

# 9

## SUMMARY AND CONCLUSION

In this thesis, the inter-related problems of inflation, price control, historic cost accounting and taxes have been investigated with a view to determining their impact on company profitability and financial viability. The criterion of profitability and financial viability which has been used for this thesis was as follows : an enterprise must generate sufficient cash from the use of its assets to pay for the money capital that is being used for production and trading after at least covering the replacement expenditure to maintain its current level of activities. Further, it was argued that this condition of financial viability could not be satisfied in times of high and accelerating inflation when a regime of price controls and corporate taxes were operated on the basis of conventional historic cost accounting.

Although the principal objective of the U.K. Price Code was to hold down increases in output prices relative to increases in input prices, the method used for computing allowable cost price increases was based on the conventional or historic cost accounting. Among the various uncertainties related to inflation, it was at least known in the context of company accounts that in times of rising prices, conventional methods overstate real earnings ; for this reason in incorporating the income of the corporate sector in national accounts, two directionally correct adjustments have long been made; that is, in the preparation of *National Accounts* gains from stock appreciation are not included in net national income and the consumption of fixed assets is valued at current prices. Despite this, in the case of company accounts the distinction between profita-



bility and liquidity continued to be maintained by a school of thought which led to the belief that for the purpose of measuring periodic income, consideration of liquidity, as measured by cash flows, was not important. It is true that in the wake of the inflation accounting debate, the source of the discrepancy between the two measures had been identified, but until the August, 1976, relaxations in the Price Code, the operation of a prices policy on the basis of conventional accounting resulted in significant underpricing of sales which was primarily responsible for the so-called liquidity crisis of 1974. The fact that during a period of rising prices a constant mark-up on historic cost pricing results in continuous underpricing of sales was less clearly understood. In its origin the problem was related to the practices of costing and pricing of products which are more or less the outcome of a continuous process. One of the major aims of this book was to explain that the underpricing of sales occurred due to significant omission of costs of products under the historic cost accounting system, which was exacerbated by the productivity deductions provisions of the Price Code. This caused the relative overstatement of conventionally measured profit which was reported to the Price Commission. While the real (cash) margin was being continuously eroded from the impact of Price Code rules, conventionally measured profit was showing artificial stability and even improvement due to certain methodological deficiencies in measuring periodic income in times of rising costs and prices. The nature of the deficiencies of conventional method are such that in times of rising prices it anticipates some revenue and effectively allocates certain costs forward through time. Therefore, it was suggested that for the purpose of operating a prices policy, historic cost accounting and the reporting context were irrelevant. The former resulted in pegging of inflation while the latter failed to give an appropriate indication of the level of erosion in real margins measured in terms of cash flows.

It was shown by a juxtaposition of conventional accounting method of profit calculation and earnings based on cash flows that the overstatement/shortfall results from a combination of two factors, namely, the failure to treat working capital as the cost it truly is, and second, a depreciation policy amounting to no more



than the allocation of historical acquisition costs over the succession of accounting periods. Given the nature of the omission of costs, its magnitude depends directly upon the array of relative price changes which affect an individual firm and/or its rate of turnover growth. It therefore follows that when these two factors are on a rising path the magnitude of the overstatement of profit continues to rise. Once these systematic omissions of costs are brought into account, one obtains what we have called *net operating cash flow*. In other words, if these costs elements were taken into account in calculating unit costs of products and hence passed on to price increases, the sales price would reflect the true cost. The so-called distinction between profitability and liquidity for a given level of on-going operation would tend to disappear at that level of the calculation. If corporation tax is charged on the statistic 'net operating cash flow' then taxes *per se* would not affect the financial viability of on-going operations. The remainder of the after-tax cash flow will comprise earnings over which a company's directorate may exercise its discretion to either distribute or reinvest on its proprietor's behalf.

This approach to measure periodic income is derived from the necessary and sufficiency conditions which is : an enterprise, in order to be financially viable, must "on average" generate sufficient cash from its production and trading activities to cover not only the replacement of used up capacity but also compensate its proprietors adequately in accordance to their expectations. Although it can borrow additional money, or it can liquidate real or financial assets that were previously accumulated, the ability to produce cash flows from its basic operations is nevertheless its fundamental strength. On this ground the implications of financial theories are clear that there is a limit to such borrowings ; and distribution of a certain amount of cash flow between debt and equity holders increase the financial risk to the enterprise. Unlike the conventional accrual method of income measurement the cash flow approach is not only objective but also based on sound economic principles that can be derived from the Hicksian<sup>1</sup> concept of income, including the principles of inter-temporal resource allocation. Therefore, earnings measured on a cash flow basis not only satisfied the required



criteria of real profitability and financial viability, but also provided an appropriate methodology to measure the impact of price controls on 'profit margins' from the fact that the effect of all accounting policy variables, including inflation, could be eliminated.

Having stated a rationale of cash flow accounting and having also said that in inflationary conditions the use of historic cost accounting resulted in significant underpricing of sales, what remains to be discussed is the result of various empirical investigations that have been carried out and already presented in the main body of the book. These are summarised below.

Through a series of numerical examples economic implications of the allowable cost regime was examined and an attempt was made to relate what might actually have happened during Stages 2-4<sup>2</sup>. It was observed that until the second quarter of 1974 when output was increasing and the rate of unit cost increase, particularly labour, was low, the effect of the allowable cost regime was to produce a slow but continuous erosion in 'net profit margins'. Drastic reduction in the above margins occurred during the second half of 1974 when the wages explosion took place and productivity deduction required 50% of the increase to be absorbed into margins in a situation of declining output. Further, it was observed that, to some extent, fluctuation in 'net profit margin' might have been due to changes in output, but the stability of the margin during the first and second quarter of 1974, and again between the third quarter of 1974 and first quarter of 1975 was mostly caused by the levels of stock appreciation in those quarters. However, the comparative improvement in the 'net profit margin' in the following quarters up to the end of Stage 4, might have been due to the use of special provisions of the Code, e.g. investment relief. But further improvement was observed to have been prevented through weak demand and increasing competitive pressures, more pertinent evidence of which was presented in Chapter 4, which is summarised below.

To determine the extent to which price increases were held down relative to input price increases during the period of control, we analysed behaviour of input-output price changes on two comparative bases. One, we compared the magnitude of price changes in



the home market using official statistic over a time dimension—*after control* and *before control*. Two, comparison with OECD countries over the same time dimension was also referred to. Research undertaken within the 'normal price hypothesis' which included incomes policy as a variable was also reviewed. All these investigations confirmed that the rates of increase in wholesale output prices were actually lower than the rate of increases in input prices during the control period.

To obtain some idea of the cost absorption that was directly associated with the operation of price control as opposed to other factors, such as delays, demand and competition, unit cost data published by the Price Commission was analysed and related to the increase in output prices in the home market. It was observed that subject to the problem of actual lag between unit cost increase and price increase, price increases in the home market fell short of unit cost increases by a cumulative total of 41.6, 24.7 and 31.2 percentage points respectively for the manufacturing, food and drink and engineering sectors during the twelve quarters starting June 1973, and ending August, 1976. Of these shortfalls, only a cumulative total of 9.1, 8.1 and 12.2 percentage points respectively for the three industrial groups could be identified with 'non-allowable' cost increases. Therefore, it was concluded that a significant portion of the shortfall might have been caused by delays in recognising cost increases, implementing price increases, and market conditions. Only the food and drink sector appeared to have been able to pass on the resulting price increases on the basis of pre-notifications submitted to the Price Commission. This was, of course, a cumulative total of about 20 percentage points less than the percent points increase in allowable cost per unit. This tended to support the proposition that industry itself was slow to respond to the rapidly rising costs and the *profit illusion* might have contributed to that process. Further, it was observed that as the unrecouped costs were measured according to historic cost method, industry would have to cover a significant amount of backlog costs in order to match current costs with current prices. A relatively higher level of price increases was, therefore, expected during Stage 5 and beyond, provided market conditions permitted the recovery.



The results of the Questionnaire Survey revealed how and under what conditions price controls affected companies pricing policies, profit margins, the nature of forecasting procedures used by companies and their outcomes. Demand and competition was observed as preventing permitted price increases in many cases, particularly in 1975. Investment relief provisions would have been more readily used if the relief was available to finance working capital investments. Keeping up with the Price Code formalities consumed valuable company resources both in terms of cost and executive time. Although there was clear disliking for the Price Code, opinions were expressed in favour of a simpler but realistic control on profit margin, which possibility reflected the continuation of trade unions' accommodation policy of Phase II. The relaxed Stage 5 Code was considered by a majority of companies as sufficient to improve both profitability and liquidity provided market conditions improved.

Based on the summarised discussion presented in the above paragraphs the overall conclusion which could be arrived at was that while manufacturing industry failed to advance its prices at the rate at which its costs were increasing, price controls could not, however, be identified as the cause of the entire shortfall in price increases relative to cost increases. The explosive nature of materials, fuels and labour cost increases, industries inexperience in pricing under rapidly rising costs and weak market conditions, especially during Stage 4, might also have had contributed to the shortfall referred to above. On the other hand, to the extent that adherence to historic cost accounting for the purpose of prices policy prevented an early move to inflation accounting by individual companies, the Price Code was to be held responsible. There were indications that companies might have learned to fix prices more effectively under inflationary conditions in the absence of control.

Chapter 3 contains a review of the empirical literature on the inter-related effects of inflation, historic cost accounting, price control and taxes. In order to investigate the nature of the inter-relationship we undertook historical simulation based on a total corporate model which was adjusted for simulating price increases under the allowable cost regime (Chapter 5). This model was used to generate *ex-post* forecast of price increases, conventional pre-



tax net profit and cash flow earnings under the assumptions of alternative scenarios regarding levels of input price increase and real turnover growth. Results of simulation runs confirmed the hypothesised relationship between accounting profits and cash flow earnings caused by the omission of costs of periodic increase in working capital and replacement investments, including the cost absorption due to price control factors. It was observed that once the level of input price increases reached the actual level of the food sector to which the company belonged, even under zero real growth cash flow earnings showed large deficits as a counterpart of large conventional pre-tax income, though reduced by margin erosion. This raised doubts about the effectiveness of macro economic planning and forecasting, especially when the other objectives of the Price Code was to maintain growth in output and investment. Since the ultimate aim of forecasting at that levels was to guide the course of business expectations in the desired direction, the experience of 1973-75 tended to give an idea that important interconnections between real and financial variables were not reflected in those forecasting models. Although events of those years—high oil and commodity prices and wage explosions—were unpredictable, the comparative weakness in forecasting the financial side had been noted before<sup>3</sup>. “An unfortunate consequence of this comparative weakness in the financial forecasts has been an inability or reluctance on the part of officials to take full account of current and prospective financial conditions in predicting the outlook of income and employment”<sup>4</sup>. On the other hand, companies were known to have been using the type of model developed by us; financial planners in companies could have predicated the reduction in real earnings measured in cash flows and as a rational reaction might have precipitated recessionary activities. An attempt to estimate the impact of price control factors on the manufacturing industry produced results indicating that the deficits in pre-tax cash flow earnings were increased by over £2bn. in 1973-75 when compared with the results of an alternative situation of no-price control.

To validate the results of the simulation and also to put some order on the magnitude of the level of cost omissions and absorptions, accounts of ten selected as well as aggregate data of listed



companies were analysed according to the total cash flow model. Results presented in Chapter 6 confirmed the proposition made about the impact of a price control system cast in terms of historic cost accounting. For example, in the case of seven of the companies the cost of periodic increase in working capital exceeded 100% of the conventionally-measured pre-tax margins in 1974/75. For these companies the effective rates of tax payments over the three years, 1973-75, exceeded 100% of cash flow earnings. Nonetheless, large dividends were paid out of funds obtained from external sources, mostly from bank borrowings. Large increases in interest payments accompanied by reduced earnings in conventional terms created a situation which was termed as 'profit exhaustion' indicating that the corporate sector was not in a position to take advantage of the fiscal incentives given for *stock appreciation relief & etc.*

Similar analyses of aggregated data on large number of listed companies showed that during the 1973-75 period, the effective tax rate was 87% and after-tax cash flow earnings fell short of the dividends paid by over £2bn. which might have been paid out of a total of £5bn. of external finance raised. There was very little growth in real investment taking the 1973-75 period as a whole ; it was therefore argued that a large portion of the balance of the money raised might have been needed just to finance replacement expenditures. In contrast, during the reference level period 1968-72, when margins were higher and inflation lower, effective tax rate was 43% after covering higher levels of real capital expenditure. Therefore, after-tax cash flow was sufficient to cover the dividends paid and it was postulated that external finance of £3bn. raised was mostly used to build up increased liquidity.

Results of these analyses led us to the conclusion that according to the criterion of real profitability and financial viability (presented in Chapter I of this book, which is summarised at the beginning of this chapter) the company sector as a whole became financially non-viable during the period covering Stage 2-4 of the operation of the Price Code. Therefore, the main postulate of the thesis :

In inflationary conditions, price controls cast in terms of conventional accounting methodology can have very serious adverse effects on companies' finances, appears to be strongly supported by the results of data analysed.



Finally, in Chapter 7 the level of analysis was raised to the macro level and was conducted within the framework of flow of funds. It was observed that the personal sector's surplus increased sharply in recent years, a period of high inflation and price control. This was reflected by about a 5 percentage point increase in the 'saving ratio' in 1973-76 period from its average 8.8% during 1966-72. On the other hand, the combined deficits of the public and company sector as percentage of disposable income increased by 8.6 percentage points in 1973-76 from its average level of 2.2% in 1966-72. It was therefore argued that although 'financial factors' might have contributed to the increased level of savings in the personal sector, a significant proportion might have been associated with increased subsidisation of consumption due to price restraint in both the public and company sector. Increased surplus of the personal sector could not, however, be re-cycled back to the company sector at comparable low cost, given the high rates of interest at which public sector deficits were financed. This was observed to have accelerated the process of changing the pattern of financing in the company sector, something representing cross substitution of equity capital by debt. Therefore, it was concluded that although price control reduced the level of inflation, its operation on the basis of conventional accounting methods might have frustrated the achievement of the other objective of the Price Code, i.e. to increase investment and growth, given the high level of inflation experienced and the resulting financial non-viability of the corporate sector.

A major contribution of the thesis is that an attempt was made to provide an explanation for the sharp deterioration in real profitability in the company sector in recent years of high and accelerating inflation, in terms of underpricing of sales caused by significant omission of costs in product pricing and profit computation due to the use of historic cost accounting as the basis for operating the prices policy. It has been previously documented that the manufacturing industry, in general, had for a long time been using pricing policy based on a mark-up on historical costs. By inference it may be said that the long-term decline in real profitability, among other things, might have been caused by the use of a deficient accounting methodology in periods of relatively lower inflation and higher growth.



That is we have provided an explanation for a source of inefficiency in resource allocation along with the possibility of distortion in the pricing mechanism within the manufacturing industry and between other sectors of the economy. By implication, this finding is all the more important for mixed economies like Britain, where the public sector, directly and indirectly, makes significant contributions to the national income through its production and trading activities.

In providing the explanation of a widely known phenomenon, this investigation was carried on the basis of a cash flow model which contains the required ingredients of a *general theory of profit*. For, at the moment, there is no general theory of profit which commands universal acceptance either among academic economists or among men of affairs<sup>5</sup>. Measurement of profit under conventional accounting was not based on any theory but was guided by simple rules of allocation whose fundamental methodological deficiencies were exposed by the high rates of inflation in recent years. The use of a profit concept which is not economically defensible is not only unhelpful for the purpose of government economic policy, but is likely to frustrate the priorities of that policy in one way or another.

The turbulent environment of the 1970s as evidenced in growing pressure to re-distributed income between and within nations, has shaken up the foundation of many established theories and modes of thinking. In the future the question of distribution of income is likely to receive greater emphasis. Earnings measured on a cash flow basis can provide an objective and neutral measure of distributable income which can better meet the requirement of a more open society to come. The overstatement of real earnings drew unnecessarily hostile attention of labour and government agencies, while leaving scope for concealing inefficiency and thus resulting in possible misallocation of resources from the point of view of money and capital markets. Since price and profit control have been and will be used as part of a total package of counter-inflationary measures, such as controlling the money supply while increasing or maintaining the level of output and investment, it may be suggested that earnings measured on a cash flow basis might be used to implement such policies in the future so far it



relates to business enterprises be it in public or private and financial or non-financial sectors.

In this thesis we have been basically concerned with measuring and explaining the impact of price controls on company profitability and financial viability. More research is needed to study how, in fact, manufacturing industry or any of its sectors did cope with the changing Price Code, which although it was introduced for the short-term, continued to be extended stage after stage. Since succeeding stages provided for relaxation in the Price Code, another piece of research could be undertaken to test the *efficient capital market hypothesis*<sup>6</sup>.

Price control was concerned with only one dimension of a sale—leaving scope for other dimensions to vary—which, in turn, reduces the validity of direct tests to measure the effectiveness of price control. Research in measuring the effectiveness of controls by reference to the variation of other dimensions would provide valuable insights because the scope for such variation in other dimension does not exist uniformly in the industry. As service and distribution sectors enjoy relatively greater flexibility in this respect, research may show that price controls were more effective in holding down price increases in these sectors, compared to the manufacturing industry. In reviewing the effectiveness of Phase II price controls in the United States, it was observed that controls were relatively more effective for the service and distributive sector comparative to the manufacturing industry<sup>7</sup>.

#### **Post-Script on Bangladesh**

As indicated in Chapter 1, the book contains limited analyses of micro as well as macro level data from Bangladesh in Chapters 6 and 8 respectively. Results of the analysis testify to the universality of the problem posed by the use of conventional accounting methodology in recent times of high and accelerating inflation experienced in less developing countries (LDC) like Bangladesh. Since public enterprises usually dominate the industry sector in most of the LDCs such as in Bangladesh the problem of misallocation of resources under a regime of inflation, conventional accounting and taxes and nationalized banks and financial institutions appeared to have attained tremendously harmful magnitudes not only for the



enterprises in the public and private sectors but also for the economy as a whole. Faced with a paradoxically contrasting situation of rising (or raised) expectations of a vast population and shrinking availability of resources governments resorted to pre-empt cash resources, specially from public enterprises in a manner which virtually turned these enterprises into 'fiscal cows.' The result has been that a system of chain borrowing from the banking system by enterprises and governments contributed to increased money supply, build up inflationary pressures and transfer of resources to a very small private sector and thus to higher degrees of inequality of income and wealth.

Recent changes in government policies encouraging the private sector to participate to invest directly in industry, trade and banking part of their massive accumulation of financial assets over the past few years may bring some good for the economy provided the interconnections between relative price changes, accounting, taxes and financial viability are correctly appreciated. Under the changing conditions public enterprises and autonomous bodies may also have to obtain finances directly from savers in general and users in particular so as to minimise the cost of capital and ensure its supply in an equitable manner.

Based on the experience of price controls in the U.K., it may be inferred that the limited exercise in prices supervision in Bangladesh can not be effective. Hence its continuation is not likely to serve any useful purpose in its present form.

#### Footnotes

1. "A company's profit for the year is the maximum value which the company can distribute during the year, and still expect to be as well off at the end of the year as it was at the beginning". Sandilands Report, p. 29.
2. Not presented in the book.
3. Dicks-Mireaux. *An Introduction to Flow of Funds Accounting: 1952-70*, Bank of England, 1972.
4. Bain, Day and Wearing. *Company Financing in the United Kingdom: A Flow of Funds Model*, Martin Robertson, 1975.
5. Adrian Wood. *A Theory of Profits*, CUP, London, 1975.
6. J. Van Horne, *Financial Management and Policy*, Prentice-Hall, 1977.
7. Lanzilloti, Roberts, and Hamilton, *Phase II in the Review: Brookings Institute, Washington, 1975*.



## INDEX

- Accounting (Conventional) 1  
    " (Cashflow) 5  
Allowable Cost 1, 16  
    " " Pricing 6  
    " " " Example 36  
Anthony R.N. 55  
Accounting Policies (Phillips) 126  
Australian PJT 52  
Asian Development Bank 155  
ADP Loan 161
- Bankruptcy 8  
Balance sheet 10, 11  
Balance of Payment 22  
Bank of England 53, 137  
BTC-Cashflow 125  
BSFIC " 129  
BPDB " 154, 161  
BCIC " 131  
BTMC " 131  
Banking Sector (borrowing) 145
- Categorisation of firms 27  
Cost of working capital 4, 39  
    " " Stock 9, 10, 14  
    " " Capital 12  
    " " Equity capital 55, 118  
    " " Sales 16  
    " Omission 6, 16  
Confiscatory 7  
Cashflow, net operating 6  
    " Deficit 50  
    " Earnings 55  
Capital Allowances 18  
    " Market 20  
    " Asset Pricing Models 40  
Callaghan, J. 43
- Cowan, Tom 53  
Company Performance 4  
    " Profitability 53  
    " failures 5  
Current purchasing power 4, 44  
    " Cost Accounting 4, 10  
Company Accounts Analysed 103  
Company Sector Performance 120
- Dividends 6, 17, 19  
Depreciation, Shortfall 6, 7, 9, 10, 20  
    " Policy 10, 11  
    " Methods 10  
Discounted Cashflow 40  
Dissavings 156  
Deficit financing 157, 165  
Debt Equity (income sharing) 149  
Debt service liabilities 161  
Disinvestment Policy 165
- Escaped Cost 15  
Erosion of margin 16  
Equity Capital 17  
Efficiency (cost saving) 39  
Equivalent Cash Distribution 49  
Engineering Sector 79  
Effective Tax Rates 59
- FIFO 14, 35  
Financial Viability 5, 6, 17, 19  
Fiscal Incentives 19  
Frequency of Price Increases 30  
Financial dooms day 48  
Food & Drink Sector 78  
Financial Model 90  
FIN PLAN 89  
FINAPLAN & Price Controls 93



- Financial Performance of Bangladeshi Enterprises 123  
 Financial Performance of Public Enterprises 154  
 Flow of Funds 137, 141  
 Financial Deficits 143  
 Financial Forecasting (Macro-level) 100  
 Fund Management 164  
  
 Generally accepted accounting concepts 9  
 Growth Investment 20  
 Gross Trading Profit 44  
 Gordon, R.J. 57  
 Grayson Jr. (Ph. II) 57  
 Glyn D.R. (CBI) 159  
  
 Holding gains 4  
 Historic Cost Accounting 5, 8  
 Home Market Prices 25  
 Hague D.C. 40  
 Hughs, John 42  
  
 Incomes Policies 1  
 Inflation 1, 20, 41  
     " Accounting 155  
     " Theories 65  
     " Counter Measures 24  
 Interacting Planning-forecasting 52  
 Interest Cost 39  
 Investment relief 37, 41  
     " outside U. K. 50  
     " strike 53  
     " and savings in Bangladesh 156  
 Impact of deficit financing 144  
  
 Liquidity 4  
 LIFO 14, 24  
 Lawson G.H. 5, 54  
 Lee T.A. 5  
  
 Margin, Net Profit 32, 45, 46  
     " Gross " 32  
 Merret & Sykes 48  
 Markup 54  
  
 Material Cost Increases 71  
 Monno Jutex 125  
  
 NEDO 50  
 Nordhaus & Godley 81  
 Naylor Survey 88  
 New Cambridge School 138  
  
 Overstatement of Profit 8  
 Oversaving 14  
 OECD 74  
 Output Price Increases 75  
  
 Price Code 1, 6, 10, 23, 25, 27  
 Price Commission 1, 26  
     " Controls 3, 16  
 Profit Margin Control 25  
     " " Safeguards 38, 41  
 Productivity deductions 23, 35  
     " & Output 71  
 Pay Policy & Board 24, 31  
 Profit Exhaustion 19  
 Profitability Collapse 49  
 PRISM 95  
 Project Financing Decisions 125  
  
 Replacement of Fixed Assets 4  
     " Cost 53  
 Relevant Cost 53  
 Relative Prices 9, 59  
 Real Margins 17  
 Refinancing gap 15  
 Roach, Owen 52  
 Road to Recovery (CBI) 159  
  
 Sandilands Report 4, 25  
 Samuelson P. A. 57  
 Savings Ratios 142  
 Sizer, John 51  
 Simulation 52, 54, 88  
 Stock 35  
     " Appreciation 15  
     " " Relief 17, 18  
     " Change 135



- Social Time Preference 139  
Subsidisation of Consumption 143  
System Loss (BPDB) 164  
Sources of long-term financing 164
- Taxes 6  
" Rate 19  
" Assessible basis 19
- Trade Unions 23  
Trade Debtors 109, 140  
" Creditor 109, 141
- Underpricing 4, 6, 8, 11  
Unemployment 23  
U.S.A. 23, 24  
U.S.A. Price Control 57  
UNILEVER 57  
Users financing 165
- Working Capital 7  
" " Changes 109  
Wage Explosion 55  
Wages Costs increase 71  
World Bank Reports 158