The Foundations of a Real Life Approach to Business Accounting

by

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1. THE PRESENT PLIGHT OF BUSINESS ACCOUNTING

Until fairly recently business accounting was just a practical art that had developed over a long period of time, with new “principles” and procedures being adopted in a purely empirical manner as new problems were encountered.

Over the last three decades or so there has been a clear recognition of the need to introduce some rigour and uniformity in the practice of business accounting.

In English-speaking countries this has led to the creation of recognised rule making bodies which have undertaken to publish binding professional standards on the various aspects of accounting practice. Countries of Continental Europe, initially lagging behind, are catching up through the passing of new legislation on accounting.

At first sight, this might appear to be a healthy process of rationalisation, but a closer look reveals that the reality is far less satisfactory.

Firstly, the stream of professional standards and legislation on accounting is added to legislation and jurisprudence on commercial and taxation matters, themselves changing and growing. As similar devel-
Opments occur with a multitude of variations in a number of countries, one faces a huge and ever mounting mass of rules and guidelines. Clearly, such a situation is the very opposite of sound rationalisation [1].

But there is a second, more fundamental problem: due to its empirical development, traditional business accounting is fraught with a wide diversity of inconsistent theories and practices and suffers from severe deficiencies [2].

Although there has been a growing awareness of these deficiencies since the second world war, the recent wave of standards and legislation has largely failed to provide satisfactory remedies.

Of the various issues that have been identified and discussed, the one that has been widely regarded as most crucial is the problem of the impact of inflation and changing values on companies accounts. Controversy has raged over this issue since the early seventies until professional standards were issued on a tentative basis by the American and British accounting rule making bodies in late 1979 and early 1980 respectively.

The merit of these standards lies in that they underline the crucial importance of the issue which they purport to resolve, but, clearly, they cannot be regarded as the ultimate answer, so that the question of inflation accounting remains open [1] [8].

The proliferation of rules and regulations about aspects of accounting and taxation and the fact that fundamental issues such as the impact of inflation on corporate accounts remain unresolved combine to create a most unsatisfactory state of affairs, whose seriousness is well recognised by a number of experts. Many of them argue – and I subscribe to their view – that the way out of the present impasse is the formulation of a comprehensive logical theory of accounting [1] [2] [6]. Lately there has been no shortage of efforts in that direction, but with disappointing results so far.

I personally believe that the lack of success in that quest for theory is due essentially to the fact that the concept of profit (or income) has been given excessive importance, to the detriment of a more general analysis of cash flow and changes in assets and debts.
It will be shown in chapter 2 of this article that the concept of profit is entirely meaningful and unambiguous only in the case of a completely static economic environment; when this very restrictive assumption is abandoned, the concept of profit becomes somewhat elusive, as is well illustrated by the existence in the specialised literature of a number of definitions of profit. In real life conditions, characterized by changes in prices, exchange rates, technology, business activities, etc., no unique clear-cut definition of profit can account for the total performance of a business entity.

This, it will be shown, is essentially because in unstable economic circumstances changes in non monetary assets (e.g. stock variations, depreciation) cannot be set on equal footing with changes in monetary assets (e.g. revenues and expenditures). The full justification of this statement rests upon a comprehensive study of the concepts of business wealth and value, which will be presented in chapter 3.

In view of the related facts that, in changing economic circumstances (a) no meaningful concept of profit holds, (b) changes in different classes of assets (and debts) can neither be valued on the same basis nor be readily compared, I will suggest that the only workable approach to business accounting in such circumstances is a systematic analysis of movements in net monetary assets and changes in long term debt set against changes in non monetary wealth. This suggested approach is explained in detail in chapter 4.

In the specialised literature, one comes across a number of authors who are clearly uneasy about the very concept of profit, but who nevertheless retain it at the centre of their work (1).

(1) Professor A. D. Barton [2], for instance, devotes an entire chapter of his book to a very lucid analysis of the nature of income. He gives a list of twelve different definitions of income, stating that they are "some of the main concepts of business income either used or advocated for use in accounting". He also states the "conditions necessary for unique income measurement". But, after going that far in recognising the limitations of the concept of profit, he still bases the rest of his book on the sacrosanct proposition that accounting is essentially about measuring income.
In this article I propose to go a step further and face the idea that since profit cannot be clearly defined except in static economic conditions, one should abandon the concept \(^2\) \(^3\) and approach business accounting from a different angle.

2. THE ASSUMPTIONS UNDERLYING PROFIT

It is well known that the traditional concept of profit is based on the assumption of prices stability. What is not so generally recognised is that there are wider assumptions implied in this concept.

The object of the present chapter is to examine these assumptions and to consider the conceptual difficulties arising when they are abandoned.

In order to place the critical analysis of the central concept of traditional accounting in its proper context, we shall begin by reviewing very briefly the sequence of financial events that occur over the life of a business. From the accountant’s point of view, the most essential characteristic of a business is that it constitutes a distinct economic entity.

On its inception, this entity receives cash from its owners and from lenders; then cash begins to be exchanged against tangible and intangible assets; various industrial and commercial activities are undertaken which result in claims being acquired, sums of money being owed to creditors, and assets being “consumed” or delivered to customers; at fairly regular intervals cash is taken out of the entity and transferred to the owners; sometimes new cash is brought in by the owners; all of this goes on for ever unless by accident or deliberate wish of the owners the entity is wound up; in that case all assets are sold off, debts repaid and any residual cash distributed between the owners.

At all stages of this story, several groups of people are interested in the affairs of the business entity: owners, lenders, management, staff, public authorities, customers and suppliers.

\(^2\) This statement applies to financial business accounting, whose purpose is to inform on the affairs of a business entity as a whole over a fairly long period of time. However, properly defined concepts of “profit margins” (based on replacement values) are of course quite useful in management accounting reports, prepared on a shorter time basis and intended for specific limited uses.

\(^3\) The point of view of public authorities with respect to allowing the payment of dividends and assessing tax liabilities is considered at the end of chapter 4.
Traditional accounting is designed to cater mainly for the information needs of one group, namely the owners of the business. There would be nothing wrong with this if it did not induce a narrower vision of the various economic aspects of business, resulting in a truncated analysis of reality, which is detrimental to the owners themselves, as well as being a poor guide to management.

Having said this, however, it is clear that the point of view of owners must be considered first.

For them, the business entity is an investment; an investment must produce a return; and the rigorous method to measure the return on investment is by computing the compounded value of all net cash flows received from start to finish.

Such computation based on the actual stream of cash received is always valid even when the monetary unit changes over time, and it is applicable to any kind of investment, whether a government bond or a stake in a business firm [10].

However, in the case of a business entity, the practical usefulness of the method is seriously impaired for two reasons:

1) the decision to transfer cash from the entity to the owners belongs to the owners themselves;
2) the capacity of the business to earn cash, thereby making future cash distributions possible, is uncertain.

In fact, the position of the owners towards their business at any given point in time is as follows: with respect to the past, the stream of net cash flows from entity to owners is known and the computation of compounded values applied to them yields a rigorous measure of return on investment “so far”; but, with respect to the next “distribution round”, a decision will have to be taken as to how much cash can be “safely” withdrawn; and, with respect to the future in general, there is a need for some means to appreciate how “well poised” the business appears to be.

Traditional accounting attempts to deal with the last two preoccupations just outlined: firstly, time is “sliced” into accounting periods; at the end of each period, two fundamental pieces of information are provided, namely “profit” and the “balance sheet”; distribution of cash to owners is then decided – by the owners themselves – on the basis of “profit” and of an appreciation of the future prospects of the business.
The idea of dividing up time into periods, analysing events of the most recent period and considering the resulting "position" is perfectly rational whatever the economic circumstances.

But, in the implementation of this general approach, traditional accounting poses very serious logical problems, which all revolve around the related concepts of "profit" and "net worth".

The "profit" of a period is traditionally defined as the increase in net worth resulting from all events of the period other than the supply of new capital by the owners, and it is considered that, if this entire surplus is distributed, the resulting "position" of the business entity will, in all respects, be equivalent to what is was at the beginning of the period.

Note that what is measured is an increase in net assets, not an increase in actual cash; yet the surplus recorded is deemed "available for distribution". Since distribution is made in cash, traditional accounting practice implies in fact that wealth -- which is made up of all kinds of different assets -- and cash are somehow equivalent.

Furthermore, the notion that the "positions" of the business at two different points in time could be regarded as totally equivalent and could be properly measured by "net worth" is loaded with wide assumptions, namely:

1) that an unambiguous monetary value can be assigned to each asset (and each debt) so that "net worth" represents a clear, straightforward concept;
2) that the monetary unit used to measure "net worth" is stable;
3) that the monetary value, and the economic "utility" of any asset held remains unchanged over time.

The last assumption implies that all assets must always be used in the same manner, involving the same expenses and yielding the same revenues.

What all of this amounts to is an assumption of total economic stability both within and outside the business entity; changes in prices, interest rates, foreign currencies, consumer tastes, technology, cost structures must all be excluded.

In the simple world of traditional accounting, characterized by the "stationary state", wealth is unambiguously measurable in monetary
terms and the concept of value is straightforward; it follows that "net worth" gives a complete and correct measure of the "position" of a business entity at any given time, which leads to a perfectly meaningful concept of "profit".

In the real, changing world, the valuation of wealth is no longer immediate and unambiguous, and the concept of "position" becomes unclear; as a matter of fact it literally explodes into several different notions: the revenue earning capacity of the entity, the amount of money one would need today to start the same business, the potential realisation proceeds of all assets minus debts, the purchasing power expressed in today's money of the funds invested historically [2] [3].

What makes everything so simple under the assumption of "stationary state" is that these multiple facets of the concepts of "position" can all be measured by the same unique figure: "net worth".

When the assumption of "stationary state" is abandoned, it is not clear which aspect of "position" should be considered in the accounts, with the consequence that it becomes impossible to define a revised concept of "profit" as totally satisfactory from all points of view as is the traditional concept of "profit" under the "stationary state" assumption [2].

Yet the real life problem of the owners of a business has to be faced: to find some rational basis on which to decide how much cash could be "safely" withdrawn from the business. This matter is also of direct concern to the authorities, firstly from the point of view of income tax and, secondly, with respect of protecting the interests of creditors, customers and employees. And, so far, nothing has been said of the information needs of management, onto whom falls the responsibility of running the business.

What emerges from the preceding developments is a vision of a complex situation to be examined from different points of view, in the sure knowledge that no simplistic doctrine can provide a unique, immediate and simple answer to the various questions arising. The rational and realistic approach is to proceed to a systematic analysis of wealth, of changes in wealth, of cash flows with a view to assisting management and be helpful to owners, public authorities and other outsiders.

No absolute criterion should be expected, only approximate indications useful in forming a reasonable opinion about the affairs of the
business. The prerequisite for a "real life" approach to business accountancy is a complete understanding of the dual nature of wealth, and of the concept of value, two related subjects to which the next chapter is devoted.

3. BUSINESS WEALTH AND ITS VALUE

If one makes a mental review of the various types of assets that can be owned by a business, and if one thinks of debts as negative wealth, one can readily accept that business wealth is made up of three groups of items:

1) cash and close substitutes of cash;
2) financial claims (positive or negative);
3) "productive assets".

There is a striking contrast between the first two categories and the last one: cash and financial claims have no direct usefulness of their own; they simply constitute "stored purchasing power"; on the other hand, productive assets are destined to be used, and often eventually "consumed", in the course of industrial and commercial activity.

Note that the word "productive" is to be taken here in a large sense, almost synonymous of "useful"; so, "productive assets" include not only plants and machinery, but also buildings, stocks, patent rights, etc...

Establishing the distinction between "productive assets" and wealth of the "stored purchasing power" variety can be rather subtle. For instance, stocks of finished products ready for sale are "productive assets", whereas a stock of gold in the safe of a speculator is "stored purchasing power". This is because the stock of finished products is destined to be used to provide a specific service to the customers of the business entity, namely to deliver to them a particular type of goods, whereas the stock of gold held for purely speculative reasons has no specific "use" connected to a specific business activity.

To take another example, accounts receivable are not productive assets because, although they are the result of commercial activity, they are not going to be used for a specific business purpose; they will simply be turned into cash upon payment by debtors; therefore, they constitute "stored purchasing power".
The importance of a clear distinction between "productive assets" and wealth of the "stored purchasing power" variety stems from its interaction with the concept of value.

Since substitutes of cash and financial claims have no other raison d'être than eventual realisation for cash, there is no ambiguity as to how they should be valued (although there may sometimes be uncertainty because of unpredictable market conditions): the value of assets of the "stored purchasing power" variety is given by their potential realisation price; the (negative) value of debts is given by the amount that is likely to be paid.

By contrast, the value of "productive assets" is not so clear. The potential realisation price cannot be used as a basis for valuation, since "productive assets" are, by definition, destined to another use than the storing of purchasing power. Having dismissed the use of realisation price, the alternative basis for valuing productive assets that springs to mind is replacement cost.

It is true that productive assets have to be replaced whenever they are lost or after they have been consumed, in order to enable the business entity to continue the particular activity in which these assets are used.

It is important to note that if certain assets are not in fact necessary to any of the activities (present or envisaged for the future) of the business, they are not "productive assets", but constitute a form of "stored purchasing power" for which the value to consider is potential realisation price.

The idea of replacing productive assets lost or consumed poses no problem in a fairly stable economic state: the same assets can always be acquired again, and they will be used to fulfil practically the same functions. But in fast moving economic circumstances, the same assets may no longer be available; and, even if they are, the activities of the business may have changed, or be about to change, so that the need for these particular assets may no longer exist, the continuance of business requiring other assets to be used for different purposes.

Given these restrictions, it appears that the value to a business organisation of productive assets is their current replacement cost, provided that the activities for which the assets concerned are needed are likely to continue for some time and that items available on the market are sufficiently similar to the assets to be replaced.
When the activities themselves are changing (e.g. the sale of a product is abandoned and replaced by the sale of a new product; a machine becomes technically obsolete and gives way to a new one), the replacement concept is no longer applicable.

In this case, the assets concerned are "on the way out": their value to the business is either their potential realisation price (as for a residual stock of a product no longer made, or a machine removed from the production line, both of which become in fact "stored purchasing power") or the discounted value of the savings likely to be made be delaying the acquisition of new assets (as for an old plant to be eventually replaced by a new one using new technology but involving a high investment with a low "pay-out") [6].

We are now in a position to state our conclusions about the concepts of business wealth and value.

There are two kinds of business wealth:

1. "stored purchasing power"
   which comprises – cash and substitutes of cash (including former "productive assets" to be disposed of),
   – financial claims, which can be positive or negative;
2. "productive assets", which include all tangible and intangible assets necessary to the various normal ongoing activities of the business.

For all items in the first category, "value" means the potential realisation price. The valuation of items in the second category implies certain assumptions about the future activities of the business and involves a good measure of approximation: "value" is either current replacement cost, or the discounted value of future savings likely to be achieved by delaying replacement.

Under the assumption of stationary state which underlies traditional accounting the various notions of values discussed here all coincide and the "cost" of productive assets consumed over a period can be meaningfully subtracted from the increase in "purchasing power" arising from business operations to yield "profit".

In the real economic environment, such a simplistic procedure does not lead to a sound appreciation of the affairs of a business. The amalgamation of all assets and debts into "net worth" and the resulting
concept of "profit" lose their meaning and a more analytical approach is called for.

This analytical approach is the object of the next chapter.

4. THE GENERAL ANALYSIS OF CHANGES IN BUSINESS WEALTH

The developments of the two previous chapters have set the scene for a real life approach to the analysis of changes in business wealth.

We are now fully aware of the essential distinction between "stored purchasing power" and "productive wealth". We have recognised that, whereas the measurement of the former is straightforward, the valuation of the latter implies assumptions and approximations. Because of the fundamentally different natures of the two kinds of wealth "net worth" – which amalgamates the two – does not represent anything meaningful by itself.

It follows that traditional "profit", the global change in "net worth" – measured on the basis of a mixture of historic and realisation values – is not a meaningful concept either.

In any case, as it has been made abundantly clear, the whole idea underlying "profit", which is that the "positions" of a business entity at two different points in time could be comparable in all respects after a certain amount of cash has been withdrawn at the end of the period between these two points, is essentially devoid of relevance in a changing economic environment.

Since stored purchasing power and productive assets are to be clearly distinguished in the analysis of business wealth, changes in the first must not be amalgamated with changes in the second. In fact it is the relationships between changes in one category and changes in the other category that are the crucial elements in the whole continual process of "turn around" of business wealth.

A simple example will give a first idea of what this implies concretely: when fixed assets are sold off, traditional accounting records the event by crediting "Realised capital gain" with the difference between selling price and net book value; a more useful way of presenting the event – in line with the approach developed hereafter – is to show sepa-
rately the increase in cash or debtors arising from the sale and the net current value of the assets disposed of.

The advantage of the latter presentation is that it tells the reader of the accounts, on the one hand, how much purchasing power has been received and therefore been made available for acquiring new fixed assets or for any other purpose, and, on the other hand, at how much could the "sacrifice" made in exchange be valued—with all the assumptions and approximations implied.

The linkage between changes in purchasing power and changes in productive assets, illustrated in the previous example, constitutes the key to wealth movements entailed by business activity.

This is why our approach will consist in making a systematic review of the changes in the main classes of assets and debts and analysing the relationships between these changes. In this we shall be greatly helped by the use of symbols representing the monetary values of the various types of assets and liabilities.

As shown in chapter 3, the appropriate monetary values to consider are

- realisation price, for items of the "stored purchasing power" variety,
- current replacement cost, or opportunity cost, for "productive assets".

Henceforth, we shall refer to these values as "current values".

As a result of all that has been said so far about the inadequacy of classical accounting, one might be tempted to disregard historic values completely. However, it will soon be apparent that handling both current and historic values in the same analysis offers the advantages of

- showing the effects of price changes in the relative values of different assets and liabilities, and
- encompassing traditional concepts, thus emphasising their limitations by contrast with the comprehensive approach followed.

Let us, therefore, use capital letters to stand for historic values and small letters for the differences between corresponding current and historic values. The letters used for the different types of assets and liabilities will be:
F and \( f \): fixed assets \((F = \text{historic cost})\) \(F+f = \text{current value}\)

D and \( d \): accumulated depreciation on fixed assets

S and \( s \): stocks

C and \( c \): net current monetary assets

L and \( l \): long term borrowings

N and \( n \): net worth; i.e. the total of assets minus debts

With the symbols just introduced, the list of current values of all main classes of assets and debts, as well as the net balance, can be presented under the classical format of a balance sheet (assets to the left, contrary to now old fashioned UK practice):

<table>
<thead>
<tr>
<th>Assets</th>
<th>Liabilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>F + f</td>
<td>L + l</td>
</tr>
<tr>
<td>(-D - d)</td>
<td>(N + n)</td>
</tr>
</tbody>
</table>

Balancing item

Productive wealth

Stored purchasing power

\(S + s\)

\(C + c\)

\(X + x\)

\(X + x\)

We need a further symbol to refer to changes in balance sheet items occurring over a period of time; let us use \(\Delta\) before any letter to mean the difference between the value of an item at a point in time \(t^2\) and the value of the same item at an earlier point in time \(t^1\): so, for instance, \(\Delta C = C^2 - C^1\), \(\Delta c = c^2 - c^1\) and \(\Delta(C + c) = C^2 + c^2 - C^1 - c^1\)

The approach that we are going to follow consists in reviewing all the various changes in assets and debts, grouping these changes into three main categories and analysing the fundamental relationships between these categories, which are

a) \(\Delta(C+c)\), the change in net current monetary assets (NCMA)

b) \(\Delta(F+f-D-d+S+s)\), the change in productive assets

c) \(\Delta(L+l)\), the change in long-term debt.

Net current monetary assets - NCMA for short - comprise cash, short term placements, accounts and bills receivable and accrued income minus accounts and bills payable, current provisions and short term borrowings. In brief, NCMA represents the net purchasing power available in the short run.
For the items included in NCMA, potential realisation (or repayment) prices are usually equal to historic values, except when there are transactions in foreign currencies giving rise to "balances" denominated in foreign currencies.

For the sake of simplicity (4), we exclude such transactions (5) and take it that \( c = 0 \); so that \( \Delta(C + c) = \Delta C \).

With this assumption, it is clear that the overall change in NCMA over a period, \( \Delta C \), is made up of a series of individual increases and decreases that are all associated with commercial and financial transactions. However, some of these transactions affect only NCMA, whereas others entail simultaneous movements in NCMA and in productive assets or long-term borrowing.

For instance, the payment of interests on a loan involves only a reduction of NCMA, whereas the purchase of a machine involves a reduction of NCMA and a simultaneous addition to fixed assets.

If movements in NCMA can only stem from transactions between the business entity and the outside world, the same is not true for additions and reductions in productive assets; such changes can result not only from external transactions but also from internal activities or occurrences (e.g. production, through which stocks of raw materials are transformed into stocks of finished products with a higher current value); furthermore, changes in current values can produce pure hoarding increases, or decreases, in productive assets held, and fluctuations of exchange rates can affect the value of long term debt denominated in foreign currencies.

In order to analyse the relationships between changes in NCMA and changes in productive assets and long term debt, we now consider the list of possible economic "events" normally encountered in a typical commercial business which entail changes in one or more item of wealth.

These events can be of three kinds:

a) "external transactions", i.e. commercial and financial transactions between the business entity and the outside world;

(4) In order to avoid slowing down the pace of exposure by considerations of secondary importance for which the reader will fairly easily make appropriate allowances.

(5) But we accept that long term debt can be denominated in foreign currencies.
b) internal activities and occurrences;
c) changes in current values.

The list of "events" that affect business wealth is presented in tableau I; the effect of each of these events on NCMA, productive assets and long term borrowing is noted by use of the symbols $\Delta^+$ for increases and $\Delta^-$ for decreases.

A quick glance at table I reveals that all the constituents of traditional profit are present, as well as all the items normally shown in the funds flow statement.

What distinguishes the information summarised in tableau I from the classical profit statement and funds flow statement is, firstly, the use of appropriate current values in addition to historic values—instead of the "conservative" mixture of historic costs and "market" values encountered in traditional practice—and secondly, the explicit indication of linkages between movements in NCMA and changes in productive assets or long term debt.

To be of maximum use, the information provided in statements prepared along the lines suggested by table I should be

a) given for several successive periods;
b) broken down by sector of activity;
c) in the case of operating expenses, divided up into appropriate categories such as purchasing, production, selling and distribution.

Armed with this tolerably detailed and highly digestible information, the reader of the accounts will be able to see the trends in the streams of cash flows for each sector of activity; this is the only serious basis on which to assess the rates of return on past investments pertaining to the different activities undertaken by the organisation (6).

So far, our approach has been largely oriented towards the analysis of the causes of changes in NCMA, in contrast to traditional accounting which tends to mingle cash and productive wealth.

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(6) Interesting comments about funds flow analysis in changing economic conditions can be found in the book by David Allen [1]. Here again, however, profit is retained as the central concept of accounting, which results in the author's whole exposure losing some of its force and clarity.
TABLE I
Principal events inducing changes in business wealth

<table>
<thead>
<tr>
<th>Type of event</th>
<th>Effects on</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>NCMA</td>
<td>Productive assets</td>
<td>Long-term debts</td>
</tr>
<tr>
<td><em>External transactions</em></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating sales</td>
<td>$\Delta C^+$</td>
<td>$\Delta (S+s)^-$</td>
<td></td>
</tr>
<tr>
<td>Operating sales pertaining to future periods</td>
<td>$\Delta C^+$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Purchases of materials</td>
<td>$\Delta C^-$</td>
<td>$\Delta S^+$</td>
<td></td>
</tr>
<tr>
<td>Labour and other operating expenses</td>
<td>$\Delta C^-$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prepaid operating expenses</td>
<td>$\Delta C^-$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sales of fixed assets</td>
<td>$\Delta C^+$</td>
<td>$\Delta (F+f-D-d)^-$</td>
<td></td>
</tr>
<tr>
<td>Purchases of fixed assets</td>
<td>$\Delta C^-$</td>
<td>$\Delta F^+$</td>
<td></td>
</tr>
<tr>
<td>Interest received</td>
<td>$\Delta C^+$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interest paid</td>
<td>$\Delta C^-$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>New long term debt</td>
<td>$\Delta C^+$</td>
<td></td>
<td>$\Delta (L+1)^-$</td>
</tr>
<tr>
<td>Repayment of long term debt</td>
<td>$\Delta C^-$</td>
<td></td>
<td>$\Delta (L+1)^-$</td>
</tr>
<tr>
<td>New equity</td>
<td>$\Delta C^+$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dividends</td>
<td>$\Delta C^-$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Income tax</td>
<td>$\Delta C^-$</td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Internal activities &amp; occurrences</em></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transformation of products</td>
<td>$\Delta (S+s)^+$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Depreciation of fixed assets</td>
<td>$\Delta (D+d)^+$</td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Changes in current values</em></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Changes in current values of productive assets</td>
<td>$\Delta f^+ - \Delta d^+ + \Delta s^\pm$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Changes in foreign currencies</td>
<td></td>
<td></td>
<td>$\Delta l^\pm$</td>
</tr>
<tr>
<td>Overall change in net worth</td>
<td>$\Delta C + \Delta (F+f-D-D+S+s) - \Delta (L+1)$</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note on symbols used*

$\Delta^+ = \text{increase}$

$\Delta^- = \text{decrease}$

$\Delta^\pm = \text{variation, either increase or decrease}$

$\Delta = \text{total net change in the item}$

This emphasis is consistent with our recognition of the fact that the valuation of productive assets in changing economic circumstances is far from accurate and unambiguous, a fact whose consequence is that
such traditional constituents of profit as "cost of goods sold" and "depreciation" are hardly meaningful.

However, when it is based on economic judgement (and not on tax rules or other biased considerations) and measured at current value, depreciation on assets held throughout or acquired during the last period can provide an idea of the order of magnitude of the future cash requirements for the replacement of productive fixed assets; to that extent it serves a useful purpose.

For its part, the notion of "cost of goods sold" is confusing and should be replaced by a close examination of the items "purchases" and "variations of stocks"; a net decrease of stocks measured with the current values at the end of the last period indicates physical destocking and gives an idea of future cash requirements for the replacement of stocks (but this is to be appreciated in the context of the activity concerned, bearing in mind that the very nature of the items in stock can change).

The crucial point to note is that the analysis of changes in productive wealth complements the analysis of movements in NCMA in the evaluation of the likely future cash requirements.

When these cash requirements are estimated, they can be set against the trend of cash inflows from operations shown in the accounts. This seems to me to be the only satisfactory basis on which to form a reasonable opinion about the affairs of a business entity in changing economic circumstances.

A problem remains: the public authorities need fairly clear-cut criteria to allow the payment of dividends and to compute the tax liability. Although this requirement is fundamentally at odds with the whole approach developed here, it is possible to agree on the use of certain criteria acceptable for tax and legal purposes (but which should not be regarded as meaningful measuring tools for managers, owners, potential investors or other interested parties).

I have myself put forward two complementary criteria – "adjusted profit" and "revaluation gain" – in a previous article [7] which did not call the very concept of profit into question; these criteria or similar ones could be employed in the separate, formal exercise of tax assessment and for the setting of a legal limit to the distribution of earnings.
REFERENCES


SOMMAIRE

Cet article présente une analyse des hypothèses sous-jacentes à la comptabilité traditionnelle et en particulier au concept de profit.
L’ensemble de ces hypothèses caractérise un environnement économique absolument stable, dont tout changement de prix, de cours de change, de technologie, etc. est exclu.
Le concept de profit perd son sens dans un environnement économique changeant.