labour-power.

#### **3.** The Concept of Capital: Constant Capital and Variable Capital

The moneys or funds that a capitalist expends in the production of the commodities he himself sells constitute 'capital,' of two distinct kinds:

(a) **Constant Capital** [Non-Reproductive Capital], which Marx defines as: 'that part of capital represented by the means of production, the raw materials, auxiliary materials, etc., which does not in the process of production undergo any quantitative

alteration of value.' That means the cost of raw materials and the cost of machinery, specifically the costs of interest and depreciation in utilizing that physical capital. These are simply consumed, used up, in the production process, and their congealed labour-values are simply transmitted to the product being manufactured; but this aspect of capital, this constant capital, does not in itself create or add any value of its own to the product.

(b) **Variable Capital** [Reproductive Capital], which Marx defines as: 'that part of capital represented by labour power, which both reproduces the equivalent of its own value and also produces an excess, or a surplus-value, which itself varies... This part of capital is continually being transformed from a constant into a variable magnitude.' In other words Variable Capital is labour-power pure and simple, or more specifically the funds expended in hiring that labour-power, which is, by the axiom previously stated, the *sole* source of value. As the sole source of value, this *variable capital* as labour-power not only transmits its own value [as defined above in 2.e], but creates an additional value called *surplus-value*. [See *Kapital*, I, 225-33.]

## 4. The Concept of Surplus Value

(a) **as defined by Marx**: 'The consumption of labour power is at one and the same time the production of commodities and of surplus value.' [*Kapital*, I, 187-90]; 'The surplus of the total value of the product, over the sum of values of its constituent factors, is surplus of the expanded capital over the capital originally advanced [*Kapital*, I, 225-33.

## (b) Surplus Value represents the Capitalist's PROFIT

- i) Surplus Value is created solely by labour-power but is expropriated solely by the Capitalist because he has purchased from the worker all of his labour-power, and therefore has purchased the rights to the fruits of that labour-power, namely the surplus value he creates.
- ii) 'PROFIT' in this Marxian sense is actually composed of three elements:

(1) interest on capital;

(2) rent on land and physical capital;

(3) and the entrepreneur's 'normal profit' or what is often called the 'wages of entrepreneurship.'

Marxian PROFIT also obviously includes what is known in economic theory as 'Economic Rent.' The distribution of these three constituent elements of Surplus-Value, of PROFIT, is not of direct concern here.

## (c) Surplus Value arises normally in the following fashion:

- i) the worker, using contemporary machinery and technology, performing that 'socially necessary quantity of labour' in the production process, is normally able to reproduce in value the cost of his own labour-power in a matter of a few hours a day: that is to say, the cost of his wages to his employer, representing the worker's cost of subsistence, etc.
- ii) but the worker is hired not to work just, say, those 4 hours in which he reproduces the cost of his labour-power; but is hired to work for the full day of 8 hours. Thus, the worker, able to reproduce the cost of his wages, his labour-power, in 4 hours, has sold his labour-power for 8 hours to the capitalist, who thus is able to recover not only the cost of his wages but also the 'surplus value' produced in the remaining four hours. To quote Marx again: 'Labour realizes its exchange-value in its wages, but parts with its use-value;' and 'the value of labour-power (wages) and the value which the labour-power creates in the labour process are two entirely different magnitudes.'

## (d) the rate of surplus value

i) **equation:** the rate of surplus value is: the amount of surplus value divided by the amount of variable capital

 $s_r = s/v$ 

- ii) symbols: s<sub>r</sub> = rate of surplus value
  v = variable capital [wages for labour]
  c = constant capital
  - C = total capital
  - s = surplus value

C' = value

## iii) equations to derive rate of surplus value

C = c + v [Capital = constant plus variable capitals]

C' = (c + v) + s [Value = constant & variable capitals plus the value created by the variable capital]

Since c, as constant capital, represents 'the value of the means of production actually consumed in the process and that value alone,' and since it adds nothing of itself to value, it can be reduced to zero for the purpose of these equations. Thus:

$$C' = (c + v) + s = v + s$$
$$s_r = s/v$$

# (e) Marx's view of the role of constant capital, of machinery and technological change

- i) Marx: 'In order to enable one portion of a capital to expand its value by being converted into labour power, it is necessary that another portion be converted into means of production' [machinery]. Thus constant capital must be advanced in proper proportions 'given by the special technical conditions of each labour process.'
- to Marx machinery and technological change were of course recognized as essential ingredients of the productive process and of economic development, because machinery clearly increases the productivity of labour. Thus technological change, more advanced machinery, will reduce the amount of time -- *the amount of socially necessary labour* -- that the worker takes to reproduce his own exchange-value, the cost of his wages to the capitalist. Hence it is in the obvious interest of the capitalist to reduce as much as possible that 'time' for reproducing the exchange-value of the labour, by machinery, in order to liberate that much more time, to increase the time, in which the worker produces a surplus-value: say from the 4 hours in the example above to 5 hours a day.
- iii) The capitalist also found the new machines of the Industrial Revolution useful in making possible the employment of women and children. Their employment in turn made possible a reduction in the unit wage rates, since the cost of subsistence, etc. that determined the worker's exchange value was viewed as a family-unit cost. Remember that the wage-cost also includes the worker's cost of reproduction.
- iv) The new machinery and further technological innovations of Marx's era made possible the prolongation of the working day, thus increasing the potential amount of time in which the worker could produce a surplus value to be

expropriated by the capitalist. [Diminishing marginal productivity of labour over such a work day must be allowed for. Of course later in the 19th century legislation reduced daily hours of work]. Hence, according to Marx, 'machinery produces a relative surplus value.' But as machinery becomes more widespread to alter that average of 'socially necessary labour' in production, the social value of the product declines, so that the original law that only variable capital produces surplus value will re-assert itself.

v) Machinery and the essential internal contradiction of modern industrialism: the more that machinery is used relative to labour in production, the less living labour is hence available for exploitation; that is, for the capitalist's expropriation of the surplus value. To compensate for the decline in the amount of labour hired, that sole source of surplus value, the capitalist must consequently utilize his remaining labour supply more fully; and thus he must intensify the work and output of his remaining labour force. He will not use less machinery; indeed insofar as machinery achieves the objectives outlined above, competition with other capitalists will force him to use more.

#### 6. Capital Accumulation and the Falling Rate of Profit

- (a) All of the Classical School economists, from Adam Smith through David Ricardo and the Mills to Marx himself, maintained that the historical tendency of PROFIT (interest, rent, profit) was to fall, though each had his own theories as to why such profit must inevitably decline. [Examples of their writings on this issue are given in D.K. Fieldhouse, *The Theory of Capitalist Imperialism* (London, 1967), pp. 1 - 44: Smith, Malthus, Sismondi, Ricardo, J.S. Mill, Marx.]
- (b) Marx's theory of the inevitable decline in the rate of profit followed logically from the preceding analysis. Thus as capital accumulated from the creation of surplus value in production, capitalists in competition with each other would normally reinvest more of that surplus-value into constant capital as machinery than into variable capital (i.e. hiring more labour). Thus as capital accumulated, the proportion of constant capital to variable capital will increase. The *total* value of **v** may continue to rise but not in proportion to total constant capital; and so the *relative* value of **v** will fall, and thus so will the amount of surplus value. To quote Marx (*Kapital*, I, 681-3): 'In the course of accumulation, a point is reached at which the development of the productivity of social labour becomes the most power level of accumulation;' and so the percentage of labour in production, as a proportion of the total means of production, must fall.

#### (c) Formula for the Falling Rate of Profit:

- i) the rate of Profit:  $P_r = s/C = s/(c+v)$  [formula 1]
- ii) 's' (surplus value) must decline in this equation, because 's' may be derived only from 'v'; and thus 's' declines as 'c' grows larger in relation to 'v', even though the rate of surplus value (s/v) may remain the same.
- iii) the formula for the historical tendency may be expressed as follows:

$$s/(c_x^{1--n} + v_v^{1--n})$$

where  $\Delta x > \Delta y$ 

iv) Hence again the internal contradiction of the capitalist process, in the words of Marx (*Kapital*, III, 247-60):

'The nature of the capitalist process of accumulation ... implies as a matter of course that the increased mass of the means of production, which is to be converted into capital, must always find on hand a corresponding increase of labouring people for exploitation.' But that becomes increasingly difficult if the capitalist process necessarily means technological advancement and increased scales of production so that constant capital must inevitably increase at a faster rate than variable capital, and thus bring about an inevitable fall in the rate of Profit.

## (d) Marx's suggestions as to how the falling rate of profit might be temporarily counteracted:

- i) increase the intensity of the exploitation of labour;
- ii) find means of cheapening the cost of subsistence of labour in order to depress even further the wage level;
- iii) to reduce the costs of the elements of constant capital (to reduce its relative rate of increase): by technological change and by increasing the scale of production (increasing returns to scale);
- iv) expand and widen foreign trade and secure colonies to facilitate achieving some of these objectives:

- (1) to cheapen cost of necessities, foodstuffs, raw materials;
- (2) to expand the scale of production by widening the market in this fashion. Indeed to sell goods at prices above their true exchange-value abroad, when competing with less advanced producers.

## 7. The Concepts of Monopoly Capitalism, Impoverishment, and Crisis

- (a) *The creation of surplus value leads naturally to capital accumulation*, which leads to amalgamation in the form of very large capitals, which through competition will gobble up smaller capitals, and so lead to the concentration of capital in few hands as monopolies. Monopoly capitalism must result, since the larger capitals with their superior economies of scale and superior technologies will cheapen commodities at a faster rate than will smaller capitals, and so drive the latter out of production, or simply absorb them through purchase.
- (b) All of the attempts of large capital to counteract the falling rate of profit can be only temporary palliatives. And in this process the chief source of escape for the capitalist will be intensifying the exploitation of labour: that is to continue driving down wages to augment surplus value. Both the unemployment caused by technological change, by machines displaying labour, and the population growth stimulated by the economic development will create a 'reserve army of the unemployed' which will permit the capitalists to depress wages further and further to the point of immiserizing the working classes.
- (c) *Growth of monopoly capitalism, by hastening the expansion of constant capital* at the expense of variable capital, will hasten this process of immiserization and oppression of the working classes to the point of revolution, of sparking a revolutionary explosion by which 'the expropriators are expropriated.' Hence the ultimate internal contradiction of capitalism. [See *Kapital*, I, 685-703; III, 308-10.]