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THE VALUE ADDED STATEMENT: AN INVESTIGATION OF SOME ACCOUNTING ISSUES

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Abstract: *It may be said that Value Added has no single and precise definition that can be universally accepted. However, there is a general agreement with regard to the concept of value added, i.e., it measures the wealth created by a business or industry. Both the economist's model and the Corporate Report assume that individual measures of value added, made by each firm should be able to be summed to equal the aggregate value added generated within the economy during a specific period of time. As a matter of fact, both the economist's model and The Corporate Report have either ignored or dealt, in a very primitive and simple way, with the accounting issues arising in the preparation of the Value Added Statement (VAS).*

Therefore, the major theme of this article is to highlight some key accounting problems that must be overcome before the preparation of the VAS. By doing so, the VAS can be regarded as a useful accounting tool in both social and financial reporting, especially when calculating the Value Added at the national level. Otherwise, it will not be more than a cosmetic rearrangement of the profit and loss account.

1. VALUE ADDED AND ITS USES

1.1 What is Value Added?

The author does not regard it as constructive to attempt to offer a precise definition of value added. This is due to the fact that adherence to a criterion of usefulness will dictate what is meant by 'Value Added'. Consequently, value added can and should, vary in different circumstances.

However, it will be helpful just to present some definitions of value added. In a definition presented by Wood, he says that value added may be defined as a form of wealth. But not all forms of wealth are value added. Value added is not the kind of wealth that occurs as natural resources. Value added is the kind of wealth generated by the efforts and ingenuity of mankind. The word 'wealth' may have come partly from natural resources and partly from the wealth created by people, i.e.,value added. Much

of the value added created is consumed soon after it is generated. But some of it is accumulated in the form of buildings and capital equipment [18, pp. 1-3].

Morley gives a similar definition. He writes that:

> Value Added (or wealth creation) is a performance measure and it reports the wealth created by a business entity over a period of time [12, pp. 2].

The definition given by Morley indicates that the wealth creation which is reported on is the outcome of trading and operating, and Value Added is not affected by capital gains. For instance, a business will add value if it makes and sells some furniture but no value will be added merely because the market value of the furniture factory has increased over the year.

The definition presented by Gray and Maunders, is:

> Value Added may be taken to represent, in monetary terms and for a particular period, the 'net output' of an enterprise, i.e., the difference between the total value of its output and the value of the corresponding inputs (materials and services) obtained from other enterprises [8, pp. 1].

Schreduer also brings to our attention the consensus of opinion amongst leading industrial accountants in Germany regarding the nature of Value Added. They hold the view that it is "...the additional value created by an enterprise in a specific period... is identical to the corporate share in the National Product" [17, pp. 109-122].

Another similar definition which shows a similar relationship between corporate and societal value added has been inferred by Rutherford who suggested that "Value Added... represents a firm's contribution to the wealth generated within the economy" [16, pp. 215-220].

Finally, the Accounting Standards Steering Committee (ASSC) emphasizes the creation and disposal of value Added as follows. "Value Added is the wealth the reporting entity has been able to create by its own and its employees efforts. This statement would show how value added has been used to pay those contributing to its creation" [1, pp. 49].

It should be noted that the measure of Value Added is not the effort that has gone into the activity. Value Added is determined by the satisfaction of the customer,

not by the work of the producer. For instance, if nobody wants to buy quill pens, no value added has been generated. Similarly, when a business or industry has to be subsidized to keep it going, the cost of the subsidy, along with the cost of materials and purchased services, must be deducted from the sales revenue to calculate the value added properly.

To sum up, it appears very clearly from the various definitions of Value Added that there is no one precise definition that can be universally accepted. However, there is a general agreement as regards the concept of Value Added, i.e., it measures the wealth created by a business or industry. In other words, it can be said that value added has some specific characteristics such as:

a) Value added is a created asset

b) There are several people who contribute towards its creation.

1.2 Value Added or Added Value?

There are those who believe that we should reverse the word order used in this research and speak of Added Value. The reason given for this belief is that in normal English usage, the adjective precedes the noun. The arguments against this idea, and in favour of retaining the order 'Value Added' are:

a) When adjectives are past participles, they do not invariably precede the noun. We already reverse the order in such cases as capital employed, capital invested, goods shipped... etc.

b) Empirical studies have revealed that most British companies use Value Added rather than the alternative in their Value Added Statements.

c) VAT is well established in modern English usage and nobody would now suggest a change to 'VAT' to become 'AVT' !

d) The Corporate Report has used the term 'Statement of Value Added' rather than the alternative.

e) Finally, most articles dealing with such a topic have been entitled 'Value Added Statements' rather than 'Added Value Statements'.[1]

1.3 Why Produce a Value Added Statement?

The Corporate Report justified publication in the following terms [1, pp. 49-50]: There is evidence that the meaning and significance of profits are widely misunderstood. The need for the VAS arises because it is 'the simplest and most immediate way of putting profit into perspective vis-a-vis the whole enterprise as a collective effort by capital, management and employees. It usefully elaborates on the profit and loss account and in time may come to be regarded as a preferable way of describing performance. From value added must come wages, dividends and interest, taxes and funds for new investment. The interdependence of each is made more apparent by a Statement of Value Added. The Statement of Value Added provides a useful measure to help in gauging performance and activity. The figure of Value Added can be a pointer to the net output of the firm and by relating other key figures (for example capital employed and employee costs), significant indicators of performance may be obtained'.

Thus, the Corporate Report indicates the main uses of the Value Added Statement. Such main uses may be summarized as follows:

a) To measure wealth created by the company

The VAS focuses attention on the success of the company to create wealth and generate national income. This would be of general interest to the various stakeholder as a firm can only sustain its payments of wages, taxes, interest and dividends by creating wealth. By the same token, the levels of those payments can be increased by creating additional wealth over what the firm has achieved previously. For the general public, it can lead to a greater awareness of the role of the business in producing goods and services and in generating income for the society.

Moreover, profits only measure the owner's share of a company's results of activities. But Value Added shows another dimension to a company's performance and may as a result put profits in a different perspective.

However, as Cox notes, [6, pp. 6-8] it must be recognized that the Value Added has the potential to be cynically interpreted as a device to divert attention away from embarrassingly high profits when discussing results with employees.

b) To emphasize stakeholder interdependence

The VAS also emphasizes the interdependence of the various stakeholder, and it highlights the interactive effect of the policy decisions by anyone of these groups on the others. It has been argued that through such an emphasis, the VAS may lead to more cohesiveness among these groups [2, pp. 152] and especially to more positive attitude by employees towards the company [8, pp. 13], [14, pp. 257].

Greater cooperation is certainly laudable but it has also been pointed out that showing the relative share received by each stakeholder may also succeed in highlighting an antagonistic relationship since it might be seen that an increased share by one group can only be accomplished by a decreased share from another [7, pp. 10-12]. Thus, competition among stakeholder can exist.

c) To condition employee expectations regarding pay and prospects

By examining the relative share of Value Added Received (over time and compared to other companies), employees may find the VAS useful in forming attitudes about the equity and fairness of their pay levels. It may also indicate a company's ability to pay higher wages in the future. For example, if higher value added were predicted for the future, the amount could be regarded as available for distribution to employees. Thus, value added information could influence the aspirations of employees when engaging in wage discussions with management [8, pp. 10-11].

Morely also argues that employees have interest in the wealth created by their company during the year, the share they receive in the form of pay as well as the proportion reinvested to strengthen the company and enhance future job security. The VAS provides this information in a straightforward and understandable way. Morely also notes that the income statement, besides being more complex than a VAS, is not particularly relevant to employees anyway [13, pp. 235]. Employees are interested in information about their own achievements and future prospects, not those of the shareholders.

d) To form a basis for incentive schemes

Finally, value added can form the basis for productivity incentive schemes. Many U.K. companies have introduced bonus plans based on increases in the ratio of value added to payroll costs or value added per employee.[2]

Thus, VAS has potential uses by shareholders, financial analysts, lenders and others. Moreover, it is likely to be most relevant for the general public and the company's employees. The credibility of value added information can be enhanced by including it in the annual report.

In brief, the uses of value added can be grouped into four categories [18, pp. 19]:

1) For Measuring Output
    a) Basis for national accounts
    b) Measuring business performance
    c) Measuring the productivity of manpower and capital
2) For Communication
    a) Explaining what business is about
    b) Presenting accounting information
    c) Basis for employee participation
3) For Rewarding Employees
    a) Basis for wage and salary policy
    b) Basis for group bonus schemes
4) For Business Policy
    a) Marketing strategy
    b) Capital investment policy
    c) Pricing policy
    d) Business ratios

1.4 The Economist's Model of Value Added

The illustrative example of a VAS given by the Corporate Report is shown in figure 1, section 2. Although it contains a good deal of data, it adds little to the

information content of an annual report. The only information contained in the VAS which is not disclosed elsewhere is (a) total payroll costs and (b) total input costs.

The VAS then offers a fresh perspective rather than new scenery. Why is a fresh perspective necessary? To quote from the Corporate Report:

> "There is evidence that the meaning and significance of profits are widely misunderstood. The need for the VAS arises because it is 'the simplest and most immediate way of putting profit into perspective..."

However, if the VAS is to be seen as something more than a crude attempt to divert attention from profits, it is important that the new focus of attention should have some underlying rationale.

Use of the concept of value added has, until now, been largely restricted to the field of economics, where it is employed as one of several theoretical approaches to the measurement of national income [16, pp. 215].

Ruggles and Ruggles describe the rationale for the economist's model of value added as follows:

> The Value Added by a firm, i.e., the value created by the activities of the firm and its employees, can be measured by the difference between the market value of goods that have been turned out by the firm and the cost of those goods and materials purchased from other producers.

Therefore, the value added measure assesses the net contribution made by each firm to the total value of production by adding up all of those contributions. Hence, it is possible to arrive at a total for the whole economy that will represent the market value of production [15, pp. 216].

It is suggested that this rationale should also be employed in financial accounting: an individual firm's value added is an important reporting measure because it represents the firm's contribution to the wealth generated within the economy during any particular period.

In brief, individual measures of value added should be able to be summed to equal the Aggregate Value Added.

The additivity requirement and the allocation of value added can perhaps be best

illustrated by way of an example. Suppose a village baker bakes and sells during the year bread with total sales value of $40,000. Suppose further that (a) his expenses consist of flour purchased for $ 15,000 and wages of $ 5,000, (b) he draws $5,000 from the business for his own consumption and reinvests the remaining surplus, (c) the farmer who supplies the flour does no other trade, has no expenses, consumes $ 5,000 and invests the remaining surplus, (d) there are no stocks at the beginning or end of the period, and (e) there is no taxation.

The value added by the activities of the baker and farmer is:

	Baker	Farmer	Total
Sales	$ 40,000	$ 15,000	$ 55,000
Input costs	15,000	-	15,000
Value Added	25,000	15,000	40,000
Wages	5,000	-	5,000
Withdrawals (Consumption by the self-employed)	5,000	5,000	10,000
Reinvestment	15,000	10,000	25,000
	25,000	15,000	40,000

2. SOME CONCEPTUAL ISSUES IN CALCULATING VALUE ADDED

This section highlights several important conceptual issues which arise when calculating the value added.

2.1 Sectoral Recognition of Value Added

The rationale discussed in section 1 provides a justification for focusing attention on value added. However, it does not provide a detailed prescription for its calculation. The process by which value is generated within an advanced economy is complex, diffuse and interactive. This is due to the fact that any attempt to allocate the aggregate value added between individual enterprises raises several conceptual problems, particularly if the additive quality of the model is to be preserved. The economist's model of value

added provides little assistance in dealing with these problems.

The model of the economy, on which the notion of Value Added described in The Corporate Report is based, is a highly simplistic one. Consider for example, the payment of interest by a manufacturing company to a financial institution. In such a case, interest paid could be regarded as either an input cost to the manufacturing company, or as part of its Value Added.

Ruggles and Ruggles [15, pp. 51] treat interest as a component of value added, whereas Brooman [3, pp: 22] argues that interest paid must be treated as an input cost when it is paid to banks and financial institutions in order to avoid double counting. He also added that financial institutions are located within the production sector, in which case their distributions are allocations of value added. Similar problems arise with rent, insurance payments, bad debts and royalties.

Finally, the recognition of value added may be better discussed under two models: a factor income model and a sectoral income model.

Following is a discussion of such two models [16, pp. 217-218]:

a) Factor income model

Under such a model, interest paid, rent expense... etc. are to be treated as components of value added by manufacturing companies regardless of the nature of the recipient. Therefore, banks, finance companies, renters and similar institutions are regarded as having a redistributive rather than a productive role in the economy. This is because interest, rent, dividends and similar distributions received from other entities in the production sector cannot be regarded as giving rise to value added.

b) Sectoral income model

Under this model, interest paid to a financial company is to be regarded as an input cost, whereas interest paid to individuals is to be treated as an allocation of value added.

To illustrate the aforementioned two models, let us assume a company with sales

of $ 100, input costs of $20 and interest income of $10. Also assume that the company pays out $50 in wages and $40 in dividends.

Under a sectoral income model, interest income would be treated as giving rise to value added:

Sales (including interest income)	$ 110
Input costs	20
Value added	90
	====
Wages	50
Dividends	40
	90
	====

Under a factor income model, interest income must be excluded from value added reducing it to $80. Perhaps, the only way round this is to allow value distributed to differ from Value Added.[3]

Sales	$ 100
Input costs	20
Value Added	80
Value received from other parts of the production sector	10
Value distributed	90
	====

2.2 Value Added on Production or Sale?

One of the fundamental issues concerning the temporal recognition of value added in a manufacturing business is how to calculate such a value added. Should it be calculated at the time of production or sale?

If measurement is to be production oriented, then the emphasis must be on the value of output for the period irrespective of whether it has been sold. This will necessitate the valuation of stocks of finished goods and work in process at market selling prices in order to place a sales value on total or gross output for the period. Also necessarily included will be the firm's own-manufactured fixed assets. The external costs

of producing this output will then be deducted to arrive at net output or value added.

In practice, however, all companies in Britain have adopted a sales orientation whereby the calculation of value added is linked to conventional accounting principles of income measurement.[4]

Value added is thus sales income less external costs relating to sales. Consistent with the 'prudence' and 'realization' principles, stocks are measured at the lower cost and net realizable value. However, this approach gives rise to problems where, consistent with The Corporate Report, employee costs are treated as a distribution of value added on a production basis, i.e., the total amounts payable are reported, whilst the measurement of value added is carried out on a sales basis [1, pp. 50]!

Gray and Maunders [8, pp. 27-28] point out that calculating value added on a sales basis and showing total employee costs for the period as a distribution of value added (as recommended in The Corporate Report and practiced by U.K. Companies) is conceptually inconsistent in that the latter is reported on a production basis.

Thus, if the labour component of unsold inventory is to be shown as a distribution of value added, then the computation of value added itself should, likewise, consider unsold inventory, i.e., for consistency it should be calculated on a production basis.[26] Such an approach is common among German firms [11, pp. 31-56] and is adopted by the Egyptian Uniform Accounting System.

Meek and Gray argue that the difference between the two approaches is unlikely to be material despite such a conceptual inconsistency [9, pp. 73-81].

However, Cox points out that a statement on these lines should certainly not be referred to as added value. He added that companies should describe such a statement as what it is, namely "A Statement of Earnings and Their Distribution" [5, pp. 145-146]. To be consistent, value added should be recognized either at the point of production or on sale. Systematic application would require that other period flows giving rise to value added, for example interest, should also be apportioned between sales and closing inventory [16, pp. 219].

Figure 1. A Manufacturing Company Statement of Value Added

		Year to 31st December 1974 £ m		Preceding Year £ m
Turnover		103.9		102.3
Bought-in materials and services		67.6		72.1
Value Added		36.3		30.2
Applied the following way				
To pay employees wages, pensions and fringe benefits		25.90		17.3
To pay providers of capital				
Interest loans	0.8		0.6	
Dividends to shareholders	0.9		0.9	
		1.7		1.5
To pay government corporation tax payable		3.9		3.1
To provide for maintenance and expansion of assets				
Depreciation	2.0		1.8	
Retained profits	2.8		6.5	
		4.8		8.3
Value Added		£ 36.3		£ 30.2

SOURCE: Accounting Standards Steering Committee, *The Corporate Report*, ASSC, London, 1975, pp. 50.

Finally, as regards the choice of approach, the measurement of value added on a production basis would seem to offer a greater number of potential uses. Moreover, current market values have been advocated for many years by accounting theorists on the grounds of improved decision relevance to investors and other users [8, pp. 28].

2.3 Gross or Net Value Added (The Treatment of Depreciation)

The Corporate Report does not deduct depreciation in calculating value added (i.e., depreciation is included in the value added amount) and shows it as an item

reinvested in the business. This is known as the 'gross' method of calculating value added. This means that depreciation has been treated as a distribution of value added not as an external cost.

In a most recent survey, it has been indicated that 80 percent of U.K. companies calculate their value added on a gross basis [2, pp. 156].

Calculating value added on a gross basis is consistent with the idea that the reinvestment of used up productive physical capacity is necessary for a business to continue as a going concern. It has an advantage in that the value added figure is unaffected by the depreciation method used by the firm. As a result, comparability and consistency are enhanced and the subjectivity involved in determining the depreciation amount is removed from the value added number [9, pp. 79].

However, the treatment of depreciation as an allocation of value added is to be regarded as a reversion to a cash flow basis of accounting. This, of course, is to be considered a dramatic contrast with the conventional profit and loss account treatment of depreciation and would seem to emphasize the significance of management's role in the allocation of resources.

The alternative is the deduction of depreciation along with other 'materials and services used' to calculate 'net' value added. There are several arguments favouring this approach.

First, the most persuasive argument is that the fixed assets, whose costs are depreciated, are to be purchased from outside the stakeholder group just as materials and services are.

Second, depreciation represents an input cost and not treating it as such is not only inconsistent with how the other inputs are treated but also overstates the wealth created during the period.

Third, distributing 100 percent of the firm's gross value added would eventually deplete its capital base (thus turning the physical capital argument favouring the gross method on its head!).

Finally, the net method avoids the peculiar impression that depreciation is a member of the stakeholder team [9, pp. 79].

Brooman supports the calculation of the value added on a net basis. He writes:

> "But plant and machinery, though not wholly used up, will be partly worn out in production, and its wear and tear should therefore be treated as an input on exactly the same footing as the input of materials and deducted accordingly from the value of output" [3, pp. 23].

Connock adds that the treatment of depreciation as an input cost accords with the view of depreciation taken in conventional profit calculations, and with the treatment in Yugosalv reports [4, pp. 42-44].

Finally, Reichman and Lauge [10, pp. 17-22] defended the calculation of value added on a net basis for the following reasons:

a) The Value Added Statement as part of social reporting should give details of the income that has been attained and is likely to be attained in the future by the coalition members. It follows, therefore, that one should basically proceed from a Net Value Added and consequently from a figure that has been reduced by depreciation. Expenditure for capital goods would have to be taken into consideration as bought-in goods from other companies and feature as deductible items. In distributive Value Added Statements, in view of the accrual concept, depreciation should be included as a bought-in cost.

b) It remains to be seen whether the problem of allocating the costs of an asset to the estimated number of useful periods and of possible biases in the periodical depreciation for balance sheet reasons and/or tax purposes could be so serious. It is essential first of all to differentiate between the allocation problem and 'accounting policy':

1) Excessive depreciation resulting from underestimating the expected useful life of an asset should be regarded as forecasting errors and consequently as unavoidable.

2) The use of accelerated depreciation methods is to be the responsibility of the management which prefers the adoption of such an accounting policy. In fact, the sum of depreciation charges of several accounting

periods must tally with the historical costs so that higher depreciation charges during the early years of an asset's life are to be balanced by lesser amounts in later years.

Excessive depreciation costs of a plant are, therefore, compensated for in the course of time. This means that there would be no absolute reduction in profit, only a temporary deferment. This also applies in principle to accelerated depreciation for that purpose.

2.4 Non-Operating Items: Are They Value Added?

All companies of any size will find that they will have some revenues resulting from non-trading activities. These non-trading credits affect the overall fortunes of the firm but do not arise from normal production activities.

These non-trading credits may include income from associated companies, receipts of investment income, rents, hire fees, royalties, interest, gains and losses on the sale of fixed assets or investments, and foreign currency translation gains and losses.

Firstly, it must be decided what are the possible treatments for such items in the Value Added Statement and then it must be decided which is the best.

Unfortunately, 'The Corporate Report' has ignored such a problem entirely. However, four ways (alternatives) are possible in order to incorporate a non-trading credit in the VAS [12, pp. 64]:

a) Assimilate the credit into an existing heading. For example, it could be included with turnover, or deducted from bought-ins, or deducted from interest paid.

b) Show the credit separately as an addition to value added.

c) Show the credit separately as a deduction from the applications of value added.

d) Omit the credit entirely from the Value Added Statement. This will oblige the company to supplement its statement with a reconciliation showing why

retained profit for the year in the VAS does not equal the figure shown in the income statement.

2.4.1 Income from Associated Companies

Some holding companies use method (b) when preparing their VAS. Hence, the VAS starts as follows:

Sales	XX
Less bought-in items	XX
Value added by the company	XX
Add the company's share of the profit of associated companies	XX
Total Value added available for sharing or retention	XX

This treatment makes clear what is happening and it enables the construction of accurate and relevant ratios. For example, if we wish to measure the productivity of the company's workers using value added per employee, then we should use the value added by the company not that available for sharing or retention. This is due to the fact that we want to evaluate the performance of the workers and this can be achieved only by looking at their output and not by looking at their output plus part of the output of associates.

Moreover, the above treatment avoids double-counting at the level of the economy as a whole due to the fact that such income has been reported as value added in the associate company's own Value Added Statement.

2.4.2 Receipts of Investment Income, Rents, Hire Fees, Royalties, Interest

These items may be assimilated into sales if they are trivial or if they are resulting from the sale of operating services, e.g., plant hire. Alternatively, they may be set off against bought-in items as done by some companies.

However, such a treatment involves a trivial amount of double-counting since the payer of the investment income will usually be treating it as an application of his value added.

In contrast, if these receipts are material, they should be separately disclosed and dealt with by method (b) as was done with associated companies. This will, in effect, exclude these receipts from 'value added by the company' but will include them in 'value added available for application' which reflects the facts of the situation. This separate disclosure will increase the chance that ratios will be fairly constructed since some ratios should be based on value added by the company and some on value added available depending on the purpose in mind.

However, it might be argued that method (d) would still be better. Perhaps we should exclude all these sorts of investment income entirely. This might be done on the grounds that this income is a reward for past outlays of capital and that therefore none of it should go to labour (if labour were to be remunerated by some formula related to value added available). Such an argument seems irrelevant because a labour incentive scheme should be based on 'Value Added by the Company' and not on 'Value Added available'.

2.4.3 Extraordinary Income and Gains

A multitude of different items may arise here, and the best treatment depends on the nature of the item. For example, profit and loss accounts of shipping company very often show realized capital gains or losses on sales of vessels. In my opinion, such gains are not really Value Added by the Company and should be excluded therefrom. If such gains are to be included in the 'Value Added by the company', seamen can ask for their wage increases by saying, 'Please may we have our share of profits on ship sales'. Clearly, the productivity of seamen is not measured by ship-dealing profits.

It is noteworthy to stress that unrealized profits arising on revaluation will be entirely excluded from the VAS and will have no effect on value added or ratios based thereon.

Of course, foreign currency translation gains and losses are to be distinguished from exchange differences. The former category arises out of the accounting process of consolidation and not from operations, but in contrast exchange differences arise from physical exchange of foreign currencies. Therefore, exchange differences constitute an integral part of the firm's trading activities and would need to be included in the calculation of value added through separate disclosure that may be warranted by their size. Moreover, it would be irrelevant to label such a category as extraneous.

To sum up, the emphasis of our argument is that items which can not be directly related to production activities should be separately categorized below the calculation of Value Added.

The point we have now reached is to recommend that the opening part of the Value Added Statement should be as follows:

Sales	XX
Less bought-in materials and services and depreciation	XX
(Net) Value Added by the Company	XX
Add:	
The company's share of the profit of associated companies	XX
Investment income	XX
Extraordinary profit	XX
Value Added available for sharing or retention	XX

2.5 Value Added and the Public (Government) Sector

The amount of value added distributed to the government may be limited to corporate income taxes or it may include social security and withholding taxes on

employees and sales and excise taxes paid and/or collected.

Most U.K. companies treat employee - related taxes, along with pay and pension contributions, as a distribution to employees [2, pp. 156]. Thus, employee - related taxes are seen as a benefit enjoyed by employees, paid by the company to the government on their behalf.

Sales and excise taxes paid on materials and services purchased from the outside can be considered as part of the cost of these materials and services and thus deducted when computing value added.

Alternatively, such sales and excise taxes may be regarded as part of value added and subsequently shown as distribution to the government [9, pp. 79]. Similarly, sales and excise taxes collected on products sold may be excluded from sales revenues (and therefore excluded from value added), or they may be included in the value of a firm's output and treated as a distribution to the government on the VAS.

Excluding sales and excise taxes from value added is consistent with the idea that the government sector has played no role in the wealth created by the firm. By excluding these taxes from the value added amount, only corporate income taxes would be left as a distribution to the government.

Including these taxes as part of the value added amount and, correspondingly, as a distribution to the government represents what McLeay terms the 'government as a public sector' view [11, pp. 31-56]. Here, the government is seen as contributing to the firm's success in creating wealth just as capital and labour do.

However, the prevailing attitude in the U.S.A on this philosophical point is probably against the 'government as a public sector', suggesting that sales and excise taxes should be excluded from value added amount [9, pp. 79].

The extent to which taxes are shifted between sectors would be reflected in the VAS drawn up to incorporate economic values [16, pp. 220]. Thus, if the burden of corporate tax was shifted to consumers, it might be deducted from turnover (on the same footing as VAT) due to the fact that the company has merely acted as an agent for the collection of the tax.

A further difficulty is that part of the expenditure which governments make from tax revenue represents the provision of inputs to the production sector free of charge, or at below market prices. This will result in losses to the government sector which must be subsidized from public funds.

Therefore, Rutherford sees that any tax borne by the company which is used by the government to provide inputs to the company should, in principle, be treated as an input cost rather than as an allocation of value added [16, pp. 220]. On the other hand, taxes which are borne by companies, for example, stamp duty, rates... etc., and for which revenue does not reflect corresponding benefit, constitute an allocation of value added.

2.6 Attachment of Flows

Finally, the VAS goes further than the calculation and allocation of value added. It also 'attaches' allocations to particular classes of recipients. Difficulties arise in the case of retained profits.[6]

The model upon which the VAS is based treats value added as created by the production sector and allocated amongst the consumption sector. Since the company itself is in the production sector, can it 'receive' some of its own value added?

The law and classical business finance regard retained profits as 'belonging' to shareholders, whereas The Corporate Report does not attach them to 'providers of capital' but, by implication, to the company itself, to be used 'to provide for maintenance and expansion of assets'.

3. SUMMARY AND CONCLUSIONS

This paper is an attempt to highlight the Value Added Statement. In my opinion, such a topic is more or less forgotten especially by accountants despite the usefulness of the VAS as an accounting tool in both social and financial reporting.

In section 1, the following topics have been addressed.

a) What is Value Added?

b) Value Added or Added Value?

c) Why produce a Value Added Statement?

d) The rationale for Value Added Statement;

1) The Economist's Model

2) The Corporate Report

Section 2, highlighted some major conceptual issues that arise on the preparation of the VAS.

Among such important issues are:

a) The point and timing of recognition of value added:

1) Factor income model

2) Sectoral income model

b) Value added on production or sale?

c) Gross or net value added (the treatment of depreciation)

d) Non-operating items: are they value added?

e) Value added and the government sector

f) Attachment of flows: retained profits and to whom must they be attached?

As a matter of fact, both the economist's model and the Corporate Report have either ignored or dealt, in a very primitive and simple way, with the above mentioned conceptual problems arising in the preparation of the VAS.

Therefore, the major theme of this paper has been to highlight the aforementioned accounting issues that must be overcome before the preparation of the VAS. By doing so, the VAS can be regarded as a useful accounting tool in both social and financial reporting, especially when calculating the value added at the national level. Otherwise, it will not be more than a cosmetic rearrangement of the profit and loss account.

NOTES

[1] You can verify that by looking at the titles of articles in this research.

[2] Value Added is seen as superior to sales as a measure of output since sales revenue includes the value of work done outside the firm, whereas Value Added excludes it. See for example, Gray and Maunders, pp. 13.

[3] It is noteworthy to mention that the Egyptian Unified Accounting System applied to public sector companies has adopted the factor income model when calculating the Value Added.

[4] In this regard, review the major survey conducted by 'Gray on a sample of 620 companies': Gray S., pp. 39-63.

[5] It is noteworthy to :nention that the Egyptian Unified Accounting System calculates the Value Added on a production basis.

[6] And possibly in the case of taxation.

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