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REPORTING CASH FLOWS AND NET REALIZABLE VALUES*

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Introduction

The outstanding feature of corporate reporting in recent times has been the attempt by the major professional accountancy bodies to improve the relevance and quality of published reports by accounting for the various effects of inflation. This has taken place in most countries within the context of persistent price changes, and has revealed remarkably similar approaches to the problem all recent suggestions of the professional accountancy bodies being rooted firmly in the use of entry prices[1] as an extension of the existing historic cost system.[2] In other words, inflation accounting has been the most significant reporting development of recent times, and has usually been conceived as an extension of a long-standing system - i.e. based on historic costs which have been adapted to current costs, and retaining the familiar accounting process of allocation in the measurement of such past data.[3]

The above brief commentary is intended only as a background to this paper, and no doubt it has and will continue to be commented on at length by the proponents and critics of inflation accounting.[4] However, what is intriguing and worthy of more comment is the existence during the same period of time of sustained arguments by a very few accountants for two systems of financial reporting which do not depend upon the familiar basis of allocated historic costs, being advocated as either alternatives or additions rather than extensions to it. These systems are usually described as cash flow accounting (CFA) and net realizable value accounting (NRVA). Their presence as serious contenders for improving the relevance and quality of financial reporting is made even more significant in the sense that, despite a lack of wide-spread explicit support from professional accountants, there appear to have been no major arguments constructed against them which could cast doubt on their

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[1] For example, historic costs are entry prices, and alternative suggestions of an entry nature include current purchasing power accounting (historic costs in current purchasing power terms) see "Accounting for Changes in the Purchasing Power of Money", *Provisional Statement of Standard Accounting Practice 7*, 1974; and current cost accounting (usually based on current replacement costs) - see "Current Cost Accounting", *Exposure Draft 24*, 1979.

[2] Current cost accounting is a good example of this with its adjustments of historic cost income for the current cost of monetary working capital see *Exposure Draft 24, op cit.*

[3] The term "allocation" is used consistently throughout this paper to mean the familiar accounting process of attributing financial data to particular accounting events, entities and periods. It does not cover the manipulation of accounting reports by management by means of altering the timing of transactions (a matter which is exceedingly difficult to detect and verify).

[4] There have also been suggestions for additional financial statements to supplement the existing system of corporate financial reporting, but this paper is largely concerned with the major and primary aspects of such a system. For examples of these additional statements, see Accounting Standards Committee, *The Corporate Report*, 1975, pp. 47-60.

validity and feasibility.[5] By way of contrast, the various recent suggestions for allocation-based entry price systems have attracted a considerable amount of adverse criticism and, on occasion, such criticism has caused rejection and withdrawal of the proposal concerned.[6]

The suggestions for CFA and NRVA typically have been made separately by their advocates, who have usually related them to specific report user needs and/or the faults of other reporting systems.[7] Rarely has any attempt been made to link the arguments for each system in such a way as to produce a convincing case for an overall system of financial reporting which contains, inter alia, both statements of cash flows and net realizable values.[8] The purpose of this paper is therefore to attempt to demonstrate that CFA and NRVA are compatible, and can be connected in a unified system of financial reporting which has considerable advantages for its potential users - i.e. a cash-orientated, allocation-free system capable of describing both the operational activity and financial position of the reporting enterprise.

Defining CFA and NRVA

Before proceeding to the argument for combining CFA and NRVA, it would appear sensible to outline briefly the aims and structure of each system. This provides a necessary background to an understanding of later sections of the paper.

CFA is a system of reporting on the past and future activity of a business enterprise in pure cash terms - i.e. only accounting for transactions for which there has or is expected to be a cash inflow or outflow. All reported transactions therefore reconcile to a periodic change in cash resources (these including bank balances and deposits). Thus, CFA avoids arbitrary allocations of accounting data, as well as accounting accruals due to credit transactions.

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[5] The reader is invited to seek in the literature for substantial arguments against CFA and NRVA. Indeed, Chambers has pointed out the lack of such arguments in relation to NRVA (see R. J. Chambers, "Second Thoughts on Continuously Contemporary Accounting", *Abacus*, September 1970, pp. 39-55), and there appears to be a reluctance to accept CFA and NRVA despite their admitted good points (see "Inflation Accounting", *Report of the Inflation Accounting Committee*, HMSO, 1975, pp. 156-8, for evidence of this in relation to CFA, and E. O. Edwards and P. W. Bell, *The Theory and Measurement of Business Income*, University of California Press, 1961, pp. 70-109, in relation to NRVA).

[6] For example, the rejection of current purchasing power accounting (as in the setting aside of *Provisional Statement 7, op cit*), and of two versions of current cost accounting (as in Accounting Standards Committee, „Current Cost Accounting", *Exposure Draft 18*, 1976 and Accounting Standards Committee, *Inflation Accounting - an Interim Recommendation*, 1977).

[7] See, for example, in relation to CFA, G. H. Lawson, "Cash flow Accounting", *The Accountant*, 28.10.71, pp. 586 9 and T. A. Lee, "A Case for Cash Flow Reporting", *Journal of Business Finance*, Summer 1972, pp. 27-36, and in relation to NRVA, R. J. Chambers, *Accounting, Evaluation and Economic Behaviour*, Prentice Hall, 1966, esp. pp. 78-102 and R. R. Sterling, *Theory of the Measurement of Enterprise Income*, University of Kansas Press, 1970, esp. pp. 319-31.

[8] Only in a casual way has it been attempted before see H. C. Edey, "Accounting Principles and Business Reality", *Accountancy*, December 1963, p. 1087; T. A. Climo, "Cash Flow Statement for Investors", *Journal of Business Finance and Accounting*, Autumn 1976, pp. 11 and 13; T. A. Lee, "The Cash Flow Accounting Alternative for Corporate Financial Reporting", in C. Van Dam (ed.), *Trends in Managerial and Financial Accounting*, Martinus Nijhoff, 1978, p. 84; and "The Simplicity and Complexity of Accounting", in R. R. Sterling and A. Thomas (eds.), *Accounting for a Simplified Firm*, Scholars Book Co., 1979, pp. 47-50.

Equally, the idea of continuing CFA and NRVA ought not to be confused with the suggestion by Ronen and Sorter of combining a market rate-determined economic value of the reporting entity with the exit values of its conventionally classified assets and liabilities - see J. Ronen and G. H. Sorter, "Relevant Accounting", *Journal of Business*, April 1972, pp. 258-82; see also J. Ronen, "Discounted Cash Flow Accounting", in J. J. Cramer, Jr. and G. H. Sorter (eds.), *Objectives of Financial Statements*, American Institute of Certified Public Accountants, 1974, pp. 143-60. The Ronen and Sorter proposal was intended to provide investors with (a) means of comparing market values with economic values of the reporting entity and its equity; (b) managerial by forecasted cash flows (but only in the form of reporting one discounted measure of value); and (c) measurement of the conversion of entity asset economic values into exit values, and vice versa. Nowhere in their system was there a recommendation to specifically disclose past or forecast CFA data.

The fundamental importance of cash management is consequently emphasised and, in particular, the reader of CFA statements is made aware not only of the uses to which cash has been put but also of the internal and external sources from which it has been obtained.

As mentioned above, CFA can be envisaged in both ex ante and ex post forms, and in each there should be adequate disclosure to support and sustain the outline cash data contained in the published statements. The aim of these statements is to provide all identifiable users of financial reports with a suitable explanation of past and future cash management within the enterprise - this aspect of its activity being vital to its long-term survival, and to the protection and development of the various interests in it of these user groups. In this sense, apart from the potential for management to manipulate the timing of cash inflows and outflows in the short-term in order to distort the reported data, CFA can be regarded as a reasonably objective, verifiable, and neutral[9] reporting system. It can also be seen to be relevant to the needs of all those persons interested in the adequacy of the financial management of the reporting enterprise.

By way of contrast, NRVA is a system of reporting which concentrates on both cash and non-cash resources of the business enterprise. Using sale values which assume an orderly rather than a forced liquidation of assets, its financial position is accounted for as an aggregation of the potential money it has at its command in order to pay its way, and to develop and change over time - sale values representing potential cash available for these purposes should management believe this to be necessary. Thus, NRVA reflects the ability of the enterprise to survive in the long-term - survival being dependent on the existence of money with which to acquire resources and pay obligations.

NRVA also demonstrates the ability of the entity to adapt from its existing activities to other activities (either on a small or large scale). Net realizable values are, in the sense used throughout this paper, expressions of opportunity cost - the sacrifice the enterprise is making by holding its resources in their existing form rather than in some alternative one. Sale values are therefore either the first stage in the possible conversion of resources from one form into another or the means of paying obligations. The "surplus" figure which can be derived from comparisons of net realizable value-based financial positions describes the increase (or decrease) in the enterprise's command over money. These data provide report users of various types with essential information about its financial position, and of periodic changes in that position - particularly its capacity to grow and to change, and to survive by being able to pay its obligations at due dates.

Points of similarity

The separate arguments for cash flows and net realizable values in accounting have been made extensively elsewhere.[10] It is therefore not intended to repeat

[9] The term "neutral" is intended to indicate that no specific user has been contemplated in the measurement and disclosure of accounting data.

[10] See, for example, references in footnote 7.

them in this paper, except to the extent that they represent points of similarity for consideration in the case for linking the two systems. These points are given below, not so much as specific arguments for combining the systems, but more as reminders that they may be parts of the same reporting system.

1. CFA and NRVA are both allocation-free systems; neither containing subjective allocations of data by their producers. Both systems are therefore based on data which are free of the influence of accounting manipulations by managements which regard them as such a necessary part of traditional systems of accounting. This lack of accounting "interference" would appear to improve their potential objectivity, verifiability, and credibility, thereby presumably adding to its quality so far as financial report users are concerned. For example, the latter can be left in no doubt about the quality of financial reports containing only data which have arisen from either enterprise or market activity; which have not been subjected to arbitrary allocations by management and accountants; and which have been adequately evidenced by an independent auditor. Problems of flexibility in accounting measurement practice, and the attendant need for relevant standardization of such practice, are therefore not to be seen in either CFA or NRVA.[11] The problems of auditing in an environment of such flexibility are also avoided by these systems. This is not to say, however, that the use of net realizable values in NRVA will not involve problems of subjectivity (due to value estimating) for accountants and auditors alike.
2. CFA and NRVA each emphasise the condition of survival required of an enterprise. It is vital that those persons interested in it are provided with relevant information as to how its management has ensured its survival in the past, and how it plans to cope in the future. This will in part determine the "life-time" and extent of their various interests in it. CFA, for example, emphasises survival in terms of the availability of cash to pay for purchases, wages, overheads, taxation, interest, dividends, investment, and so on. The quality of cash management will determine the success of the enterprise at paying its way, and all interested user groups are represented in the above list of cash outflows.

   NRVA, too, describes the survival attribute in business - the sale values of the enterprise's assets reflecting the "cover" available for its commitments, as well as the base from which growth, development and change occur in its activities. Although an admittedly incomplete description of the resources of the entity, the realizable value aggregate for its assets is both the "security" for owners, lenders and suppliers, and the "platform" for future enterprise activity. Any increase in such a position (as measured in terms of a periodic surplus) is a description of an improvement in both the "security" and the "platform". Survival prospects are thus enhanced.
3. Both CFA and NRVA are systems of reporting which are concerned primarily with the reporting *of* enterprise activity and market effects related to it, rather than *for* the specific needs of particular user groups.

[11] The term "flexibility" is used throughout this paper to indicate the condition of accounting variability which results from the arbitrary allocations of data defined in footnote 3 above.

Both sets of data can be said to conform more with the "entity" view of reporting than with any of its socalled "equity" variants.[12] They therefore appear to have the considerable reporting attribute of neutrality - no particular user group or set of user decisions being contemplated in the preparation of the information concerned.

CFA, for example, describes the various cash inflows and outflows arising from the operations and other activities of the reporting enterprise. It is a system which attempts to describe such activity in factual terms which do not require to be fashioned to meet the information needs of a specific user group.[13] In particular, because it does not directly involve income and capital measurement concepts and procedures (which inevitably are orientated toward categories of specific ownership and related interests), CFA retains a user neutrality and, indeed, may be described reasonably as a "general purpose" reporting system capable of satisfying several user group needs. As previously indicated, its main aim is to describe, in summary form, the cash management of the enterprise which should be a matter of direct concern to all interested groups.

NRVA also has this "entity" characteristic - it is a system which is intended to describe the reporting enterprise's command over money which reflects its ability to fulfil its obligations, and its capacity to adapt its existing activities to alternative operations should this be required (either wholly or partly). Net realizable value balance sheets describe enterprise resources in monetary terms which inform all users of its ability to pay its way, and to evolve from one form to another, and the related periodic "surplus" measurement describe improvements or deterioration in this. All businesses have to meet their various obligations at due dates, and all businesses replace and augment their existing resources. Sale values represent the intermediate resource form (cash) which is required by the enterprise to complete these functions.

4. One of the most vital aspects of corporate activity is the reliance of the enterprise on cash resources for its survival - without cash no enterprise can survive in the long-term; no matter how good its products, and no matter how effective its management.[14] CFA and NRVA are systems of accounting which emphasise the importance of cash and cash flow to the enterprise. CFA obviously does this as it describes in detail the cash flow in and out of the enterprise over defined periods. NRVA, on the other hand, ought to be regarded also as a system which highlights the importance of cash - in this case describing the activity and financial position of the reporting enterprise in what is often termed "current cash equivalents".[15] In other words, cash can be regarded in NRVA as the

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[12] The importance of the entity concept has long been ignored in the practice of financial reporting, as evidenced in T. A. Lee, "The Accounting Entity Concept, Accounting Standards, and Inflation Accounting", *Accounting and Business Research*, Spring 1980, pp. 1-11.

[13] A recent example of such bias in practice is seen in the latest version of current cost accounting in the UK (*Exposure Draft 24, op cit*), and a recent paper has directed accountants' attention to the bias of reporting on distributable income and the dividend decision (see D. A. Eggington, "Distributable Profit and the Persuit of Prudence", *Accounting and Business Research*, forthcoming).

[14] Cash in this sense includes cash equivalents (for example, bank transactions). It is used in this paper to denote a vital means of exchange for business enterprises, as well as its role as a unit of accounting measurement. For example, an examination of corporate failures inevitably leads to the lack of adequate cash resources and cash flow as a major contribution to such failure.

[15] A term coined by Chambers see, Chambers (*Accounting, Evaluation and Economic Behaviour*), *op cit*, p. 92.

intermediary between existing and alternative resource forms, and net realizable values are intended to reflect the potential of the enterprise to translate its existing resources into cash available to acquire alternative or replacement resources, or to pay obligations and make distributions.

5. One of the most often-quoted arguments made for NRVA is its lack of attention to the continuity assumption used in traditional allocation-based accounting practice - i.e. the general proposition which assumes for accounting purposes that the reporting enterprise will continue in business indefinitely. Continuity is therefore used in traditional practice to at least partly justify accounting allocations (for example, in the carrying forward of fixed asset and inventory costs). NRVA, however, challenges the absolute validity of such an assumption given that enterprises tend to change over time, either taking on other forms or disappearing altogether. Thus, because NRVA does not presume any specific action on the part of the enterprise and its management with regard to the nature of its business activity and resource form, it can be said to contravene the continuity assumption. However, this is too narrow an outlook on continuity - sale values are reported in NRVA systems to indicate their availability for a variety of investment, financing and distribution functions in the future. NRVA does not therefore assume liquidation of the enterprise. In fact, the opposite is the case - continuity of the entity is assumed but not the continuity of its existing business activity and resource form. The latter can be changed in the future, and the sale values reported are intended to reflect this without prejudging the issue.

   CFA also appears to challenge the idea of continuity because of its use of cash flows without any process of accounting allocation - i.e. treating payments as committed costs, and receipts as recoveries of these costs. However, as with NRVA, CFA treats the future with a neutral approach, preferring to describe the past in purely factual terms, and to leave the future as a matter of subjective judgment (in the form of reported forecasts). CFA and NRVA therefore do not depend on the debatable assumption of an indefinite life for the reporting enterprise in order to determine the method of accounting. Instead, the method of accounting in each case reflects an expectation of a future for the entity, but not necessarily for existing resources and activities.

6. Corporate financial reporting has two main objectives - the provision of relevant information for a variety of decision functions of external interests, and as an exercise in accountability to the owners (and, possibly, also lenders, creditors and employees) of the enterprise.[16] It can be argued that CFA and NRVA both provide data for these purposes. The systems of CFA which have been advocated over the years have all included not only past data but also forecasts, thus aiding both the decision and accountability functions - i.e. forecasts (together with trends established from past data series) aiding decisions, and comparisons of forecast and actual data providing the basis for an accountability exercise whereby

[16] Explicitly recognised in *The Corporate Report, op cit.*, and in Accounting Objectives Study Group, *Objectives of Financial Statements*, American Institute of Certified Public Accountants, 1973. This assumes accountability to be a function sufficiently important to be separated from the various other decision-orientated functions.

previously stated expectations can be used to evaluate results achieved. In addition, due to the lack of accounting allocation, past cash flows can be argued for as the most objective information base for formulating investment and other decisions, and for accountability purposes when comparing relevant forecast and actual data.

NRVA is equally a system which attempts to satisfy decision making and accountability functions. It provides data representing descriptions of the assets which are available for use and sale by the enterprise at particular points of time, as well as descriptions of the financial consequences during defined periods of such use and sale. The end-of-period position highlights the financial platform from which the enterprise can move forward into the next period in terms of its command over money, thus reflecting its potential to adapt in the future and to meet its financial obligations.

7. Following on from the previous point, one of the main features of financial information usage is the idea of data comparability - i.e. the user of information ought to be able to compare data when assessing it; between different enterprises and between different periods. For example, when company A is compared with company B; period 1 is compared with period 2; and forecast results are compared with actual results. Such comparisons demand that the data be in measurement terms which have legitimate comparability. This is reasonably the case with CFA and NRVA for both are in cash or cash equivalent terms which, when aggregated and matched, provide meaningful totals and meaningful movements in these totals.[17] Both are devoid of accounting rules which, despite standards prescribed by professional accountancy bodies, give room for potential variability of results due to different measurement procedures and, thus, for lack of comparability. Also it should be noted that, in the case of CFA, comparability of the data is achieved without the distortion of accounting adjustments when actual results are reviewed with previously forecast results.[18]
8. A major problem in financial reporting concerns the communication of accounting data. The ability of the report user to comprehend properly the meaning of accounting messages is very much in doubt because of their complexity - the complexity of the allocation procedures, together with the technical language used in financial reports, causing non-accounting users severe difficulty in terms of comprehension.[19] CFA and NRVA obviously contain as yet unresolved terminology problems but, because they avoid data allocations, could be better understood by their users (i.e. compared with their understanding of allocated data). They are also based on measurement systems which, intuitively, users of financial reports may be

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17 The importance of aggregation in accounting generally, and of additivity of data, particularly, has been well argued by Chambers - for example, Chambers (*Accounting, Evaluation and Economic Behaviour*), *op cit.*, pp. 93-4. The absolute additivity of even CFA and NRVA data must always be doubtful - particularly as it relates to data of *periods* as distinct from *periodic* data (the latter are additive; the former are not unless some further adjustment of the measurement unit is made to ensure additivity).

18 This is not intended to convey the impression that forecasting, and the subsequent comparison of forecast and actual results, are unique to CFA. Merely to suggest that such forecasts and comparisons are made easier by the lack of possible distortion and variance due to accounting allocations.

19 For evidence of this, see T. A. Lee and D. P. Tweedie, „Accounting Information: An Investigation of Shareholder Understanding", *Accounting and Business Research*, Winter 1975, pp. 3-17 and *The Private Shareholder and the Corporate Report*, Institute of Chartered Accountants in England and Wales, 1977.

expecting when they receive allocation-based statements.[20] Thus, report users may not be misled in their use of such CFA and NRVA data - they could be receiving what they expect to receive; but this requires empirical testing to be anything other than a subjective comment.

9. CFA and NRVA are systems of financial reporting which have considerable individual merit from the point of view of providing useful information regarding the financial management of the reporting entity for a variety of report users. In particular, they emphasise the ability of the enterprise to survive and adapt. In addition, the following points of similarity in the systems have been identified: both systems are allocation-free; reflect the activity of the reporting enterprise without reference to the specific needs of individual user groups; describe and highlight the key factor of cash in business activity; assume enterprise continuity but do not assume activity continuity; relate to both user decision and accountability objectives in reporting; provide reasonably comparable data; and appear to improve user comprehension. Thus, although they can be argued for as separate reporting systems, CFA and NRVA seem to be mutually reinforcing because they both reflect the importance in business of cash resources and cash management in reasonably straightforward and comprehensive terms. There therefore appear to be sufficient common features in these systems to warrant consideration of the deliberate linking of cash flows and realizable values within a complete reporting structure.[21]

Combining cash flows and net realizable values

The combining of CFA and NRVA in a unified system of corporate financial reporting can be described in a diagramatic form as follows. This hopefully aids the reader's comprehension of the main features of such a system. Its main aims and advantages will be discussed following this initial introduction. The undernoted comments are intended only as preliminary descriptions of the system.

CFA proposals normally include the publication of historic and forecast cash flows, and this has been accommodated in the above scheme - forecasts are prepared on a cash basis, thus attempting to aid user decisions regarding the future cash flow of the enterprise (step 1); these forecasts reflect managerial intentions and expectations which, given time, hopefully should be translated into the cash flow data contained in statements of historic cash flows of use for stewardship purposes (step 2); relevant forecast and historic cash flows can be compared providing, together with explanations of the resultant variances, a description and basis for evaluation of the cash management of the enterprise (step 3); the historic cash flows can be linked with measures of unrealized cash flows represented by periodic changes in (a) the net realizable values of the underlying assets and (b) liabilities, to produce a measure of total

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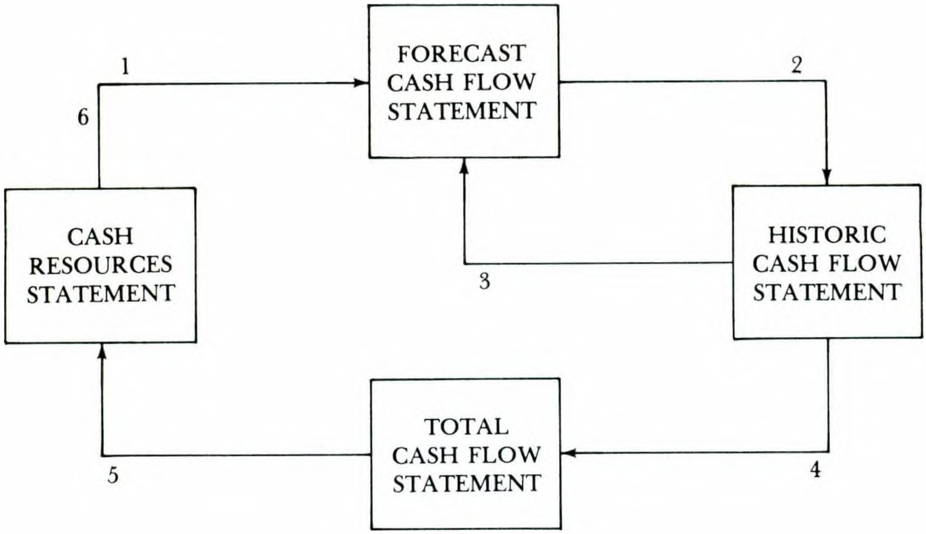
20 See D. P. Tweedie, "Cash Flows and Realizable Values: The Intuitive Accounting Concepts? An Empirical Test", *Accounting and Business Research*, Winter 1977, pp. 2 13.

21 This is not to say that CFA and NRVA financial statements would be the only statements to include in a financial report. The cases for inclusion of further statements must, however, be made elsewhere.



cash flow representing measurable actual and potential cash flows of the enterprise (step 4); the measurement of total cash flows results in an end-of-period cash resources statement which attempts to describe the enterprise's total command over money available for a variety of as yet unspecified purposes (step 5); and, finally, the latter statement can be used as a basis for producing the next forecast for decision making purposes - i.e. the specification of future cash uses (step 6).

The essential feature of the above system is the way in which realized cash flows can be linked to unrealized changes in net values of non-cash resources in order to produce a measure of total cash flow which represents the total money available for future investment and distribution.[22] The exact formulation can be described as follows:

$$\triangle C + \triangle N = \triangle 0$$

Where $\triangle$ C represents the net realized change in the total cash resources of the reporting enterprise for a defined period - i.e. sales revenue received minus total operational payments, minus total payments for new and replacement investment, minus interest, taxation, and dividend payments, plus or minus cash transactions relating to long-term financing (such as loans and share capital).[23]

$\triangle$ N is the total unrealized net cash flow representing the periodic change in the net realizable value of the non-cash assets of the reporting enterprise (including those assets which are readily realizable and those which are not so readily realizable).

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22 It must be emphasised that due to the omission of important assets (such as goodwill), and the incompleteness of valuing non vendible assets, this total sum is itself incomplete.

23 A great deal of work, as mentioned later in this paper, will require to be done in order to establish the most reasonable and acceptable sequence of ordering this data.

$\Delta 0$ is the total change in the various obligations (or liabilities) of the reporting enterprise (including its short, medium and long term debts, and its owner's capital measured in net realizable value terms).

This aggregation of realized cash flows and potential cash flows from the use and holding of assets provides the report user with a total cash flow figure which is equivalent to the total taxed and undistributed, actual and potential, cash funds in the enterprise. This expression of its total measured command over money reveals a potential basis for repaying its financial obligations, maintaining and changing its operations and activities, and for making distributions.

Thus, using assumed figures, the overall reporting system described above could be summarised as below:

Opening Cash Resources Statement		*Total Cash Flow Statement*		*Closing Cash Resources Statement*	
	£		£		£
Realized cash	5	Realized cash flow	39	Realized cash	44
Readily realizable assets	43	Increase in potential cash flow	17	Readily realizable assets	60
Not readily realizable assets	18	Increase in potential cash flow	12	Not readily realizable assets	30
	66		68		134
Short-term obligations	27	Additional credit received	23	Short-term obligations	50
Long-term obligations	10	Additional borrowings received	8	Long-term obligations	18
Indefinite obligations	29	Additional funds accruing	37	Indefinite obligations	66
	66		68		134

The above outline contains several relatively unique features which ought to be described at this stage before proceeding further:

1. The opening and closing position statements are described as cash resources statements rather than as conventional balance sheets. They treat all measurable assets of the enterprise as cash or potential cash - through the use of net realizable values. Thus, its command over money is emphasised by measuring its assets in current cash equivalent terms.
2. The assets are ordered for purposes of the position statements in order of realizability - from the already realized to the least realizable. This provides the user with some idea of the degree of certainty associated with the

enterprise's command over money (such command being more absolute with certain assets than with others). It also means a rethinking of asset classification from either the traditional fixed and current or monetary and non-monetary categories. Indeed, a further non-realizable category could be added for non-vendible durables.

3. The liabilities of the enterprise (including its ownership interests) are also ordered - in this case in terms of order of potential repayment (from the most to the least immediate obligation). Again, this will require some further thinking as to classification, but should provide report users with some impression of the timing of repayments of obligations for which cash resources will be required (and are available as described in the earlier part of the cash resources statement).
4. The total cash flow statement reflects all actual and potential cash flow changes affecting the measured assets and obligations of the enterprise over a defined period - i.e. the total increase or decrease in its command over money. The separate parts of this total cash flow are attributable to the various actual and potential cash and cash equivalent resources and obligations in the cash resources statement. Thus, the entire emphasis in all statements in the system is on cash flow and cash resources (actual and potential). The system is essentially one concerned with the cash management function within the enterprise.
5. The cash-orientated system described in outline above describes the activities of the reporting enterprise in as neutral a fashion as possible. It does not attempt to identify particular report users and, for this reason, is hopefully a genuinely multi-purpose reporting system.

Outline financial statements

The above outline is obviously insufficient for reporting purposes. It requires to be expanded and presented in such a way as to be comprehensible and meaningful to its readers. Thus, as a first step in this difficult process, the undernoted statements have been prepared. They are given in outline only, and contain many matters of terminology and presentation sequence which would require to be resolved before such statements become part of a formal system of reporting by the enterprise to its various external interests.[24] In addition, the following statements at this stage concern only the reporting of the events and activities of the enterprise during the immediate past period. The statements concerned are a summary statement of realized cash flow; a total statement of cash flow (realized and potential); and a statement of cash resources (again, realized and potential).

[24] See the conclusions to this paper.

CF LTD.

SUMMARY STATEMENT OF CASH FLOWS

Period t_1 - t_2

	£
Cash receipts from customers	187
Less: cash payments for materials, wages and overheads	124
CASH OPERATING MARGIN	63
Less: loan interest paid	2
PRE TAX CASH FLOW	61
Less: taxation paid	13
DISTRIBUTABLE CASH FLOW	48
Less: dividends paid	10
OPERATING CASH FLOW AVAILABLE FOR INVESTMENT	38
Add: long term loans received	8
TOTAL CASH FLOW AVAILABLE FOR INVESTMENT	46
Less: cash payments for new buildings	7
TOTAL INCREASE IN CASH RESOURCES	39

The above statement provides its reader with a portrayal of the actual cash inflow and outflow for the defined period. The next statement looks beyond the point of realization, and describes increases in potential cash flows which are being held by the enterprise in various non-cash forms but which, with varying degrees of certainty, could be converted into cash.

CF LTD.

SUMMARY STATEMENT OF TOTAL INCREMENTAL CASH FLOWS

Period t_1 - t_2

	£	£
REALIZED CASH FLOW INCREMENTS		
Net realized cash flow for the period		39
READILY REALIZABLE CASH FLOW INCREMENTS		
Potentially realizable cash flows represented by an increase (decrease) in the net realizable values of:		
Amounts due by customers	7	
Stocks of finished goods	8	
Motor vehicles	(6)	
Land and buildings	8	17
		56
NOT READILY REALIZABLE CASH FLOW INCREMENTS		
Not readily realizable cash flows represented by an increase (decrease) in the net realizable values of:		
Work in progress	15	
Plant and machinery	(3)	12
Total Potential Increase in Cash Resources		68
INCREMENTAL CHANGE IN SHORT-TERM OBLIGATIONS		
Potential cash outflows in the near future because of increases in:		
Amounts due to suppliers	9	
Taxation due to Inland Revenue	12	
Distributions due to owners	2	23
INCREMENTAL CHANGE IN LONG-TERM OBLIGATIONS		
Potential cash outflows in the long term because of increases in:		
Borrowings from merchant bank		8
INCREMENTAL CHANGE IN INDEFINITE OBLIGATIONS		
Indeterminate future cash outflows because of increases in:		
Funds pertaining to owners		37
Total Potential Increase in Obligations		68

If reported, the above data would provide an explanation of the total increase in the enterprise's command over money during the period. It is a general statement of the cash management exercised within the enterprise, resulting in a realization of cash flow and an increase in potential cash flow. In particular, it reveals the incremental changes in cash and cash equivalent resources available to cover the incremental changes in financial obligations - in the case of resources, highlighting the range of potential realizability; and in the case of obligations, highlighting the range of possible repayment timing.

The final statement supporting these descriptions of cash flow is the end-of-period cash resources statement. Together with corresponding figures relating to the beginning of the period, it contains descriptions of the total resources of the enterprise in cash equivalent terms. As such, it provides a total reporting of the actual and potential cash resources available to cover the enterprise's total financial obligations. Thus, it not only describes the assets and liabilities of the enterprise in current value terms which are understandable and not subject to the arbitrariness of data allocations; it also reveals (in an admittedly limited way) the financial resources available to management to meet existing financial obligations and future commitments.

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STATEMENT OF TOTAL CASH AND EQUIVALENT RESOURCES

as at t_1 and t_2

RESOURCES

	t_1 £	t_2 £
REALIZED CASH RESOURCES		
Bank, cash and deposit balances	5	44
READILY REALIZABLE NON-CASH RESOURCES		
Amounts due by customers	11	18
Stocks of finished goods	10	18
Motor vehicles	10	4
Land and buildings	12	20
	43	60
NOT READILY REALIZABLE NON CASH RESOURCES		
Work in progress	9	24
Plant and Machinery	9	6
	18	30
	66	134

m a b blz. 95

OBLIGATIONS

SHORT-TERM OBLIGATIONS		
Amounts due to suppliers	9	18
Taxation due to Inland Revenue	8	20
Distributions due to owners	10	12
	27	50
LONG-TERM OBLIGATIONS		
Borrowings from merchant bank	10	18
INDEFINITE OBLIGATIONS		
Funds pertaining to owners	29	66
	66	134

The above outline statements contain the following advantageous features which appear to strengthen the case for reporting in such a way:

1. The cash flow statements clearly separate the objectively measured realized cash flow data from the far more subjective potential data described in large part by the unrealized value changes in the enterprise's assets. This is not entirely a new suggestion,[25] and the idea of distinguishing factual from judgmental data in accounting statements should be capable of aiding their users in assessing the varying degrees of credibility inherent in such information. In addition, the "ranking" of actual and potential cash flows in order of realizability provides users with indications of what cash is or will be available for future activities of the enterprise.
2. Although it can be argued that there is no need to ensure the articulation of the "surplus" and "position" statements,[26] the above scheme of reporting ensures a proper reconciliation of cash flows with cash resource changes. It is thus intended as a complete cash system with all reported data being capable of being matched, compared and justified. In this way, the cash-based statements are available for an assessment of the extent and quality of the reporting enterprise's cash management. If the managing of cash flow is regarded as a vital ingredient in the survival of the enterprise in both the short-term and long-term, it appears to be sensible to report on such matters.

   Therefore, it could be anticipated that these statements would be useful primarily for (a) bankers, lenders and suppliers concerned with evaluating the liquidity of the enterprise in connection with the amount and risk

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[25] For example, see R. A. Rayman, "Is Conventional Accounting Obsolete?", *Accountancy*, June 1970, pp. 422-9.

[26] An interesting argument for this has been made by G. Macdonald in relation to income and capital - see "Deprival Value: Its Use and Abuse', *Accounting and Business Research*, Autumn 1974, pp. 263-9.

associated with their existing and potential cash claims on it; (b) investors anxious to predict the amount and risk associated with the future cash distributions by the enterprise which are such a vital ingredient in their investment decisions; (c) employees desiring to assess the financial position of the enterprise in connection with future job and pay prospects; and (d) government monitoring the effects of its taxation policies and procedures on the cash flow of business enterprises. In addition, it does not appear unreasonable to presume that enterprise management may find such statements useful when involved in the process of managing cash flow and resources - for example, when determining distribution levels, and when deciding on borrowing requirements.

3. The accounting practices used in the above statements are simple and straightforward - no complex data allocation procedures have been undertaken, and no extensive explanation of such procedures are necessary to the report user.[27]

There are, however, several problems which have yet to be discussed and resolved. For example, the ordering of the presentation of the realized cash flow data can produce differing interpretations of particular cash uses (should new investment expenditure be deducted from the operating margin before the deduction of tax and dividends; and where should loan and share capital changes be introduced?). Also there is the question of how much explanation and disclosure to provide in support of each of the figures contained in the above statements (for example, in relation to cash payments for operational activity, new and replacement investment, and so on).

In addition, it would be wrong to believe that cash flow could not involve any allocation procedure. Allocations may be made by management without adequate disclosure (by delaying or accelerating payments), and may also be required (for example, should expenditure on investment be split between replacement and new investment in order to give the report user some idea of growth and development in the enterprise; and, if so, what can be classed as new investment, and what can be classed as replacement expenditure?). Finally, and perhaps surprisingly, the feasibility in practice of using cash flows and net realizable values is not exactly proven. Because reporting enterprises are so dependent on accounting allocations and accruals, it may not be too easy to determine cash inflows and outflows with the amount of detailed analysis required for the above system of financial reporting.[28] Equally, although several studies have examined and established proof of the feasibility of using net realizable values in practice,[29] there are areas where obtaining such valuations would be extremely hazardous and subjective (for example, in the case of not readily realizable assets).

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27 As, for example, required in historic cost accounting in the UK by "Disclosure of Accounting Policies", *Statement of Standard Accounting Practice 2*, 1971.

28 In other words, companies may not be able to adequately label their cash inflows and outflows, as such details are normally related to the original credit transactions in the bookkeeping system.

29 For example, in J. C. McKeown, "An Empirical Test of a Model Proposed by Chambers", *The Accounting Review*, January 1971, pp. 12-29.

Completing the system

One final matter requires to be described in order to complete the linking of CFA and NRVA within one system of financial reporting, and that is the need to disclose forecast data. In this respect, it would appear to be sensible to limit the suggestion to the forecasting of realized cash flows rather than also including predictions of future net realizable values. This is not to say that the latter cannot be contemplated - it is simply an admission that the process of forecasting enterprise activity is subjective enough without extending it into the arguably more subjective area of anticipating market behaviour in the form of sale prices.[30]

Forecasting of cash flows is a large and controversial area,[31] and cannot really be covered properly in this paper - for example, the question of the period of time to which the forecast relates is open to question; should it be for one period or several, and how long should these periods be? For purposes of this paper, the illustration provides for a one period forecast, but this should not be taken as a firm suggestion (much has yet to be considered for any definite proposal to be made). The following illustration uses the assumed figures already described above. It shows the need to disclose, first the previous period's forecast to compare with the actual results of the current period; and, secondly, the forecast for the next period. In addition, variances between actual and previously forecast results could be shown, together with suitable explanations of the differences (distinguishing between operational factors and forecasting errors, and between controllable and uncontrollable factors).[32] An explanation of the assumptions underlying the forecast for the next period would also appear to be worthy of consideration for reporting purposes, although there are considerable problems to be faced in this area regarding the commercial secrecy and such disclosure (yet again, another matter requiring much more thought and space than this paper can allow).

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30 A search of Literature reveals no argument made for forecasting in net realizable value terms. In fact, Chambers is very doutbful about making predictions in financial reporting - see Chambers (*Accounting, Evaluation and Economic Behaviour*), *op cit.*, pp. 83-4.

31 See, for example, S. Dev and M. Webb, "The Accuracy of Company Profit Forecasts", *Journal of Business Finance*, Autumn 1972, pp. 26-39.

32 As in conventional standard costing analyses for internal management accounting purposes.

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SUMMARY STATEMENT CONTAINING FORECAST AND ACTUAL REALISED CASH FLOWS

	Forecast $t_1 - t_2$	*Actual* $t_1 - t_2$	*Variance* $t_1 - t_2$	*Forecast* $t_2 - t_3$
	£	£	£	£
Cash receipts from customers	173	187	14	195
Less: cash payments for materials, wages and overheads	116	124	8	121
CASH OPERATING MARGIN	57	63	6	74
Less: loan interest paid	2	2	–	2
PRE TAX CASH FLOW	55	61	6	72
Less: taxation paid	9	13	4	20
DISTRIBUTABLE CASH FLOW	46	48	2	52
Less: dividends paid	10	10	–	11
OPERATING CASH FLOW AVAILABLE FOR INVESTMENT	36	38	2	41
Add: long term loans received	8	8	–	–
TOTAL CASH FLOW AVAILABLE INVESTMENT	44	46	2	41
Less: cash payment for new and replacement investment	11	7	(4)	23
TOTAL INCREASE IN CASH RESOURCES	33	39	6	18

The above description cannot do full justice to the presentation and explanation of such information, but it is hoped that it will provide some flavour of the place of forecasts in the suggested reporting system. Suffice to say that it is believed that such predicted data will provide the various user groups mentioned previously with information which ought to further aid their respective decision activities.

Conclusions and unresolved issues

What this paper has attempted to do us to bring its readers' attention to the possibility of linking CFA and NRVA to provide information relating to past and future enterprise cash flows and cash resources. Points of similarity between CFA and NRVA provide the impetus for this suggestion, and outline financial statements have been described as a starting point for any discussion on the merit of these proposals. These statements were supported by brief explanations of their aims and advantages.

What has been described in this paper is only a small step along the road to providing a system containing CFA and NRVA which is acceptable enough in practice. There appear, however, to be considerable arguments for pursuing this theme. In particular, the emphasis on allocation-free cash data in CFA and NRVA for purposes of evaluating cash management ought to provide the basis for this. There are also arguments for separating realized and unrealized cash flows, thereby deriving measures of realized and potential cash resources available to the reporting enterprise and its management. The production of both forecast and actual results on the same basis, together with supporting explanations and disclosures, are a further matter requiring discussion and debate.

Inevitably, the above comments lead to more questions than answers. This is as it should be. Accounting is a process which should be allowed to evolve gradually in response to the needs and requirements of the times. The present times, with their emphasis on business liquidity and cash flow, appear ripe for systems such as CFA and NRVA but these matters should always be of importance. They certainly must be considered more seriously than hitherto. But they also require a consideration of a number of significant issues on which this paper has only managed to touch. For example:

1. The extent of detailed disclosure to back up the aggregate data presented in the CFA and NRVA statements; and the possibility of other statements to include in the overall reporting package.
2. The sequence of presentation of data in the cash flow and resource statements in order to provide the most meaningful and least biased disclosure of such information.
3. The way in which non-cash transactions (such as assets acquired by the issue of shares and loan stock) can be coped with in the suggested system (this is an issue which has not been covered in this paper)[33].
4. The terminology to be adopted in CFA and NRVA statements. Particularly of concern is the way in which the unrealized cash flows might be presented in the total statement.
5. The way in which the suggested CFA and NRVA statements might be tested for use and feasibility.[34]
6. The number of periods to be covered by the disclosed CFA and NRVA data - both actual and forecast - and the extent to which the nature of the reporting enterprise and its normal operating cycle ought to determine this issue.[35]

These issues, of course, only become live ones once the general principle of reporting in CFA and NRVA terms has been accepted by the reader. Hopefully, by this stage in the paper, the latter person has not felt obliged to treat them as unacceptable. If this is the case then the discussion can commence on the various assertions, arguments and proposals contained in this paper.

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33 It has been touched on briefly in Lee (A Case for Cash Flow Reporting), *op cit.*, pp. 31-2.

34 Work on this has already commenced - see T. A. Lee, "A Test of the Use of Cash Flow Reporting", and "A Survey of Accountants' Opinions on Cash Flow Reporting", both discussion papers at the University of Edinburgh, 1979.

35 This is an issue which has rarely, if ever, been discussed by accountants. In fact, company law and accounting regulations imply that a requirement to report at least every twelve months is suitable for all companies - irrespective of the nature of their trade and operations.