

COLIN CHALMERS

CIRCUIT AND EQUATIONS

VOLUME ONE

PART 1 COMMODITIES AND MONEY

THE CIRCULATION OF COMMODITIES

Commodity producers sell the commodities they produce to get money to buy other commodities they want. This can be expressed as a circuit of commodities (C) to money (M) to commodities (C) or, using these symbols to represent exchanges, **C-M-C**. Each purchase (M-C) is at the same time a sale (C-M) in another circuit.

PART 2 CAPITAL AND LABOUR POWER

THE CIRCULATION OF CAPITAL

Money becomes capital when the circuit C-M-C, selling in order to buy, develops into the circuit M-C-M', buying in order to sell, with money thrown into circulation to extract a larger sum of money out of it. 'In the one case both the starting-point and the goal are commodities, in the other they are money'. **M-C-M'** is the general formula of capital in circulation.

PART 3 EXPLOITATION

THE VALUE OF COMMODITIES

The value of a commodity consists of the value of the dead labour contained in the constant capital (c), the value of the workers' labour power (v) and the surplus value (s) created by workers, c + v + s.

THE RATE OF EXPLOITATION

The rate of exploitation or rate of surplus value is the ratio between the surplus value and the variable capital contained in the produced commodity, **s / v.** It expresses the ratio between the amount of value produced in the labour process going to capitalists and the amount going to workers. If the rate of exploitation is 100%, the surplus value is the same as the variable capital.

VOLUME TWO

PART 9 CIRCULATION

THE CIRCUIT OF INDUSTRIAL CAPITAL

The circuit of industrial capital is put into motion when an industrial capitalist with money (M) buys two kinds of commodity capital (C), labour power (L) and means of production (MP), with the purpose of making more money. The productive consumption of the means of production by labour during the labour process (P) produces new commodities (C') with more value than the labour and means of production used up in their production. The capitalist then sells these commodities for more money (M') than they advanced. Using lines to indicate exchange and dots to indicate an interruption in the circulation process, the formula for the circuit of industrial capital can be written as $M-C (L + MP) \dots P \dots C'-M'$.

PART 10 TURNOVER TIME

THE CIRCUIT OF GOLD PRODUCTION

As gold is already money, gold capitalists do not need to realise (C'-M') the surplus value produced by workers in the gold industry, making the circuit of gold production $M-C (L + MP) \dots P \dots M'$.

PART 11 REPRODUCTION

THE VALUE OF THE TOTAL ANNUAL PRODUCT

The value of all the commodities produced by total social capital in a year can be divided into two departments of social production making commodities with fundamentally different use values. Department 1 makes means of production to be consumed in production. Department 2 makes consumer goods to be consumed privately by workers and capitalists as means of subsistence or luxuries. The value of the total annual product can therefore be written as 1c + 1v + 1s + 2c + 2v + 2s.

SIMPLE REPRODUCTION

If we assume simple reproduction, where all surplus value is consumed privately by capitalists and there is no accumulation, the value of all means of production produced during the year (1c + 1v + 1s) would need to be the same as all means of production consumed during the year (1c + 2c) and the value of all consumer goods produced during the year (2c + 2v + 2s) would need to be the same as all consumer goods consumed by workers and capitalists during the year (1v + 1s + 2v + 2s).

Department 1 capitalists would sell means of production to department 2 capitalists (2c) of the same value it takes to pay their workers' wages (1v) and their own surplus value (1s). Department 2 capitalists would sell consumer goods (1v +1s) of the same value it takes to buy the constant capital (2c) they need. In simple reproduction this great exchange can be written as 1v + 1s = 2c.

VOLUME THREE

PART 12 PROFIT

COST PRICE, MARKET PRICE AND PROFIT

Capitalists do not know or care about value or surplus value. They are only interested in turning money into more money, M-C-M'. As far as capitalists are concerned, the money it costs them to pay wages and buy the means of production to make a commodity (c + v) is the commodity's **cost price**, the price they sell a commodity at (c + v + s) is the commodity's selling or **market price** and the difference, the surplus value (s), is their **profit**.

THE RATE OF PROFIT

The rate of profit is the ratio between the surplus value (s) produced by workers and the total capital (C) a capitalist invests in production to create this surplus value, $\mathbf{s} / \mathbf{c} + \mathbf{v}$ or \mathbf{s} / \mathbf{C} . The rate of profit measures the rate at which capital expands. The pursuit of the highest possible rate of profit is what drives capital and capitalists.

PART 12 COMMERCE

THE CIRCUIT OF COMMERCIAL CAPITAL

While the circuit of industrial capital involves the production of commodities, the circuit of commercial capital only involves buying and selling commodities. Commercial capital has the circuit **M-C-M'**, buying commodities at one price then selling them at a higher one without any production taking place.

PART 16 INTEREST AND FICTITIOUS CAPITAL

THE CIRCUIT OF LOAN CAPITAL

The money that industrial capitalists borrow from money capitalists to expand production is called loan capital. Money capitalists make a profit from loan capital by charging interest on the money they lend. The circuit of loan capital appears as **M-M'**, money becoming more money. But capital cannot create surplus value without exploiting workers. The circuit M-M' is dependent on the industrial capitalist using borrowed loan capital to produce new value in the circuit M-C ... P ... C'-M' and returning a portion of their M' to the money capitalist.