THE INTELLIGENT APPLICATION

of

THE PRINCIPLES OF CURRENT PURCHASING POWER

(CPP) ACCOUNTING

by

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There are a number of alternative methods of accounting for inflation. Each method is valid but achieves a materially different answer and the difficulty accountants face is to decide which is the most appropriate. As I see it, each method has a valid but different objective and the final choice depends on which user(s) you are trying to satisfy.

The Sandilands Committee has identified nine types of users and I have broken these into the following four groups:

Group 1 - shareholders
- investment analysts
- stock exchange

Group 2 - creditors

Group 3 - employees
- management

Group 4 - government
- general public
- other companies

Accountants seem to me to fall into two distinct groups.

1. Professional accountants practising as auditors who see their duty as being to prepare accounts in particular for the benefit of shareholders, investment analysts and the stock exchange which they see as having a common interest.

2. Academic and commercial accountants who seek to arrive at a universal solution appropriate for all the users of accounts listed above.

I would include in this latter category the Sandilands Committee, the Australian Accounting Research Foundation and the Mathews Committee which all saw their task as being to select the most universally acceptable form of accounting.

In my view the shareholder has a different philosophy to other possible users because he invests his money with the object of making money and in fact says to the board - "your job is to make money." He does not say, and you may disagree, "here is some money - go make steel or sugar." He leaves the method of money making to the board and as you know they often diversify.

I believe all the research has been done, all the solutions and combinations of solutions have been discussed and we are at the point where the users of accounts must decide what they want and accountants must decide what they think users want and whether they can provide the information in practice.

I will discuss tonight the method I have selected as the most appropriate for shareholders, investment analysts and the stock exchange.

This group, I believe, seek answers to the following questions:

1. Has a company made a profit or loss in real terms?
2. Has the profit or loss been determined after maintaining in general purchasing power terms the level of shareholders funds the company had at the beginning of the year?
3. What is the relationship of real earnings and dividend distributions to real shareholders funds and to the market price of the shares?

Before discussing the alternatives let me comment briefly about inflation - what happens in a period of inflation? Prices rise one by one by varying percentages and they rise at different times and intervals.

Any index of inflation is an average. It is not the experience of any particular individual or business in a particular year but over a period of years would be close to the experience of all individuals and businesses.

The concept of an index of general price movements is now widely accepted in politics, the arbitration courts and the press and I am sure each of you would like the growth of your savings and income at least to keep up with the consumer price index (CPI).

In thinking about the problem of accounting for inflation, I think you will find it helpful if you consider the alternatives under three sets of conditions:

(a) No inflation - absolute stability.
(b) Net nil inflation - where some price rises are offset by corresponding price falls.
(c) General inflation where some prices rise faster than the average and others more slowly than the average.

Let us now examine how far the intelligent application of the CPP principles will get us towards achieving the answers shareholders want.

CPP accounting intelligently applied requires the application of a general index to every item in the accounts and the appraisal and adjustment of the results to increase their usefulness. I will now discuss each major area of the balance sheet in turn.

SHAREHOLDERS FUNDS

The process starts with restatement of the opening shareholders funds into end of year dollars. In other words if a company has opening shareholders funds of $100m, it should have as a minimum $120m of shareholders funds at the end of the year if there has been 20% inflation. To
find out if that company has made a real profit or loss, it is necessary to value net tangible assets by placing appropriate values on each asset and liability item and to compare the total with $120m.

Initially all assets and liabilities are classified either monetary or non-monetary. Monetary items are defined as those assets and liabilities, the dollar amount of which does not change with inflation (eg. - cash, debtors, creditors borrowings, etc.) All other items are non-monetary (eg. - land, depreciable assets, etc.)

**MONETARY ITEMS**

If we return to the company which started with $100m and assume it invested all its funds in monetary items such as loans (similar to a finance company) and the company traded for the year and its interest income equalled its expenses, the balance sheet of the company at the end of the year would then read:

- **Opening shareholders funds restated**: $120m
- **Less Loss on holding monetary items**: $20m
- **Shareholders funds**: $100m

**Represented by:**

- **Monetary items**: $100m

The purpose of this simple illustration is to show that by restating opening shareholders funds and by not being able to correspondingly restate the asset side of the balance sheet because it is simply not worth any more we have reflected the loss which has arisen from having our shareholders funds invested in monetary items.

Tonight you will find there is no argument about the amount at which monetary items are included in the balance sheet but you will find argument as to whether or not this $20m loss on holding monetary items should be recognized. In my view this is where the question of who is the user of the company’s accounts is important. As a shareholder in a company I believe one is vitally concerned to know whether one’s capital has been maintained intact.

To take it a step further, assume our company borrowed an additional $100m and was thus able to have debtors of $200m and again interest received equalled expenses.

Our restated balance sheet would now read:

- **Opening shareholders funds restated**: $120m
- **Less Loss on holding monetary items**: $20m
- **Shareholders funds**: $100m

**Represented by**

- **Loans out**: $200m
- **Less borrowings**: $100m

In this case the loss on monetary items is still $20m because the borrowings directly offset the above amount of debtors. You could equally show a gain of $20m on the borrowings and loss of $40m on the $200m of loans, giving a net $20m loss.

I regard this recognition of loss or gain on monetary items as a vital adjustment to complete the picture. It is absent from the Sandilands report and the CVA exposure draft which I think is absolutely wrong in principle. It is also absent from the Mathews report on taxation for a different and arguable reason.

**LAND**

Let us now turn to the simplest form of non-monetary item which is land. Asssuming our company invested its $100m of opening shareholders funds in a block of land, the balance sheet under CPP at the end of the year would read as follows:

- **Shareholders funds expressed in end of year dollars**: $120m
- **Loss at cost restated into end of year dollars**: $120m

If accountants stop at this point they should expect to be ridiculed. Obviously if that land has a significantly higher or lower market value they must consider whether this fact should or should not be reflected. I believe there are many situations in which the figure of $120m is as good a figure for land as any. For example, if this land is the site on which there is an enormous factory complex it would be foolish to be too concerned about the value of this land from time to time where there is neither intention nor likelihood of the land becoming available for sale inside 20 years. In such cases CPP accounting does not prevent and indeed should encourage disclosure by way of note of the most recent valuation. In those cases where it is clearly inappropriate to leave the land in the accounts at $120m because in the foreseeable future the land will realize significantly more or less than this figure, then in my view it is entirely appropriate to revalue in much the same way as has been done in the past in historical accounts.

Taking the above example a step further, and assuming they borrowed $100m in addition to $100m capital and bought land for $200m (and the rent income equalled the expenses including interest) our restated balance sheet would now read:

- **Opening shareholders funds restated**: $120m
- **Add profit on borrowings**: $20m
- **Shareholders funds**: $140m

**Represented by**

- **Land ($200m + 20%)**: $240m
- **Less borrowings**: $100m

If that land value is appropriate our company is $20m ahead which occurred because the borrowings are repayable in old dollars whereas the asset we invested in has kept pace with inflation.

Obviously this profit is unrealized but nevertheless it is a profit and should be shown as such in my view.

CVA and Sandilands would not recognize this profit on the hedge provided by borrowing.

**DEPRECIABLE ASSETS**

Turning now to depreciable fixed assets, let me just
speak broadly about accounting principles before discussing specifics of CPP. In principle, an enterprise purchases a piece of equipment (normally after a detailed feasibility study) and has in mind the use of this piece of equipment to do a job for a period of years and at a point of time expects to either scrap the equipment and get nothing for it or alternatively to sell it before it is worn out and to receive a reasonable scrap value. Existing accounting principles require the differences between historical cost and ultimate scrap value (known as a depreciable amount) to be spread over the period of years which the equipment is expected to be used. Given no inflation over the period of the asset's life the asset will be shown in the balance sheet each year at a gradually decreasing amount which may or may not coincide with its market value or even its second hand replacement price. In the context of no inflation one could have shown the scrap value as being a tangible asset and the balance of cost as being an intangible asset or deferred cost which will be absorbed over the years in which the machine is used.

Professor Chambers when talking to you later will probably tell you that depreciable assets should be included in the accounts at their market value and the deferred cost or intangible element which we have in the past been happy to include in the balance sheet should be written off. At that point I will disagree with him because I believe there is a valid place on a balance sheet for unexpired costs and if it means we can make progress I would even go so far as to say - why not include them in a separate intangible category in the accounts on the asset's side of the balance sheet? Alternatively they could be deducted from shareholders funds and the subtotal shareholders funds less intangibles would equal net tangible assets.

Continuing this discussion in the context of no inflation one must consider the other major school of thought which would require the cost of the fixed asset to be shown at replacement price and depreciation to be based on that replacement price. In a period of net nil inflation it is possible for some costs to be rising and others to be falling. Assuming plant replacement prices have risen in such a period - should the cost of production today bear a percentage of the cost of the asset actually paid for or should it bear a percentage of the increased cost of the next one? In my view, the extra cost of the replacement relates to the production when and if that extra piece of equipment is purchased - i.e., it is a future cost.

Conversely, if current plant replacement prices are falling in this period of net nil inflation, how do we record a cost saving which we have not yet derived when we have not recovered the cost of the one we bought in the first place?

A great deal of research and effort is being put into the development of increasingly technologically advanced equipment. These research costs would not be spent if it was not considered that more efficient and economical plant will result. In the long term plant capacity must be getting cheaper as time passes. This fact cannot be proved because cost savings will come not only from the depreciable cost but from the future labour and maintenance cost savings associated with production. Indices of plant replacement prices in recent years suggest that plant prices are rising more slowly than the general level of inflation but in my view that is only part of the picture.

By applying a general index to the historical cost and depreciation provision in the CPP accounts what is achieved? The balance sheet will show a restated cost, depreciation provision and a net book value which does not necessarily have any relationship to current market value or replacement price. When it has been written down to that point at which it is expected to be scrapped the net book value should equal the realizable value. In the profit and loss account depreciation will have been charged each year as a percentage of the restated cost of the asset. At the end of the useful life of the asset funds equivalent of the historical cost expressed in current terms should be available so that if replacement is desired at least that amount should be available, which may or may not coincide with the replacement price.

In other words the shareholders funds invested in those assets has been kept intact (provided the company has not been showing losses in real terms).

Simple restatement in this matter will not necessarily give the right result and intelligent adjustment may be necessary. Consider for example an old building which has a book value in the historical accounts which is below market value and provision for depreciation is not considered necessary. Restatement of the book value of this asset in the CPP accounts may result in the building being stated well above market value and it may be necessary to deprecate it over a period of years towards its ultimate expected realizable value.

In the case of depreciable plant, blind application of CPP could achieve a write off to a significantly overstated scrap value and in such cases it may be necessary to depreciate in the CPP accounts at a faster rate than in the historical accounts so that at the point when the asset is disposed of it will be written down to its anticipated scrap value in both types of accounts. This point is illustrated in the diagram as the line C - E.

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AC = \text{Restated historical cost} \\
AB = \text{Historical cost} \\
DE = \text{Historically calculated scrap value} \\
DF = \text{Restated scrap value}
\]

I regard this as a vital point for your consideration (particularly in the case of buildings) because if accountants apply CPP intelligently in this way they achieve a meaningful balance sheet which is in fact (as with historical accounts) a restatement of residual costs expressed in current terms.

I beg all of you when considering these questions to think in terms of the major dollar value depreciable assets to be found at such places as Mt. Isa, Kambalda, Port Kembla and Newcastle and not of desks, cars and hand tools. In the real world of business, market values for the big things have little relevance and replacement costs because of technological change are equally meaningless unless looked at in the full picture with associated labour and maintenance costs.

INVENTORY

Inventory is a most complex subject to discuss in a short paper such as this. In principle, there are three ways to deal with inventory (and cost of sales which is the write off of inventory). They are to include inventory and cost of sales at:

(a) Restated historical cost (CPP);
(b) Replacement prices (CVA);
(c) Market selling prices;
To minimize manipulation of profits I reject the idea of including inventory at selling price and thereby bringing to account unrealized profits.

I likewise reject the need to use replacement prices for similar reasons to my argument on depreciable assets. I believe if one goes back to the basic principles which one would develop in a period of net nil inflation if prices are rising in your industry you would regard replacement price as a future cost and conversely if your prices are falling you would regard the difference as a future cost saving and you would bring neither to account. In a period in which there is general inflation I would apply the same argument regarding bringing to account future costs or future cost savings.

CPP SUMMARY

In summary a CPP Balance sheet and profit and loss account will tell us:

1. Whether or not shareholders funds have been kept intact bearing in mind the method of valuing assets on the "continuing business" basis outlined above.

2. The monetary assets and liabilities in precise terms.

3. The depreciable assets at figures which we know are not related to market or replacement prices but are a combination of unexpired costs (which we expect to be able to feed into production costs in the future) and residual scrap values (if desired market values for the scrap could be shown).

4. The profit or loss expressed in end of year dollars (I have not attempted in this paper to explain the method of achieving this).

5. The profits and losses of a series of years all expressed in the currency of one common year, normally the most recent year. This latter technique is comparable with the expression of the gross domestic product (GDP) in constant (say 1967) prices which gives a measure of the increase in volume of the GDP.

SOME CLOSING THOUGHTS

I believe any system which attempts to reflect the effects of inflation must deal with every item in the accounts or the results will be misleading. The current value method proposed in the Australian exposure draft, the Mathews report and the Sandilands report, require only inventory and fixed assets to be dealt with and in effect say that the preservation of operating capability in the industry in which the company finds itself is all that is necessary. It must be recognized that every company has a different balance between shareholders funds and outside borrowings. A company with large outside borrowings and minimal shareholders funds has minimized the exposure of shareholders funds to capital erosion. If only some of the effects of inflation are reflected companies will find themselves with a disincentive to seek outside borrowings as a hedge against inflation which is surely not the real world.

You will have observed that the accounting profession, the stock exchange and the legislators are all working towards strict rules of accounting to minimize variation from company to company and to minimize manipulation. I believe it is imperative that we find a system which is the subject of rules and can be verified reasonably accurately. This is a further attraction of the application of a general index to all companies in a consistent way rather than permitting a method involving estimation of market, replacement or selling prices.