

The

A + B

THEOREM –

ITS VALIDITY

AND IMPLICATIONS

by **J. D. MALAN**

“Facts are chiels that winna ding,
An’ downa be disputed.”

Robert Burns

Douglas once referred to Social Credit
as the ‘chiel that winna ding’.

A simple statement of the A + B Theorem, which Douglas described as the spearhead of Social Credit, appears in Chapter 4 of “The Monopoly of Credit”, by C. H. Douglas, first published in 1931.

“In any manufacturing undertaking the payments made may be divided into two groups: Group A—Payments made to individuals as wages, salaries, and dividends, and Group B—Payments made to other organizations for raw materials, bank charges, and other external costs. The rate of distribution of purchasing power to individuals is represented by A, but since all payments go into prices, the rate of generation of prices cannot be less than A plus B. Since A will not purchase A plus B, a proportion of the product at least equivalent to B must be distributed by a form of purchasing power which is not comprised in the description grouped under A”.

A theorem is a statement of fact which is not self-evident, as is an axiom, but which can be demonstrated to be true. It is the purpose of this paper to demonstrate the truth of this theorem, and to explore the most important consequences of the acceptance of this basic truth.

A Dynamic Statement

Two important points should be noted—the theorem relates to a single undertaking and is not in itself a general statement covering all industries, and secondly it is a statement of a dynamic condition, as evidenced by the use of the word ‘rate’.

As a simple statement, on its own, it cannot be challenged because obviously A must be less than A + B, unless B equals zero, which is impossible under modern conditions. However, as a basis for a dynamic analysis of industrial cost accounting it has been challenged many times. In most cases the challenger seeks to show that the B payments were, at some time in the past, A payments, and therefore all costs can be traced back to the A payments which either are, or were, purchasing power in the hands of individuals.

The question of time is disposed of, at least to the satisfaction of the challenger, by pointing out that all stages of production are in progress at the same time, so that A payments of the present are equivalent to the A payments of the past, thus happily equating total prices and total purchasing power.

A student of Social Credit encountering such a challenge for the first time will be dismayed to find that the mathematics as well as the logical arguments are faultless, yet he would remain convinced that the conclusion is wrong. In fact the conclusions are probably not wrong, in terms of the facts used in the logical process of obtaining them, so that the explanation must lie in the omission of some factor from the argument. Can this dilemma be resolved?

Yes, simply because no attempt to understand the implications of the A plus B Theorem can succeed unless it starts from a clear understanding of the fundamental operations of the banking system, and no challenge to its accuracy can be adequately answered without reference to banking practice.

To analyse the A + B Theorem, is it easier if it is considered in two contexts—financial and physical. To deal with the financial implications, we must first look briefly at some basic operations of the banking system.

The Origin of Money

All our money, which is purely symbolic, comes into existence as an interest-bearing debt to the banking system, incurred either by Governments, industrial or other organizations, or by individuals. Although it is a side issue in the present context, it is worth remembering that because the banking system is the only source of money with which to pay the interest, it is mathematically certain that if we wish to continue using money, the overall debt must increase at approximately the same rate as the average rate of interest charged.

But the most important aspect of modern banking for our present purpose is that the repayment of a loan cancels both the loan and the money used to repay it.

When money is issued by the banking system to industry to finance a manufacturing process, its use to pay wages, salaries, etc., to individuals creates costs which are included in the price of some article. When this article is sold, the money received for it repays an equivalent portion of the loan, and is therefore cancelled. If the article concerned is a capital item, or a semi-manufactured stage in a sequence of processes ultimately leading to a consumer product, the cancellation of the money equivalent of its price does not reduce the amount of the cost which was generated during its manufacture. This cost is merely transferred to a later stage of production until it finally appears in the price of the consumer product.

The process of issuing new money, transferring an existing cost (B payment), or creating a new cost (A payment), and its cancellation when the loan is repaid, may be repeated several times before the final product is completed. As the total time involved may be several years, or even decades, it is obvious that the majority of the A payments distributed during the sequence of production and money cycles will have been spent and cancelled when they were returned to the banking system.

Analysing the sequence with respect to any one article, it is therefore obvious that at the time it is completed and offered for sale, only the A payments of the immediate past, which were distributed in connection with its completion and distribution, can be considered as purchasing power which would be still available to match its price tag. As these A payments cannot equal the price of A + B, and all earlier A payments would have been cancelled, the basic Theorem remains valid.

Since every product of the industrial system can be analysed in a similar way, the sum total of the prices of all products must exceed the total purchasing power available at the time of their completion.

Looking at the situation in another way, any one undertaking can be analysed in the terms of the original Theorem, and since the total industrial system is composed of many such individual cases, the total must also be capable of a similar analysis, and with similar results.

Thus it is shown that the price of final products must include costs for which the equivalent purchasing power cannot be distributed by the same organization which produced the goods. Furthermore, the deficiency of purchasing power must progressively increase for several reasons.

These are:

- (1) The fact that interest is charged on money at its point of creation,
- (2) Increasing complexity of products requires greater numbers of successive production stages, and therefore money cycles, and
- (3) Increasing use of applied solar energy increases the proportion of B payments at any stage of manufacture.

The Physical Meaning of the A + B Theorem

Important though the financial implications of this Theorem undoubtedly are, they are not as significant as its relationship to the physical facts of production.

The pricing of industrial production by the simple addition of the component financial costs is traditionally regarded as the only valid method, but as money and accountancy are only symbols used to record physical facts or events, it is important to discover if the present method of keeping these records results in a true and correct record. To do this it is necessary to look at the question of the cost of production from a purely physical point of view.

To illustrate the concept, consider an isolated island community consisting of ten people who grow corn (which can be regarded as representative of all consumer production) and who also make ploughs to assist their corn production (the ploughs can be regarded as being representative of all non-consumer production). If half the people produce sufficient corn to feed all ten of the islanders, while the other 5 are producing 5 ploughs, and at the end of the period the only remaining assets are the 5 ploughs, what have these ploughs cost, and who owns them?

If the 5 corn growers each produced 2 units of corn but consumed only 1 unit, and gave the other to one of the plough makers, the cost of producing 2 units of corn would be the 1 unit of corn necessarily consumed in the process. The cost of producing the 5 ploughs, assuming the materials they were made from were available from Nature without effort, would be the 5 units of corn consumed by the plough makers while they were working on their manufacture.

At the end of the period, assuming all ten to have devoted equal effort to their respective tasks, the 5 remaining ploughs would be jointly owned by all ten islanders.

Two important concepts emerge from this analysis:

- (1) The physical cost of producing anything (in this case ploughs) is the total of everything consumed in the process.
- (2) The islanders have 'paid' for the ploughs by contributing everything needed for their production, and such 'payment' is finalized the instant they are completed. There can be no question of any debt remaining since, if some physical part was still to be provided, they could not be considered as complete.

It is important to note that the total production over the period in question (10 units of corn plus 5 ploughs) is completely paid for IN THE SAME PERIOD irrespective of whether it has been consumed (as has the corn) or remains for use in a later period (as have the ploughs). What remains at the end is an asset owned collectively by the islanders, which can be invested, if they so desire, in future corn production to make such production either more plentiful or easier to achieve, whichever they wish.

But in either case they will obtain a DIVIDEND in the form of extra corn or extra leisure from the use of an INHERITANCE from the past which, as it came into use, was completely paid for and free of debt.

The Impossibility of Physical Debt

If the islanders wished to calculate the cost of the next cycle of corn production using their new ploughs, they may discover that by working for the same time as before, each could produce 4 units of corn instead of 2. But as the demand for corn is the same, which is equivalent to saying that they have decided to take their dividend in leisure, the time devoted to corn production would be halved, and the amount of corn required to be consumed in order to produce one unit of corn would now be only one quarter of a unit, compared with the original one half. However, as the ploughs wear out at a rate which we will assume is equal to the consumption of 1 plough for every 20 units of corn produced, and 1 plough 'costs' 1 unit of corn to replace, the total 'cost' of producing 1 unit of corn by the new method is $0.25 + .05 = 0.3$ units, compared with 0.5 units previously.

The most important consequences of these relationships is that under no circumstances whatsoever can anything be produced unless the necessary materials already exist— we cannot make ploughs today with the iron which will be produced next year, or grow corn with the help of next year's rainfall.

It is of vital importance that this concept of the impossibility of physical debt be clearly understood, because of its application to the problem of industrial costing.

All Assets are Physically Paid for on Completion

If the total affairs of a community were to be suddenly halted, and all financial records destroyed, what would be the physical assessment of the community's assets?

First observation would be the profusion of real assets in the form of what is usually called 'capital' items. These include buildings, factories, communication and transport facilities, machines, power stations, and every imaginable aid to the production of consumer goods and services. In addition, there would be considerable stocks of recently completed goods which would be available for consumption. But no matter how we may search, there would be no evidence of debt of any kind—everything we could see would be fully paid for in the physical sense.

If we start from this point and assess the cost of production in the next following period, as the islanders did in costing their second cycle of corn production, the only portion of the cost of the existing assets which should be included is that which is consumed by the process of wearing out. There would be no question of repaying debts because none existed.

However, when our present form of financial records are restored to the scene, a completely different picture is revealed. The capital assets are represented by debt, and this debt is progressively charged as a cost into the price of future production, along with the quite separate and legitimate charge representing depreciation. These capital charges are a large and ever increasing part of the B payments, and must continue to increase as such techniques as automation are introduced into the production process.

It is therefore clear that the present form of financial records do not correctly record the physical facts, and are therefore quite definitely false records.

The Just Price

At this point we should return to the original statement of the A + B Theorem, and follow some of the arguments based on it which Douglas expounded in "The Monopoly of Credit".

The most important is a mathematical proof of the conclusions already outlined, which is that the only component of B payments which are a legitimate component of prices, is that proportion of total B payments equal to the rate at which capital assets become obsolete, are destroyed, or are worn out in the process of production.

Bearing in mind that these observations are based on the overall affairs of a community, we have progressed from the original simple statement of the A + B Theorem to the point where it can be combined with the concept that the cost of production is consumption, to obtain the natural formula for what is known as the Just Price. This relationship is such that the just price bears the same relationship to the arithmetic sum of all financial costs (which is the sum at present regarded simply as 'cost') as total consumption does to total production, both being expressed in conventional financial terms.

This relationship can be written in the form:

$$\frac{\text{Just Price}}{\text{Financial Cost}} = \frac{\text{Total Consumption}}{\text{Total Production}}$$

The ratios thus obtained will always be less than 1.

It is therefore evident that conventional costing procedures do not correctly represent the physical facts in financial terms. In other words, they do not comply with the Natural Laws which apply to the things and events they are intended to represent.

The Basis of a Natural Costing System

In conclusion it can be stated that the primary implication of the A + B Theorem is that it is a simple, mathematically accurate, statement which is compatible with Natural Law, and is a valid basis for a natural costing system.

In fact, it is far more significant than merely providing one possible basis for a correct costing system. The converse is equally true—which is that the basis thus provided by the A + B Theorem is the only valid basis for a natural costing system if the results are to remain continuously compatible with the Laws governing the behaviour of the real assets that these costs are intended to represent.

One final point is worthy of note. A correctly organized accounting system will reflect physical facts in representative financial terms, but will not afford any basis for assessing the desirability, feasibility, or otherwise of any proposed action. An honest accounting system will correctly represent even the most ill-advised project, whereas an incorrect, or dishonest, system will produce false records, no matter how it is manipulated, of every activity whether desirable or otherwise.

In the final judgement between the validity of our traditional method of costing industrial production, and the validity of a system of natural costing based on the application of the principle expressed in the A plus B Theorem, it is the results achieved which must provide the evidence.

Traditional costing has produced, and is still producing, inflation and financial chaos for which no answer has been found—for the very simple reason that no answer exists, or can ever exist, within the limitations of those same accounting rules. In contrast, the principle contained in the statement of the A + B Theorem has been challenged many times, but has not yet been found wanting in any respect.

Undoubtedly the most important, and also the most confused, question in society today is the question of costs.

The multiplicity of suggested answers which flow continuously from individuals and organizations have never solved the problems, and never can solve them, as long as they lack the essential quality of being in agreement with Natural Law. The principle contained in the statement of the A + B Theorem has been demonstrated to possess this essential quality.

The implication is that the A plus B Theorem is a sadly misunderstood truth.

APPENDIX 1

Some of the subject matter in this paper has been adapted from a number of publications dating from 1922. Although some are out of print, the following are recommended for further study, if copies are available. Dates listed are those of the first editions, but several also have appeared in later editions.

THE CONTROL AND DISTRIBUTION OF PRODUCTION, by C. H. Douglas (1922).

SOCIAL CREDIT, by C. H. Douglas (1924).

THE VEIL OF FINANCE, by Arthur Brenton (1925).

REAL WEALTH AND FINANCIAL POVERTY, by W. H. Rhys (1930).

THE MONOPOLY OF CREDIT, by C. H. Douglas (1931).

FACTS AND FALLACIES OF DOUGLAS CREDIT, by D. B. Copland (1932).

FANCIES & DELUSIONS CONCERNING THE DOUGLAS SOCIAL CREDIT PROPOSALS,
by D. W. Burbridge (1932).

HUMAN ECOLOGY, by Thomas Robertson (1948).

MONEY—FACT & FICTION, by J. D. Malan (1971).

A LICENCE TO LIVE, by D. E. Phelps (1972).

NATURAL COST & THE OWNERSHIP OF MONEY, by J. D. Malan (1974).

APPENDIX 2

“The natural and mathematical result of the operation of a financial costing system which requires that all the costs, or issues of purchasing power, distributed during the production of an article, shall eventually be recovered in prices, is a continuous rise in the cost of production of any article produced by a given process. This rise can be, and is, temporarily offset by improvements of process, but only temporarily.

“The consumer cannot possibly obtain the advantages of improved process in the form of correspondingly lower prices, nor can he expect stable prices under stationary processes of production, nor can he obtain any control over the programme of production, unless he is provided with a supply of purchasing power which is not included in the price of the goods produced. If the producer or distributor sells at a loss, this loss forms such a supply of purchasing power to the consumer; but if the producer and distributor are not to sell at a loss, this supply of purchasing power must be derived from some other source. There is only one source from which it can be derived, and that is the same source which enables a bank to lend more money than it originally received. That is to say, the general credit.”

From the chapter “The Nature of Price”, part two of “Social Credit” by C. H. Douglas.