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A REVIEW OF THE LITERATURE ON THE INTER-RELATED EFFECTS OF HIGH RATE OF INFLATION, PRICE CONTROL AND TAXATION ON COMPANY PROFITABILITY AND FINANCIAL VIABILITY

Back in 1973, the CBI attempted to demonstrate the impact of Stage II price controls in terms of a profit squeeze so intense as to put at risk the required increase in productive investment in 1974-75[1]. Its representation did not dislodge the main constraints on profit margins which were developed during Stage II and had been carried over into Stage III and Stage IV of the Price Control Programme in the U.K., albeit with some relaxations as mentioned in the previous chapter.

Outside the Price Commission, there had been very little systematic study of the impact of the price control on profit and profit margins, but profits reported to the Commission, in general, followed the same basis that companies adopt in reporting profits in their published accounts. Although the overall trend of industrial profitability had long been deteriorating, profits disclosed in the accounts of companies generally had been at high, if not record, levels even at the bottom of the 1974-75 recession. Yet the public were constantly being informed by companies themselves, by academics and even from government sources, of the urgent necessity to increase business profitability. Towards the end of 1973, John Hughes quoted the Treasury from its memorandum to the Wilberforce Court of Inquiry in early 1971, while he was evaluating the impact of price controls on profit :

"The gross trading profit of companies have, in fact, risen very little for several years. Between 1964 and the first three quarters

of 1970, they rose by 11% and all of this increase can be attributed to higher stock appreciation.....The resulting sharp narrowing of profit margins is having adverse effects on investment plans, both through reducing cash flow and by reducing the expected profitability of new investment"[2].

Although John Hughes cited the Treasury quote, he arrived at a different picture of company profit during Stage II and the then forthcoming Stage III by analysing gross trading profits of companies as a percentage of domestic income published by the Central Statistical Office. He found no justification for the danger of a profit squeeze, such as argued by the CBI, and with which the then Conservative Government seemed to have agreed, in principle, and provided for some relaxation in the Stage III Code.

Mr. Callaghan, the Prime Minister, speaking at the Labour Party Conference on 28th September 1976, recognised the fundamental importance of profit :

"The willingness of industry to invest in new plant and machinery requires not only that we overcome inflation, but that industry is left with *sufficient funds* and sufficient confidence to make the new investment. Whether you call it surplus or profit it is necessary whether we live in a socialist economy, a mixed economy or a capitalist economy"[3].

The two statements of governmental position after an interval of over five years, basically expressed the same sort of concern. Certainly, many others expressed similar concerns, but it appeared that although the symptoms of the crisis had been recognised, the interconnections between real profitability, financial performance and investment under inflationary conditions had not been properly appreciated.

In the following pages an attempt is made to present systematically the work and views of various people and institutions on the interrelated effects of rapid inflation, price control and taxation on company profitability and financial viability. We start with the position taken up by the Price Commission in the U.K., and present the data analysed by them.

In its report (June-August 1974) the Price Commission recognised the effect of stock appreciation on company profit, but they considered

"the issues involved extended far beyond price control". To quote the Commission :

"We do not at this juncture propose to enter into the debate whether profits should be computed conventionally or on some different basis as current purchasing power.···· But whatever view is taken on this point there is no doubt that, however buoyant profits may have been until recently in conventional terms, the replacement of stocks at present inflated prices is already posing serious problems for industry".

The above position was taken by the Commission when the average net profit margins of Category I manufacturing and service industries in the private sector were reported as 72% of reference levels. For various reasons, however, the Commission considered this level of erosion serious but found its practical basis doubtful. Having discredited their own figures, the Commission, like Hughes, referred to the Central Statistical Office figures of gross trading profits (before depreciation and stock appreciation) as a percentage of domestic incomes which did not show any significant reduction during the first and second quarters of 1974. Referring to the same figures, the Commission concluded that over the 18 months of control there was no significant erosion in profit margins, although their own figures suggested an extent of erosion exceeding 25%. In general, profits reported to the Commission followed the same basis that companies used in reporting their profits in their published reports. The erosion in net profit margin discussed above was computed on pre-tax profits but after interest and depreciation on turnover within control, i.e. home sales.

The Commission had been publishing a time series of net profits as defined above within the field of control, expressed as a proportion of reference levels. It considered this to be the best indicator available of the effect of the price control on profits and hence on prices, barring the effects of long-term deterioration, cyclical variations and the problem of stock appreciation[4]. The extent and pattern of erosion in net profit margins have been presented in Figure 1 and reference levels to which these were related appear in Table 2. The Commission estimated that these reference levels were fixed at a level higher than the level of profit (by about 25%) which were

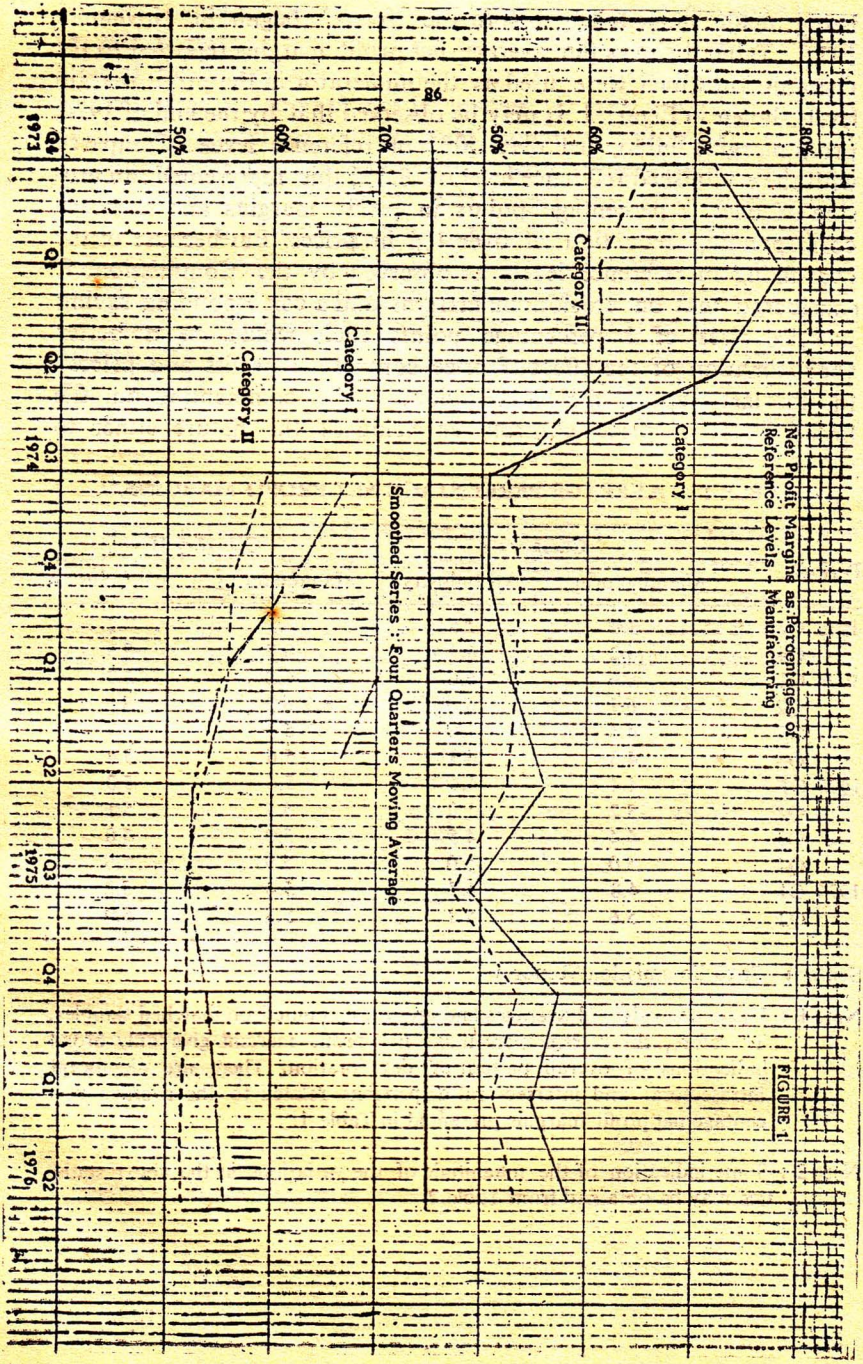
Net Profit Margins as Percentages of Reference Levels - Manufacturing
Smoothed Series - Four Quarters Moving Average
Category I
Category II
80%
70%
60%
50%
Q4 1973
Q1
Q2
Q3 1974
Q4
Q1
Q2
Q3 1975
Q4
Q1
Q2 1976

FIGURE 1

being made immediately before the 'freeze' began in November 1972[5]. Table 1 shows the average net profit margins reported to the Commission which were used as the numerator in the profit margin levels shown in Figure 1. It may be observed that by the end of 1974, profit margins fell to just over 50% of reference levels. Compared with the established reference level of 8.6% this represented an erosion of over 4 percentage points in profit margins and hence a corresponding reduction of over 4% in prices. But because of the over-fixing of reference levels as observed by the Commission, it considered that on erosion in margins and a corresponding saving in price rises of 3 percentage points each would be a better approximation of the effect of price control on profits and prices[6]. In its last Report, the Commission, while commenting on the broad effect of price controls as being of the nature either to

TABLE 1 : AVERAGE PERCENTAGE NET PROFIT MARGINS

Periods	Category I		Category II	
	Manufacturing	All Industry	Manufacturing	All Industry
1973 Q3	7.8	7.5	7.1	7.2
Q4	6.2	6.3	6.7	6.5
1974 Q1	6.6	6.6	6.3	5.9
Q2	6.1	6.1	6.2	5.9
Q3	4.4	4.6	5.4	5.3
Q4	4.3	4.3	5.6	5.4
1975 Q1	4.4	4.4	5.6	5.0
Q2	5.2	5.0	5.5	5.1
Q3	4.4	4.5	5.0	5.0
Q4	5.0	5.0	5.9	5.6
1976 Q1	4.8	4.7	5.4	5.2
Q2	5.6	5.8	5.8	5.9

Source : Price Commission Reports

Note 1 : These are weighted averages and are not computed on matched samples. Therefore, the average percentage net profit margins give only broad indications of overall pattern of deterioration. There are significant intrasectoral and intersectoral dispersions related to the average percentage net profit margins presented in Table 1.

Note 2 : Some indication of the magnitude of the variations in the above statistics may be obtained from Table 2.

transfer income from profits to labour incomes or to offset a transfer which might otherwise have taken place, again referred to the Central Statistical Office published figures of gross trading profit as a percentage of total domestic income. It was observed that the proportion concerned fell by a maximum of 4 percentage points in the fourth quarter of 1975 compared with the level before the freeze in November 1972. Referring to the same ratio *after* stock appreciation, it was observed that a maximum fall of more than 7 percentage points in profit margins had occured compared with what they would have been had margins been maintained[7]. However, as the percentage reduction was related to the first quarter of 1974 which reflected the effect of oil price increases, the Commission considered it untypical and instead referred to the figures for the second quarter of 1974. Accordingly, the fall in profit margins was shown to be about 5 percentage points with a corresponding reduction of 5% in prices[8].

The analysis (Table 2) shows the averages and standard deviations of reference levels in the different sectors. They were calculated from a sample, using annual turnover as weights. Given the wide spreads of the average reference levels, and the nature and magnitude of the erosion observed, it was possible that companies at the

TABLE 2 : ANALYSIS OF REFERENCE LEVELS STAGE 3, CATEGORY I ENTERPRISES

Sector	Number of groups	Number of reporting units	Annual turnover £m	% net profit margin	
				average	standard deviation
Food and drink	25	87	4,957	7.8	4.1
Engineering, vehicles and metal	40	160	6,047	9.8	7.4
Oil refining	7	11	1,524	6.9	4.2
Other manufacturing	41	81	7,317	8.2	4.2
Total manufacturing	113	339	19,845	8.6	
Services	11	14	851	11.7	5.4
Total	124	353	20,695	8.8	

Source : Price Commission Report, March-May 1974.

lower end of the distribution might have experienced sharply reduced profit margins right from the early stages of the Code.

Against the position maintained by the Commission right up to the end of the life of Price Code, a number of people and institutions raised voices of alarm over the magnitude of the erosion in real profits and the consequent reduction in earning measured on a cash flow basis. In the following pages some of these studies have been reviewed and some important conclusions are arrived at by the end of this chapter.

Professor Merrett and Mr. Sykes published an article in the *Financial Times*, 30th September 1974,[9] which exploded the myth of rising profitability during a period of rapid inflation. Using the official CSO data and taking out their estimates of replacement depreciation and stock appreciation, they showed that a 29% increase of gross trading profit before depreciation (of industrial and commercial companies on U.K. operations) in 1973, was reduced to 11%. But after adjusting for two critical factors (tax before deducting stock appreciation and after interest on loan capital), they revealed the fact that net of tax profit had dropped by 42.5% in money terms during 1973 and were running at about 37% of their 1963 level. *The authors considered the net of tax profit was the only type that mattered to a company, and found the situation 'scarcely credible'*. To quote :

"The simple truth of the matter is that the combination of price control and corporate taxation based on historic costs during a period of massive inflation constitute a financial dooms day machine, which as mere question of arithmetic, must, if not checked, have the severest consequences for the private sector, as our own figures, for what is merely the first year of the severe inflation, suggest".

Exactly one year later, Professor Merrett updated his analysis of deteriorating corporate profitability and financial viability in another article in the *Financial Times*[10]. He recognised that their earlier results were challenged by some accountants (and academics) who argued for the continued relevance of historic cost accounting—especially the profit figures to be used in the debate. Professor Merrett maintained his position by stating that the principal issue

in the debate was that of the *financial viability of British Industry. For that, the key statistics were the net-of-tax and net-of-interest profit accruing to the equity holders.*

Regarding taxation and inflation, he said :

> "To make profits of the two companies (used for illustration : one, wholly debt financed and other equity financed) comparable and to make profits comparable with other forms of income such as interest or wages, they have to be adjusted to turn them as far as possible, into their *equivalent in terms of cash in the hands of the shareholders*".

Finally, in December 1976, Professor Merrett and Mr. Hecht published their report of the Profitability Research Project[11] in which they proposed a new method (that of equivalent Cash Distribution or ECD) of defining corporate profitability under conditions of both stable prices and inflation. Results of empirical analysis based on their model suggested that :

"...*Conventional representation of net profits are wholly misleading and, indeed, in practical terms, virtually meaningless.* If profit is intended to be relevant to valuation of shares, corporate performance, comparable with cash payments such as wages or salaries or interest, or *made relevant to any policy considerations*, it must be adjusted to equivalent cash (ECD's).....a very substantial collapse of profitability is indicated in the mid 1970s, to the point at which on balance the whole of British industry is seen to be operating at losses in excess of the profits which it was enjoying in the 1960s."

One important qualification which they made in connection with the above conclusion was :

".....it is likely that there are substantial inter-industry (or rather interactivity) differences, which would be revealed by more disaggregated data. This would probably *show the bulk of these losses to be concentrated in primarily U.K. activities, and in particular those affected by price controls rather than overseas activities less adversely affected by inflation and government intervention.* .... A corollary of

this qualification, however, is the strong impulse which such result must give towards investment outside,[12] and disinvestment within, the United Kingdom."

The authors also evaluated three profit concepts, historic cost profit, dividends and cash flow and found all three unsuitable for valuation of an enterprise. Therefore, they proposed the method of ECD.

However, it was established that the two major factors which introduce the substantial divergence between the profit numbers resulting from the alternative concepts were as follows :

1. Growth
2. Changes in price levels

Only under a situation of *nil* net addition to the capital stock (e. g. there are no net increases in inventories or debtors or cash balances and merely the reinvestment of the depreciation) would the concept of historic cost profit and cash flow produce identically the same results year by year. Under situations of growth—real or inflationary—*they showed that a fraction of the historic cost profit margin was pre-empted into increased working capital, thereby reducing the cash flow margin by the same factor.*

The first official recognition of the nature of the problem was embodied in a section of a booklet published by N. E. D. O. in May 1975[13]. In this publication the relationship between profitability, cash flow and liquidity was precisely stated by the comparison between the conventional accounting model format, universally accepted for measuring periodic profit, and the total cash flow model. It was noted that although there was a direct relationship between conventional post-tax profits and cash flow earnings, in a world of inflation and real turnover growth significant deviations between the two will generally obtain. (The same two variables were identified by Professor Merrett). It was concluded that "in general, conventional profits are greater than cash flow earnings and depreciation is less than replacement capital expenditure". The implications of tax and inflation on corporate cash flow was traced by measuring the financial performance of U. K. companies over 1968-74 on a cash flow basis and the same was found to be in deficit by £4, 142m. A further implication of the deficit of the corporate sector was stressed, namely its impact on the

financing of industrial investment. It was stated "if future industrial investment is to be financed in a non-inflationary manner, there would have to be greater reliance on private savings or from government, financed by personal taxation"[14].

Based on his paper presented to the Royal Economic Society Conference on "The Rate of Profit in British Industry", Professor John Sizer published a number of articles in which he principally examined the inter-related effects of inflation, price control and historical cost accounting on company liquidity and profitability during 1974 and 1975[15]. According to Sizer, the situation many companies faced was very similar to that of a company that was over-trading : .... The company facing a liquidity crisis in November 1974, like the company over-trading, found that the *rise in sales and profits was accompanied by a disproportionate increase in stocks, work in progress and debtors which more than absorbed the cash flow generated by the higher sales.* He also cited, as an example, the statistics prepared by the Food Manufacturers' Federation, based on a sample of 26 companies which between them accounted for 45% of the British manufactured food sales during 1974. These revealed a combined negative cash flow of £93m. in 1973, and £79m. in 1974. During this period working capital requirements increased by 54.3% and net profit before tax, but after interest to sales fell from 5.19% in 1971 to 2.56% in 1974*.

Commenting on the suggestion made by the Price Commission[16] that in 1972 and 1973, when the economy was expanding rapidly, profit rose rapidly but the effect of price control was to hold back the increase, Professor Sizer argued that price control took "the icing and the marzipan" off the top of the profits cake during 1973 and the first half of 1974. 'Icing and marzipan', he went on, had in the past :

(a) Provided finance for additional investment in working capital during a period of expansion.

(b) Allowed companies to continue investing during leaner times.

(c) Provided the liquid reserves to see companies through a recession ; and

*Accounts of four food manufacturing companies have been analysed in Chapter 6.

(d) By providing sufficient liquid reserves to carry a company through a period of industrial unrest, possibly allowed companies to resist unrealistic wage claims during a recession.

Finally, Sizer drew attention to the increasingly hostile and uncertain environment in which companies were operating during the past two years and emphasised the need for an *interacting planning-forecasting framework to cope with the situation and made reference to the computer model developed and employed by Unilever*[17].

Mr. Owen Roach, an Australian actuarial consultant, has emphasised the importance of pricing policy based on replacement cost and stated that many companies (in Australia) were operating at a loss in real terms ; to quote :

> "Management seems to be unaware of the problem and conventional accounting will not reveal the solution".

By using a computer model Roach investigated the effect of two rates of inflation, one 10% and another 20% on different companies and concluded that historic cost profits (pre-tax) overstated profit in real terms :

— by as much as 2 to 3 per cent of sales when inflation is at the rate of 10% per annum ;

— by as much as 3 to 4 per cent of sales when inflation is at the rate of 20% per annum.

He drew the attention of management, investors, the Price Justification Tribunal (PJT) and Government to the nature of the overstatement and its possible *consequences in terms of stagnation in production and an increase in the rate of company failure*[18]. His particular reference to PJT and the Government was as follows :

"Delays in fixing prices and the fixing of prices on the basis of historic costs will not allow companies to survive under continuing inflation".

"Income tax of 42.5 cents in $1 of historic cost profits means a much higher effective rate of tax on real profits".

Professor Tom Cowan (University of Otago, New Zealand),[19] writing in the magazine 'Accountancy', stressed the importance of

using replacement cost for the purpose of price control decision, both on the grounds of business as well as financial risk which he believed to increase during a situation of rising price levels. He started with the important submission made by the Australian (Labour) Government to the PJT in which some of the problem areas of business finance under inflationary conditions were recognised. He quoted :

"Most manufacturers, in these times of inflation, are able to replace a decreasing proportion of their worn out or obsolete plant with funds provided by depreciation allowances. They will also find it difficult to raise the additional funds necessary to finance replacements"[20].

Cowan argued that costs should be measured in terms that are relevant for the particular purpose ; that price control decision should be based on relevant costs and that, in continuing operations, the costs which are relevant for price control are replacement costs. Historical costs and the financial reporting context are not relevant for the purpose of price control decisions. Cowan's criterion for profit control was 'fairness', particularly with the owner group which provides the risk capital ; and 'fairness' to today's customers of a continuing business is achieved only if they are not required to meet more than the costs that are relevant today (replacement cost) plus a 'fair' margin of profit.

The Bank of England published an article based on research carried out at the Bank's Economics Section on 'trends in company profitability'[21]. They found that post-tax real rates of return in 1973 would have been negative but for the stock appreciation tax relief and in 1974 it was almost zero or negative, even after the stock appreciation tax relief. While tracing the slow decline in the post-tax real rates of return since 1960, they found the more rapid fall since 1972 too great to be attributable to any of the long term changes in the economic behaviour of industry. They argued:[16] many companies may have been unaware of the impact of stock appreciation on profits and have been content, if published earnings expressed as a percentage of capital employed were broadly maintained.....*The fall in profits at current costs has subsequently been widely recognised but, faced first with a Price Code controlling domestic selling prices on the basis of historic costs,* coupled more recently with very depr-

essed demand at home and abroad, companies have been unable to raise their real profitability'[22].

The impact of historic cost pricing on profitability during a period of rapid inflation was also *simulated* with the help of a simple model by the authors and the model and its results were reported in the article.

It was found that companies with the slowest turnover of stocks were the most vulnerable to faster inflation ; even with a gross mark-up of 30% (on direct historic costs), a company did not earn sufficient profits to cover depreciation at replacement cost once inflation exceeded 15% per annum. Even for the majority of firms, which held stocks for only a few months, real profitability almost disappeared at the 25%-30% rate of inflation recently experienced in the U.K. In order to maintain a constant rate of return of 5% (pre-tax) on capital employed, *the mark-up on historic costs needed to be twice as large as when prices were stable.* In this connection they also commented on the *inadequacy of the reference level margins of the current Price Code which were based on margins in 1968-72,* when prices were rising much more slowly than at present when real rate of returns were already below the average of the previous decade.

On a number of occasions Professor Lawson raised serious concern about the implications of pursuing a prices policy based on historic cost accounting. Based on the premise of cash flow accounting, he pointed out the impact of price control as an 'increasing threat to corporate financial viability' in much the same way as coming from the U.K. corporate taxes. To quote :

"If 'allowable' profit margins are based upon historic cost measures of profit (and therefore disallow periodic working capital investment as a cost for pricing purposes) situations in which positive 'controlled' profits cause negative cash flow earnings will abound...in the year to July 1974 the (pre-tax) historic cost profit of Wolseley-Hughes was £3.276m. represented by 5.8% of sales and 6.2% of total costs. ...these reasonable profit margins are associated with negative cash flow earnings (of £.583m. deficit). But if a 'margin' only looks reasonable because it ignores significant recurring outlays it is patently obvious that the control of margins (similarly defined) tantamount

to an attempt to force companies to finance the spectacular effects of rising costs and output growth on periodic working capital investment with an external source which may be both costly and not always accessible"[23].

He ascribed much of the wage explosions and trade union insistance on price controls, the so-called investment strike by companies, and output reductions, as something having been significantly related to the *'profit illusion' which was not accompanied by cash flows.* He strongly argued that periodic income measured on the basis of cash flow can only provide the most objective and realistic performance of a company, especially in periods of rising relative prices. It had also been pointed out that during a regime of corporate taxes, price control and relative price changes, *earnings measured on the basis of cash flows provide the desired neutrality and hence avoid their distorting effects arising out of diverging characteristics of companies with respect to growth, cost and capital structure*[24].

Based on data published by CSO on company finance, financial performance of U.K. companies over the period 1968-74 was measured on the basis of cash flows. It was observed that U.K. cash flow earnings (post-tax) started to decline from 1972, dropped by 26% in 1973, and was negative in 1974[25].

Professor Robert N. Anthony[26] of the Harvard Business School, proposed a fundamental change in the methodology of conventional accounting and argued for accounting for the cost of equity capital. He showed that financial accounting reports would be more meaningful guides for management if they did include equity cost. While listing the possible benefit of such a change in accounting practice for *public policy he included price control and showed the shocking inequity in pre-tax return on investment resulting from the margin control in the U.S.A.*

In the U.S.A. a company had to set its selling prices in such a fashion that :

(a) current margins on individual products were not increased and,

(b) resulting profit margins (percentage) for the company as a whole did not exceed the average profit margin (percentage) for the best two of the preceding three years.

His paper contained the following table, derived from the Commission's (US) own analysis of published data :

ESTIMATED EFFECTS OF PRICE COMMISSION POLICIES

Allowed Pre-Tax Returns on Capital	Companies	
	Number	Percentages
30% or over	168	11.6
20% to 30%	341	23.1
10% to 20%	664	45.4
Less than 10%	292	19.9
Total	1,465	100.0

Relief for a few of the low profit companies was provided by making exceptions to the general rule on a case-by-case basis, but no action was taken to inhibit price increases by the high profit companies.

Given the existing accounting systems of U.S. business, there was no way the U.S. Price Commission could have devised a system of price control that would avoid such inequities. If debt and equity interests had been accounted for routinely as an element of cost in U.S. companies, the Commission would have had the data it needed to arrive at equitable rules, which would show much lower average returns with smaller dispersion about it. Finally, Anthony commented on the eroneous impression that the public had about business which tends to become translated into public policy. The inclusion of equity interest as an element of cost would help to correct some of these misconception and consequently would be conducive to better public policy.

Perhaps the most significant impact of the proposed change in accounting procedures, however, lies in its potential effect on the process of capital formation[27]. Specifically, the argument has been made that one reason underlying the sharp rise in corporate debt is the fact that the debt interest costs are tax deductible, while equity interests are not.

Although Anthony specifically stated that his proposal[28] did not include a change in taxes, such a change would help to even out the

balance between the use of debt and equity funds for capital formation.

In the 1973 edition of ECONOMICS, P.A. Samuelson stated :

"Peace time wage-price controls have been used in Scandinavia, the Netherlands, and elsewhere. Although in the short run they have sometimes been effective—in Finland in 1967-71, being a notable case, and America in 1971-73, perhaps another—in the longer runs such controls have been either blown up or have allowed to become ineffective by attrition, (p. 834).

R.J. Gordon published two papers on the effectiveness of U.S. wage-price controls[29]. In the first paper he reached the conclusion that Phases I and II of the Nixon wage-price control program had achieved a slight reduction in the advances of wages and a marked decline in the rise in prices between 1971:3 to 1972:2 as compared with econometric simulations of the hypothetical paths in the absence of controls. After one year, based on an extended analysis of data, he concluded :

"Price controls checked inflation in the 1971-73 period are not clear evidence that the controls succeeded. Controls worked not by moderating the behaviour of wages relative to prices, but rather by squeezing profit margins sufficiently to hold prices below their free market levels···on the assumption that profit margins will eventually be re-established (after control ended), one can cite at least four reasons for concluding that the controls were a failure :

1. Controls will have had no long run effect on inflation.
2. The removal of controls will cause an extra "catch-up" inflation at some point.
3. Controls have caused shortages and misallocations of resources in several sectors.
4. The administration of controls has consumed real resources."

Similar conclusions were also arrived at by others[30] who studied the effects of price control in the U.S.A. Grayson[31] who served as head of the Price Commission in Phase II of the Economic Stabilisation Programme, expressed the view that with the aid of inflation and price controls, "we are quickly approaching the point where it will be too

difficult either to give up controls or to manage the economy that has been created". "True wage-price controls help attack inflation in the short run by (a) reducing inflationary expectations, (b) intruding on discretionary market power of business and labour, (c) influencing the timing of price and wage decisions. By their very design, such controls interfere with the market and therefore introduce distortions of various sorts". Most dangerous, "they draw attention away from the fundamental factors that affect inflation—fiscal and monetary policies, tax rates, import-export policies, productivity, competitive restrictions—and so on".

When the Price Commission was established (in the U. S. A.) it was given four mandates. To quote Grayson[32] from an earlier paper :

"Our first was to reduce the rate of inflation to 2%-3% by the end of 1972. Our second was to control price increases without impeding the recovery. The third was to design policies that would not result in a wage-price bulge after controls were lifted. Finally, we were to do all of the above without creating a large bureaucracy".

During Phase I and Phase II the annual rate of inflation was reduced to 2.9% from a rate of 4.4% in the months prior to the imposition of Phase I, "but after three years of price control the economy moved to a rate of double-digit inflation"[33]. Grayson also claimed : "with a productivity increase of 6.0% in the second quarter of 1972, an unemployment rate of 5.5% and a gain in before-tax profits of 8.0%, we could hardly be accused of having impeded the economic recovery".

But the improvement in profit performance was illusory. It was shown by F. W. Hickman, Assistant Secretary of the U.S. Treasury, who supplied the following data on a large group of U.S. corporations at a conference in Pittsburgh[34] :

PRE-TAX EARNINGS

Reported	Restated ; adjusting for inventory profits and understated depreciation
1972 $76 billion	$ bn 61
1974 $110 billion	$ bn 60

Mr. Hickman also supplied data that shows the role that taxation plays during inflationary times ;

AFTER TAX EARNINGS	
Reported	Restated : as above
1971 $38 billion	$ bn 37
1974 $65 billion	$ bn 20
Effective Tax Rates	
1965	43%
1974	69%

M.H. Koster, *et al*[35], studied the impact of the U.S. price controls and found that except for short periods, the impact on prices of restricting pass-through of increased costs and squeezing corporate profits was much smaller than seemed to be generally recognised (p.111), "only small fractions of the overall change in prices during the period can be directly accounted for by conversion of the components of profit changes into corresponding changes in the value of output and prices. A major reason for the insensitivity of prices to profit margin changes is the small fraction of the value of output accounted for by profits. Profits accounted for less than 10% turnover of non-financial corporations in 1970 .. .. reducing percentage margins through erosion of the profit share in real terms, *could both have significant effects on rates of return on investment and on cash flow available for investment in production capacity even though price inflation in the corporate non-financial sector would not have been significantly affected.*

While arguing for the abolition of the price and profit controls in the UK, D.R. Glynn[36] of the CBI, stated that after stock appreciation gross profits represented about 7% of the value of consumers expenditure, so that an increase of well under 1% in the RPI would raise profits by about 10%, and thus partly restore their erosion since 1972. In the document 'Road to Recovery', the CBI found no economic justification for price controls[37]. To quote :

"Their effects are harmful to companies and to the people, pension funds and other institutions which have invested in them, to the people they employ and the customers they supply. They reduce investment, employment, and discourage improvements in industrial efficiency...their only justification has been a political *quid pro quo*

for wage restraint. But as they are harmful to the interests of all, this has been a poor bargain on all sides".

Summary and Major Conclusions

The main points that emerge from the review may be summarised as follows :

(a) The substantial erosion in average net profit margins as reported by the Price Commission did not provide a true measure of the reduction in real earnings measured on a cash flow basis or its equivalent. The magnitude of erosion was more serious. The reduction of profit share in domestic income measured after stock appreciation was neither complete nor relevant for the purpose of maintaining real profitability and financial viability of companies.

(b) Historic cost and financial reporting contexts were not relevant bases for operating a policy of price control. This was due to the methodological deficiencies of the conventional accounting system which under conditions of rising relative prices and/or growth shows illusory profits by not charging the cost of periodic increase in working capital and replacement cost of fixed assets.

(c) The discrepancy between conventional accounting profit and cash flow earnings are effectively caused by the under-pricing of sales which prevents recoupment of the cost actually incurred. To have operated a prices policy based on an eroding mark-up on historic cost sharply increased the short fall in cash flow earnings which was reduced to a deficit. This resulted in a situation wherein companies became entirely dependent on the banking sector to finance replacement and part of working capital investment.

(d) Unless control reduces the price increases by moderating the behaviour of wages relative to prices, the limited success in controlling inflation would be achieved by the reduction in profit margins only.

(e) In the longer run unchanged controls would be less effective in checking inflation, but the impact of reducing real rates of return and cash flows could have significant effects on

investment. Finance for investment must come entirely from external sources which might not be forthcoming in view of the relative unprofitability of industrial investment.

(f) In the U.S. price controls appeared to have been fully discredited. In the U.K. though the need for keeping sufficient funds within the industry had been recognised price controls continued to be justified on political rather than economic considerations. Incomes policy consideration had increased the need for measuring distributable earnings on a more realistic basis, such as earnings measured on a cash flow basis.

The overstatement of real earnings drew unnecessarily hostile attention of labour and government agencies. Earnings measured on a cash flow basis not only can provide an objective and neutral measure of distributable income, but also takes financial conditions into account, under a regime of relative price changes.

(g) Finally, it may be concluded that although price control reduced the level of inflation, operation of the policy on the basis of conventional accounting methodology was not helpful in achieving the other objective of the Price Code, i.e. to maintain growth in output and investment. A substantially larger quantity of resources had been transferred out of the company sector which was neither intended in the Price Code nor was revealed in conventional accounting reports.

Footnotes

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6. *Ibid.*
7. *Ibid.*
8. *Ibid.*
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12. Evidence supporting the proposition was presented in Labour Research September, 1976.

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14. N. E. D. O. *op. cit.*

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